



# **The Economic Implications of Tertiary Fee Rises in Relation to Student Welfare and the Policy Environment**

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**Report to the University of Auckland Council**

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## 1. Introduction

Changes to tertiary funding policies in New Zealand in the past decade have moved tertiary institutions toward a combination of *increased* and *variable* fees, which have more closely reflected the relative costs of various degrees. One of the important implications of fee rises is the extent to which *student access* is affected by these changes—most importantly, whether certain groups are disadvantaged or deterred from furthering their education and/or entering certain fields of study as a result of higher costs. The effect of *student loans*, *part-time work* and *other student support systems* are also important as three major sources by which students finance tuition fees.

The question of fee rises is closely linked to the broader question of funding of tertiary education, reflecting the preferences of several stakeholders. For example, from the point of view of students and their families, higher fees represent higher tertiary costs. From the perspective of taxpayers, views are often different as to what proportion of tertiary expenses should be financed by the public and what proportion by students. From the point of view of tertiary institutions, and in a policy environment in which public funding of education does not cover the full cost of the provision of tertiary education, tertiary fees are an essential component of the funding structure, with an impact on the quality of education offered. Therefore, public choices made about the funding of higher education and parameters of the funding system are key determinants of the proportion of tertiary expenses paid through fees.

This report addresses the economic effects of tertiary fee rises on student financing, access and welfare, as a follow up to the University Council's November meeting recommendation of commissioning a study on this topic. The report focuses on four aspects of student fees rises: (1) *participation and access* effects; (2) finance of fees through *student loans* and its current and future economic effects; (3) the extent of *part-time work* for financing education; and (4) *other student support*. The report discusses the economic effects of rising fees and policy parameters. The discussion is supported by the consideration of relevant evidence:

(1) ***Participation and access effects***

Questions of particular relevance to the effect of fee rises on student access are: Who is affected most? What is the evidence? What are the issues? And what options are available to increase access?

(2) ***Student loans and their current and future economic effects***

The combined economic impact of increased tuition fees and the financing of fees through student loans poses important questions relating to student welfare. In particular, the effect of larger student loans on student borrowing behaviour, loan repayments, eligibility for future loans such as home mortgages, and repayment evasion of larger loans (e.g. by leaving New Zealand) are relevant considerations.

(3) ***The contribution of student part-time work to financing education***

Higher fees are expected to increase student participation in part-time work as a means of financing tertiary education. The economics surrounding part-time work and the extent to which it provides income for tertiary funding are of interest. In addition, while

part-time work provides students with opportunities to gain experience in the labour market, it also reduces the hours available for study, which in turn could have a negative impact on student learning and gain from education.

**(4) *Scholarships, and other student support***

Merit based and Access Scholarships, as well as student allowances, are financial means of providing greater access by students. Student counselling services for stress and time management, in turn, provide other types of support for students in relation to the financing of higher fees.

The plan of this report is as follows. An overview of changes in tertiary fees is provided in Section 2, followed by a review of the international evidence on student response to higher fees in Section 3, and an analysis of University of Auckland participation levels in Section 4. The extent of student loan borrowing, repayment scenarios for four professional groups, and the expected effects of student loans on future borrowing through the private sector by student loan holders is examined in Section 5. The contribution of student part-time and summer employment to financing tertiary fees is covered in Section 6. A discussion of student allowances and student support services is provided in Sections 7 and 8, followed by Section 9 on Scholarships, and conclusions are drawn in Section 10.

## **2. Tertiary Fees**

Prior to 1990, students paid nominal fees for education, which was financed almost completely by public funds. The introduction of tertiary student fees may be traced to the review of the funding of tertiary education in New Zealand and the recommendations of the Hawke Report (1988) that participants in higher education contribute towards the costs of that education. These recommendations were reflected in the document *Learning for Life* (1989). Subsequent policy changes in 1990 introduced subsidies to tertiary institutions for each equivalent full-time student (EFTS), and student fees of NZ\$1,250 per year. The introduction of fees was to a great extent based on a “user pays” argument for student contributions toward the costs of education. The government set student fee was increased to NZ\$1,300 in 1991, but in 1992 tertiary institutions were given the autonomy to set their own fees.

The EFTS contribution to tertiary institutions was initially set at 85%-95% of base costs of a degree per student, and it was gradually decreased toward a targeted rate of 75% subsidy of course costs. With the EFTS system, degrees such as undergraduate Arts and Business have required lower EFTS contributions relative to Dentistry, Medicine and doctoral studies that are the most costly, due to greater supervision and equipment costs.

To offset tertiary institutions only having a portion of the EFTS base rate (and leaving significant shortfalls), tertiary institutions became free to set their own fees, and fees have varied since 1992. A major argument for allowing universities to set their fees was based on the idea of the need to introduce price signals into the choice system.

Table 1 below provides a summary of Auckland University level of tertiary fees since 1989. In the 1980s student fees were around \$500. However almost all students were eligible for a fees grant that covered 75 per cent of this cost, leading to an effective base fee of \$125. Since the introduction of fees in 1990, and throughout the 1990-1998 period, Auckland University maintained undifferentiated fees at levels that were close to the average fee of all New Zealand Universities.

By the year 2000 all New Zealand universities moved to differentiated fees. Otago, Massey and Lincoln Universities moved to a system of differentiated fees in 1992. Waikato moved to differentiated fees in 1994, Auckland and Victoria Universities in 1999, and Canterbury University in the year 2000. When universities have moved from undifferentiated to differentiated, the proportional increases in fees for some degrees have been much greater than for others, reflecting the differences in the costs of different courses of study partly passed on to students.

**Table 1: University of Auckland Fees, 1989-2000**

Year	Undifferentiated Fees		Differentiated Fees			
	Current Dollars	2000 Dollars	Arts & Education	Commerce, Law and Science	Engineering	Medicine
1989	\$516	\$619				
1990	\$1,250	\$1,431				
1991	\$1,300	\$1,474				
1992	\$1,050	\$1,175				
1993	\$1,400	\$1,544				
1994	\$1,792	\$1,924				
1995	\$1,848	\$1,929				
1996	\$2,128	\$2,165				
1997	\$2,464	\$2,486				
1998	\$2,884	\$2,898				
1999	—	—	\$3,080	\$3,500	\$4,060	\$7,980
2000	—	—	\$3,360	\$3,850	\$4,480	\$9,646

Sources: Maani (1997), NZUSA (for 1992 fees), NZVCC Fees for Domestic Students 1993, 1994, 1995, 1996, 1997, 1998, 1999 and 2000. New Zealand Time Series Database (CPI New Zealand: All Groups).

In the year 2000 Auckland University's fees ranged from \$3,360 in Arts and Education to \$9,646 in Medicine (plus a compulsory materials and resource fee of \$10 per point). The increases in average fees at Auckland University have followed average national trends, while Auckland and Otago universities (with Medical schools) have the widest range of differentiated fees. For example, Massey's lowest fee in 2000 is for undergraduate Teacher Education at \$2,880, and the highest fee is for Veterinary Science is \$6,500. Lincoln University's fees range from \$3,040 in Category A to \$8,400 for Category H (Master of

Professional Studies). Otago University's lowest fee is for Arts and Commerce at \$2,950; their highest fee for Dentistry and Medicine at \$9,180.

In examining the economic effects of fee increases on student participation decisions, a fee rise (keeping other factors constant) is expected to decrease the demand for education through demand responses to a higher price. This can manifest itself through lower participation rates in general, or lower demand for the more expensive and the longer courses of study. Since the demand for education is expected to be more elastic (responsive) when income constraints are greater, the price response may be mainly observed through a change in the socio-economic background of students, and through lower representation at some institutions or degrees.

A number of international studies have examined the determinants of student participation decisions. A brief review of these studies is covered below.

### **3. International Evidence on the Implications of Rising Fees**

An important economic question is how students react to fees. This reaction may differ according to individual financial and cultural circumstances. Numerous studies have examined at least some aspect of this question. Presented in this section is a brief review of the findings of international studies on student demand responses to rising fees, and the effect of financial aid and fee setting strategies.

#### **3.1 Student Demand Studies**

Standard economic demand theory suggests that (i) as educational costs rises, student enrolments will decrease (and conversely, as financial aid increases, enrolments will rise); and (ii) enrolments will rise at one institution if the educational costs of competitors rise. A review of these studies may be found in Heller (1997), Maani (1997), and Leslie and Brinkman (1987).

Student fees are the most visible cost of tertiary education faced by students. Other costs of education include *foregone earnings* during the years of the study, course related costs, transport, and living expenses for students outside of the immediate region of a tertiary institution. A systematic study of the student demand response to tertiary fees in New Zealand is timely and it requires an analysis of price responses by income groups and fields of study over time.

Among major overseas studies, Leslie and Brinkman (1987) reviewed 25 tuition price-response studies published in the US between 1967 and 1982. They followed a three-step process to standardise each of the studies in order to compare results over a 50 year period, by transforming the results to a common measure of price response, correcting all values to reflect consistent price levels, and converting data from various age-group populations to a common age base. For each study a Student Price Response Coefficient (SPRC) was calculated, as the change in the college participation rate of 18 to 24 year olds for every \$100 increase in tuition prices (in 1982-83 dollars).

Leslie and Brinkman's review concluded that when fees rise, a price response in the demand for higher education is expected. They found that the average price response was 0.7 percentage points, i.e. for every US\$100 increase in tuition fees, given the 1982-83 average weighted higher education cost of \$3,420 for tuition fee and board, one would expect the 18 to 24 year old participation rate to drop by almost three quarters of a percentage point (equivalent to a price elasticity of  $-0.24$ ). Since the US higher education participation rate was about 0.33 in 1982, enrolments would decline by about 2.3 per cent for every US\$100 tuition price increase (p. 189).

Although the Leslie and Brinkman (1987) study was comprehensive, it could not capture the effects of real tuition price increases during most of the 1980s and 1990s. More recent studies have examined the student price response to tertiary fees. Heller (1997) reviews twenty further studies and expands upon and updates the earlier Leslie and Brinkman analysis. These studies are consistent with Leslie and Brinkman's estimates of elasticities of below one for the overall demand for tertiary education (e.g. Shires, 1995, for California). The fee rises in the US studies have been generally based on *proportionally* smaller fee increases compared to the fee rises in New Zealand over the past decade.

An important question addressed by several studies is the extent to which *income and wealth* of students and their families influence their sensitivity to an increase in tuition fees. Some of the twenty-five studies that Leslie and Brinkman (1987) reviewed considered students of different income levels. The studies consistently found a higher level of price sensitivity by lower-income students.

McPherson and Schapiro (1989) analysed data from the Current Population Survey (CPS) for 1974 to 1984 by income level. They showed different student response levels to fees by income level, and concluded that their most important and reliable finding was that increases in the net cost of attendance negatively affected enrolments by European students from low-income families.

St John (1990), who divided students into four income categories, found that the wealthiest quarter of students were much less sensitive to tuition fee changes than the other three income categories. This indicates that middle income students also show demand responses to fee rises. The poorest students responded much more strongly to increases in grants (access scholarships) than to tuition decreases (but it was noted that this may be partly explained by the observation that when tuition fees had fallen, targeted grants also had a tendency to fall).

McPherson and Schapiro (1994) further examined changes in enrolments by students of different income levels, between the years 1980 and 1993. Based on the American Freshman Survey utilised in their study, they found evidence that the combined effects of tuition increases and limitations on federal student aid had impaired the ability of low-income students to gain access to institutions other than community colleges.

For the U.K. and in a study of history students the University of Liverpool notes, "the chief effect of tuition fees has been to discourage students from less well-off backgrounds" (Bates, 1999, p. 57).

Heller (1997), in his review, concludes (p. 642):

“Tuition increases that are not offset by concomitant increases in financial aid appear to have the effect of reducing access to higher education for our country’s poorest students.”

Heller (1997) further notes that most institutions will loosen their admission standards as demand lessens (p. 656, n. 9):

“The high percentage of fixed costs in colleges (for such things as physical plant and tenured faculty) requires institutions to maintain enrolment levels even if the quality of students applying for admission declines.”

A related question in the international literature is the extent to which higher fees affect tertiary participation by disadvantaged ethnic groups. There are at least three explanations for why students of different races may have different sensitivities to tuition and financial aid changes. First, ethnicity may be a proxy for income (and there is evidence that students from lower income families are more sensitive to tuition fees). Second, different ethnic groups may be *perceived* to have different success rates. This perception can influence the expected returns from higher education, and thus influences the sensitivity to tuition fee increases. Third, there may be a difference in demand for higher education between ethnic groups because of differences in the values placed upon tertiary education by those groups.

Studies that have investigated differences in responses to tuition fees by ethnicity have found greater responses by disadvantaged ethnic groups. For example, Kane (1991), after controlling for socio-economic status and family income, found that African American students were more sensitive to tuition costs than European students, with the greatest difference in sensitivity occurring with the “sticker price” of an institution. St John and Noell (1989), after controlling for socio-economic status, family income and ability, found that African American students were most responsive to financial aid offers, followed by Hispanic students. Jackson (1989) had similar findings for African American students.

Kane and Spizman (1994) examined the college and university attendance of African American students in the United States. They found that lower levels of parental education and income, lower SAT scores and lower high school class ranks resulted in lower levels of investment in human capital, preventing many African American students from going to college. They concluded that student assistance designed to increase college attendance by African American students is desirable in order to offset the effects of long term and generational disadvantage.

St John and Starkey (1995) make the important observation that there is a difference in sensitivity to tuition prices between “first-time enrolments” and those making a “persistence decision.” Therefore, while significant fee rises may not result in students’ decisions to stop investing in higher education in the middle of a degree, fee rises are expected to have more significant effects on the choices of students entering tertiary study.

Studies also indicate that mature and part-time students show more sensitivity to fee rises. Mature students are very sensitive to student fees, particularly in courses for personal interest or development. In August 1999 *History Today* reported a decline in mature student numbers

in over half of the forty University departments teaching history across Britain (p. 54). Since part-time study often reflects financial or time constraints for study, part-time student enrolments also show greater sensitivity to fee rises.

Therefore, the evidence from the international literature is consistent in predicting a student price response to fee rises, which is greater for lower levels of parental income and for disadvantaged ethnic groups. There is also evidence that mature and part-time students are generally more responsive to fee rises.

### 3.2 Financial Aid and Fee Setting Strategies

A number of financial aid mechanisms, such as government sponsored access scholarships and grants, subsidised loans, and scholarships offered by institutions, are operational at a large scale in countries such as the U.S., which have a longer history of tertiary fees.

Many studies have focussed on whether financial aid can be interpreted as a simple discount to the tuition fee of a tertiary institution, and if that is how students interpret the effect of financial aid.

There is international evidence that students tend to react more significantly to the tuition fee—or “sticker price”—of a tertiary institution for which information is usually more readily available. There is also usually some uncertainty associated with receiving access scholarships. In addition students may not be aware of financial aid or may not believe they would qualify for it. Therefore, information and a higher degree of certainty regarding eligibility are important factors for financial aid to increase the demand for education.

A number of studies, in turn, show that when student financial aid and scholarships are offered, they have a significant effect on increasing the demand for education (e.g. St. John and Noell, 1989; St. John, 1990; Moore, Studenmund and Slobko, 1991). St John (1990), for example, studies the enrolment effects of different types of financial aid and scholarship awards, and examines changes in tuition fees, grants, loans and work-study awards. He concludes that all forms of financial aid are at least as effective as tuition decreases in promoting enrolments. St John and Starkey (1995) have further concluded that students respond to a *set of prices and subsidies*. Regardless, availability of information is important for financial aid to be considered in student decision-making.

Hearn and Longanecker (1985) examine the decision making assumption that students evaluate the net price of attending a university (including the financial aid available). They note that student and parental knowledge about the forms and terms of student aid is “sadly inadequate” (p. 495). They emphasise that net prices may differ depending upon the source of the financial aid, or in other words “a loan represents something different from work study, which in turn represents something different from a grant.” (p. 496).

They further note that people may not process information in the way that is posited by “a rational actor” model with full knowledge. Students may react just as strongly to receiving a grant or scholarship as to the actual amount of that grant or scholarship. Loans may not be accepted or valued as a source of aid, and may in fact be culturally shunned or feared. This

indicates that in some cultures alternative policy options to student loans, such as a “graduate tax” or an income contingent “higher education contribution scheme,” may be more publicly acceptable and more successful than the student loan option.

Hearn and Longanecker note that due to *differentiation* between institutions and students, there may be “sticky” and “fluid” markets for tertiary participation (for example, quality or prestige of an institution may be extremely important to some students, enabling that institution to maintain participation of certain intakes even when raising prices faster than “the competition”). Lastly, policy analysts may not fully interpret the financial position of students and their families in the same way as they themselves do. Researchers and policy makers can only rely on partial accounts of student and family finances (and the choices they make). Students and families themselves will have perceptions and expectations about future economic conditions that can make their decisions seem inexplicable.

Overall, international studies show that while students respond most significantly to fees or the “sticker price” of universities for which information is more readily available, financial aid increases participation rates, especially when it is targeted closely and when information and greater certainty exists.

### **3.3 Interpreting the International Evidence within the context of the University of Auckland**

The existing international research on the demand response to increased fees provides a number of general observations, which are relevant in the New Zealand and University of Auckland context:

1. Tuition fee increases generally do lead to decreases in enrolments. However, factors such as the population’s age distribution, immigration, changes in institutional entry standards, rising expectations of employers, changes in the values of society or groups within that society, can mask enrolment effects.
2. Students with lower parental income levels can be expected to be more sensitive to rising tuition fees and can be expected to base enrolment decisions more heavily upon the relative cost of courses within and between institutions.

It can be reasoned that since the University of Auckland moved to differentiated fees in 1999 students from lower income families will be more likely to choose lower cost courses. It can also be reasoned that as tuition fees increase, poorer students may choose lower cost alternatives to instruction at the University of Auckland, particularly short-course certificates.

3. Disadvantaged ethnic groups in New Zealand (particularly Maori and Pacific Islanders) can be expected to be generally more sensitive to rising tuition fees than other students.
4. Part-time and mature students usually show greater sensitivity to fee rises.

5. Middle class students and their families are also affected by higher fees, as they normally would not be eligible for financial aid and are more likely to use student loans.
6. While the student demand response to fee rises may be small when fees are low, demand responsiveness can increase significantly as fee levels and the overall cost of financing a degree increases. In other words, the demand for education is likely to be non-linear.
7. Financial aid that decreases the net cost of tertiary education will generally be helpful in increasing access, although very high “sticker prices” on tertiary fees may lead to decreases in enrolments, particularly if the full range of financial aid is unknown to some potential students (especially those from lower socio-economic groups).

#### 4. The University of Auckland Student Population

Auckland University has experienced increasing enrolments during the past decade. In 1989 there were 15,881 students at the University of Auckland. As Table 2 and the corresponding Figure 1 show, student enrolments reached a high of 26,985 in 1999.

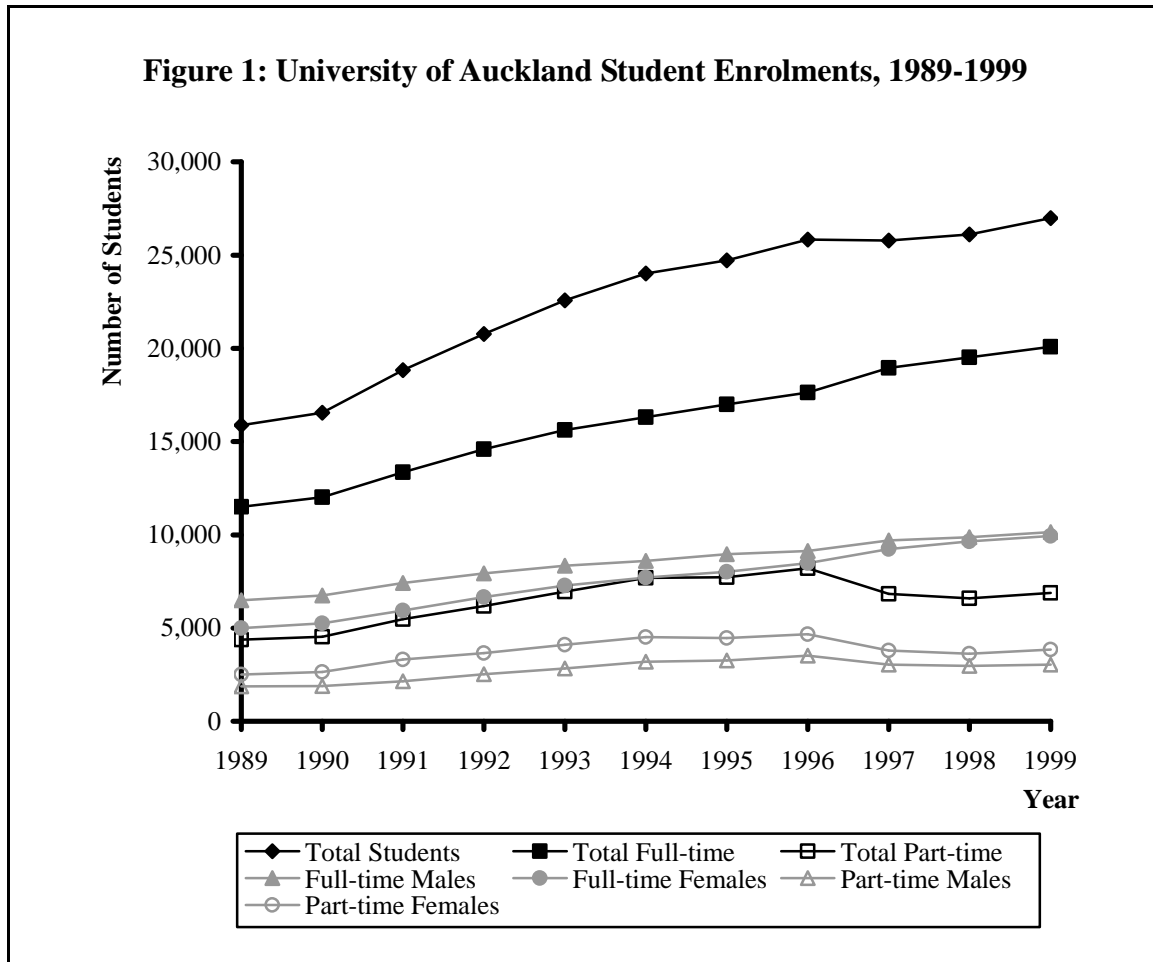
**Table 2: University of Auckland Student Numbers, 1989-1999**

Year	Full-time Males	Full-time Females	Total Full-time	Part-time Males	Part-time Females	Total Part-time	Total Students
1989	6,498	4,998	11,496	1,875	2,510	4,385	15,881
1990	6,752	5,260	12,012	1,899	2,639	4,538	16,550
1991	7,421	5,936	13,357	2,152	3,322	5,474	18,831
1992	7,929	6,658	14,587	2,522	3,663	6,185	20,772
1993	8,345	7,276	15,621	2,843	4,109	6,952	22,573
1994	8,606	7,702	16,308	3,190	4,511	7,701	24,009
1995	8,971	8,024	16,995	3,264	4,461	7,725	24,720
1996	9,134	8,490	17,624	3,529	4,676	8,205	25,829
1997	9,699	9,246	18,945	3,041	3,794	6,835	25,780
1998	9,865	9,648	19,513	2,974	3,623	6,597	26,110
1999	10,148	9,942	20,090	3,048	3,847	6,895	26,985

Sources: University of Auckland Annual Review 1989-1990; University of Auckland Annual Report and Financial Statements 1994, 1995 and 1999.

An examination of Figure 1 and Table 2 further reveals that total student enrolments have been rising at a *decreasing rate* over most of the decade. The rise in full-time enrolments has been linear. However this increase has been largely offset by the significant fall in part-time students after 1996.

Over the eleven-year period the number of full-time males and females has converged. In 1999 there were almost as many full-time females at the University of Auckland as males. Since there have been consistently more female part-time students over the period, there were more female students at the University of Auckland in 1999.



#### 4.1 Student Ethnic Makeup

Over the previous decade there has been a dramatic shift in the ethnic makeup of University of Auckland students. Table 4 sets out the number of students by European, Maori, Pacific Islands and Asian descent. The data from this table is graphed in two ways. Figure 2 shows student numbers at the University of Auckland by ethnicity. Figure 3 sets out how the proportion of the different ethnic groups at the University of Auckland has changed over the decade.

The significant increases in enrolments of Asian students at the University of Auckland reflects high rates of immigration into the Auckland region during the 1990s, as seen in Table 3. In addition, recent immigration policy which has emphasised human capital and professional requirements for immigrants would tend to result in greater demand for higher education by children of immigrants when their parents have higher education.

**Table 3: Auckland Region Population by Ethnicity  
Percentages of Age Group 15 - 24**

Ethnicity	Year		
	1986	1991	1996
European	70.4%	65.2%	53.1%
NZ Maori	15.3%	14.8%	15.5%
Pacific Islands	10.6%	13.4%	13.2%
Asian	2.4%	5.6%	11.7%
Other	0.2%	0.3%	0.6%
Not Specified	1.2%	0.8%	5.9%
Total	100.0%	100.0%	100.0%

Sources: 1986, 1991 and 1996 Census of Population and Dwellings (Supermap).

As Table 4 shows, between 1989 and 1999, total student numbers at the University of Auckland grew by 11,104 students (from 15,881 to 26,985) over the eleven year period. Increases in European enrolments contributed 1,528 students; Maori 1,039; Pacific Islands 831, and Asian 6,866 extra students. Therefore, over the period extra European enrolments contributed 13.8 per cent to the rise in enrolments at the University of Auckland; Maori 9.4 per cent; Pacific Islands 7.5 per cent; Asian 61.8 per cent; and other and unknown 7.6 per cent.

If, however, the last five years of data is analysed (between 1994 and 1999), total numbers at the University of Auckland only grew by 2,976 students. Decreases in European enrolments contributed -1,752 students; Maori -124 students; Pacific Islands 192 extra students; and Asian 4,495 extra students. Therefore, over the last five years European enrolments contributed -58.9 per cent to the growth in student numbers; Maori -4.2 per cent; Pacific Islander +6.5 per cent; Asian +151.0 per cent; and other or unknown +5.5 per cent.

Table 3 shows the change in the average ethnic composition of Auckland area over the recent past. It can be seen from Table 3 that in 1986 young Asians between fifteen and twenty-four years of age comprised only 2.4 per cent of the Auckland population within this age group. Within ten years this cohort grew to 11.7 per cent of the Auckland population within this age group.

The increase in Asian participation has been a major factor in the University of Auckland's ability to maintain overall participation during a period of rising fees. European enrolments have decreased both in numbers and in percentage terms. Whether these students are enrolled at other universities or types of institutions is a question that requires further research. Maori participation at the University also dropped from 1,984 to 1,757 students between 1996 and 1999, an overall fall of 11.4 per cent. Without the University's set of affirmative action policies larger reductions in representation may have otherwise occurred.

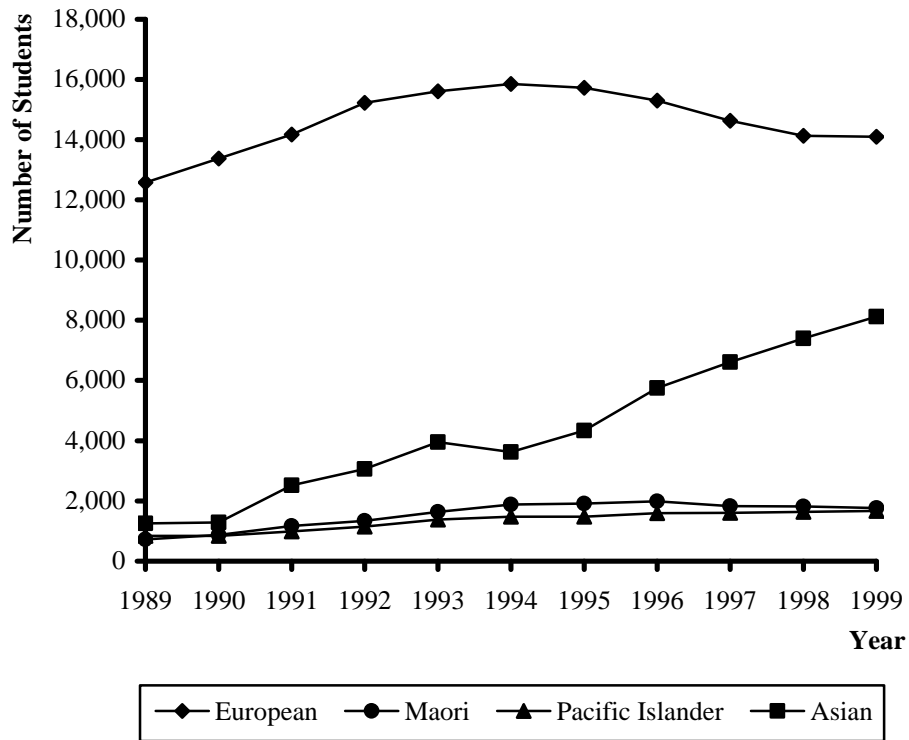
**Table 4: Number of Auckland University Students by Ethnic Group, 1989-1999**

Year	European			Maori			Pacific Islands			Asian			Other or Unknown*			Total AU Students		
	Males	Fem.	M+F	Males	Fem.	M+F	Males	Fem.	M+F	Males	Fem.	M+F	Males	Fem.	M+F	Males	Fem.	M+F
1989	6,527	6,044	12,571	346	372	718	449	386	835	739	511	1,250	312	195	507	8,373	7,508	15,881
1990	6,958	6,418	13,376	423	451	874	446	392	838	719	570	1,289	—	—	—	8,546	7,831	16,377
1991	7,184	6,982	14,166	510	657	1,167	505	477	982	1,374	1,142	2,516	—	—	—	9,573	9,258	18,831
1992	7,661	7,561	15,222	600	740	1,340	581	567	1,148	1,609	1,453	3,062	—	—	—	10,451	10,321	20,772
1993	7,758	7,850	15,608	722	916	1,638	655	722	1,377	2,053	1,897	3,950	—	—	—	11,188	11,385	22,573
1994	7,829	8,022	15,851	794	1,087	1,881	678	796	1,474	1,868	1,753	3,621	627	555	1,182	11,796	12,213	24,009
1995	7,769	7,954	15,723	796	1,120	1,916	688	787	1,475	2,280	2,058	4,338	702	566	1,268	12,235	12,485	24,720
1996	7,484	7,814	15,298	785	1,199	1,984	695	898	1,593	3,056	2,693	5,749	643	562	1,205	12,663	13,166	25,829
1997	7,128	7,502	14,630	747	1,077	1,824	725	873	1,598	3,530	3,080	6,610	610	508	1,118	12,740	13,040	25,780
1998	6,862	7,260	14,122	727	1,088	1,815	747	884	1,631	3,882	3,511	7,393	621	528	1,149	12,839	13,271	26,110
1999	6,766	7,333	14,099	732	1,025	1,757	771	895	1,666	4,240	3,876	8,116	687	660	1,347	13,196	13,789	26,985

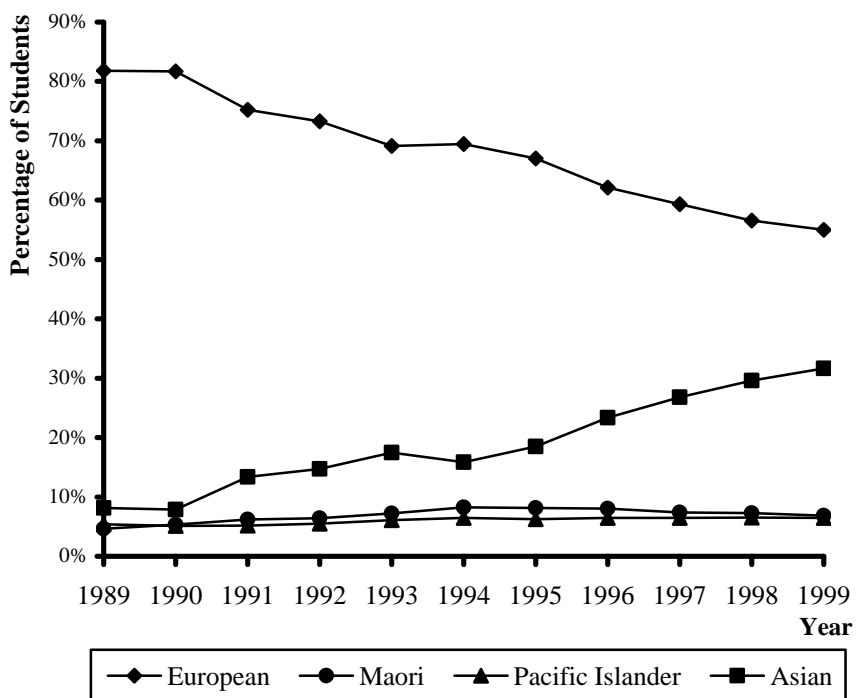
Sources: University of Auckland Annual Review 1989-1990; University of Auckland Annual Report and Financial Statements 1993; University of Auckland Annual Report and Financial Statements 1995; and University of Auckland Annual Report and Financial Statements 1999.

\*Even though other and unknown is missing for 1991, 1992, 1993 and 1994 it appears that this category has been merged into the other ethnic groups because total student numbers continue to add up to the official student numbers in Table 2 (apart from a very small discrepancy for 1990).

**Figure 2: Number of Auckland University Students by Ethnic Group, 1989-1999**



**Figure 3: Percentage of Auckland University Students by Ethnic Group (excluding Other or Unknown), 1989-1999**



In 1999, the University of Auckland set up a taskforce to examine participation issues at the University. The *Report of the Taskforce for Improving Participation in Tertiary Education* (1999) showed that there is a wide and growing gap in rates of participation in tertiary education between students from high and low socio-economic backgrounds. The taskforce further found that when students from low socio-economic backgrounds and Maori and Pacific Island students do participate in tertiary education, they enrol disproportionately in diplomas and certificate courses and in courses with lower entry requirements.

Overall, the analyses of the University's enrolments indicate that while enrolments have increased over time, there has been a decrease in part-time enrolments and enrolments by European and Maori students. Further analysis of students' income backgrounds has shown that the participation of students from schools representing lower family income deciles has decreased over the last decade.

## 5. Student Loans

While student loans have facilitated the student financing of education in an environment of rising fees (especially by deferring costs of education from the time of study when income levels are low, to the future when higher income levels may be expected), certain features of student indebtedness, especially the lifetime effects of high course costs, are now a greater concern.

In what may demonstrate that student loans were an unwelcome addition to the New Zealand way of life, the Porter Novelli-CM Research study entitled *Currents of Thought* found that New Zealanders rated the student loan scheme as the worst blunder of the 1990s.<sup>1</sup>

This section examines evidence on the magnitude of student borrowing by ethnicity and gender in New Zealand, recent changes to the student loan scheme, long-term borrowing restrictions for student loan-holders, and the effect of higher fees on the years of repayment required.

### 5.1 Student Loan Borrowing

Table 5 provides information on average annual student loan borrowing by full-time students, and the corresponding number of full-time students borrowing in the relevant year.

These averages confirm that student borrowing has increased over the seven year period from 1992-1998, and that more males than females at Auckland University on average borrow through student loans. In addition, Auckland University students did not, on average, borrow more than students from other New Zealand universities.

While Auckland University students are not, on average, borrowing greater annual amounts than students in other universities, average annual student indebtedness has generally risen

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1. *The Dominion*, 28 February 2000, edition 2, page 3. Student loans were the most "popular" worst blunder, garnering 43 per cent of all responses.

significantly since 1992. Both the number of borrowers and the average amount of borrowing has been rising. In addition to the average trend of higher fees and higher borrowing, students in longer and more expensive courses of study such as Medicine could be expected to borrow \$59,220 to cover fees for the degree, or \$92,520 if cost of living is included.

**Table 5: Average Annual Student Loan Borrowing of Full-Time Students by Institution and Gender, 1992-1998\***

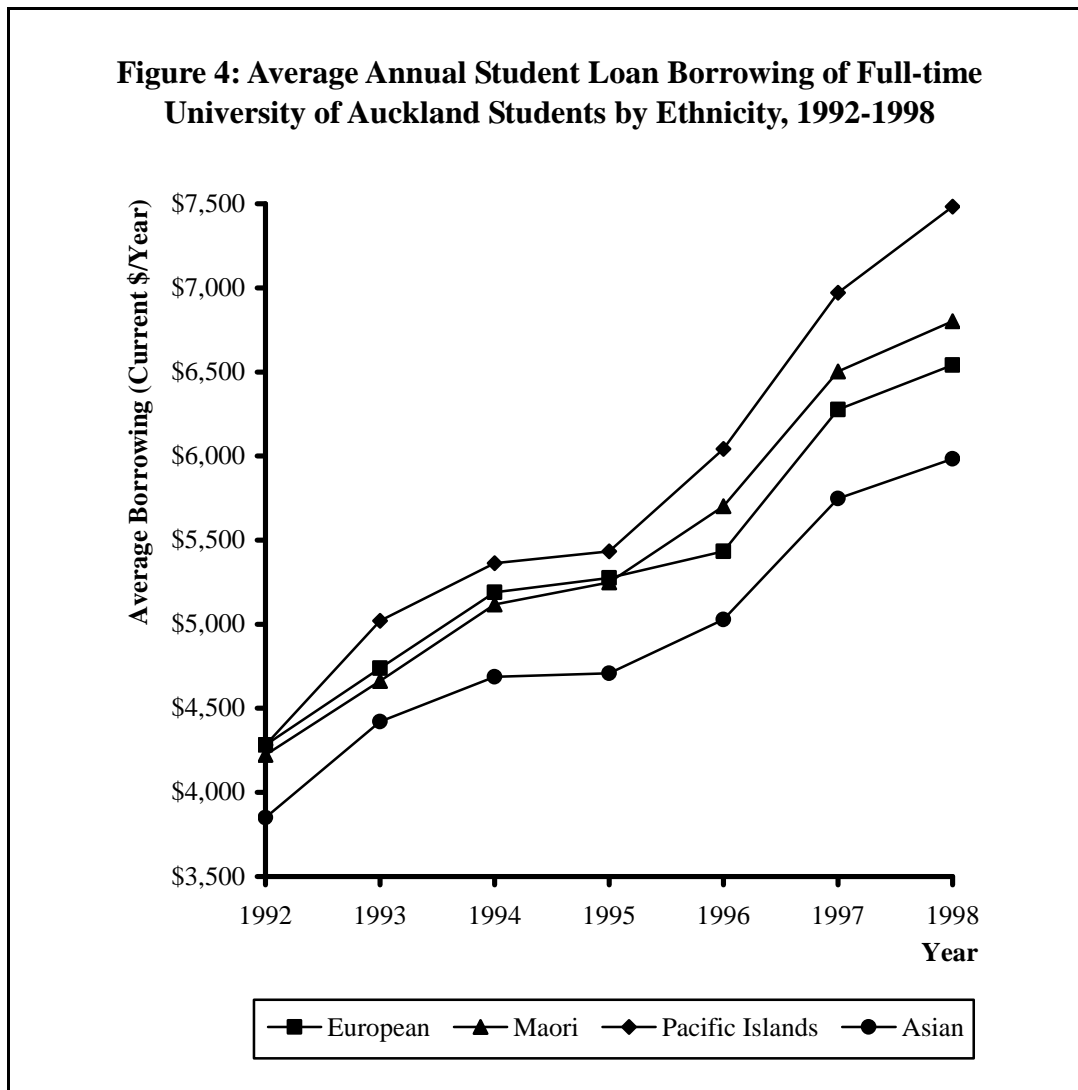
Year	Auckland University Students						Other Universities					
	Males			Females			Males			Females		
	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students
1992	\$4,363	\$4,882	3,381	\$4,041	\$4,522	2,382	\$4,354	\$4,872	9,596	\$4,214	\$4,716	7,508
1993	\$4,839	\$5,338	4,126	\$4,573	\$5,045	3,144	\$4,832	\$5,330	12,021	\$4,647	\$5,126	10,496
1994	\$5,196	\$5,578	4,567	\$5,066	\$5,439	3,702	\$5,203	\$5,586	13,841	\$5,040	\$5,411	12,677
1995	\$5,300	\$5,531	4,879	\$5,120	\$5,343	4,035	\$5,402	\$5,638	14,622	\$5,232	\$5,460	13,786
1996	\$5,469	\$5,563	4,760	\$5,343	\$5,435	4,064	\$5,715	\$5,813	14,916	\$5,539	\$5,634	14,438
1997	\$6,164	\$6,220	4,639	\$6,262	\$6,318	4,024	\$6,679	\$6,739	14,909	\$6,540	\$6,599	14,982
1998	\$6,479	\$6,511	4,576	\$6,469	\$6,501	4,175	\$6,905	\$6,939	15,222	\$6,716	\$6,750	15,687

Source: Demographic and Statistical Analysis Unit, Ministry of Education. \*Unknown gender excluded.

Figure 4 and the corresponding Table 6 show average annual borrowing by *ethnicity* for full-time students at the University of Auckland. The evidence on student borrowing shows an emergence of a clear ordering in borrowing by ethnicity in the second half of the last decade, where Pacific Island students are borrowing the most per year, followed by Maori students, European students and Asian students. These patterns of indebtedness by ethnicity are in turn likely to represent parental financial support and socio-economic background of students, especially since Pacific Island and Maori students are not highly represented in the high cost courses. A similar pattern exists for students in other New Zealand universities.

## 5.2 Implications of High Loan Debts

Average annual student borrowing was presented in the previous section, which can be used to estimate average *total degree borrowing* by students. The individual student loans, however, vary by field of study, and higher *total* loans are expected for students in longer and more costly courses of study. When combined with borrowing for cost of living expenses the total student loan can be as high as \$60,000 to \$100,000, where the middle class are expected to have a significant share in student loan borrowing. Changes in Government policy now allow a full interest write-off for current full-time students from 1 April 2000, which to some extent decreases the loan balance at the time of the completion of studies.



The financial impact of student loans continues well past the completion of study. Two potential effects of high student loan indebtedness include borrowing constraints for future homes and businesses, and the potential for the greater attractiveness of working overseas (in other words, a “brain drain”). For example, some evidence on the “brain drain” of New Zealand graduates has already been noted (e.g. the Report of the Dental Council, *NZ Education Review*, 19 May 2000).

As a student loan is considered by financial institutions as an existing loan, students are affected in borrowing for a home loan or to establish themselves in a business or profession. Future loan eligibility becomes a potentially greater problem as the student loan increases in size.

While borrowing restrictions will have welfare impacts for graduates, loss of great numbers of tertiary graduates to international markets will have economic cost implications for the nation.

**Table 6: Full-time Student Loan Borrowing at the University of Auckland by Ethnic Group, 1992-1998**

Year	European			Maori			Pacific Islands			Asian			Other or Unknown		
	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students	Average Current Dollars	Average 2000 Dollars	Number Students
1992	\$4,282	\$4,792	4,214	\$4,223	\$4,726	416	\$4,282	\$4,792	535	\$3,849	\$4,307	366	\$3,774	\$4,223	232
1993	\$4,739	\$5,227	5,060	\$4,663	\$5,144	647	\$5,020	\$5,537	715	\$4,422	\$4,877	501	\$4,271	\$4,711	377
1994	\$5,189	\$5,572	5,398	\$5,118	\$5,494	780	\$5,363	\$5,758	693	\$4,688	\$5,033	704	\$4,950	\$5,314	731
1995	\$5,275	\$5,505	6,231	\$5,249	\$5,477	772	\$5,434	\$5,671	748	\$4,708	\$4,913	948	\$4,701	\$4,906	262
1996	\$5,434	\$5,528	5,198	\$5,702	\$5,800	753	\$6,042	\$6,146	818	\$5,027	\$5,113	1,149	\$4,879	\$4,963	965
1997	\$6,277	\$6,333	4,799	\$6,504	\$6,562	736	\$6,972	\$7,034	806	\$5,748	\$5,800	1,301	\$5,589	\$5,640	1,204
1998	\$6,542	\$6,575	4,570	\$6,801	\$6,835	727	\$7,482	\$7,520	829	\$5,984	\$6,014	1,383	\$5,890	\$5,919	1,498

Source: Demographic and Statistical Analysis Unit, Ministry of Education.

### 5.3 Changes to the Student Loan Scheme in 2000

A number of changes to New Zealand's student loan scheme became effective on 1 April 2000. These changes reduce the financial burden of repaying a student loan.

#### **The Student Loan Interest Rate:**

In October of 1999 the National Government announced that the student loan interest rate would rise from 7.0 per cent to 7.6 per cent, beginning 1 April 2000. The new Labour Government reversed this decision and student loan interest rates have remained at 7.0 per cent.

#### **The Repayment Threshold:**

The repayment threshold for student loans increased in 2000, from \$14,716 to \$14,768 gross annual income (\$284 per week). Ten per cent of all gross income above this amount is deducted by the IRD for the repayment of a student loan.

#### **Zero Interest Rates for Full-Time Students:**

A full interest write-off is being granted to full-time students during the period of full-time study (defined as those who have studied full-time for at least 32 weeks).

It is now the case that a student loan can fall in real terms while a borrower is a student. In times of high inflation a current student could see significant falls in the real cost of repaying their loan, particularly if the loan is taken out early in the years of a long course of study.

#### **Zero Interest Rates for Part-Time Students:**

Part-time students will receive a full interest write-off as long as their gross income is below a threshold of \$24,596. The threshold is set at the level at which a sole parent's Domestic Purposes Benefit abates, meaning that no beneficiary will face interest on a student loan while studying (regardless of whether or not they are in receipt of earned income).

#### **Borrowing for Course-Related Costs:**

In a reversal of their policy for 1999, the National Government decided to reinstate maximum borrowing for course-related costs at \$1,000, and the Labour Government has allowed this to continue. Borrowing for course-related costs must be preceded by the posting of receipts for course related expenses.

#### **Enhanced Base Interest Write-Off:**

The Labour Government is continuing with the National Government's pre-election policy of providing an enhanced base interest write-off when repaying a student loan. The enhanced base interest write-off provides that at least 50 per cent of all *inflation-adjusted* compulsory repayments will go towards repayment of principal (this is because any borrower who is not a full-time student—or a part-time student qualifying for a full interest write-off—will pay the interest adjustment rate, regardless of any base interest write-off).

**Administration of the Student Loan Scheme:**

Beginning in the year 2000, Work and Income New Zealand (WINZ) manages the administration of student loans. The application process is now made over the phone and by mail. The initial application is made to WINZ by phone. WINZ then sends by mail a pre-printed contract, letter and booklet to applicants, who have to sign the contract and enclose requested evidence. The returned materials are processed by WINZ and once enrolment at a recognised institution is confirmed a letter of entitlement (“Loan Entitlement Advice”) is issued.

**5.4 Effect of Student Loan Repayments on the Ability to Borrow**

One of the long-term effects of student loans is the degree to which graduate indebtedness influences future borrowing ability of student loan holders for home mortgages or business investments. Having to repay a student loan at the compulsory rate of ten per cent of all gross income over \$14,768 will affect the disposable income of any student loan borrower earning over this amount and it is reasonably expected that banks would consider compulsory student loan repayments as reducing the gross income of a client seeking a loan. For example, with an annual income of \$50,000 and compulsory student loan repayments that total \$3,523, annual income could be treated as \$46,477.

However, for student loan holders seeking to borrow for home mortgages or businesses, student loan repayments are generally not treated this way, and this reduces the borrowing ability of loan holders beyond the compulsory repayment levels. To examine the extent to which student loans affect borrowing ability the lending practices of four major New Zealand banks—Bank of New Zealand, The National Bank, ANZ Banking Group, and Westpac Trust—were studied. The result of this research is that each dollar of loan repayment per year reduces borrowing by significantly more than the amount repaid.

The Bank of New Zealand’s criteria are based upon debt servicing ability and having an interest in clients not over-extending their level of borrowing. The Bank of New Zealand employs the concept of total sustainable gross income, which is defined as the wages and salary of the applicant (excluding other forms of income such as share dividends or interest income).<sup>2</sup> Only a specified fraction (25%-33%) of total sustainable gross income is considered for debt servicing, allowing for taxation and other expenses.<sup>3</sup>

Student loan holders are affected by this rule, since student loan repayments are deducted from the “debt servicing limit” and *not* the “annual gross income” level. For example, for a gross income of \$50,000, 33 per cent or \$16,500 is considered as debt servicing per year. However, if the client has a student loan of at least a few thousand dollars they will be spending \$3,523, or 7 per cent of their annual income, on student debt servicing. This means that only 26 per cent of total sustainable gross income, or \$12,977, is available for debt

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2. Rent payments are also categorised as debt servicing unless the payment of rent can be substituted for mortgage repayments.

3. For example, with an income range of \$20,000 - \$29,999, up to 25 per cent of a client’s total sustainable *gross* income is available for debt servicing. For an income range of \$30,000 - \$49,999 the debt servicing limit rises to 30 per cent. Once an income reaches \$50,000 or above, the debt servicing limit is raised to 33 per cent of total sustainable gross income.

servicing, such that a 7 per cent reduction in available income has led to a 21 per cent reduction in the amount available for debt servicing.

It may be noted that with these rules what is important is the amount that must be spent on annual compulsory repayments, and the years that it will affect borrowing eligibility. The size of a student loan mainly affects borrowing capacity through the years of borrowing eligibility.

The National Bank employs a similar approval mechanism to the Bank of New Zealand. For example, for an income scenario of \$50,000 with a maximum of 35 per cent of gross income available for debt servicing, student loan repayments at the compulsory rate would reduce the ability to borrow for a home by about \$40,000 (down from \$190,000 for a 25 year loan at an interest rate of 8.1 per cent).

The ANZ Banking Group generally requires that a person has at least \$200 excess income per month after all payments have been made, and lending approval will not be given for debt servicing that exceeds 40 per cent of gross income.

Westpac Trust employs two “ratios” in determining whether lending will be approved. The first is the requirement of a defined cash surplus to be available every month. This is \$900 for a single person, \$1,300 for a couple and \$120 for each additional child. The second requirement is a maximum debt-servicing ratio of 37 per cent.<sup>4</sup>

While variations to bank loan approvals based on judgements by individual managers may be made at times, the major bank regulations for lending to student loan holders tend to reduce the borrowing ability of graduates in the private sector beyond the compulsory repayment levels. When student loan repayments are considered as a component of debt servicing, any compulsory student loan repayments will reduce the ability to service debt by a multiple equal to the reciprocal of the percentage allowed for debt servicing (e.g. by 3.03 times compulsory annual repayments when the debt servicing income requirement is 33 per cent).

## **5.5 Loan Repayment Requirements for Four Professional Groups**

The effect of fee rises on student indebtedness and the time requirements to repay a loan have changed over time as fees have risen and the parameters of the student loan system have changed. In this section, scenarios of financing fees and cost of living expenses through the loan system for four professional groups (general practice solicitors, public hospital doctors, provisional and chartered accountants, and professional engineers) are modelled. The analysis uses average income levels provided by professional societies by age group, given the relevant fees and the parameters of the loan system.

All repayment scenarios are modelled using required repayments and a nominal seven per cent interest rate. It is assumed that inflation will be two per cent and thus the real interest rate is five per cent.

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4. A person's expenditure is determined by taking five per cent of total credit or store card limits, hire purchase payments that will continue for more than six months, any personal loans, rent, child maintenance, and adding the amount of any compulsory student loan repayments. To this is added the cost of the loan application. This expenditure has to result in a defined cash surplus of at least \$900 per month (for a single person).

Using real dollars and interest rates has a number of implications:

- Total repayment figures are quoted in 2000 dollars. For example, if it is quoted that \$100,000 is repaid over the lifetime of the loan then this is the actual cost of making that repayment in the year 2000.
- Since the Labour Government has decided to charge a zero nominal interest rate while studying, loan balances will actually fall in real terms while a borrower is a student (a negative interest rate of two per cent is effectively granted). In times of higher inflation (which has not been modelled), the size of the implicit negative interest rate would grow.<sup>5</sup>

The minimum compulsory repayment rate of ten per cent of all gross income over \$14,768 is utilised as the rate at which a student loan is repaid. Repayment times are calculated from the modelled start of full-time employment.

When comparing the present student loan scheme's repayment times and costs to a previous scheme two changes are made in the calculations. The first is that no interest write-off while studying is granted, and the second is that no enhanced base interest write-off is applicable. The absence of these two policies makes a significant difference to repayment times and costs.<sup>6</sup>

### 5.5.1 General Practice Solicitors

Studying law at the University of Auckland requires a four-year course. The first year consists of one paper in legal system and six non-law papers. If it is assumed that the six non-law papers will be taken in the faculty of Business and Economics, then at year 2000 fee levels and resource charges for the first year would total \$4,010.<sup>7</sup> Base fees and resource charges for the remaining three years at year 2000 fee levels would total \$4,130 each year. In comparison, in 1998 the undifferentiated fee was \$2,884 (or \$2,898 in 1 January 2000 dollars).

A further requirement of professional practice is to complete the full-time 13-week Institute of Professional Legal Studies Course before admission as a barrister and solicitor can occur (\$3,640 in 2000).

Therefore, at zero interest rates while in full-time study the nominal student loan balance would equal \$24,290 (including borrowing of \$1,000 per year for four years of course-related costs and an annual \$50 loan administration fee). Under the 1999 student loan rules and a

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5. Since incomes maintain their purchasing power at 2000 levels in the analysis they implicitly increase by two per cent per annum in nominal terms to offset the effect of inflation. In addition, since fees have been calculated using 2000 fee levels there is also an implicit assumption that fees will rise by two per cent per annum to keep up with the rate of inflation.

6. The reader may also refer to Warner (1999) for a review of the student loan system, loan repayment scenarios for other professional groups, and policy options.

7. One law paper at \$550 and \$40 materials and resource charges plus six commerce papers totalling \$3,300 and \$120 in materials and resource charges.

nominal interest rate of seven per cent the loan balance at the end of study would instead have been approximately \$27,272 (i.e. \$4,093 higher). With the 1998 fees and the previous loan interest rules, the loan balance would have been \$21,778.

If maximum borrowings for living expenses of \$5,550 per annum (and \$1,950 for the length of the Law Professionals course) are also included then the loan balance at zero nominal interest rates rises to \$48,440. In 2000 dollars this is \$46,267. If the old student loan scheme rules had continued then the loan balance at the end of study would have been around \$54,262 (i.e. \$7,995 higher). With the 1998 fees and the previous loan interest rules, the loan balance would have been \$48,768, which is close to the year 2000 sum.

Using the midpoints of average expected income levels for the profession and by age group, repayment of a student loan under the new changes would take 8.6 years at nominal interest rates of seven per cent when not borrowing for living expenses (and repayments would total \$28,967).<sup>8</sup> With the 1998 fees, the repayment time would have been 8.3 years (with \$27,505 repaid in total).

If borrowing for living expenses is also undertaken then repayment would take 13.3 years with \$62,551 repaid in total. This compares with repayment under the old scheme of 16.1 years, and \$82,359 repaid in total. With the 1998 fees, the repayment time would have been 14.7 years (with \$72,354 repaid in total).

Therefore, as fees are now higher for law students, a full interest write-off while studying has assisted in limiting the growth in the size of a loan balance and hence the total amount that has to be repaid. The effect of the full interest write-off while studying is more pronounced for larger loan balances, particularly when borrowing for living expenses.

### **5.5.2 Public Hospital Doctors**

Training in Medicine at the University of Auckland requires six years of full-time study. Based on fees at their present level (in real terms) the base fee for the first year of Medicine would be \$3,990 (including a flat resource fee of \$10 per point). For the second to sixth year fees are \$9,786 (also including a flat resource fee of \$10 per point). Taking into account borrowing for course-related costs of \$1,000 per year and a student loan administration fee of \$50 per year, a full-time Medical degree financed through student loans would result in a student loan balance of \$59,220 (or \$55,508 in 2000 dollars because of the two per cent negative interest rate).

This loan balance would have grown significantly if zero nominal interest rates had not been introduced for full-time students. At a seven per cent nominal (five per cent real) interest rate this would have instead resulted in a loan balance after six years of study of \$69,538 (in 2000 dollars). Had the 1998 undifferentiated base fee of \$2,884 (\$2,898 in 1 January 2000 dollars)

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8. According to the LawStaff (NZ) Ltd salary survey for April 2000, solicitors in general practice employed in firms of one to four partners will earn between \$24,000-\$33,000 in their first year; \$30,000-\$39,000 in their second year; \$31,000-\$40,000 in their third year; around \$50,000 in their fourth year; \$50,000-\$52,000 in their fifth year; \$53,000-\$70,000 in their following sixth to ninth years; and \$50,000 to \$125,000 thereafter (i.e. ten or more years).

been sustained, under the previous student loan rules the loan balance at the end of study would have been \$28,112 (and \$67,122 with living expenses) assuming nominal interest rates of seven per cent).

If maximum borrowing for living expenses is undertaken then the student loan increases by \$5,550 per annum (\$150 a week over 37 weeks of full-time study). The loan balance at the end of studies would then rise to \$92,520 at zero interest rates while studying. This is \$86,764 in 2000 dollars. Again, if seven per cent nominal (five per cent real) interest rates had continued during the years of study, then the approximate loan balance to repay would have instead been \$108,549.

Under the present student loan scheme and level of fees, repayment of fees and course-related costs would take approximately 16.8 years, with \$80,451 repaid in total (in 2000 dollars).<sup>9</sup> If there is also borrowing for living expenses then repayment with minimum required repayments would take 21.8 years, or five years longer, with \$126,502 repaid.

Under the old student loan rules but the current level of fees, repayment without borrowing for living expenses would take 21.5 years, with \$123,953 repaid. Therefore, for high fees such as for Medicine, the 2000 changes in the interest rate have meant the loan repayments will take approximately five years less. If also borrowing for living expenses, repayment time would have risen to 29.8 years, with \$212,811 in repayments. In addition, under the 1999 student loan rules it would have taken 14 years before a doctor started earning enough to begin repaying the principal off a student loan that also included borrowing for living expenses.<sup>10</sup>

If the 1998 level of fees at the University of Auckland had been sustained and the old student loan rules remained, repayment would have taken approximately 10.3 years (or 6.5 years less than the current estimates), with \$36,762 (in 2000 dollars) repaid when borrowing for fees and course-related costs. If borrowing for living expenses also occurred, repayment is modelled to have taken 20.9 years, with \$118,385 (in 2000 dollars) repaid in total.

Therefore, for a Medical degree, the increases in fees have significantly increased the costs of financing the degree. The changes this year to the student loan scheme would however result in a saving of \$21,785 upon completion of University studies for maximum borrowing. This analysis further highlights the importance of the parameters of the loan scheme, especially the interest rate, as fees and the student loans get larger.

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9. Current doctor salary levels paid at Auckland public hospitals are employed in the repayment scenarios. It is assumed that 40-44.9 hours are worked per week giving a Year 1 House Officer salary of \$37,763; followed by \$41,351 in Year 2 and \$44,320 in Year 3. It is then assumed that a doctor becomes a Registrar while training to be a Specialist for the next 10 years. This gives base salary levels of \$46,829, \$49,337, \$51,832, \$54,339, \$56,848 and \$59,356 for the remaining five years. Once Specialist salary Step 1 is reached income rises to \$94,000 and increments to \$97,000, followed by \$100,000, \$103,000, \$105,000, \$107,000, \$109,000, \$111,000, \$113,000, \$115,000, \$117,000, \$119,000, \$121,000, \$123,000, \$125,000, \$127,000, \$129,000 and \$131,000 over a maximum of 18 salary steps.

10. This assumes repayment at the compulsory rate. Quite simply, a loan to repay of \$108,549 would incur \$5,427 interest at real interest rates of five percent. Under the old student loan repayment rules and a loan of this size, gross income would have to exceed \$69,043 per annum before principal would start to be repaid.

### 5.5.3 Provisional and Chartered Accountants

Becoming a Chartered Accountant requires four years of tertiary study. One option for the completion of the degree at the University of Auckland is through a Commerce degree over four years (possibly with a double major). An alternate option is through a conjoint degree or a degree and a diploma.

Taking a four-year Bachelor of Commerce track would result in a loan of \$5,040 per annum if borrowing for the base fees of \$3,850.<sup>11</sup> The loan would total \$20,160 in nominal terms (or \$19,191 in 2000 dollars). Under the 1999 loan rules the balance to repay would have been \$22,755 (i.e. \$3,564 higher).

When also including maximum borrowing for living expenses of \$5,550 per annum the resulting nominal loan would become \$42,360 (or \$40,447 in 2000 dollars). Under the old loan scheme rules the balance to repay at the end of study would have been \$47,475 (i.e. \$7,028 higher).<sup>12</sup>

Under the present student loan scheme and with current fees, repayment without borrowing for living expenses would take 7.8 years with \$23,560 repaid in total. This compares with repayment taking 8.8 years and \$28,854 repaid in total under the old student loan scheme rules. In 1998 the undifferentiated fee was \$2,884 (or \$2,898 in 1 January 2000 dollars), and under the previous loan interest regulations would have resulted in a loan balance of \$17,813, with a repayment time of 7.3 years (and \$21,576 repaid in total).

If borrowing for living expenses is also undertaken then repayment would take 13.9 years with \$55,648 repaid in total. Under the old student loan scheme rules repayment would have taken 16.8 years with \$74,844 repaid in total. With 1998 undifferentiated fees, the repayment would have taken 15.2 years (with \$64,529 repaid in total).

Fees are now higher for accounting students but a full interest write-off while studying helps to limit the growth in the size of loan balances and hence the total amount that has to be repaid. If also borrowing for living expenses accounting students are likely to be better off under the new system compared to 1998.

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11. Including materials and resource fees of \$140, course-related costs of \$1,000 and a student loan administration fee of \$50 per annum.

12. Before an accounting graduate becomes a Chartered Accountant (through additional part-time study and examinations) he or she is a Provisional Member of the Institute of Chartered Accountants of New Zealand. The 2000 Momentum Consulting Group Remuneration Survey of the Institute of Chartered Accounts of New Zealand surveyed the salary of year one, two and three Provisional Members and found an average salary of \$37,500, \$36,200 and \$38,700 respectively (p. 17). A possible career progression would be to become a Business Services Accountant in year four (average salary of \$43,100, p. 12); Business Services Senior in years five, six and seven (average salary of \$48,400, \$52,100 and \$52,100 respectively, p.12); a Business Services Manager at \$63,000 for the follows six years (p. 12); and a Business Services Manager on \$85,400 thereafter (i.e. a Chartered Accountant with more than 10 years post-CA experience, p. 12).

#### 5.5.4 Professional Engineers

An engineering degree usually requires four years of full-time tertiary study. Borrowing for fees and course-related costs would amount to \$5,670 per annum if studying at the University of Auckland (comprising \$4,480 in base fees, \$140 in materials and resource charges, \$1,000 for course-related costs and \$50 for the administration fee). This would amount to a loan to repay of \$22,680 in nominal terms (\$21,588 in 2000 dollars). This compares to a balance to repay of \$25,606 (\$4,018 higher) under the old loan scheme rules. With 1998 fees, the total loan balance would have been \$17,813 (in 2000 dollars).

When also including maximum borrowing for living expenses of \$5,550 per annum the resulting nominal loan would become \$44,880, or \$42,844 in 2000 dollars. Under the old student loan scheme and seven per cent nominal (five per cent real) interest rates the balance to repay would have been \$50,326 (i.e. \$7,482 higher).<sup>13</sup> With 1998 fees, the total loan balance would have been \$42,533.

Based on the profession's expected average salary levels by age group, and seven per cent nominal (five per cent base) interest rates, it would on average take professional engineers 9.4 years to repay their student loans if not borrowing for living expenses, with \$27,620 repaid in total. This compares with a repayment time of 10.9 years under the old scheme with \$34,177 repaid in total. With 1998 undifferentiated fees, the time requirement would have been 7.9 years (with \$21,884 repaid in total).

If borrowing for living expenses, repayment would take 16.8 years with \$61,522 repaid in total. This would have taken 21.3 years to repay under the old loan scheme rules, with \$86,096 repaid in total. With 1998 fees, the loan repayment period would have been 18 years (with \$68,449 repaid in total).

Given the salary structure of young engineers and the size of the fee increases, the loan repayment of engineers is now expected to take on average one and a half years longer than it would have in 1998.

The analysis of repayment scenarios for graduates of the four professional groups examined shows that the increased fees have generally increased required repayment times. However interest write-offs as a result of the year 2000 policy changes decrease the effect of rising fees (and in some cases offset the fee rises). For Medicine and Engineering the changes have increased repayment times.

### 5.6 Need for Stability and Continuity

Major changes in the funding of tertiary education and resulting changes in tertiary fees and the parameters of the loan scheme have resulted in significant financial effects for students

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13. According to the Professional Engineers Remuneration Survey for 1999 (published by the Institution of Professional Engineers New Zealand), a median full-time engineer aged 25 years and under earns a base salary of \$36,000. For ages 26 to 30 this rises to \$50,040. Thereafter in five-year intervals the median total gross salary packages are \$57,600, \$67,200, \$69,960, \$73,200, \$75,000 and \$80,000 (for those over 55 years of age).

and their families during a relatively short span of time. These changes have affected a generation of families that had not expected to be required to finance tertiary education or save for it.

Stability and continuity of funding is crucial for parents and students when they are considering embarking on funding three to six years of tertiary education.

## 5.7 Management of Student Loans

Currently student loans are administered by Work and Income New Zealand (WINZ) and as such are linked by association with the negative connotations of welfare and benefits. Management issues related to the administration of student loans by WINZ as expressed by students are mainly those of customer service, remoteness and time delays. It is quite plausible that the time delays in 2000 have been transitory due to the change over of the administration of student loans.

Student support should indeed have a positive image and reflect the linkage between investment in education and training, and careers and income opportunities. The provision of student loans, allowances and access scholarships are major enterprises, and they should demonstrate the linkage with education as an investment.

## 6. Student Employment

Summer and part-time within-term employment by students provide potential sources of income for financing higher education, and work experience during the years of study. The extent to which student earnings contribute to the coverage of fees and living expenses is of interest. Few professions, such as Law, provide a limited number of summer internships. Many student jobs require less training, such as retail, minor clerical, and manual or odd jobs.

To examine the evidence on the *employment duration*, *hourly wage*, and *total earnings* by students, Student Job Search evidence in Auckland has been analysed, and it provides useful information on the earning experience of Auckland tertiary students. While jobs from other sources are available to students, Student Job Search data is useful in providing data exclusively on students.

We have analysed student enrolment and job placement patterns for students over the two summer periods of 1998-1999 and 1999-2000, and during the 1999 academic year. The results for the two summer periods were very consistent. Therefore, for brevity the results for the 1999 academic year, and the 1999-2000 summer will be discussed below.

Tables 7 and 8 below show the total number of students who had enrolled for jobs and the proportion that was successful in finding at least one job through SJS. Table 8 shows student job durations and earning patterns over the summer period.

**Table 7: Within-Term Student Job Search Placements,  
March-September 1999**

Year	Auckland SJS Within-Term Enrolments	Within-Term Job Placements	Individual SJS Clients finding a Placement	Percentage of SJS Clients finding a Placement
1994	5,668	7,252	—	—
1995	6,341	8,224	—	—
1996	7,423	8,008	—	—
1997	8,386	9,201	—	—
1998	8,311	6,812	—	—
1999	8,424	7,933*	3,093*	39.0%

*Sources:* Auckland Student Job Search Statistics, Auckland Student Job Search. \*Analysed Student Job Search Data, Within-Term 1999.

**Table 8: Summer Student Job Search Placements,  
October-February 1999-2000**

Year	Auckland SJS Summer Enrolments	Summer Job Placements	Individual SJS Clients finding a Placement	Percentage of SJS Clients finding a Placement
1994	14,634	11,199	—	—
1995	14,620	11,091	—	—
1996	15,966	11,101	—	—
1997	16,964	10,268	—	—
1998	14,579	9,700*	4,294*	29.5%
1999	15,189	9,173*	4,360*	28.7%

*Sources:* Auckland Student Job Search Statistics, Auckland Student Job Search. \*Analysed Student Job Search Data, Summer 1998/1999 and Summer 1999/2000.

As Tables 7 and 8 indicate, more students (roughly twice as many) enrol for jobs during the summer period than during the academic year. While a large number of students find placements, and placement rates are impressive, those who are successful in securing employment through SJS are still a minority of those who had enrolled for jobs. For example, during the within-term period the placement rate in 1999 was 39% and over the summer 28.7%. In addition, on average, for each successful client there was an average of two job placements.

The analysis of employment patterns of the students finding placements shows that in the summer of 1999-2000, 4,360 successful clients in the Auckland office, on average, earned

\$2,240 at an hourly rate of \$10.97. 2,146 of these students were University of Auckland students (or planning to start at the University). They received 4,546 of the Auckland job placements and their total average gross earnings over the 1999-2000 summer were \$2,409 at an average hourly rate of \$11.13

Further analysis of student work patterns showed that successful within-term 1999 clients in the Auckland area earned an average of \$2,640 at an hourly rate of \$10.78. 1,725 of the successful clients were University of Auckland Students who earned an average of \$2,607 at an average hourly rate of \$10.92.

University of Auckland students did not earn consistently less or more than the other students using the Student Job Search placements.

Further analyses by gender also showed that male and female students did not show significantly different work durations and earnings over the summer or during the academic year. Analyses by ethnicity further show similar average hourly wages for the ethnic groups available (European, Maori, Pacific Islands and Other).

For examining the earning power of students in relation to tertiary fees, Table 9 is useful in providing the distribution of employment durations and hourly and total earnings by Student Job Search clients. The evidence in Table 9 indicates that about half of the student job clients who were successful in securing employment found jobs that were equivalent to up to two weeks of full-time work, resulting in average gross earnings of \$274. 32.2% of the successful clients had earned gross earnings of between \$1,360-\$2,508. 84% of the successful job clients had earned \$2,508 or less. 264 students had full-time employment throughout the summer and had earned an average of \$6,248 before taxes. This number is equivalent to about 1% of Auckland University students and a smaller proportion of the Auckland region tertiary students it is based on.

Among the reasons expressed by students regarding why overall summer earnings are not higher is that jobs available are sporadic, and that many jobs available are focused around the Christmas retailing period, but that they diminish afterwards. Among factors influencing employment opportunities by students during within-term periods, significant timetable constraints, transport constraints, and interference with study time are commonly noted.

To put the above statistics in perspective, it is useful to examine how many hours of work it would require a student to finance tuition fees for various fee levels through either or both summer and within-term earnings. Based on the average hourly wage rate of \$10.78 (\$9.16 after tax) for Auckland tertiary students through SJS placements in 1999, a base fee of \$3,360 requires 367 hours of work during the year (or 8 hours per week throughout the year). Adding course related costs of \$1,140 (including compulsory resource charges) and living expenses of \$5,550 per year, 1,097 hours of work (or 21 hours per week) are required. Financing a base fee of \$4,480 requires 489 hours of work. Financing a base annual tuition fee of \$9,646 requires 1,053 hours of work (or 20 hours per week). Adding course related costs and living expenses requires 1,783 hours of work (or 34 hours per week throughout the year).

**Table 9: Total Gross Income Earned by Student Job Search Clients, Summer 1999-2000.**

<b>Number of Months &amp; Total Hours Worked</b>	<b>Number of Clients in this Category</b>	<b>Estimated Average Gross Earnings</b>	<b>Average Hourly Wage Rate</b>
<b>Up to 2 weeks work</b> (Less than 80 hrs.)	2082	\$274	\$11.29
<b>2 weeks - 1 month</b> (80 -160 hrs.)	596	\$1,360	\$11.53
<b>1 - 2 months</b> (161- 320 hrs.)	698	\$2,508	\$10.68
<b>2 - 3 months</b> (321 – 480 hrs.)	373	\$4,241	\$10.81
<b>3 - 4 months</b> (481 – 640 hrs.)	264	\$6,248	\$11.06

Given the time constraints of students and limitations of the Auckland job market, fully financing fees and living expenses for the entire student body through work experience has not been a realistic option, especially for those with higher fees or from outside of the immediate geographic area of the University. The extent of participation of students in the student loan scheme is consistent with the above analysis on employment patterns of students.

Therefore, while employment is a potential source of work experience and supplementing income by students, the evidence from student employment and loan experiences and the above analyses strongly suggest that student employment opportunities at best provide a modest support for the overall student body in financing their education and cost of living over the academic and summer periods. This increases the importance of access scholarships and the parameters of the loan system.

## **7. Student Allowances**

The student allowance scheme is a system of financial assistance in relation to living expenses for tertiary students from low income families. Therefore, as such it is not linked to student fees. As fees have increased over time, student allowances have remained relatively constant in real terms and thus cover an increasingly smaller portion of the full cost of tertiary education.

Table 10 sets out average student allowance payments and numbers of New Zealand tertiary students receiving student allowances by ethnicity for all tertiary institutions (University,

Polytechnic, etc.) for 1996, 1997 and 1998. A larger variation in average student allowances received by ethnicity can result for under 25 year olds because of means testing of parental income.

An unanticipated finding when analysing the table is that under 25 year old Asian students living at home receive on average higher student allowances than any other ethnic group, in some instances by as much as \$1,000 in a year. A partial explanation may be that a higher proportion of Asian students take more full-time courses of study during the year.

While the allowance system is important for increasing access to tertiary education and it has benefited some students, certain aspects of the policy need to be reconsidered for change. The regional differences in the allowance amounts and work disincentive effects of recent changes in allowance policy are important, and they are discussed below.

## **7.1 Allowances and Regional Disadvantage**

While fees have increased at all Tertiary institutions over recent years and the cost of living has increased, the level of allowances has only increased at the official rate of inflation. There are also demonstrable cost differences between the different cities in New Zealand (Table A1 in Appendix A). As Table A1 indicates, the shortfall between the student allowance and minimum living expenses for living away from home, estimated as a weekly shortfall of \$82, is not trivial and it can explain the decrease in student enrolments from Northland and other parts of the region in the recent past.

The current allowance policy disproportionately disadvantages students from lower income families receiving a student allowance in Auckland, due to higher living expenses and transport costs. This effect is also acting as a barrier for students from outside of Auckland city. The University of Auckland recognizes that it must be accessible to students of the greater region.

Therefore, it is important that the allowance levels are realistically adjusted to give appropriate recognition to annual cost of living increases and local differentials in living costs.

## **7.2 Student Work Disincentive Effects of Allowance Policy**

A recent change in the allowance system creates significant work disincentives for students. With this change students who work and earn an income of \$135.13 during any week lose the *total* amount of their allowance during that week. This approach treats the student allowance as a handout rather than a planned partnership and payment towards investment in education.

The previous system allowed annual earnings of \$5,000 during the 37 week academic year. Although equivalent in total earnings, this had the significant advantage of allowing students to work when job opportunities became available, without artificial weekly restrictions.

**Table 10: Average Student Allowance Payments at all Tertiary Institutions by Ethnicity, 1996-1998**

Category of Student Allowance	European		Maori		Pacific Island		Asian		Other/Unknown		Total	
	Average (\$)	Number Students	Average (\$)	Number Students	Average (\$)	Number Students	Average (\$)	Number Students	Average (\$)	Number Students	Average (\$)	Number Students
<25 at Home-1996	\$2,472	5,760	\$2,289	1,099	\$2,615	918	\$3,037	1883	\$2,788	425	\$2,584	10,085
<25 at Home-1997	\$2,607	5,586	\$2,452	1,131	\$2,724	925	\$3,392	2092	\$3,096	435	\$2,783	10,169
<25 at Home-1998	\$2,579	5,330	\$2,408	1,186	\$2,749	950	\$3,448	2480	\$2,819	778	\$2,793	10,724
<25 Away Home-1996	\$3,300	13,681	\$3,401	2,959	\$3,364	650	\$3,750	1187	\$3,349	532	\$3,348	19,009
<25 Away Home-1997	\$3,611	13,544	\$3,482	2,823	\$3,504	652	\$3,999	1401	\$3,679	566	\$3,619	18,986
<25 Away Home-1998	\$3,612	13,510	\$3,479	2,837	\$3,553	736	\$4,077	1592	\$3,520	1106	\$3,623	19,781
25+ at Home-1996	\$2,893	1,068	\$2,630	263	\$3,078	104	\$2,946	173	\$2,985	78	\$2,873	1,686
25+ at Home-1997	\$3,084	1,227	\$2,922	326	\$3,018	144	\$3,186	248	\$2,822	82	\$3,055	2,027
25+ at Home-1998	\$3,081	1,329	\$2,801	350	\$3,054	176	\$2,987	314	\$2,563	160	\$2,989	2,329
25+ Away Home-1996	\$4,340	7,060	\$4,352	1,750	\$4,248	372	\$3,819	1354	\$4,341	632	\$4,276	11,168
25+ Away Home-1997	\$4,685	7,869	\$4,423	2,062	\$4,307	504	\$4,151	1597	\$4,584	621	\$4,555	12,653
25+ Away Home-1998	\$4,786	8,313	\$4,534	2,272	\$4,476	564	\$4,172	1642	\$4,255	1058	\$4,618	13,849

Source: Demographic and Statistical Analysis Unit, Ministry of Education.

Therefore, the current eligibility system for the student allowance, in which eligibility is determined or lost on a weekly basis, needs to be adjusted to preserve student work incentives, and to allow students flexibility in responding to job opportunities.

## **8. Counselling and Time Management Support**

In an environment of higher costs of education the provision of stress management and counselling services are important to student retention in completing their degrees and student well-being. Both the demand and supply of these services have increased at the University of Auckland during the past decade.

In the year before the introduction of flat compulsory fees by the Labour Government in 1990, student financial hardship was not uncommon, as the first paragraph in the University of Auckland *Welfare Services Annual Report for 1989* highlights:

During 1989 many students were unable to cope with the financial costs of a university education. The Needy Students Fund was exhausted before the end of term three, even though a more conservative granting policy was in place compared with 1988.... Financial hardship among students, especially those traditionally under-represented among enrolments (the poor, single parents and ethnic minorities) was still a main problem for welfare services at the end of 1989.

This section sets out data on the number of students accessing stress and time-management services through the Student Learning Centre and the Counselling Service.

### **8.1 Stress and Time-Management Services**

As students try and cope with higher fees, and as Auckland city has grown in size and population, it can be expected that they may experience higher levels of stress, particularly if they work longer hours to pay for fees while continuing to study. As fees increase it is particularly important to students that they pass the papers they are studying, for financial reasons.

The University of Auckland runs motivation and time-management courses through the Student Learning Centre, and it may be expected that additional pressures on students are reflected in numbers attending such courses. The Student Learning Centre provides assistance to students on both individual and group bases. Because the individual consultation data is quite consistently categorised for the previous decade, emphasis is put on this data. Table 11 provides a summary of Student Learning Centre statistics, and the corresponding graph for Table 11 is presented in Figure 5.

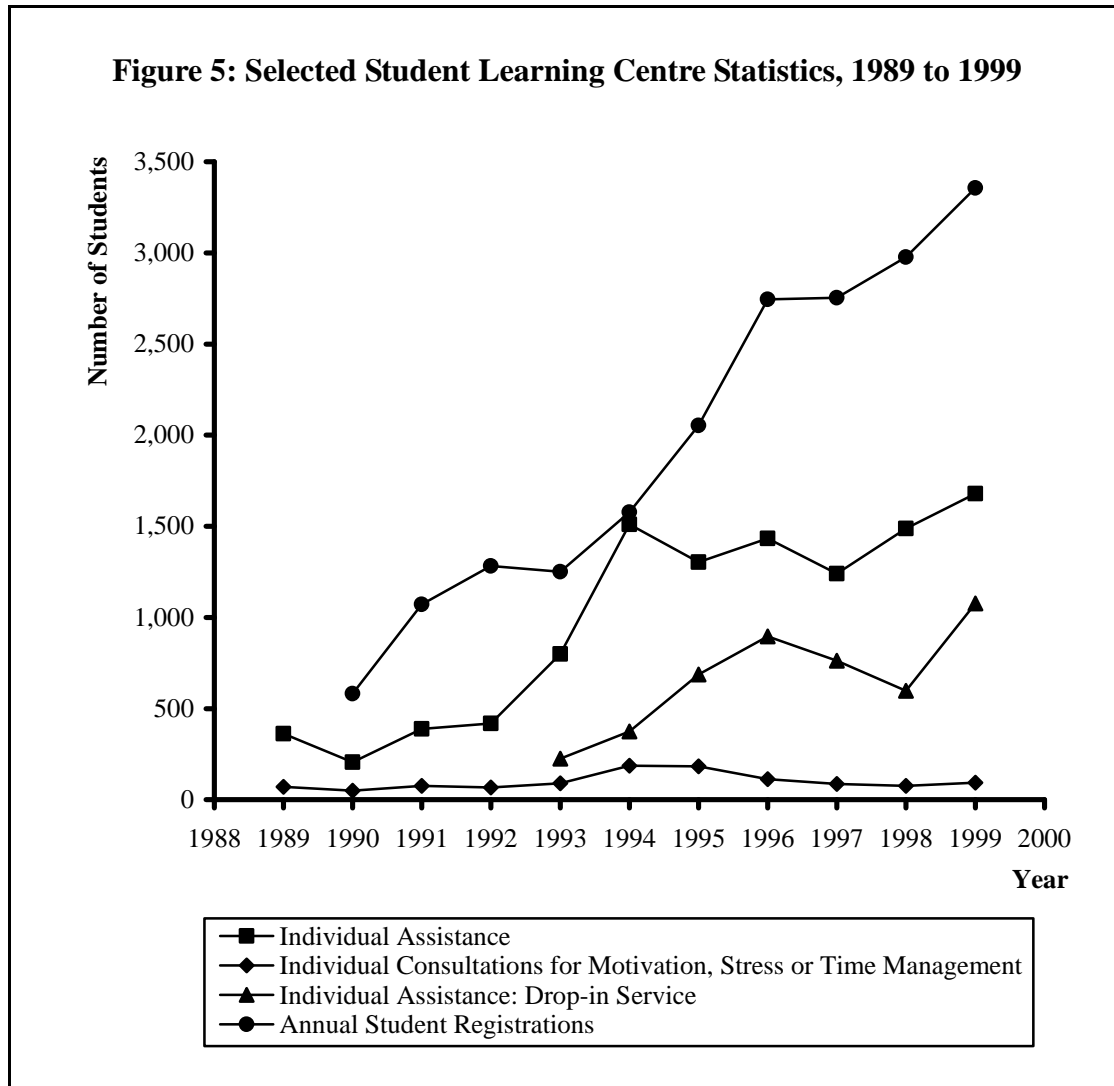
Table 11 and Figure 5 show significantly greater enrolments (and a greater proportion of Auckland University students enrolments) over the 1989-1999 period.

Table 11: Selected Student Learning Centre Statistics, 1989 to 1999

Year	Individual Assistance	Percentage Given Individual Assistance	Individual Consultations for Motivation, Stress or Time Management	Percentage of Individual Consultations for Motivation, Stress or Time Management	Individual Assistance: Drop-in Service	Percentage Using the Drop-in Service	Annual Student Registrations	Percentage of Annual Student Registrations
1989	363	2.3%	70	0.4%	—	—	—	—
1990	206	1.2%	49	0.3%	—	—	581	3.5%
1991	388	2.1%	76	0.4%	—	—	1,071	5.7%
1992	419	2.0%	68	0.3%	—	—	1,283	6.2%
1993	799	3.5%	90	0.4%	225	1.0%	1,250	5.5%
1994	1,510	6.3%	186	0.8%	375	1.6%	1,577	6.6%
1995	1,304	5.3%	183	0.7%	687	2.8%	2,053	8.3%
1996	1,433	5.5%	113	0.4%	896	3.5%	2,746	10.6%
1997	1,241	4.8%	87	0.3%	763	3.0%	2,754	10.7%
1998	1,488	5.7%	76	0.3%	598	2.3%	2,977	11.4%
1999	1,679	6.2%	94	0.3%	1,077	4.0%	3,357	12.4%

Sources: Report of the Fifth Year of Operation of the Student Learning Unit, March 1989 - February 1990; Report of the Sixth Year of Operation of the Student Learning Unit, March 1990 - February 1991; Report of the Seventh Year of Operation of the Student Learning Unit, March 1991 - February 1992; Report of the Eighth Year of Operation of the Student Learning Centre, March 1992 - February 1993; Student Learning Centre Annual Report, January to December 1993, 1994, 1995, 1996, 1997, 1998 and 1999.

Note: In 1996 consultations for stress were included in the “other” category and have been excluded from this table.



Consultations for motivation, stress or time management peaked in 1994 and 1995, and returned to earlier levels of consultation thereafter. General individual assistance also peaked in 1994, only returning to similar levels in 1999.

A first potential reason for these lower levels of individual assistance is the drop-in service that was expanded in 1994. Prior to 1994 five hours was made available per week for students to drop-in and briefly consult with a tutor without having to make an appointment or register with the Centre (however a record of the number of students accessing this service has only been kept since 1993). The *Student Learning Centre Annual Report (January to December 1993)* states (p. 4):

“The students’ problems ranged from assignment writing difficulties and questions about test taking strategies to concerns about loss of motivation and problems about remembering what they study.”

The drop-in service’s hours were expanded to fifteen hours per week in 1994. The growth in the drop-in service, where neither an appointment nor registration with the Student Learning

Centre is required, may have contributed to the decline in appointments to talk about motivation, stress or time management. There is also a point at which a student's learning problems may be better handled by the Counselling Service.

Secondly, workshop attendance increased dramatically over the decade. The number of students attending group workshops doubled between 1996 and 1999. A dramatic rise in the number of students registering with the service each year is also evident in the table and figure. Because of limitations in resources the Student Learning Centre refers students to the drop-in centre or group workshops wherever possible, rather than one-on-one appointments.

Overall, the University is providing increased student services through the Student Learning Centre.

## 8.2 Counselling Services

In 1989 the Counselling Service noticed a continuing trend towards more serious psychological problems, even though client numbers were four per cent below 1988 levels.

Table 12 sets out the number of University of Auckland students provided with comprehensive counselling (i.e. a high standard of therapeutic input) since 1991. Note that these figures exclude students who have asked to remain unrecorded and students that have been dealt with in groups.<sup>14</sup> Columns 5 and 6 of Table 12 show significant increases in counselling compared to the beginning of the decade. The percentage of counselled students column gives an indication of the proportion of the University of Auckland student population that received counselling. This represents greater demand and greater supply during the period of increased fees.

Even though the number of counselled students dipped after 1994, the number of counselled students has been rising again since 1997, and it appears that there has been an overall upward trend in counselling at the University of Auckland over the previous decade (even when taking into account the rising student population).

The cost of providing counselling to all students who would benefit from it has kept demand for counselling at levels above the supply of counsellors. Unmet demand, staff shortages, and long waiting times have been a feature of counselling provision. For example, due to the limitation in the supply of counsellors, an increase in the University of Auckland population does not necessarily mean that more students can be seen for counselling. Recently the number of equivalent full-time counsellors has fallen.

More students can only be provided with counselling if the average time spent with each student is decreased. In 1999 the waiting time to begin counselling after a half hour initial assessment ranged from two to six weeks. According to the *Student Counselling Service*

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14. Even though it was intended to produce this table with data going back to 1989 a serious inconsistency was found with the prior reports. The 1991 annual report states that 233 male students and 558 females students received counselling in 1991, giving a total of 791 students. However the figures must have been revised in 1992 as the 1992 report lists 500 students as attending face-to-face consultations in 1991. This figure appears more credible as there were 550 face-to-face consultations with students in 1992.

*Annual Report 1999*, a waiting time in “...excess of three weeks has serious implications for the effectiveness of the service.”

**Table 12: Comprehensive Counselling since 1991 at the University of Auckland**

Year	Male Students	Female Students	Ratio of Female to Male Students	Total Counselling Students	Percentage Counselling Students	Equivalent Full-Time Staff
1991	147	353	2.4	500	2.7%	
1992	157	393	2.5	550	2.6%	5.0
1993	316	694	2.2	1,010	4.5%	5.0
1994	—	—	—	1,264	5.3%	5.6
1995	—	—	—	1,083	4.4%	6.1
1996	338	743	2.2	1,081	4.2%	6.4*
1997	247	693	2.8	940	3.6%	6.6
1998	379	795	2.1	1,174	4.5%	6.2
1999	389	894	2.3	1,283	4.8%	6.2

Sources: University of Auckland Counselling Service Annual Report 1992, 1993, 1994, 1995, 1996, 1997, 1998 and 1999. Data excludes those students who wished to be unrecorded or attended group sessions.

\* Excluding one full-time trainee intern psychologist (non-EFT Staff position).

## 9. Scholarships and Entry Criteria

As a major university in the region, The University of Auckland has a goal of being accessible to those who can benefit from tertiary education, regardless of ethnicity and socio-economic background.

The *Report of the Taskforce for Improving Participation in Tertiary Education* (1999) at The University of Auckland showed that there is a wide and growing gap in rates of participation between students from high and low socio-economic backgrounds. The taskforce report further emphasised that students from low socio-economic backgrounds (from low income deciles) and Maori and Pacific Island students who do participate in tertiary education, disproportionately enrol in diplomas and certificate courses and in courses with lower entry requirements.

Given the international evidence on the link between educational attainment and lifetime employment and income opportunities, the taskforce made a number of recommendations for providing greater access to tertiary education. These recommendations include merit-based equity scholarships, bridging programmes and participation funding (including additional academic support and counselling, social recruitment, and special retention schemes).

In 1998 the University of Auckland established an earlier taskforce (The Student Assistance Taskforce) which considered access and student support issues. To meet the additional

challenges of high tertiary fees the taskforce recommended university level scholarships and access awards. In 1998 the University of Auckland established Access Awards with an available fund of \$1,300,000 (the available fund has since been increased to \$1,600,000).

In an environment of high and rising fees, targeted support is especially needed to attract talented students into tertiary education from all sectors of society and to achieve social goals such as an equitable level of participation by all ethnic groups. However, given the current funding system when institutions invest in these initiatives to improve access by lower income students, the resources must be taken from elsewhere (from research, teaching infrastructure or the general student body though a higher level of fees) which is likely to affect the international competitiveness and quality of teaching at New Zealand Universities.

The University of Auckland also has some 227 separate awards, scholarships and grants potentially available to undergraduate students at the University of Auckland. Out of these 46 were exclusively available to Maori and/or Pacific Island students.

According to the FIS Database of Awards, Scholarships and Grants for Individuals (known as “BreakOut”), there were 268 separate awards, scholarships and grants potentially available to undergraduate students at The University of Auckland. Out of these 69 were exclusively available to Maori and/or Pacific Island students.

The Government has recently introduced Bright Future and other scholarships that support and encourage able students into doctoral degree studies and encourage linkages with industry (e.g. Graduates in Industry Fellowship, or GRIF). These scholarships are an excellent initiative but they are only available to those already participating in University studies and focused on specific disciplines. New initiatives are needed to encourage students with the potential to succeed to enter university and take the path that leads to careers in the professions or to postgraduate research scholarships.

The University of Auckland has already begun offering Equity and Access Scholarships and Awards administered at the university level. The Faculty of Medicine, for example, has offered access awards that have been successful in providing access and relief. The bulk of the funding for these initiatives has come from the University’s own resources.

The University is also actively fundraising in “partnership” and other appeals, but within New Zealand there is not a strong culture of philanthropic support. There is a need to address why there is a paucity of benefactors and philanthropic organisations in New Zealand. The New Zealand Tax system is an important factor in this regard.

## **9.1 Lack of Supporting Tax Infrastructure for Philanthropic Endowments**

While The University of Auckland and other New Zealand Universities have attempted to establish financial support and scholarship schemes to assist students, they exist in an environment that lacks a tradition of educational philanthropy and maintains a taxation system that is not conducive to such benefactions. It is important for the future of financial support for

education that the government in consultation with taxation specialists seek ways to providing incentives for the private support of education.

One of the major factors contributing to this is that contrary to the tax legislation of other English speaking countries, philanthropic donations to organizations such as universities are seriously discouraged in New Zealand. While this may not have been of concern in the previous decades when public funds covered costs of tertiary education, in the current policy environment it creates a significant barrier to fund raising for scholarships by New Zealand Universities. A comparison of New Zealand tax policy to other countries below highlights New Zealand's uncommon policy (Appendix B provides a brief comparison).

Benchmarking information comparing the University of Auckland with G8 Australian universities shows that the average annual level of donations per equivalent full-time student at Australian G8 universities is \$505 compared with \$105 at the University of Auckland. A comparative review of the tax laws of New Zealand and other developed countries within the English-speaking university system shows that the New Zealand tax laws limit the deductibility of gifts to eligible organisations to a much greater extent than in Australia, Canada, the United Kingdom and the United States. New Zealand Universities, although actively seeking donations for support of scholarships and awards that would encourage students to enter University, are disadvantaged in comparison with overseas countries by the lack of tax incentives for donations.

A review of the New Zealand tax incentive system in consultation with tax experts is timely to allow greater support of tertiary institutions for research, teaching and scholarships by industry and individual benefactors.

## **9.2 Maori and Pacific Island Support**

The University of Auckland works to enhance Maori and Pacific Island participation through two main methods: reserved places for appropriate students, and scholarships and grants that are only available to Maori<sup>15</sup> or Pacific Island students.<sup>16</sup>

The Faculty of Medical and Health Sciences has two entry schemes for Maori and Pacific Island students. These are the Certificate in Health Science, which is a one-year bridging course, and the Maori and Pacific Admissions Scheme (MAPAS). These admission schemes are designed to increase the number of Maori and Pacific Island health professionals to levels commensurate with New Zealand's Maori and Pacific Island population.

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15. Scholarships that are available to Maori students include University of Auckland Maori and Polynesian Graduate Scholarships; institute or association sponsored scholarships (e.g. the New Zealand Association of Economists and Treasury Scholarship for Maori Students, or the New Zealand Institute of Landscape Architecture Scholarship for Maori Students); corporate scholarships (e.g. the Trans Power New Zealand Scholarship); scholarships from various central and local Government ministries and departments; scholarships for specific Maori tribes and Iwi; and trusts established for the benefit of Maori students.

16. Scholarships that are available to Pacific Island students include University of Auckland Maori and Polynesian Graduate Scholarships; scholarships from various central and local Government ministries and departments (e.g. the Ministry of Commerce, Ministry of Pacific Island Affairs, and the Auckland City Council); and trusts or foundations (e.g. the Pacific Islands Youth Leadership Trust, and the Pacific Islands Education Foundation). There appears to be less support from corporations or institutes.

The Law faculty employs a range of quotas, with up to 49 of the total 425 places in Legal System available to Maori applicants; up to 20 places for Pacific Island applicants; up to 3 places for disabled students; 2 places for international fees scholarship students; and up to 20 places for mature applicants.

The School of Business and Economics participates in the Maori and Other Polynesian Students Admission Scheme. Eligibility under the scheme is determined by an interview panel, which includes invited members of the Maori and Polynesian communities and staff members of the University of Auckland Business School.

The Engineering faculty reserves some places for Maori and Pacific Island students who do not have an A Bursary (which is generally required for entry to Part I). The Faculty of Architecture, Property, Planning and Fine Arts also reserves places for Maori and Pacific Island students in Architecture, Property and Planning courses.

The Science and Arts faculties are usually open entry; therefore special admissions policies for Maori and Pacific Island students are generally unnecessary.

Overall, the provision of student support for access scholarships is important for the University's goals of providing access regardless of socio-economic background. Currently—with the exception of the recently government-sponsored “Bright Future Scholarships” for graduate studies, and various scholarships by different organisations—expenditures by the University to provide access scholarships have to be made at the expense of other costs such as teaching, maintenance of internationally recognised staff, and research. Greater public support for tertiary access and ways of facilitating private contributions to universities should be considered for increasing access to tertiary education.

## 10. Conclusions

Major changes in the funding of tertiary education and resulting changes in tertiary fees and the parameters of the loan scheme have significantly changed the cost of financing tertiary education by students and their families over a relatively short span of time.

The international evidence on the effect of fee rises shows that a price response in participation rates is expected when fees rise, especially for students from lower socio-economic backgrounds and disadvantaged ethnic groups. This response may manifest itself through lower representation of groups of students or their greater participation in low cost courses. The middle class is, in turn, influenced by fee rises, although to a smaller extent than the lower socio-economic groups, but the participation response is expected to get larger as fees increase (and depending on the parameters of support systems such as student loans). Therefore, while the introduction of small fees may not provoke a price response in middle-income students, larger fee increases can have significant effects. In addition, the overall cost of a degree and parameters of financing it are expected to be important in relation to the student price response.

In addition, changing and increasing fees and parameters of the student support system create uncertainty that is a disincentive for students considering participation in tertiary studies. Stability and continuity of funding are crucial for students considering participation in three to six years of tertiary education—a feature that has unfortunately been lacking in the past decade.

The evidence on participation rates at Auckland University shows that enrolments have increased over the past decade, but that there has been a change in the composition of the student body. In particular, the number and percentage of part-time students, and Maori and European students has decreased significantly over time, especially in the past five years. There has also been a change in the participation of students from low income decile schools. These trends are consistent with the hypothesis that students are responding to fee changes, although this is not reflected in a decline in overall enrolments.

While the student loan system has facilitated participation in tertiary education by increasing immediate access to education through deferring fee payments, higher fees have increased the indebtedness of a generation of students. As fees become higher, the parameters of the loan system (especially the student loan interest rate) become increasingly important in relation to the lifetime effective incomes of graduates, the overall amounts paid, and the number of years required to fully repay student debt.

Students are also affected in borrowing for a home loan or to establish a business. A student loan is considered by banks as an existing loan and this can create problems with debt servicing limits. The “brain drain” and “future loan eligibility” become potentially greater problems as student loans increase in size.

Financing tertiary fees and living expenses through student employment has become less realistic for a large proportion of students as fees have increased over the past decade, and due to the limited capacity of the Auckland youth and part-time labour markets. The analysis in this report of actual earnings by students through Student Job Search confirms this.

The student allowance scheme benefits some students, but while the fee component of the cost of education has increased significantly over the past decade, the allowance has remained generally constant in real terms covering an increasingly smaller portion of the overall cost of education. In addition, the cost of living component of the allowance does not realistically reflect the higher cost of living of larger cities such as Auckland, and needs to more realistically reflect regional differences in costs of living. A recent change in the allowance system further creates significant work disincentives for students. With this change, students who work and earn an income of \$135.13 or more during any week lose the total amount of their allowance for that week. This approach treats the student allowance as a handout rather than as a planned partnership and investment in education.

A system of access scholarships has been traditionally lacking in New Zealand, and as fees have risen, scholarships have been an afterthought of the policy structure. Auckland University has taken important initiatives in creating scholarships and access awards. The Government has also recently introduced a set of merit based scholarships such as the Bright Future Scholarships for graduate studies, which is a positive development. However,

developments at the national level have lagged behind fee rises, and a greater number of merit based scholarships targeted at students from lower income families will be an important component of tertiary funding and student support for maintaining access to higher education. Funding of access scholarships cannot be left solely to tertiary institutions, and a greater partnership between tertiary institutions, the government, and the business community is needed for sustainable funding of equitable levels of access.

Finally, given the experience of a decade and the changes in tertiary sector funding, it is timely to review the relative success of the parameters of the tertiary funding structure, the loan system, fee levels and systems of student support, both at this University and at the national level. It is also useful to evaluate the parameters of the New Zealand student support system against systems currently operating in other countries, such as variations of higher education contribution schemes, a graduate tax, and the existing systems of grants and scholarships.

The government's establishment of a Select Committee to investigate all aspects of student fees, loans, allowances, and the social and economic impact of student debt in New Zealand is timely and worthwhile, and new ways of addressing some of the challenges of the past decade may result. In relation to fees and student financing of education, the government level of funding per student remains a crucial factor.

## Appendix A

**Table A1: Average Basic Living Expenses for a Single Student Living Away from Home per Week by University Location Compared with Allowances and Loan Entitlements**

City :	Auckland	Hamilton	Palmerston Nth	Wellington	Christchurch	Dunedin
Rental Accommodation (including water rates)	\$118.50	\$76.50	\$69.00	\$88.50	\$77.50	\$64.00
Travel	\$17.60	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00
Other items*	\$96.00	\$96.00	\$96.00	\$96.00	\$96.00	\$96.00
<b>Total</b>	<b>\$232.10</b>	<b>\$184.50</b>	<b>\$177.00</b>	<b>\$196.50</b>	<b>\$185.50</b>	<b>\$172.00</b>
<u>Student Allowance per week - maximum for student under 25 living away from home</u>						
	\$160.78	\$141.28	\$137.78	\$147.28	\$141.78	\$134.78
Weekly shortfall cf. basic living costs for single student living away from home	\$71.32	\$43.22	\$39.22	\$49.22	\$43.72	\$37.22
Shortfall for 37 week academic year	<b>\$2639</b>	<b>\$1599</b>	<b>\$1451</b>	<b>\$1821</b>	<b>\$1618</b>	<b>\$1377</b>
<u>Student Allowance per week - maximum for student 25 and over living away from home</u>						
	\$185.34	\$165.84	\$162.34	\$171.84	\$166.34	\$159.34
Weekly shortfall cf. basic living costs for single student living away from home	\$46.76	\$18.66	\$14.66	\$24.66	\$19.16	\$12.66
Shortfall for 37 week academic year	<b>\$1730</b>	<b>\$690</b>	<b>\$542</b>	<b>\$912</b>	<b>\$709</b>	<b>\$468</b>
<u>Student Loan per week - maximum living allowance</u>						
	\$150	\$150	\$150	\$150	\$150	\$150
Weekly shortfall cf. basic living costs for single student living away from home	\$82.10	\$34.50	\$27.00	\$46.50	\$35.50	\$22.00
Shortfall for 37 week academic year	<b>\$3038</b>	<b>\$1277</b>	<b>\$999</b>	<b>\$1721</b>	<b>\$1314</b>	<b>\$814</b>

\* Other items include the following :

Groceries (food and toiletries) = \$50.00

whiteware rental/laundry = \$3.00

gym/sports club = \$3.00

power = \$7.00

photocopying = \$3.00

personal cash = \$15.00

phone = \$5.00

lunches = \$10.00

Source: Student Affairs Registry

## Appendix B

### Tax Deductibility of Charitable Donations by Companies: An International Comparison

This Appendix contains a summary of how five countries (New Zealand, the United States, Canada, Australia and the United Kingdom) treat the tax deductibility of donations made by companies to recognised charitable institutions.

#### **New Zealand:**

The tax deductibility of donations made by companies which are *not* closely held is governed by section DJ 4 of the Income Tax Act 1994 (“ITA 1994”). A close company is defined in section OB 1 of the ITA 1994, and to simplify, it is a company whose majority interest or value is owned by five or fewer natural persons. Thus section DJ 4 of the ITA 1994 will apply to companies listed on the New Zealand Stock Exchange since they will not be closely held companies.

Section DJ 4 of the ITA 1994 provides that a non-closely held company is allowed to deduct gifts of money made to any society, institution, organisation, trust or fund of any of the kinds referred to in subsection KC 5(1). The category that is most applicable to, for example, a hardship fund established by the University of Auckland is paragraph (ac) of subsection KC 5(1), being a fund established and maintained exclusively for the purpose of providing money for any one or more of the purposes within New Zealand specified in paragraph (aa), being charitable, benevolent, philanthropic or cultural purposes.

The total amount of any deduction by a non-closely held company to a recognised institution is however limited. The amount of any deduction for a gift of money to any one donee in an income year shall not exceed:

- (a) 1% of what would have been the company’s net income before tax; or
- (b) \$4000;

whichever is *greater*. But this is also restricted by the requirement that the aggregate of all gifts made in an income year by a non-closely held company shall not exceed (for deduction purposes):

- (a) \$1000; or
- (b) 5% of what would have been the company’s net income before tax;

whichever is *greater*.

To give an example, say a non-closely held company had a net income before tax of \$1,000,000. The maximum amount that company would be able to deduct in any income year would be a gift of money of \$10,000 to any one donee, and a maximum of \$50,000 to what would have to be at least five different donees.

**United States:**

A charitable contribution made by a corporation (the term which denotes a company in the United States) to a qualified organisation is deductible under Federal tax law of the United States. A corporation can deduct charitable contributions up to 10% of before-deduction taxable income, with any excess able to be carried over for up to five years (so long as the excess does not increase a net operating loss and the 10% limit is never exceeded over any income year).

**Canada:**

In recent years there has been an extraordinary liberalisation of the tax deductibility regime in Canada with respect to charitable contributions by corporations.

In 1995, the amount a corporation could deduct as a charitable donation was limited to 20% of the corporation's net income before donation (so long as a loss was neither created nor increased). Charitable donations could also be carried forward from five previous taxation years as in the United States.

For the 1996 taxation year, the limit on the deductibility of charitable donations by a corporation increased to 50% of the corporation's net income before any donation (with the same rules applying to losses and the carrying forward of deductions). The 1997 federal budget increased the general annual limit on charitable donations to 75% of net income.

**Australia:**

In 1993, the Tax Law Improvement Project (TLIP) was established in Australia to restructure, renumber and rewrite in plain language Australia's income tax law. To date, the Income Tax Assessment Act 1997 ("ITAA 1997") has been enacted upon these principles. The expression "you" is used within the Act to apply to all legal entities (such as companies) unless its application is expressly limited (section 4-5 ITAA 1997).

There are no onerous conditions attached for deductibility when giving to a public university. The institution must be in Australia, the value of the gift must be over \$2 and, if the gift is money, the amount of the gift must be specified. The upper limit on deduction is yearly net income (before subtraction of any tax losses from prior periods): section 26-55 of the ITAA 1997.

**United Kingdom:**

In the United Kingdom, companies can deduct payments made under a charitable deed of covenant that is for a period of more than three years. It is usual for the charitable deeds of covenant to operate for four years, thus enabling charitable organisations to plan ahead.

The deed of covenant does not have to be for a fixed yearly amount, but if not, it must be linked to an objective measure, such as a fixed percentage of net income.

It is also possible to be able to deduct one-off payments under the Gift Aid regime. Since 1993, close companies (those under the control of five or fewer people) have had to donate at least £250 after tax to qualify for tax relief (section 339 of the Income and Corporation Taxes Act 1988). Earlier in the decade the gift had to be at least £600 after tax to qualify for tax

relief). There is no corresponding limit on single cash gifts made by companies that are not closely held.

In mid-1997 a review of charity taxation was announced by the Chancellor of the Exchequer, Gordon Brown. During the first phase of open consultation, over 3000 charities and other interested parties sent in their views. On 9 March 1999 the Government issued a consultation document containing points for consideration and invited final responses by 31 August 1999.

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