



Return on Capital Employed

2014 Review of the NZ Listed Sector and NZ Crown Entities

June 2015

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Disclaimer

The information contained in this report has been prepared by Armillary Private Capital ('Armillary'). While the intention is to provide accurate information based on historical performance and market information, Armillary accepts no liability for any errors or inaccuracies in this report. The reader is advised to perform their own research to confirm the accuracy of the information contained in this report before relying on it for any investment decision making. This report has been prepared as a 'class service' as defined by the Financial Advisers Act and is general in nature.

Foreword

We are delighted to bring you the fourth Armillary Private Capital Return on Capital Employed (ROCE) report. This year the total number of entities in our data set of NZX, NZAX, Unlisted and selected Crown entities has increased by one to 161. In addition to these, we have also reviewed a confidential sample of 44 non-listed companies and compared their results to the overall dataset, although we have not identified the entities individually.

The ROCE methodology we have used in this report was developed by Du Pont Corporation and therefore is not proprietary to us, although we are proponents. 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 benefit of the ROCE methodology is that the performance of an entity can be broken down into its components of profitability and activity, for deeper analysis. Profitability, as measured by EBIT margin, provides an indication of operational efficiency; activity, as measured by asset turn-over, provides an indication of balance-sheet efficiency. A full explanation of ROCE is included in Appendix 2.

This year's report provides a continuation of last year's review of the major sectors in the economy, illustrating the effect that differences in business models has had in the subsequent profitability, activity and overall ROCE performance. We have then explored these differences in more depth by comparing companies operating in the aged-care sector, analysing their ROCE and its components.

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, general, 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.

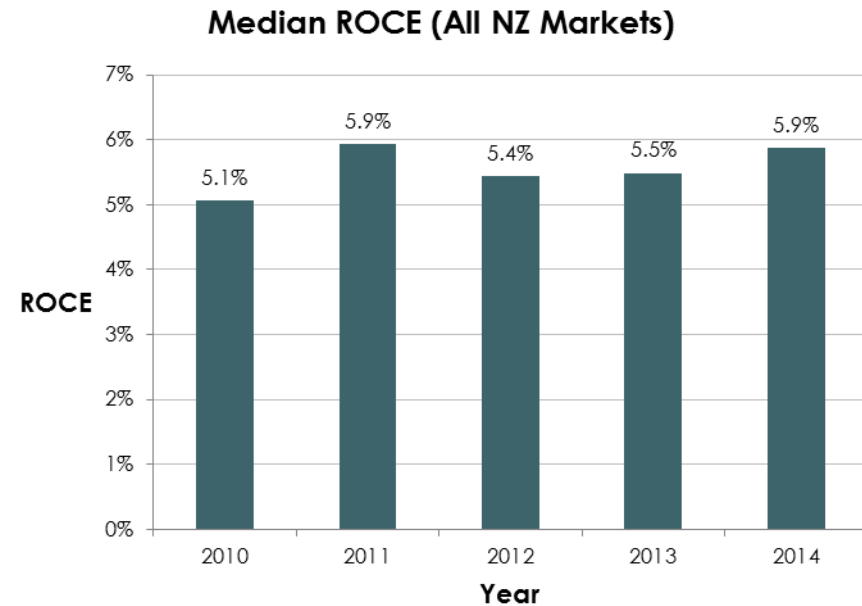
David Wallace
Managing Director

Executive Summary

This year's ROCE review of 2014 financial results included nine Crown Entities, 117 companies with primary listings on the NZX, 20 listed on the NZAX and 15 from Unlisted. This has resulted in a 2014 sample size of 161. This number is up by one from 2013 and 5 from 2012.

We have also compared the listed and Crown companies to a group of 44 privately held companies that have been reviewed separately from the main sample.

- The median performance in 2014 of 5.9% is a marked increase on previous years and is a new five-year high for the sample companies. While this result is a clear improvement it is less than common estimates of the market weighted average cost of capital for NZX listed companies of between 8% and 9%.
- Veritas Investments was the top performer in 2014 with a return of 125.0% reflecting high levels of operational leverage (activity) and profitability.
- Once again the services sector dominated the top 10 performers due to their high levels of activity. Likewise, the sector as a whole was the best performer of the New Zealand listed companies surveyed.
- The median ROCE of NZX50 constituent companies (2014: 8.3%) came out ahead of companies in comparable international indices in Europe (2014: 7.4%), although behind those of Australia (2014: 8.4%) by the narrowest of margins. Companies in the USA's S&P500 index significantly outperformed other countries reviewed with a 2014 ROCE of 12.7%. The NZX50 was the only index of those compared to show a gain in median result from 2013 to 2014.
- For the Crown Entities the 2014 median ROCE was 2.7% up from the 2.3% in 2013, with Airways Corporation again recording the best performance from that group with 17.3%.



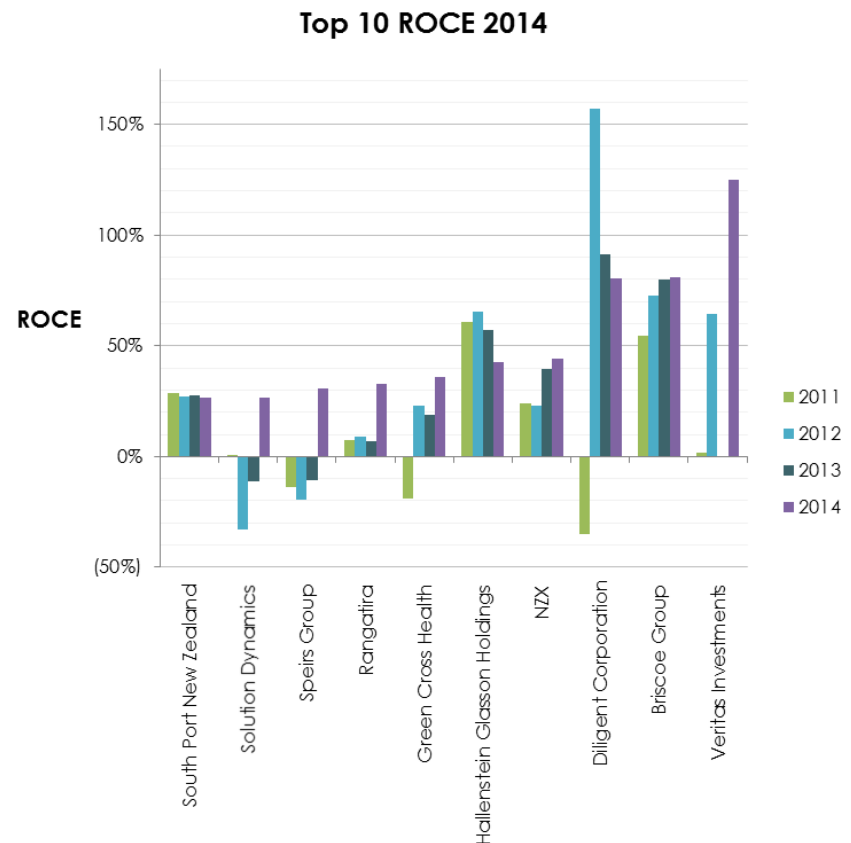
Top 10 Performers

The top 10 entities by 2014 ROCE performance are dominated by businesses that in general have high levels of activity (revenue/assets), in particular technology, retail and service-oriented businesses.

Veritas Investments, as the top performer, had a 19.3% Profitability Ratio (down from 19.5% in 2013) and a 6.5x Activity Ratio in 2014 (not applicable in 2013). Fronde, last year's top performer, failed to make the top 10 this year. Fronde produced a 2014 Profitability Ratio of 0.7% and Activity Ratio of 21.9x, down from 6.4% and 38.5x respectively in 2013.

The top three ROCE values achieved in 2014 for each of the four markets analysed were as follows.

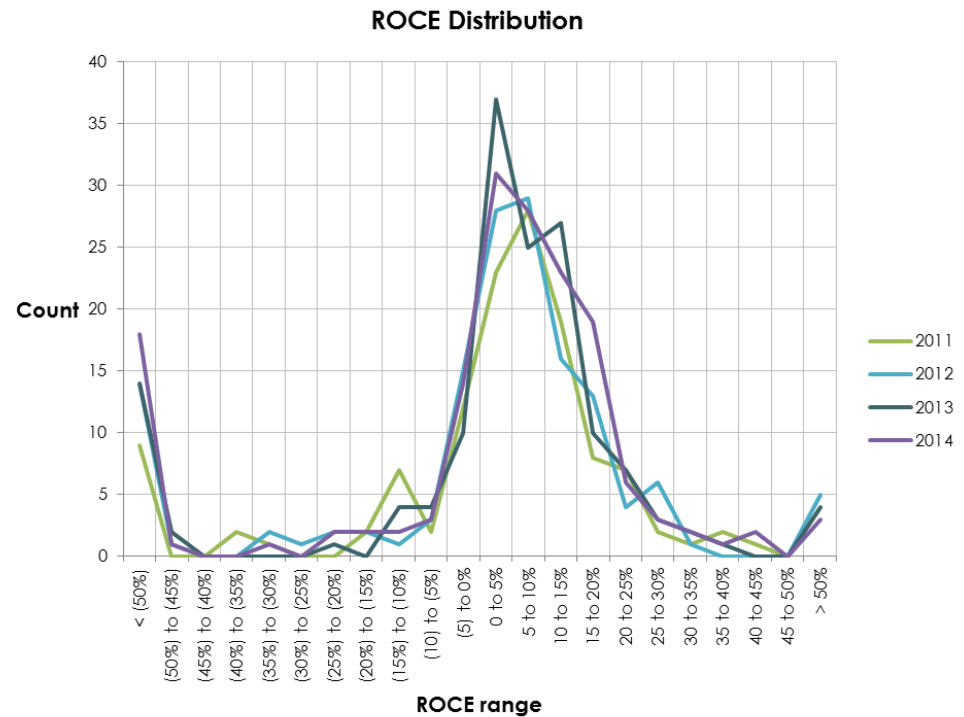
- For the NZX market, Veritas Investments (125.0%), Briscoe Group (81.1%) and Diligent (80.5%).
- For the NZAX market, Speirs Group (30.5%), Solution Dynamics (26.7%) and Just Water (16.1%).
- For the Unlisted market, the top three performers were Rangatira (32.9%), Connexionz (23.7%) and Skyline (18.8%).
- Of the nine Crown Entities sampled the top performers were Airways Corporation (17.3%), Metservice (15.5%) and Transpower (11.7%).



Distribution of Results

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

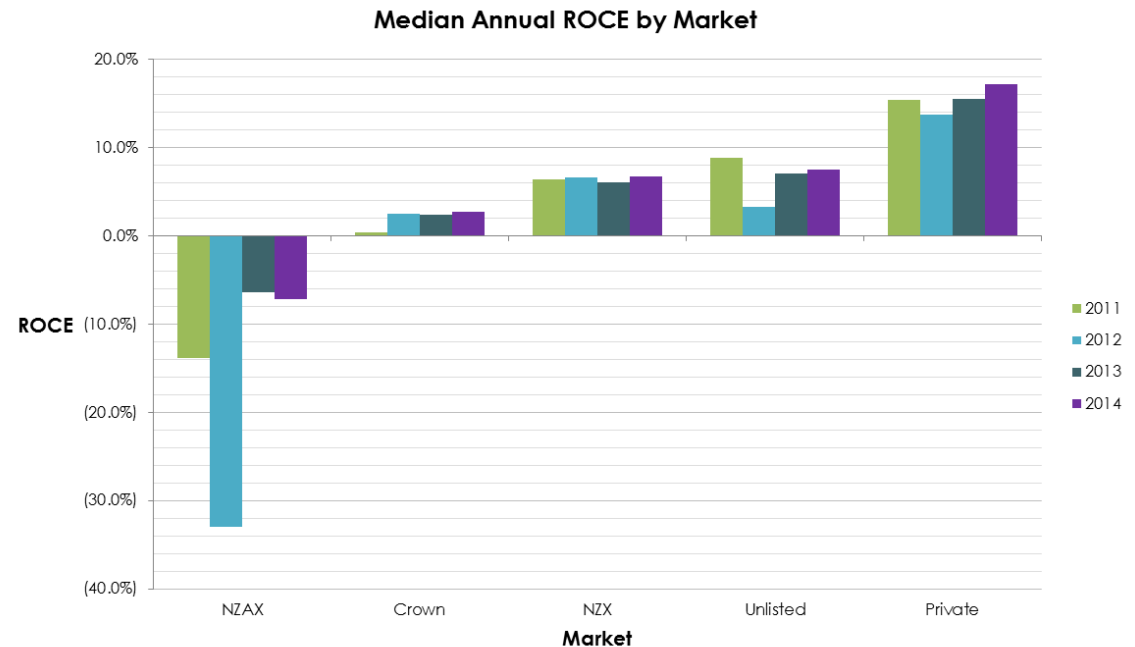
- 61 companies (38%) achieved a 2014 ROCE greater than the common estimates of the market weighted average cost of capital for NZX listed companies of between 8% and 9%, down from 48% in 2013 and 49% in 2012.
- 17 companies achieved a ROCE of greater than 20% in 2014, compared to 16 companies in 2013. However, only three managed to top 50%, down one from 2013.
- In 2014, 44 companies had a negative ROCE, compared to 41 companies in 2013. A negative ROCE result implies negative profitability, that is, a net operating loss. There is a grouping of entities with a ROCE less than negative 50%. These entities are typically technology focused, based in the services sector and generally focused on growth at the expense of profitability.



Markets

The median ROCE performance by market for the last four years shows:

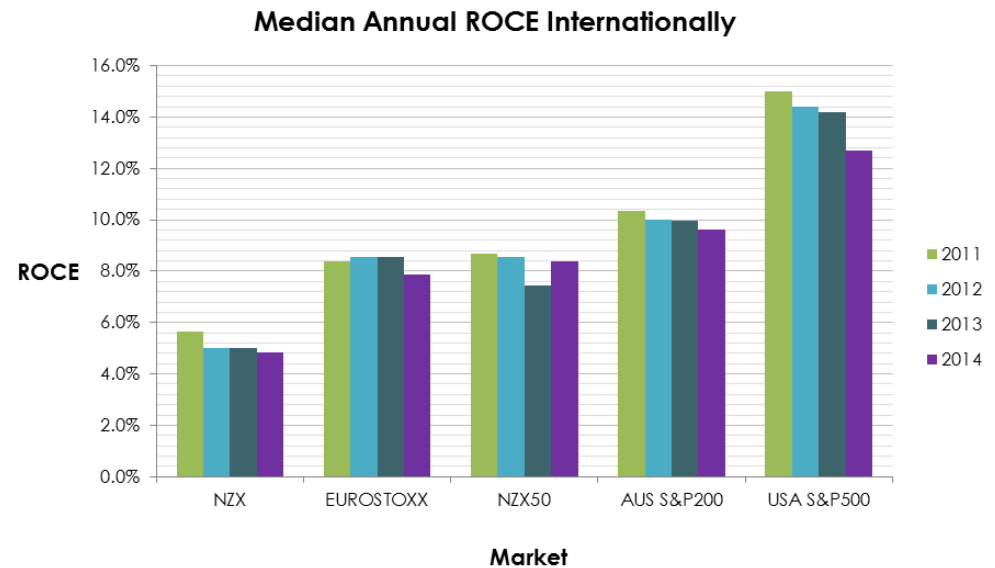
- The NZX listed entities has a consistent median performance ranging between 6.3% to 6.7%;
- Those entities listed on the NZAX market have been consistent median under-performers compared to the overall median for all entities. Note that of the 20 issuers reviewed from the NZAX, five had revenue between \$1m and \$10m, seven had less than \$1m in revenue with three having no revenue at all. The negative median ROCE is representative of the mix of young loss-making companies and non-operating or pre-revenue businesses present.
- Unlisted issuers' median performance increased from 7.0% to 7.5% for 2014, outperforming the NZX and NZAX markets and Crown Entities;
- The Crown Entities were outperformed by all markets except the NZAX. The Crown Entities did however post an increased ROCE in 2014 compared to 2013; and
- Our sample of private non-listed companies had a significantly higher ROCE than their NZ listed counterparts with a median 2014 ROCE of 17.2%. However, we note that this should be the case as the cost of capital for these private companies, in particular the cost of equity, will be significantly higher than that of their listed peers.



International Comparison

In order to benchmark New Zealand's performance, we have also reviewed the performance of companies in the European, Australian and US markets, as selected by the EURO STOXX 50, S&P/ASX 200 and S&P 500 indices respectively. For comparability, we have isolated the performance of the NZX50 index constituents from that of the entire group of NZX listed entities.

- The NZX50 index group of companies have a considerably higher median performance than the overall NZX main board with ROCE ranging from 7.5% to 8.5% over the past four years compared to a 4.7% to 5.4% range for the main board. The NZX50 companies represent more than 85% of NZ listed equity market capitalisation.
- The EURO STOXX 50 index covers 50 blue-chip stocks from 12 Eurozone countries. It represents more than 50% of the entire free-float market capitalisation of all Eurozone listed equities. The median ROCE for this group has been lower than that of the NZX50 group over the past four years with the exception of 2013. The EURO STOXX 50 has ranged between 7.8% and 8.6%.
- The S&P/ASX 200 index is recognised as the institutional investable benchmark in Australia. The index covers approximately 80% of the equity market capitalisation of Australia. Median ROCE performance between 2011 and 2014 ranged between 10.4% trending down to 9.6%. This result was notably higher than that of the NZX Main Board and European companies reviewed.
- The S&P 500 index captures approximately 80% of the total US listed equity market capitalisation. The companies in this index have been producing a significantly higher median ROCE than the other markets reviewed, ranging from 15.0% in 2011 trending down to 12.7% in 2014.
- The average cost of capital in the comparison markets will vary from that in New Zealand. In general, companies in the comparison indices tend to be larger and cost of debt in each of the markets is currently lower, therefore they will have a lower cost of capital.

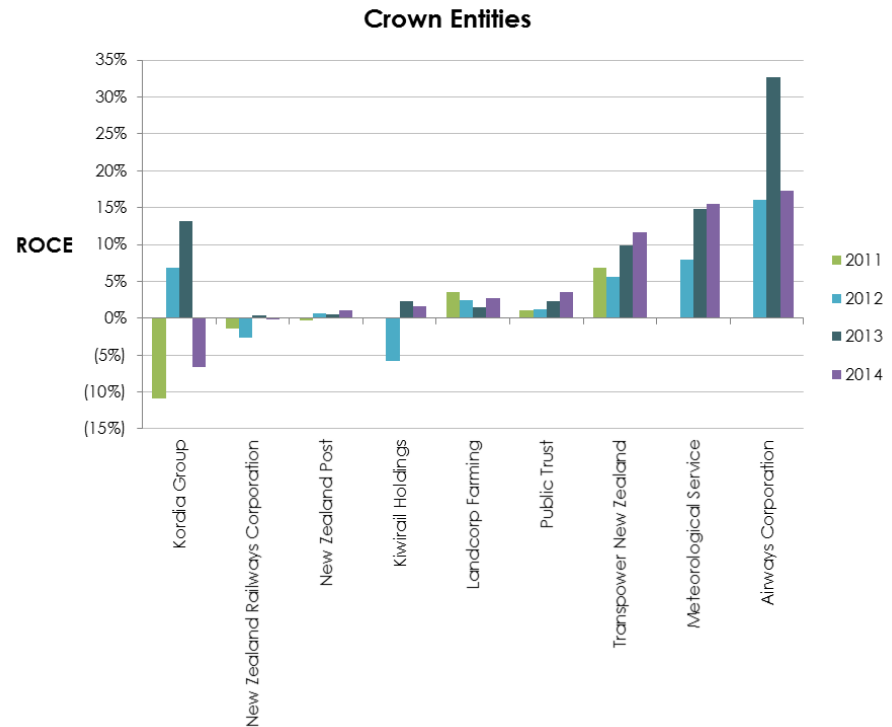


Crown Entities

Of the nine Crown Entities in our analysis, selected as being the most commercially run entities in the Crown's portfolio, all of the top five posted gains on last years' results, aside from Airways Corporation, although it still remains the best performer in the Crown portfolio. The median ROCE for 2014's Crown Entities was 2.7%, up slightly on last year's 2.3% result.

This years' sample of Crown Entities delivered performance results below the median levels of publicly listed and privately held entities in general.

- Five of the nine Crown Entities reported improved ROCE in 2014 compared to 2013.
- Airways Corporation recorded the best ROCE performance of 17.3%, although this was down from 32.7% in 2013. The fall was largely driven by a decrease in EBIT margin from 18% to 11% with the Activity Ratio marginally lower at 1.62x in 2014 compared to 1.85x in 2013.
- Kordia Group fell from third place in 2013 to last with its ROCE falling from 13.1% down to negative 6.6% due to trading unprofitably in 2014.



Non-Listed Companies

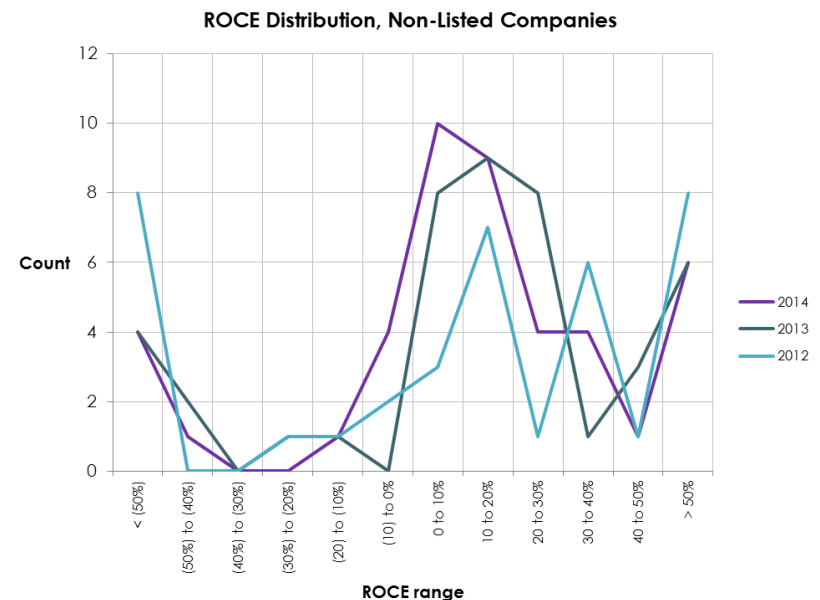
Expanding on last year's report's use of privately held companies as a performance comparison to their publicly listed pairs, we have this year reviewed a selection of 44 non-listed companies.

This sample is not large enough to make definitive conclusions regarding the nature of private companies in New Zealand and there is a bias towards younger, growing companies in the dataset. In terms of industry representation, 22 of these companies are involved in manufacturing, nine are involved in services, particularly technology, six operate in the primary sector and the rest are thinly spread across the other sectors.

In summary:

- All companies in the top quartile recorded a ROCE of over 30%
- The two middle quartiles ranged from 1.0% through to 28.3% with more than half of those companies achieving a ROCE of greater than 10%;
- In the bottom quartile the range was from negative 189.0% to 0.9%, with 9 of those companies being less than zero.
- The median ROCE increased from 15.6% to 17.2% between 2013 and 2014.

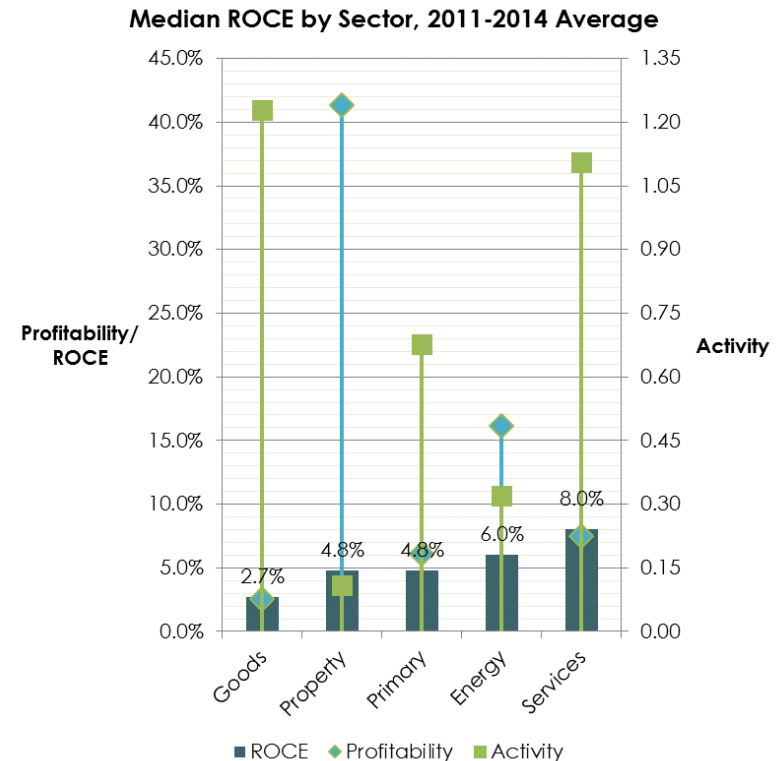
Although the median ROCE is higher than that reported for the NZ listed sector, ROCE needs to be judged against the weighted average cost of capital of the entity. In the case of these typically younger, growing companies, the capital weighting will typically be biased towards equity rather than debt. In addition to equity being more expensive than debt in general, the cost of equity for private companies is significantly higher than that of listed companies due to investors requiring a premium for higher risk. For example, higher risk relates to smaller sized, less mature firms potentially with less depth and/or quality of management, lower quality of information disclosure and lack of liquidity or marketability of the equity holding. Intuitively the 2014 median ROCE of 17.2% suggests that the majority of the private companies reviewed are not generating a return above their weighted average cost of capital, or if they are, only just.



Sector Performance

The ROCE of different business models can be examined by comparing the median performance of companies in different sectors. For this analysis we have used the 2011 to 2014 average profitability, activity and ROCE performance of the median value per sector.

- The services sector is a consistent performer in regards to ROCE. This sector includes transportation, retail, professional and technology services. The sector is characterised by high levels of activity due to low capital requirements and relatively high level of profitability, reflecting a reasonable level of pricing power.
- The energy sector contains companies involved with the generation, distribution and retail of electricity, gas and liquid fuels. It achieves a higher level of profitability than the non-property sectors due to the oligopoly market structure that these businesses generally operate in. The energy sector's ROCE is dragged down by low levels of activity due to the capital intensive nature of the sector.
- The primary sector, contains companies mainly involved in agriculture and mining. The primary sector has moderate levels of activity, likely due to many of the companies in this sector owning the land on where their activities take place.
- The property sector relates to the construction, ownership and management of real estate. This sector's ROCE components paint a more extreme version of that of the energy sector. These companies have the highest profitability with the lowest levels of activity, unfortunately the high level of profitability is not enough to offset the low activity, leading to a low ROCE. Some of this sector's high profitability will be due to the inclusion of capital gains in their EBIT.
- The goods sector contains predominantly companies involved in the manufacture of physical goods. These companies have very high levels of activity, primarily from efficient inventory management. Balancing this is a relatively low level of profitability indicating low pricing power.

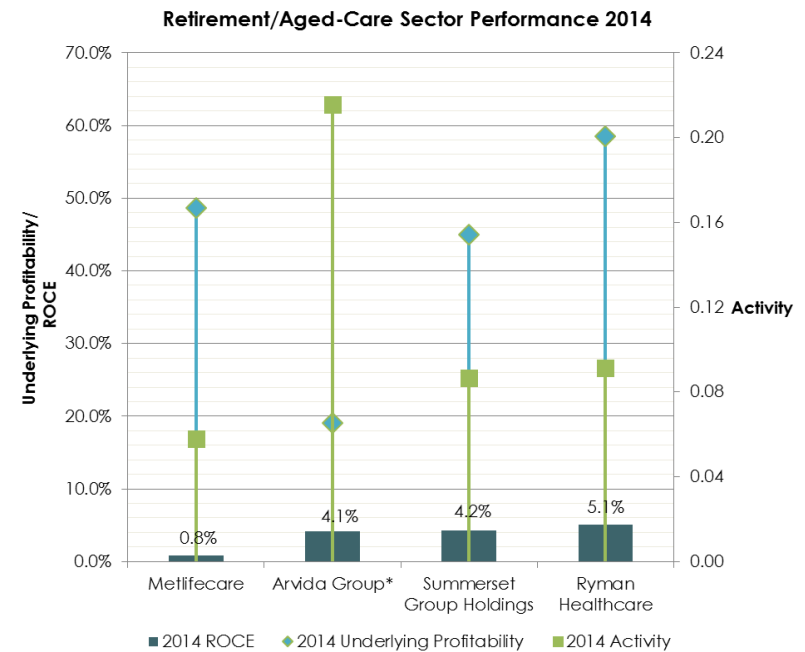


ROCE Application: Aged-Care Sector Performance

With a growing number of aged-care providers listing on the NZX, there has been an increasing level of scrutiny on the various business models being operated.

For this particular sector, we have calculated profitability as 'underlying earnings' divided by revenue. Underlying earnings is a non-GAAP industry metric, used to remove the impact of unrealised gains on investment properties, one-off gains and deferred taxation on net profit. By taking the underlying profitability, activity and ROCE for each of the members of the industry for the 2014 financial year, it is possible to examine differences in their operating models.

- Ryman Healthcare was the best performer in 2014, producing ROCE of 5.1%. This can be attributed to its sector leading underlying profitability of 58.5% and an activity ratio of 0.09x. Ryman's greater profitability may be due to achieving better margin on healthcare services in its care bed portfolio which represents a much larger proportion of its overall portfolio than that of its peers.
- Summerset Group's ROCE of 4.2% was achieved with a similar Activity Ratio (0.09x) as Ryman Healthcare but was dragged down by a lower level of underlying profitability (45.0%).
- Arvida Group is the most recent member of the sector and, as it was only listed in December 2014, its results have been reported on a pro-forma basis. Arvida's ROCE of 4.1% is very close to that of Summerset, however, in contrast to its peers, it reported a very high activity ratio (0.22x) and relatively low profitability (19.1%). Arvida is not involved in property development and therefore its activity ratio is boosted by holding fewer non-revenue producing assets compared to its peers with significant development land-banks.
- Metlifecare's low ROCE of 0.8% is a result of a sector low activity ratio of 0.05x and underlying profitability of 14.0%. A lower activity ratio indicates that Metlifecare is producing a much lower level of revenue relative to the value of its assets. This may be due to its portfolio having largely been acquired rather than internally developed and therefore may have inherited contracts (deferred fees) of a relatively low value compared to the value of its real estate.



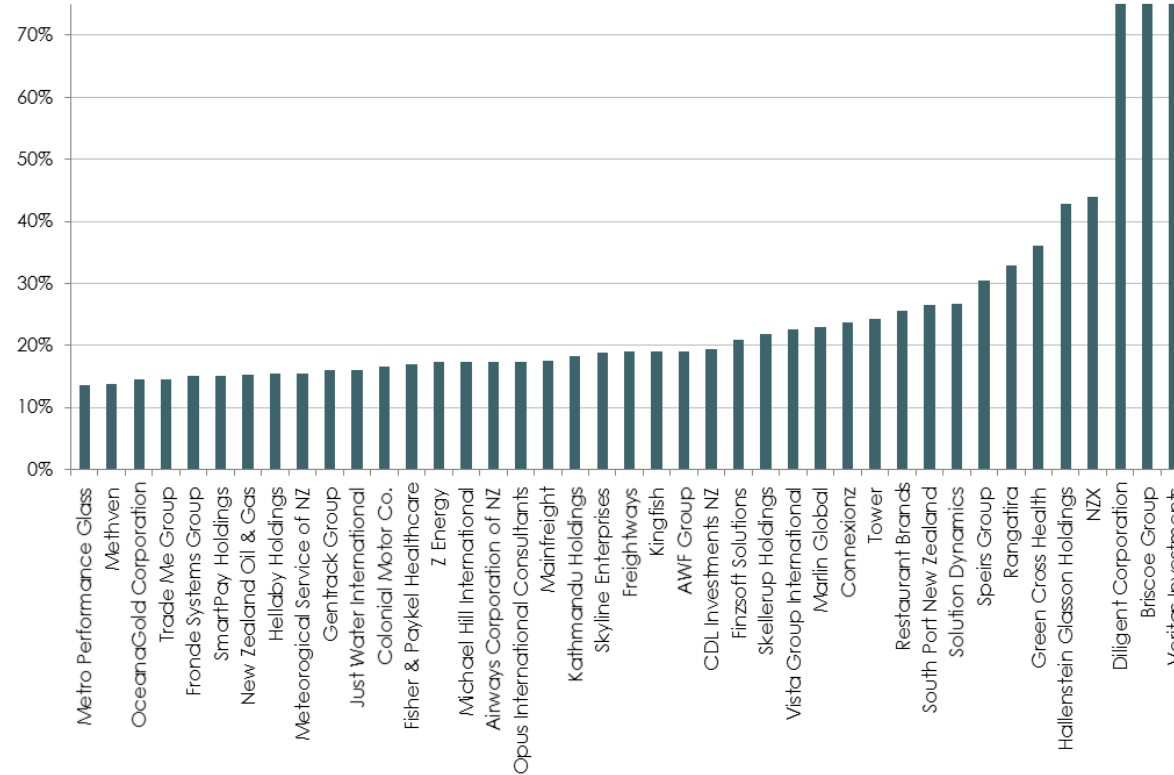
*Arvida's profitability is based on pro-forma operating income in the absence of an available underlying profit figure.

Individual Entities

The following four charts show the individual ROCE performance for each of the 161 listed and Crown Entities reviewed in 2014. Note for the purposes of presenting this chart, entities with ROCE greater than 75% have been capped at 75% as they are relative outliers.

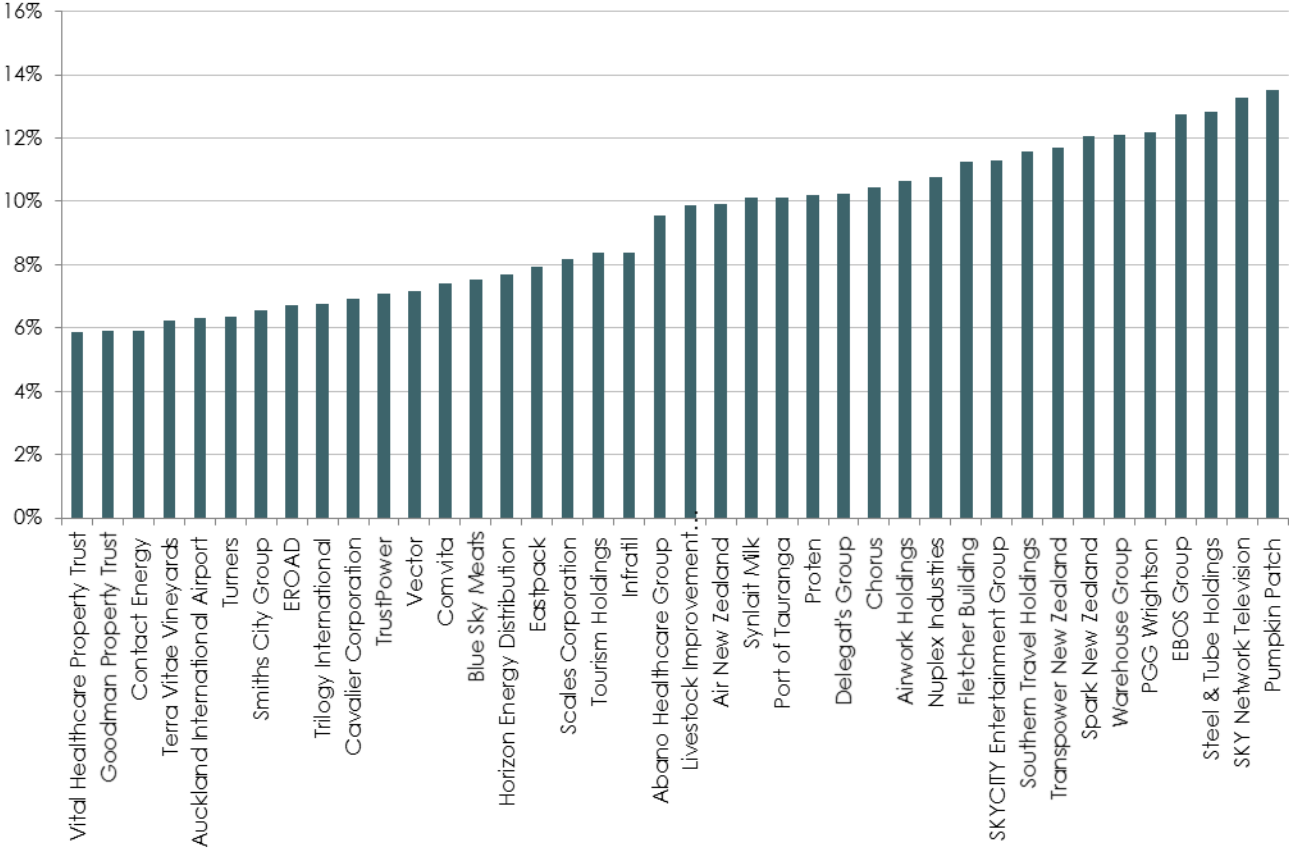
The 41 entities in the top quartile are dominated by technology, retail and service related companies and top quartile ROCE performance ranges from 13.5% to 271.2%.

2014 ROCE - Top Quartile



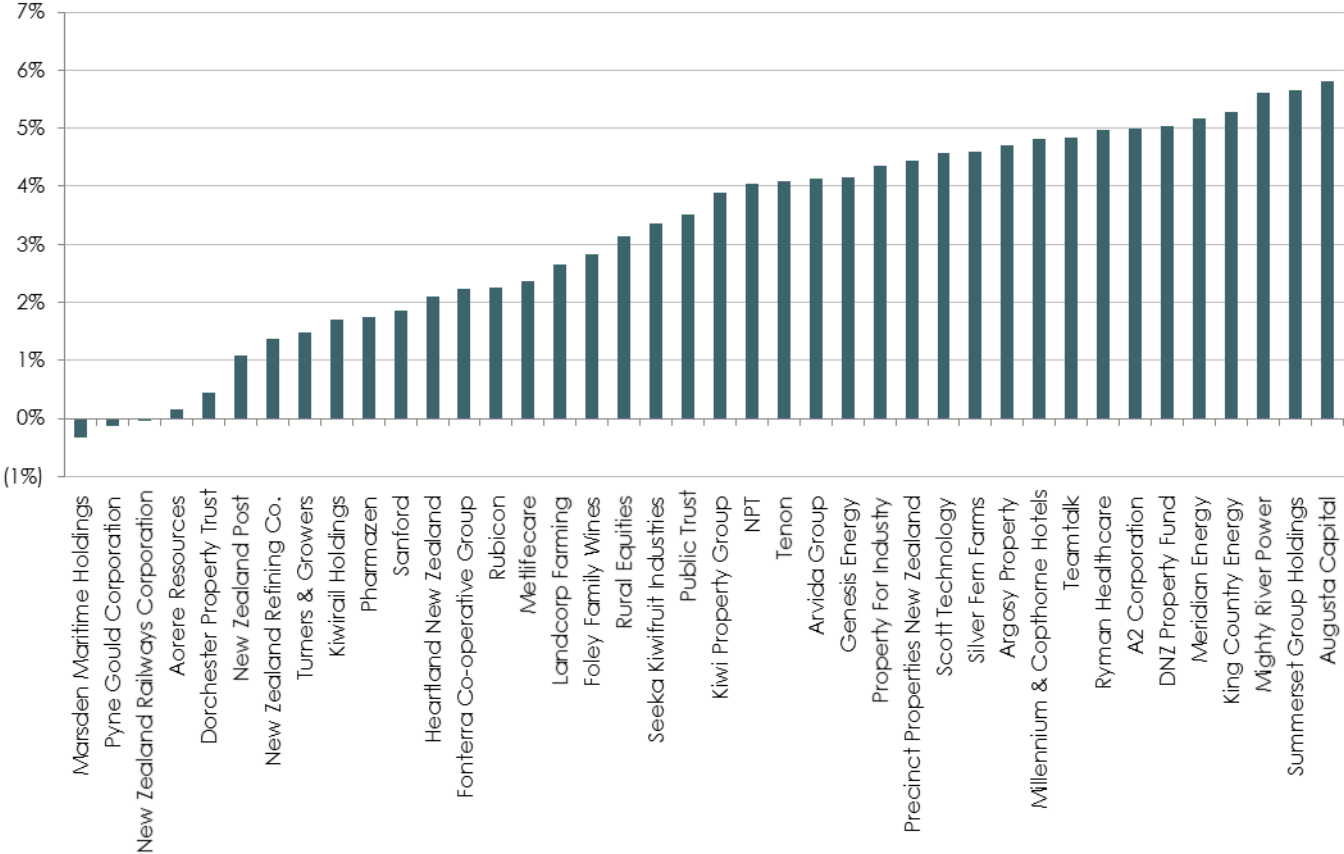
The entities in the second quartile had 2014 ROCE's ranging between 5.8% and 13.3%. At this level we estimate that only half are trading at or above their individual weighted average cost of capital, if only marginally.

2014 ROCE - Second Quartile



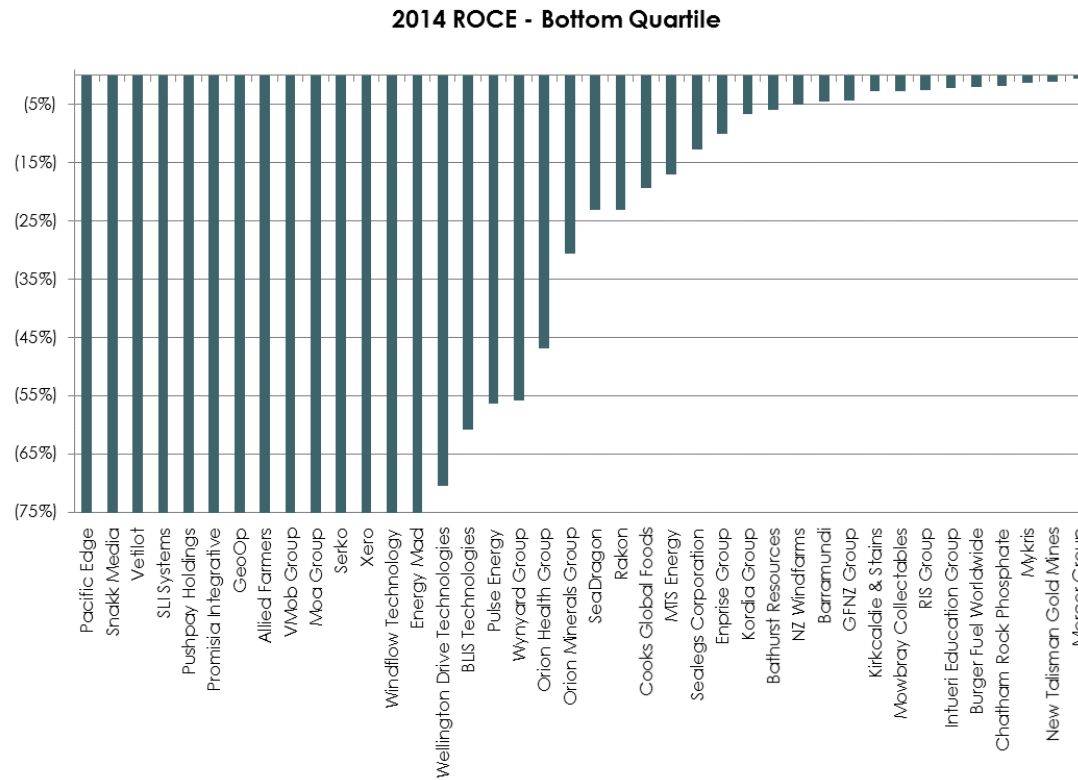
The third quartile ranges from negative 0.5% to 5.7%. At this level we estimate that most are trading below their individual weighted average cost of capital.

2014 ROCE - Third Quartile



The fourth quartile of entities are those entities with a negative ROCE ranging from negative 1.1% to negative 801.1%. Note that for the purposes of this chart those entities with a ROCE of less than negative 75% have been constrained to negative 75%. Those entities with negative ROCE reported negative EBIT margins.

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. Vmob, SLI Systems and Xero are examples of this strategy. Those mature businesses in this quartile may need to reconsider the viability of their business models if their negative result is not a one-off.



Appendix 1 contains a table of individual entity results including 2013 and 2014 Profitability (EBIT margin) and Activity Ratios in addition to the 2012, 2013 and 2014 and three-year average ROCE.

About Armillary Private Capital

Armillary Private Capital is an investment bank providing specialist asset and market place management, corporate finance, advisory and financial training services focused on the New Zealand capital markets. Our purpose is enabling success for businesses, business owners and investors.

Our approach is based on a combination of influences grounded in our culture, methodology and experiences. We have worked with a range of New Zealand businesses through all stage of the business lifecycle from startup to maturity. Be they private, listed or government-related, we have seen and experienced the roller-coaster rides business owners and managers endure. These experiences allow us to quickly identify your needs and find the right solution.

An important part of our approach is the use of proven financial tools and methodologies to provide a concise but comprehensive view of business performance. A key methodology that underpins our work is the DuPont method. This powerful but highly practical method of analysis allows us to develop a rapid understanding of the underlying performance of a business and to identify key business drivers. This disciplined approach helps us with quality decision making in our work.

Sources of Data

The data for this analysis and report has been compiled by Armillary Private Capital from annual reports and data obtained through FactSet Research Systems.

Appendix 1 – Detailed Results

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
A2 Corporation	NZX	9.7%	1.9%	2.5	2.7	14.3%	24.3%	5.0%	14.6%
Abano Healthcare Group	NZX	9.1%	8.6%	1.2	1.1	11.1%	10.7%	9.5%	10.4%
Air New Zealand	NZX	6.2%	8.3%	1.2	1.2	6.7%	7.7%	9.9%	8.1%
Airways Corporation	Crown	17.7%	10.7%	1.9	1.6	16.0%	32.7%	17.3%	22.0%
Airwork Holdings	NZX	14.9%	12.9%	0.8	0.8	NA	11.4%	10.6%	11.0%
Allied Farmers	NZX	(42.6%)	(178.0%)	2.3	1.2	(57.8%)	(98.7%)	(220.4%)	(125.6%)
Aorere Resources	NZX	(77.0%)	1.2%	0.1	0.1	NA	(6.3%)	0.2%	(3.1%)
Argosy Property	NZX	45.7%	47.2%	0.1	0.1	3.2%	4.5%	4.7%	4.1%
Arvida Group	NZX	20.9%	19.1%	NA	0.2	NA	NA	4.1%	4.1%
Auckland International Airport	NZX	57.8%	59.4%	0.1	0.1	6.1%	6.4%	6.3%	6.3%
Augusta Capital	NZX	43.8%	45.1%	0.1	0.1	3.5%	5.5%	5.8%	4.9%
AWF Group	NZX	5.8%	4.5%	5.9	4.2	28.2%	34.3%	19.0%	27.2%
Barramundi	NZX	484.5%	(39.4%)	0.1	0.1	0.2%	26.6%	(4.6%)	7.4%
Bathurst Resources	NZX	NA	(33.5%)	0.0	0.2	(4.2%)	(0.0%)	(6.0%)	(3.4%)
BLIS Technologies	NZX	(156.5%)	(126.7%)	0.4	0.5	(49.4%)	(63.9%)	(60.9%)	(58.1%)
Blue Sky Meats	Unlisted	(4.8%)	3.1%	2.1	2.4	(0.6%)	(10.1%)	7.5%	(1.1%)
Briscoe Group	NZX	9.0%	9.4%	8.9	8.7	72.9%	80.2%	81.1%	78.0%
Burger Fuel Worldwide	NZAX	6.0%	(0.6%)	4.8	3.6	14.7%	28.9%	(2.1%)	13.8%
Cavalier Corporation	NZX	2.7%	5.5%	1.2	1.3	3.2%	3.4%	6.9%	4.5%
CDL Investments NZ	NZX	45.4%	45.1%	0.5	0.4	14.4%	20.6%	19.4%	18.1%
Chatham Rock Phosphate	NZAX	NA	NA	0.0	0.0	NA	(2.2%)	(1.8%)	(2.0%)
Chorus	NZX	32.5%	30.9%	0.4	0.3	8.4%	12.4%	10.4%	10.4%
Colonial Motor Co.	NZX	3.6%	4.2%	3.8	3.9	11.8%	13.9%	16.6%	14.1%
Comvita	NZX	9.9%	7.6%	1.0	1.0	11.3%	9.7%	7.4%	9.5%
Connexionz	Unlisted	7.0%	9.6%	3.4	2.5	(33.7%)	24.0%	23.7%	4.7%
Contact Energy	NZX	12.9%	14.2%	0.4	0.4	5.4%	5.7%	5.9%	5.7%
Cooks Global Foods	NZAX	NA	(48.5%)	0.0	0.4	NA	(10.2%)	(19.4%)	(14.8%)
Delegat's Group	NZX	26.9%	18.7%	0.7	0.5	12.8%	17.5%	10.2%	13.5%

2014 Return on Capital Employed

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
Diligent Corporation	NZX	16.0%	18.2%	5.7	4.4	157.1%	91.3%	80.5%	109.6%
DNZ Property Fund	NZX	52.6%	55.9%	0.1	0.1	4.6%	4.9%	5.0%	4.8%
Dorchester Property Trust	Unlisted	5.9%	2.6%	0.1	0.2	1.3%	0.9%	0.4%	0.9%
Eastpack	Unlisted	7.0%	5.6%	1.9	1.4	29.3%	13.1%	7.9%	16.8%
EBOS Group	NZX	3.1%	2.6%	2.7	4.8	16.7%	8.3%	12.7%	12.6%
Energy Mad	NZX	(28.6%)	(34.9%)	1.6	2.6	(22.1%)	(47.1%)	(91.9%)	(53.7%)
Enprise Group	NZAX	(18.9%)	(3.1%)	NA	3.3	NA	NA	(10.0%)	(10.0%)
Eroad	NZX	(4.1%)	10.7%	NA	0.6	NA	NA	6.7%	6.7%
Finzsoft Solutions	NZX	4.7%	8.5%	2.5	2.5	(16.6%)	11.6%	21.0%	5.3%
Fisher & Paykel Healthcare	NZX	12.1%	14.9%	1.1	1.1	9.2%	12.8%	17.0%	13.0%
Fletcher Building	NZX	6.4%	7.3%	1.5	1.5	8.9%	9.5%	11.2%	9.9%
Foley Family Wines	NZAX	7.2%	9.8%	0.3	0.3	(1.2%)	2.2%	2.8%	1.3%
Fonterra Co-operative Group	NZX	4.2%	1.1%	1.7	2.0	8.0%	7.1%	2.2%	5.8%
Freightways	NZX	15.9%	16.4%	1.1	1.2	17.5%	17.6%	19.0%	18.0%
Fronde Systems Group	Unlisted	6.4%	0.7%	38.5	21.9	166.8%	246.8%	15.0%	142.8%
Genesis Energy	NZX	8.3%	7.1%	0.6	0.6	6.7%	5.0%	4.2%	5.3%
Gentrack Group	NZX	21.8%	27.3%	0.5	0.6	NA	11.5%	15.9%	13.7%
GeoOp	NZAX	(307.5%)	(1379.3%)	1.7	0.2	(288.9%)	(518.1%)	(232.3%)	(346.4%)
GFNZ Group	NZAX	13.6%	(19.7%)	0.2	0.2	(0.0%)	3.0%	(4.4%)	(0.5%)
Goodman Property Trust	NZX	56.2%	71.2%	0.1	0.1	5.1%	5.0%	5.9%	5.3%
Green Cross Health	NZX	11.4%	10.0%	1.7	3.6	22.9%	18.9%	36.1%	26.0%
Hallenstein Glasson Holdings	NZX	11.5%	9.0%	5.0	4.8	65.3%	57.3%	42.8%	55.1%
Heartland New Zealand	NZX	15.3%	24.7%	0.1	0.1	1.4%	1.5%	2.1%	1.6%
Hellaby Holdings	NZX	5.2%	5.7%	2.5	2.7	16.1%	13.0%	15.4%	14.8%
Horizon Energy Distribution	NZX	7.7%	9.1%	0.6	0.8	10.6%	4.5%	7.7%	7.6%
Infratil	NZX	6.0%	15.8%	0.5	0.5	4.1%	3.3%	8.4%	5.2%
Intueri Education Group	NZX	32.2%	(3.1%)	NA	0.7	NA	NA	(2.1%)	(2.1%)
Just Water International	NZAX	12.8%	13.3%	1.2	1.2	15.2%	15.0%	16.1%	15.5%
Kathmandu Holdings	NZX	16.5%	16.0%	1.2	1.1	18.3%	19.2%	18.3%	18.6%
King Country Energy	Unlisted	11.3%	20.5%	0.3	0.3	8.9%	3.8%	5.3%	6.0%
Kingfish	NZX	551.5%	546.8%	0.0	0.0	8.2%	23.8%	19.0%	17.0%

2014 Return on Capital Employed

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
Kirkcaldie & Stains	NZX	(8.3%)	(4.2%)	0.8	0.7	(6.0%)	(6.5%)	(2.7%)	(5.1%)
Kiwi Income Property Trust	NZX	34.6%	37.3%	0.1	0.1	4.4%	3.6%	3.9%	3.9%
Kiwirail Holdings	Crown	7.6%	1.7%	0.3	1.0	(5.8%)	2.3%	1.7%	(0.6%)
Kordia Group	Crown	6.5%	(2.9%)	2.0	2.3	6.8%	13.1%	(6.6%)	4.4%
Landcorp Farming	Crown	11.7%	17.0%	0.1	0.2	2.5%	1.5%	2.7%	2.2%
Livestock Improvement Corp	NZAX	11.2%	11.0%	0.9	0.9	10.0%	10.4%	9.9%	10.1%
Mainfreight	NZX	5.6%	6.0%	2.9	2.9	20.8%	16.5%	17.5%	18.2%
Marlin Global	NZX	521.6%	665.2%	0.0	0.0	(13.9%)	10.2%	22.9%	6.4%
Marsden Maritime Holdings	NZX	(38.6%)	(20.1%)	0.0	0.0	(0.4%)	(0.5%)	(0.3%)	(0.4%)
Mercer Group	NZX	3.9%	(0.3%)	1.7	1.6	(2.0%)	6.8%	(0.5%)	1.4%
Meridian Energy	NZX	12.9%	14.6%	0.4	0.4	3.0%	4.6%	5.2%	4.3%
Meteorological Service	Crown	10.9%	11.1%	1.4	1.4	7.9%	14.8%	15.5%	12.7%
Methven	NZX	8.2%	8.6%	1.6	1.6	15.8%	13.0%	13.7%	14.1%
Metlifecare	NZX	37.3%	48.6%	0.1	0.0	NA	2.2%	2.4%	2.3%
Metro Glass	NZX	12.4%	15.0%	NA	0.9	NA	NA	13.5%	13.5%
Michael Hill International	NZX	9.1%	8.8%	2.2	2.0	19.0%	19.7%	17.3%	18.7%
Mighty River Power	NZX	17.5%	18.5%	0.2	0.3	5.0%	4.2%	5.6%	4.9%
Millennium & Copthorne Hotels	NZX	21.6%	20.0%	0.2	0.2	3.6%	4.4%	4.8%	4.3%
Moa Group	NZX	(85.4%)	(123.2%)	1.0	1.2	(191.0%)	(85.9%)	(145.1%)	(140.7%)
Mowbray Collectables	NZX	0.5%	(2.9%)	0.6	0.9	0.4%	0.3%	(2.7%)	(0.7%)
Mts Energy	Unlisted	1.3%	(0.2%)	0.7	97.1	1.1%	0.9%	(17.1%)	(5.0%)
Mykris	NZAX	11.7%	(2.7%)	0.6	0.5	NA	6.6%	(1.3%)	2.7%
New Talisman Gold Mines	NZX	NA	NA	0.0	0.0	(1.5%)	(1.7%)	(1.1%)	(1.4%)
New Zealand Oil & Gas	NZX	45.4%	41.8%	0.4	0.4	18.6%	16.6%	15.2%	16.8%
New Zealand Post	Crown	3.9%	10.1%	0.1	0.1	0.7%	0.5%	1.1%	0.8%
New Zealand Railways Corp	Crown	14.8%	(2341.9%)	0.0	0.0	(2.7%)	0.4%	(0.0%)	(0.8%)
New Zealand Refining Co.	NZX	(2.9%)	6.1%	0.3	0.2	6.5%	(0.7%)	1.4%	2.4%
NPT	NZX	23.3%	37.1%	0.1	0.1	6.7%	2.7%	4.0%	4.5%
Nuplex Industries	NZX	5.7%	5.2%	2.0	2.1	13.4%	11.7%	10.8%	12.0%
NZ Windfarms	NZX	(40.5%)	(47.8%)	0.1	0.1	(4.2%)	(3.8%)	(5.0%)	(4.3%)
NZX	NZX	30.8%	29.3%	1.3	1.5	23.0%	39.7%	44.0%	35.6%

2014 Return on Capital Employed

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
Oceanagold Corporation	NZX	(11.2%)	19.5%	0.6	0.7	7.2%	(6.8%)	14.4%	4.9%
Opus International Consultants	NZX	7.3%	6.0%	3.2	2.9	34.4%	22.9%	17.3%	24.9%
Orion Health	NZX	(4.8%)	(8.0%)	4.6	5.9	NA	(21.8%)	(47.0%)	(34.4%)
Orion Minerals Group	NZAX	NA	NA	0.0	0.0	(136.7%)	(121.3%)	(30.7%)	(96.2%)
Pacific Edge	NZX	(48743.9%)	(6937.7%)	0.0	0.1	(982.6%)	(911.7%)	(801.1%)	(898.5%)
PGG Wrightson	NZX	3.1%	3.9%	2.0	3.1	5.4%	6.1%	12.2%	7.9%
Pharmazen	Unlisted	11.4%	2.8%	0.8	0.6	8.4%	9.2%	1.8%	6.5%
Port of Tauranga	NZX	42.8%	41.2%	0.2	0.2	9.9%	10.2%	10.1%	10.1%
Precinct Properties	NZX	42.7%	43.8%	0.1	0.1	4.9%	4.5%	4.4%	4.6%
Promisia Integrative	NZX	(326.3%)	(370.0%)	1.6	0.6	(165.3%)	(514.3%)	(236.9%)	(305.5%)
Property For Industry	NZX	63.6%	59.1%	0.1	0.1	5.6%	5.0%	4.4%	5.0%
Proten	Unlisted	43.4%	41.8%	0.2	0.2	9.8%	9.8%	10.2%	9.9%
Public Trust	Crown	25.5%	31.0%	0.1	0.1	1.2%	2.3%	3.5%	2.3%
Pulse Energy	NZAX	0.1%	(4.9%)	15.7	11.6	(146.8%)	1.7%	(56.5%)	(67.2%)
Pumpkin Patch	NZX	6.0%	5.8%	3.0	2.3	16.7%	17.9%	13.5%	16.1%
Pushpay	NZAX	(7100.0%)	(507.6%)	NA	0.6	NA	NA	(281.7%)	(281.7%)
Pyne Gould Corporation	NZX	49.2%	(3.5%)	0.1	0.0	(5.9%)	5.8%	(0.1%)	(0.1%)
Rakon	NZX	(10.3%)	(21.7%)	0.9	1.1	(3.3%)	(8.8%)	(23.2%)	(11.8%)
Rangatira	Unlisted	26.3%	57.5%	0.3	0.6	8.9%	7.0%	32.9%	16.3%
Restaurant Brands	NZX	8.1%	8.1%	3.0	3.2	25.5%	24.3%	25.6%	25.1%
RIS Group	NZAX	NA	NA	0.0	0.0	(73.9%)	(2.7%)	(2.5%)	(26.4%)
Rubicon	NZX	0.2%	1.5%	1.4	1.5	(2.9%)	0.2%	2.2%	(0.1%)
Rural Equities	Unlisted	33.2%	49.3%	0.1	0.1	2.2%	1.7%	3.1%	2.4%
Ryman Healthcare	NZX	55.6%	58.5%	0.1	0.1	5.0%	5.1%	5.0%	5.0%
Sanford	NZX	4.8%	3.0%	0.6	0.6	4.2%	3.1%	1.9%	3.0%
Scales	NZX	10.2%	7.3%	1.1	1.1	NA	11.0%	8.2%	9.6%
Scott Technology	NZX	8.1%	4.0%	1.5	1.1	14.3%	12.1%	4.6%	10.3%
SeaDragon	NZX	(2.7%)	(55.5%)	NA	0.4	NA	NA	(23.2%)	(23.2%)
Sealegs Corporation	NZX	(0.2%)	(4.9%)	3.0	2.6	(26.6%)	(0.6%)	(12.7%)	(13.3%)
Seeka Kiwifruit Industries	NZX	3.8%	2.4%	1.2	1.4	12.0%	4.6%	3.4%	6.6%
Serko	NZX	(20.5%)	(33.8%)	NA	3.8	NA	NA	(127.7%)	(127.7%)

2014 Return on Capital Employed

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
Silver Fern Farms	Unlisted	(0.8%)	1.4%	3.0	3.3	(3.0%)	(2.3%)	4.6%	(0.2%)
Skellerup Holdings	NZX	13.7%	14.7%	1.5	1.5	27.6%	20.1%	21.8%	23.2%
SKY Network Television	NZX	23.1%	26.1%	0.5	0.5	10.1%	11.2%	13.3%	11.5%
SkyCity Entertainment Group	NZX	25.3%	22.4%	0.5	0.5	14.5%	13.8%	11.3%	13.2%
Skyline Enterprises	Unlisted	30.3%	31.7%	0.4	0.6	16.4%	13.6%	18.8%	16.2%
SLI Systems	NZX	(52.4%)	(28.1%)	1.3	11.7	12.9%	(68.4%)	(328.1%)	(127.9%)
SmartPay Holdings	NZX	2.2%	22.3%	0.5	0.7	(23.1%)	1.1%	15.0%	(2.3%)
Smiths City Group	NZX	1.7%	3.8%	1.7	1.7	0.0%	2.9%	6.5%	3.1%
Snakk Media	NZAX	(33.1%)	(31.0%)	297.5	23.1	(10367.9%)	(9844.5%)	(717.6%)	(6976.7%)
Solution Dynamics	NZAX	(2.0%)	3.8%	5.6	7.0	(32.9%)	(11.1%)	26.7%	(5.8%)
South Port New Zealand	NZX	31.6%	31.1%	0.9	0.9	27.3%	27.6%	26.5%	27.1%
Southern Travel Holdings	Unlisted	2.5%	2.7%	4.5	4.2	1.5%	11.1%	11.6%	8.1%
Spark	NZX	8.3%	8.8%	1.5	1.4	6.6%	12.4%	12.1%	10.4%
Speirs Group	NZAX	(3.0%)	8.5%	3.5	3.6	(19.5%)	(10.5%)	30.5%	0.2%
Steel & Tube Holdings	NZX	5.3%	5.9%	2.1	2.2	10.0%	11.2%	12.8%	11.3%
Summerset Group Holdings	NZX	49.0%	45.0%	0.1	0.1	2.5%	4.2%	5.7%	4.1%
Synlait Milk	NZX	6.4%	5.4%	1.7	1.9	7.7%	10.5%	10.1%	9.4%
Teamtalk	NZX	17.5%	6.4%	0.7	0.8	15.0%	12.0%	4.8%	10.6%
Tenon	NZX	0.3%	1.8%	2.1	2.3	(3.1%)	0.6%	4.1%	0.5%
Terra Vitae Vineyards	Unlisted	35.5%	43.8%	0.1	0.1	3.3%	4.4%	6.2%	4.6%
Tourism Holdings	NZX	6.8%	10.0%	0.8	0.8	6.4%	5.6%	8.4%	6.8%
Tower	NZX	7.2%	13.4%	0.9	1.8	22.6%	6.8%	24.3%	17.9%
Trade Me Group	NZX	69.4%	64.6%	0.2	0.2	25.6%	14.6%	14.6%	18.2%
Transpower New Zealand	Crown	46.6%	53.7%	0.2	0.2	5.7%	9.8%	11.7%	9.0%
Trilogy International	NZX	3.4%	6.1%	1.0	1.1	2.1%	3.4%	6.8%	4.1%
TrustPower	NZX	28.2%	25.1%	0.3	0.3	9.5%	8.4%	7.1%	8.3%
Turners	NZX	(0.6%)	15.5%	0.3	0.4	(3.2%)	(0.2%)	6.4%	1.0%
Turners & Growers	NZX	2.2%	0.8%	2.1	1.9	2.2%	4.6%	1.5%	2.7%
Vector	NZX	36.0%	31.7%	0.2	0.2	8.7%	8.5%	7.2%	8.1%
Veritas Investments	NZX	19.5%	19.3%	NA	6.5	64.2%	NA	125.0%	94.6%
Vetilot	NZAX	(366.2%)	(3215.5%)	0.5	0.1	(52.0%)	(184.0%)	(381.8%)	(206.0%)

2014 Return on Capital Employed

Issuer	Market	2013 EBIT Margin	2014 EBIT Margin	2013 Activity Ratio	2014 Activity Ratio	ROCE 2012	ROCE 2013	ROCE 2014	3 Year Average ROCE
Vista	NZX	25.4%	13.6%	NA	1.6	NA	NA	22.5%	22.5%
Vital Healthcare Property Trust	NZX	50.2%	49.5%	0.1	0.1	4.9%	6.1%	5.9%	5.6%
VMob Group	NZAX	(2989.1%)	(558.7%)	0.2	0.4	(2.3%)	(461.4%)	(200.8%)	(221.5%)
Warehouse Group	NZX	4.7%	3.3%	3.6	3.7	18.5%	16.9%	12.1%	15.8%
Wellington Drive Technologies	NZX	(14.2%)	(29.0%)	4.2	2.4	(68.0%)	(58.9%)	(70.5%)	(65.8%)
Windflow Technology	NZAX	(811.7%)	(230.8%)	0.2	0.4	(116.6%)	(127.9%)	(101.2%)	(115.2%)
Wynyard Group	NZX	(64.1%)	(93.0%)	0.7	0.6	(146.6%)	(48.0%)	(55.9%)	(83.5%)
Xero	NZX	(42.3%)	(57.5%)	1.9	1.9	(82.2%)	(78.4%)	(109.2%)	(89.9%)
Z Energy	NZX	2.2%	5.7%	3.3	3.0	19.9%	7.3%	17.2%	14.8%

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.

$$\text{EQUITY} = (\text{Current Assets} + \text{Cash} - \text{Current Liabilities}) + \text{Non-current Assets} - \text{Debt}$$

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 exclude 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.

$$\text{DEBT} - \text{CASH} + \text{EQUITY} = (\text{Current Assets} - \text{Current Liabilities}) + \text{Non-Current Assets}$$

$$\text{TOTAL CAPITAL EMPLOYED (TCE)} = \text{TOTAL NET OPERATING ASSETS (TNA)}$$

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 which are 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 including depreciation.

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 that 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 ROCE calculation:

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

It is worth noting that average TNA for the period over that Revenue and EBIT are derived will give a better result than 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.

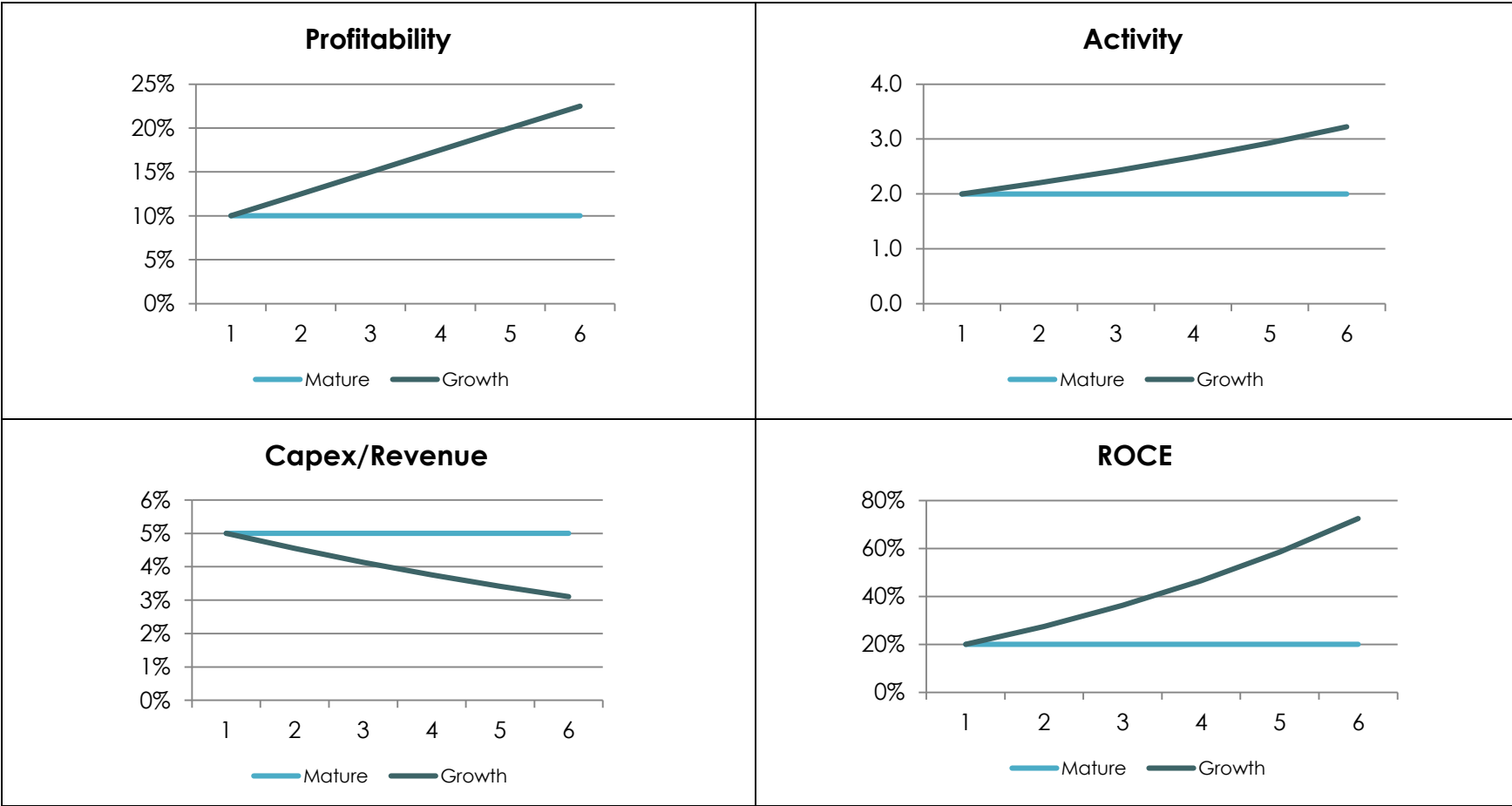
Budgeting and Valuation

Businesses and analysts can often make an underlying error in budgeting or forecasting business performance that 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 that 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 in 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 ratios 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.