

# New Zealand financial reporting benchmarks and data-driven research insights

June 2023, Volume 3

This report is prepared jointly by Chartered Accountants Australia and New Zealand, the University of Melbourne and the University of Queensland.

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More information is available from the authors upon request.

We would welcome any feedback regarding additional metrics and benchmarks that would be useful for inclusion in future reports.

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# Contents

03	About the authors
05	Introduction
07	Research insights
08	Appendix 1
08	Benchmarks of financial performance and position
26	Appendix 2
26	Definitions of financial metrics

# Introduction

This annual benchmark research report provides both data-driven research insights into significant financial reporting subject areas and benchmarks of high, normal and low values for the primary drivers of entity performance and the values of financial reporting line items in the statements of financial performance and position for New Zealand Stock Exchange (NZX) listed entities.

## Benchmarks of financial performance and position

Benchmarks of entity performance and position for a wide range of metrics are produced for each Global Industry Classification Standards (GICS) sector. These benchmarks could potentially be useful to:

- Enable auditors, audit committees, management, directors and regulators to identify unusual amounts and to assess the quality/reliability of reported financial accounting variables.
- Enable professional service firms, management, directors and investors to assess past performance, risk, capital structure and investment decisions.
- One of the challenges of assessing a business is developing and maintaining perspective, i.e., a big picture view of what comprises normal, high or low in order to understand how entities are operating. To make this judgment, the current distribution of typical values of business variables needs to be known.
- Facilitate planning, budgeting, forecasting and valuation. Many economic and business variables revert to the mean or norm. But what is the “norm”?
- Enable comparison of the performance and reporting of New Zealand entities to their international counterparts, using the rest of the world (RoW) benchmarks based on high-income countries (as classified by the World Bank) that are also included.

## Methodology for benchmarks of financial performance and position

The starting population for the benchmarks is all NZX listed entities over the period from 2014 to 2022. We removed entities missing data on total assets, total revenue, shareholders' equity, net statutory income, or a GICS sector. We also removed exchange traded funds and depository receipts.

For the rest of the world (RoW) benchmark we followed a similar sampling approach, but we included only entities incorporated in countries or territories that the World Bank classified as 'high income' in 2011 to provide a more meaningful comparison to Australian entities. We further require a country or territory to have at least 60 listed entities each year to be included in the sample. The countries or territories represented in the RoW benchmark include: Austria, The Bahamas, Bahrain, Belgium, Bermuda, Canada, Cayman Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Hong Kong SAR (China), Hungary, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Republic of Korea (South Korea), Kuwait, Latvia, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, Oman, Poland, Portugal, Qatar, Saudi Arabia, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, Trinidad and Tobago, United Arab Emirates, United Kingdom, United States.

The data for the research insights and benchmarks was obtained from the Standard and Poor's Compustat database ('Compustat'), which is a comprehensive market and corporate financial database, covering thousands of entities worldwide. Firms in the financial sector (GICS 40) and real estate investment trusts (REITs, GICS Sector 60) are excluded from the sample because of the uniqueness of both the business models and the accounting in these sectors.

## Understanding the benchmarks for financial performance and position

To identify very low to very high values of the financial metrics we ranked all observations of the variable from the lowest to the highest (within each GICS sector). For each financial metric we then identify the values at the following specific points in the percentile distribution of the rank of the financial metric from low to high: 10th percentile, 25th percentile, 50th percentile, 75th percentile, and 90th percentile. The observations at these specific percentile points become respectively the reported observations that are very low, low, normal, high and very high.

The normal value is the observation at the 50th percentile, which is the median, and thus a measure of a typical or normal value for the financial metric. The very high value is the observation at the 90th percentile of a rank of entities from lowest to highest on this metric. Thus, only 10% of entities have values greater than the 90th percentile and these values can therefore be considered to have a very high value and are "very unusual". The high value is the observation at the 75th percentile of a rank of entities from lowest to highest on this metric and only 25% of entities have values greater than this observation and thus can be considered "unusual". Likewise, a very low value is the observation at the 10th percentile of a rank of entities from lowest to highest on this metric and only 10% of entities have an observation lower than this value.

As an illustration, for GICS 30 Consumer Staples across the 2014-21 period (see Table 1.5), the median and thus normal value for ROE is 6.0%. The very high value of the gross profit margin is 62.7%. This is the value at the 90th percentile and implies that only 10% of entities have a gross profit margin greater than 62.7% and thus these entities can be deemed unusual. The low value of days receivable (closing receivables) is 31.6 this is the value at the 25th percentile and implies, that 25% of entities have a days receivable metric lower than 31.6. Values below (greater) the 25th (75th) percentile can be considered "unusual" or "not typical".

To identify the relevant reference benchmark for an entity, the entity is classified by GICS sector and then classified by size (large, medium, small and micro). "NM" stands for "Not Material" and means a benchmark has not been provided due to an insufficient number of observations.

# Research insights

## Impact of climate-related risks on reporting within statutory financial reports

A separate insights report<sup>1</sup> outlines the results of a high-level review of financial statements of listed entities in Australia, New Zealand and globally, that issued financial statements in 2022, to understand how climate-related risks are impacting statutory financial statements in different entities across different sectors.

Some of the key findings are as follows:

- In the sampled statutory financial statements 37% and 19% of Australian and New Zealand entities respectively mention climate. In comparison 35% of global entities mention climate in their statutory financial statements.
- For Australian and New Zealand entities climate-related risks are impacting financial reports mainly in the areas of impairment of non-current assets, financial risks and critical accounting estimates. Global entities are similar.
- The Energy and Utilities sectors have seen the biggest impact to financial statements from climate-related risks. The impact on financial statements from climate-related risks is lowest in Information Technology and Communications Services sectors.

## Benchmarks of financial performance and position

We produce benchmarks of high, normal and low values for most financial report variables and drivers of entity performance and financial position (hereafter referred to as “financial metrics” and defined in Appendix 2) categorised as follows:

- Income Statement – Growth and Margins
- Balance Sheet – Working Capital Management
- Balance Sheet – Capital Investment
- Balance Sheet – Capital Structure and Liquidity
- Income Statement and Balance Sheet – Performance

The benchmarks are produced using the past reported financial reporting data of the relevant population of NZX listed entities. Two benchmark periods are reported: 2014-2021 and 2022.

Benchmarks of financial performance and position for each industry are in the following Tables in Appendix 1:

<b>Table 1.1</b>	GICS 10 Energy	<b>08</b>
<b>Table 1.2</b>	GICS 15 Materials	<b>10</b>
<b>Table 1.3</b>	GICS 20 Industrials	<b>12</b>
<b>Table 1.4</b>	GICS 25 Consumer Discretionary	<b>14</b>
<b>Table 1.5</b>	GICS 30 Consumer Staples	<b>16</b>
<b>Table 1.6</b>	GICS 35 Health Care	<b>18</b>
<b>Table 1.7</b>	GICS 45 Information Technology	<b>20</b>
<b>Table 1.8</b>	GICS 50 Communication Services	<b>22</b>
<b>Table 1.9</b>	GICS 55 Utilities	<b>24</b>

<sup>1</sup> [Climate risk in financial statements.](#)

# Appendix 1

## Benchmarks of financial performance and position

**Table 1.1: GICS 10 Energy**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High		Normal	Low	Normal
<b>Income Statement</b>									
Revenue Growth	-29.4%	-14.0%	-3.4%	16.4%	21.0%	42.1%	-24.2%	-0.3%	25.9%
Gross Profit Margin	14.5%	18.3%	54.9%	68.8%	75.0%	63.9%	11.3%	30.4%	58.4%
SG&A Expense to Revenue	0.1%	0.5%	9.5%	24.1%	30.6%	7.9%	5.5%	12.0%	29.0%
EBITDA Margin	2.7%	6.9%	14.9%	35.4%	52.1%	47.3%	-7.8%	11.0%	37.6%
EBIT Margin	-36.1%	-4.0%	4.6%	9.9%	24.5%	30.6%	-38.0%	1.0%	14.0%
Cost of debt	4.2%	5.2%	6.3%	10.7%	13.3%	3.2%	3.9%	5.9%	9.2%
PBT Margin	-103.5%	-6.4%	3.7%	9.7%	18.2%	26.2%	-54.1%	-2.1%	10.8%
Effective tax rate	25.6%	26.4%	28.9%	32.9%	122.4%	29.1%	10.4%	24.1%	35.8%
Net Profit Margin	-84.8%	-11.3%	1.9%	6.0%	13.3%	18.8%	-50.0%	-2.5%	8.0%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	NM	NM	NM	NM	NM	NM	0.1%	0.7%	3.2%
Staff Expenses to Revenue	0.1%	0.1%	1.5%	17.0%	21.1%	4.9%	3.4%	11.5%	31.5%
<b>Performance</b>									
ROIC	-26.8%	-2.6%	5.1%	14.5%	21.9%	19.5%	-16.7%	-0.4%	9.0%
ROIC (including lease liabilities)	-26.8%	-2.6%	5.2%	14.5%	21.9%	21.0%	-17.1%	-0.4%	9.2%
ROE	-30.0%	-7.5%	1.4%	11.1%	21.4%	13.8%	-26.1%	-3.5%	8.5%
FCF/NOA	9.8%	20.5%	29.8%	69.2%	102.5%	10.6%	3.5%	19.0%	37.1%
Operating cash flow/NOA	6.4%	9.9%	18.7%	27.8%	50.1%	5.9%	-1.7%	8.7%	17.7%
Earnings growth (profitable only)	-85.9%	-68.7%	-28.5%	279.7%	814.3%	336.1%	-35.8%	7.3%	67.5%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	23.3	27.6	34.9	72.6	91.8	49.8	40.8	65.2	110.8
Days Receivable (Closing Receivables)	23.5	24.7	35.8	64.9	89.5	61.2	39.2	62.1	107.2



**Table 1.1: GICS 10 Energy (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Days Inventory	8.6	14.0	48.6	64.2	71.9	54.0	11.7	27.6	61.9
Days Payable	36.4	42.8	49.1	92.8	134.9	51.2	30.4	61.4	159.2
Operating Cycle	37.6	57.2	78.8	125.1	161.8	83.7	62.3	99.5	188.7
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	2.3%
DTL to Total Assets	1.0%	2.1%	5.5%	8.6%	9.4%	2.8%	0.0%	0.0%	2.1%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.31	0.40	0.88	2.78	3.41	1.48	0.18	0.43	1.16
Asset Turnover (Sales to Average Assets)	0.20	0.21	0.27	1.71	2.00	0.39	0.11	0.27	0.62
CAPX Growth	-52.1%	-40.1%	-2.9%	16.5%	71.6%	36.2%	-50.0%	-10.3%	54.7%
Depreciation Rate	2.1%	2.5%	5.3%	5.9%	6.2%	5.5%	3.1%	4.8%	7.0%
Average Age of PPE	0.97	2.11	3.63	26.94	33.10	3.05	4.18	7.57	12.74
Average Total Lifespan of PPE	16.09	16.99	19.03	39.55	48.07	18.21	14.21	20.94	31.16
Average Remaining Lifespan of PPE	7.04	8.96	12.14	14.54	15.78	14.09	6.44	10.67	17.88
Intangible Assets to Total Assets	0.0%	0.3%	0.9%	2.7%	25.8%	1.0%	0.0%	0.1%	5.8%
Goodwill to Total Assets	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.6%
Goodwill to Total Revenue	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	2.0%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.2%	0.5%	17.8%	31.1%	36.2%	27.5%	5.4%	24.7%	46.3%
Debt to Assets (incl. lease liabilities)	0.0%	0.5%	17.6%	29.8%	32.9%	27.4%	3.9%	23.5%	44.9%
Lease Liability to Assets	0.0%	0.0%	0.0%	0.2%	0.4%	0.1%	0.0%	0.0%	0.5%
Debt to Equity	0.2%	0.7%	33.5%	80.6%	105.5%	50.2%	5.3%	43.5%	111.4%
Cash to Assets	0.1%	0.6%	4.7%	28.6%	59.1%	0.4%	1.8%	7.1%	18.0%
Current Ratio	76.7%	95.4%	135.1%	535.6%	1129.1%	102.2%	67.8%	128.4%	242.8%
Quick Ratio	16.7%	25.3%	54.9%	496.9%	1102.2%	45.5%	47.3%	95.8%	195.4%
Cash flow liquidity ratio	16.9%	29.9%	53.3%	126.3%	207.1%	11.6%	-12.2%	23.6%	92.3%
Interest Coverage	2.80	4.79	7.65	16.32	286.79	13.45	2.83	5.89	15.01
Debt to EBITDA	0.06	0.70	2.07	2.83	5.18	1.83	1.66	3.47	6.44

Table 1.2: GICS 15 Materials

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-17.2%	-3.0%	2.7%	11.1%	33.8%	7.6%	-6.9%	2.7%	13.7%
Gross Profit Margin	23.7%	25.0%	30.8%	49.4%	100.0%	40.4%	17.0%	25.5%	37.2%
SG&A Expense to Revenue	14.1%	17.0%	21.6%	34.6%	190.6%	25.0%	8.0%	12.8%	20.7%
EBITDA Margin	-151.4%	-4.0%	5.8%	9.5%	19.2%	10.9%	4.3%	10.3%	17.1%
EBIT Margin	-151.4%	-8.8%	1.9%	5.5%	7.2%	3.0%	0.4%	5.4%	10.8%
Cost of debt	3.0%	5.1%	6.5%	8.6%	12.9%	5.9%	1.9%	3.8%	6.9%
PBT Margin	-151.4%	-16.4%	0.2%	5.1%	6.7%	7.0%	-1.5%	4.8%	10.6%
Effective tax rate	21.7%	22.2%	24.7%	28.1%	33.3%	28.0%	18.0%	25.1%	32.9%
Net Profit Margin	-151.4%	-14.9%	-0.3%	4.0%	5.3%	5.0%	-1.9%	3.4%	7.8%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	0.0%	0.0%	0.0%	0.3%	1.2%	0.0%	0.4%	1.2%	2.9%
Staff Expenses to Revenue	0.3%	9.2%	24.5%	35.7%	371.8%	24.7%	3.5%	14.4%	24.8%
<b>Performance</b>									
ROIC	53.0%	-17.6%	0.7%	9.5%	13.0%	-0.3%	-8.9%	4.2%	12.5%
ROIC (including lease liabilities)	-53.0%	-17.6%	0.7%	9.9%	13.2%	-0.4%	-9.0%	4.3%	12.7%
ROE	-37.9%	-21.1%	-3.3%	8.5%	13.2%	14.8%	-11.7%	2.8%	9.6%
FCF/NOA	-27.2%	-7.4%	8.0%	15.6%	45.4%	-1.8%	1.6%	15.9%	29.4%
Operating cash flow/NOA	-49.8%	-9.2%	3.4%	11.4%	27.3%	2.1%	-4.5%	7.7%	16.5%
Earnings growth (profitable only)	-22.4%	4.0%	20.1%	71.1%	200.0%	-37.2%	-23.2%	8.0%	52.7%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	27.4	30.2	59.1	65.4	92.3	55.4	46.2	69.8	101.2
Days Receivable (Closing Receivables)	27.2	30.5	57.4	65.5	90.7	58.9	46.0	70.2	102.5
Days Inventory	16.8	34.2	84.5	108.3	133.5	124.6	50.8	77.4	116.3
Days Payable	25.8	29.1	44.4	85.1	101.3	69.8	33.0	55.9	89.2
Operating Cycle	46.5	86.2	143.4	168.9	195.6	175.0	113.6	156.3	208.4
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	1.3%	2.8%	16.0%	0.2%	0.0%	0.7%	3.2%
DTL to Total Assets	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.3%	2.3%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.00	0.09	1.59	1.93	2.30	0.27	0.14	1.00	1.68

**Table 1.2: GICS 15 Materials (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.00	0.07	0.94	1.30	1.78	0.24	0.00	0.55	0.89
CAPX Growth	-56.9%	-16.7%	0.5%	30.8%	119.0%	50.0%	-35.9%	1.3%	53.6%
Depreciation Rate	2.9%	4.0%	4.9%	6.9%	9.0%	7.2%	3.0%	4.0%	5.3%
Average Age of PPE	2.00	4.67	9.83	13.86	19.00	3.99	7.50	12.32	18.35
Average Total Lifespan of PPE	11.07	14.51	20.24	25.00	34.00	13.80	18.90	24.90	33.02
Average Remaining Lifespan of PPE	4.65	8.33	9.45	11.92	16.55	8.90	8.01	10.85	15.30
Intangible Assets to Total Assets	0.0%	0.1%	16.2%	22.7%	49.8%	2.5%	0.0%	0.4%	3.5%
Goodwill to Total Assets	0.0%	0.0%	0.0%	10.8%	16.2%	0.0%	0.0%	0.0%	0.5%
Goodwill to Total Revenue	0.0%	0.0%	3.2%	9.2%	13.1%	0.0%	0.0%	0.0%	2.3%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	0.0%	19.7%	25.9%	32.3%	3.1%	1.3%	17.7%	33.5%
Debt to Assets (incl. lease liabilities)	0.0%	0.0%	16.9%	24.4%	30.8%	0.0%	0.6%	16.8%	32.6%
Lease Liability to Assets	0.0%	0.0%	0.0%	1.0%	6.2%	2.6%	0.0%	0.0%	0.4%
Debt to Equity	0.0%	0.0%	38.3%	52.9%	92.0%	11.5%	1.6%	28.8%	73.6%
Cash to Assets	0.4%	2.4%	6.4%	15.2%	42.0%	4.7%	4.5%	10.6%	22.0%
Current Ratio	82.2%	156.9%	257.5%	445.7%	971.3%	255.9%	108.8%	174.5%	313.6%
Quick Ratio	56.3%	80.4%	113.8%	352.8%	943.8%	127.1%	62.7%	112.1%	227.6%
Cash flow liquidity ratio	-538.5%	-260.4%	11.5%	35.1%	66.7%	5.8%	-34.7%	13.2%	42.6%
Interest Coverage	1.60	3.10	4.80	10.73	17.00	23.71	6.02	14.14	40.69
Debt to EBITDA	0.97	2.03	2.72	4.46	7.63	2.05	1.17	2.65	4.80

Table 1.3: GICS 20 Industrials

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-17.3%	-0.5%	6.2%	14.4%	35.7%	8.3%	-5.9%	3.4%	13.2%
Gross Profit Margin	9.9%	21.5%	39.8%	52.9%	69.2%	45.9%	16.0%	26.2%	38.5%
SG&A Expense to Revenue	0.0%	1.5%	14.1%	32.5%	61.1%	9.8%	8.4%	15.5%	25.4%
EBITDA Margin	-29.3%	6.0%	14.7%	28.3%	54.3%	14.5%	3.5%	8.1%	14.2%
EBIT Margin	-30.6%	2.9%	8.7%	16.9%	44.7%	9.1%	1.0%	4.9%	9.5%
Cost of debt	2.7%	3.6%	4.8%	6.6%	11.3%	4.2%	1.6%	3.2%	5.3%
PBT Margin	-16.0%	2.6%	9.4%	31.2%	80.5%	8.2%	0.3%	4.4%	9.3%
Effective tax rate	12.1%	23.5%	27.4%	29.6%	32.5%	26.3%	19.3%	26.7%	34.7%
Net Profit Margin	-15.0%	1.9%	6.8%	21.2%	61.5%	6.3%	0.0%	3.1%	6.9%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	0.5%	1.0%	2.1%	4.7%	32.0%	1.5%	0.5%	1.5%	3.4%
Staff Expenses to Revenue	3.3%	14.7%	27.5%	32.8%	40.8%	31.5%	5.4%	20.4%	32.6%
<b>Performance</b>									
ROIC	-32.0%	0.9%	11.8%	17.8%	22.7%	6.3%	1.8%	9.2%	18.6%
ROIC (including lease liabilities)	-30.8%	1.7%	12.1%	18.5%	24.7%	7.8%	1.9%	9.6%	19.4%
ROE	-34.6%	6.6%	11.1%	17.0%	23.0%	7.2%	0.5%	6.8%	13.1%
FCF/NOA	3.9%	10.7%	20.3%	30.5%	47.4%	12.9%	5.8%	19.1%	34.3%
Operating cash flow/NOA	-17.7%	5.1%	10.9%	17.8%	26.7%	7.4%	2.2%	11.3%	21.3%
Earnings growth (profitable only)	-31.1%	-8.1%	7.2%	24.3%	95.3%	8.7%	-19.0%	8.5%	44.8%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	26.0	40.1	50.1	62.0	107.3	54.0	55.0	80.9	120.5
Days Receivable (Closing Receivables)	25.9	39.0	50.6	63.7	98.9	54.1	55.2	81.4	120.9
Days Inventory	0.8	4.8	46.9	120.5	167.4	29.6	18.9	61.1	116.1
Days Payable	13.7	31.4	46.8	76.8	131.0	49.6	33.1	55.1	89.5
Operating Cycle	38.4	54.3	118.2	187.1	236.9	90.3	104.1	157.6	228.1
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	0.9%	2.1%	5.0%	1.0%	0.1%	1.1%	4.3%
DTL to Total Assets	0.0%	0.0%	0.8%	3.1%	4.1%	0.4%	0.0%	0.6%	2.1%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.09	0.40	1.18	2.63	3.84	1.12	1.03	1.80	3.12

**Table 1.3: GICS 20 Industrials (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.08	0.25	0.90	1.37	1.91	0.82	0.55	0.86	1.25
CAPX Growth	-66.7%	-41.3%	1.5%	68.6%	223.0%	63.0%	-33.7%	2.2%	54.0%
Depreciation Rate	1.6%	3.5%	6.2%	9.5%	11.4%	6.7%	3.5%	5.1%	7.7%
Average Age of PPE	2.37	3.79	5.27	8.54	13.03	5.65	5.23	8.92	14.24
Average Total Lifespan of PPE	8.49	10.53	16.14	28.16	61.74	14.91	12.88	19.75	28.64
Average Remaining Lifespan of PPE	3.21	5.25	8.60	18.05	58.35	8.78	5.55	9.04	14.55
Intangible Assets to Total Assets	0.0%	1.0%	6.3%	27.8%	53.0%	5.6%	0.3%	1.9%	12.7%
Goodwill to Total Assets	0.0%	0.0%	2.6%	22.9%	36.7%	5.0%	0.0%	0.1%	6.8%
Goodwill to Total Revenue	0.0%	0.0%	5.4%	19.1%	35.2%	4.7%	0.0%	0.2%	7.4%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	3.2%	15.9%	25.2%	33.8%	49.1%	26.9%	6.9%	20.4%	34.8%
Debt to Assets (incl. lease liabilities)	2.1%	13.3%	23.5%	31.4%	47.8%	16.2%	5.3%	18.5%	32.7%
Lease Liability to Assets	0.0%	0.0%	0.0%	1.2%	14.3%	5.0%	0.0%	0.1%	1.5%
Debt to Equity	3.2%	23.4%	49.1%	85.2%	132.4%	44.4%	11.0%	42.3%	95.1%
Cash to Assets	0.4%	1.5%	3.7%	7.3%	19.1%	4.4%	6.3%	13.1%	23.8%
Current Ratio	26.3%	63.5%	110.4%	192.5%	267.0%	117.5%	117.1%	161.2%	238.3%
Quick Ratio	19.0%	41.2%	85.6%	116.9%	162.0%	86.7%	80.3%	116.9%	178.6%
Cash flow liquidity ratio	-28.9%	16.9%	38.9%	79.5%	144.3%	35.5%	1.9%	17.6%	39.1%
Interest Coverage	4.14	7.31	9.99	16.59	31.29	8.83	6.19	15.40	48.06
Debt to EBITDA	0.65	1.37	2.17	3.12	5.03	2.67	1.06	2.56	5.12

Table 1.4: GICS 25 Consumer Discretionary

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-13.7%	-3.2%	4.6%	9.3%	18.3%	1.8%	-6.5%	2.4%	11.8%
Gross Profit Margin	16.0%	23.7%	45.3%	62.1%	70.9%	49.0%	20.4%	32.8%	50.6%
SG&A Expense to Revenue	4.4%	9.6%	21.6%	40.4%	50.0%	22.7%	11.4%	22.0%	39.5%
EBITDA Margin	2.0%	5.5%	13.6%	23.2%	35.1%	16.2%	2.9%	8.1%	14.4%
EBIT Margin	0.1%	3.8%	9.6%	15.8%	29.2%	5.7%	-0.3%	4.2%	9.5%
Cost of debt	3.0%	4.0%	5.3%	7.3%	9.3%	4.5%	1.5%	3.1%	5.2%
PBT Margin	-11.6%	2.0%	7.4%	14.5%	36.3%	4.4%	-1.5%	3.8%	9.3%
Effective tax rate	21.1%	25.6%	27.8%	29.2%	32.9%	27.5%	19.1%	26.6%	36.5%
Net Profit Margin	-9.5%	1.6%	4.9%	10.2%	23.0%	3.2%	-1.7%	2.6%	6.8%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	0.0%	0.2%	0.3%	3.7%	7.3%	NM	0.1%	1.2%	3.1%
Staff Expenses to Revenue	8.1%	13.9%	17.6%	29.0%	55.0%	22.2%	6.7%	17.1%	28.1%
<b>Performance</b>									
ROIC	-0.7%	6.2%	13.7%	17.1%	41.7%	7.8%	-0.2%	8.0%	18.3%
ROIC (including lease liabilities)	-0.7%	7.6%	14.2%	18.3%	46.1%	12.3%	-0.2%	8.3%	19.4%
ROE	-25.8%	4.2%	10.8%	15.2%	27.0%	8.5%	-2.5%	5.9%	13.6%
FCF/NOA	-4.8%	11.1%	23.9%	46.7%	75.5%	11.2%	6.0%	20.2%	39.0%
Operating cash flow/NOA	-1.4%	7.6%	14.2%	22.1%	50.8%	6.9%	2.4%	11.7%	23.2%
Earnings growth (profitable only)	-33.8%	-8.1%	6.3%	28.2%	65.9%	-21.2%	-23.4%	6.7%	42.2%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	1.2	3.7	20.7	43.4	81.5	15.5	18.3	45.6	76.0
Days Receivable (Closing Receivables)	1.2	4.2	22.6	40.2	76.6	19.0	18.1	45.2	76.3
Days Inventory	7.3	22.2	89.2	160.8	223.0	87.4	29.3	72.4	137.3
Days Payable	14.2	21.1	34.5	56.5	81.8	42.7	28.4	48.6	78.8
Operating Cycle	15.5	78.3	102.9	204.8	246.0	102.0	73.7	132.5	209.4
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	0.1%	2.2%	10.3%	0.1%	0.0%	1.0%	5.3%
DTL to Total Assets	0.0%	0.0%	0.0%	1.2%	5.2%	0.0%	0.0%	0.3%	1.8%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.35	0.67	1.33	3.37	4.50	0.88	1.01	1.87	3.21

**Table 1.4: GICS 25 Consumer Discretionary (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.24	0.47	1.04	1.95	2.71	0.66	0.55	0.96	1.40
CAPX Growth	-47.1%	-29.9%	4.3%	44.4%	108.3%	22.8%	-33.5%	0.3%	46.4%
Depreciation Rate	2.5%	3.5%	6.7%	9.5%	13.2%	7.9%	3.8%	5.7%	9.0%
Average Age of PPE	2.53	3.85	6.63	11.10	19.58	3.00	4.40	7.56	12.80
Average Total Lifespan of PPE	7.38	10.46	14.88	28.66	39.82	12.70	11.05	17.40	26.54
Average Remaining Lifespan of PPE	3.26	4.88	6.86	15.09	29.34	9.34	4.76	7.95	13.60
Intangible Assets to Total Assets	0.2%	0.6%	11.5%	39.0%	64.6%	14.0%	0.3%	1.8%	9.6%
Goodwill to Total Assets	0.0%	0.0%	3.3%	22.9%	51.5%	3.2%	0.0%	0.0%	4.1%
Goodwill to Total Revenue	0.0%	0.0%	3.5%	31.8%	99.6%	6.9%	0.0%	0.0%	4.3%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	7.1%	22.5%	39.7%	54.0%	43.9%	7.6%	22.6%	38.4%
Debt to Assets (incl. lease liabilities)	0.0%	2.6%	19.2%	35.9%	49.1%	20.2%	5.4%	19.9%	35.4%
Lease Liability to Assets	0.0%	0.0%	0.0%	0.3%	18.9%	25.0%	0.0%	0.0%	1.5%
Debt to Equity	0.0%	9.7%	44.2%	90.5%	194.6%	94.0%	11.2%	44.7%	104.0%
Cash to Assets	0.8%	1.8%	4.7%	16.3%	36.4%	7.3%	6.5%	13.9%	25.8%
Current Ratio	50.0%	103.5%	156.4%	262.1%	466.6%	152.6%	105.6%	155.3%	241.2%
Quick Ratio	16.3%	33.0%	63.0%	164.0%	385.4%	60.0%	55.8%	95.0%	160.5%
Cash flow liquidity ratio	-4.6%	17.4%	62.7%	91.9%	148.5%	36.5%	3.1%	21.1%	45.6%
Interest Coverage	1.47	4.07	10.69	31.08	134.00	6.99	5.94	15.95	50.16
Debt to EBITDA	0.47	1.23	2.14	5.41	8.43	4.49	1.13	2.72	5.38

**Table 1.5: GICS 30 Consumer Staples**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-30.1%	-2.2%	7.3%	19.0%	38.8%	12.4%	-2.9%	2.8%	9.6%
Gross Profit Margin	11.2%	20.8%	28.1%	48.0%	62.7%	40.1%	20.6%	32.0%	46.2%
SG&A Expense to Revenue	0.0%	8.0%	15.4%	33.1%	52.4%	15.1%	13.7%	22.3%	34.2%
EBITDA Margin	-45.6%	3.3%	10.2%	17.0%	30.7%	12.7%	3.4%	7.5%	13.6%
EBIT Margin	-54.2%	0.6%	5.9%	11.9%	25.0%	8.7%	1.0%	4.1%	9.2%
Cost of debt	3.6%	4.5%	5.6%	7.2%	11.9%	5.0%	1.4%	3.1%	5.2%
PBT Margin	-81.0%	-1.9%	5.4%	11.1%	18.4%	7.2%	0.4%	3.7%	8.8%
Effective tax rate	15.1%	23.9%	27.9%	29.7%	35.6%	25.4%	20.0%	27.1%	35.3%
Net Profit Margin	-63.3%	-1.9%	3.7%	7.9%	14.1%	4.0%	0.1%	2.6%	6.5%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	0.1%	0.3%	0.5%	2.0%	7.3%	0.3%	0.2%	0.7%	1.6%
Staff Expenses to Revenue	11.9%	13.2%	15.0%	29.9%	38.1%	13.9%	5.7%	13.0%	19.8%
<b>Performance</b>									
ROIC	-49.8%	-1.4%	7.0%	13.6%	25.7%	7.4%	2.4%	9.2%	17.4%
ROIC (including lease liabilities)	-54.9%	-1.8%	7.2%	14.3%	26.8%	8.3%	2.4%	9.4%	17.9%
ROE	-43.7%	-1.8%	6.0%	13.3%	19.9%	5.0%	0.9%	6.7%	13.1%
FCF/NOA	-59.0%	1.7%	13.0%	26.5%	46.1%	10.8%	8.4%	20.8%	35.7%
Operating cash flow/NOA	-49.0%	0.4%	7.7%	14.6%	23.8%	6.4%	4.0%	12.1%	21.4%
Earnings growth (profitable only)	-53.3%	-23.7%	4.5%	58.0%	151.8%	38.6%	-18.1%	7.1%	38.1%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	23.4	33.4	53.1	85.7	143.5	50.4	29.3	46.7	70.4
Days Receivable (Closing Receivables)	21.7	31.6	52.7	86.6	136.2	43.9	29.3	46.7	71.0
Days Inventory	10.4	29.9	64.9	172.4	489.2	60.5	37.7	64.3	114.1
Days Payable	11.8	31.1	48.9	83.6	186.9	32.0	30.6	49.7	78.5
Operating Cycle	50.0	85.8	127.8	286.7	593.8	109.0	77.8	119.0	184.9
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	0.2%	1.5%	4.0%	0.9%	0.0%	1.0%	4.4%
DTL to Total Assets	0.0%	0.0%	0.0%	4.8%	7.5%	1.8%	0.0%	0.7%	2.6%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.32	0.64	1.17	2.14	3.37	0.87	1.08	1.98	3.39



**Table 1.5: GICS 30 Consumer Staples (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.25	0.43	0.83	1.23	1.63	0.68	0.62	1.02	1.55
CAPX Growth	-58.8%	-32.3%	13.8%	61.0%	153.9%	7.7%	-28.6%	1.8%	44.1%
Depreciation Rate	3.0%	3.9%	5.9%	9.3%	13.0%	6.7%	3.5%	4.7%	6.1%
Average Age of PPE	1.52	2.65	4.44	8.24	10.26	4.33	6.15	9.67	14.69
Average Total Lifespan of PPE	7.67	10.75	17.05	25.38	33.79	15.04	16.27	21.39	28.21
Average Remaining Lifespan of PPE	4.44	6.79	11.88	19.82	28.39	9.60	7.57	10.32	14.61
Intangible Assets to Total Assets	0.0%	0.9%	6.5%	19.4%	50.7%	6.4%	0.4%	2.7%	14.3%
Goodwill to Total Assets	0.0%	0.0%	1.8%	6.3%	35.9%	2.4%	0.0%	0.2%	6.7%
Goodwill to Total Revenue	0.0%	0.0%	1.9%	9.0%	30.9%	3.9%	0.0%	0.2%	6.6%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	12.0%	22.8%	34.9%	42.4%	26.3%	7.5%	21.8%	36.2%
Debt to Assets (incl. lease liabilities)	0.0%	7.6%	19.9%	30.9%	40.0%	15.6%	5.9%	20.0%	34.4%
Lease Liability to Assets	0.0%	0.0%	0.0%	1.3%	13.1%	4.7%	0.0%	0.0%	1.4%
Debt to Equity	0.0%	15.5%	38.2%	75.8%	106.3%	50.0%	10.5%	40.8%	92.8%
Cash to Assets	0.4%	1.0%	2.9%	9.6%	27.7%	3.1%	4.0%	10.5%	21.5%
Current Ratio	79.5%	117.2%	166.6%	306.8%	490.5%	157.0%	100.0%	150.7%	243.3%
Quick Ratio	36.5%	54.8%	87.9%	130.0%	244.8%	62.9%	53.7%	89.1%	156.6%
Cash flow liquidity ratio	-97.9%	1.6%	27.2%	54.5%	105.7%	29.1%	5.8%	23.3%	44.7%
Interest Coverage	2.77	4.68	7.06	12.00	27.94	10.67	6.83	16.92	57.95
Debt to EBITDA	0.47	1.69	2.56	3.84	5.65	3.11	1.03	2.50	4.72

Table 1.6: GICS 35 Health Care

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-12.6%	5.3%	12.1%	26.7%	131.7%	16.2%	-3.7%	8.0%	28.7%
Gross Profit Margin	-66.3%	9.9%	29.1%	43.1%	70.9%	33.4%	20.7%	47.6%	69.1%
SG&A Expense to Revenue	0.3%	3.7%	14.4%	86.6%	316.1%	26.4%	24.2%	44.4%	103.0%
EBITDA Margin	-467.4%	-175.2%	9.2%	17.6%	23.5%	-0.5%	-164.7%	2.0%	17.0%
EBIT Margin	-477.6%	-191.2%	5.0%	13.1%	19.0%	-2.8%	-178.7%	-2.5%	11.0%
Cost of debt	2.7%	3.3%	4.5%	6.0%	12.3%	5.0%	2.1%	4.3%	9.0%
PBT Margin	-469.2%	-177.0%	2.9%	40.5%	121.5%	1.8%	-193.3%	-5.6%	9.9%
Effective tax rate	0.8%	3.8%	16.0%	29.2%	30.8%	24.9%	16.6%	23.3%	32.8%
Net Profit Margin	-469.4%	-161.6%	2.0%	40.2%	123.5%	1.6%	-186.1%	-5.3%	7.6%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	3.1%	9.2%	36.1%	129.5%	550.4%	71.9%	4.9%	15.0%	132.9%
Staff Expenses to Revenue	3.6%	6.0%	35.1%	104.1%	174.4%	40.1%	18.8%	42.3%	109.0%
<b>Performance</b>									
ROIC	-511.6%	-41.2%	1.4%	10.0%	28.6%	-8.9%	-77.9%	1.3%	15.2%
ROIC (including lease liabilities)	-386.6%	-41.2%	1.5%	12.7%	33.1%	-10.3%	-69.6%	2.5%	17.3%
ROE	-79.5%	-37.6%	7.7%	17.6%	28.1%	3.1%	-60.1%	-10.3%	8.8%
FCF/NOA	-284.9%	-8.8%	22.8%	35.6%	52.4%	25.6%	-43.2%	13.0%	36.0%
Operating cash flow/NOA	-307.0%	-35.8%	8.6%	13.2%	23.8%	5.7%	-63.4%	3.3%	17.0%
Earnings growth (profitable only)	-41.1%	-6.5%	16.8%	58.3%	135.6%	32.2%	-18.7%	9.9%	47.2%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	33.6	48.1	66.6	169.5	332.7	78.0	51.3	76.9	123.7
Days Receivable (Closing Receivables)	29.1	47.9	67.9	179.4	383.1	94.3	52.9	79.4	127.3
Days Inventory	12.3	18.7	38.3	153.2	176.3	150.1	46.8	127.9	223.7
Days Payable	11.9	24.6	50.0	70.2	179.1	61.4	28.8	59.3	123.0
Operating Cycle	41.3	82.5	164.9	248.9	467.5	296.5	135.9	221.5	345.3
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	0.1%	1.7%	6.2%	0.1%	0.0%	0.5%	4.2%
DTL to Total Assets	0.0%	0.0%	0.0%	1.6%	3.3%	0.0%	0.0%	0.0%	0.7%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.09	0.13	0.97	2.31	4.87	0.58	0.47	1.07	2.06

**Table 1.6: GICS 35 Health Care (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.04	0.06	0.20	1.01	1.55	0.32	0.05	0.39	0.73
CAPX Growth	-53.4%	-23.8%	12.1%	66.4%	218.4%	30.6%	-39.2%	6.4%	85.7%
Depreciation Rate	2.0%	3.4%	7.2%	10.1%	17.4%	8.7%	4.4%	6.6%	11.0%
Average Age of PPE	1.68	2.57	3.52	6.65	8.00	3.23	3.72	6.14	9.61
Average Total Lifespan of PPE	5.75	9.94	13.91	29.49	49.99	11.53	9.08	15.00	22.30
Average Remaining Lifespan of PPE	1.85	3.13	8.08	25.02	46.92	8.63	3.63	7.26	12.55
Intangible Assets to Total Assets	0.0%	0.4%	3.3%	15.5%	46.9%	7.5%	0.0%	3.1%	24.6%
Goodwill to Total Assets	0.0%	0.0%	0.0%	1.7%	30.0%	0.4%	0.0%	0.0%	8.0%
Goodwill to Total Revenue	0.0%	0.0%	0.0%	10.9%	64.6%	6.7%	0.0%	0.0%	19.7%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	1.7%	9.4%	18.1%	40.1%	15.6%	0.6%	12.2%	32.0%
Debt to Assets (incl. lease liabilities)	0.0%	0.0%	8.8%	17.4%	38.7%	8.4%	0.0%	9.7%	29.8%
Lease Liability to Assets	0.0%	0.0%	0.0%	0.5%	5.0%	2.5%	0.0%	0.0%	1.5%
Debt to Equity	0.0%	1.8%	16.4%	48.2%	82.0%	32.4%	0.6%	16.0%	61.1%
Cash to Assets	0.1%	0.5%	6.8%	43.0%	77.6%	12.2%	11.9%	31.1%	67.1%
Current Ratio	21.1%	59.9%	178.7%	383.2%	1017.6%	217.5%	140.4%	264.6%	549.5%
Quick Ratio	15.9%	40.2%	103.3%	343.8%	890.3%	131.1%	101.5%	207.6%	483.9%
Cash flow liquidity ratio	-610.7%	-209.7%	22.8%	83.5%	137.4%	10.1%	-222.3%	-16.0%	35.5%
Interest Coverage	1.11	1.80	4.07	12.71	38.58	2.31	6.09	17.13	66.92
Debt to EBITDA	0.31	1.65	4.08	13.26	21.07	8.22	0.74	2.14	4.47

**Table 1.7: GICS 45 Information Technology**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-15.4%	2.6%	18.6%	37.3%	76.1%	26.1%	-6.3%	5.1%	17.8%
Gross Profit Margin	8.7%	23.7%	46.8%	67.1%	98.2%	29.3%	19.9%	32.5%	50.8%
SG&A Expense to Revenue	0.9%	4.4%	31.6%	70.9%	113.3%	24.9%	10.4%	19.6%	38.0%
EBITDA Margin	-128.7%	-46.8%	8.1%	20.1%	30.7%	-2.5%	1.2%	7.8%	15.4%
EBIT Margin	-150.5%	-63.6%	0.0%	8.7%	19.4%	-9.7%	-3.3%	4.1%	10.3%
Cost of debt	3.2%	5.0%	7.2%	11.0%	43.6%	5.7%	1.5%	2.9%	5.4%
PBT Margin	-150.7%	-69.0%	-5.1%	7.1%	16.4%	-16.7%	-4.8%	3.9%	10.7%
Effective tax rate	2.7%	17.1%	29.4%	35.3%	42.7%	24.4%	16.2%	22.9%	32.4%
Net Profit Margin	-139.9%	-64.1%	-4.6%	6.7%	12.8%	-15.8%	-4.9%	2.9%	8.3%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	3.6%	8.0%	15.6%	36.7%	63.0%	21.8%	1.9%	5.4%	13.3%
Staff Expenses to Revenue	0.1%	1.0%	35.2%	50.1%	189.2%	NM	10.6%	26.3%	47.4%
<b>Performance</b>									
ROIC	-134.4%	-62.0%	1.6%	17.3%	50.5%	-5.3%	-3.9%	9.1%	23.5%
ROIC (including lease liabilities)	-141.9%	-62.2%	1.6%	19.2%	54.5%	-6.2%	-3.9%	9.4%	24.3%
ROE	-112.4%	-39.8%	-2.1%	12.4%	36.9%	-14.6%	-5.8%	5.7%	13.5%
FCF/NOA	-34.5%	9.5%	32.1%	63.9%	116.0%	40.3%	4.1%	23.8%	49.5%
Operating cash flow/NOA	-102.9%	-31.5%	9.2%	23.2%	78.9%	4.8%	-0.7%	13.1%	29.5%
Earnings growth (profitable only)	-77.0%	-11.9%	18.3%	94.9%	255.4%	26.0%	-19.3%	12.3%	57.2%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	29.0	40.9	53.3	90.0	133.2	64.5	55.9	77.9	109.7
Days Receivable (Closing Receivables)	31.6	41.3	60.9	91.3	137.4	78.6	55.9	78.9	111.5
Days Inventory	1.8	2.4	89.6	199.0	234.3	2.4	30.0	67.2	116.0
Days Payable	11.6	20.3	33.5	63.3	115.6	28.7	33.7	56.9	85.5
Operating Cycle	43.7	54.5	144.3	280.0	314.6	70.5	109.6	156.4	213.7
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	1.1%	5.8%	15.7%	3.1%	0.1%	0.9%	3.6%
DTL to Total Assets	0.0%	0.0%	0.0%	0.4%	2.1%	0.0%	0.0%	0.1%	0.9%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.57	0.73	1.25	2.37	10.35	1.23	1.16	1.98	3.56

**Table 1.7: GICS 45 Information Technology (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.31	0.45	0.62	1.03	2.17	0.57	0.53	0.81	1.21
CAPX Growth	-65.9%	-39.7%	11.6%	75.0%	198.3%	48.7%	-37.8%	2.7%	66.8%
Depreciation Rate	6.8%	11.3%	14.9%	18.9%	25.3%	19.9%	4.6%	7.0%	11.6%
Average Age of PPE	1.56	2.01	3.05	5.60	11.50	2.92	3.92	6.65	10.89
Average Total Lifespan of PPE	3.95	5.28	6.69	8.84	14.76	5.05	8.55	14.20	21.53
Average Remaining Lifespan of PPE	1.59	2.32	3.13	3.95	5.11	2.78	3.00	5.69	9.91
Intangible Assets to Total Assets	2.2%	4.8%	27.4%	51.7%	68.6%	34.9%	0.4%	2.5%	16.8%
Goodwill to Total Assets	0.0%	0.0%	6.2%	28.5%	45.7%	15.0%	0.0%	0.0%	7.5%
Goodwill to Total Revenue	0.0%	0.0%	4.7%	48.4%	72.6%	35.4%	0.0%	0.0%	9.5%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	0.0%	5.5%	16.3%	45.4%	13.8%	1.9%	12.8%	27.3%
Debt to Assets (incl. lease liabilities)	0.0%	0.0%	0.4%	14.4%	44.0%	7.2%	0.3%	11.4%	26.0%
Lease Liability to Assets	0.0%	0.0%	0.0%	3.1%	8.5%	4.2%	0.0%	0.0%	0.9%
Debt to Equity	0.0%	0.0%	9.0%	31.4%	127.5%	24.4%	2.5%	21.1%	60.4%
Cash to Assets	4.1%	9.3%	23.4%	44.5%	71.1%	33.7%	12.1%	22.6%	38.0%
Current Ratio	77.2%	100.6%	167.5%	239.7%	589.8%	162.8%	133.8%	196.1%	316.5%
Quick Ratio	61.1%	93.1%	132.5%	220.6%	539.8%	154.8%	96.9%	149.5%	252.0%
Cash flow liquidity ratio	-204.1%	-47.1%	27.2%	52.8%	96.0%	15.5%	-2.6%	18.4%	46.0%
Interest Coverage	3.50	5.42	16.60	46.53	314.67	12.06	8.72	25.96	93.54
Debt to EBITDA	0.04	0.42	1.45	2.74	5.27	1.59	0.60	1.76	3.94

**Table 1.8: GICS 50 Communication Services**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-6.1%	-4.2%	0.5%	14.8%	45.7%	2.0%	-6.5%	3.8%	18.7%
Gross Profit Margin	-0.7%	27.6%	42.9%	61.5%	67.3%	32.8%	26.8%	46.5%	66.4%
SG&A Expense to Revenue	0.5%	2.2%	29.8%	45.0%	63.5%	1.8%	15.8%	31.1%	55.6%
EBITDA Margin	-98.9%	-4.7%	19.0%	32.9%	61.0%	31.0%	-1.7%	9.8%	22.5%
EBIT Margin	-124.7%	-12.7%	9.0%	17.9%	26.6%	10.0%	-8.4%	4.7%	13.5%
Cost of debt	4.5%	5.6%	6.5%	8.4%	15.5%	5.8%	1.9%	4.0%	7.1%
PBT Margin	-122.8%	-26.7%	-0.5%	12.6%	16.8%	11.0%	-13.4%	3.5%	12.2%
Effective tax rate	18.5%	26.0%	28.2%	28.9%	30.6%	28.4%	18.4%	27.0%	36.9%
Net Profit Margin	-123.9%	-26.8%	1.8%	10.6%	13.0%	6.6%	-13.5%	2.1%	9.0%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	1.9%	3.0%	8.9%	35.4%	70.6%	NM	0.7%	4.0%	14.4%
Staff Expenses to Revenue	1.5%	20.8%	27.8%	44.1%	105.3%	31.2%	12.9%	29.1%	51.7%
<b>Performance</b>									
ROIC	-214.4%	-17.1%	10.3%	15.9%	23.4%	13.1%	-7.6%	8.0%	21.5%
ROIC (including lease liabilities)	-214.4%	-17.1%	10.9%	16.3%	24.0%	19.7%	-7.7%	8.4%	22.6%
ROE	-88.4%	-42.2%	0.6%	11.9%	24.1%	13.6%	-12.7%	4.0%	13.5%
FCF/NOA	-47.8%	15.2%	29.0%	38.8%	48.8%	26.8%	4.9%	27.4%	58.8%
Operating cash flow/NOA	-112.6%	5.5%	16.6%	24.3%	33.0%	17.6%	-0.5%	13.7%	31.0%
Earnings growth (profitable only)	-43.8%	-17.9%	-4.9%	13.8%	36.0%	19.2%	-22.2%	8.5%	54.4%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	26.2	46.6	59.4	74.1	94.4	48.2	43.6	68.0	106.8
Days Receivable (Closing Receivables)	25.3	47.0	58.0	74.4	108.0	50.1	43.8	68.9	108.6
Days Inventory	2.2	2.5	12.6	47.9	84.8	12.5	4.0	12.8	35.7
Days Payable	23.6	41.7	58.5	94.0	197.9	63.7	29.1	56.2	114.3
Operating Cycle	48.9	53.4	72.1	97.7	127.8	73.3	59.4	91.1	149.2
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	1.7%	3.7%	7.4%	1.2%	0.1%	2.3%	8.1%
DTL to Total Assets	0.0%	0.0%	0.3%	2.8%	4.7%	1.7%	0.0%	0.1%	1.8%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.39	0.55	1.06	1.63	5.95	1.15	0.74	1.48	3.48

**Table 1.8: GICS 50 Communication Services (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.09	0.39	0.79	1.09	1.65	0.90	0.38	0.63	1.06
CAPX Growth	-58.6%	-22.3%	0.2%	23.7%	121.3%	-19.9%	-36.9%	1.7%	59.6%
Depreciation Rate	3.6%	4.9%	8.2%	14.9%	23.3%	6.6%	5.3%	9.5%	16.9%
Average Age of PPE	1.69	2.62	8.75	15.22	18.63	10.52	2.61	5.19	9.73
Average Total Lifespan of PPE	4.18	6.67	11.91	20.41	28.13	15.15	5.84	10.38	18.39
Average Remaining Lifespan of PPE	1.58	2.51	3.95	5.52	8.06	4.66	2.03	3.84	7.45
Intangible Assets to Total Assets	0.0%	2.1%	23.2%	42.9%	65.8%	20.0%	2.2%	14.5%	39.5%
Goodwill to Total Assets	0.0%	0.0%	0.0%	19.3%	30.6%	0.9%	0.0%	3.2%	18.7%
Goodwill to Total Revenue	0.0%	0.0%	0.0%	34.5%	55.6%	0.8%	0.0%	4.7%	31.2%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	0.0%	0.0%	18.1%	41.1%	49.5%	46.7%	1.5%	14.3%	34.6%
Debt to Assets (incl. lease liabilities)	0.0%	0.0%	17.3%	34.3%	46.6%	29.1%	0.1%	12.5%	32.3%
Lease Liability to Assets	0.0%	0.0%	0.0%	3.3%	13.3%	10.3%	0.0%	0.0%	1.2%
Debt to Equity	0.0%	0.0%	33.7%	100.6%	209.9%	132.7%	1.5%	22.1%	79.2%
Cash to Assets	0.7%	1.8%	6.4%	40.3%	61.7%	1.8%	6.8%	19.1%	39.7%
Current Ratio	40.0%	71.0%	99.3%	189.4%	344.9%	91.8%	90.6%	153.0%	266.7%
Quick Ratio	27.9%	43.0%	83.4%	169.5%	337.0%	76.4%	71.0%	127.8%	233.0%
Cash flow liquidity ratio	-196.8%	-47.1%	44.9%	90.6%	119.6%	83.9%	-5.5%	22.2%	55.9%
Interest Coverage	4.10	5.94	11.29	16.58	21.25	8.96	5.74	17.20	75.85
Debt to EBITDA	0.42	0.88	1.73	2.69	3.09	1.93	0.65	2.06	4.15

Table 1.9: GICS 55 Utilities

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
<b>Income Statement</b>									
Revenue Growth	-16.6%	-5.1%	0.4%	13.4%	24.1%	-12.9%	-4.4%	3.5%	13.4%
Gross Profit Margin	20.9%	24.4%	37.6%	79.2%	100.0%	33.9%	23.2%	35.7%	54.1%
SG&A Expense to Revenue	0.0%	0.0%	7.2%	11.4%	24.8%	0.0%	5.7%	11.1%	21.1%
EBITDA Margin	13.7%	21.2%	25.4%	34.3%	58.7%	24.9%	12.2%	24.5%	38.8%
EBIT Margin	6.2%	11.1%	14.9%	21.0%	28.6%	14.2%	4.8%	13.7%	23.6%
Cost of debt	3.9%	5.0%	6.4%	7.8%	10.2%	3.7%	2.9%	4.2%	5.4%
PBT Margin	1.2%	6.6%	10.2%	14.3%	18.7%	17.3%	2.4%	9.5%	17.3%
Effective tax rate	14.4%	24.7%	28.0%	29.0%	36.8%	28.3%	16.8%	24.5%	33.4%
Net Profit Margin	-0.6%	3.6%	7.2%	10.9%	14.3%	12.0%	1.4%	6.7%	13.1%
<b>Income Statement - Supplemental</b>									
R&D to Revenue	0.3%	0.3%	1.4%	2.6%	2.6%	NM	0.1%	0.3%	0.7%
Staff Expenses to Revenue	3.9%	5.6%	7.3%	11.4%	24.8%	13.3%	3.9%	8.3%	13.0%
<b>Performance</b>									
ROIC	2.4%	5.2%	6.8%	8.2%	9.7%	7.0%	3.8%	7.4%	10.6%
ROIC (including lease liabilities)	2.4%	5.2%	6.9%	8.3%	9.7%	7.0%	3.8%	7.5%	10.8%
ROE	-0.4%	2.2%	4.8%	6.9%	9.7%	9.2%	2.3%	7.7%	11.7%
FCF/NOA	0.8%	8.4%	12.4%	15.8%	19.3%	11.8%	13.0%	20.9%	29.6%
Operating cash flow/NOA	3.1%	6.8%	8.1%	10.0%	11.9%	8.2%	6.1%	10.1%	14.7%
Earnings growth (profitable only)	-77.8%	-38.1%	2.0%	52.6%	199.0%	209.1%	-13.9%	7.7%	33.2%
<b>Balance Sheet - Working Capital Management</b>									
Days Receivable (Average Receivables)	28.5	35.0	41.3	48.9	63.8	53.9	43.5	62.2	111.0
Days Receivable (Closing Receivables)	29.0	33.6	41.0	50.8	62.1	49.8	43.5	62.9	115.2
Days Inventory	3.5	6.4	12.0	22.5	252.4	13.4	13.2	26.3	49.8
Days Payable	27.2	33.6	53.5	113.6	183.8	122.0	35.0	58.8	115.6
Operating Cycle	42.4	50.3	57.7	79.5	289.4	82.5	67.7	93.9	150.5
Provision for Doubtful Debts (% of A/R)	0.0%	0.0%	1.6%	2.6%	5.4%	0.1%	0.0%	1.7%	6.3%
DTL to Total Assets	0.0%	7.6%	11.3%	14.2%	18.5%	10.8%	0.1%	2.0%	5.6%
<b>Balance Sheet - Capital Investment</b>									
Asset Turnover (Sales to Average NOA)	0.16	0.27	0.41	0.55	0.83	0.30	0.26	0.48	1.01



**Table 1.9: GICS 55 Utilities (continued)**

	New Zealand 2014-2021					New Zealand 2022	Rest of World 2014-2021		
	Very Low	Low	Normal	High	Very High	Normal	Low	Normal	High
Asset Turnover (Sales to Average Assets)	0.12	0.22	0.29	0.43	0.61	0.22	0.17	0.28	0.55
CAPX Growth	-55.3%	-22.3%	8.7%	36.7%	81.1%	19.4%	-17.0%	4.5%	29.7%
Depreciation Rate	2.0%	2.8%	3.1%	3.5%	4.1%	3.3%	2.7%	3.5%	4.7%
Average Age of PPE	0.46	1.27	2.96	7.19	8.99	1.81	5.25	9.71	18.37
Average Total Lifespan of PPE	24.54	28.68	32.10	35.95	49.86	30.22	21.22	28.49	36.61
Average Remaining Lifespan of PPE	19.78	21.86	28.96	33.80	47.02	28.17	10.96	15.32	20.63
Intangible Assets to Total Assets	0.6%	1.0%	3.5%	8.3%	22.4%	7.1%	0.2%	2.6%	9.9%
Goodwill to Total Assets	0.0%	0.0%	0.2%	3.7%	20.4%	2.1%	0.0%	0.3%	4.3%
Goodwill to Total Revenue	0.0%	0.0%	0.5%	8.6%	90.0%	4.0%	0.0%	1.2%	13.7%
<b>Capital Structure and Liquidity</b>									
Debt to Assets (excl. right-of-use assets)	14.8%	18.7%	27.2%	38.9%	45.9%	24.8%	20.9%	35.7%	49.5%
Debt to Assets (incl. lease liabilities)	14.2%	18.0%	26.6%	38.9%	44.1%	24.5%	19.7%	34.7%	48.6%
Lease Liability to Assets	0.0%	0.0%	0.2%	1.0%	4.9%	0.5%	0.0%	0.0%	0.8%
Debt to Equity	24.4%	33.5%	54.2%	98.2%	141.5%	52.0%	47.8%	112.9%	193.1%
Cash to Assets	0.3%	0.5%	1.1%	4.6%	11.7%	2.5%	1.7%	5.9%	13.0%
Current Ratio	45.2%	63.8%	91.2%	136.8%	245.8%	78.3%	70.6%	104.2%	158.6%
Quick Ratio	36.3%	43.9%	64.7%	103.0%	194.7%	49.6%	45.3%	76.7%	129.0%
Cash flow liquidity ratio	32.0%	50.7%	69.5%	102.1%	144.5%	47.5%	15.8%	38.7%	67.6%
Interest Coverage	2.32	3.24	5.21	6.72	8.37	7.63	3.55	5.46	10.00
Debt to EBITDA	1.83	2.33	3.25	4.42	6.14	3.38	3.12	4.76	6.90

# Appendix 2

## Definitions of financial metrics

Variable	Definition
<b>Revenue growth</b>	One-year percentage change in total revenue
<b>Gross profit margin (GPM)</b>	Revenue less cost of goods sold divided by total revenue
<b>Selling, general and administrative (SG&amp;A) expense to revenue</b>	Selling, general and administrative expense divided by total revenue
<b>Earnings before interest, tax, depreciation and amortisation (EBITDA) margin</b>	Earnings before interest, tax, depreciation and amortisation divided by total revenue
<b>Earnings before interest and tax (EBIT) margin</b>	Earnings before interest and tax divided by total revenue
<b>Cost of debt</b>	Interest expense divided by total short- and long-term debt
<b>Profit before tax (PBT) margin</b>	Profit before tax divided by total revenue
<b>Effective tax rate</b>	Income tax expense divided by profit before tax. Profit before tax must be positive
<b>Net profit margin (NPM)</b>	Net statutory income divided by total revenue
<b>Research and development (R&amp;D) expense to revenue</b>	Research and development expense (where reported) divided by total revenue
<b>Staff expenses to revenue</b>	Direct and indirect payments to employees divided by total revenue
<b>Return on invested capital (ROIC)</b>	Earnings before interest and tax divided by the average of beginning and end of the year invested capital. Invested capital is the sum of short- and long-term debt, shareholders' equity, non-controlling interest, and preferred equity less cash and cash equivalents and short-term investments
<b>ROIC (including lease liabilities)</b>	Earnings before interest and tax to the average of beginning and end of the year invested capital. Invested capital is the sum of short- and long-term debt, lease liabilities, shareholders' equity, non-controlling interest, and preferred equity less cash and cash equivalents and short-term investments
<b>Return on equity (ROE)</b>	Net income to the average of beginning and end of the year total shareholders' equity
<b>Free cash flow (FCF) to net operating assets (NOA)</b>	Free cash flow divided by net operating assets. Free cash flow is cash flow from operations less cash flow from investing. Net operating assets is the sum of short- and long-term debt, shareholders' equity, non-controlling interest, and preferred equity less cash and cash equivalents and short-term investments
<b>Operating cash flow to NOA</b>	Cash flow from operations to net operating assets. Net operating assets is the sum of short- and long-term debt, shareholders' equity, non-controlling interest, and preferred equity less cash and cash equivalents and short-term investments
<b>Earnings growth (profitable only)</b>	One-year change in income before extraordinary items. Only entities that reported a profit in both years are included

<b>Days receivable (average receivables)</b>	365 divided by average accounts receivable turnover. Average accounts receivable turnover is total revenue divided by the average of beginning and end of the year accounts receivables
<b>Days receivable (closing receivables)</b>	365 divided by closing accounts receivable turnover. Closing accounts receivable turnover is total revenue divided by end of the year accounts receivables
<b>Days in inventory</b>	365 divided by inventory turnover. Inventory turnover is cost of goods sold divided by the average of beginning and end of the year inventory
<b>Days payable (Average payables)</b>	365 divided by accounts payable turnover. Accounts payable turnover is cost of goods sold divided by the average of beginning and end of the year accounts payables
<b>Operating cycle</b>	Days in inventory plus days receivable (average receivables)
<b>Provision for doubtful debts (% of A/R)</b>	Provision for doubtful debts divided by end of the year accounts receivable
<b>Deferred tax liability (DTL) to total assets</b>	Deferred tax liability divided by total assets
<b>Asset turnover (Sales to average NOA)</b>	Total revenue divided by average of beginning and end of the year net operating assets. Net operating assets is the sum of short- and long-term debt, shareholders' equity, non-controlling interest, and preferred equity less cash and cash equivalents and short-term investments
<b>Asset turnover (Sales to average assets)</b>	Total revenue divided by average of beginning and end of the year total assets
<b>Capital expenditure (CAPX) Growth</b>	One-year change in capital expenditure
<b>Depreciation rate</b>	Depreciation of tangible assets divided by the cost of property, plant and equipment
<b>Average age of property, plant and equipment (PPE)</b>	Accumulated depreciation divided by depreciation of tangible assets
<b>Average total lifespan of PPE</b>	Cost of property, plant and equipment divided by depreciation of tangible assets
<b>Average remaining lifespan of PPE</b>	Carry amount of property, plant and equipment divided by depreciation of tangible assets
<b>Intangible assets to total assets</b>	Intangible assets divided by total assets
<b>Goodwill to total assets</b>	Goodwill divided by total assets
<b>Goodwill to total revenue</b>	Goodwill divided by total revenue
<b>Debt to assets</b>	Short- and long-term debt divided by total assets
<b>Debt to assets (excluding right-of-use assets)</b>	Short- and long-term debt divided by total assets (less right-of-use assets)
<b>Debt to assets (including lease liabilities)</b>	Short- and long-term debt and lease liabilities divided by total assets
<b>Lease liabilities to assets</b>	Lease liabilities divided by total assets
<b>Debt to equity</b>	Short- and long-term debt divided by total shareholders' equity
<b>Cash to assets</b>	Cash and cash equivalents divided by total assets
<b>Current ratio</b>	Current assets divided by current liabilities
<b>Quick ratio</b>	Sum of cash and cash equivalents and accounts receivable divided by current liabilities
<b>Cash flow liquidity ratio</b>	Cash flow from operations divided by interest expense
<b>Interest coverage</b>	EBITDA divided by interest expense
<b>Debt to EBITDA</b>	Short- and long-term debt divided by EBITDA

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