ARMILLARY
PRIVATE CAPITAL

Return on Capital Employed

2012 Review of the NZ Listed Sector and NZ Crown Entities

May 2013

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Foreword

We are delighted to bring you the second Armillary Private Capital Return on Capital Employed (ROCE) report. This year we have added a selection of Crown Entities to our data set of NZX, NZAX and Unlisted entities bringing the total number of entities reviewed to 156. Additionally we have also focused the report on median outcomes as opposed to averages which we used last year as we consider this provides a better guide to overall results.

The ROCE methodology we have used in this report was developed by Du Pont Corporation and therefore is not proprietary to us. As it is simple to apply, anyone who understands the methodology can use it. We regularly use this methodology as a tool in our client engagements and in our financial training curriculum. A full explanation of ROCE is included in Appendix 2.

We have also included in this year's report case studies on Diligent, the best ROCE performer in 2012 and Briscoe Group, the third ranked performer. Both of these entities provide a prime example of the operational leverage achievable by businesses, and the market has rewarded both these entities with a strong share price performance that has tracked the improvement on ROCE.

We have also presented a distribution of results that shows that whilst the number of entities performing at or better than an average Weighted Average Cost of Capital (WACC) has increased, a large number of entities continue to deliver sub-optimal ROCE results compared to WACC.

We continue to advocate the ROCE methodology in our work with businesses as a simple to use and easily understood tool for measuring business performance, identifying improvement strategies, creating incentive remuneration programs, and for testing budgets and forecasts, especially those applied in valuations. We also see the data and results in this report as providing useful benchmarks for business performance in the New Zealand market.

We trust that the insights contained in this report provide value to investors, business owners and managers alike.

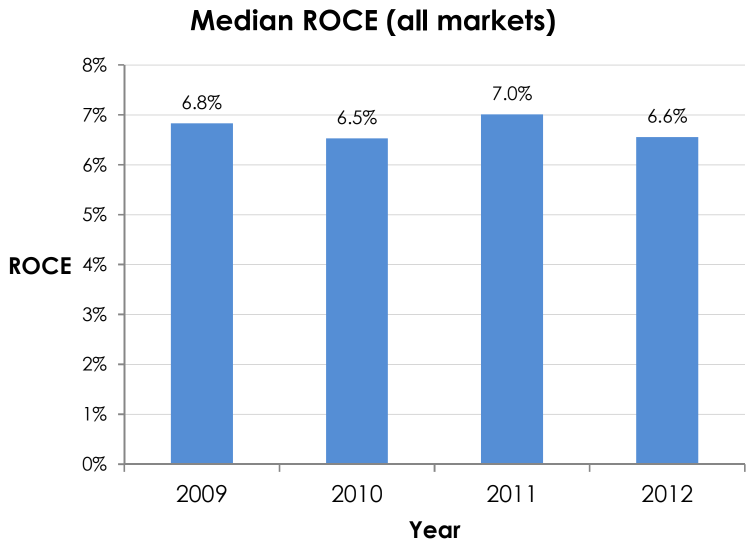
David Wallace
Managing Director

Executive Summary

For this year's ROCE review of 2012 financial results we have added nine Crown Entities to our review of companies with primary listings on the NZX, NZAX, and Unlisted. We have included the prior year results for the Crown Entities for comparative purposes.

The 2012 sample size of 156 companies was slightly down from 159 in 2011 and 158 in 2010 reflecting exits from the market.

- Although the median performance in 2012 has slipped slightly from 2011, the overall result is still largely in line with a rough estimate of the market weighted average cost of capital.
- 56% companies (88) achieved a ROCE greater than 5%, slightly down from 59% in 2011 and 54% in 2010.
- Diligent was the top performer with a 2012 result of 348.7% reflecting high levels of operational leverage or activity
- The 2012 top 10 performers are dominated by retailers and services companies, all of which have high levels of activity (Revenue/Total Net Assets).
- The median ROCE for NZX and Unlisted listed companies was lower than that of 2011 although the decline for NZX listed entities was only 0.2%.
- The 2012 median ROCE for the Crown Entities was 5.2% with Kordia recording the best performance of 11.2%.
- Genesis delivered the highest performance of the Crown owned power companies.



Top 10 Performers

The top 10 entities by 2012 ROCE performance are dominated by businesses that in general have high levels of activity (revenue/assets), like technology, retail and service oriented businesses.

After having a negative ROCE in 2010 and 30% in 2011, Diligent has delivered a significant performance in 2012 of nearly 350%. This is an increase of nearly 1,200% over 2011.

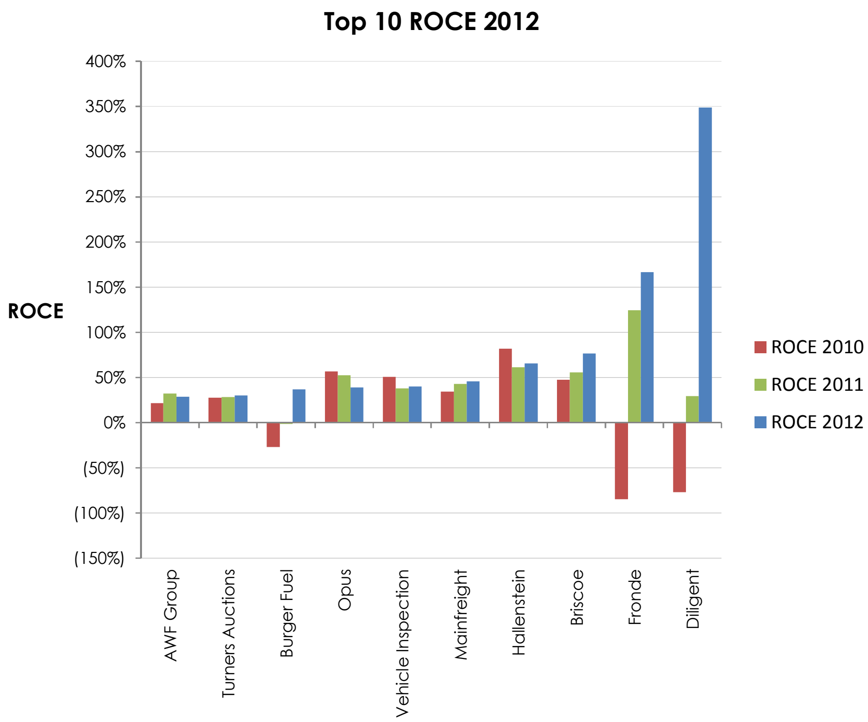
The top three ROCE values achieved in 2012 for each of the four markets analysed were as follows;

– For the NZX market Diligent 348.7%, Briscoe Group 76.6%, and Hallenstein 65.7%;

– On the NZAX market Burger Fuel 37.2%, Investment Research 25.5% and Just Water 13.8%;

– Unlisted's top three performers were Fronde 166.8%, Vehicle Inspection NZ 40.1% and Skyline 16.4%; and

– Of the 9 Crown Entities sampled the top performers were Kordia 11.2%, Genesis Power 8.4%, and Meridian Energy 5.9%.



Diligent, as top performer, had a 28% Profitability ratio (up from 5% in 2011) and a 12.4x Activity Ratio in 2012 (up from 5.8x in 2011). Last year's top performer Fronde's 2012 Profitability Ratio was 4.2% (up from 3.9% in 2011) and its Activity Ratio of 39.6x was also an improvement from 32.3x in 2011.

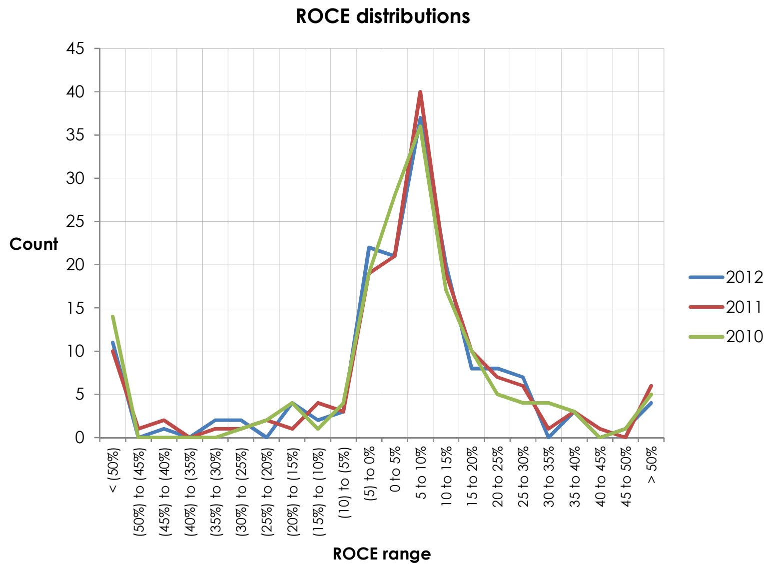
Distribution of Results

The ROCE returns for the last three years appear to follow a relatively normal distribution, with outliers at either side of a bell shaped curve.

- 88 companies (56%) achieved a ROCE greater than 5%, slightly down from 59% in 2011 and compared to 54% in 2010.

- 23 companies in 2012 achieved a ROCE of greater than 20% and 4 of those achieved a ROCE of greater than 50%.

- 47 companies had a negative EBIT percentage in 2012 compared to 44 and 45 in 2011 and 2010 respectively.



Markets

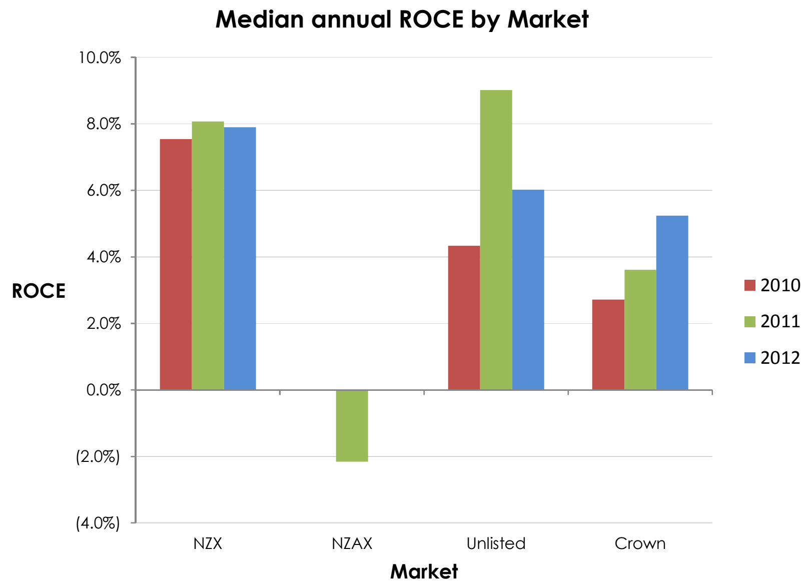
Looking at the median ROCE performance by market for the last three years shows:

– The NZX listed entities had a consistent median performance above the overall median of the sampled entities;

– Those entities listed on the NZAX market have been consistent median under-performers compared to the overall median for all entities. Note that the median for NZAX listed issuers was 0% in 2010 and 2012;

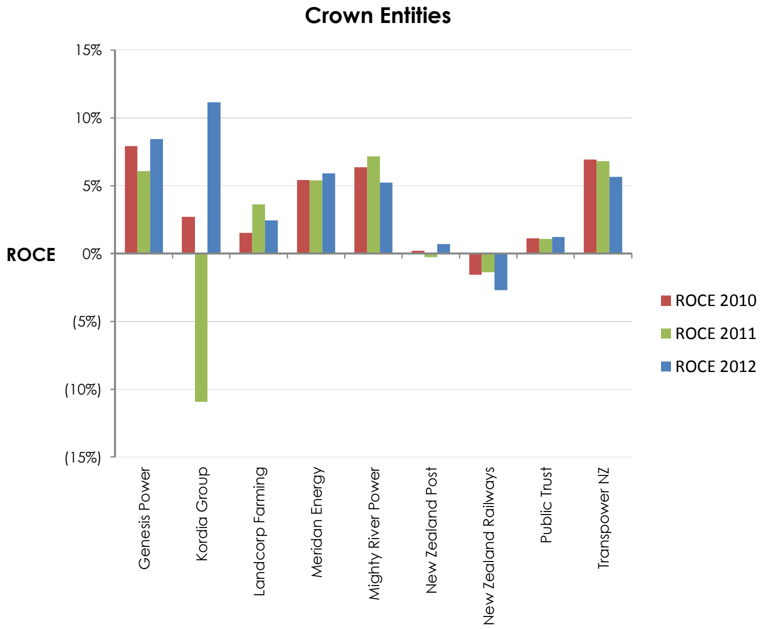
– Unlisted issuers median performance slipped 3% from 2010; and

– The Crown Entities reviewed are not performing as well as their listed counterparts, however have shown an improving trend.



Crown Entities

This year we have broadened the data set to include a selection of 9 Crown Entities.



As noted previously this sample of Crown Entities delivered performance results below the median levels of publicly listed entities in general.

– The 2012 median ROCE for the Crown Entities was 5.2% with Kordia recording the best performance of 11.2%.

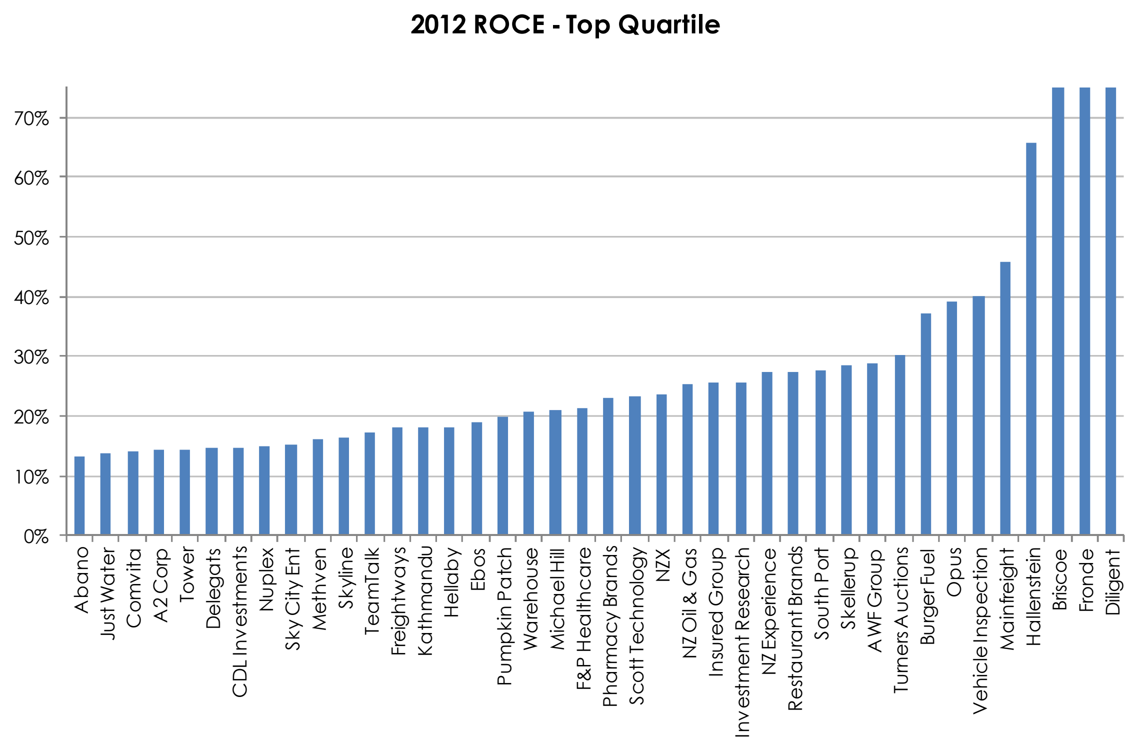
– Genesis delivered the highest performance of the Crown owned power companies achieving a ROCE of 8.4%. Mighty River Power and Meridian achieved 2012 ROCE's of 5.2% and 5.4% respectively.

– Transpower's ROCE declined year-on-year due to lower EBIT margins although its Activity ratio held up despite its making significant investment in new transmission lines.

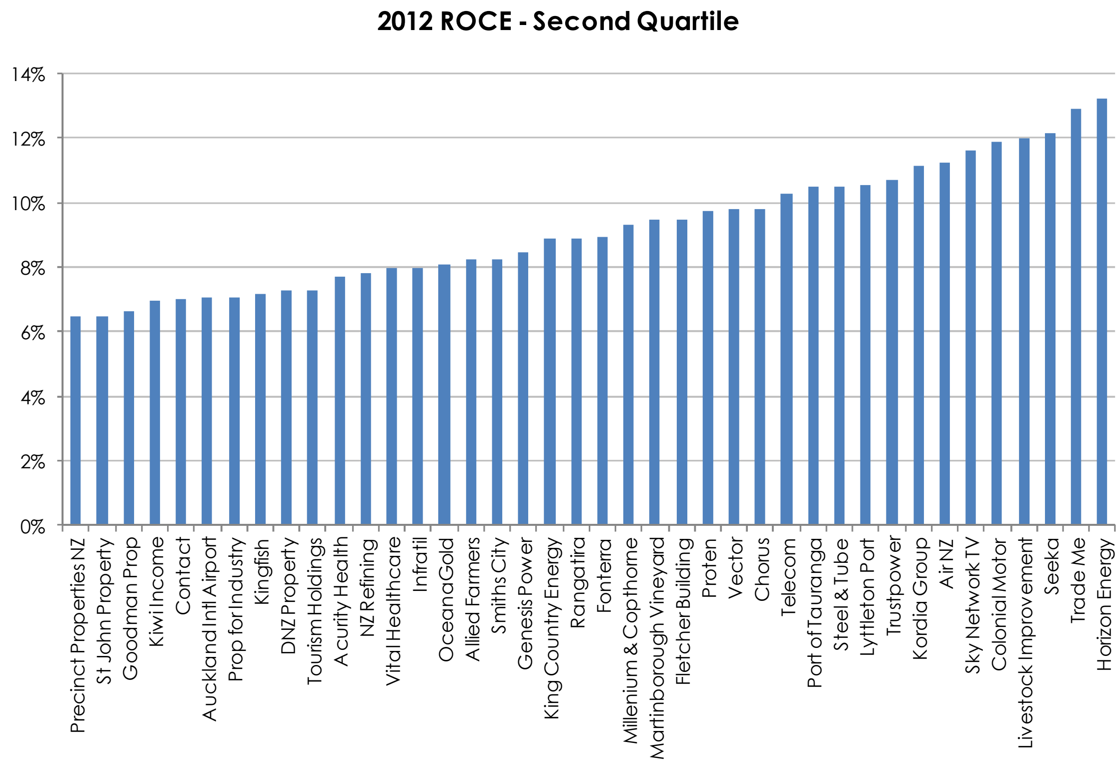
Individual Entities

The following 4 graphs show the individual ROCE performance for each of the 156 entities whose financial performance was reviewed in 2012. Note for the purposes of presenting this chart, entities with ROCE greater than 75% have been capped at 75% as they are relative outliers.

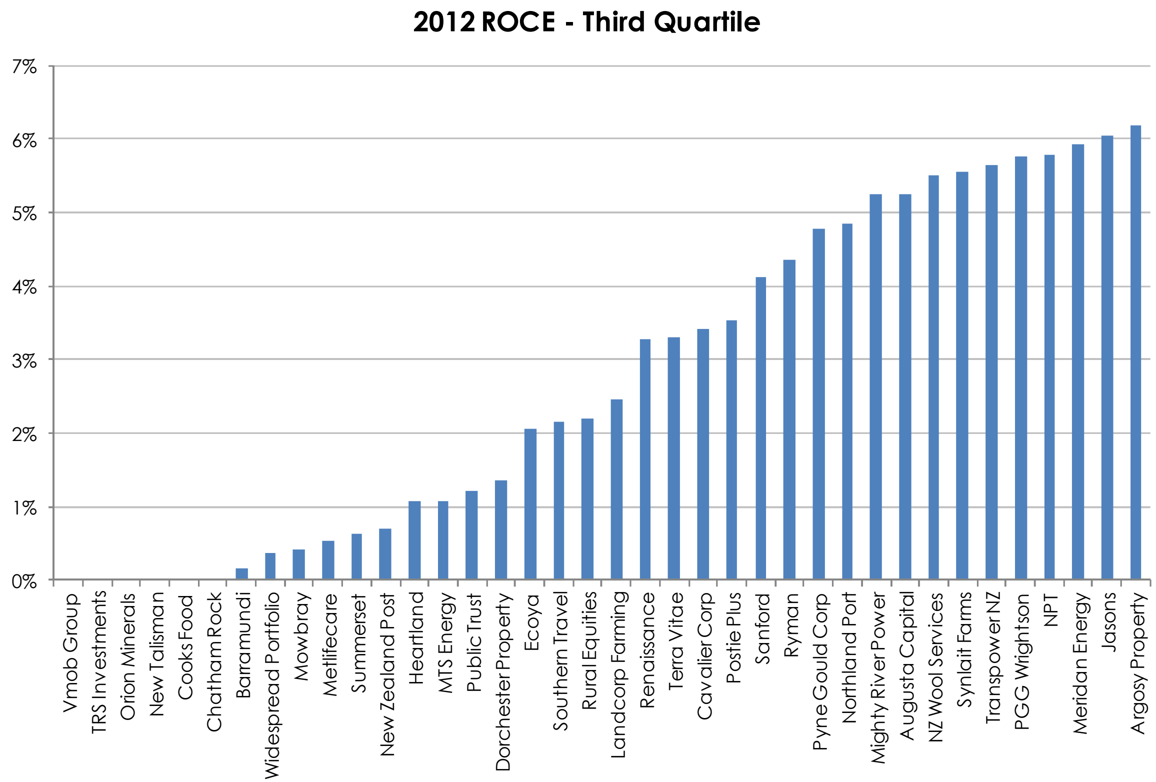
The 40 entities in the top quartile are dominated by technology, retail and service related companies, and top quartile ROCE performance ranges from 13.3% to 348.7%.



The entities in the second quartile had 2012 ROCE's ranging between 6.5% and 13.2%. At this level we estimate that most are trading at or above their individual weighted average cost of capital, if only marginally. We also not the concentration of property-related entities at the bottom end of this range

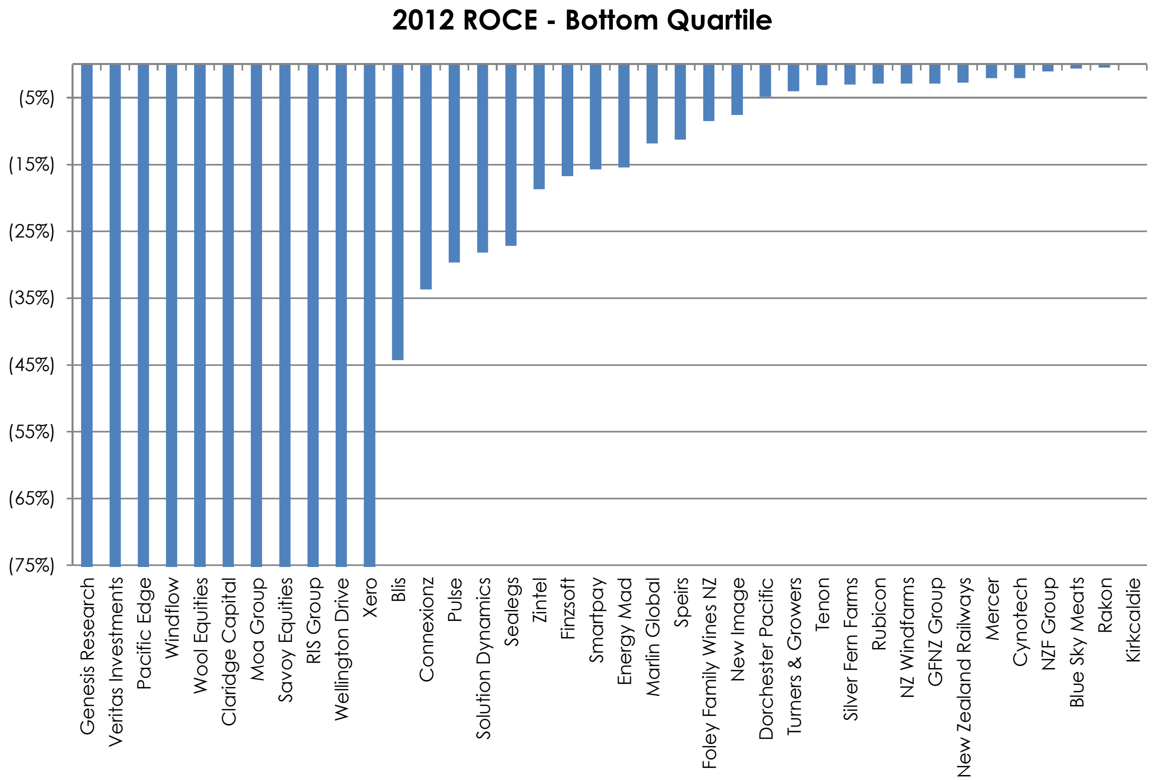


The third quartile ranges from 0% to 6.2% and contains a high grouping of aged care related entities and the Crown power companies.



The fourth quartile of entities are those entities with a ROCE of 0% or less. Note that for the purposes of this chart those entities with a ROCE of less than minus 75% have been constrained to minus 75%. Those entities with negative ROCE reported negative EBIT margins. The order represents the entities ROCE achieved in 2012.

We note that some of the entities at the bottom of this quartile are focused on a significant growth strategy at the expense of profitability. Xero and Moa are examples of this strategy. Those mature businesses in this quartile need to be either considering changing their business model or in the process of such change.



Appendix 1 contains a table of results including 2011 and 2012 Profitability Ratio's (EBIT margins) and Activity Ratio's, 2010, 2011 & 2012 ROCE and average ROCE across these three years.

Case Studies

Below we have presented studies on Diligent and Briscoe, two of the top 3 performers of the companies reviewed in our sample.

Diligent Board Member Services

Diligent Board Member Services ("Diligent") is an example of a technology business with high operating leverage and was the top performer in our 2012 data set.

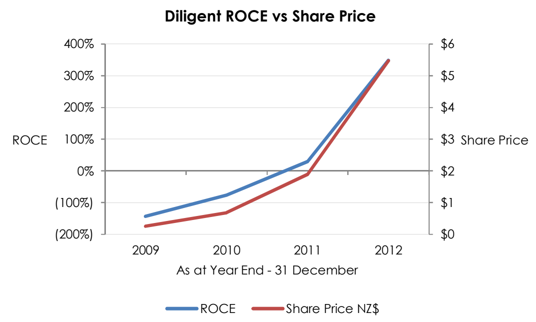
For our analysis Diligent's financial results have been converted from USD to NZD. The underlying logic and insights are the same regardless of the currency used.

Diligent's ROCE has improved materially over the last three years as its revenues have grown. Revenues have risen significantly faster than TNA (Total Net Assets), which has resulted in a materially improved ROCE of 349% in 2012 (versus 30% in 2011). Diligent reported a significantly higher activity ratio in 2012 compared with 2011 (12x versus 6x) and its EBIT increased by 1174%, while TNA (Total Net Assets) rose a modest 16%, which highlights the operating leverage of the Diligent business model.

In order to calculate Diligent's TNA we have adjusted its working capital from a negative position to zero by adding back sufficient cash to current assets for operating purposes, as its statement of financial position includes significant deferred revenues. Typically we exclude cash held on the balance sheet from current assets if the cash is not required for operating the business. In the case of Diligent we regard a certain amount of cash is required to be held to offset the deferred revenue liabilities.

The chart to the right tracks Diligent's ROCE over the 4 year period from 2009 and its share price over the same period. The correlation between the two indicated how the market has rewarded the company for its performance improvements.

Year Ending 31 Dec - NZ$m	**2010**	**2011**	**2012**
Profitability			
Revenue	**11**	**23**	**53**
COGS	4	6	12
Gross Profit	7	17	41
Gross Margin %	67%	72%	77%
Operating expenses	10	15	26
EBIT	**(3)**	**1**	**15**
EBIT margin	(29%)	5%	28%
Activity			
Current Assets (excluding Cash)	1	8	6
Current Liabilities	(5)	(14)	(28)
Unadjusted Working Capital	(4)	(6)	(22)
Adjusted Working Capital	-	-	-
Non Current Assets	4	4	7
Non Current Liabilities (excluding debt)	(0)	(0)	(2)
Total Net Assets (TNA)	**4**	**4**	**5**
Profitability ratio	(29%)	5%	28%
Activity ratio	3	6	12
ROCE	**(77%)**	**30%**	**349%**



Briscoe Group

Briscoe Group ("Briscoe") is an example of a retail business with high operating leverage.

Briscoe's has been a consistent high performer, as measured by ROCE over the last three years. Briscoe's has been in the top 10 performers in each of 2010, 2011 and 2012. ROCE has improved from 48% to 77% over the last three years.

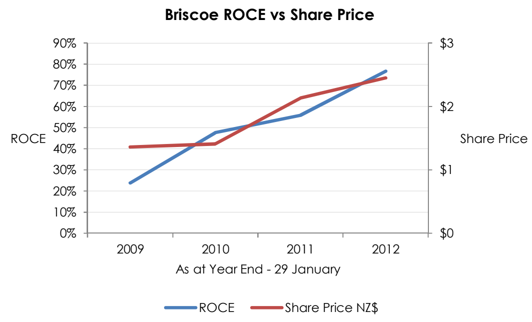
Revenues have been relatively consistent over the last three years, however improved performance has been achieved through a lowering of its TNA (Total Net Assets), and therefore achieving a higher Activity Ratio.

By leasing its store,s Briscoe's business model captures high operating leverage and this provides it with a high activity ratio which has improved in 2012 to 9x. Briscoe's EBIT margin has been relatively consistent over the last three years ranging between 7% and 8%.

Year Ending 29 Jan - NZ$m	2010	2011	2012
Profitability			
Revenue	**417**	**419**	**438**
COGS	250	253	265
Gross Profit	166	167	173
Gross Margin %	40%	40%	40%
Operating expenses	136	134	136
EBIT	**30**	**33**	**37**
EBIT margin	7%	8%	8%
Activity			
Current Assets (excluding Cash)	66	65	65
Current Liabilities	(46)	(59)	(66)
Unadjusted Working Capital	21	6	(1)
Adjusted Working Capital	21	6	-
Non Current Assets	48	43	47
Non Current Liabilities (excluding debt)	(0)	(1)	(1)
Total Net Assets (TNA)	**68**	**49**	**47**
Profitability ratio	7%	8%	8%
Activity ratio	7	7	9
ROCE	**48%**	**56%**	**77%**

In order to calculate Briscoe's TNA we have adjusted its 2012 working capital position, so that working capital is zero instead of negative. Typically we exclude cash held on the balance sheet within current assets if the cash is not required for operating the business however we have taken the view that prudent directors will retain sufficient cash to offset the negative working capital position. Over the last three years total working capital levels have been managed down by $21m, which has significantly improved Briscoe's ROCE performance.

The improvement in Briscoe's share price is reflective of its improvement in ROCE.



Background on Armillary Private Capital

Armillary Private Capital is an investment banking, asset management, financial training and advisory services firm based in Wellington. The Armillary team has advised a broad range of NZ companies at numerous points along the business life cycle, and in doing so has undertaken extensive investment banking work including debt and equity raisings, M&A, valuations, due diligence, and independent appraisal reports for public and private businesses. Its financial training business counts a number of government agencies, corporate and tertiary education institutions among its clients. Armillary Private Capital is Manager of Touchstone Capital Partners, a special situations investment company and Unlisted, the internet-based securities trading platform.

Armillary uses the DuPont method (DuPont analysis or DuPont accounting) as its primary method of financial analysis. This powerful and highly practical method allows the development of a rapid understanding of the underlying performance of a business notwithstanding its capital structure. As such the DuPont method assists Armillary to identify key business drivers and provide valuable insight to its clients.

Sources of Data

The data for this analysis and report has been compiled by Armillary Private Capital from annual reports and information courtesy of Cameron Partners Limited.

Appendix 1 – Detailed Results

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
A2 Corp	NZX	6.1%	6.1%	4.0	2.3	(114.4%)	24.4%	14.2%	(25.2%)
Abano	NZX	8.1%	9.3%	1.3	1.4	8.5%	10.8%	13.3%	10.9%
Acurity Health	NZX	11.3%	12.3%	0.7	0.6	9.8%	8.4%	7.7%	8.6%
Air NZ	NZX	5.0%	4.8%	2.4	2.3	9.8%	12.1%	11.2%	11.0%
Allied Farmers	NZX	0.0%	9.7%	0.5	0.9	(0.2%)	0.0%	8.2%	2.7%
Argosy Property	NZX	68.9%	63.8%	0.1	0.1	6.9%	6.8%	6.2%	6.6%
Auckland Intl Airport	NZX	61.2%	60.2%	0.1	0.1	7.4%	7.3%	7.0%	7.2%
Augusta Capital	NZX	57.4%	54.6%	0.1	0.1	6.5%	5.4%	5.2%	5.7%
AWF Group	NZX	5.8%	5.1%	5.6	5.6	21.5%	32.4%	28.7%	27.5%
Barramundi	NZX	73.9%	7.3%	0.1	0.0	21.6%	7.5%	0.2%	9.7%
Blis	NZX	(54.3%)	(85.3%)	0.7	0.5	(10.6%)	(40.6%)	(44.3%)	(31.8%)
Blue Sky Meats	Unlisted	6.5%	(0.3%)	2.5	2.3	4.8%	16.3%	(0.6%)	6.8%
Briscoe	NZX	7.8%	8.4%	7.1	9.2	47.6%	55.8%	76.6%	60.0%
Burger Fuel	NZAX	(0.3%)	7.2%	4.0	5.2	(27.0%)	(1.2%)	37.2%	3.0%
Cavalier Corp	NZX	11.2%	2.5%	1.5	1.3	14.7%	16.8%	3.4%	11.7%
CDL Investments	NZX	44.9%	46.9%	0.1	0.3	4.3%	5.8%	14.6%	8.2%
Chatham Rock	NZAX	0.0%	0.0%	0.0	0.0	(15.6%)	0.0%	0.0%	(5.2%)
Chorus	NZX	n/a	34.3%	n/a	0.3	n/a	n/a	9.8%	9.8%
Claridge Capital	NZX	0.0%	(3593.3%)	0.0	0.1	0.0%	0.0%	(211.4%)	(70.5%)
Colonial Motor	NZX	3.2%	3.7%	2.8	3.3	5.8%	9.0%	11.9%	8.9%
Comvita	NZX	9.4%	13.0%	1.0	1.1	12.5%	9.3%	14.1%	12.0%
Connexionz	Unlisted	(0.2%)	(8.1%)	5.9	4.2	28.6%	(1.4%)	(33.7%)	(2.2%)
Contact	NZX	12.3%	11.7%	0.5	0.6	6.7%	6.6%	7.0%	6.8%
Cooks Food	NZAX	0.0%	0.0%	0.0	0.0	(4.1%)	0.0%	0.0%	(1.4%)
Cynotech	NZAX	(11.8%)	(5.8%)	0.3	0.4	(18.6%)	(3.1%)	(2.1%)	(7.9%)
Delegats	NZX	18.1%	19.1%	0.8	0.8	8.2%	14.5%	14.5%	12.4%
Diligent	NZX	5.1%	28.1%	5.8	12.4	(76.6%)	29.7%	348.7%	100.6%

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
DNZ Property	NZX	68.3%	77.8%	0.1	0.1	6.1%	6.0%	7.3%	6.5%
Dorchester Pacific	NZX	(681.1%)	(53.9%)	0.0	0.1	(16.6%)	(11.8%)	(4.8%)	(11.1%)
Dorchester Property	Unlisted	7.9%	8.1%	0.2	0.2	0.0%	1.7%	1.3%	1.0%
Eastpack	Unlisted	21.4%	n/a	1.8	n/a	22.0%	37.7%	n/a	29.8%
Ebos	NZX	2.8%	3.0%	7.8	6.3	18.4%	22.1%	18.8%	19.8%
Ecoya	NZX	(24.1%)	2.1%	1.3	1.0	(128.8%)	(31.3%)	2.1%	(52.7%)
Energy Mad	NZX	8.8%	(15.2%)	1.3	1.0	(8.5%)	11.4%	(15.4%)	(4.2%)
Finzsoft	NZX	6.5%	(6.8%)	2.5	2.4	12.1%	16.5%	(16.7%)	3.9%
F&P Healthcare	NZX	19.3%	18.0%	1.3	1.2	28.5%	24.9%	21.2%	24.9%
Fletcher Building	NZX	7.5%	6.0%	1.5	1.6	11.6%	11.5%	9.5%	10.9%
Foley Family Wines NZ	NZAX	(12.2%)	(19.2%)	0.3	0.4	1.9%	(3.9%)	(8.5%)	(3.5%)
Fonterra	NZX	5.3%	4.8%	1.9	1.9	10.2%	10.3%	9.0%	9.8%
Freightways	NZX	16.1%	16.2%	1.1	1.1	17.1%	17.6%	18.0%	17.6%
Fronde	Unlisted	3.9%	4.2%	32.3	39.6	(84.8%)	124.7%	166.8%	68.9%
Genesis Research	NZX	(50300.0%)	(915.4%)	2.0	52.0	(222.8%)	(100600.0%)	(47600.0%)	(49474.3%)
Genesis Power	Crown	8.1%	10.6%	0.8	0.8	7.9%	6.1%	8.4%	7.5%
GFNZ Group	NZAX	(133.0%)	(20.5%)	0.1	0.1	(1.0%)	(9.2%)	(2.9%)	(4.3%)
Goodman Prop	NZX	73.5%	70.8%	0.1	0.1	6.5%	6.8%	6.6%	6.6%
Hallenstein	NZX	10.9%	12.3%	5.6	5.3	82.1%	61.2%	65.7%	69.7%
Heartland	NZX	17.0%	25.0%	0.0	0.0	1.7%	0.7%	1.1%	1.2%
Hellaby	NZX	5.6%	5.8%	2.8	3.1	10.8%	15.8%	18.2%	14.9%
Horizon Energy	NZX	31.6%	30.4%	0.4	0.4	12.3%	12.1%	13.2%	12.5%
Infratil	NZX	15.4%	15.4%	0.5	0.5	6.9%	8.0%	8.0%	7.6%
Insured Group	NZX	(45.9%)	37.1%	1.0	0.7	0.0%	(45.2%)	25.4%	(6.6%)
Investment Research	NZAX	7.0%	22.3%	0.9	1.1	2.7%	6.5%	25.5%	11.6%
Jasons	NZAX	7.9%	3.5%	1.9	1.7	16.2%	15.1%	6.0%	12.4%
Just Water	NZAX	9.9%	11.7%	1.2	1.2	1.0%	11.5%	13.8%	8.8%
Kathmandu	NZX	20.9%	16.4%	1.0	1.1	16.7%	21.8%	18.0%	18.8%
King Country Energy	Unlisted	21.7%	23.3%	0.4	0.4	3.4%	9.0%	8.9%	7.1%
Kingfish	NZX	82.3%	76.8%	0.1	0.1	27.8%	10.0%	7.2%	15.0%

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
Kirkcaldie	NZX	2.1%	(0.0%)	1.3	1.2	6.6%	2.6%	(0.0%)	3.1%
Kiwi Income	NZX	65.9%	64.3%	0.1	0.1	7.0%	7.1%	7.0%	7.0%
Kordia Group	Crown	(6.4%)	4.4%	1.7	2.5	2.7%	(10.9%)	11.2%	1.0%
L&M Energy	NZX	(607.9%)	n/a	0.2	n/a	(122.0%)	(109.2%)	n/a	(115.6%)
Landcorp Farming	Crown	24.1%	17.3%	0.1	0.1	1.5%	3.6%	2.5%	2.5%
Livestock Improvement	NZAX	15.9%	10.8%	1.1	1.1	12.6%	17.5%	12.0%	14.0%
Lyttleton Port	NZX	22.6%	21.8%	0.5	0.5	8.9%	10.5%	10.6%	10.0%
Mainfreight	NZX	11.7%	11.9%	3.7	3.8	34.4%	42.8%	45.8%	41.0%
Marlin Global	NZX	76.2%	117.3%	0.1	-0.1	11.8%	8.6%	(11.8%)	2.8%
Martinborough Vineyard	Unlisted	3.1%	23.5%	0.3	0.4	0.3%	0.9%	9.5%	3.6%
MTS Energy	Unlisted	n/a	5.4%	n/a	0.2	n/a	n/a	1.1%	1.1%
Mercer	NZX	(12.5%)	(1.3%)	1.2	1.5	(4.0%)	(14.6%)	(2.1%)	(6.9%)
Meridan Energy	Crown	16.9%	14.5%	0.3	0.4	5.4%	5.4%	5.9%	5.6%
Methven	NZX	7.3%	9.7%	1.7	1.6	16.5%	12.7%	15.9%	15.0%
Metlifecare	NZX	10.5%	5.4%	0.1	0.1	0.8%	0.9%	0.5%	0.8%
Michael Hill	NZX	9.3%	8.9%	2.3	2.4	17.6%	21.7%	21.1%	20.1%
Mighty River Power	Crown	23.4%	13.8%	0.3	0.4	6.4%	7.2%	5.2%	6.3%
Millenium & Copthorne	NZX	23.7%	36.6%	0.2	0.3	2.8%	5.2%	9.3%	5.8%
Moa Group	NZX	(98.7%)	(115.9%)	1.6	1.6	(222.8%)	(157.9%)	(187.4%)	(189.4%)
Mowbray	NZX	9.7%	0.7%	0.6	0.6	6.3%	6.3%	0.4%	4.3%
New Image	NZX	9.8%	(2.0%)	5.3	3.8	142.4%	51.6%	(7.6%)	62.2%
New Talisman	NZX	0.0%	0.0%	0.0	0.0	0.0%	0.0%	0.0%	0.0%
NZ Experience	NZX	20.9%	19.9%	1.3	1.4	37.0%	27.4%	27.4%	30.6%
NZ Oil & Gas	NZX	36.9%	44.8%	0.4	0.6	7.3%	13.4%	25.4%	15.4%
New Zealand Post	Crown	(2.4%)	6.6%	0.1	0.1	0.2%	(0.3%)	0.7%	0.2%
New Zealand Railways	Crown	(27.0%)	(32.4%)	0.1	0.1	(1.6%)	(1.4%)	(2.7%)	(1.9%)
NZ Refining	NZX	17.9%	17.5%	0.5	0.4	12.1%	8.1%	7.8%	9.3%
NZ Wool Services	NZAX	5.2%	2.2%	2.6	2.5	6.9%	13.6%	5.5%	8.7%
Northland Port	NZX	69.2%	73.7%	0.1	0.1	2.5%	3.7%	4.9%	3.7%

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
NPT	NZX	50.8%	43.5%	0.1	0.1	7.0%	6.9%	5.8%	6.6%
Nuplex	NZX	7.2%	6.5%	2.6	2.3	19.6%	18.3%	14.8%	17.6%
NZ Windfarms	NZX	(105.4%)	(27.7%)	0.0	0.1	(4.7%)	(4.9%)	(2.9%)	(4.2%)
NZF Group	NZX	(64.6%)	(27.4%)	0.0	0.0	1.1%	(0.8%)	(1.1%)	(0.2%)
NZX	NZX	36.4%	27.3%	0.7	0.9	19.5%	24.2%	23.7%	22.4%
OceanaGold	NZX	19.8%	13.8%	0.6	0.6	10.8%	12.6%	8.1%	10.5%
Opus	NZX	7.7%	7.2%	6.8	5.5	57.0%	52.4%	39.3%	49.6%
Orion Minerals	NZAX	0.0%	0.0%	0.0	0.0	0.0%	0.0%	0.0%	0.0%
Pacific Edge	NZX	(1288.3%)	(1209.2%)	0.5	0.6	(611.9%)	(632.6%)	(783.5%)	(676.0%)
PGG Wrightson	NZX	1.2%	3.2%	1.2	1.8	4.1%	1.4%	5.8%	3.7%
Pharmacy Brands	NZX	15.2%	9.5%	0.6	2.4	10.7%	9.8%	23.0%	14.5%
Pharmazen	Unlisted	7.9%	n/a	1.1	n/a	8.7%	8.6%	n/a	8.6%
Port of Tauranga	NZX	42.1%	42.7%	0.2	0.2	7.7%	8.8%	10.5%	9.0%
Postie Plus	NZX	2.1%	1.0%	3.7	3.5	10.3%	7.6%	3.5%	7.2%
Precinct Properties NZ	NZX	67.1%	62.3%	0.1	0.1	7.3%	7.6%	6.5%	7.2%
Prop for Industry	NZX	89.5%	86.1%	0.1	0.1	7.8%	8.0%	7.1%	7.6%
Proten	Unlisted	45.1%	41.9%	0.2	0.2	10.9%	10.7%	9.8%	10.4%
Public Trust	Crown	16.4%	17.5%	0.1	0.1	1.1%	1.1%	1.2%	1.1%
Pulse	NZAX	(30.6%)	(2.6%)	9.2	11.5	(159.1%)	(281.9%)	(29.7%)	(156.9%)
Pumpkin Patch	NZX	8.9%	6.0%	2.9	3.3	39.9%	26.0%	19.9%	28.6%
Pyne Gould Corp	NZX	19.8%	15.2%	0.1	0.3	0.7%	1.2%	4.8%	2.2%
Rakon	NZX	5.8%	(0.6%)	1.1	0.9	(1.9%)	6.3%	(0.5%)	1.3%
Rangatira	Unlisted	38.0%	36.1%	0.2	0.2	3.9%	7.6%	8.9%	6.8%
Renaissance	NZX	(0.5%)	0.7%	12.6	4.6	13.3%	(6.5%)	3.3%	3.4%
Restaurant Brands	NZX	11.3%	8.6%	3.4	3.2	32.3%	38.1%	27.4%	32.6%
RIS Group	NZAX	(43.8%)	(214.8%)	0.5	0.4	(72.0%)	(20.1%)	(83.1%)	(58.4%)
Rubicon	NZX	(0.6%)	(2.1%)	1.2	1.4	0.8%	(0.8%)	(2.9%)	(0.9%)
Rural Equities	Unlisted	53.7%	40.0%	0.1	0.1	2.0%	3.4%	2.2%	2.5%
Ryman	NZX	22.8%	22.5%	0.2	0.2	4.0%	4.2%	4.4%	4.2%
Sanford	NZX	7.0%	6.5%	0.7	0.6	5.4%	4.6%	4.1%	4.7%

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
Satara	NZAX	5.0%	n/a	1.4	n/a	3.3%	6.8%	n/a	5.1%
Savoy Equities	NZX	(8866.7%)	(814.7%)	0.0	0.2	(22.6%)	(40.2%)	(131.0%)	(64.6%)
Scott Technology	NZX	7.5%	12.2%	1.8	1.9	36.1%	13.8%	23.3%	24.4%
Sealegs	NZX	(32.6%)	(11.5%)	2.2	2.4	22.0%	(70.2%)	(27.2%)	(25.2%)
Seeka	NZX	3.1%	8.6%	1.5	1.4	20.6%	4.7%	12.1%	12.5%
Silver Fern Farms	Unlisted	2.5%	(0.8%)	4.5	3.6	2.6%	11.1%	(3.0%)	3.6%
Skellerup	NZX	15.7%	16.7%	1.6	1.7	15.4%	24.6%	28.4%	22.8%
Sky City Ent	NZX	27.5%	26.4%	0.6	0.6	15.0%	15.8%	15.3%	15.4%
Sky Network TV	NZX	24.7%	23.9%	0.5	0.5	10.1%	11.4%	11.6%	11.0%
Skyline	Unlisted	38.8%	34.6%	0.4	0.5	14.8%	14.7%	16.4%	15.3%
Smartpay	NZX	5.9%	(19.1%)	1.6	0.8	(4.6%)	9.5%	(15.7%)	(3.6%)
Smiths City	NZX	4.2%	5.1%	1.5	1.6	2.2%	6.4%	8.3%	5.6%
Solution Dynamics	NZAX	1.1%	(5.7%)	4.6	4.9	0.2%	5.0%	(28.2%)	(7.7%)
South Port	NZX	34.7%	32.0%	0.8	0.9	32.0%	29.5%	27.5%	29.7%
Southern Travel	NZAX	(1.7%)	0.3%	6.7	6.7	(22.4%)	(11.1%)	2.2%	(10.4%)
Speirs	NZAX	(1.8%)	(4.1%)	2.5	2.7	(17.2%)	(4.5%)	(11.3%)	(11.0%)
St John Property	Unlisted	63.8%	65.6%	0.1	0.1	9.7%	5.8%	6.5%	7.3%
Steel & Tube	NZX	6.8%	4.9%	2.1	2.1	8.4%	14.1%	10.5%	11.0%
Summerset	NZX	11.0%	10.6%	0.1	0.1	1.2%	0.7%	0.6%	0.8%
Synlait Farms	Unlisted	52.5%	31.3%	0.2	0.2	n/a	12.4%	5.6%	9.0%
TeamTalk	NZX	25.3%	25.9%	0.7	0.7	13.6%	16.5%	17.2%	15.8%
Telecom	NZX	3.7%	8.6%	0.9	1.2	0.5%	3.5%	10.3%	4.7%
Tenon	NZX	0.0%	(1.5%)	1.8	2.1	3.6%	0.0%	(3.1%)	0.1%
Terra Vitae	Unlisted	30.7%	31.8%	0.1	0.1	0.1%	3.3%	3.3%	2.2%
Tourism Holdings	NZX	2.1%	8.2%	0.9	0.9	4.6%	1.8%	7.3%	4.6%
Tower	NZX	12.8%	18.9%	0.6	0.8	20.4%	8.1%	14.3%	14.3%
Trade Me	NZX	75.6%	71.2%	0.3	0.2	63.1%	20.1%	12.9%	32.0%
Transpower NZ	Crown	30.9%	27.6%	0.2	0.2	6.9%	6.8%	5.7%	6.5%
TRS Investments	NZX	(200.0%)	0.0%	0.1	0.0	(223.8%)	(26.7%)	0.0%	(83.5%)
Trustpower	NZX	28.7%	30.3%	0.3	0.4	10.1%	10.0%	10.7%	10.3%

Entity	Market	2011 EBIT Margin	2012 EBIT Margin	2011 Activity Ratio	2012 Activity Ratio	ROCE 2010	ROCE 2011	ROCE 2012	Average ROCE
Turners & Growers	NZX	(0.9%)	(2.1%)	1.8	1.9	6.3%	(1.7%)	(4.0%)	0.2%
Turners Auctions	NZX	9.1%	9.7%	3.2	3.1	27.8%	28.6%	30.1%	28.8%
Vector	NZX	34.9%	36.2%	0.3	0.3	9.0%	9.0%	9.8%	9.3%
Vehicle Inspection	Unlisted	7.4%	7.4%	5.2	5.4	50.8%	38.2%	40.1%	43.0%
Veritas Investments	NZX	30.3%	211.0%	9.6	-9.5	0.8%	290.9%	(2013.8%)	(574.0%)
Vital Healthcare	NZX	74.8%	74.0%	0.1	0.1	7.7%	8.3%	8.0%	8.0%
Vmob Group	NZAX	(2.9%)	0.0%	8.2	0.0	18.3%	(23.8%)	0.0%	(1.8%)
Warehouse	NZX	6.9%	5.6%	4.3	3.7	33.5%	29.6%	20.8%	27.9%
Wellington Drive	NZX	(41.8%)	(19.0%)	2.7	4.2	(106.5%)	(112.4%)	(80.2%)	(99.7%)
Widespread Portfolio	NZX	(84.0%)	5.1%	0.1	0.1	(6.0%)	(4.3%)	0.4%	(3.3%)
Windflow	NZAX	(66.7%)	(84.0%)	3.4	4.0	(186.2%)	(226.7%)	(339.4%)	(250.8%)
Wool Equities	NZAX	(1682.0%)	(493.9%)	0.3	0.6	0.0%	(570.2%)	(290.1%)	(286.8%)
Xero	NZX	(86.4%)	(43.6%)	2.0	1.8	(291.0%)	(173.1%)	(79.4%)	(181.2%)
Zintel	NZAX	(1.5%)	(1.7%)	7.9	10.8	8.9%	(12.2%)	(18.7%)	(7.3%)

Appendix 2 – ROCE explained

What is Return on Capital Employed and what does it show?

Return on Capital Employed (“ROCE”) is a measure of business effectiveness and capital efficiency. ROCE is a function of profitability, how much profit a business generates before interest on debt and tax (EBIT) and activity, how much a business has invested in operating assets to generate that level of profitability.

In the 1920’s Du Pont Corporation developed what is commonly known as Du Pont accounting and ROCE as a measure of business performance to enable it to compare the performance of its many different business units. The Du Pont accounting method is a powerful and relatively simple approach to determine the impact of management decisions on financial performance. The advantage of this method is that it provides a consistent form of evaluation for a business to use when measuring performance.

At an individual business level ROCE:

- allows comparison between business units of different size over time;
- shows where to invest further and where to cut back;
- shows whether it is worth borrowing further to invest;
- shows if expectations of shareholders are being met;
- indicates the maximum sustainable growth of a business; and
- is used to track whether or not a project is performing according to plan.

ROCE can be used to test operational efficiency, balance sheet management efficiency and the adequacy of return on total capital employed to make an assessment of a business’s performance.

ROCE can be used to help management improve both the profitability (EBIT) and balance sheet management. Improvements in these areas will lead to improvements in the Return on Capital employed.

Calculating ROCE

It is important to note that some changes need to be made to traditional thinking to gain the benefits of this dynamic approach. To achieve this there are two concepts that need to be considered:

Concepts

(i) The separation of funding from operating decisions

Consider the traditional formula for presenting financial statements.

EQUITY = (Current Assets + Cash - Current Liabilities) + Non-current Assets - Debt

In order to calculate ROCE, all forms of funding need to be removed from the right hand side of the equation. Total net assets should be void of any external funding or debt thereby representing the true value of scarce resources employed in the business.

The financial analysis format can now be structured as follows.

DEBT - CASH + EQUITY = (Current Assets - Current Liabilities) + Non-Current Assets

TOTAL CAPITAL EMPLOYED (TCE) = TOTAL NET OPERATING ASSETS (TNA)

The movement in TNA reflects operating changes made to the employment of scarce resources, whilst net Debt (debt – cash) and Equity reflects how these changes are funded. It should be noted that where the directors of a business elect to retain minimum levels of cash this cash should be included in TNA.

(ii) Balance sheet efficiency – ACTIVITY RATIO.

Definition: A measurement of how well the business manages its scarce resources

Formula: $$\frac{\text{Revenue}}{\text{Total Net Assets}}$$

The Activity Ratio is a measure of how many times a business turns over its TNA in a financial year.

By way of example, an Activity ratio of 2.5 means that for every $1 invested in TNA the business produces $2.50 in sales. It answers the question of whether or not the net operating assets are being utilised efficiently in the production of income.

The activity drivers are:

- Stock, Work in Progress, Inventory – the value of raw materials, work in progress and finished goods the business holds;
- Trade Debtors – how much the business has locked up in sales revenues receivable;
- Trade Creditors – how much the business owes to its suppliers for goods and services provided; and
- Non-Current Assets – how much is invested in plant and equipment and intangible assets is required to operate the business and produce the goods sold.

Other current assets and liabilities such as prepayments and accruals are included in trade debtors and creditors.

Adjusting one or more of the activity drivers will increase or decrease the activity ratio and therefore improve or worsen ROCE.

(iii) Operational Efficiency – PROFITABILITY MARGIN.

Definition: A measurement of the Return on Sales purely from an operating perspective.

Formula:

$$\frac{\text{Earnings before interest \& tax}}{\text{Revenue}}$$

The above formula ignores the impact of funding and concentrates on the entity's ability to produce a return from revenue.

The four key profitability drivers are:

- Price – how much a business receives for the goods it sells;

- Volume – how many goods the business sells;
- Cost of Goods Sold – how much it costs the business to produce the goods it sells; and
- Expenses – the overhead expenses of the business.

Adjusting one or more of the profitability drivers will increase or decrease the profitability ratio and therefore improve or worsen ROCE.

(iv) Return on Capital Employed – ROCE

The link between the Balance Sheet and Profit & Loss is dynamically reflected in ROCE.

Definition: The percentage return yielded from the employment of scarce resources in the form of profit before interest and tax

Formula:

$$\frac{\text{EBIT}}{\text{TNA}}$$

OR

Profitability x Activity

The interactive nature of this ratio is seen in the alternative formula as the product of Profitability and Activity. Operational and Balance Sheet efficiency are brought to life in one single ratio. This should be the first area of review in the process of corporate performance assessment, and it should be determined as to whether or not ROCE is adequate and which of its components contribute to both the strengths and weaknesses of the financial strategy.

Irrespective of the type of industry ROCE should at least be equal to or greater than the weighted average cost of capital (WACC) in order for a business to create shareholder value.

Example:

Revenue	100,000
EBIT	10,000
Profitability Ratio	10%
TNA	50,000
Activity Ratio	2x
ROCE	10% x 2 = 20%

It is worth noting that average TNA for the period over which Revenue and EBIT are derived will give a better result that just considering TNA and the end of the period being measured.

It should also be remembered that ROCE does not change when EQUITY is substituted for DEBT. This highlights the impact of a true operational performance measurement.

(v) Interfacing Profit and Loss/(Cash) with the Balance Sheet

The Balance Sheet is just a snapshot of the assets and liabilities of a business at a point in time. However its interaction with profit and loss, through Earnings before Interest and Tax (EBIT), provides the platform for developing a totally dynamic analytical structure.

Two businesses, producing the same sales and return on sales can be viewed from an operational point of view as being identical even if one were funded by debt and the other by equity. This is because the cost of borrowing is purely a financial issue.

ROCE Uses

ROCE can be used in many ways by organisations and management teams as a performance measure and as a tool when preparing budgets and valuations.

One of these ways is that the management team may set ROCE goals for either the entire organisation or its sub-units and decision making in respect of investing in new projects to ensure that the business is performing at a level that is greater than WACC.

ROCE is also able to be used to set up a performance remuneration plan for management and employees. As it is simple to calculate, ROCE provides a transparent model for such programs.

Budgeting and Valuation

Businesses and analysts can often make an underlying error in budgeting or forecasting business performance which impacts a business valuation. When undertaking a valuation the biggest error usually arises from utilising overly optimistic forecasts. Discount rates are generally less susceptible to such errors.

Consider the following 4 charts which simplistically compare Profitability, Activity, Capex to Revenue and ROCE ratios for a mature business and a growth business. The underlying issue is that most budgets for mature businesses more than often assume expanding profitability, increasing activity, reducing levels of capital expenditure for every dollar of sales and therefore increasing ROCE. More often than not a mature business is unlikely to see these improvements on an ongoing basis. While some improvement is always possible continuous expansion is unlikely to be experienced on an ongoing basis and the art of getting the forecasts correct is challenging such ongoing expansion assumptions.

Forecasts for growth businesses often have the opposite issues. It is rare to find a business in NZ that can achieve EBIT margins in excess of 20% on an ongoing basis. At those levels competitors are likely to enter a market and customers generally start looking elsewhere or in-housing the supply. Revenue growth will also demand additional lock up in working capital and additional fixed assets to support the growth. Therefore to create robust forecasts for a growth business at some juncture these charts are likely to level out and this levelling is usually earlier than anticipated generally because the business becomes loose with expenditure.

Taking into account the ratio's in the chart helps to reduce the risk of making a budget or forecast error and therefore improves the quality of the budget or forecast and by extension the quality of any valuation based off the same.

What is a "Good" ROCE

ROCE is a measure of a company's profitability and its activity. Quite simply a good ROCE is a level that exceeds the weighted average cost of capital for the business. Where this is the case the business will be creating value for its shareholders.