Counting the cost

An analysis of domestic tuition fees
This report forms part of a series called *Supporting the tertiary education system*.  

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1 Summary

Key findings

This analysis of domestic tuition fees has shown that:

- Increases in domestic tuition fees have been lower under the Fee and Course Costs Maxima (FCCM) policy than in the unregulated environment during the 1990s. Increases in government funding per student since 2001 have also helped to moderate the increases in tuition fees.
- The general affordability of tuition fees improved under the fee stabilisation policy and has since been maintained by the FCCM policy.
- Many undergraduate courses are now at, or are approaching, their maxima, while a significant proportion of government-funded courses in private training establishments have fees and course costs that are above their maxima.
- Fees for postgraduate courses are increasing at a faster rate than undergraduate courses under the FCCM policy.

This report examines trends in domestic tuition fees between 1992 and 2008. There have been a number of different funding and fees policies during this time. Between 1992 and 2000, there was an unregulated fee environment. This coincided with a period when the government was reducing the amount of funding per student to increase the share of their education costs paid by students. This resulted in significant increases in fees during this time.

The introduction of the fee stabilisation policy in 2001, followed by the introduction of the Fee and Course Costs Maxima (FCCM) policy in 2004, first improved and then maintained the affordability of tertiary education for students. Significant fee discounting in the polytechnic and wānanga subsectors has also improved affordability. Increases in per student tuition funding by the government also helped to reduce pressure to increase fees. As a result, the share of tuition costs borne by students has fallen between 2000 and 2007.

The results show that a significant proportion of course fees are now at, or approaching, their FCCM maxima. In addition, there was a significant proportion of course fees above their respective maxima, especially in the private training establishment subsector. Also, partly as a result of the FCCM policy settings, the fees for postgraduate courses appear to be increasing much faster than undergraduate fees.
2 Introduction

In New Zealand, the government expects students who participate in the tertiary education system to contribute towards the cost of their tuition. This funding, provided by student fee payments enables the creation of more student places than would otherwise be possible, resulting in greater participation in tertiary education. In addition, the sharing of the cost of tuition between students and the government is an acknowledgement that there are both private and public benefits from acquiring a tertiary education. In 2007, domestic students enrolled in tertiary education institutions (TEIs) contributed around a quarter of the revenue for their tuition.1

This report examines trends in domestic tuition fees under various government policies since 1990. In particular, there is a focus on trends in domestic tuition fees under the current Fee and Course Costs Maxima (FCCM) policy. The objective of the FCCM policy purpose is to promote affordability of study for learners and a level of certainty about the fees payable throughout the course of study for a qualification, while allowing tertiary education organisations (TEOs) some flexibility in fee-setting.

An analysis of tuition fees, such as this report, needs to be examined in the context of the wider resourcing environment, where the level of government tuition funding and student support will influence both the level of tuition fees and their impact. Therefore, in section 4 an overview of the changes made to funding and student support policies is presented.

This report has the following structure. Section 3 discusses the fee datasets used in this analysis, along with their limitations. In section 4, background information on the history of government tuition fee and funding policy in New Zealand is presented. In section 5, trends in domestic tuition fees are examined across a number of dimensions, including affordability and the sharing of the costs of tertiary education between government and students. Some conclusions are presented in section 6 and median fees by subject area and level for 2007 are presented in Appendix A and Appendix B.

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1 Because of changes over time in the way that the government funds tertiary institutions, this analysis treats the following as government tuition funding: EFTS-based tuition subsidies, special supplementary grants and funding via the Performance-Based Research Fund (PBRF).
3 Data and limitations

There are a number of sources of domestic fees data used in this report. One source of time-series data on fees is the indicative full-year domestic fees published annually by the New Zealand Vice-Chancellors’ Committee (NZVCC).\(^2\) This dataset presents indicative fee information for all universities across several subject areas and levels from 1993 to 2009.

For the period 1997 to 2007, total domestic fee revenue data is also available via the financial information reported by tertiary education institutions (TEIs) to the Ministry of Education and the Tertiary Education Commission (TEC).\(^3\) By dividing total fee revenue by the number of TEC-funded equivalent full-time students (EFTS) an average domestic fee can be calculated. It should be noted that, because of how it has been calculated, this average fee can be influenced by a change in the proportion of enrolments into higher or lower cost courses, rather than a change in the actual fee charged to individual students.

Since 2002, tertiary education organisations receiving Student Achievement Component funding\(^4\) have submitted information on the tuition fees and course costs of courses reported in the mandatory single data return (SDR). Fee information on around 60,000 courses annually is available in this dataset and is currently used as part of the monitoring process of the Fee and Course Costs Maxima (FCCM) policy. This dataset allows for a detailed analysis of fees by level, subject area and subsector.\(^5\) Note that as courses can vary in length, all the fees have been converted to a full-time equivalent fee.

The comparison of domestic tuition fees between New Zealand and overseas uses data from the Organisation of Economic Cooperation and Development (OECD) publication *Education at a Glance*. The OECD uses a purchasing power parity approach to convert the fees from several countries into US dollars for comparison purposes.

The fees and course costs in this report are reported inclusive of GST. Also, for time series analysis purposes, the data is constructed on the basis that institutions were in the subsector they belonged to in 2008 for the entire period of analysis. Therefore, the colleges of education are treated as part of the university subsector for the entire period. Similarly, Auckland University of Technology and Wellington Polytechnic are treated as part of the university subsector for the entire period.

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\(^2\) This data is available from www.nzvcc.ac.nz.
\(^3\) Until 2002, not all TEIs separated their tuition fee revenue into fees paid by domestic and by international students. Therefore, an estimate of domestic fees for those TEIs has been calculated for the years prior to 2002 by the Ministry of Education.
\(^4\) This was previously known as Student Component funding.
\(^5\) There may be instances where fee data has been entered erroneously in the submitted SDR.
4 Background

Since 1990, the resourcing of tertiary education in New Zealand has undergone significant change. Government policy for domestic fees has ranged from the direct setting of fees by the government to an environment where there was no fee regulation. Similarly, there have been significant changes to funding of tertiary education organisations (TEOs) and to the student support system. A brief history of the tertiary resourcing and student support systems outlining these changes is presented below.

4.1 Government tuition fee, tertiary funding and student support policies

1990 to 1991

Before 1990, the level of domestic tuition fees for tertiary students was very low. In the case of university students, fees for a full-time year’s study ranged from $45 in 1980 to $129 in 1989, once the Tertiary Fees Grant was taken into account.

In 1990, the government introduced a standard tuition fee for tertiary study. The fee was set at $1,250 for an equivalent full-time year of study, with postgraduate research students paying only 40 percent of this amount ($500). Reduced tuition fees were also available for 16 and 17 year olds, 18 and 19 year olds from low income families, students on basic vocational programmes and long-term beneficiaries.

The rationale for the introduction of a standard tuition fee at a much higher level than in the past was to increase the share that students paid towards their education, given the positive benefits that accrue to the individual from tertiary education. In addition, the extra funding raised through the standard tuition fee was to be used to provide more funded student places and hence increase participation in tertiary education (Ministry of Education 1990).

In 1991, the standard tuition fee was increased to $1,300, with students engaged in postgraduate research paying $520. In the same year, the equivalent full-time student (EFTS) system of funding tertiary institutions was introduced by the government throughout the sector. This system funded tertiary education institutions (TEIs) based on the number of student enrolments in various subject areas and levels. Courses with higher tuition costs were funded at a higher rate.

In terms of student allowances, there was minimal targeting of payments based on parental income testing for students aged under 20, while there was no targeting for students aged 20 and over.

1992 to 2000

In 1992, the government abolished the standard tuition fee and allowed TEIs to set their own fees. At this time a number of changes took place in the way that government funded TEIs. Firstly, the government introduced the Study Right system. Students who generated Study Right funding were subsidised at 95 percent of the base funding category they were enrolled in. Non-Study Right students were subsidised at 85 percent of the base funding category in 1992, declining to 80 percent in 1993 and 75 percent in 1994. To generate Study Right funding, a student needed to be either a school leaver (under the age of 22) or a long-term beneficiary.6

The government also introduced the Student Loan Scheme in 1992. This provided students with the opportunity to borrow for tuition fees, course costs and living expenses. Students could either make voluntary repayments, or repayments would be deducted automatically from their pay once their earnings reached a certain threshold. Interest on the amount borrowed was charged from the point of drawing down the loan. A limit of $4,500 was placed on the amount that could be borrowed to pay for tuition fees by students enrolled in private training establishments (PTEs). This amount was raised to $6,500 in 1997.

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6 The introduction of Study Right was designed to increase the contribution of certain groups of students towards the cost of their education. It was envisaged that this would improve the efficiency of student choices. Additionally, it was designed to give tertiary providers an incentive to target certain groups of students.
The government also increased the targeting of student allowances in 1992, with students under the age of 25 now subject to means testing on parental income.

During the period 1993 to 1999, the government reduced tuition subsidy rates each year. Among the reasons for these reductions was a need to make fiscal savings and also fund additional student places. The fiscal restraint prompted by the Asian crisis in 1998 also led to further reductions in base tuition subsidy rates, as did the move to fund ‘unfunded’ places in 1999. The move to fund ‘unfunded’ places was a result of a desire by the government to allow the funding of tertiary providers to be more demand driven.

The reduction in tuition subsidy rates was also in response to a 1994 report by the MinisterialConsultative Group (MCG) on funding growth in tertiary education and training. This report (better known as the Todd Report) made a series of recommendations to the government on the appropriate balance of government and student contribution to the costs of tuition.

The MCG recommended two options for the appropriate share of tuition costs between government and students. One option suggested the share of tuition costs should be split 50/50 between government and students, compared with the estimated 80 percent/20 percent split that existed in 1994. The second option recommended a 75/25 split between government and students. The government accepted the second option. To achieve this, the MCG recommended that funding rates be reduced by 1 percent a year until 2000.

In 2000, the government altered the Student Loan Scheme so that students were not charged interest while studying. Also in 2000, the government began the phase-out of the Study-Right funding differential on tuition subsidy rates.

2001 to 2003

To address the significant increases in domestic tuition fees that had occurred since 1992 in the unregulated fee environment, the government offered TEOs an increase in tuition subsidy rates in 2001 in return for freezing their domestic tuition fees at 2000 levels. All TEIs and around 75 percent of private training establishments (PTEs) accepted the government’s offer. The government repeated the process in 2002 and 2003 with further increases in tuition subsidy rates in return for domestic fees remaining frozen at 2000 levels.

In 2001 the government completed the phase-out of the Study Right funding differential.

2004 onwards

In 2004, the government introduced the Fee and Course Costs Maxima (FCCM) policy. Under this policy, the government publishes a maximum fee level for each category of course, with high-cost courses having higher maxima than low-cost courses. Undergraduate fees are limited by FCCM and can only increase by 5 percent each year towards the maxima, via the Annual Fee Movement Limit (AFML). At the postgraduate level, fees can increase by a maximum of $500 per year on an EFTS basis, via the Postgraduate Fee Increase Limit (PFIL).7

In terms of funding policy, the government has increased the base funding rates for tuition subsidies in each year, and made additional appropriations into the Performance-Based Research Fund (PBRF) and into salaries for academic staff in the universities.

In a major change to the student support system, in 2006, student loans were made interest free for borrowers who are resident in New Zealand. Also, the $6,500 limit on fee borrowing for students enrolled in PTEs which did not receive government Student Component funding was removed in 2007.

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7 TEOs can apply to the Tertiary Education Commission for an exemption to the PFIL while only tertiary education institutions can apply for an exemption to the AFML.
4.2 Impact of government policy on domestic tuition fees over time

The impact of the various government domestic tuition fee policies can be illustrated in Figure 1. This shows the median indicative full-time domestic tuition fee for student studying towards a Bachelor of Arts at university between 1981 and 2008.\(^8\) As can be seen, throughout the 1980s fees for a bachelors degree were minimal, increasing from $45 in 1981 to $129 in 1989, once the Tertiary Fees Grant subsidy is taken into account.

The introduction of the Standard Tuition fee in 1990 significantly increased the level of fees paid by domestic students. The fee increased from $129 in 1989 to $1,250 in 1990.

When fees were initially deregulated in 1992 there was a decrease in the median fee charged to students studying a Bachelor of Arts degree. The fee decreased from $1,300 in 1991 to $990 in 1992. This was partly a result of the removal of the rebate on postgraduate study, which saw postgraduate fees rise significantly following the removal of the rebate on fees for this type of study.

From 1992 to 2000 the median tuition fee for a Bachelor of Arts degree increased significantly from $990 in 1992 to $3,258 in 2000, an increase of 229 percent. This represented the fastest growth in tuition fees during the period between 1981 and 2008 and reflects a period when domestic tuition fees were rising as the government tuition subsidy per student was reducing.

The period of stable fees between 2000 and 2003 represents the period where fees were frozen under the government’s fee stabilisation policy. Since 2004, the median tuition fee for a Bachelor of Arts degree has increased from $3,268 in 2003 to $4,020 in 2008, an increase of 23 percent.

Figure 1: Bachelor of Arts median indicative tuition fee at universities

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\(^8\) The Bachelor of Arts fees at six universities were used to generate the median indicative fee. These universities are: Massey University, University of Auckland, University of Canterbury, University of Otago, University of Waikato and Victoria University of Wellington. Also note that the Study Right fee has been used where applicable.
Figure 2 presents the annual percentage increase in the median fee for a Bachelor of Arts in universities between 1993 and 2008. As can be seen, the rate of increase in tuition fees was highest during the 1990s, when fees were unregulated and there was a reduction in per student tuition subsidies paid by the government to tertiary providers. Although fees have increased since 2004, increases in per student government funding and the FCCM policy have meant that the rate of increase has been much lower than in the 1990s.

Figure 2: Percentage change in Bachelor of Arts median indicative tuition fee at universities
5  Analysis of domestic tuition fees

5.1  Average domestic tuition fee per equivalent full-time student

The average domestic fee per equivalent full-time student (EFTS) in tertiary education institutions (TEIs) is presented in Figure 3. As was noted in section 3, the average domestic tuition fee per EFTS can be influenced by a switch in enrolments to low-cost or high-cost courses which can lower or increase the average fee paid by students. Despite this limitation, this is one of the few reliable sources of fee information that is applicable to all three TEI subsectors between 1997 and 2007.

Between 1997 and 2000, the average domestic fee per EFTS was rising in all subsectors. However, the introduction of the fee stabilisation policy in 2001 halted the increase in average fees per EFTS in universities. In the polytechnic and wānanga subsectors, the average fee per EFTS actually fell significantly between 2000 and 2003, reflecting the increased use of fee discounting⁹ and a higher proportion of enrolments in lower-cost courses. Between 2001 and 2003, the average fee per EFTS in TEIs decreased by 24 percent from $3,513 to $2,664. In wānanga the fall in average fees per EFTS was 71 percent and in polytechnics 28 percent. In the universities, average fees fell slightly by 3.3 percent.

Since the introduction of the FCCM policy, the average fee per EFTS has generally been rising. Between 2003 and 2007, the average domestic tuition fee per EFTS in TEIs increased by 28 percent. In universities the increase was 22 percent, polytechnics 11 percent and wānanga 46 percent. Although exhibiting the largest increase, the average fees per EFTS at wānanga increased off a very low base and remain the lowest of the three subsectors.

Figure 3: Average domestic tuition fee per equivalent full-time student

The inflation-adjusted average domestic tuition fee per EFTS is presented in Figure 4. It shows that in real terms, the average fee per EFTS in universities in 2007 is of a similar level to that observed in 2001. Real domestic fees per EFTS in polytechnics and wānanga are well below 2000 levels.

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⁹ For example, the Southern Institute of Technology introduced a zero-fees policy in 2001.
Another way of assessing the affordability of tuition fees is to express it as a ratio of the average weekly income for an employed person. This gives a sense of how many weeks of income it takes to repay the average tuition fee for an employed person receiving an average week’s income.

Figure 5 presents the ratio of average tuition fees per EFTS to the average weekly income for employed persons. It shows that the introduction of fee stabilisation in 2001 and increased fee discounting by some TEIs has improved the affordability of tertiary education. This increased affordability has been maintained under the FCCM policy. In 2007, the average domestic tuition fee in TEIs was around 3.9 weeks of the average income for employed people. This compares with 5.7 weeks in 2000. In the universities, the ratio of average tuition fees to the average weekly income has fallen from 5.7 weeks in 2001 to 5 weeks in 2007 as a result of incomes rising faster than tuition fees.
As was discussed above, the average fee can be influenced by a change in the proportion of enrolments in low or high cost courses. Therefore, the median fee for a Bachelor of Arts at a university is presented in Figure 6 in real terms and as a ratio of the average weekly income for employed persons. This will give a sense of the change in affordability in this particular qualification.

Figure 6 shows that a Bachelor of Arts has become more affordable since the regulation of fees began in 2001. In real terms, the median tuition fee for a Bachelor of Arts in 2008 is still below that in 2000. Similarly, the number of weeks of the average weekly income needed to pay for the median tuition fee for a Bachelor of Arts is 4.4 weeks in 2008, compared with 5.2 weeks in 2000.
Figure 6: Median domestic tuition fee for a Bachelor of Arts adjusted for inflation and as a ratio of average weekly income for employed persons.
5.2 Trends in domestic fees under the Fee and Course Costs Maxima policy

Introduced in 2004, the Fee and Course Costs Maxima (FCCM) policy aims to regulate the level of domestic fees. Its purpose is to promote affordability of study for learners and a level of certainty about the fees payable throughout the course of study for a qualification, while allowing TEOs some flexibility in fee-setting.

For courses at the non-degree and degree level, the government sets a series of fee maxima or upper limits to fees. There is also an annual fee movement limit (AFML) applied to non-degree and degree-level courses which controls how quickly fees can move towards the maxima. TEOs with fees below the maxima can increase fees by a maximum of five percent up to the maxima. TEOs with fees above the maxima (these fees were at a level above the maxima when the policy was introduced in 2004), are required to keep their fees at the same level. The maxima increases each year by the rate of inflation, so that if a TEO has a course with a fee at the relevant maxima, that fee can be raised by the rate of inflation. For courses at the postgraduate level, fees can rise by a maximum of $500 per annum on a per EFTS basis.

After four years of the FCCM policy, a number of trends are becoming apparent. Figure 1 and Figure 3 have already shown that the FCCM policy has resulted in lower fee increases than under a system with no fee regulation. However, this masks a shift in the relative fee charged by level of course. As the allowable rate of increase in postgraduate-fee increases is effectively greater than the rate for undergraduate courses, there are signs, especially in the universities, that fees at the postgraduate level are increasing at a faster rate than undergraduate fees.

Figure 7 compares the median indicative fees for degree, postgraduate-taught and postgraduate-research study at universities between 2000 and 2008 in the arts subject area. Between 2003 and 2008, the median fee for postgraduate-taught courses has increased the most (43 percent), followed by postgraduate-research (35 percent) and then degree study (23 percent). With a number of universities either at or approaching the maxima in terms of undergraduate courses, this disparity in the growth in fees by level may well continue under the FCCM policy.

Figure 7: Median indicative university fee in the arts subject area by level

Source: NZVCC

10 One possible explanation for the faster rate of increase in the postgraduate taught courses is that, with the transfer of research top-ups funding to the PBRF, the funding that the universities receive from government for these enrolments has decreased.
Another issue surrounding the FCCM is the distribution of undergraduate courses around the maxima, given that, currently the fees for courses above the maxima are not allowed to increase, while for courses with fees below the maxima, fees are allowed to increase by 5 percent a year, until they reach the maxima. The fees for courses that are at the maxima can be increased by the level the maxima rise each year, which is by the rate of CPI inflation.

Therefore, where the fee for a course sits in relation to the maxima will determine how much TEOs can increase their fees. In 2007, there were around 7,600 courses with a per EFTS fee above the maxima (which is around 16 percent of undergraduate courses). In addition, another 9,200 courses (or around 20 percent of undergraduate courses) were between 95 percent and 100 percent of the maxima. Consequently, there will soon be a substantial number of courses at the maxima where the rate of fee increase will be limited to the rate of inflation.

There is significant variation in the distribution of courses around the maxima among the subsectors. In the universities, 93 percent of courses were at or below the maxima in 2007. In the polytechnics this figure was 86 percent, wānanga 98 percent, Other Tertiary Education Providers (OTEPS) almost 100 percent and private training establishments (PTEs) 58 percent. Clearly, the majority of courses above the FCCM are in the PTE subsector, while OTEPs and wānanga have the lowest proportion of courses above the maxima.

**Figure 8: Distribution of undergraduate courses around the FCCM 2007**
5.3 The share of tuition costs between government and students

One of the key issues in the resourcing of tertiary education is the share of tuition costs that are met by the government and by students. The Todd report recommended that the share of the costs of tuition should be 75/25 percent between the government and students, respectively. Figure 9 shows the student share of tuition costs between 1997 and 2007 in the various TEI subsectors. Because of changes over time in the way that the government funds tertiary institutions, this analysis treats the following as government tuition funding: EFTS-based tuition subsidies, special supplementary grants and funding via the Performance-Based Research Fund (PBRF).

Between 1997 and 2000 the student share of tuition costs was rising. This was a result of cuts to tuition subsidy rates combined with rising tuition fees. In 2000, the share of tuition costs met by students in TEIs reached a high of 33 percent.

Between 2000 and 2003, the students’ share of tuition costs fell from 33 percent to 26 percent. This fall in share was due to a combination of factors. Firstly, the government increased the funding rates via the fee stabilisation special supplementary grant (SSG) in 2001, 2002 and 2003. To receive the fee stabilisation SSG payment, TEIs were required to freeze their fees at 2000 levels. Secondly, a number of providers in the polytechnic and wānanga subsectors introduced zero or discounted fees for their courses.

Since 2003, the student share of tuition costs has remained relatively stable at around 26 percent, as fee increases have been constrained by the FCCM policy and government has increased funding to TEIs via tuition subsidies and the PBRF.

Figure 9: Students’ share of tuition costs

There is a substantial difference in the share of tuition costs between subsectors. In 2007, students at wānanga paid the lowest share of 7 percent, followed by polytechnic students (25 percent) and university students (28 percent).

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11 Funding for the PBRF was previously delivered via the EFTS-funding system. So for consistency in trend analysis, the PBRF funding has been included in tuition funding.
The most dramatic shift in share has occurred in wānanga, where the impact of growth in low cost or zero-fee courses, along with fee stabilisation, saw the student share decrease from a high of 31 percent in 2000 to a low of 6 percent in 2003. In polytechnics, the share of tuition costs met by students also decreased for similar reasons, but not to the same degree. The student share declined from 34 percent in 2000 to 25 percent in 2004.

The student share of tuition costs in the university subsector increased from 25 percent in 1997 to a high of 32 percent in 2000. Since then, the student share has decreased slightly to reach 28 percent in 2007 as a result of funding increases in that subsector combined with the government’s policies to restrict the rate of fee increases.

One factor not yet taken into account in analysing the government and student share of tuition costs is the cost of student loans to the government. At current rates, around 40 percent of lending under the student loan scheme is treated as an expense by the government. In effect, the government is writing off 40 percent of the value of the money it lends.

Figure 10 presents the raw and adjusted share of tuition costs once the write-off of student loans used to pay for tuition fees is taken into account. It shows that once write-offs are taken into account, the student share of tuition costs in TEIs decreases from 26 percent to 18 percent in 2007. In universities, the student share falls from 28 percent to 19 percent, in polytechnics 25 percent to 17 percent and in wānanga from 7 percent to 5 percent.

**Figure 10: Share of tuition costs by source with adjustment for student loan write-offs 2007**
5.4 Fee discounting and borrowing

The fees reported by TEIs in their financial accounts can be reconciled with two other sources – the fees indicated by the Single Data Return (SDR) and the borrowings from the Student Loan Scheme to pay for fees. Comparing the fees reported in annual financial returns with the fees indicated from the SDR can give a sense of the fee discounting that may apply in the various subsectors, which usually takes the form of fee-free scholarships. Comparing the financial returns with borrowed fees gives an indication of what proportion of fees is being paid for via student loans.

Figure 11 presents the reconciliation of the three sources of fee data. It shows that in the universities the fees indicated by the SDR ($504 million) are very close to those reported in the annual financial accounts ($495 million). This suggests that there is little fee discounting in this subsector. However, in the polytechnic and wānanga subsectors there is a greater degree of fee discounting behaviour going on. The fees reported in the financial returns from polytechnics are just 77 percent of those indicated by the SDR. The figure for wānanga is even lower at 20 percent.

Figure 11: Reconciliation of domestic tuition fees 2007

Figure 11 also shows that in 2007 the highest proportion of fees that students paid for by borrowing would appear to be in wānanga (86 percent), followed by universities (81 percent) and polytechnics (79 percent).

Table 1 shows that in since 2005 a higher proportion of fees are being paid for via student loans. In 2005, 72 percent of reported fees in TEIs were paid for by student loans. By 2007, this figure had risen to 81 percent. There are a number of possible reasons for this. Firstly, the change to the Student Loan Scheme in 2006 to make student loans interest free for borrowers who are resident in New Zealand has made it more attractive for students to borrow to pay for their fees. Also, there has been a reduction in the proportion of low-cost courses offered by TEIs; fees are less likely to be paid for via student loans if they are very low.

Table 1: Borrowed fees as a percentage of reported domestic fee revenue

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>73%</td>
<td>74%</td>
<td>74%</td>
<td>73%</td>
<td>78%</td>
<td>81%</td>
</tr>
<tr>
<td>Polytechnics</td>
<td>76%</td>
<td>85%</td>
<td>74%</td>
<td>71%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>Wānanga</td>
<td>96%</td>
<td>94%</td>
<td>83%</td>
<td>74%</td>
<td>78%</td>
<td>86%</td>
</tr>
<tr>
<td>TEIs</td>
<td>74%</td>
<td>78%</td>
<td>74%</td>
<td>72%</td>
<td>77%</td>
<td>81%</td>
</tr>
</tbody>
</table>

Source: Ministry of Social Development, Ministry of Education and the Tertiary Education Commission
5.5 International comparison of domestic tuition fees

The Organisation for Economic Cooperation and Development (OECD) carries out a comparison of tuition fees across countries annually and compares the per-EFTS domestic fee across a number of selected countries. The OECD uses a purchasing power parity approach, which adjusts for the different cost structures in the various countries, to convert the domestic fees to US dollars and allow for a meaningful comparison. The latest figures available are from 2005 and are produced in Figure 12 below. They show that the cost of tertiary education for students in New Zealand compares relatively favourably with other OECD countries.

At the bachelors level, New Zealand domestic tuition fees are lower than a number of other developed countries. As can be seen in Figure 12, the average tuition fee in New Zealand (US$2,671) is lower than in the USA (US$5,027), Japan (US$3,920) and Australia (US$3,855). In Ireland, students are not charged a domestic tuition fee. At the diploma level, the average tuition fee per EFTS in New Zealand (US$2,489) is higher than in the United States (US$1,850) and Japan (US$1,682) and Ireland (US$0), but is still lower than that charged in Australia (US$3,734).

Figure 12: Average domestic tuition fee by selected country and level 2005

Note: Fees shown for New Zealand are for public tertiary education institutions only.
Source: OECD Education at a Glance 2008

It is important to take into account also government funding of student support when comparing tuition fees charged to students. Table 2 categorises countries based on their level of fees and their level of government student support funding. As can be seen in Table 2, New Zealand is in the high tuition fees/well-developed student support system category, as is Australia and the United Kingdom. Although Ireland has no tuition fee, it has a less-developed student support system.

Table 2: OECD countries categorised by level of tuition fees and student support

<table>
<thead>
<tr>
<th>Low/no tuition fees</th>
<th>High tuition fees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Less developed student support systems</strong></td>
<td>Austria, Belgium, France, Ireland, Italy, Poland and Spain.</td>
</tr>
<tr>
<td><strong>Well developed student support systems</strong></td>
<td>Denmark, Finland, Iceland, Norway, Sweden, the Czech Republic and Turkey</td>
</tr>
</tbody>
</table>

5.6 Changes in the cost of education by level

Statistics New Zealand publishes data on the costs facing consumers of education in New Zealand. The published data includes price indices for early childhood, primary/secondary and tertiary education. This allows for a comparison of how the costs of education have changed over time at these different levels. This data is presented in Figure 13, along with the overall Consumers Price Index (CPI).

Two of the three education indices have increased faster than the overall rate of inflation. Between 1994 and 2008, the fastest growth in costs occurred in tertiary education (133 percent), followed by primary and secondary education (118 percent) and early childhood education (7.2 percent). The CPI increased by 35 percent during this period. As can be seen in Figure 13, for most of the period the cost of early childhood education was increasing faster than general inflation. The significant reduction in the cost of early childhood education between 2007 and 2008 is a result of the introduction of the government’s 20 hours free childcare policy.

The impact of the fee stabilisation policy on the costs of tertiary education is clearly shown between 2001 and 2003. The slower rate of growth in costs under the FCCM policy since 2004, compared with the unregulated fee environment of the 1990s is also evident.

Figure 13: Consumer price indices for education by level

![Graph showing consumer price indices for education by level from 1994 to 2008.](image)

Note: Data is from the March quarter.
Source: Statistics New Zealand

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12 These contribute to the Education subgroup of the Consumers Price Index.
Figure 14 compares the rate of change in the tertiary education consumer price index with the change in the All Groups CPI. During the period the FCCM policy has been in place, the rate of increase in the cost of tertiary education is more in line with the growth in overall inflation.

**Figure 14: Percentage increase in tertiary education consumer price index and All Groups CPI**
5.7 Tuition fees and participation in tertiary education

Analysing the impact changes in tuition fees have on participation in tertiary education is difficult, given the multitude of factors apart from costs that influence student decision-making. These factors include the state of the labour market, changes in the tastes and preferences of students and also changes to the student support system (such as making student loans interest free).

One polytechnic, the Southern Institute of Technology, introduced a zero fees policy in 2001 and experienced a growth of 62 percent in domestic EFTS compared with the previous year. However, the extent to which this may simply reflect substitution behaviour, with students who would have studied in other regions moving to Southland to take advantage of the cheaper fees, is not clear.

A recent New Zealand study found that students intending to go to university were not particularly sensitive to the price of their tertiary education (Holdsworth and Nind 2006). Certainly, the increase in university tuition fees during the last 15 years has not resulted in a fall-off in participation rates at the bachelors-degree level. Figure 15 compares the participation rate for students aged 18 and 19 at the bachelors-degree level who attended a university\textsuperscript{13} with the real indicative median tuition fee for a bachelors degree (in this case in arts).

As can be seen in Figure 15, the increase in the real tuition fee at universities was actually matched by an increase in the participation rate of students aged 18 and 19. Similarly, when real tuition fees were falling in the early 2000s, there was no associated surge in enrolments. Usher (2006) suggests that students from poorer socioeconomic groups are more likely to be price sensitive when it comes to tertiary study. Given that students studying degrees at university are predominantly from the middle classes or higher, this could explain the lack of sensitivity to the rising cost of university degree study. However, as was mentioned earlier, given the other factors that can influence participation in tertiary education, caution should be used in interpreting this as meaning tuition fees have no effect on participation.

\textsuperscript{13}Colleges of education students, Auckland Institute of Technology students and Wellington Polytechnic students are treated as being university students in this analysis.
Figure 15: Real tuition fee and participation rate of 18 and 19 year olds in bachelors degrees (universities)
Domestic tuition fees are an important source of income for TEIs. However, fees have decreased as a proportion of total revenue for TEIs from a peak of 23 percent in 2000 to 17 percent in 2007. A number of factors have contributed to this trend. These include the impact of the fee stabilisation policy, fee discounting by TEIs and a significant increase in international fee revenue as a result of increased enrolments of international students.

In 2007, domestic tuition fees made up the largest proportion of total revenue in polytechnics (18 percent), followed by universities (17 percent) and then wānanga (7 percent).

Figure 16: Domestic tuition fees as a percentage of total TEI revenue
Conclusion

By its nature, domestic tuition fee policy will always face competing tensions between affordability of tertiary education for students and the revenue requirements of tertiary education organisations. Since 2001, government policies to constrain tuition fees, along with fee discounting behaviour by some providers, would appear on average to have improved and then maintained the affordability of tertiary education for students, certainly compared with previous periods where fees were not regulated. As such, the Fee and Course Costs Maxima (FCCM) policy is achieving its objective.

However, there are a range of issues that need to be monitored to analyse the effects of the FCCM policy. A significant proportion of undergraduate courses are now either above, or will soon be at, the maxima. The fees for courses above the maxima are effectively frozen. For those courses with fees at the maxima, this will limit the rate of increase in these fees to the rate of inflation, which historically is lower than the five percent increase allowed for fees that are below the maxima. The impact of this on the financial viability tertiary providers will need to be monitored. In addition, because of the difference in how undergraduate and postgraduate courses are treated under the FCCM policy, trends in tuition fees at different levels of tertiary education will also need to be monitored.
Appendix A: Median domestic fees by level and broad subject area 2007

The fee information reported in the Single Data Return (SDR) can be used to show how domestic tuition fees\(^{14}\) for courses compare by level and by broad subject area. Figure 17 shows the median fee per EFTS by broad subject area using the New Zealand Standard Classification for Education (NZSCED) and by level.\(^{15}\)

In terms of level of study, generally the higher the level of course the more expensive are the median tuition fees. Postgraduate-taught courses are the most expensive, followed generally by postgraduate-research, degree and then non-degree.

In terms of median fees by subject area, at the degree level ‘Engineering’ ($4,680) is the most expensive followed by ‘Natural and physical sciences’ ($4,540). The lowest-cost courses at the degree level are in ‘Management and commerce’ ($3,880) and ‘Food, hospitality and personal services’ ($3,880).

Overall, the most expensive median tuition fee was at the postgraduate-taught level in ‘health’ ($5,328). The lowest median fee was at the non-degree level in ‘Agricultural and environmental studies’ ($2,012).

However, analysing median fees at the broad NZSCED level can mask the comparative cost of courses. For example, ‘Health’ includes fees for both medical and nursing degrees. Section 5.3 examines fees by level at the narrow NZSCED level.

Figure 17: Median tuition fee and course costs per EFTS by broad subject and level 2007

\(^{14}\) Note that these fees include compulsory course costs reported in the SDR.

\(^{15}\) The fees in Figure 5 have been ranked from highest to lowest at the degree level.
Appendix B: Median domestic fees by level and narrow subject area 2007

The median fee for courses at the non-degree level is presented in Figure 18 below, ranked from highest to lowest cost. The most expensive narrow subject by some margin is ‘Aerospace engineering’ ($11,000), followed by ‘Dental studies’ ($5,068) and ‘Food & hospitality’ ($4,703). The lowest-cost fee was in ‘Fisheries studies’ ($120).

Figure 18: Median tuition fee and course costs per EFTS by narrow subject at the non-degree level 2007
The median fee for courses at the degree level is presented in Figure 19. This shows that at this level of study, the highest median fee is charged in ‘Medical studies’ ($10,776), followed by ‘Veterinary studies’ ($7,820) and ‘Optical science’ ($6,576). The lowest-cost courses are in ‘Automotive engineering’ ($2,025).

Figure 19: Median tuition fee and course costs per EFTS by narrow subject at the degree level 2007
The median tuition fee for courses at the postgraduate-taught level is presented in Figure 20 below. The highest cost fees occur in ‘Other management & commerce’ ($8,758), ‘Veterinary studies’ ($7,772) and ‘Dental studies’ ($6,896). The lowest fees occur in ‘Social skills programmes’ ($0).

Figure 20: Median tuition fee and course costs by narrow subject at the postgraduate-taught level 2007
The median tuition fee at the postgraduate-research level is presented in Figure 21. It shows that the highest median fee is charged in ‘Dental studies’ ($6,162) followed by ‘Medical studies’ ($6,018) and ‘Sport & recreation’ ($6,018). The lowest median fee is in ‘Curriculum and education studies’ ($3,695).

Figure 21: Median tuition fee and course costs by narrow subject at the postgraduate-research level 2007
References


