

# The Cost of Capital Report

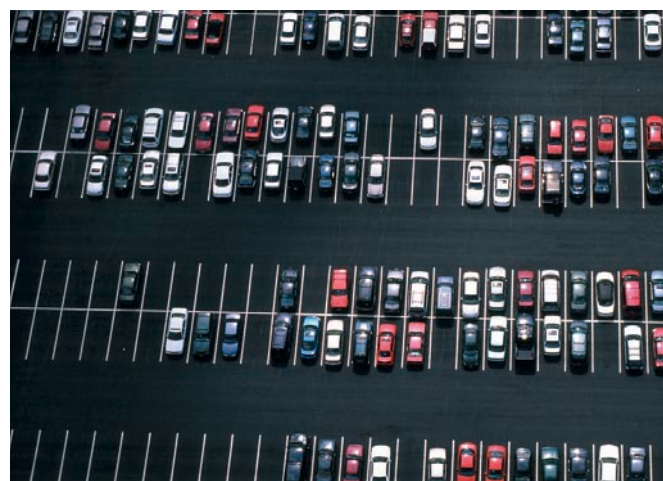
As at March 2004

## How cost of capital measures can be used to drive executive share option plans

Executive share option plans are commonly used by corporates as part of their overall remuneration arrangements for senior executives. They are intended to attract and retain key executives and align their interests with those of shareholders, through the provision of incentives and rewards that reflect both the executive's performance and the success of the organisation. A central feature of such schemes is the alignment of management benefits with shareholder returns.

Share option plans may operate on a number of different bases. Some plans require no performance thresholds to be met before the options can be exercised. However, it is more common for the share option plan to have either an escalating exercise price or threshold return that must be achieved before the share options can be exercised. Typically the share price escalation or threshold return is based on either the company's cost of capital, or in some instances, overall index-linked market performance.

The preferable basis for driving such schemes is to use the company's cost of equity capital ( $K_e$ ) as the benchmark. The rationale behind using  $K_e$  as the driving parameter is that it is only when the total shareholder returns (TSR) exceed  $K_e$  that additional shareholder value is being created.



Aerial of parking lot photographed by David Sailors

This concept can be illustrated using a simple example: If a company's current share price is \$5, and  $K_e$  is assessed to be 10%, and assuming that the earliest date on which an executive can exercise their share options is after three years, then the TSR over that three year period would need to be \$1.66 (assuming a simple annual compounding of returns) before an executive would be "in the money" in terms of their share options. This total shareholder return is likely to comprise a combination of share price appreciation and dividends.

One of the reasons why we prefer to use  $K_e$  is that application of a market benchmark as the driver of the exercise price under a share option plan will result in executives of companies with equity betas of more than one (i.e. those

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Input Assumptions:			
Market Risk Premium	7.5%	Marginal Tax Rate On Debt	33.0%
Risk Free Rate Of Return	5.7%	Investor Tax Rate On Equity	28.0%

Company	NZSE Code	EBIT Multiple	NPAT Multiple	Equity Beta	D/(D+E) Ratio	WACC
<b>Agriculture</b>						
Affco Holdings Ltd	AFF	8.7	8.0	0.43	26%	6.9%
Pyne Gould Guinness Ltd	PGG	10.5	10.3	0.69	56%	7.3%
Richmond Ltd	RHD	7.1	8.0	0.67	55%	7.9%
Sanford Ltd	SAN	6.5	9.8	0.39	5%	7.0%
Williams & Kettle Ltd	WKL	6.9	9.2	0.38	20%	6.8%
Wrightson Ltd	WRI	6.7	8.9	0.91	7%	10.6%
						7.6%
<b>Building Materials &amp; Construction</b>						
Fletcher Building Ltd	FBU	9.0	11.6	1.07	34%	9.8%
Nuplex Industries Ltd	NPX	10.1	14.2	0.80	41%	8.0%
Steel & Tube Holdings Ltd	STU	10.8	15.9	1.06	7%	11.6%
						9.7%
<b>Consumer</b>						
Briscoe Group Ltd	BGR	9.0	13.4	0.62	1%	8.8%
The Colonial Motor Co Ltd	CMO	6.3	8.4	0.39	23%	6.7%
Hallenstein Glasson Holdings Ltd	HLG	10.2	15.4	0.53	1%	8.1%
Kirkcaldie & Stains Ltd	KRK	14.1	16.4	0.59	49%	7.3%
Michael Hill International Ltd	MHI	12.8	17.7	0.46	17%	7.2%
Pacific Retail Group Ltd	PRG	9.0	6.7	0.92	67%	9.0%
Restaurant Brands New Zealand Ltd	RBD	7.6	10.6	1.05	20%	10.8%
Turners Auctions Ltd	TUA	13.6	20.4	0.76	0%	9.8%
Vending Technologies Ltd	VTL	16.5	13.2	2.27	50%	14.1%
Wakefield Hospital Ltd	WFD	14.8	23.1	0.38	20%	6.8%
The Warehouse Group Ltd	WHS	12.1	17.4	0.66	17%	8.4%
						8.6%
<b>Energy</b>						
Contact Energy Limited	CEN	18.0	27.3	0.48	28%	6.9%
Horizon Energy Distribution Ltd	HED	11.4	17.7	0.40	23%	6.7%
Infratil Ltd	IFT	16.1	25.6	0.79	33%	8.5%
NGC Holdings Ltd	NGC	4.4	7.1	0.96	0%	11.3%
The New Zealand Refining Co Ltd	NZR	6.7	11.0	0.55	0%	8.2%
Powerco Ltd	PWC	20.8	15.7	0.86	65%	6.7%
Trustpower Ltd	TPW	27.6	47.4	0.67	10%	8.8%
						7.9%
<b>Food &amp; Beverages</b>						
DB Breweries Ltd	DBB	11.8	16.5	0.32	6%	6.4%
						6.4%
<b>Forestry &amp; Forest Products</b>						
Carter Holt Harvey Ltd	CAH	-8.4	-5.9	1.59	23%	13.5%
Evergreen Forests Ltd	EVF	-7.4	-2.0	0.65	54%	7.4%
Tenon Ltd	TEN	-0.8	-0.7	1.65	43%	12.2%
						13.2%
<b>Intermediate &amp; Durables</b>						
EBOS Group Ltd	EBO	13.1	16.3	0.68	17%	8.6%
Fisher & Paykel Appliances Holdings Ltd	FPA	12.9	15.4	0.73	19%	8.7%
Fisher & Paykel Healthcare Corporation Ltd	FPH	11.1	16.8	0.64	2%	8.9%
Provenco Group Ltd	PVO	-12.5	-9.0	2.55	15%	20.9%
Scott Technology Ltd	SCT	8.7	13.1	0.91	0%	11.0%
						9.1%
<b>Investment</b>						
Genesis Research & Development Corp Ltd	GEN	-1.9	-1.6	1.06	15%	11.3%
Hellaby Holdings Ltd	HBY	14.0	11.7	0.74	15%	9.1%
Sealegs Corporation	SLG	-6.2	-6.2	1.56	0%	15.8%
						9.1%

Company	NZSE Code	EBIT Multiple	NPAT Multiple	Equity Beta	D/(D+E) Ratio	WACC
<b>Leisure &amp; Tourism</b>						
CDL Hotels New Zealand Ltd	CDL	8.8	14.6	1.05	28%	10.2%
Kingsgate International Corporation Ltd	KIN	10.0	11.2	0.95	27%	9.8%
Shotover Jet Ltd	SJL	10.3	14.1	0.54	12%	7.9%
Sky City Entertainment Ltd	SKC	11.8	17.2	0.69	25%	8.2%
Sky City Leisure Ltd	SLL	11.5	1.9	4.57	62%	10.5%
Tourism Holdings Ltd	THL	10.3	19.3	1.30	20%	12.3%
						8.8%
<b>Media &amp; Telecommunications</b>						
GDC Communications Ltd	GDC	28.0	-25.0	1.56	47%	11.8%
Independent Newspapers Ltd	INL	5.6	5.5	1.31	15%	12.7%
Sky Network Television Ltd	SKY	87.5	3047.8	1.15	16%	11.6%
Telecom Corp of New Zealand Ltd	TEL	10.7	15.8	1.50	31%	12.1%
						12.1%
<b>Mining</b>						
New Zealand Oil & Gas Ltd	NOG	-117.0	-108.5	0.58	0%	8.5%
						8.5%
<b>Ports</b>						
Auckland International Airport Ltd	AIA	16.9	24.2	0.87	21%	9.3%
Lytelton Port Co Ltd	LPC	10.7	14.3	0.60	18%	8.0%
Northland Port Corporation (NZ) Ltd	NTH	26.1	34.9	0.50	0%	7.9%
Ports of Auckland Ltd	POA	11.6	16.3	0.66	17%	8.3%
Port of Tauranga Ltd	POT	13.4	19.1	0.39	23%	6.5%
South Port New Zealand Ltd	SPN	9.9	14.5	0.32	6%	6.5%
						8.5%
<b>Property</b>						
AMP NZ Office Trust	APT	7.4	6.4	0.40	25%	6.6%
CDL Investments New Zealand Ltd	CDI	5.0	7.6	0.73	0%	9.6%
Calan Healthcare Properties Trust	CHP	13.9	16.8	0.53	28%	7.4%
Capital Properties New Zealand Ltd	CNZ	17.1	13.4	0.65	54%	6.9%
Kiwi Income Property Trust	KIP	15.8	16.4	0.41	27%	6.6%
Macquarie Goodman Property Trust	MGP	13.6	17.4	0.48	37%	6.9%
The National Property Trust	NAP	20.9	17.2	0.68	56%	7.4%
Property for Industry Ltd	PFI	9.8	10.0	0.41	26%	6.7%
Trans Tasman Properties Ltd	TTP	10.4	10.4	0.84	55%	8.3%
						7.1%
<b>Finance &amp; Other Services</b>						
Abano Healthcare Group Ltd	ABA	14.9	17.0	1.94	55%	12.2%
Metlifecare Ltd	MET	15.0	14.3	0.58	17%	7.9%
Ryman Healthcare Ltd	RYM	15.9	14.4	0.58	19%	7.9%
Taylors Group Ltd	TAY	10.5	15.7	0.52	7%	7.9%
Waste Management NZ Ltd	WAM	15.3	24.6	0.95	15%	10.4%
						9.3%
<b>Textiles &amp; Apparel</b>						
Cavalier Corporation Ltd	CAV	11.6	17.6	0.58	9%	8.2%
Designer Textiles (NZ) Ltd	DTL	7.3	8.0	0.70	29%	8.4%
						8.2%
<b>Transport</b>						
Air New Zealand Ltd	AIR	10.3	7.1	1.57	57%	10.1%
Mainfreight Ltd	MFT	12.6	21.2	1.02	19%	10.6%
Owens Group Ltd	OWN	13.4	-103.0	0.45	28%	7.0%
Tranz Rail Holdings Ltd	TRH	18.7	-228.5	1.33	54%	9.7%
						10.0%
<b>Overseas</b>						
Guinness Peat Group Plc	GPG	14.5	22.1	0.50	12%	7.6%
BIL International Ltd	BRY	-143.6	-15.7	1.47	67%	9.1%
Lion Nathan Ltd	LNN	13.6	20.6	0.42	28%	6.6%
						7.5%
<b>Market Weighted Average</b>						<b>9.7%</b>



PricewaterhouseCoopers building photographed by Rachael Morris

considered as being more risky than the market) being rewarded even in circumstances where they have not achieved a return matching the company's cost of capital. The converse also applies.

Note that the driver for the exercise price formula should be the cost of equity and not the weighted average cost of capital (WACC), as the benchmark is purely shareholder returns, rather than the amalgamated WACC return attributable to the combined funding provided by debt and equity providers.

The  $K_e$  measure that drives the future exercise price or threshold under the share option plan may be subject to periodic review or may be set when the options are first issued.

Of course, the design of executive share option plans needs to also take account of a range of other considerations, such as the total value that the company is willing to provide to executives at the shareholders' expense, the duration before the executive is able to exercise, which is typically between three and five years after options are issued, the exercise window(s) available each year, the total number of options issued relative to the existing capital structure, and the accounting treatment that should be applied to recognise the overall economic effect on the enterprise.

The introduction of International Financial Reporting Standards (IFRS) will increase the focus on executive share option plans. Under IFRS 2, options must be valued when they are issued and the cost recognised in the issuer's financial statements over the vesting period of the options. Previously, companies were not required to expense the cost of share options in their Statement of Financial Performance. While it is likely that this charge will, in most instances, be immaterial relative to the companies' overall profitability, the cost of the share options still needs to be calculated correctly. PricewaterhouseCoopers has been involved in the design and/or valuation of executive share option plans for many New Zealand listed companies.

Readers interested in obtaining more information on this topic should contact David Bridgman, Eric Lucas or Richard Souter in our Auckland office, or Bruce Wattie in our Wellington office.

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Disclaimer: The Cost of Capital Report is intended as an overview of WACC as at March 2004. Readers are advised that before acting on any matter arising in this report, they should consult PricewaterhouseCoopers Corporate Finance.

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