

**Tertiary Education
Commission**

Te Amorangi Mātauranga Matua



ITP Roadmap 2020

Sector Financial Modelling

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Executive Summary

Financial modelling demonstrates the impact of certain scenarios on ITP sector financial performance and suggests that in most cases, the ITP sector is unable to withstand further financial pressures.

We commissioned KPMG to develop a financial model, and undertake financial modelling based on our assumptions, in order to better understand the potential financial impacts on ITPs of various scenarios. The modelling is designed to give a better understanding of what the overall financial position of the ITP sector might be between now and 2022. A consulting firm was used to ensure a level of independence to the modelling.

The modelling will be used to inform the thinking of possible changes to the ITP sector as part of later phases of the TEC's ITP Roadmap 2020 project. It will help define the scale and shape of the financial challenges that the sector may face in the next five years and assists in the determining the need for change.

In all scenarios other than "all upside", the modelling suggests that the majority of ITPs will increasingly move into deficit positions from 2018 onwards, and that most will have insufficient cash balances to remain viable by 2022. The best case scenario, the all upside, suggests that even with steady international EFTS, and some growth in domestic EFTS and government funding, 10 ITPs will return deficit results in 2018, reducing to eight from 2020 onwards.

In an "all downside" scenario, the ITP sector could be facing an overall cash shortfall in the vicinity of \$280 million by 2022, and no ITP will be in surplus from 2019 onwards. While we expect many ITPs to fare better than this at least in the short term, this remains a concerning worst case scenario.

Other scenarios included a domestic only downside and a base case with efficiency gains. These scenarios show a mixed result, but demonstrate that a downturn in domestic EFTS has a significant impact on the sector if this cannot be offset by either increases in other revenue streams or cost savings. The base case with efficiency gains shows that reductions in costs via efficiency gains alone are not sufficient to make a significant impact on the sector's financial performance, although it does improve profitability in the short term once these are achieved.

With any modelling of this nature, applied to multiple organisations, the assumptions will not apply uniformly in every case. In some instances individual ITPs could be more, or less, impacted than the assumptions and scenario outcomes suggest. Also, the model does not reflect any adjustments to student fees or government funding for Fees-Free payments; the impact of the Fees-Free policy on ITP revenue over the next five years is not yet clear.

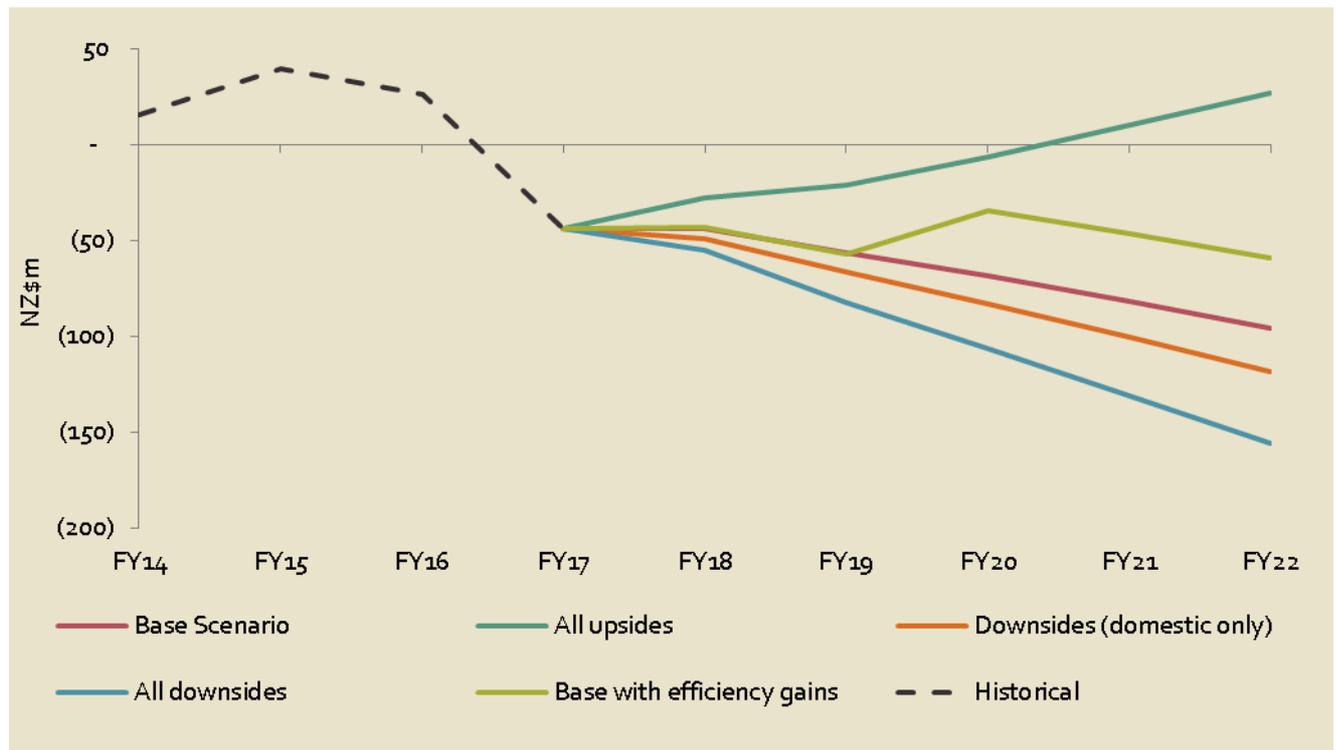
While individual results inform the overall sector position and the scenario analysis, the model is not a definitive assessment of how an individual ITP is going to perform financially over the coming years. Rather, the modelling demonstrates the level of impact that may occur in certain scenarios for the sector as a whole.

In all scenarios, including an optimistic all upside case, the sector is impacted by at least some individual ITPs being in financial difficulty. While other ITPs are likely to remain in surplus and relatively stable financially, non-financial impacts are likely if the sector continues to collectively face financial pressure and uncertainty. These non-financial impacts are not reflected in the model and have yet not been quantified.

The modelling demonstrates that in all but the most optimistic scenarios, much of the ITP sector will struggle to remain financially viable under current settings, and the gap between likely and desirable financial performance will likely grow over time.

A two page summary and a high level analysis of each scenario is outlined later in this report.

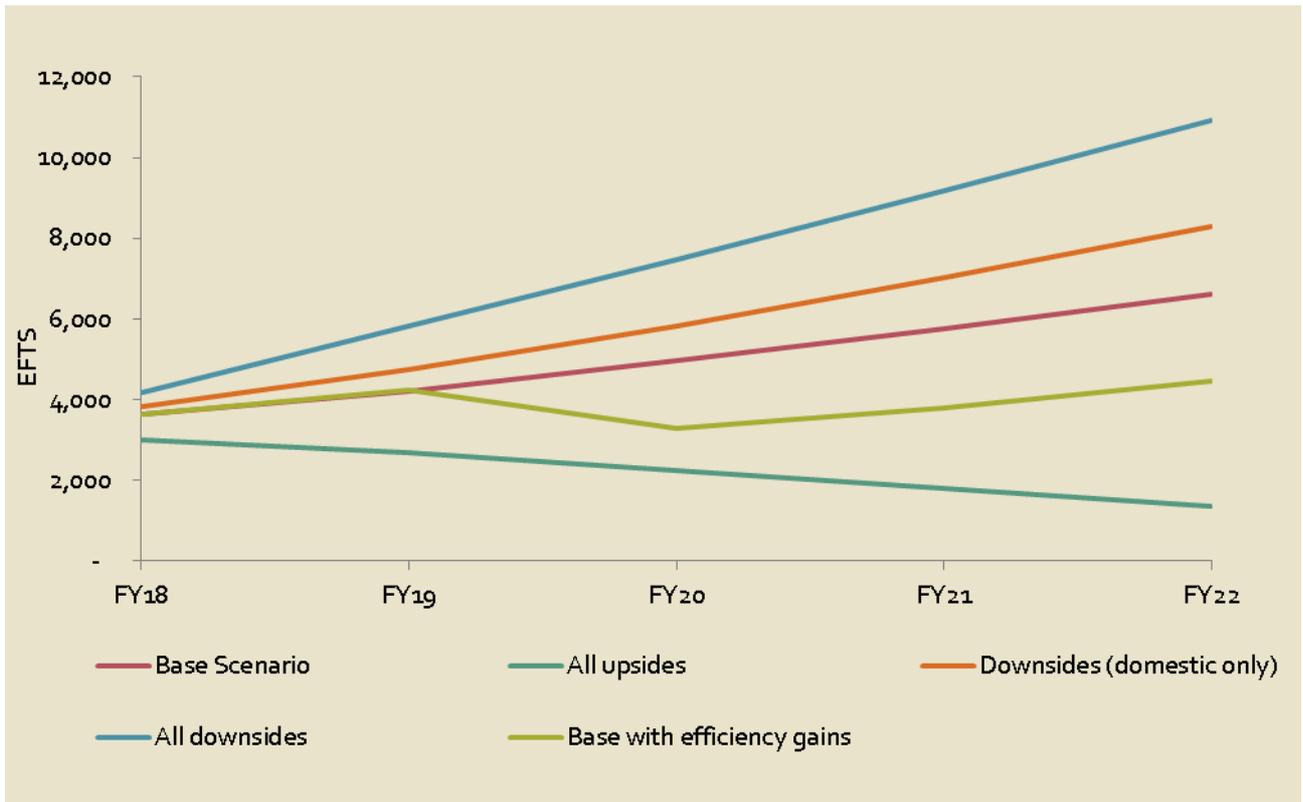
Figure 1: Sector net surplus/deficit under each scenario



Source: KPMG Financial Modelling

In all scenarios, the ITP sector remains in an overall deficit position until at least 2020. Only the all upside scenario results in the sector achieving a surplus; in 2021 and 2022. In the all downsides scenario, the sector is facing increasing deficits, reaching a sector deficit of over \$156 million in 2022; and with an overall cash shortfall in the vicinity of \$280 million by 2022 (not shown on graph).

Figure 2: Additional domestic EFTS required to break even

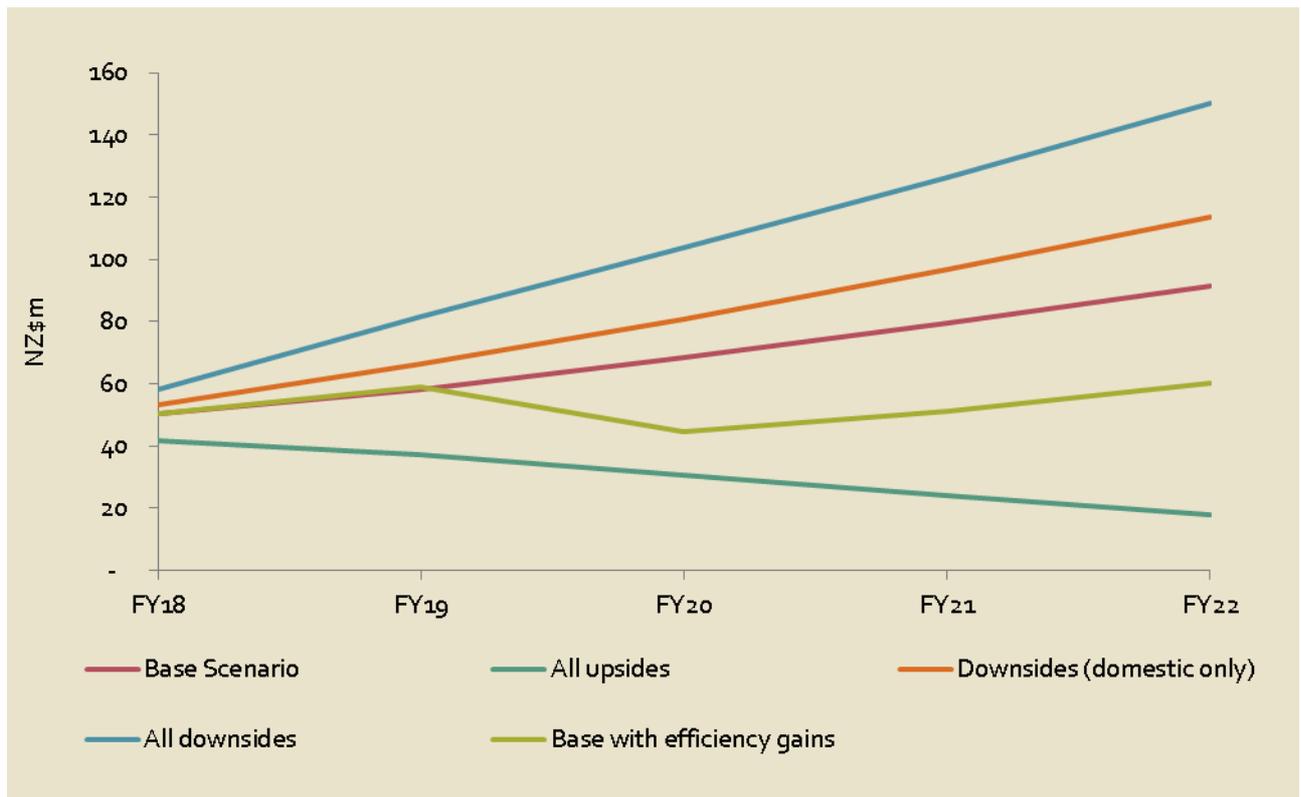


Source: KPMG Financial Modelling

The modelling has calculated the number of additional domestic EFTS required in each year for the sector to return a break-even result. The level of additional EFTS required significantly exceeds demographic and population projections over the same period and suggests that ITPs would need to increase participation rates, or draw EFTS from other tertiary education organisations in order to meet the increases required.

While increases in international EFTS may reduce the number of additional domestic EFTS required, it is unlikely to have a significant impact on the overall number of new EFTS required for the sector to break even.

Figure 3: Cost savings required to break even

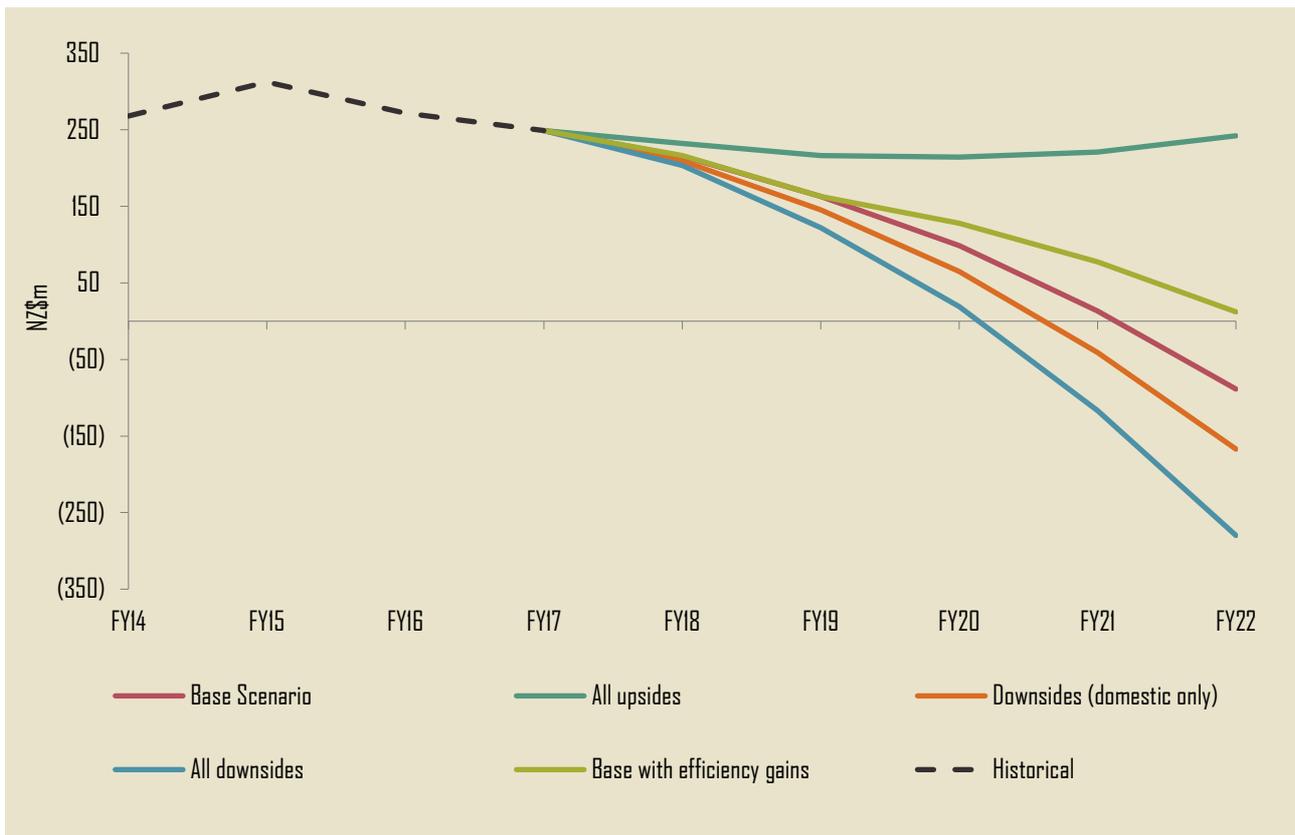


Source: KPMG Financial Modelling

The graph above demonstrates the level of cost savings required for the sector overall to return a break even result each year. Cost savings range from between \$20 million and just over \$40 million on the all upsides scenario, to between \$40 million and over \$140 million per annum on the all downsides scenario. This is before the impact of interest on any theoretical borrowing that may eventuate.

The year on year savings required suggest that cost savings alone will not reverse the sector's financial fortunes. While some savings may be achievable and indeed required, broader changes will be required to return the sector to overall sustainability.

Figure 4: Cash and cash equivalents (including overdrafts and theoretical borrowing)



Source: KPMG Financial Modelling

The impact of ongoing operating deficit results on sector cash balances is demonstrated by the graph above. Increased theoretical borrowing required by a number of ITPs sees the sector net cash position deteriorate in all but the all upside case. While the efficiency gains scenario avoids cash balances deteriorating to a net negative position, is it likely this would occur in the following financial year.

It is also notable, that even in instances where the sector cash position remains positive, these balances are concentrated in a small number of ITPs, with the majority of ITPs requiring increasing borrowing to fund operating deficits.

Model Details

Limitations

There are some limitations to the model:

- › All assumptions are applied at a high level and to all ITPs equally;
- › Modelling is based on indicative 2017 results, meaning most known 2018 events are not reflected, particularly student volumes currently visible across the ITP sector;
- › The modelling is based on data classified and submitted by individual ITPs;
- › In most cases, there is no adjustment to reflect one-off events;
- › The model does not reflect the potential changes individual ITPs may make in the face of challenging financial performance, other than adjusting staffing levels to maintain a consistent staff to student ratio.

Definitions

The two page summaries for each scenario are premised on the following definitions:

Government funding includes TEC on-and off-plan funding, PBRF, and funding from other Ministries and Departments based on historical financial information submitted by each ITP. No adjustment for future Fees-Free tertiary education payments has been made.

Domestic and international fees are based on historical financial information submitted by each ITP. No adjustment for future Fees-Free tertiary education payments has been made.

Interest expenditure does not include any interest on theoretical future borrowing (i.e. the scenarios do not include the accelerating impact of cash deficits that are funded through borrowing). This assumption means that deficits are probably understated, but means that the underlying operating picture is clearer.

Cash and cash equivalents includes current cash assets and short term investments.

Bank overdrafts includes existing bank overdrafts as well as the theoretical borrowing required in order to cover annual cash flows.

Assumptions

The assumptions were developed to balance some historical trends, the most likely policy and environmental settings, and some possible movements in key areas such as EFTS. We have taken a conservative approach to downward movements in order to avoid overestimating impacts.

On the other hand, interest expenditure does not include any interest on theoretical future borrowing (i.e. the scenarios do not include the accelerating impact of cash deficits that are funded through borrowing). This assumption means that deficits are probably understated, but means that the underlying operating picture is clearer.

Table 1: Modelling assumptions

	Base	All upsides	Downside (domestic only)	All downsides	Base with efficiency gains
Domestic EFTS	No change	Plus 2.0% p.a.	Minus 2.0% p.a.	Minus 2.0% p.a.	Same as Base
International EFTS	-2.5% one off in 2019 then flat	no change	Same as base	-7% one off in 2019 then flat	Same as Base
Govt. tuition funding per EFTS	No change	Plus 1.5% p.a. from 2020	Same as Base	Same as Base	Same as Base
Annual Maximum Fee Movement	Plus 2.0% p.a.	Same as Base	Same as Base	Same as Base	Same as Base
Staff Costs per FTE	Plus 2.0% p.a.	Same as Base	Same as Base	Plus 3.0% p.a.	Same as Base
Capex	Equal to depreciation in previous year	Same as Base	Same as Base	Same as Base	Same as Base
Faculty support	Plus 2.0% p.a.	Same as Base	Same as Base	Same as Base	One-off 2.5% decrease in 2020
Occupancy and property costs	Plus 2.0% p.a.	Same as Base	Same as Base	Same as Base	One-off 2.5% decrease in 2020
Depreciation rate	Based on historical	Same as Base	Same as Base	Same as Base	Same as Base
Interest income on cash	FY18-19: 2.0%, FY20: 2.7%, FY21: 3.4%, FY22-onwards: 3.7%	Same as Base	Same as Base	Same as Base	Same as Base
Finance costs on term debt	2.0% margin on interest rates	Same as Base	Same as Base	Same as Base	Same as Base
Academic FTEs	Constant EFTS / FTE ratio	FTE number maintained	Same as Base	Same as Base	Same as Base
Non-academic FTEs	Constant EFTS / FTE ratio	FTE number maintained	Same as Base	Same as Base	FTE number maintained with One-off 5.0% decrease in FTEs in 2020

Scenario analysis

The pages that follow provide a summary overview of the outcome of each scenario as well as a two page summary showing the model outputs, which are:

- › a summary profit and loss statement
- › a summary cashflow statement
- › a summary balance sheet
- › an anonymised breakdown of the individual surplus/deficit as a percentage of total revenue
- › the anonymised estimated cash balances or shortfall (cash and cash equivalents – overdrafts and theoretical borrowing)
- › the anonymised theoretical number of domestic EFTS required to return a break even result, and
- › the anonymised theoretical cost savings required to return a break even result.

Base case

The base case reflects our best view of current policy settings, historical trends, and a conservative estimated impact of recently announced changes to post-study work visa rules. The base case holds the current staff:student ratio constant, reflecting the likelihood of some adjustment to staffing levels in light of a reduction in EFTS numbers. Expenditure increases are forecast at 2%, a rate slightly higher than current inflation, but consistent with previous trends.

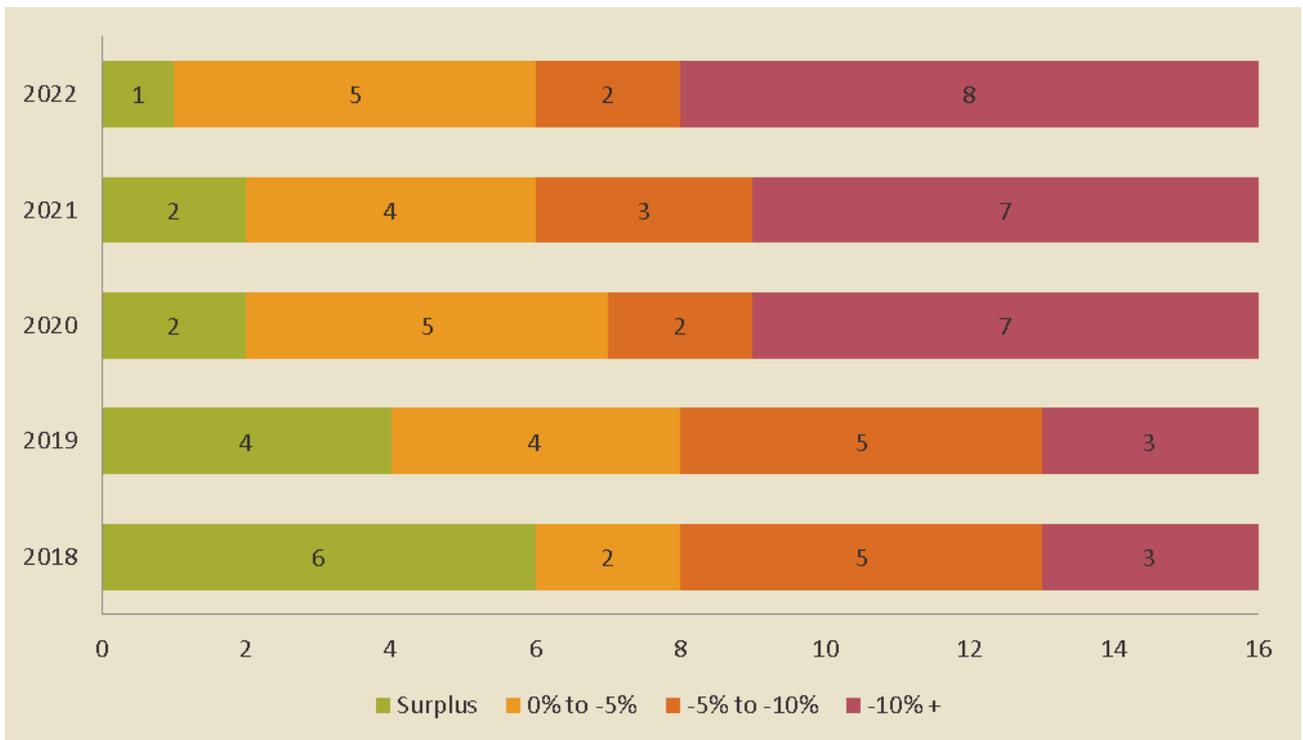
The base case suggests that in 2018 six ITPs will make an operating surplus, reducing to two by 2020 and one by 2022. Overall, the sector could return an overall deficit of \$44 million, increasing to just under \$96 million by 2022. Across the sector, cost savings of between circa \$50 million (2018) to \$91 million (2022) would be required for the sector to return a break even result.

The declining profitability is driven by inflationary pressure on costs combined with an initially lower, and then flat, demand profile limiting revenue increases. This declining profitability drives reducing cash balances across the sector as ITPs are required to utilise cash reserves to fund operating expenditure.

Four ITPs could be in a position of having insufficient cash reserves in 2018, increasing to eight in 2020 and 11 in 2022. The overall sector cash position could decline from \$249 million in 2017 to a net cash shortfall of just under \$89 million (including the theoretical borrowing required).

This suggests that, without either an increase in revenue, significant cost savings, or a combination of both, the ITP sector will be significant financial difficulty within the five year period considered, with some ITPs requiring financial assisting within 12 months or less.

Figure 5: Number of ITP surplus/deficit per year – base case



Summary income statement	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Government funding	NZDm	603.6	601.6	596.2	571.6	571.6	571.6	571.6	571.6	571.6
Domestic student revenue	NZDm	234.3	239.4	233.7	226.1	230.7	235.3	240.0	244.8	249.7
International student revenue	NZDm	116.5	161.6	180.0	188.2	192.0	190.9	194.8	198.7	202.6
Other income	NZDm	104.4	102.8	110.5	103.9	103.9	103.9	103.9	103.9	103.9
Total revenue	NZDm	1,058.8	1,105.4	1,120.4	1,089.9	1,098.2	1,101.7	1,110.3	1,119.0	1,127.8
Personnel expenditure	NZDm	(614.9)	(630.5)	(650.3)	(653.0)	(666.1)	(676.4)	(690.0)	(703.8)	(717.8)
Occupancy/Property costs	NZDm	(72.3)	(73.2)	(72.4)	(75.9)	(77.4)	(79.0)	(80.5)	(82.1)	(83.8)
Faculty support and other costs	NZDm	(267.3)	(276.9)	(281.2)	(292.5)	(298.3)	(304.3)	(310.4)	(316.6)	(322.9)
Total expenditure	NZDm	(954.5)	(980.6)	(1,003.9)	(1,021.4)	(1,041.9)	(1,059.7)	(1,080.9)	(1,102.5)	(1,124.5)
EBITDA	NZDm	104.3	124.8	116.6	68.5	56.3	42.1	29.4	16.5	3.3
Depreciation & Amortisation	NZDm	(90.4)	(92.0)	(100.8)	(97.4)	(100.8)	(100.9)	(101.1)	(101.5)	(102.0)
Non-recurring items	NZDm	(8.8)	(4.3)	3.0	(27.8)	-	-	-	-	-
Interest income	NZDm	13.7	14.2	11.0	9.3	4.8	4.4	5.4	6.0	5.6
Finance Costs	NZDm	(3.5)	(3.3)	(3.4)	(3.3)	(4.1)	(1.9)	(2.2)	(2.6)	(2.7)
Net surplus	NZDm	15.3	39.4	26.4	(50.6)	(43.9)	(56.3)	(68.6)	(81.6)	(95.9)

Summary cash flow	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Surplus before D&A	NZDm	105.7	131.4	127.2	46.8	57.0	44.6	32.6	19.9	6.2
Non cash items above EBITDA	NZDm	6.8	(10.9)	(6.4)	(50.0)	-	-	-	-	-
Movement in NWC	NZDm	19.5	17.7	(30.5)	63.1	0.4	3.6	4.0	4.1	4.3
Cash from operating activities	NZDm	132.1	138.2	90.2	59.9	57.4	48.1	36.6	24.0	10.4
Cash from / applied to investing activities	NZDm	(159.7)	(119.5)	(139.5)	(168.9)	(98.9)	(104.6)	(107.0)	(109.5)	(112.2)
Cash from / applied to financing activities	NZDm	30.9	2.9	40.8	87.3	10.0	3.9	5.9	-	-
Total cash movement	NZDm	3.3	21.7	(8.5)	(21.7)	(31.5)	(52.6)	(64.5)	(85.4)	(101.8)

Summary balance sheet	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Cash and cash equivalents	NZDm	267.8	312.3	271.8	249.0	232.8	211.8	190.2	162.7	144.4
Other current assets	NZDm	103.4	130.8	139.0	144.8	146.5	147.3	149.1	150.8	152.6
Fixed assets / Intangibles	NZDm	1,812.0	1,911.6	2,085.1	2,133.4	2,131.5	2,135.2	2,141.0	2,149.0	2,159.1
Other non current assets	NZDm	20.4	14.4	32.6	52.3	52.3	52.3	52.3	52.3	52.3
Total assets	NZDm	2,203.6	2,369.1	2,528.4	2,579.4	2,563.0	2,546.6	2,532.5	2,514.7	2,508.4
Bank overdraft	NZDm	-	(2.3)	(4.3)	(1.8)	(17.1)	(48.7)	(91.6)	(149.5)	(233.0)
Other current liabilities	NZDm	(264.5)	(310.0)	(287.8)	(351.6)	(353.7)	(358.1)	(363.8)	(369.8)	(375.8)
Term debt	NZDm	(76.5)	(65.6)	(110.6)	(158.5)	(47.4)	(47.4)	(47.4)	(47.4)	(47.4)
Other non current liabilities	NZDm	(9.0)	(9.7)	(9.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)
Total liabilities	NZDm	(350.1)	(387.6)	(411.8)	(530.0)	(436.4)	(472.3)	(521.0)	(584.8)	(674.4)
Equity / Net assets	NZDm	1,853.5	1,981.5	2,116.6	2,049.4	2,126.6	2,074.2	2,011.5	1,929.9	1,834.0

Quick stats	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total EFTS	EFT					70,394	70,088	70,088	70,088	70,088
Revenue per EFT	NZD'000					15.6	15.7	15.8	16.0	16.1
Operating Cash flow per EFT	NZD'000					0.8	0.7	0.5	0.3	0.1
Academic FTEs	FTE					4,218	4,199	4,199	4,199	4,199
Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Non-Academic FTEs	FTE					4,206	4,188	4,188	4,188	4,188
Non-Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Government funding per EFT	NZD'000					9,826	9,826	9,826	9,826	9,826
Domestic revenue per EFT	NZD'000					3,966	4,045	4,126	4,208	4,293
International revenue per EFT	NZD'000					15,703	16,017	16,337	16,664	16,998
Implied growth Government funding	%					0.0%	0.0%	0.0%	0.0%	0.0%
Implied growth domestic fees	%					2.0%	2.0%	2.0%	2.0%	2.0%
Implied growth international fees	%					2.0%	2.0%	2.0%	2.0%	2.0%

Closing cash and cash equivalents (incl. bank overdraft)	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.4	(0.5)	(2.9)	(5.6)	(8.7)
ITP 2	NZDm					(0.6)	(1.2)	(3.2)	(6.7)	(11.7)
ITP 3	NZDm					60.8	59.4	57.0	53.3	48.1
ITP 4	NZDm					33.4	34.5	35.2	35.5	35.1
ITP 5	NZDm					(11.1)	(22.4)	(33.4)	(51.9)	(72.2)
ITP 6	NZDm					3.5	0.1	(3.6)	(7.7)	(12.1)
ITP 7	NZDm					1.4	(8.0)	(19.0)	(31.6)	(45.9)
ITP 8	NZDm					12.8	9.2	5.0	0.1	(5.6)
ITP 9	NZDm					39.1	40.7	41.6	42.0	41.4
ITP 10	NZDm					27.0	24.9	21.8	17.9	12.9
ITP 11	NZDm					(3.8)	(12.4)	(21.7)	(31.9)	(42.9)
ITP 12	NZDm					0.7	0.7	(0.2)	(2.2)	(5.2)
ITP 13	NZDm					16.0	12.2	7.8	2.8	(3.1)
ITP 14	NZDm					26.9	20.3	12.2	2.7	(8.5)
ITP 15	NZDm					9.7	9.9	9.5	8.5	6.9
ITP 16	NZDm					(1.7)	(4.3)	(7.7)	(11.9)	(16.9)
Total cash and cash equivalents (incl. bank overdraft)	NZDm					215.7	163.1	98.6	13.2	(88.6)

Net surplus/(deficit) as percentage of revenue	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	%					(7.19%)	(8.78%)	(10.29%)	(11.79%)	(13.32%)
ITP 2	%					0.79%	(0.51%)	(1.75%)	(3.01%)	(4.23%)
ITP 3	%					0.19%	(1.09%)	(1.92%)	(2.82%)	(4.01%)
ITP 4	%					3.83%	2.46%	1.83%	1.16%	0.16%
ITP 5	%					(11.95%)	(11.52%)	(12.47%)	(13.43%)	(14.40%)
ITP 6	%					(15.17%)	(16.84%)	(18.42%)	(19.83%)	(21.19%)
ITP 7	%					(7.87%)	(9.05%)	(10.24%)	(11.46%)	(12.60%)
ITP 8	%					(7.19%)	(8.81%)	(10.04%)	(11.47%)	(12.86%)
ITP 9	%					3.82%	2.67%	1.88%	1.03%	(0.17%)
ITP 10	%					(1.96%)	(3.39%)	(4.45%)	(5.64%)	(7.08%)
ITP 11	%					(13.54%)	(14.88%)	(15.96%)	(17.06%)	(18.16%)
ITP 12	%					1.17%	0.02%	(0.96%)	(1.95%)	(2.91%)
ITP 13	%					(7.63%)	(9.21%)	(10.44%)	(11.89%)	(13.56%)
ITP 14	%					(5.84%)	(7.30%)	(8.51%)	(9.89%)	(11.35%)
ITP 15	%					1.42%	0.23%	(0.77%)	(1.82%)	(3.03%)
ITP 16	%					(3.10%)	(4.39%)	(5.53%)	(6.69%)	(7.86%)
Total surplus/(deficit) as percentage of revenue	%					(4.00%)	(5.11%)	(6.18%)	(7.29%)	(8.50%)

Cost savings required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.6	1.9	2.2	2.5	2.9
ITP 2	NZDm					-	0.5	1.9	3.2	4.6
ITP 3	NZDm					-	1.2	2.1	3.0	4.2
ITP 4	NZDm					-	-	-	-	-
ITP 5	NZDm					15.7	15.1	16.3	17.6	19.1
ITP 6	NZDm					3.0	3.3	3.5	3.8	4.1
ITP 7	NZDm					8.1	9.3	10.6	11.9	13.2
ITP 8	NZDm					3.0	3.6	4.0	4.4	5.0
ITP 9	NZDm					-	-	-	-	0.1
ITP 10	NZDm					1.2	2.1	2.7	3.4	4.2
ITP 11	NZDm					7.7	8.5	9.1	9.8	10.6
ITP 12	NZDm					-	-	0.9	1.8	2.7
ITP 13	NZDm					3.1	3.7	4.1	4.5	5.0
ITP 14	NZDm					5.4	6.7	7.6	8.6	9.7
ITP 15	NZDm					-	-	0.4	0.9	1.4
ITP 16	NZDm					1.8	2.5	3.2	3.9	4.7
Total cost savings required to breakeven	NZDm					50.6	58.3	68.6	79.4	91.3

Domestic EFTS required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	EFTS					124.9	152.5	178.6	204.6	231.0
ITP 2	EFTS					-	34.4	119.3	205.2	288.8
ITP 3	EFTS					-	79.8	140.7	207.4	295.1
ITP 4	EFTS					-	-	-	-	-
ITP 5	EFTS					1,140.7	1,095.3	1,189.5	1,284.8	1,381.3
ITP 6	EFTS					203.2	225.2	246.6	265.8	284.3
ITP 7	EFTS					494.6	567.0	642.9	719.9	792.9
ITP 8	EFTS					250.5	306.1	350.4	401.7	452.2
ITP 9	EFTS					-	-	-	-	9.0
ITP 10	EFTS					93.0	160.8	211.5	268.4	337.5
ITP 11	EFTS					566.9	620.8	667.7	715.2	763.3
ITP 12	EFTS					-	-	54.7	111.4	166.4
ITP 13	EFTS					246.8	297.1	337.8	385.4	440.7
ITP 14	EFTS					407.8	508.9	594.2	691.8	795.4
ITP 15	EFTS					-	-	26.0	62.0	102.9
ITP 16	EFTS					110.8	156.7	197.9	239.7	282.2
Total domestic EFTS required to breakeven	EFTS					3,639.2	4,204.5	4,957.8	5,763.5	6,623.2

All upsides

The all upsides scenario presents a more optimistic set of assumptions than the base case. The table below outlines how this scenario differs from the base case.

Table 2: All upsides scenario assumptions

	Base	All upsides
Domestic EFTS	No change	Plus 2.0% p.a.
International EFTS	-2.5% one off in 2019 then flat	no change
Govt. tuition funding per EFTS	No change	Plus 1.5% p.a. from 2020
Annual Maximum Fee Movement	Plus 2.0% p.a.	Same as Base
Staff Costs per FTE	Plus 2.0% p.a.	Same as Base
Capex	Equal to depreciation in previous year	Same as Base
Faculty support	Plus 2.0% p.a.	Same as Base
Occupancy and property costs	Plus 2.0% p.a.	Same as Base
Depreciation rate	Based on historical	Same as Base
Interest income on cash	FY18-19: 2.0%, FY20: 2.7%, FY21: 3.4%, FY22-onwards: 3.7%	Same as Base
Finance costs on term debt	2.0% margin on interest rates	Same as Base
Academic FTEs	Constant EFTS / FTE ratio	FTE number maintained
Non-academic FTEs	Constant EFTS / FTE ratio	FTE number maintained

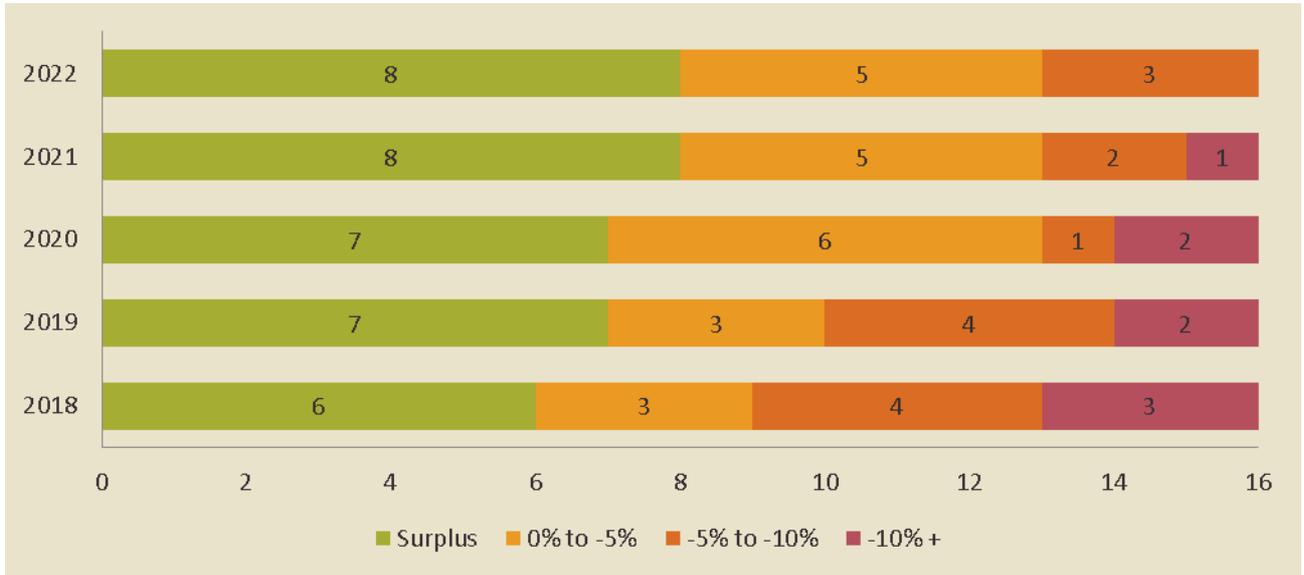
The all upsides case results in progressively improving financial performance due to the year on year growth in domestic EFTS and the increase in Government funding rates from 2020 onwards. In addition, the increase in the staff:student ratio as a result of maintaining FTE numbers limits increases in personnel expenditure to inflation, resulting in efficiency gains.

Despite this, half of the 16 ITP remain in a deficit position throughout the modelling period, and the sector's cash position is still heavily impacted by the size of deficit results in the period from 2018 to 2020, before the upside assumptions begin to impact on performance.

We consider the all upside scenario the least likely of all modelled scenarios to occur, given the recent declining trend in domestic EFTS, forecast population and demographic features, and the likely impact of proposed changes to post study visa rights for international students, should they proceed. Recent financial performance would also suggest that constraining expenditure increases to 2% in a growth environment would require significant efficiency gains and would be difficult to maintain.

The outcomes of this scenario indicate that the all upsides case sees a larger portion of ITPs on a more solid footing. However, even in an optimised environment, the revenue increases and limited increases in personnel expenditure are insufficient to enable all ITPs, or the sector as it is currently positioned, to remain viable.

Figure 6: Number of ITP surplus/deficit per year – all upsides



Summary income statement	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Government funding	NZDm	603.6	601.6	596.2	571.6	583.0	594.7	615.7	637.4	659.9
Domestic student revenue	NZDm	234.3	239.4	233.7	226.1	235.3	244.8	254.7	265.0	275.7
International student revenue	NZDm	116.5	161.6	180.0	188.2	192.0	195.8	199.8	203.8	207.8
Other income	NZDm	104.4	102.8	110.5	103.9	103.9	103.9	103.9	103.9	103.9
Total revenue	NZDm	1,058.8	1,105.4	1,120.4	1,089.9	1,114.2	1,139.2	1,174.0	1,210.0	1,247.3
Personnel expenditure	NZDm	(614.9)	(630.5)	(650.3)	(653.0)	(666.1)	(679.4)	(693.0)	(706.9)	(721.0)
Occupancy/Property costs	NZDm	(72.3)	(73.2)	(72.4)	(75.9)	(77.4)	(79.0)	(80.5)	(82.1)	(83.8)
Faculty support and other costs	NZDm	(267.3)	(276.9)	(281.2)	(292.5)	(298.3)	(304.3)	(310.4)	(316.6)	(322.9)
Total expenditure	NZDm	(954.5)	(980.6)	(1,003.9)	(1,021.4)	(1,041.8)	(1,062.7)	(1,083.9)	(1,105.6)	(1,127.7)
EBITDA	NZDm	104.3	124.8	116.6	68.5	72.4	76.6	90.1	104.5	119.6
Depreciation & Amortisation	NZDm	(90.4)	(92.0)	(100.8)	(97.4)	(100.8)	(100.9)	(101.1)	(101.5)	(102.0)
Non-recurring items	NZDm	(8.8)	(4.3)	3.0	(27.8)	-	-	-	-	-
Interest income	NZDm	13.7	14.2	11.0	9.3	4.9	4.9	6.9	9.4	11.5
Finance Costs	NZDm	(3.5)	(3.3)	(3.4)	(3.3)	(4.1)	(1.9)	(2.2)	(2.6)	(2.7)
Net surplus	NZDm	15.3	39.4	26.4	(50.6)	(27.7)	(21.3)	(6.4)	9.8	26.4

Summary cash flow	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Surplus before D&A	NZDm	105.7	131.4	127.2	46.8	73.2	79.6	94.8	111.3	128.5
Non cash items above EBITDA	NZDm	6.8	(10.9)	(6.4)	(50.0)	-	-	-	-	-
Movement in NWC	NZDm	19.5	17.7	(30.5)	63.1	0.9	4.9	4.5	4.7	4.8
Cash from operating activities	NZDm	132.1	138.2	90.2	59.9	74.1	84.5	99.3	116.0	133.3
Cash from / applied to investing activities	NZDm	(159.7)	(119.5)	(139.5)	(168.9)	(98.9)	(104.6)	(107.0)	(109.5)	(112.2)
Cash from / applied to financing activities	NZDm	30.9	2.9	40.8	87.3	10.0	3.9	5.9	-	-
Total cash movement	NZDm	3.3	21.7	(8.5)	(21.7)	(14.8)	(16.2)	(1.8)	6.5	21.1

Summary balance sheet	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Cash and cash equivalents	NZDm	267.8	312.3	271.8	249.0	245.5	247.4	263.5	292.2	331.6
Other current assets	NZDm	103.4	130.8	139.0	144.8	147.5	150.3	153.2	156.2	159.2
Fixed assets / Intangibles	NZDm	1,812.0	1,911.6	2,085.1	2,133.4	2,131.5	2,135.2	2,141.0	2,149.0	2,159.1
Other non current assets	NZDm	20.4	14.4	32.6	52.3	52.3	52.3	52.3	52.3	52.3
Total assets	NZDm	2,203.6	2,369.1	2,528.4	2,579.4	2,576.8	2,585.1	2,609.9	2,649.6	2,702.2
Bank overdraft	NZDm	-	(2.3)	(4.3)	(1.8)	(13.2)	(31.3)	(49.2)	(71.3)	(89.7)
Other current liabilities	NZDm	(264.5)	(310.0)	(287.8)	(351.6)	(355.1)	(362.8)	(370.2)	(377.9)	(385.8)
Term debt	NZDm	(76.5)	(65.6)	(110.6)	(158.5)	(47.4)	(47.4)	(47.4)	(47.4)	(47.4)
Other non current liabilities	NZDm	(9.0)	(9.7)	(9.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)
Total liabilities	NZDm	(350.1)	(387.6)	(411.8)	(530.0)	(433.9)	(459.7)	(484.9)	(514.8)	(541.0)
Equity / Net assets	NZDm	1,853.5	1,981.5	2,116.6	2,049.4	2,142.9	2,125.5	2,125.0	2,134.8	2,161.2

Quick stats	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total EFTS	EFT					71,557	72,744	73,954	75,189	76,448
Revenue per EFT	NZD'000					15.6	15.7	15.9	16.1	16.3
Operating Cash flow per EFT	NZD'000					1.0	1.2	1.3	1.5	1.7
Academic FTEs	FTE					4,227	4,227	4,227	4,227	4,227
Academic EFT / FTE	EFT/FTE					16.9	17.2	17.5	17.8	18.1
Non-Academic FTEs	FTE					4,196	4,196	4,196	4,196	4,196
Non-Academic EFT / FTE	EFT/FTE					17.1	17.3	17.6	17.9	18.2
Government funding per EFT	NZD'000					9,826	9,826	9,974	10,123	10,275
Domestic revenue per EFT	NZD'000					3,966	4,045	4,126	4,208	4,293
International revenue per EFT	NZD'000					15,703	16,017	16,337	16,664	16,998
Implied growth Government funding	%					0.0%	0.0%	1.5%	1.5%	1.5%
Implied growth domestic fees	%					2.0%	2.0%	2.0%	2.0%	2.0%
Implied growth International fees	%					2.0%	2.0%	2.0%	2.0%	2.0%

Closing cash and cash equivalents (incl. bank overdraft)	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.8	0.7	(0.2)	(0.7)	(0.9)
ITP 2	NZDm					0.9	3.4	6.8	11.2	16.7
ITP 3	NZDm					62.6	65.2	69.8	76.6	85.5
ITP 4	NZDm					34.1	37.0	40.8	45.6	51.3
ITP 5	NZDm					(9.3)	(16.5)	(21.0)	(30.2)	(38.2)
ITP 6	NZDm					3.9	1.3	(1.2)	(3.4)	(5.4)
ITP 7	NZDm					3.0	(3.2)	(8.4)	(12.8)	(16.1)
ITP 8	NZDm					13.4	11.2	9.4	8.1	7.2
ITP 9	NZDm					40.2	44.1	49.3	56.0	64.2
ITP 10	NZDm					28.1	28.1	29.1	31.1	34.2
ITP 11	NZDm					(3.1)	(9.9)	(16.5)	(22.6)	(28.4)
ITP 12	NZDm					2.0	4.9	8.8	13.8	20.1
ITP 13	NZDm					16.5	14.1	11.9	10.0	8.5
ITP 14	NZDm					28.3	24.7	22.0	20.3	19.7
ITP 15	NZDm					10.6	12.6	15.5	19.4	24.4
ITP 16	NZDm					(0.8)	(1.7)	(2.0)	(1.6)	(0.6)
Total cash and cash equivalents (incl. bank overdraft)	NZDm					232.3	216.1	214.3	220.9	241.9

Net surplus/(deficit) as percentage of revenue	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	%					(5.22%)	(4.79%)	(3.30%)	(1.79%)	(0.28%)
ITP 2	%					2.11%	2.30%	3.13%	4.02%	4.99%
ITP 3	%					1.81%	2.30%	4.08%	5.91%	7.56%
ITP 4	%					5.17%	5.53%	7.22%	8.99%	10.53%
ITP 5	%					(10.54%)	(8.41%)	(7.27%)	(6.14%)	(5.01%)
ITP 6	%					(13.24%)	(12.79%)	(11.53%)	(10.05%)	(8.53%)
ITP 7	%					(6.30%)	(5.80%)	(4.62%)	(3.46%)	(2.23%)
ITP 8	%					(5.68%)	(5.42%)	(4.13%)	(2.90%)	(1.75%)
ITP 9	%					5.61%	6.30%	8.36%	10.50%	12.41%
ITP 10	%					(0.36%)	0.03%	1.62%	3.23%	4.71%
ITP 11	%					(12.09%)	(11.72%)	(10.63%)	(9.54%)	(8.46%)
ITP 12	%					2.49%	2.98%	4.08%	5.26%	6.49%
ITP 13	%					(6.22%)	(6.11%)	(5.00%)	(3.94%)	(3.01%)
ITP 14	%					(4.33%)	(4.04%)	(2.79%)	(1.56%)	(0.42%)
ITP 15	%					3.15%	3.82%	5.55%	7.36%	9.12%
ITP 16	%					(1.63%)	(1.26%)	(0.12%)	1.01%	2.12%
Total surplus/(deficit) as percentage of revenue	%					(2.48%)	(1.87%)	(0.54%)	0.81%	2.12%

Cost savings required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.2	1.1	0.7	0.3	-
ITP 2	NZDm					-	-	-	-	-
ITP 3	NZDm					-	-	-	-	-
ITP 4	NZDm					-	-	-	-	-
ITP 5	NZDm					14.0	11.3	9.9	8.4	6.9
ITP 6	NZDm					2.7	2.6	2.3	2.0	1.7
ITP 7	NZDm					6.6	6.1	4.9	3.7	2.3
ITP 8	NZDm					2.4	2.3	1.7	1.1	0.5
ITP 9	NZDm					-	-	-	-	-
ITP 10	NZDm					0.2	-	-	-	-
ITP 11	NZDm					6.9	6.9	6.4	5.8	5.3
ITP 12	NZDm					-	-	-	-	-
ITP 13	NZDm					2.5	2.5	2.0	1.5	1.0
ITP 14	NZDm					4.1	3.8	2.5	1.2	-
ITP 15	NZDm					-	-	-	-	-
ITP 16	NZDm					0.9	0.8	0.1	-	-
Total cost savings required to breakeven	NZDm					41.6	37.3	30.5	24.0	17.8

Domestic EFTS required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	EFTS					92.3	86.3	60.4	33.3	5.3
ITP 2	EFTS					-	-	-	-	-
ITP 3	EFTS					-	-	-	-	-
ITP 4	EFTS					-	-	-	-	-
ITP 5	EFTS					1,019.0	825.5	722.7	617.8	511.0
ITP 6	EFTS					180.4	177.3	162.5	144.1	124.2
ITP 7	EFTS					401.4	375.7	303.6	230.2	150.4
ITP 8	EFTS					200.9	195.2	151.0	107.3	65.7
ITP 9	EFTS					-	-	-	-	-
ITP 10	EFTS					17.6	-	-	-	-
ITP 11	EFTS					512.9	504.6	463.1	420.9	377.8
ITP 12	EFTS					-	-	-	-	-
ITP 13	EFTS					203.9	203.3	168.3	134.4	104.0
ITP 14	EFTS					306.8	290.7	203.4	115.6	31.2
ITP 15	EFTS					-	-	-	-	-
ITP 16	EFTS					59.2	46.4	4.5	-	-
Total domestic EFTS required to breakeven	EFTS					2,994.4	2,705.1	2,239.6	1,803.6	1,369.6

All downsides

The all downsides scenario considers the impact of a year on year decline in domestic EFTS combined with a larger, but still conservative, one-off negative impact of changes to international EFTS. In addition, the scenario includes a higher rate of increase in staffing costs per FTE.

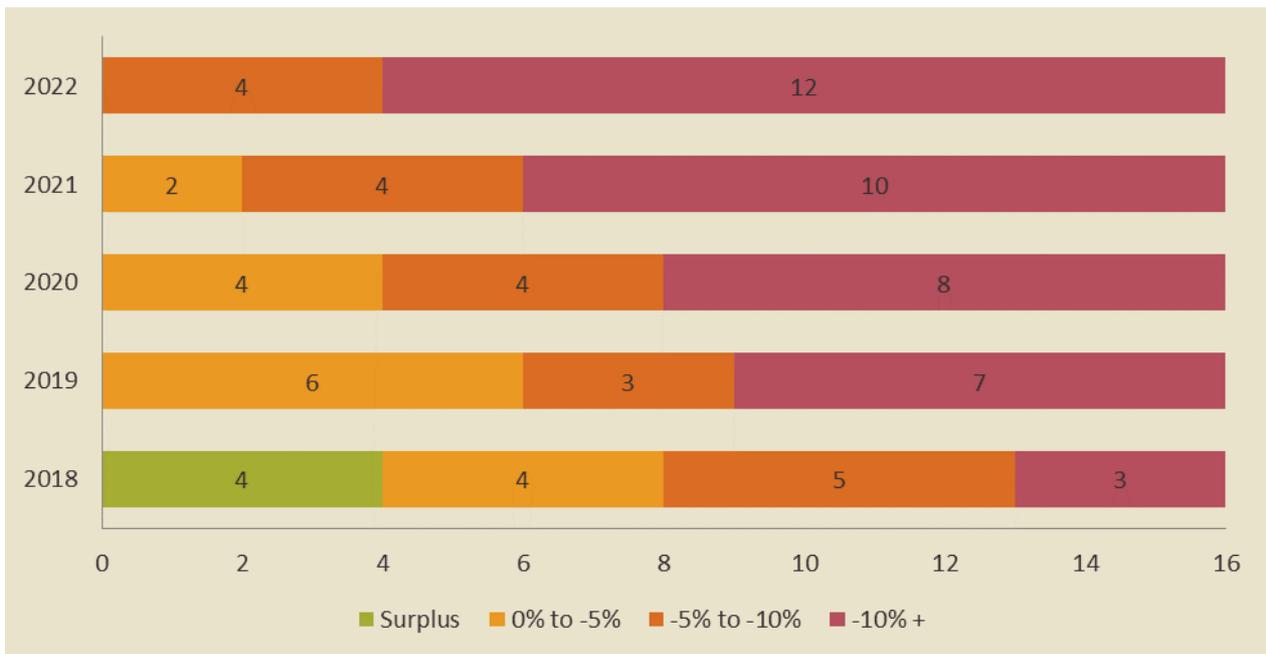
Table 3: All downsides assumptions

	Base	All downsides
Domestic EFTS	No change	Minus 2.0% p.a.
International EFTS	-2.5% one off in 2019 then flat	-7% one off in 2019 then flat
Govt. tuition funding per EFTS	No change	Same as Base
Annual Maximum Fee Movement	Plus 2.0% p.a.	Same as Base
Staff Costs per FTE	Plus 2.0% p.a.	Plus 3.0% p.a.
Capex	Equal to depreciation in previous year	Same as Base
Faculty support	Plus 2.0% p.a.	Same as Base
Occupancy and property costs	Plus 2.0% p.a.	Same as Base
Depreciation rate	Based on historical	Same as Base
Interest income on cash	FY18-19: 2.0%, FY20: 2.7%, FY21: 3.4%, FY22-onwards: 3.7%	Same as Base
Finance costs on term debt	2.0% margin on interest rates	Same as Base
Academic FTEs	Constant EFTS / FTE ratio	Same as Base
Non-academic FTEs	Constant EFTS / FTE ratio	Same as Base

Unsurprisingly, the all downsides scenario presents the fastest decline in both sector profitability and cash balances. In this scenario all ITPs are returning an operating deficit from 2019 onwards, driven by the combination of declining revenue and increasing costs. Forecast sector deficits increase from \$55.5 million in 2018 to \$156 million in 2022. Also of concern is the number of ITPs returning deficit results of more than -10% of revenue.

Deficit results drive an increase in theoretical borrowing, with 12 of the 16 ITPs requiring borrowing to fund deficit results by 2022, and a negative sector cash balance of just under \$280 million. Total cash balances decline by over \$480 million between 2018 and 2022 due the increased need of most ITPs to borrow. Even where individual ITPs have positive cash balances through to 2022 these are increasingly utilised to fund deficit results and decline significantly.

Figure 7: Number of ITP surplus/deficit per year – all downside



Summary income statement	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Government funding	NZDm	603.6	601.6	596.2	571.6	560.1	548.9	538.0	527.2	516.7
Domestic student revenue	NZDm	234.3	239.4	233.7	226.1	226.1	226.0	225.9	225.8	225.7
International student revenue	NZDm	116.5	161.6	180.0	188.2	192.0	182.1	185.8	189.5	193.3
Other income	NZDm	104.4	102.8	110.5	103.9	103.9	103.9	103.9	103.9	103.9
Total revenue	NZDm	1,058.8	1,105.4	1,120.4	1,089.9	1,082.1	1,061.0	1,053.5	1,046.4	1,039.6
Personnel expenditure	NZDm	(614.9)	(630.5)	(650.3)	(653.0)	(661.6)	(661.7)	(670.2)	(679.0)	(687.9)
Occupancy/Property costs	NZDm	(72.3)	(73.2)	(72.4)	(75.9)	(77.4)	(79.0)	(80.5)	(82.1)	(83.8)
Faculty support and other costs	NZDm	(267.3)	(276.9)	(281.2)	(292.5)	(298.3)	(304.3)	(310.4)	(316.6)	(322.9)
Total expenditure	NZDm	(954.5)	(980.6)	(1,003.9)	(1,021.4)	(1,037.4)	(1,044.9)	(1,061.2)	(1,077.7)	(1,094.6)
EBITDA	NZDm	104.3	124.8	116.6	68.5	44.8	16.1	(7.6)	(31.3)	(55.0)
Depreciation & Amortisation	NZDm	(90.4)	(92.0)	(100.8)	(97.4)	(100.8)	(100.9)	(101.1)	(101.5)	(102.0)
Non-recurring items	NZDm	(8.8)	(4.3)	3.0	(27.8)	-	-	-	-	-
Interest income	NZDm	13.7	14.2	11.0	9.3	4.7	4.1	4.6	4.3	3.6
Finance Costs	NZDm	(3.5)	(3.3)	(3.4)	(3.3)	(4.1)	(1.9)	(2.2)	(2.6)	(2.7)
Net surplus	NZDm	15.3	39.4	26.4	(50.6)	(55.5)	(82.6)	(106.4)	(131.1)	(156.2)

Summary cash flow	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Surplus before D&A	NZDm	105.7	131.4	127.2	46.8	45.3	18.3	(5.2)	(29.5)	(54.1)
Non cash items above EBITDA	NZDm	6.8	(10.9)	(6.4)	(50.0)	-	-	-	-	-
Movement in NWC	NZDm	19.5	17.7	(30.5)	63.1	(0.4)	1.2	3.2	3.3	3.4
Cash from operating activities	NZDm	132.1	138.2	90.2	59.9	45.0	19.5	(2.0)	(26.3)	(50.8)
Cash from / applied to investing activities	NZDm	(159.7)	(119.5)	(139.5)	(168.9)	(98.9)	(104.6)	(107.0)	(109.5)	(112.2)
Cash from / applied to financing activities	NZDm	30.9	2.9	40.8	87.3	10.0	3.9	5.9	-	-
Total cash movement	NZDm	3.3	21.7	(8.5)	(21.7)	(43.9)	(81.2)	(103.1)	(135.7)	(163.0)

Summary balance sheet	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Cash and cash equivalents	NZDm	267.8	312.3	271.8	249.0	224.3	191.1	151.3	113.5	82.0
Other current assets	NZDm	103.4	130.8	139.0	144.8	145.5	143.6	144.3	145.0	145.7
Fixed assets / Intangibles	NZDm	1,812.0	1,911.6	2,085.1	2,133.4	2,131.5	2,135.2	2,141.0	2,149.0	2,159.1
Other non current assets	NZDm	20.4	14.4	32.6	52.3	52.3	52.3	52.3	52.3	52.3
Total assets	NZDm	2,203.6	2,369.1	2,528.4	2,579.4	2,553.6	2,522.1	2,488.8	2,459.7	2,439.1
Bank overdraft	NZDm	-	(2.3)	(4.3)	(1.8)	(21.1)	(69.0)	(132.4)	(230.3)	(361.9)
Other current liabilities	NZDm	(264.5)	(310.0)	(287.8)	(351.6)	(351.9)	(351.2)	(355.1)	(359.0)	(363.1)
Term debt	NZDm	(76.5)	(65.6)	(110.6)	(158.5)	(47.4)	(47.4)	(47.4)	(47.4)	(47.4)
Other non current liabilities	NZDm	(9.0)	(9.7)	(9.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)
Total liabilities	NZDm	(350.1)	(387.6)	(411.8)	(530.0)	(438.6)	(485.8)	(553.0)	(654.9)	(790.5)
Equity / Net assets	NZDm	1,853.5	1,981.5	2,116.6	2,049.4	2,115.0	2,036.3	1,935.8	1,804.8	1,648.6

Quick stats	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total EFTS	EFT					69,231	67,235	66,117	65,022	63,949
Revenue per EFT	NZD'000					15.6	15.8	15.9	16.1	16.3
Operating Cash flow per EFT	NZD'000					0.6	0.3	(0.0)	(0.4)	(0.8)
Academic FTEs	FTE					4,149	4,028	3,961	3,896	3,832
Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Non-Academic FTEs	FTE					4,136	4,017	3,950	3,885	3,821
Non-Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Government funding per EFT	NZD'000					9,826	9,826	9,826	9,826	9,826
Domestic revenue per EFT	NZD'000					3,966	4,045	4,126	4,208	4,293
International revenue per EFT	NZD'000					15,703	16,017	16,337	16,664	16,998
Implied growth Government funding	%					0.0%	0.0%	0.0%	0.0%	0.0%
Implied growth domestic fees	%					2.0%	2.0%	2.0%	2.0%	2.0%
Implied growth International	%					2.0%	2.0%	2.0%	2.0%	2.0%

Closing cash and cash equivalents (incl. bank overdraft)	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.2	(1.3)	(4.5)	(8.2)	(12.6)
ITP 2	NZDm					(1.6)	(4.6)	(9.9)	(17.7)	(27.9)
ITP 3	NZDm					59.4	55.2	48.7	39.7	27.7
ITP 4	NZDm					32.8	32.2	30.8	28.3	24.5
ITP 5	NZDm					(12.4)	(27.2)	(42.4)	(66.3)	(93.1)
ITP 6	NZDm					3.2	(0.7)	(5.2)	(10.2)	(15.8)
ITP 7	NZDm					0.3	(11.5)	(25.7)	(42.6)	(62.0)
ITP 8	NZDm					12.4	7.5	1.7	(5.3)	(13.2)
ITP 9	NZDm					38.3	38.2	36.6	33.4	28.5
ITP 10	NZDm					26.3	22.5	17.1	10.2	1.3
ITP 11	NZDm					(4.4)	(14.5)	(25.8)	(38.5)	(52.5)
ITP 12	NZDm					(0.3)	(2.9)	(7.2)	(13.5)	(21.7)
ITP 13	NZDm					15.5	10.7	4.9	(1.9)	(9.8)
ITP 14	NZDm					26.0	17.0	5.9	(7.7)	(23.5)
ITP 15	NZDm					9.0	7.8	5.5	1.9	(3.0)
ITP 16	NZDm					(2.3)	(6.3)	(11.7)	(18.5)	(26.7)
Total cash and cash equivalents (incl. bank overdraft)	NZDm					203.3	122.1	18.9	(116.8)	(279.8)

Net surplus/(deficit) as percentage of revenue	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	%					(8.60%)	(11.63%)	(14.61%)	(17.67%)	(20.83%)
ITP 2	%					(0.17%)	(2.73%)	(5.01%)	(7.32%)	(9.61%)
ITP 3	%					(0.95%)	(3.66%)	(5.79%)	(8.11%)	(10.82%)
ITP 4	%					2.76%	(0.42%)	(2.31%)	(4.33%)	(6.77%)
ITP 5	%					(13.02%)	(14.29%)	(16.36%)	(18.46%)	(20.58%)
ITP 6	%					(16.60%)	(20.04%)	(23.10%)	(26.10%)	(29.09%)
ITP 7	%					(9.02%)	(11.57%)	(13.98%)	(16.43%)	(18.84%)
ITP 8	%					(8.36%)	(11.87%)	(14.48%)	(17.25%)	(19.74%)
ITP 9	%					2.47%	(0.12%)	(2.46%)	(4.99%)	(8.03%)
ITP 10	%					(3.08%)	(6.05%)	(8.40%)	(11.00%)	(13.95%)
ITP 11	%					(14.75%)	(17.89%)	(20.27%)	(22.67%)	(25.11%)
ITP 12	%					0.09%	(2.69%)	(4.82%)	(6.97%)	(9.11%)
ITP 13	%					(8.68%)	(11.84%)	(14.31%)	(17.09%)	(19.64%)
ITP 14	%					(6.90%)	(9.88%)	(12.32%)	(15.00%)	(17.38%)
ITP 15	%					0.18%	(2.49%)	(4.92%)	(7.55%)	(10.39%)
ITP 16	%					(4.24%)	(7.07%)	(9.43%)	(11.84%)	(14.30%)
Total surplus/(deficit) as percentage of revenue	%					(5.13%)	(7.78%)	(10.10%)	(12.52%)	(15.02%)

Cost savings required for 0% surplus	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.8	2.4	3.0	3.6	4.2
ITP 2	NZDm					0.2	2.8	5.1	7.4	9.7
ITP 3	NZDm					1.0	3.8	5.9	8.0	10.3
ITP 4	NZDm					-	0.2	1.1	2.0	3.1
ITP 5	NZDm					16.9	18.0	20.4	22.9	25.5
ITP 6	NZDm					3.2	3.7	4.2	4.7	5.2
ITP 7	NZDm					9.2	11.5	13.8	16.1	18.4
ITP 8	NZDm					3.4	4.7	5.5	6.4	7.3
ITP 9	NZDm					-	0.1	1.4	2.7	4.3
ITP 10	NZDm					1.9	3.6	4.9	6.2	7.5
ITP 11	NZDm					8.2	9.8	11.1	12.3	13.6
ITP 12	NZDm					-	2.3	4.1	5.9	7.7
ITP 13	NZDm					3.5	4.6	5.3	6.1	6.9
ITP 14	NZDm					6.3	8.7	10.5	12.3	14.2
ITP 15	NZDm					-	1.1	2.2	3.2	4.3
ITP 16	NZDm					2.4	3.9	5.2	6.5	7.8
Total cost savings required to breakeven	NZDm					58.1	81.4	103.8	126.3	150.0

Domestic EFTS required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	EFTS					146.5	194.3	239.4	284.3	328.8
ITP 2	EFTS					11.4	180.0	325.6	470.4	610.9
ITP 3	EFTS					68.5	257.6	401.8	554.7	729.2
ITP 4	EFTS					-	22.6	122.0	226.6	350.8
ITP 5	EFTS					1,227.5	1,307.2	1,482.3	1,656.0	1,828.4
ITP 6	EFTS					218.6	257.7	292.4	325.2	356.7
ITP 7	EFTS					558.3	698.5	832.7	965.9	1,093.1
ITP 8	EFTS					287.3	396.3	478.3	564.0	639.4
ITP 9	EFTS					-	6.4	125.6	250.2	394.5
ITP 10	EFTS					144.0	275.9	378.0	488.0	610.6
ITP 11	EFTS					610.0	719.1	806.1	892.7	978.9
ITP 12	EFTS					-	147.3	260.5	372.8	482.2
ITP 13	EFTS					277.3	368.6	440.5	520.7	592.1
ITP 14	EFTS					475.2	663.2	816.4	982.3	1,124.2
ITP 15	EFTS					-	81.4	158.0	238.1	322.1
ITP 16	EFTS					149.5	243.0	320.4	397.2	473.6
Total domestic EFTS required to breakeven	EFTS					4,174.1	5,819.0	7,480.1	9,189.1	10,915.3

Downside (domestic only)

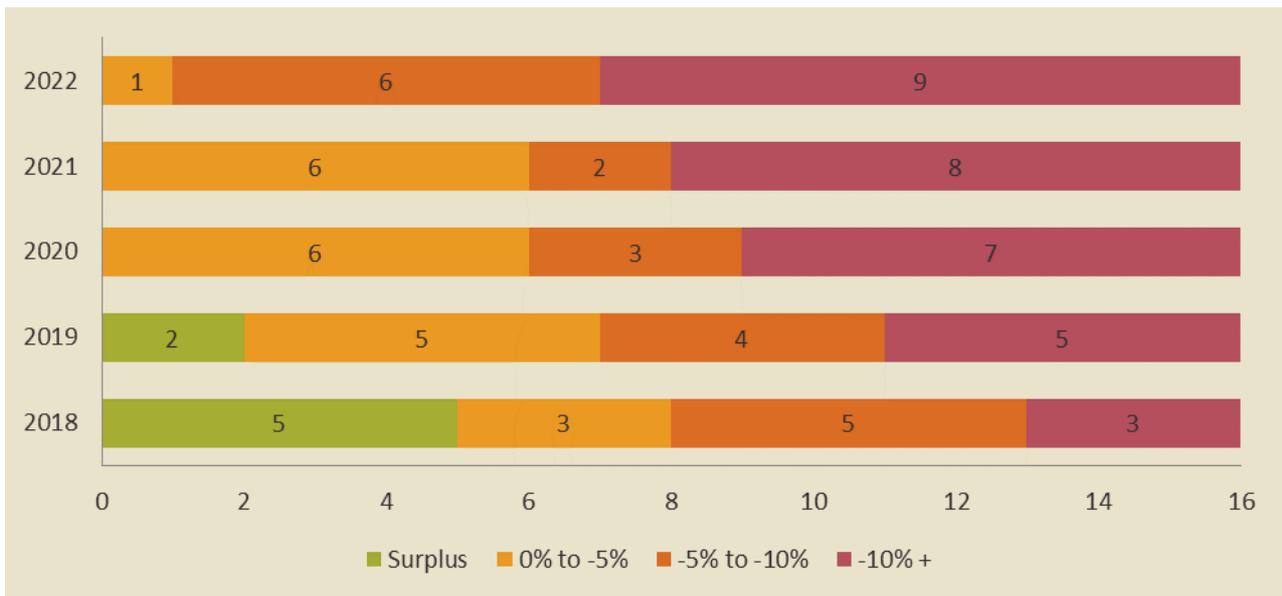
The domestic only downside assumes a lesser impact on international EFTS than the all downside case, but a continued year on year decline in domestic EFTS.

Table 4: Downside (domestic only) assumptions

	Base	Downside (domestic only)
Domestic EFTS	No change	Minus 2.0% p.a.
International EFTS	-2.5% one off in 2019 then flat	Same as base
Govt. tuition funding per EFTS	No change	Same as Base
Annual Maximum Fee Movement	Plus 2.0% p.a.	Same as Base
Staff Costs per FTE	Plus 2.0% p.a.	Same as Base
Capex	Equal to depreciation in previous year	Same as Base
Faculty support	Plus 2.0% p.a.	Same as Base
Occupancy and property costs	Plus 2.0% p.a.	Same as Base
Depreciation rate	Based on historical	Same as Base
Interest income on cash	FY18-19: 2.0%, FY20: 2.7%, FY21: 3.4%, FY22-onwards: 3.7%	Same as Base
Finance costs on term debt	2.0% margin on interest rates	Same as Base
Academic FTEs	Constant EFTS / FTE ratio	Same as Base
Non-academic FTEs	Constant EFTS / FTE ratio	Same as Base

This case demonstrates the impact of a declining domestic demand profile where cost savings or other revenue increases cannot assist in impact mitigation. While the move to deficit operating results is delayed for some compared to the all downsides case, the impact of a one-off decline in international students in 2019 accelerates the number of deficit results. This also results in a large decline in cash balances, before a more gradual decline through to 2022. Cash balances remain marginally higher than the all downsides scenario, at a net negative of \$167 million in 2022.

Figure 8: Number of ITP surplus/deficit per year – downside (domestic only)



Summary Income statement	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Government funding	NZDm	603.6	601.6	596.2	571.6	560.1	548.9	538.0	527.2	516.7
Domestic student revenue	NZDm	234.3	239.4	233.7	226.1	226.1	226.0	225.9	225.8	225.7
International student revenue	NZDm	116.5	161.6	180.0	188.2	192.0	190.9	194.8	198.7	202.6
Other income	NZDm	104.4	102.8	110.5	103.9	103.9	103.9	103.9	103.9	103.9
Total revenue	NZDm	1,058.8	1,105.4	1,120.4	1,089.9	1,082.1	1,069.8	1,062.5	1,055.6	1,048.9
Personnel expenditure	NZDm	(614.9)	(630.5)	(650.3)	(653.0)	(655.2)	(654.3)	(656.5)	(658.7)	(660.9)
Occupancy/Property costs	NZDm	(72.3)	(73.2)	(72.4)	(75.9)	(77.4)	(79.0)	(80.5)	(82.1)	(83.8)
Faculty support and other costs	NZDm	(267.3)	(276.9)	(281.2)	(292.5)	(298.3)	(304.3)	(310.4)	(316.6)	(322.9)
Total expenditure	NZDm	(954.5)	(980.6)	(1,003.9)	(1,021.4)	(1,030.9)	(1,037.6)	(1,047.4)	(1,057.4)	(1,067.6)
EBITDA	NZDm	104.3	124.8	116.6	68.5	51.2	32.2	15.1	(1.8)	(18.7)
Depreciation & Amortisation	NZDm	(90.4)	(92.0)	(100.8)	(97.4)	(100.8)	(100.9)	(101.1)	(101.5)	(102.0)
Non-recurring items	NZDm	(8.8)	(4.3)	3.0	(27.8)	-	-	-	-	-
Interest income	NZDm	13.7	14.2	11.0	9.3	4.7	4.3	5.1	5.2	4.6
Finance Costs	NZDm	(3.5)	(3.3)	(3.4)	(3.3)	(4.1)	(1.9)	(2.2)	(2.6)	(2.7)
Net surplus	NZDm	15.3	39.4	26.4	(50.6)	(49.0)	(66.3)	(83.2)	(100.7)	(118.9)

Summary cash flow	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Surplus before D&A	NZDm	105.7	131.4	127.2	46.8	51.8	34.6	18.0	0.8	(16.8)
Non cash items above EBITDA	NZDm	6.8	(10.9)	(6.4)	(50.0)	-	-	-	-	-
Movement in NWC	NZDm	19.5	17.7	(30.5)	63.1	(0.8)	2.3	2.7	2.8	2.9
Cash from operating activities	NZDm	132.1	138.2	90.2	59.9	51.0	36.9	20.7	3.6	(13.9)
Cash from / applied to investing activities	NZDm	(159.7)	(119.5)	(139.5)	(168.9)	(98.9)	(104.6)	(107.0)	(109.5)	(112.2)
Cash from / applied to financing activities	NZDm	30.9	2.9	40.8	87.3	10.0	3.9	5.9	-	-
Total cash movement	NZDm	3.3	21.7	(8.5)	(21.7)	(37.9)	(63.8)	(80.4)	(105.9)	(126.1)

Summary balance sheet	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Cash and cash equivalents	NZDm	267.8	312.3	271.8	249.0	228.1	201.9	172.8	136.7	112.4
Other current assets	NZDm	103.4	130.8	139.0	144.8	145.5	145.3	146.0	146.7	147.5
Fixed assets / Intangibles	NZDm	1,812.0	1,911.6	2,085.1	2,133.4	2,131.5	2,135.2	2,141.0	2,149.0	2,159.1
Other non current assets	NZDm	20.4	14.4	32.6	52.3	52.3	52.3	52.3	52.3	52.3
Total assets	NZDm	2,203.6	2,369.1	2,528.4	2,579.4	2,557.4	2,534.6	2,512.1	2,484.6	2,471.2
Bank overdraft	NZDm	-	(2.3)	(4.3)	(1.8)	(18.9)	(56.5)	(107.8)	(177.6)	(279.4)
Other current liabilities	NZDm	(264.5)	(310.0)	(287.8)	(351.6)	(351.5)	(353.5)	(356.9)	(360.4)	(364.1)
Term debt	NZDm	(76.5)	(65.6)	(110.6)	(158.5)	(47.4)	(47.4)	(47.4)	(47.4)	(47.4)
Other non current liabilities	NZDm	(9.0)	(9.7)	(9.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)
Total liabilities	NZDm	(350.1)	(387.6)	(411.8)	(530.0)	(435.9)	(475.5)	(530.3)	(603.5)	(709.0)
Equity / Net assets	NZDm	1,853.5	1,981.5	2,116.6	2,049.4	2,121.5	2,059.1	1,981.8	1,881.1	1,762.2

Quick stats	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total EFTS	EFT					69,231	67,785	66,668	65,573	64,500
Revenue per EFT	NZD'000					15.6	15.8	15.9	16.1	16.3
Operating Cash flow per EFT	NZD'000					0.7	0.5	0.3	0.1	(0.2)
Academic FTEs	FTE					4,149	4,062	3,995	3,930	3,866
Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Non-Academic FTEs	FTE					4,136	4,050	3,983	3,918	3,853
Non-Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Government funding per EFT	NZD'000					9,826	9,826	9,826	9,826	9,826
Domestic revenue per EFT	NZD'000					3,966	4,045	4,126	4,208	4,293
International revenue per EFT	NZD'000					15,703	16,017	16,337	16,664	16,998
Implied growth Government funding	%					0.0%	0.0%	0.0%	0.0%	0.0%
Implied growth domestic fees	%					2.0%	2.0%	2.0%	2.0%	2.0%
Implied growth International fees	%					2.0%	2.0%	2.0%	2.0%	2.0%

Closing cash and cash equivalents (incl. bank overdraft)	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.3	(1.0)	(3.7)	(6.9)	(10.6)
ITP 2	NZDm					(1.1)	(2.7)	(6.1)	(11.5)	(18.7)
ITP 3	NZDm					60.1	57.6	53.5	47.7	39.8
ITP 4	NZDm					33.0	33.4	33.0	31.9	29.7
ITP 5	NZDm					(11.6)	(23.7)	(35.8)	(55.6)	(77.4)
ITP 6	NZDm					3.3	(0.3)	(4.3)	(8.8)	(13.7)
ITP 7	NZDm					0.9	(9.2)	(21.2)	(35.2)	(50.9)
ITP 8	NZDm					12.6	8.5	3.7	(2.0)	(8.4)
ITP 9	NZDm					38.5	38.9	38.2	36.2	32.8
ITP 10	NZDm					26.7	23.9	20.0	14.9	8.5
ITP 11	NZDm					(4.2)	(13.3)	(23.4)	(34.6)	(46.9)
ITP 12	NZDm					0.1	(1.1)	(3.7)	(7.8)	(13.3)
ITP 13	NZDm					15.8	11.6	6.8	1.1	(5.4)
ITP 14	NZDm					26.6	19.3	10.4	(0.3)	(12.6)
ITP 15	NZDm					9.3	8.7	7.3	4.9	1.6
ITP 16	NZDm					(2.0)	(5.2)	(9.6)	(15.0)	(21.4)
Total cash and cash equivalents (incl. bank overdraft)	NZDm					209.2	145.4	65.0	(40.9)	(167.0)

Net surplus/(deficit) as percentage of revenue	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	%					(7.95%)	(10.35%)	(12.66%)	(15.01%)	(17.43%)
ITP 2	%					0.35%	(1.40%)	(3.11%)	(4.84%)	(6.53%)
ITP 3	%					(0.30%)	(2.11%)	(3.47%)	(4.96%)	(6.76%)
ITP 4	%					3.21%	1.18%	(0.13%)	(1.52%)	(3.28%)
ITP 5	%					(12.35%)	(12.30%)	(13.64%)	(14.98%)	(16.32%)
ITP 6	%					(15.94%)	(18.42%)	(20.79%)	(23.05%)	(25.26%)
ITP 7	%					(8.33%)	(9.97%)	(11.64%)	(13.33%)	(14.96%)
ITP 8	%					(7.73%)	(9.93%)	(11.76%)	(13.83%)	(15.66%)
ITP 9	%					2.94%	0.85%	(0.95%)	(2.89%)	(5.28%)
ITP 10	%					(2.44%)	(4.39%)	(5.98%)	(7.74%)	(9.80%)
ITP 11	%					(14.18%)	(16.18%)	(17.92%)	(19.68%)	(21.45%)
ITP 12	%					0.58%	(1.17%)	(2.75%)	(4.34%)	(5.91%)
ITP 13	%					(8.08%)	(10.14%)	(11.88%)	(13.86%)	(15.92%)
ITP 14	%					(6.23%)	(8.10%)	(9.74%)	(11.58%)	(13.37%)
ITP 15	%					0.77%	(1.11%)	(2.85%)	(4.72%)	(6.80%)
ITP 16	%					(3.69%)	(5.59%)	(7.34%)	(9.12%)	(10.93%)
Total surplus/(deficit) as percentage of revenue	%					(4.53%)	(6.20%)	(7.83%)	(9.54%)	(11.33%)

Cost savings required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.7	2.2	2.6	3.0	3.5
ITP 2	NZDm					-	1.4	3.2	4.9	6.6
ITP 3	NZDm					0.3	2.2	3.6	4.9	6.5
ITP 4	NZDm					-	-	0.1	0.7	1.6
ITP 5	NZDm					16.0	15.7	17.2	18.7	20.4
ITP 6	NZDm					3.1	3.5	3.8	4.2	4.5
ITP 7	NZDm					8.5	10.0	11.5	13.1	14.6
ITP 8	NZDm					3.2	4.0	4.5	5.1	5.7
ITP 9	NZDm					-	-	0.5	1.6	2.8
ITP 10	NZDm					1.5	2.7	3.5	4.4	5.3
ITP 11	NZDm					7.9	9.0	9.9	10.8	11.8
ITP 12	NZDm					-	1.0	2.4	3.7	5.1
ITP 13	NZDm					3.2	3.9	4.4	5.0	5.6
ITP 14	NZDm					5.7	7.2	8.3	9.5	10.8
ITP 15	NZDm					-	0.5	1.3	2.1	2.9
ITP 16	NZDm					2.1	3.1	4.1	5.1	6.0
Total cost savings required to breakeven	NZDm					53.2	66.3	81.0	96.8	113.7

Domestic EFTS to required breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	EFTS					135.5	173.1	207.6	241.6	275.4
ITP 2	EFTS					-	92.9	203.6	313.3	418.6
ITP 3	EFTS					21.7	149.2	242.6	341.0	458.8
ITP 4	EFTS					-	-	7.1	80.4	171.9
ITP 5	EFTS					1,164.4	1,139.7	1,251.6	1,361.8	1,470.3
ITP 6	EFTS					209.9	238.1	264.5	288.7	311.5
ITP 7	EFTS					515.8	606.5	698.8	789.9	874.9
ITP 8	EFTS					265.7	335.5	393.4	458.1	513.7
ITP 9	EFTS					-	-	48.4	144.8	259.8
ITP 10	EFTS					114.3	201.7	271.2	346.1	432.0
ITP 11	EFTS					586.3	658.0	721.5	784.5	846.9
ITP 12	EFTS					-	64.8	150.4	235.0	316.6
ITP 13	EFTS					258.0	318.7	369.4	426.5	484.9
ITP 14	EFTS					428.8	548.7	651.2	764.8	872.8
ITP 15	EFTS					-	36.3	91.8	149.5	211.6
ITP 16	EFTS					130.0	193.7	251.5	308.7	365.3
Total domestic EFTS required to breakeven	EFTS					3,830.4	4,756.8	5,824.6	7,034.8	8,284.9

Base with efficiency gains

The base with efficiency gains scenario includes one-off decreases in facility and support costs and in personnel expenditure, and a 5% reduction in non-academic FTE occurring in 2020. This models the impact of a drive for efficiency gains in response to the declining international and flat domestic EFTS in the base case.

Table 5: Base with efficiency gains assumptions

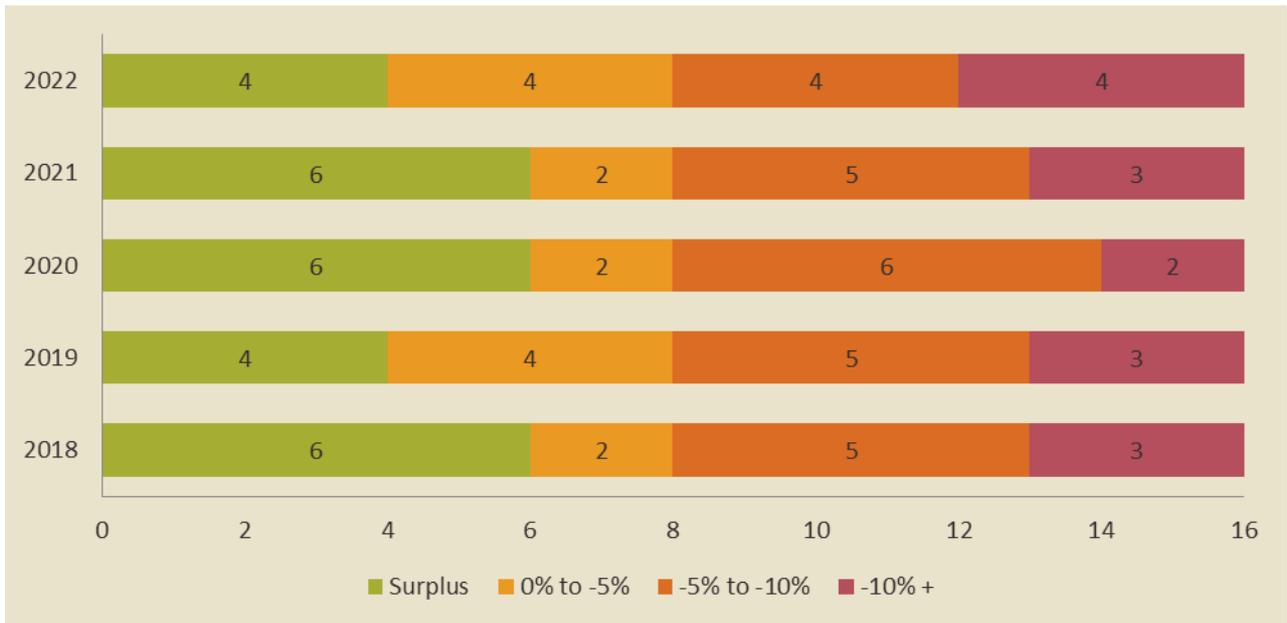
	Base	Base with efficiency gains
Domestic EFTS	No change	Same as Base
International EFTS	-2.5% one off in 2019 then flat	Same as Base
Govt. tuition funding per EFTS	No change	Same as Base
Annual Maximum Fee Movement	Plus 2.0% p.a.	Same as Base
Staff Costs per FTE	Plus 2.0% p.a.	Same as Base
Capex	Equal to depreciation in previous year	Same as Base
Faculty support	Plus 2.0% p.a.	One-off 2.5% decrease in 2020
Occupancy and property costs	Plus 2.0% p.a.	One-off 2.5% decrease in 2020
Depreciation rate	Based on historical	Same as Base
Interest income on cash	FY18-19: 2.0%, FY20: 2.7%, FY21: 3.4%, FY22-onwards: 3.7%	Same as Base
Finance costs on term debt	2.0% margin on interest rates	Same as Base
Academic FTEs	Constant EFTS / FTE ratio	Same as Base
Non-academic FTEs	Constant EFTS / FTE ratio	FTE number maintained with one-off 5.0% decrease in FTEs in 2020

The number of ITPs in a deficit position is reduced under the scenario compared to the base case and downside scenarios, with three maintaining profit throughout the period, and two others not moving to a deficit position until 2022.

2019 proves more challenging than 2018 in this scenario due to the time delay in adjusting non-academic FTE until the year following a reduction in international EFTS. On the other hand, performance improves in 2020 as efficiency gains are realised. Due the one-off nature of the cost reductions, performance again declines in 2021 and 2022, albeit off a better base.

This demonstrates that efficiency gains, unless achieved on a more significant scale than modelled, are not a viable solution to sector viability concerns. The scenario does not take into account any subsequent increased in spending at a later to date (which often occurs after a period of constrained expenditure) as this would likely occur beyond the timeframe considered.

Figure 9: Number of ITP surplus/deficit per year – base with efficiency gains



Summary Income statement	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Government funding	NZDm	603.6	601.6	596.2	571.6	571.6	571.6	571.6	571.6	571.6
Domestic student revenue	NZDm	234.3	239.4	233.7	226.1	230.7	235.3	240.0	244.8	249.7
International student revenue	NZDm	116.5	161.6	180.0	188.2	192.0	190.9	194.8	198.7	202.6
Other income	NZDm	104.4	102.8	110.5	103.9	103.9	103.9	103.9	103.9	103.9
Total revenue	NZDm	1,058.8	1,105.4	1,120.4	1,089.9	1,098.2	1,101.7	1,110.3	1,119.0	1,127.8
Personnel expenditure	NZDm	(614.9)	(630.5)	(650.3)	(653.0)	(665.4)	(677.2)	(673.5)	(686.9)	(700.7)
Occupancy/Property costs	NZDm	(72.3)	(73.2)	(72.4)	(75.9)	(77.4)	(79.0)	(77.0)	(78.5)	(80.1)
Faculty support and other costs	NZDm	(267.3)	(276.9)	(281.2)	(292.5)	(298.3)	(304.3)	(296.7)	(302.6)	(308.7)
Total expenditure	NZDm	(954.5)	(980.6)	(1,003.9)	(1,021.4)	(1,041.2)	(1,060.4)	(1,047.1)	(1,068.1)	(1,089.4)
EBITDA	NZDm	104.3	124.8	116.6	68.5	57.0	41.3	63.1	50.9	38.4
Depreciation & Amortisation	NZDm	(90.4)	(92.0)	(100.8)	(97.4)	(100.8)	(100.9)	(101.1)	(101.5)	(102.0)
Non-recurring items	NZDm	(8.8)	(4.3)	3.0	(27.8)	-	-	-	-	-
Interest income	NZDm	13.7	14.2	11.0	9.3	4.8	4.4	5.6	6.9	6.9
Finance Costs	NZDm	(3.5)	(3.3)	(3.4)	(3.3)	(4.1)	(1.9)	(2.2)	(2.6)	(2.7)
Net surplus	NZDm	15.3	39.4	26.4	(50.6)	(43.2)	(57.1)	(34.6)	(46.3)	(59.4)

Summary cash flow	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Surplus before D&A	NZDm	105.7	131.4	127.2	46.8	57.7	43.8	66.6	55.2	42.6
Non cash items above EBITDA	NZDm	6.8	(10.9)	(6.4)	(50.0)	-	-	-	-	-
Movement in NWC	NZDm	19.5	17.7	(30.5)	63.1	0.4	3.7	(0.7)	4.0	4.2
Cash from operating activities	NZDm	132.1	138.2	90.2	59.9	58.0	47.5	65.9	59.2	46.8
Cash from / applied to investing activities	NZDm	(159.7)	(119.5)	(139.5)	(168.9)	(98.9)	(104.6)	(107.0)	(109.5)	(112.2)
Cash from / applied to financing activities	NZDm	30.9	2.9	40.8	87.3	10.0	3.9	5.9	-	-
Total cash movement	NZDm	3.3	21.7	(8.5)	(21.7)	(30.8)	(53.2)	(35.2)	(50.3)	(65.4)

Summary balance sheet	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Cash and cash equivalents	NZDm	267.8	312.3	271.8	249.0	232.9	211.3	206.5	196.4	179.5
Other current assets	NZDm	103.4	130.8	139.0	144.8	146.5	147.3	149.1	150.8	152.6
Fixed assets / Intangibles	NZDm	1,812.0	1,911.6	2,085.1	2,133.4	2,131.5	2,135.2	2,141.0	2,149.0	2,159.1
Other non current assets	NZDm	20.4	14.4	32.6	52.3	52.3	52.3	52.3	52.3	52.3
Total assets	NZDm	2,203.6	2,369.1	2,528.4	2,579.4	2,563.1	2,546.0	2,548.8	2,548.5	2,543.5
Bank overdraft	NZDm	-	(2.3)	(4.3)	(1.8)	(16.6)	(48.2)	(78.6)	(118.8)	(167.3)
Other current liabilities	NZDm	(264.5)	(310.0)	(287.8)	(351.6)	(353.7)	(358.1)	(359.2)	(365.0)	(371.0)
Term debt	NZDm	(76.5)	(65.6)	(110.6)	(158.5)	(47.4)	(47.4)	(47.4)	(47.4)	(47.4)
Other non current liabilities	NZDm	(9.0)	(9.7)	(9.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)	(18.1)
Total liabilities	NZDm	(350.1)	(387.6)	(411.8)	(530.0)	(435.7)	(471.8)	(503.3)	(549.3)	(603.8)
Equity / Net assets	NZDm	1,853.5	1,981.5	2,116.6	2,049.4	2,127.4	2,074.2	2,045.5	1,999.1	1,939.7

Quick stats	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total EFTS	EFT					70,394	70,088	70,088	70,088	70,088
Revenue per EFT	NZD'000					15.6	15.7	15.8	16.0	16.1
Operating Cash flow per EFT	NZD'000					0.8	0.7	0.9	0.8	0.7
Academic FTEs	FTE					4,218	4,199	4,199	4,199	4,199
Academic EFT / FTE	EFT/FTE					16.7	16.7	16.7	16.7	16.7
Non-Academic FTEs	FTE					4,196	4,196	3,986	3,986	3,986
Non-Academic EFT / FTE	EFT/FTE					16.8	16.7	17.6	17.6	17.6
Government funding per EFT	NZD'000					9,826	9,826	9,826	9,826	9,826
Domestic revenue per EFT	NZD'000					3,966	4,045	4,126	4,208	4,293
International revenue per EFT	NZD'000					15,703	16,017	16,337	16,664	16,998
Implied growth Government funding	%					0.0%	0.0%	0.0%	0.0%	0.0%
Implied growth domestic fees	%					2.0%	2.0%	2.0%	2.0%	2.0%
Implied growth International fees	%					2.0%	2.0%	2.0%	2.0%	2.0%

Closing cash and cash equivalents (incl. bank overdraft)	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.4	(0.5)	(2.2)	(4.2)	(6.6)
ITP 2	NZDm					0.1	0.1	1.6	2.0	1.1
ITP 3	NZDm					60.8	59.3	59.9	59.6	58.0
ITP 4	NZDm					33.4	34.4	36.7	38.7	40.1
ITP 5	NZDm					(11.1)	(22.6)	(30.3)	(45.1)	(61.6)
ITP 6	NZDm					3.5	0.1	(3.0)	(6.5)	(10.2)
ITP 7	NZDm					1.4	(8.2)	(16.8)	(26.1)	(37.0)
ITP 8	NZDm					12.8	9.1	5.9	2.3	(2.0)
ITP 9	NZDm					39.1	40.7	43.4	46.0	47.9
ITP 10	NZDm					27.0	24.8	23.2	21.0	17.9
ITP 11	NZDm					(3.8)	(12.5)	(20.1)	(28.2)	(37.2)
ITP 12	NZDm					0.7	0.6	2.1	3.0	2.8
ITP 13	NZDm					16.0	12.1	8.9	5.2	0.8
ITP 14	NZDm					26.9	20.1	14.2	7.5	(0.8)
ITP 15	NZDm					9.7	9.9	10.6	11.0	10.9
ITP 16	NZDm					(1.7)	(4.3)	(6.2)	(8.6)	(11.8)
Total cash and cash equivalents (incl. bank overdraft)	NZDm					216.3	163.1	127.9	77.6	12.2

Net surplus/(deficit) as percentage of revenue	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	%					(7.19%)	(8.81%)	(7.01%)	(8.46%)	(9.94%)
ITP 2	%					1.47%	0.06%	1.91%	0.73%	(0.44%)
ITP 3	%					0.19%	(1.20%)	0.99%	0.22%	(0.80%)
ITP 4	%					3.83%	2.33%	4.97%	4.46%	3.64%
ITP 5	%					(11.95%)	(11.70%)	(9.70%)	(10.63%)	(11.57%)
ITP 6	%					(15.17%)	(16.92%)	(15.23%)	(16.61%)	(17.92%)
ITP 7	%					(7.87%)	(9.24%)	(7.18%)	(8.36%)	(9.46%)
ITP 8	%					(7.19%)	(8.98%)	(7.02%)	(8.31%)	(9.78%)
ITP 9	%					3.82%	2.67%	5.38%	4.71%	3.71%
ITP 10	%					(1.96%)	(3.48%)	(1.84%)	(2.90%)	(4.19%)
ITP 11	%					(13.54%)	(15.09%)	(12.60%)	(13.66%)	(14.72%)
ITP 12	%					1.17%	(0.14%)	2.06%	1.16%	0.26%
ITP 13	%					(7.63%)	(9.38%)	(7.26%)	(8.55%)	(10.06%)
ITP 14	%					(5.84%)	(7.44%)	(5.64%)	(6.89%)	(8.30%)
ITP 15	%					1.42%	0.19%	1.98%	1.05%	0.00%
ITP 16	%					(3.10%)	(4.52%)	(2.55%)	(3.67%)	(4.81%)
Total surplus/(deficit) as percentage of revenue	%					(3.93%)	(5.18%)	(3.12%)	(4.14%)	(5.27%)

Cost savings required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	NZDm					1.6	1.9	1.5	1.8	2.1
ITP 2	NZDm					-	-	-	-	0.5
ITP 3	NZDm					-	1.3	-	-	0.8
ITP 4	NZDm					-	-	-	-	-
ITP 5	NZDm					15.7	15.3	12.6	13.9	15.3
ITP 6	NZDm					3.0	3.3	2.9	3.2	3.4
ITP 7	NZDm					8.1	9.5	7.3	8.6	9.9
ITP 8	NZDm					3.0	3.7	2.8	3.2	3.6
ITP 9	NZDm					-	-	-	-	-
ITP 10	NZDm					1.2	2.2	1.1	1.7	2.4
ITP 11	NZDm					7.7	8.6	7.2	7.9	8.6
ITP 12	NZDm					-	0.1	-	-	-
ITP 13	NZDm					3.1	3.7	2.8	3.1	3.6
ITP 14	NZDm					5.4	6.8	4.9	5.8	6.9
ITP 15	NZDm					-	-	-	-	-
ITP 16	NZDm					1.8	2.6	1.5	2.2	2.8
Total cost savings required to breakeven	NZDm					50.6	59.0	44.5	51.3	60.1

Domestic EFTS required to breakeven	Unit	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
ITPs										
ITP 1	EFTS					124.9	153.0	121.7	146.9	172.5
ITP 2	EFTS					-	-	-	-	30.2
ITP 3	EFTS					-	88.0	-	-	59.0
ITP 4	EFTS					-	-	-	-	-
ITP 5	EFTS					1,140.7	1,113.1	924.6	1,016.5	1,109.6
ITP 6	EFTS					203.2	226.3	203.9	222.5	240.5
ITP 7	EFTS					494.6	579.2	450.6	525.1	595.5
ITP 8	EFTS					250.5	312.2	245.0	291.2	344.0
ITP 9	EFTS					-	-	-	-	-
ITP 10	EFTS					93.0	164.8	87.5	138.1	199.9
ITP 11	EFTS					566.9	629.5	526.9	572.6	618.9
ITP 12	EFTS					-	7.7	-	-	-
ITP 13	EFTS					246.8	302.6	234.7	277.2	327.0
ITP 14	EFTS					407.8	518.4	393.6	481.8	582.0
ITP 15	EFTS					-	-	-	-	-
ITP 16	EFTS					110.8	161.4	91.3	131.6	172.6
Total domestic EFTS required to breakeven	EFTS					3,639.2	4,256.1	3,279.8	3,803.5	4,451.7