MAGAMÉ

The Mergers & Acquisitions Game – Global Edition

An interactive presentation by Andy Staudt

TOWERS WATSON

Reliances and Limitations

- The following presentation is purely fictional, whilst there may be some similarities to real life companies these should not in any way be considered intentional and no action should be taken on the basis of this presentation.
- These slides should not be considered as advice.
- This presentation is for the sole use of the meeting attendees for educational purposes. Any distribution of this presentation, in whole or part, is not permitted.
- No liability or responsibility will be accepted by Towers Watson in relation to the use of this presentation for any purpose and we will accept no liability or responsibility to any third party recipients of this presentation. This presentation must not be relied upon by any person for any purpose.

Introduction / Instructions

Introduction

- **Game.** The following game puts you in the CEO's seat and requires you to make a strategic decision regarding the future of your company. Rather than focusing on everyday actuarial intricacies (i.e., picking loss development factors), we want you to take a step back and think about the bigger picture – what it means to create value for the company you run.
- **What we hope you take away from this exercise...**
  - **Dividend Discount Model (DDM).** The dividend discount model (DDM) is one of the primary tools used to value property & casualty insurance companies. Quite simply we value the company as the present value of future dividends. Because this technique takes a macro view (i.e., it looks at Return-on-Equity, payout ratios) rather than a micro view (i.e., effect of change in distribution on operating profit), it can be more useful from an analysts' or executives' perspective than the Discounted Cash Flow (DCF) Model. However, in all good due diligence, the macro DDM should be supplemented by a micro DCF which considers the firms operations as a means of generating return. Note that it is typically with this later valuation method that we as actuaries can add significant value given our understanding of insurance.
  - **Multiples.** There are a number of key multiples analysts consider when valuing companies and benchmarking performance relative to peers. We include a few graphs which demonstrate some of these key relationships including:
    - Price to Book Value (PBV) vs. Return on Equity (ROE) – Companies are typically rewarded for higher returns
    - Payout Ratio vs. Growth Expectations – The more a company pays in dividends, the less they retain to finance future growth
    - Debt to Equity (DE) Ratio vs. Beta – The more leveraged a company, the more risky

Instructions

- **Format.** Each team represents a real company.
- **Actions.** You can take 1 of 2 actions (but only one action and doing nothing is not an option)…
  - Merge – Decide to merge with another company (free, need to agree percentage split)
  - Acquire / Sell – Decide to acquire a company / sell your company (need to decide sale price)
- **Financing.** Each team is provided with an amount of cash commiserate with its balance sheet. To finance an acquisition however, you might need to borrow from the bank at 3%.
- **Mission.** To help you decide what to do, you are given a <u>Mission</u> with some key insider information
- **Information.** There are two types of information…
  - Outsider – Information known to all compiled by actuaries / analysts regarding valuations / future expectations
  - Insider – Information known only to you which others should suss out in negotiations (don't lie or you will go to JAIL)
- **Valuation Packs.** Each team receives a valuation pack (attached) containing relevant outsider information
  - CEO's Dashboard – High-level information ("pictures") necessary to make a dangerously wild-guess
  - Actuary's Dashboard – Excruciatingly boring information regarding relative valuations using dividend discount model
- **Time.** Time, as is the case in M&A, is tight and you have 45 minutes to negotiate an acceptable deal. To make matters worse, the bank only has limited amount of money to lend and once that money has been lent no one else can borrow.
- **Winner.** The winner is the company who adds the most value out of their M&A activity.

Companies

Companies

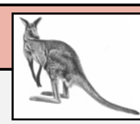
(1) Fjord Forsikring [Scandinavia]

- CEO: Anders Hansen
- Headquarters: Bergen, Norway
- Employ over 2,000 people in Norway, Denmark, Sweden and Finland
- Fjord's overall target is to be the most consumer-focused general insurance company in the Nordic region, based on sustainable operations and a market leading position
- Fjord consider acquiring businesses that can contribute to realising the Group's strategy in Scandinavia and further afield
- A precondition for any acquisition is that the business can support the Group's return on equity requirement within two years of the acquisition
- The insurance activity of any acquisition must also be able to deliver results that satisfy the Group's combined ratio target within four years

(2) El Matador SA [Spain]

- CEO: Miguel Costa
- Headquarters: Barcelona, Spain
- Employ around 32,000 people, with over a fifth of these in Spain. El Matador have a presence in 40 countries across 5 continents
- Involved in M&A deals (both as buyer and seller) more than 10 times in the past 2 years
- El Matador announced a strategy to be the "most respected global insurance company" in its 2011 report
- One of the objectives for 2013 is to focus on expanding operations in Asia

(3) Wallaby Group [Australia]



- CEO: Neil Johnson
- Headquarters: Melbourne, Australia
- A fine example of a company born out of mergers; the Wallaby group can trace its origins back to four separate entities each set up a minimum of 50 years ago
- No stranger to M&A, its presence in 42 countries leads to regular activity
- Wallaby Insurance Group has delivered more than 100 acquisitions since its first acquisition in 1985
- Has seen strong M&A activity over the last 2 years

(4) NICC [Canada]

- CEO: Robin Reynolds
- Headquarters: Ottawa, Canada
- One of Canada's largest general insurers has focussed recently on integrating 'Ice Insurance' as part of one of the largest acquisitions in Canadian P&C insurance history (2012)
- Also purchased 'Maple Insurance Company' in 2013
- Employ around 10,000 people in 105 offices, predominantly in Canada
- Overall strategy is to build a "world-renowned P&C insurer"

(5) Triangle Holdings, Ltd. [Bermuda]

- CEO: Frank Marista
- Headquarters: Hamilton, Bermuda
- A relatively young company, incorporated under the laws of Bermuda on February 2nd 2006
- Seek to establish themselves as one of the leading players in the global insurance and reinsurance markets
- Focus on their own underwriting philosophy and adherence to a group risk management strategy
- Also maintain a "conservative investment approach which focuses on preserving shareholder value"

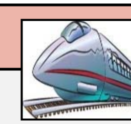
(6) Table Mountain Ltd [South Africa]

- CEO: Richard du Plessis
- Headquarters: Cape Town, South Africa
- A long established insurer with over a third of the South African market
- Have assets totalling around R14 billion and insure more than 450,000 policy holders
- Consider broker relationships and the broker distribution network to be a core strength
- Committed to "growth coupled with diversification"

(7) Bengal insurance Solutions [US]

- CEO: Michael Lewis
- Headquarters: Cincinnati, USA
- Have big ambitions to be the top motor insurer in the US
- Bengal have 20,000 employees in more than 400 offices throughout the United States
- Began working on a usage based insurance (UBI) device in the late 1990s and today holds 2 patents covering UBI methods and systems with many more pending
- Very limited operations outside the US with only an Argentinian subsidiary to its name
- Historically have focussed more on organic growth

(8) Bullet Fire & Marine [Japan]



- CEO: Aiko Nakata
- Headquarters: Osaka, Japan
- One of Japan's largest, well established non-life companies employs around 19,500 people in 30 countries across the world
- Has a corporate philosophy of: "customers and their trust is at the heart of everything we do"
- Have been involved in M&As frequently over the last 5 years (with the majority as the acquirer)
- In the company's 2014 plan it lists 'Seize new opportunities for growth by expansion' and 'Invest in businesses with efficient capital' as key strategies

(9) Shakespeare & Sons [UK]

- CEO: Evan Jones
- Headquarters: Birmingham, UK
- Employ around 21,000 people in 30 countries across the globe, serving customers in 130 countries
- 'Invest in attractive markets with excellent growth outlook' is a key part of the group's strategy
- 'Achieve market leading ratios in mature markets' is another key strategic objective and this led to the acquisition of Bayern Broking Group in Germany in 2012

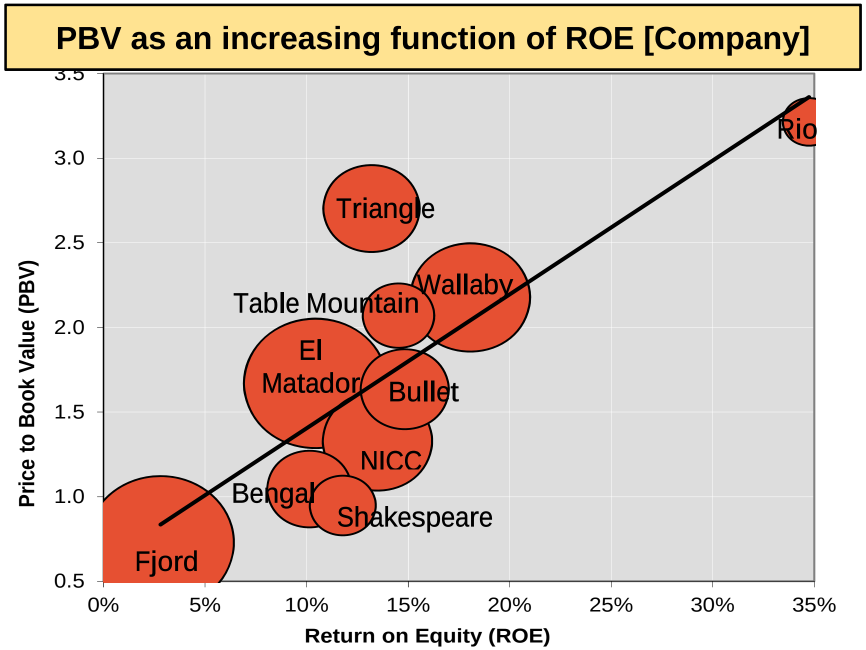
(10) Rio SA [South America]

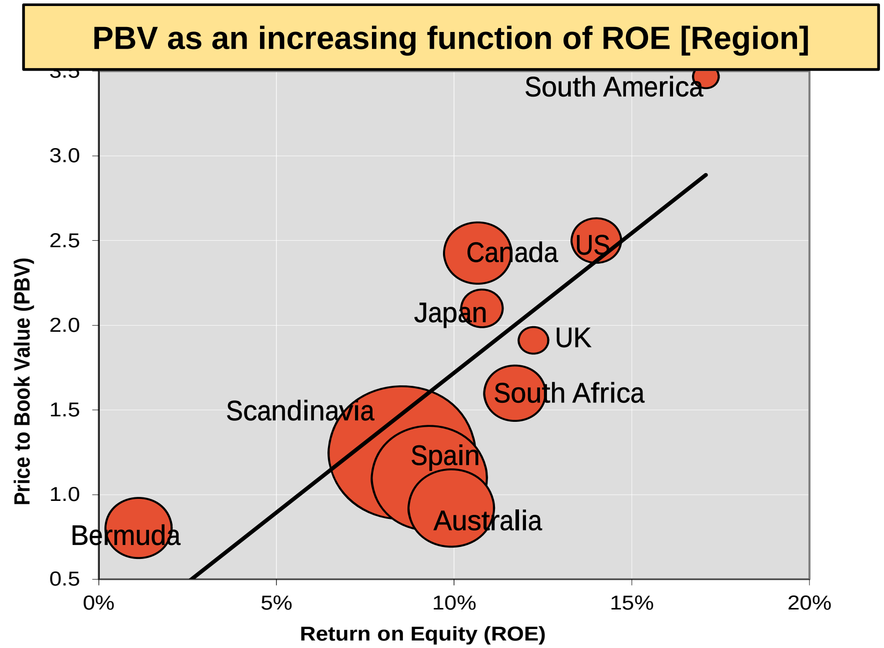
- CEO: Rolando da Sousa
- Headquarters: Rio de Janeiro, Brazil
- Mission is 'to take risks and provide solutions through family values that exceed expectations, guaranteeing competitive costs with corporate and social responsibility'
- Surged from 47th to 3rd in the rankings of Brazilian insurers since its inception in 1965
- Brazil projected to be one of the top 10 insurance markets globally by 2020 according to a Munich Re report from May 2013

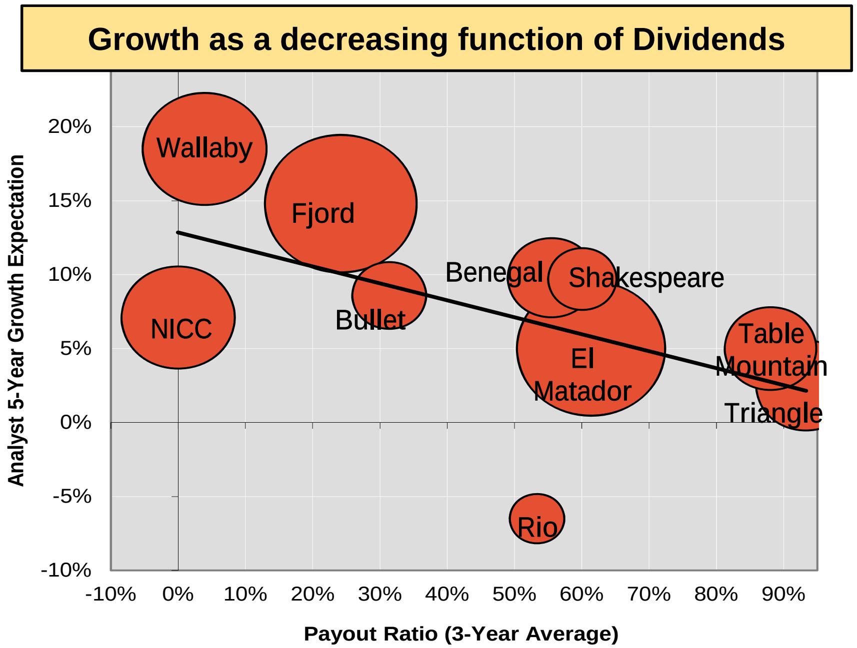
Valuation

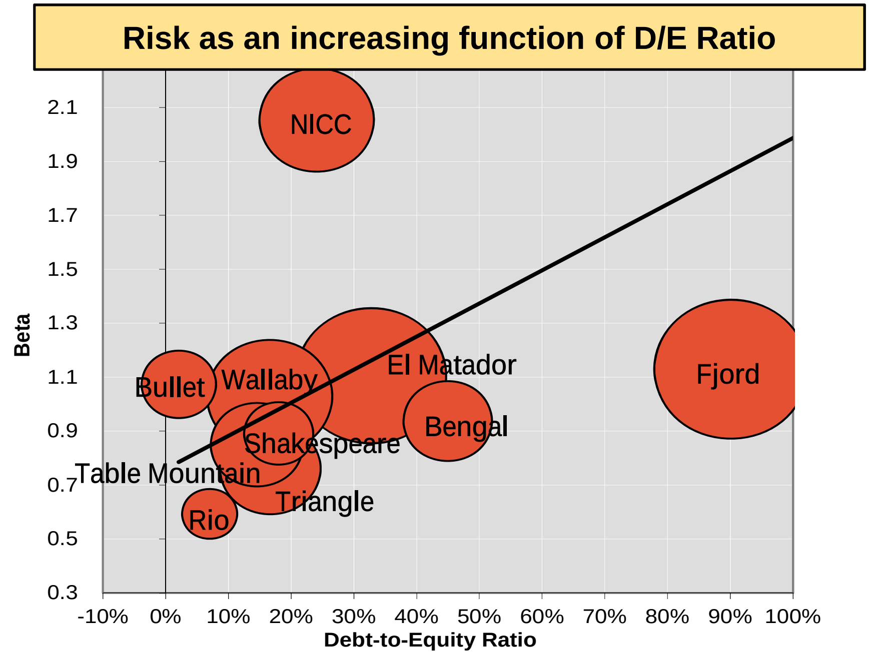
The CEO’s Dashboard

CEO's Dashboard









Valuation

The Actuary’s Projections

Dividend Discount Model (DDM)

- Overview – The DDM values a company as the present value of all future dividends
- Key assumptions –
  - *n* – Extraordinary growth period (typically, we value the company as the sum of (i) the present value of dividends over the next *n* years reflecting extraordinary or reasonably predictable growth in dividends and (ii) the present value of dividends subsequent to *n* years reflecting steady state growth assumptions)
  - D_0 – Current dividend
  - $D_1, D_2, \ldots, D_n$ – Projected dividends over extraordinary growth period
  - g – Steady-state growth rate of dividends for years $n+1$ and subsequent
  - p – Payout ratio or the percentage of earnings which are paid as dividends
  - ROE – Return on equity (typically expressed as net income divided by book value of equity)
  - k – Risk adjusted discount rate (or cost of capital)
  - β – Beta of the company describing volatility (typically, we assume it tends to 1.00 in the steady state)
  - r_f – Risk-free rate of return
  - $E(r_m) - r_f$ – Market risk premium (expected market return in excess of risk-free rate)
- Intermediate Steps – Based on the above, we compute the cost of capital and growth rate as:

$$k = r_f + \beta\left(\mathrm{E}[r_m] - r_f\right)$$
$$g = (1 - p)\mathrm{ROE}$$

- Valuation – Mathematically, this model is expressed as:

$$\begin{aligned} V_0 &= \sum_{i=1}^{n} \frac{D_i}{(1+k)^i} + \frac{D_n}{(1+k)^n} \sum_{i=1}^{\infty} \left(\frac{1+g}{1+k}\right)^i \\ &= \sum_{i=1}^{n} \frac{D_i}{(1+k)^i} + \frac{D_n}{k-g} \end{aligned}$$

Company #1 – Fjord (Scandinavia)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	16,995	25x	0.7x
(2)	Estimated Value from DDM	17,476	25x	0.8x
(3)	Book Value	22,957	33x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	14.8%

Table **(c) Valuation Model**

		Valuation Period		Total
Row	Statistic	Growth	Terminal	Value
(1)	Expected 2012 Dividend	500.0		
(2)	Growth Period	2.0		
(3)	Payout Ratio	25.0%	40.0%	
(4)	Return-on-Equity	3.5%	3.5%	
(5)	Growth Rate	2.6%	2.1%	
(6)	Risk-Adjusted Discount Rate	1.6%	5.0%	
(7)	Valuation	1,005	16,470	**17,476**

Table **(d) Dividend Payout Ratio**

		Net	Payout Ratio	
Year	Dividend	Income	Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004				
2005	126	435	52%	32%
2006	186	1,110	19%	17%
2007	183	610	26%	30%
2008	145	780	26%	23%
2009	329	751	33%	42%
2010	361	455	96%	68%
2011	390	811	372%	47%
2012	504	1,806	37%	26%
2013	0	738	52%	0%
2004-07	165	719	32%	26%
2007-11	282	681	111%	42%
2011-13	298	1,118	154%	24%
Growth	**500**			**25%**
Terminal				**40%**

Table **(e) Return-on-Equity (ROE)**

	Market	Net	ROE	
Year	Cap	Income	Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003				
2004	14,186	522	2%	3%
2005	21,963	1,079	6%	5%
2006	19,443	622	4%	3%
2007	24,864	682	3%	3%
2008	29,106	689	3%	3%
2009	20,898	489	2%	2%
2010	20,698	836	1%	4%
2011	26,270	1,642	4%	7%
2012	22,957	687	(1%)	3%
2004-07	18,531	741	4%	4%
2007-11	23,002	664	2%	3%
2011-13	23,309	1,055	1%	5%
Growth				**4%**
Terminal				**4%**

Table **(f) Risk-Adjusted Discount Rate**

	Risk Free	Market	Debt to	Beta		Risk Adj Disc
Year	Rate	Return	Equity	Bench.	Co.	Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003						
2004	1%	2%	96%	1.0	1.0	2%
2005	1%	5%	104%	1.2	1.3	6%
2006	2%	4%	96%	1.9	2.0	6%
2007	2%	3%	102%	2.1	1.6	4%
2008	2%	3%	99%	1.8	1.7	4%
2009	2%	2%	96%	1.0	0.9	2%
2010	1%	1%	93%	1.0	1.2	0%
2011	1%	4%	88%	1.0	1.1	4%
2012	1%	(1%)	90%	1.0	1.1	(1%)
2004-07	1%	3%	99%	1.4	1.5	5%
2007-11	2%	2%	97%	1.6	1.5	3%
2011-13	1%	1%	90%	1.0	1.1	1%
Growth	**1%**	**2%**			**1.1**	2%
Terminal	**2%**	**5%**			**1.0**	5%

Company #2 – El Matador (Spain)

Table **(a) Summary**

Estimate		Value	Multiples PE	Multiples PBV
(1)	Current Stock Market Value	16,154	12x	1.3x
(2)	Estimated Value from DDM	14,255	11x	1.2x
(3)	Book Value	12,055	9x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	5.0%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Valuation Period Terminal	Total Value
(1)	Expected 2012 Dividend	800.0		
(2)	Growth Period	3.0		
(3)	Payout Ratio	60.0%	60.0%	
(4)	Return-on-Equity	15.0%	10.0%	
(5)	Growth Rate	6.0%	4.0%	
(6)	Risk-Adjusted Discount Rate	9.5%	10.0%	
(7)	Valuation	2,324	11,931	**14,255**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Payout Ratio Co.
(1)	(2)	(3)	(4)	(5)
2004				
2005	92	201	38%	39%
2006	136	429	33%	32%
2007	108	571	35%	16%
2008	180	877	51%	22%
2009	397	1,301	52%	36%
2010	530	1,692	280%	30%
2011	811	1,166	114%	66%
2012	942	1,856	56%	54%
2013	733	1,316	66%	64%
2004-07	112	400	35%	29%
2007-11	405	1,121	106%	34%
2011-13	829	1,446	79%	61%
Growth	**800**			**60%**
Terminal				**60%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	ROE Co.
(1)	(2)	(3)	(4)	(5)
2003				
2004	1,894	199	8%	11%
2005	2,431	420	18%	16%
2006	3,175	638	20%	20%
2007	4,176	938	20%	20%
2008	5,569	1,366	16%	22%
2009	8,005	1,941	8%	22%
2010	8,420	1,231	10%	15%
2011	8,564	1,644	13%	20%
2012	12,055	1,304	8%	10%
2004-07	2,500	419	16%	15%
2007-11	5,869	1,223	15%	20%
2011-13	9,679	1,393	10%	15%
Growth				**15%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Beta Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003						
2004	6%	9%	25%	0.7	0.8	8%
2005	5%	20%	25%	0.7	0.9	19%
2006	6%	21%	28%	1.6	1.6	31%
2007	6%	19%	28%	0.9	1.6	27%
2008	6%	18%	27%	1.0	1.6	26%
2009	6%	8%	29%	0.9	0.7	7%
2010	5%	10%	29%	0.7	0.6	8%
2011	5%	13%	29%	0.7	0.7	11%
2012	5%	9%	33%	0.8	1.1	9%
2004-07	6%	17%	26%	1.0	1.1	19%
2007-11	6%	15%	28%	1.0	1.2	20%
2011-13	5%	11%	30%	0.7	0.8	9%
Growth	**5%**	**10%**			**0.9**	10%
Terminal	**6%**	**10%**			**1.0**	10%

Company #3 – Wallaby (Australia)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	11,315	11x	2.1x
(2)	Estimated Value from DDM	17,971	17x	3.3x
(3)	Book Value	5,444	5x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	18.5%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Terminal	Total Value
(1)	Expected 2012 Dividend	150.0		
(2)	Growth Period	10.0		
(3)	Payout Ratio	7.5%	20.0%	
(4)	Return-on-Equity	20.0%	10.0%	
(5)	Growth Rate	18.5%	8.0%	
(6)	Risk-Adjusted Discount Rate	9.6%	10.0%	
(7)	Valuation	2,183	15,788	**17,971**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004	23	403	51%	6%
2005	26	647	40%	4%
2006	28	1,146	24%	2%
2007	25	1,757	24%	2%
2008	31	1,394	28%	3%
2009	0	1,730	19%	0%
2010	0	1,242	19%	0%
2011	15	(77)	7%	(21%)
2012	96	1,163	25%	10%
2013	273	1,082	24%	22%
2004-07	25	988	35%	3%
2007-11	14	1,209	19%	(3%)
2011-13	128	723	19%	4%
Growth	**150**			**8%**
Terminal				**20%**

Table **(e) Return-on-Equity (ROE)**

Year	Book Value	Net Income	ROE Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003	3,056	374	5%	13%
2004	3,391	697	7%	19%
2005	4,880	1,295	12%	23%
2006	4,898	1,693	13%	32%
2007	6,230	1,394	11%	23%
2008	6,504	1,499	16%	25%
2009	4,442	1,242	14%	25%
2010	4,173	(72)	9%	(2%)
2011	5,979	962	10%	20%
2012	5,444	1,072	9%	18%
2004-07	4,056	1,015	9%	22%
2007-11	5,249	1,151	13%	21%
2011-13	5,199	654	9%	12%
Growth				**20%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	5%	4%	13%	0.6	1.0	4%
2004	4%	7%	12%	0.7	0.8	7%
2005	4%	11%	12%	0.8	0.8	10%
2006	4%	12%	13%	1.5	0.9	11%
2007	4%	12%	14%	1.1	0.1	5%
2008	4%	17%	15%	1.0	0.1	5%
2009	4%	16%	16%	0.8	0.7	12%
2010	3%	8%	17%	0.7	0.9	7%
2011	3%	11%	17%	0.6	0.9	10%
2012	3%	10%	17%	0.8	1.0	10%
2004-07	4%	9%	13%	0.9	0.9	8%
2007-11	4%	13%	15%	1.0	0.5	8%
2011-13	3%	10%	17%	0.7	0.9	9%
Growth	**3%**	**10%**			**1.0**	10%
Terminal	**4%**	**10%**			**1.0**	10%

Company #4 – NICC (Canada)

Table **(a) Summary**

Estimate		Value	Multiples	
			PE	PBV
(1)	Current Stock Market Value	9,429	7x	1.1x
(2)	Estimated Value from DDM	9,277	7x	1.1x
(3)	Book Value	8,281	6x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	7.1%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period		Total
		Growth	Terminal	Value
(1)	Expected 2012 Dividend	260.0		
(2)	Growth Period	10.0		
(3)	Payout Ratio	20.0%	45.0%	
(4)	Return-on-Equity	15.0%	10.0%	
(5)	Growth Rate	12.0%	5.5%	
(6)	Risk-Adjusted Discount Rate	14.5%	10.0%	
(7)	Valuation	2,359	6,919	**9,277**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Payout Ratio Co.
(1)	(2)	(3)	(4)	(5)
2004	37	94	50%	35%
2005	0	130	64%	0%
2006	0	162	22%	0%
2007	0	212	22%	0%
2008	215	325	25%	68%
2009	265	445	38%	60%
2010	0	1,206	77%	0%
2011	0	1,296	29%	0%
2012	0	1,195	35%	0%
2013	0	1,364	54%	0%
2004-07	9	150	39%	9%
2007-11	96	697	38%	26%
2011-13	0	1,285	39%	0%
Growth	**260**			**20%**
Terminal				**45%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	ROE Co.
(1)	(2)	(3)	(4)	(5)
2003	1,902	106	(6%)	6%
2004	1,249	126	7%	9%
2005	1,198	184	10%	12%
2006	1,800	230	11%	11%
2007	2,560	309	14%	12%
2008	3,775	454	14%	15%
2009	7,068	1,312	4%	19%
2010	6,913	1,158	11%	20%
2011	6,103	1,448	11%	22%
2012	8,281	1,377	9%	13%
2004-07	1,537	161	5%	10%
2007-11	4,423	693	11%	15%
2011-13	7,099	1,328	10%	18%
Growth				**15%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Beta Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	5%	(6%)	32%	0.7	0.6	(2%)
2004	4%	8%	31%	0.6	0.5	6%
2005	4%	11%	31%	1.1	1.1	11%
2006	3%	14%	32%	0.8	1.4	18%
2007	4%	15%	30%	0.9	1.4	19%
2008	4%	14%	27%	1.1	1.2	17%
2009	5%	4%	27%	1.0	0.9	4%
2010	4%	11%	27%	1.0	1.1	12%
2011	4%	10%	26%	1.0	1.5	13%
2012	5%	9%	24%	1.4	2.0	14%
2004-07	4%	6%	31%	0.8	0.9	8%
2007-11	4%	12%	28%	1.0	1.2	14%
2011-13	4%	10%	25%	1.2	1.5	13%
Growth	**6%**	**10%**			**2.0**	15%
Terminal	**4%**	**10%**			**1.0**	10%

Company #5 – Triangle (Bermuda)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	7,310	18x	2.3x
(2)	Estimated Value from DDM	4,287	10x	1.3x
(3)	Book Value	3,225	8x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	2.5%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Terminal	Total Value
(1)	Expected 2012 Dividend	160.0		
(2)	Growth Period	7.0		
(3)	Payout Ratio	35.0%	35.0%	
(4)	Return-on-Equity	7.5%	10.0%	
(5)	Growth Rate	4.9%	6.5%	
(6)	Risk-Adjusted Discount Rate	8.5%	10.0%	
(7)	Valuation	1,013	3,273	**4,287**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004				
2005				
2006	0	134	7%	0%
2007	0	550	10%	0%
2008	72	671	12%	10%
2009	123	658	12%	20%
2010	136	351	11%	33%
2011	154	97	20%	132%
2012	152	122	14%	113%
2013	145	388	8%	35%
2004-07	0	342	8%	0%
2007-11	97	465	13%	39%
2011-13	150	203	14%	93%
Growth	**160**			**35%**
Terminal				**35%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003				
2004				
2005	879	133	11%	16%
2006	1,690	501	10%	29%
2007	2,557	624	12%	29%
2008	3,181	592	11%	20%
2009	3,051	408	16%	11%
2010	2,387	109	9%	4%
2011	2,502	111	9%	5%
2012	3,225	414	15%	13%
2004-07	1,285	317	11%	23%
2007-11	2,573	447	12%	19%
2011-13	2,705	211	11%	7%
Growth				**8%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003						
2004						
2005	4%	11%	18%	0.8	1.0	11%
2006	4%	11%	16%	0.9	1.1	12%
2007	4%	12%	16%	0.8	0.9	12%
2008	5%	11%	16%	0.9	1.1	12%
2009	3%	14%	16%	0.8	1.0	14%
2010	3%	8%	15%	0.6	0.8	7%
2011	3%	8%	16%	0.7	0.6	6%
2012	3%	15%	17%	0.8	0.7	12%
2004-07	4%	11%	17%	0.8	1.0	12%
2007-11	4%	11%	16%	0.8	1.0	11%
2011-13	3%	10%	16%	0.7	0.7	8%
Growth	**3%**	**12%**			**0.7**	9%
Terminal	**5%**	**10%**			**1.0**	10%

Company #6 – Table Mountain (South Africa)

Table **(a) Summary**

Estimate		Value	Multiples	
			PE	PBV
(1)	Current Stock Market Value	6,160	11x	1.6x
(2)	Estimated Value from DDM	5,681	11x	1.5x
(3)	Book Value	3,768	7x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	5.0%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period		Total
		Growth	Terminal	Value
(1)	Expected 2012 Dividend	300.0		
(2)	Growth Period	10.0		
(3)	Payout Ratio	75.0%	50.0%	
(4)	Return-on-Equity	15.0%	10.0%	
(5)	Growth Rate	3.8%	5.0%	
(6)	Risk-Adjusted Discount Rate	10.0%	10.0%	
(7)	Valuation	2,338	3,343	**5,681**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio	
			Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004			15%	
2005			15%	
2006			14%	
2007			25%	
2008			43%	
2009			32%	
2010			77%	
2011			92%	
2012			72%	
2013	451	477	49%	88%
2004-07			17%	
2007-11			54%	
2011-13	451	477	71%	88%
Growth	**300**			**75%**
Terminal				**50%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE	
			Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003			(2%)	
2004			(1%)	
2005			10%	
2006			16%	
2007			17%	
2008			24%	
2009			9%	
2010			4%	
2011			8%	
2012	3,768	538	13%	15%
2004-07			6%	
2007-11			14%	
2011-13	3,768	538	9%	15%
Growth				**15%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta		Risk Adj Disc Rate
				Bench.	Co.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	7%	(2%)		0.9		7%
2004	5%	(1%)		1.0		5%
2005	5%	10%		1.2		5%
2006	4%	14%		0.7		4%
2007	4%	20%		0.8		4%
2008	5%	25%		0.8		5%
2009	4%	10%		1.2		4%
2010	4%	5%		1.0		4%
2011	4%	8%		0.7		4%
2012	2%	11%	15%	1.0	0.8	10%
2004-07	5%	5%		0.9		5%
2007-11	4%	15%		0.9		4%
2011-13	3%	8%	15%	0.9	0.8	6%
Growth	**6%**	**10%**			**1.0**	10%
Terminal	**4%**	**10%**			**1.0**	10%

Company #7 – Bengal (US)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	5,648	11x	1.1x
(2)	Estimated Value from DDM	7,444	14x	1.4x
(3)	Book Value	5,378	10x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	9.8%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period: Growth	Valuation Period: Terminal	Total Value
(1)	Expected 2012 Dividend	350.0		
(2)	Growth Period	5.0		
(3)	Payout Ratio	50.0%	50.0%	
(4)	Return-on-Equity	12.5%	10.0%	
(5)	Growth Rate	6.3%	5.0%	
(6)	Risk-Adjusted Discount Rate	12.8%	10.0%	
(7)	Valuation	1,558	5,885	**7,444**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Payout Ratio Co.
(1)	(2)	(3)	(4)	(5)
2004				
2005	0	(526)	35%	0%
2006	0	(57)	44%	0%
2007	177	150	36%	114%
2008	262	1,022	36%	21%
2009	0	940	23%	0%
2010	218	1,477	76%	19%
2011	340	853	334%	42%
2012	388	682	38%	54%
2013	351	513	400%	71%
2004-07	59	(144)	38%	38%
2007-11	199	888	101%	39%
2011-13	359	683	257%	56%
Growth	**350**			**50%**
Terminal				**50%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	ROE Co.
(1)	(2)	(3)	(4)	(5)
2003				
2004	3,065	(505)	(9%)	(16%)
2005	3,979	(58)	19%	(1%)
2006	4,820	149	20%	4%
2007	4,973	1,054	18%	23%
2008	5,212	912	20%	19%
2009	6,727	1,316	6%	23%
2010	6,290	811	1%	14%
2011	4,545	621	21%	14%
2012	5,378	529	14%	10%
2004-07	3,955	(138)	10%	(5%)
2007-11	5,604	848	13%	17%
2011-13	5,405	654	12%	13%
Growth				**13%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Beta Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003						
2004	5%	(8%)	42%	0.6	1.4	(13%)
2005	5%	19%	39%	1.0	2.4	39%
2006	5%	19%	43%	0.6	2.3	37%
2007	4%	18%	47%	0.6	1.8	29%
2008	5%	19%	52%	0.8	2.0	33%
2009	5%	5%	55%	0.8	0.9	5%
2010	4%	1%	52%	0.5	0.7	2%
2011	4%	20%	48%	0.4	0.5	12%
2012	3%	15%	45%	0.9	0.9	13%
2004-07	5%	10%	42%	0.7	2.0	21%
2007-11	5%	12%	50%	0.7	1.5	21%
2011-13	3%	12%	48%	0.6	0.7	9%
Growth	**2%**	**14%**			**0.9**	13%
Terminal	**5%**	**10%**			**1.0**	10%

Company #8 – Bullet (Japan)

Table **(a) Summary**

Estimate		Value	Multiples PE	Multiples PBV
(1)	Current Stock Market Value	4,014	10x	1.7x
(2)	Estimated Value from DDM	4,106	10x	1.7x
(3)	Book Value	2,406	6x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	8.6%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Valuation Period Terminal	Total Value
(1)	Expected 2012 Dividend	130.0		
(2)	Growth Period	15.0		
(3)	Payout Ratio	35.0%	50.0%	
(4)	Return-on-Equity	15.0%	10.0%	
(5)	Growth Rate	9.8%	5.0%	
(6)	Risk-Adjusted Discount Rate	13.1%	10.0%	
(7)	Valuation	1,593	2,513	**4,106**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Payout Ratio Co.
(1)	(2)	(3)	(4)	(5)
2004				
2005				
2006	0	57	8%	0%
2007	0	72	2%	0%
2008	0	234	0%	0%
2009	0	284	1%	0%
2010	15	151	37%	11%
2011	59	124	35%	43%
2012	38	192	31%	20%
2013	134	372	28%	31%
2004-07	0	65	5%	0%
2007-11	15	173	15%	11%
2011-13	77	229	31%	31%
Growth	**130**			**35%**
Terminal				**50%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	ROE Co.
(1)	(2)	(3)	(4)	(5)
2003				
2004				
2005	259	51	13%	23%
2006	451	63	14%	17%
2007	1,022	210	19%	21%
2008	961	287	16%	30%
2009	1,060	155	15%	15%
2010	1,208	122	9%	11%
2011	2,204	196	13%	10%
2012	2,406	402	15%	15%
2004-07	355	57	13%	20%
2007-11	940	167	15%	19%
2011-13	1,939	240	12%	12%
Growth				**15%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Beta Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003						
2004						
2005	17%	12%	2%	1.1	1.1	12%
2006	20%	13%	3%	0.1	0.0	20%
2007	14%	22%	2%	0.4	0.7	20%
2008	10%	19%	2%	0.3	1.0	19%
2009	15%	14%	2%	0.6	1.1	13%
2010	10%	8%	2%	0.5	0.6	9%
2011	10%	12%	2%	0.5	0.7	11%
2012	11%	15%	2%	0.4	1.0	15%
2004-07	19%	13%	2%	0.6	0.5	16%
2007-11	14%	15%	2%	0.4	0.7	16%
2011-13	10%	12%	2%	0.5	0.8	12%
Growth	**12%**	**14%**			**0.8**	13%
Terminal	**8%**	**10%**			**1.0**	10%

Company #9 – Shakespeare (UK)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	3,432	9x	1.0x
(2)	Estimated Value from DDM	3,869	11x	1.1x
(3)	Book Value	3,590	10x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	9.7%

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Terminal	Total Value
(1)	Expected 2012 Dividend	115.0		
(2)	Growth Period	5.0		
(3)	Payout Ratio	20.0%	35.0%	
(4)	Return-on-Equity	12.5%	10.0%	
(5)	Growth Rate	10.0%	6.5%	
(6)	Risk-Adjusted Discount Rate	9.3%	10.0%	
(7)	Valuation	583	3,286	**3,869**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004			25%	
2005			25%	
2006			20%	
2007			23%	
2008			19%	
2009			13%	
2010	41	144	21%	29%
2011	70	49	11%	140%
2012	102	844	14%	13%
2013	94	374	17%	27%
2004-07			23%	
2007-11	56	96	17%	85%
2011-13	89	422	14%	60%
Growth	**115**			**20%**
Terminal				**35%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003			(4%)	
2004			9%	
2005			12%	
2006			9%	
2007			(5%)	
2008			17%	
2009	2,112	160	11%	8%
2010	3,808	48	5%	1%
2011	3,460	826	14%	23%
2012	3,590	366	11%	12%
2004-07			7%	
2007-11	2,960	104	7%	5%
2011-13	3,619	413	10%	12%
Growth				**13%**
Terminal				**10%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	4%	(3%)		0.7		4%
2004	4%	10%		0.5		4%
2005	5%	12%		0.8		5%
2006	4%	9%		0.6		4%
2007	5%	(6%)		0.9		5%
2008	5%	16%		1.0		5%
2009	3%	9%	17%	0.9	0.6	7%
2010	3%	6%	19%	1.0	0.4	4%
2011	3%	14%	20%	0.7	0.4	8%
2012	3%	12%	18%	0.8	0.8	10%
2004-07	4%	7%		0.6		4%
2007-11	4%	7%	18%	0.9	0.5	5%
2011-13	3%	11%	19%	0.8	0.6	8%
Growth	**3%**	**12%**			**0.8**	9%
Terminal	**4%**	**10%**			**1.0**	10%

Company #10 – Rio (South America)

Table **(a) Summary**

Estimate		Value	Multiples PE	PBV
(1)	Current Stock Market Value	2,189	8x	2.9x
(2)	Estimated Value from DDM	2,309	9x	3.0x
(3)	Book Value	758	3x	

Table **(b) Analyst's 5-Year Growth Expectation**

Estimate	Value
Expectation	(6.5%)

Table **(c) Valuation Model**

Row	Statistic	Valuation Period Growth	Terminal	Total Value
(1)	Expected 2012 Dividend	85.0		
(2)	Growth Period	5.0		
(3)	Payout Ratio	30.0%	55.0%	
(4)	Return-on-Equity	25.0%	15.0%	
(5)	Growth Rate	17.5%	6.8%	
(6)	Risk-Adjusted Discount Rate	11.7%	12.5%	
(7)	Valuation	472	1,837	**2,309**

Table **(d) Dividend Payout Ratio**

Year	Dividend	Net Income	Payout Ratio Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2004	13	37	45%	40%
2005	28	60	39%	42%
2006	29	199	24%	17%
2007	46	418	38%	13%
2008	68	322	22%	18%
2009	164	301	77%	63%
2010	4	34	81%	13%
2011	58	85	46%	79%
2012	73	155	46%	49%
2013	81	265	27%	32%
2004-07	29	178	36%	28%
2007-11	68	232	53%	37%
2011-13	70	168	40%	53%
Growth	**85**			**30%**
Terminal				**55%**

Table **(e) Return-on-Equity (ROE)**

Year	Market Cap	Net Income	ROE Bench.	Co.
(1)	(2)	(3)	(4)	(5)
2003	307	36	12%	13%
2004	472	60	13%	12%
2005	620	186	19%	34%
2006	942	370	36%	44%
2007	1,056	344	32%	29%
2008	1,051	287	36%	29%
2009	560	36	6%	6%
2010	564	84	15%	15%
2011	722	133	18%	21%
2012	758	265	17%	35%
2004-07	585	163	20%	26%
2007-11	835	224	25%	25%
2011-13	681	161	17%	24%
Growth				**25%**
Terminal				**15%**

Table **(f) Risk-Adjusted Discount Rate**

Year	Risk Free Rate	Market Return	Debt to Equity	Beta Bench.	Co.	Risk Adj Disc Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003	13%	11%	8%	0.7	0.7	12%
2004	10%	12%	8%	0.5	0.5	11%
2005	7%	20%	8%	0.7	0.6	14%
2006	9%	30%	7%	0.4	0.8	27%
2007	7%	32%	7%	0.5	0.6	23%
2008	9%	37%	7%	0.6	0.3	18%
2009	7%	7%	7%	0.9	0.8	7%
2010	9%	17%	8%	0.4	0.5	13%
2011	9%	16%	7%	0.3	0.2	11%
2012	9%	17%	7%	0.1	0.5	13%
2004-07	10%	18%	8%	0.6	0.7	16%
2007-11	8%	25%	7%	0.6	0.6	17%
2011-13	9%	17%	7%	0.3	0.4	12%
Growth	**9%**	**18%**			**0.4**	12%
Terminal	**5%**	**13%**			**1.0**	13%