## Chapter 13 Tertiary education providers

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Chapter 13

AN OVERVIEW

The collective financial performance of the 33 tertiary education institutions was moderately strong over 2005. Liquidity and cash flow were both above the benchmark set for prudent operation of a tertiary education institution.

However, when compared with the performance between 2002 and 2004, performance in 2005 fell as the operating environment changed. The aggregate operating surplus fell to 2.3 percent of revenue – below the benchmark of 3 percent for the first time since 2000. At the same time, the indicators of liquidity and cash flow both worsened.

In large part, this decline in financial performance reflected real factors such as the reduction in international student enrolments, increases in the costs faced by institutions, changes to the funding of community education, and the slowdown in the growth of enrolments in the wānanga.

While aggregate financial performance was moderately strong, there was considerable variation between the tertiary education institutions, with some recording very strong performance, while nine institutions had an operating deficit in 2005, compared with six in 2004 and none in 2003.

Overall, the universities performed more strongly than the other sub-sectors. They experienced only a relatively small decline in international students, their income was more diversified than that of the other sub-sectors and they have had only relatively small community programmes, so their performance was not especially affected by the changes in funding of these programmes. The universities’ collective surplus – 3.2 percent of revenue – was above the benchmark.

By contrast, the polytechnics experienced a fall in income as international enrolments dropped and as they experienced the effects of community education funding changes. While income fell, the polytechnics’ costs continued to rise. Their combined operating surplus was 1.6 percent of revenue, compared with 4.4 percent in 2004 and 7.7 percent in 2003. Five of the 20 polytechnics recorded an operating deficit.

LOOKING TO 2006

The half-year financial reports of tertiary education institutions give an idea of the likely financial performance of institutions during 2006.

The operating environment for tertiary education institutions has become more difficult as the downturn in international enrolments has persisted and as the effects of the government’s policy changes in areas such as community education take effect. While most of the universities were forecasting a surplus for 2006, in some cases the surplus was smaller than in previous years. All three wānanga and nearly half the polytechnics were forecasting a deficit.

FOREWORD

This chapter provides an outline of the financial performance of New Zealand’s public tertiary education institutions in 2005 in the context of past trends and results. The financial data presented in this chapter excludes goods and services tax, unless otherwise stated. Note also that the Auckland College of Education merged with the University of Auckland on 1 September 2004. Data on the University of Auckland for 2004 incorporates data for the former college, even though the merger took place during the year.

CURRENT FINANCIAL SITUATION

The financial performance of tertiary education institutions improved significantly between 2000 and 2004. In 2005, there was some reversal in the trend. However, on most measures, the results in 2005 were still ahead of those in 2000. The improvement in the overall financial situation can be seen in the following graph, which tracks performance between 2000 and 2005. The graph summarises the performance of the tertiary education institutions against benchmarks for four key dimensions of financial performance: cash liquidity, surplus as a percentage of revenue, asset productivity and net operating cash flow. The actual results are compared with the minimum thresholds expected by the Tertiary Advisory Monitoring Unit, the government unit that monitors tertiary education institution performance. In order to compare indicators on different scales, the figures have been scaled to make an index, where 100

ANALYTICAL TABLES: An associated set of tables on financial performance of tertiary education institutions is available on the Education Counts website, Tables FNP1-5. Detailed technical information on the data presented here can be found in chapter 17.
represents the benchmark in each case. Unless there is a reason in a particular case, the benchmark is seen as the minimum required for the prudent operation of the organisation.

### Figure 13.1: Strategic financial position of tertiary education institutions

![Graph showing financial positions of tertiary education institutions]

**Source**: Annual reports of tertiary education institutions.

**Note**: Surplus (before abnormals) has been used in this graph.

### Table 13.1: Financial performance of tertiary education institutions

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Performance in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>Liquid assets</td>
<td>12.0</td>
</tr>
<tr>
<td>Surplus (before abnormals) as a % of revenue</td>
<td>3.0</td>
</tr>
<tr>
<td>Asset productivity</td>
<td>40.0</td>
</tr>
<tr>
<td>Net cash flow</td>
<td>11.0</td>
</tr>
</tbody>
</table>

One significant development over this period has been the strengthening of liquidity. Liquidity is an important measure because it is an important source of finance for the intellectual and physical developments that underpin the sustainability of an institution. Liquidity also provides a safety margin that gives the institution cash to deal with adverse changes in its operating environment.

A reasonable operating surplus is needed to provide funds for reinvestment – and therefore to enable a tertiary education institution to maintain or enhance its educational capability.

After having risen strongly between 2000 and 2003, the operating surplus as a percentage of tertiary education institution revenue fell in 2004 and 2005, falling below the 3 percent benchmark in 2005. One of the important reasons for this trend has been the fall-off in international student numbers. In addition, in the polytechnics, changes to limit the amount of community education funded through the student component of the funding system have also had the effect of reducing surpluses.

Tertiary education institutions have relatively low levels of debt. Total debt is less than 6 percent of equity plus debt while the overall ratio of equity to assets is over 80 percent.

### THE INCOME OF TERTIARY EDUCATION INSTITUTIONS

The income of tertiary education institutions continued to grow in 2005 but at a lower level than for the previous four years; it was in fact the lowest rate of increase since 2000. Costs followed a similar trend. What is significant is that, in 2004 and 2005, costs grew more sharply than revenue – meaning that the operating surplus was reducing. The total surplus of the tertiary education institutions (before abnormal items) fell by 42 percent between 2004 and 2005 – from $135 million to $79 million.

![Graph showing annual growth in expenses and income]

**Source**: Annual reports of tertiary education institutions.
Income across the tertiary education institution sector was reasonably diversified. The largest single component of tertiary education institution revenue was provided by the government through tuition subsidies. This amounted to $1.52 billion in 2005, an increase of 55 percent since 1996. Other government revenue (including Performance-Based Research Fund allocations but excluding government-funded research contracts) contributed some $117 million in 2005. Overall government funding in 2005 was at a similar level to 2003 and 2004 in dollar terms, following two years of significant growth. Government education revenue represented 47 percent of the total income of the tertiary education institutions in 2005, compared with 49 percent in 2004 and 51 percent in 2003. This represented the lowest proportion since 1996.

Tertiary education institutions also earn some revenue from other government votes. For instance, some tertiary education institutions earn funding through the government’s research, science and technology funds and some conduct research for government agencies. Thus, the figures quoted here understate the full extent of government funding provided to the tertiary education institutions.

Total student tuition fees accounted for approximately 28 percent of income in 2005, compared with 29 percent in 2004. Domestic student fees contributed $563 million in 2005, up from $549 million in 2004 and $529 million in 2001. This represented 16 percent of total tertiary education institution income, similar to 2004 but down from a high of 23 percent in 2000. In part, this fall reflects the government’s fee stabilisation policies. Another factor influencing fee income in the polytechnics and wānanga is the extent of discounting of fees – offering courses with low or zero fees. In nominal terms, total domestic student tuition fee income has remained relatively static over the past three years, while declining as a proportion of total income.
With the downturn in enrolments by international students, revenue from international student fees fell slightly in 2005, after five years of strong growth. In 2005, total revenue from this source was $426 million, 1.3 percent down on the $432 million earned in 2004. This compares with $262 million in 2002 and $153 million in 2001. There has been a four-fold increase since 2000. International fee revenue represented 12 percent of total income in 2005, compared with 13 percent in 2004, 10 percent in 2002 and 6 percent in 2001. The universities have been slightly less affected by the drop in international students than other sub-sectors. Some 79 percent of the total international student tuition fee income in 2005 was generated by the university sub-sector, compared with 76 percent in 2004.

Other activities, including contract research, generated some 25 percent of income. Revenue generated from external research contracts undertaken by the tertiary education institutions amounted to $333 million or 9.5 percent of income. This represented a 7.9 percent rise on 2004. Research contracts brought in $196 million in 2000, so the increase between 2000 and 2005 was 66 percent. The university sub-sector accounted for more than 99 percent of this research contract income.

**Income by sub-sector**

Figure 13.6 shows the proportion of total income derived from government for the sector as a whole and for the sub-sectors, while Figure 13.7 shows the split of total income by sub-sector.

While 47 percent of the total revenue of the tertiary education institutions was derived from the government in 2005, there were marked differences in the sub-sectors in the proportion of their revenue that came from that source. The universities had the lowest proportion – 38 percent – while the wānanga derived 86 percent from the government. The low proportion in the universities results from the ability of that sub-sector to recruit international students, to raise research contract revenue and to engage in consulting activities. The wānanga, by contrast, have almost no international students, charge their students relatively low fees and have a research culture that is just getting going. So the heavy dependence of the wānanga on government revenue is entirely predictable.

The university sub-sector earned the highest proportion of total tertiary education institution income in 2004 at 68 percent, the same share as in 2000. Between 2000 and 2003, the university share had fallen as the polytechnics and the wānanga had grown. With the absorption of colleges of education into the university sub-sector during 2004 and 2005, and with the flattening of growth in the wānanga and the reduction in the polytechnics, the universities have restored their share of the total revenue.

In the last five years, the most significant increase in share of income has been in the wānanga, whose share rose from 1 percent of total income in 2000 to 7 percent in 2003 and 6 percent in 2004 and 2005. The polytechnics’ share of total income fell to 24 percent in 2005, from a high of 27 percent in 2003, largely as a result of a fall of 2 percent in the total revenue between 2004 and 2005.
Figure 13.8 illustrates the trend in the rate of income growth of the universities and polytechnics and of tertiary education institutions as a whole.

![Figure 13.8: Annual revenue growth by sub-sector](source)

After a period of strong growth in income, the polytechnics have experienced a falling rate of growth from 2003 to 2004. From 2004 to 2005 income fell. The wānanga had extremely strong income growth, more than 100 percent per annum, between 2000 and 2002. Since 2003, their income has reduced each year. The universities’ income has grown steadily, ranging from 7.6 percent to 12 percent a year throughout the period under consideration. In part, the recent growth reflects the absorption into the universities of the Auckland College of Education and the Wellington College of Education.

Total income by sub-sector over the period is shown in Figure 13.9 below.

The university sub-sector

The total revenue of the universities in 2005 was $2.39 billion, a 10 percent (or $215 million) increase over 2004. This followed 12 percent income growth between 2003 and 2004. Of the total income of the universities, tuition subsidies from the government and fees from students were $1.57 billion in 2005, up by $34 million or 2.2 percent from 2004. That increase was, however, of lower magnitude than in the past few years. For instance, revenue from these sources in the universities rose by $138 million or nearly 11 percent between 2002 and 2003. The major factor in this change in the rate of growth in education revenue is the decline in international student numbers and, consequently, in international fee revenue. Whereas in 2004 there was a 19 percent, or $52 million, rise in international student fees, between 2004 and 2005 international fees rose by only $7.5 million or 2.3 percent. Total domestic student fee revenue grew by $14.6 million, or 4.0 percent, following a rise of $27 million or 8.1 percent between 2003 and 2004. Government tuition revenue grew by 1.5 percent, or $12 million, the smallest percentage rise in this form of revenue since 2000.

In 2005, other revenue (trading and miscellaneous) grew by 44 percent, or $136 million, to $444 million. This category accounts for about 19 percent of the total revenue of the university sub-sector. This growth continued past trends.

Since 2000, the huge rise in international student fees, the constant rise of research revenue, and government domestic fee policies have changed the character of university sub-sector revenue. Over this period, government revenue grew by $177 million, or 26 percent, in part because of rising funding rates. By comparison, international student revenue increased by $262 million, or more than 300 percent, and external research contract revenue grew by 71 percent. Over the period 2000 to 2004, domestic student tuition fee revenue increased by 18 percent, influenced by government policy on maintaining the affordability of tertiary education. As a percentage of total revenue, domestic student tuition fee revenue has declined from 21 percent in 2000 to 16 percent in 2005.
The shift in the sources of university income since 2000 is marked and is shown in Figure 13.10. The three major changes have been a decrease in government funding as a proportion of total revenue by almost eight percentage points – from 45 percent to 38 percent – offset by increases of one percentage point in external research contract income, four percentage points in tuition fee income and three percentage points in other income. The increase in fee income particularly reflects the international student contribution.

Figure 13.10: University income by source

Source: Annual reports of tertiary education institutions.

In 2005, the reliance on government education subsidies was broadly similar in each of the eight universities, with the marked exception of Lincoln University. The university sector average in 2005 was 38 percent of total income from government funding. The Auckland University of Technology had the highest reliance on tuition subsidy revenue at 44 percent of its total income, whereas Lincoln University received less than 20 percent of its income from tuition subsidies.

The polytechnic sub-sector

In the institutes of technology and polytechnics, revenue increased by almost 50 percent over the period between 2000 and 2004. The level of the increases in revenue in 2002 (15 percent) and 2003 (nearly 20 percent) were especially significant. This trend mirrors the increase recorded in enrolments in non-formal courses over that time. In 2004, revenue growth fell sharply, to 4.4 percent. In 2005, the total revenue of the polytechnics fell by 2.1 percent. This was the first time the polytechnics, as a group, had experienced a drop in revenue, so the financial and cultural effects of this change were very serious.

Fees contributed about 30 percent of the institutes of technology and polytechnics’ total revenue in 2004 and 2005, compared with 34 percent in 2001 and 2002 and slightly more than the average for the universities. There is significant variation among polytechnics in the reliance on fees. Among the polytechnics with significant numbers of international students (such as Unitec New Zealand and Whitireia Polytechnic) over 40 percent of total revenue is sourced from student fees. However, the decline in international student enrolments has affected the polytechnics. Between 2004 and 2005, the number of international students at Unitec New Zealand and Whitireia Polytechnic fell by 18 percent (when measured in equivalent full-time student units) and the share of their revenue derived from international fees fell from over 26 percent to 22 percent. In the polytechnics as a whole, international fee revenue fell by 12 percent between 2004 and 2005.

Polytechnics with a relatively low reliance on international students – such as Aoraki Polytechnic and Telford Rural Polytechnic – earn a relatively low proportion of their income from fees. In Aoraki’s case, fees represent around 10 percent of income, while Telford earns less than 5 percent of revenue from fees.

Figure 13.11: Institute of technology and polytechnic income by source

Source: Annual reports of tertiary education institutions.

Note: Research contract income was reported as nil for the years 2000 to 2005.

There is still a heavy reliance on government student component tuition subsidy funding in the sub-sector. Nearly 61 percent of revenue is from this source (compared with 38 percent for the universities). Four polytechnics – Aoraki, Northland, Tai Poutini and Telford – receive over 75 percent of their income from government funding. Other income sources are relatively limited and only account for 10 percent of total revenue.
2004 and 2005 saw sharp decreases in non-formal education in the polytechnics in response to changes in the approach to funding this form of tertiary education. In 2003, this category of enrolments accounted for approximately 25 percent of domestic equivalent full-time students in polytechnics. In 2004, this fell to 17 percent. In 2005, the proportion was 9 percent.

THE EXPENDITURE OF TERTIARY EDUCATION INSTITUTIONS

The total expenditure of tertiary education institutions has increased in nominal terms each year. The total expenditure of tertiary education institutions in 2000 was $2.17 billion and rose to $3.43 billion in 2005. This represents a 58 percent increase over that period, while enrolments – measured by equivalent full-time students – increased by 44 percent over the same time. While the increase in volume is a major driver of cost increases, other causes include inflation, wage growth and new technology.

Figure 13.12 illustrates the major cost components of tertiary education institutions. At 55 percent of the total, personnel costs are the dominant component of expenditure in the sector. This is not surprising, given the service nature of tertiary education. This proportion has reduced, but only very slowly, since 2001.

Expenditure per equivalent full-time student varies across the sector with the difference being attributable to a variety of factors. For instance, different types of courses require differing resourcing. The level of such activities as trading or commercial research also contributes to the differences. As student numbers have risen and as different types of courses have been developed, the cost per equivalent full-time student in the sector as a whole has fluctuated. The average total expenditure per equivalent full-time student increased in 2004 and 2005 after two years of decline. The results show that the universities spend more per student than other types of institutions. Between 2000 and 2002, the spending per equivalent full-time student in the wānanga fell as enrolments grew sharply in that sub-sector.
Since then, as the rate of enrolment growth in the wānanga has fallen, the trend has reversed. In the polytechnics, spending per equivalent full-time student fell as community education enrolments grew but has risen as enrolments in that kind of course fell.

One way of understanding the differences in cost structure between different sub-sectors and different types of tertiary education is to look at the average personnel expenditure per equivalent full-time student. In 2003, the ratio for the tertiary education institutions as a whole fell, largely as a result of the rapid growth in enrolments in the wānanga and the rise in non-formal community education in the polytechnics. However, with wānanga growth having slowed and restrictions being placed on community education in tertiary education institutions, average personnel costs increased in all sub-sectors in 2004 and 2005. Costs vary significantly across the sectors, with the universities having the highest level of expenditure. That higher cost per equivalent full-time student reflects the universities’ higher level of research intensity. The Universities of Auckland and Otago and Lincoln University have the highest personnel cost per equivalent full-time student among the universities. The Auckland University of Technology has the lowest personnel cost per equivalent full-time student, which reflects the stage of development of the institution in terms of its current faculties and research profile.

The tertiary education institutions’ operating surplus fell by 40 percent between 2004 and 2005, from $132 million to $79 million, before non-recurring and unusual expenses. The operating surplus fell as a percentage of income from 4.0 percent in 2004 to 2.3 percent in 2005. This figure is a good guide to the financial health of the sector’s core operations. With the inclusion of non-recurring and unusual items, however, the operating surplus for the total sector in 2005 was $120 million, compared with $220 million in 2004 and $56 million in 2003.

Nine of the 33 tertiary education institutions recorded net operating deficits before abnormal items in 2005, compared with six of the 34 in 2004 and none of the 35 in the previous year. In 2005, 14 institutions reached the recommended threshold of 3 percent for surplus as a percentage of income, compared with 20 in 2004, 24 in 2003 and 13 in 2000.
### Table 13.2: Number of tertiary education institutions reporting losses and surpluses

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tertiary education institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 3 percent</td>
<td>13</td>
<td>17</td>
<td>20</td>
<td>24</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>0-3 percent</td>
<td>13</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Deficit</td>
<td>12</td>
<td>11</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Surplus as a percentage of revenue (before abnormals).

Table 13.3 below gives the net return on revenue before abnormal or non-recurring items.

### Table 13.3: Net return on income

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>2.9</td>
<td>3.6</td>
<td>3.0</td>
<td>3.5</td>
<td>4.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Polytechnics</td>
<td>0.4</td>
<td>1.7</td>
<td>4.5</td>
<td>7.7</td>
<td>4.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Colleges of education</td>
<td>6.0</td>
<td>2.9</td>
<td>2.9</td>
<td>1.6</td>
<td>0.6</td>
<td>-0.3</td>
</tr>
<tr>
<td>Wānanga</td>
<td>4.0</td>
<td>8.2</td>
<td>22.6</td>
<td>15.7</td>
<td>-1.0</td>
<td>-5.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.4</td>
<td>3.2</td>
<td>4.4</td>
<td>5.4</td>
<td>4.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>

The increase in the operating surpluses in the polytechnics between 2001 and 2003 can be explained by the significant increase in international students and enrolments in non-formal courses. The latter are now reducing as a result of changed funding policies, while the polytechnics have had significant falls in international students. The surplus of the polytechnics was $13 million in 2005, compared with $38 million in 2004, $64 million in 2003 and $2.3 million in 2000.

The universities have maintained their combined surplus at above the benchmark of 3 percent of income since 2001. The surplus of the universities was $78 million in 2005, compared with $96 million in 2004 and $44 million in 2000.

The wānanga sub-sector experienced an operating deficit, before abnormal items, of $11 million in 2005, compared with a deficit of $2.2 million in 2004. In 2003, however, the surplus was $35 million.

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### CASH FLOWS

Net operating cash flows in the sector decreased slightly between 2004 and 2005, from $442 million to $406 million. The fall reflected decreases in the polytechnics, where net operating cash flows declined from $133 million to $68 million, and a decrease in the wānanga from $13 million to a negative cash flow of $5.5 million. By contrast, net operating cash flow in the universities rose by 16.5 percent, from $291 million to $339 million. Net investing cash flows (capital expenditure and purchase of investments), in the sector decreased by $421 million in 2005, compared with decreases of $442 million in 2004 and $430 million in 2003. In the university sector, the result in 2005 was a decrease of $326 million, compared to decreases of $309 million in 2004 and $291 million in 2003. The trend shows continued increases in investment by the tertiary education institutions in capital infrastructure.

The sector’s net financing cash flow was $18 million, compared with $43 million in 2004 and $39 million in 2003. For the universities, the result was a negative cash flow of $9.4 million, compared with $39 million in 2004 and $12 million in 2003. While 2004 had seen the highest level of debt financing secured in one year, there was reduced net debt financing in 2005.

### SECTOR LIQUIDITY

The levels of cash, bank deposits and readily liqulifiable assets (liquidity) held by institutions constitute an important indicator of financial health and viability. These factors provide a buffer against variability in performance. The liquidity holding also represents the capacity for an institution to invest when significant strategic repositioning is required. The operating cash surpluses of tertiary education institutions are generally significantly lower than those of purely commercial organisations. As a result, financing through borrowing may not be a viable option for tertiary education institutions.

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1 Net capital expenditure is cash expenditure for fixed asset purchases less cash receipts from fixed asset sales.
The cash holdings of tertiary education institutions are represented as a percentage of the year’s operating cash disbursements. Figure 13.16 shows this as operating months’ cover, i.e. the number of average months’ operating cash disbursements held by the organisation in cash. Liquidity levels at the end of 2005 were not particularly varied across the sub-sectors. A liquidity level of one month’s average operating cash disbursements is seen as the minimum target for prudent operation. The major change was the very high wānanga liquidity at the beginning of the period reflecting the start of the Treaty of Waitangi capital settlement process as well as the beginning of a major surge in enrolments. In 2004, that level returned to something closer to the rest of the sector.

Cash holdings at the end of 2004 were $492 million, which represented 16 percent of the year’s operating cash disbursements, or 8.5 average weeks’ operating cash disbursements. Cash at the end of 2005 was $40 million less than at the end of 2004, which reduced tertiary education institutions’ cover by about one week. On average, institutions have a reasonable capacity to cope with unexpected increases in expenditure or reductions in income, and some capacity for strategic investment.

In 2005, the university sub-sector’s cash cover was 1.5 months, compared with 1.8 months in 2004 and 1.6 months in 2003. The cash cover in 2005 for the institutes of technology and polytechnics’ sub-sector was 3.0 months. This compares with cash cover of 3 months in 2004 and 2.5 months in 2003. A total of 12 tertiary education institutions, including four universities, had less than 1.5 months cover in 2005.

The working capital ratio for tertiary education institutions at the end of 2005 was 99 percent, compared with 107 percent in 2003 and 2004. Working capital is defined as current assets divided by current liabilities. The working capital ratio gives a snapshot of a tertiary education institution’s current assets maturing within one year against its short-term obligations maturing within one year. A ratio of less than 100 percent means an institution is relying on cash flow from operations and external sources to settle its short-term debts.

The universities had a ratio of 80 percent against 89 percent in 2004. The polytechnics had a ratio of 129 percent, similar to 2003 and 2004. The working capital ratio in the wānanga was 242 percent, compared with 183 percent in 2004 but down from some 400 percent in 2004.

The main working capital liabilities drivers have been:
- increased employee liabilities
- use of cash reserves to fund capital developments
- accounts payable exceeding receivables, and
- a substantial sum in fees received in advance of teaching being delivered.

One of the benefits of an institution’s international student programme is the effects on cash flow. Because international students pay their fees in advance, international students create a liability (because the institution has an obligation to those students) but also increase year-end cash holdings. For example, the Auckland University of Technology’s fees in advance recorded in 2005 (for 2006) were 11.4 percent of 2005 revenue for 2006, while the corresponding ratio for Unitec New Zealand was 14.5 percent and Wellington Institute of Technology 10.4 percent.
CAPITAL EXPENDITURE AND ASSET LEVELS

In 2005, the fixed assets of the tertiary education institutions increased in value by some 7.8 percent on 2004 to reach $5.51 billion. The value of fixed assets grew by 48 percent between 2000 and 2005. Total equity in the sector was $5.23 billion, up 5.3 percent from 2004. The capital development programmes of a tertiary education institution are largely constrained by cash reserves and, for those with sufficiently strong performance, the ability to borrow. Increased capital requirements occur as a result of factors such as increased student numbers, replacement of obsolete teaching technology, and the need to modernise systems, plant and buildings. Significant variations from year to year can be expected in capital expenditure. The monetary value of capital assets also increases through inflationary factors, which are reflected in rising prices of capital inputs and revaluation of existing assets. Since 1996, capital expenditure for each of the years ranged between 1.5 and 2 times the depreciation expense in that year. In 2005, this was lower at 1.4 times depreciation expenses, compared with 1.6 times in 2004.

Total capital expenditure by the tertiary education institution sector in 2005 was $432 million, down by 2.5 percent on 2004, but at a similar level to 2003 and considerably higher than in the previous two years. The level of capital expenditure on a per student basis varied widely across the sector, with the highest being $3,565 per equivalent full-time student at the University of Auckland and the lowest $108 per equivalent full-time student at the Western Institute of Technology in Taranaki.

The level of fixed assets on a per equivalent full-time student basis is very different among the sub-sectors, as illustrated in Figure 13.18. There are many factors that influence the variation in fixed asset levels among institutions, such as the age of the institution, the availability of cash surpluses to invest in capital, the level of research activity undertaken by the institution and the actual capital requirements of the programmes delivered.

The universities remain the most asset-intensive and are increasing the margin over other sectors. In the polytechnics and wānanga, several years of considerable enrolment growth meant that assets per equivalent full-time student fell. This trend has now stabilised.

The relationship between cash surpluses and capital expenditure is illustrated in Figure 13.19. The operating cash surplus represents the cash available for capital expenditure generated during the year, and the net capital expenditure represents the cash used for capital. Operating cash surpluses not used for capital expenditure result in increased liquidity levels for the following year, while capital expenditure greater than operating cash surpluses reduces liquidity levels.

In 2005, liquidity fell by 7.5 percent, following three years of strengthening liquidity. Net cash from operating was slightly less – about 2 percent – than that required for capital development.
BORROWING BY TERTIARY EDUCATION INSTITUTIONS

The sector overall has borrowed only lightly. Total debt is less than 6 percent of equity plus debt – though this ratio has increased since 2002. The overall ratio of equity to assets is over 80 percent, although it is dropping slowly.

Table 13.4: Tertiary education institutions gearing ratios

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross interest cover</td>
<td>22.2</td>
<td>39.0</td>
<td>61.8</td>
<td>56.9</td>
<td>35.8</td>
<td>29.1</td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross debt to gross debt plus equity</td>
<td>4.0</td>
<td>4.1</td>
<td>3.6</td>
<td>3.7</td>
<td>5.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Total equity to total assets</td>
<td>85.6</td>
<td>84.2</td>
<td>83.3</td>
<td>82.9</td>
<td>82.3</td>
<td>82.4</td>
</tr>
</tbody>
</table>

Note: Gross interest cover is defined as EBITDA, where EBITDA means ‘earnings before interest, taxation, depreciation and abnormal items’. This is a measure of the underlying operational earnings of an entity.