



Corporate Finance: Spring 2002

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First Principles

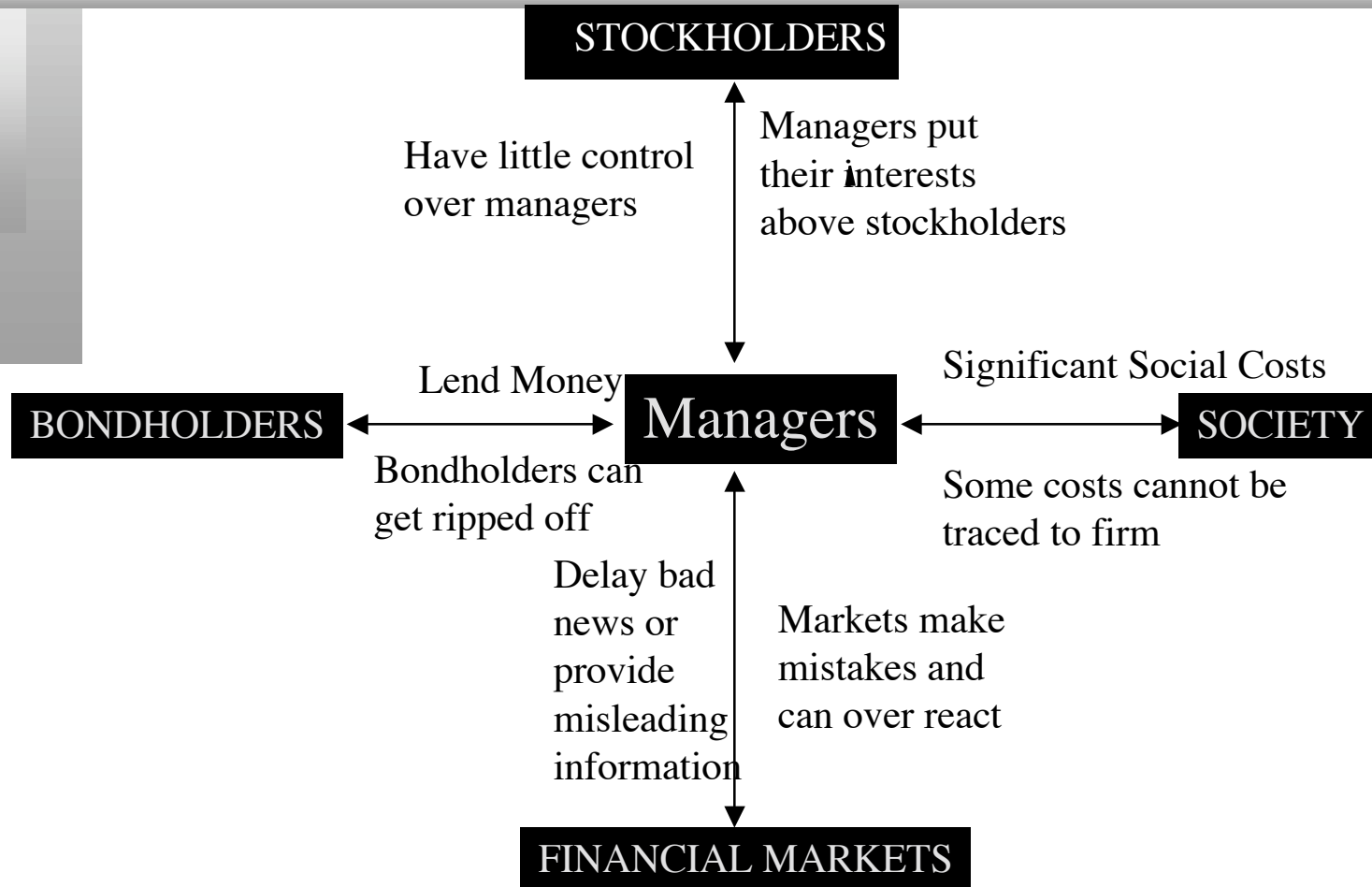
- Invest in projects that yield a return greater than the minimum acceptable hurdle rate.
 - The hurdle rate should be higher for riskier projects and reflect the financing mix used - owners' funds (equity) or borrowed money (debt)
 - Returns on projects should be measured based on cash flows generated and the timing of these cash flows; they should also consider both positive and negative side effects of these projects.
- Choose a financing mix that minimizes the hurdle rate and matches the assets being financed.
- If there are not enough investments that earn the hurdle rate, return the cash to stockholders.
 - The form of returns - dividends and stock buybacks - will depend upon the stockholders' characteristics.

Objective: Maximize the Value of the Firm

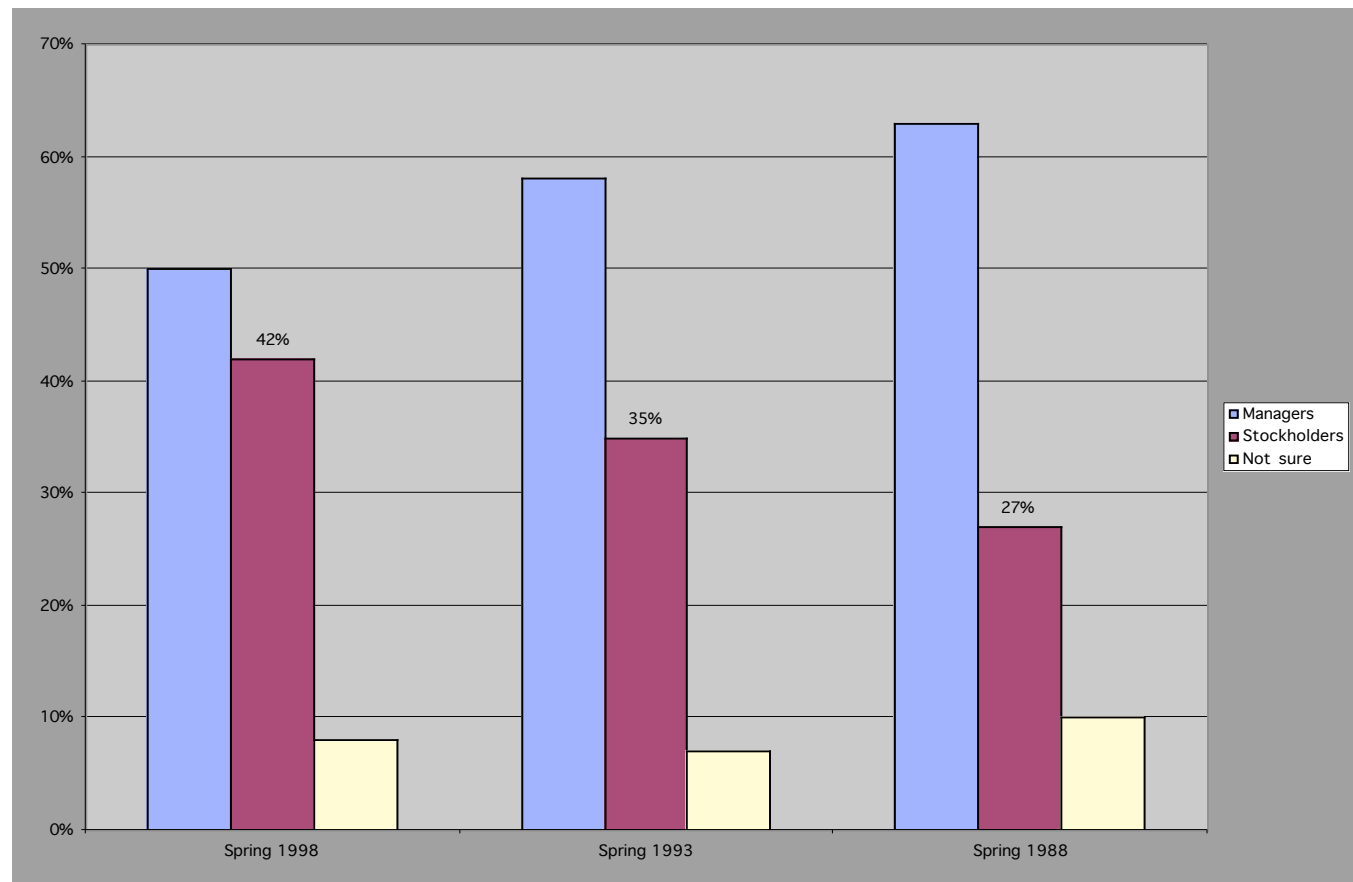
Ponderous Thoughts... (or maybe not)

- Corporate financial analysis is 95% perspiration, 5% inspiration.
- There are few facts and lots of opinions...
- The model is your tool... You are not the model's tool...
- Static analysis in a dynamic world is frustrating...

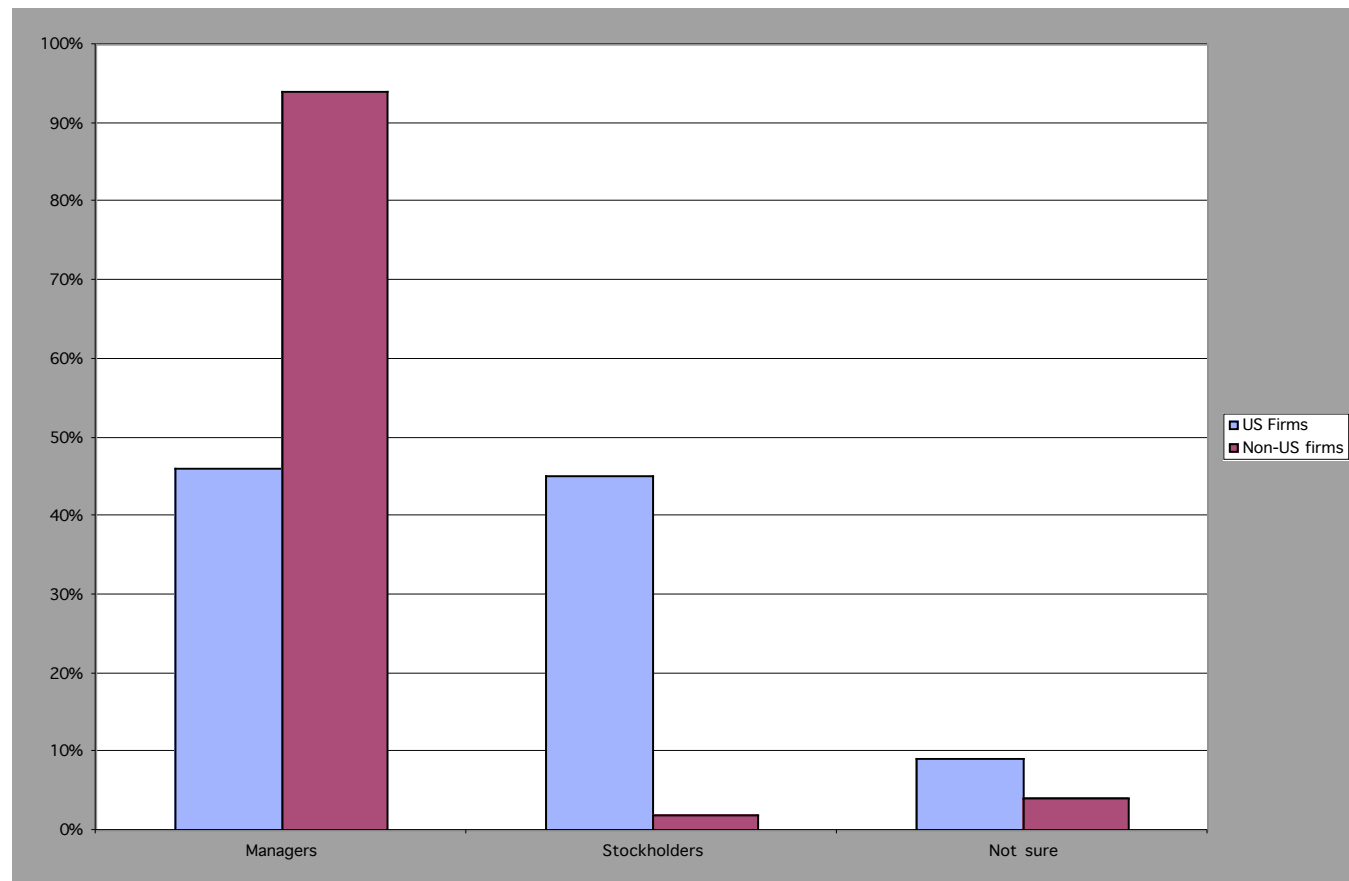
The Breakdown in the Classical Objective Function



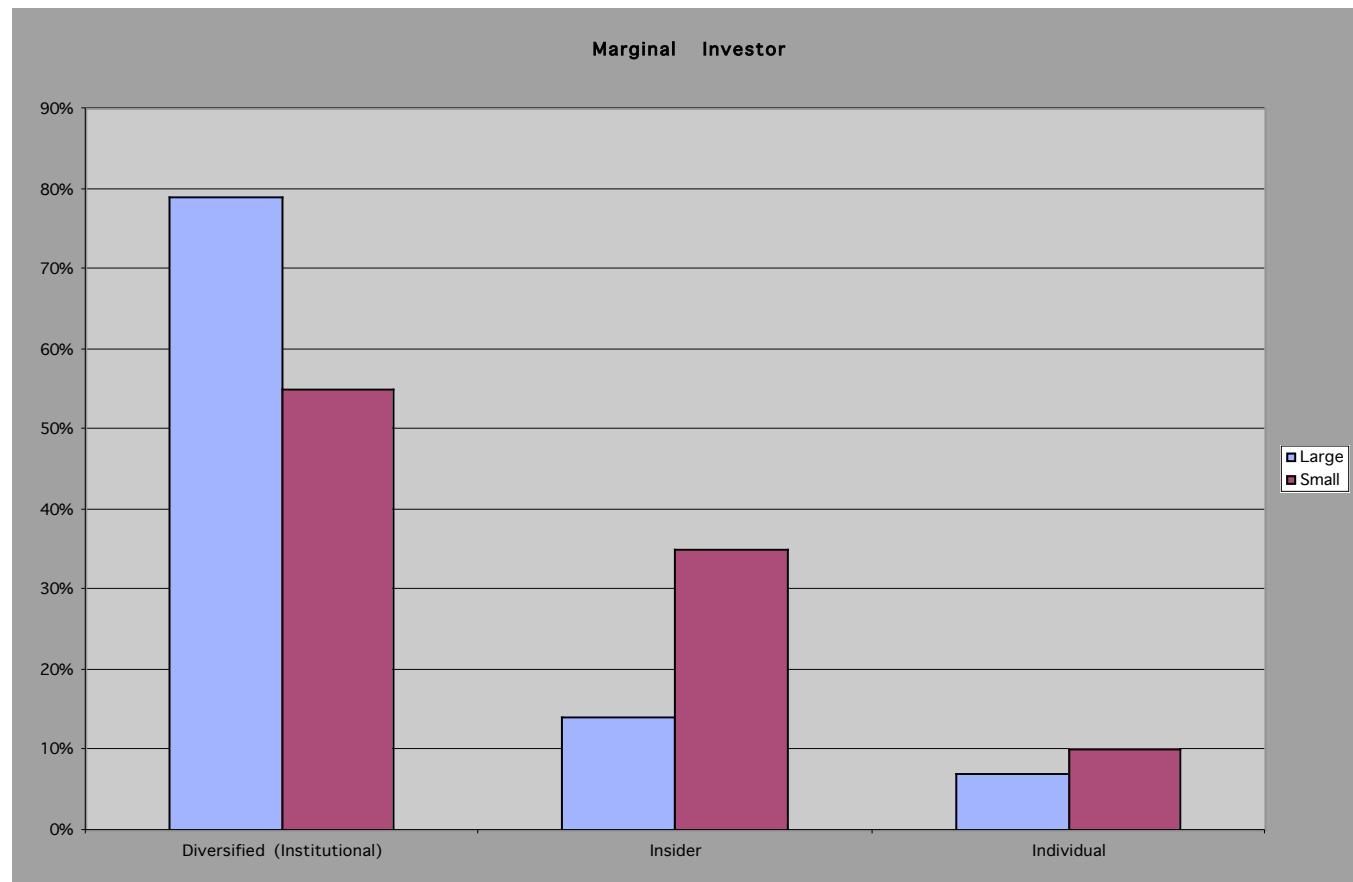
I. Where does the power lie?



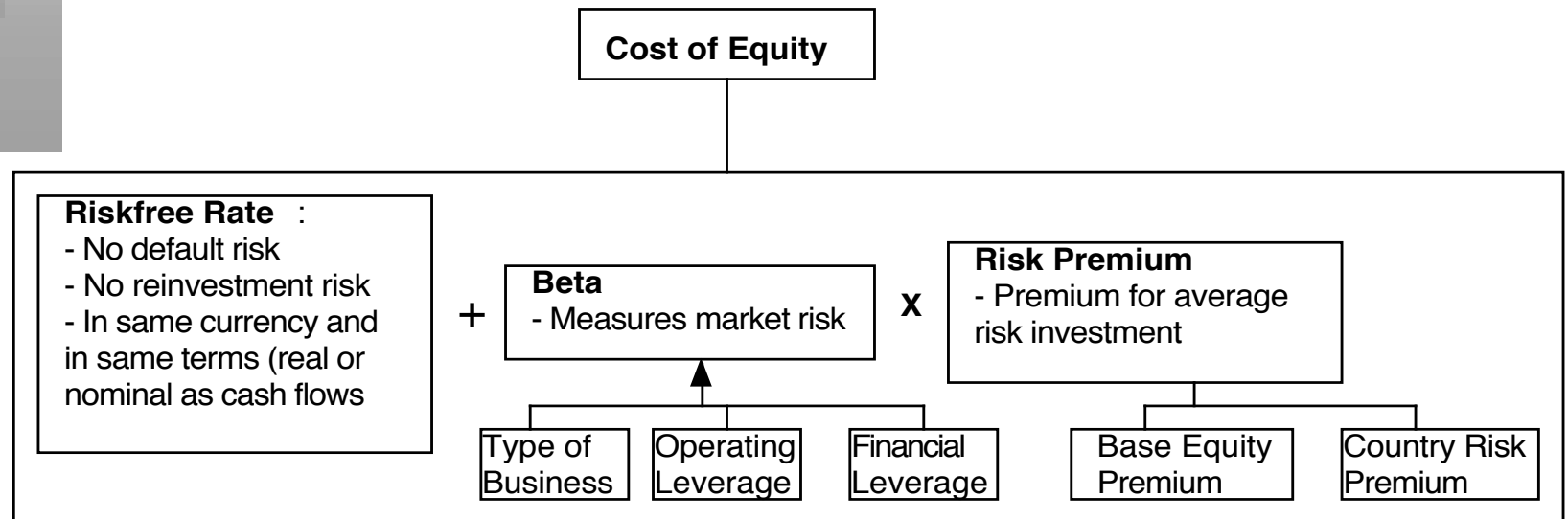
US versus Non-US firms: Spring 1999



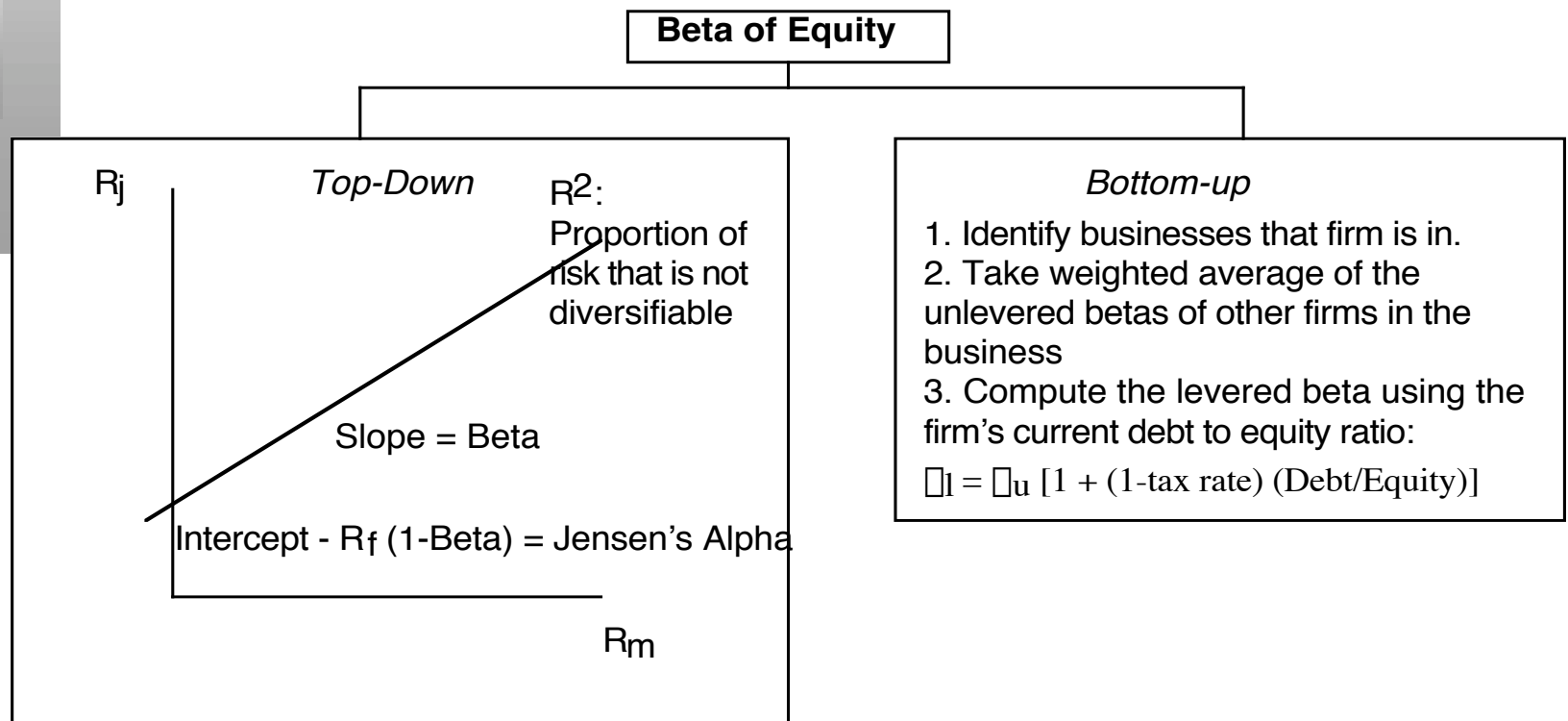
II. Who is your marginal investor?



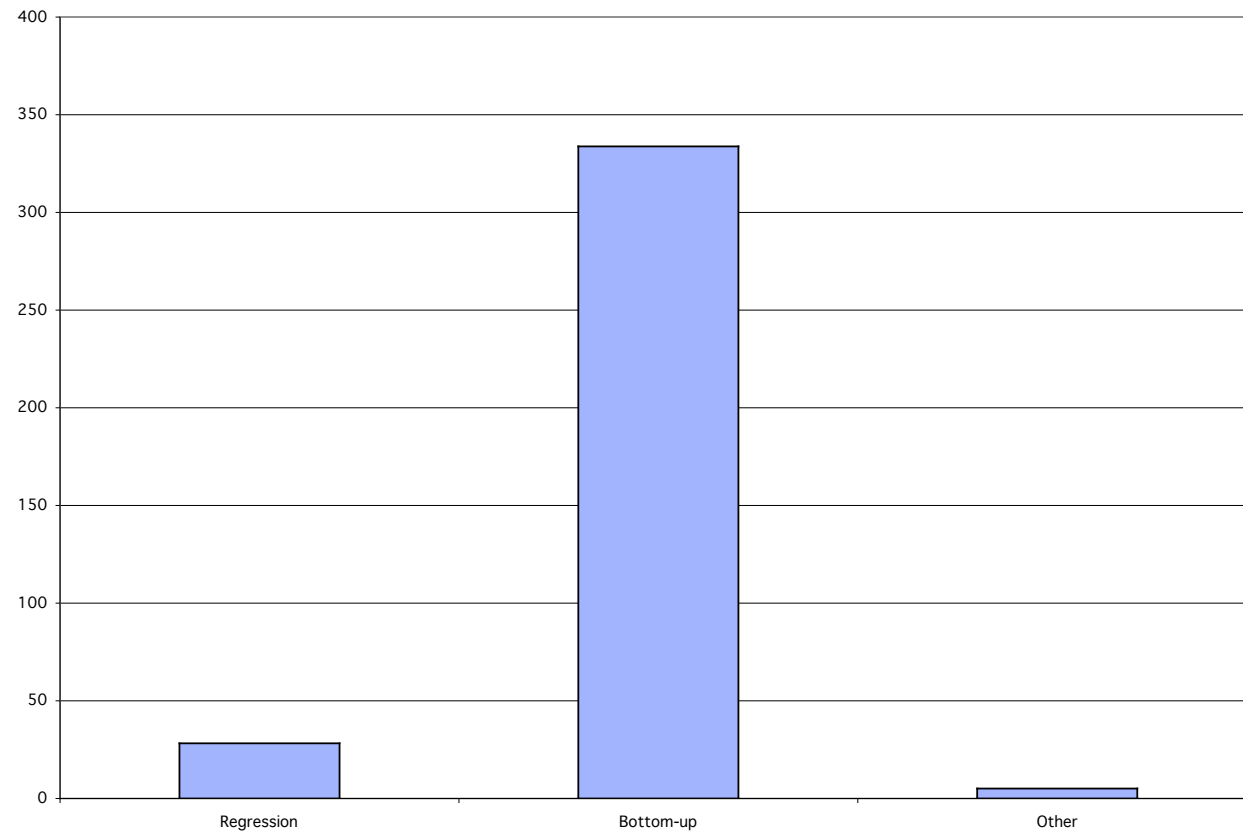
III. Risk Profiles and Costs of Equity



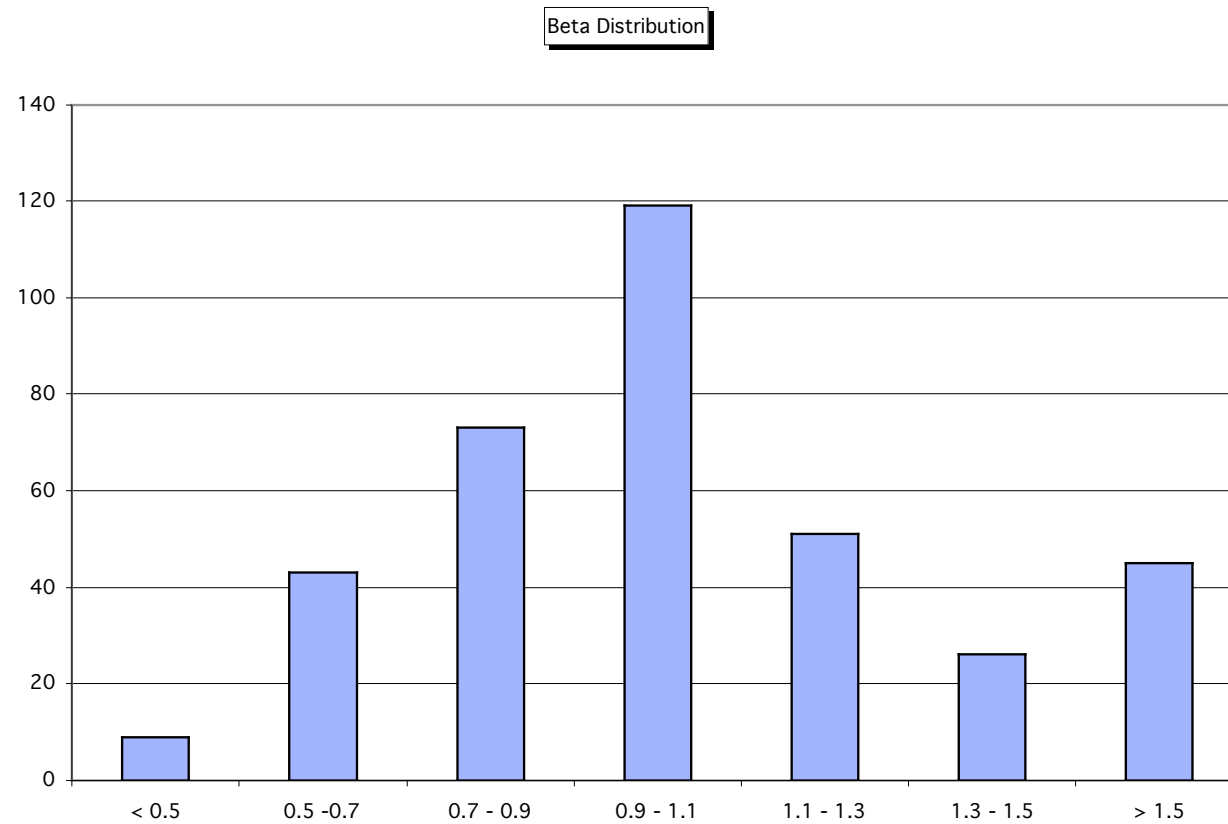
Beta: The Standard Approach



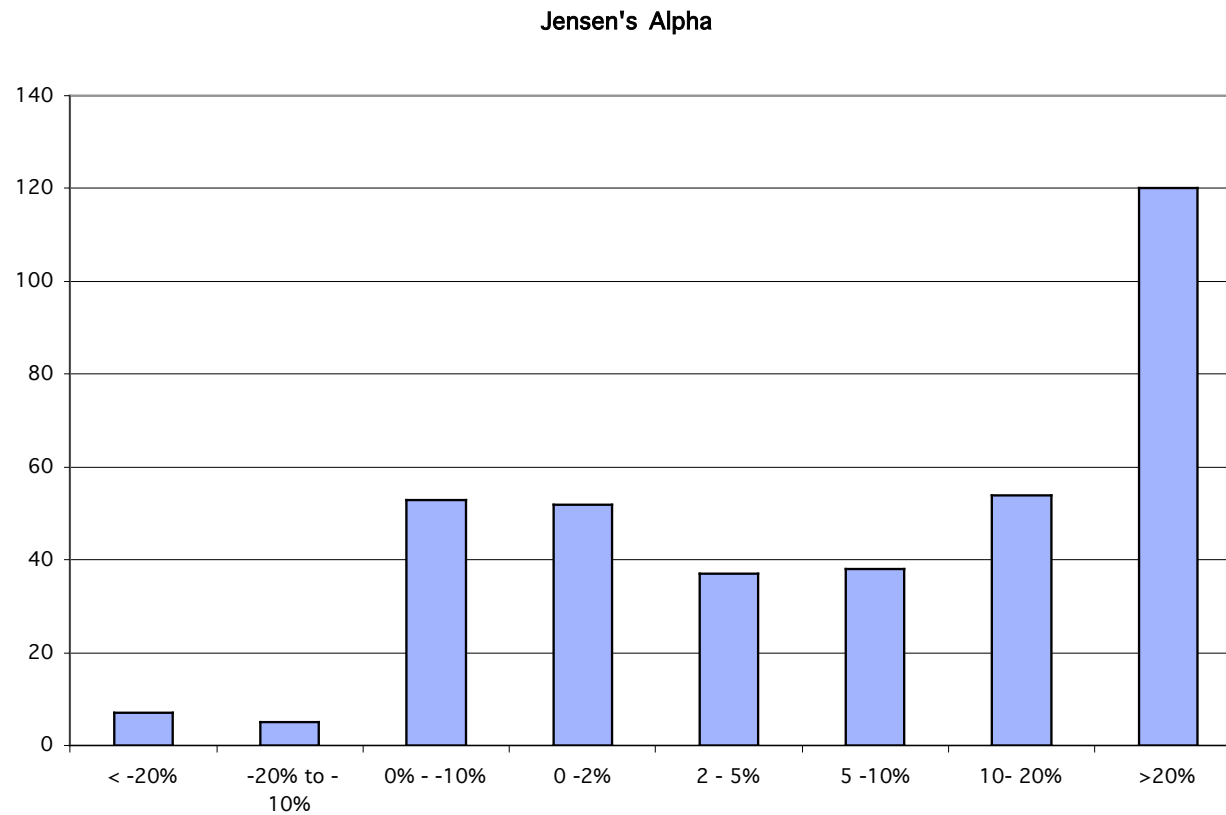
Regression Estimation Approaches



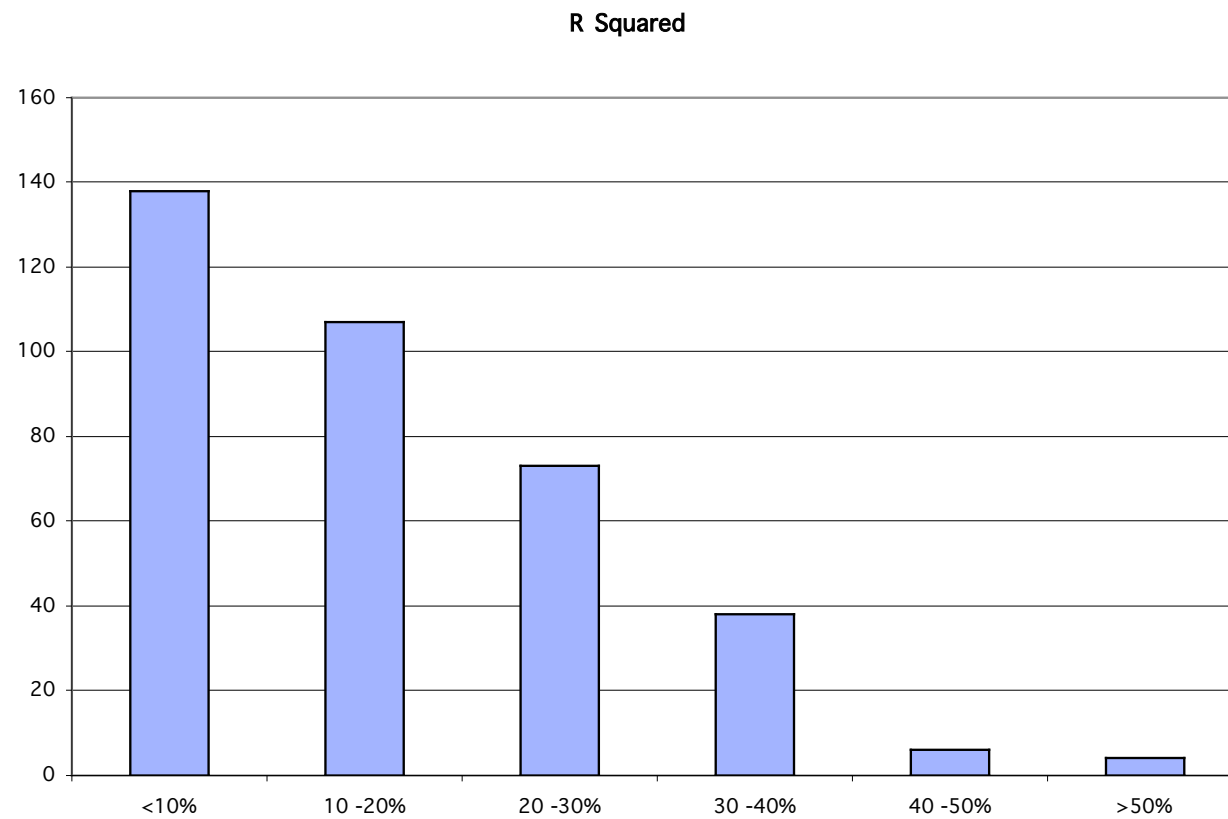
Beta Distribution



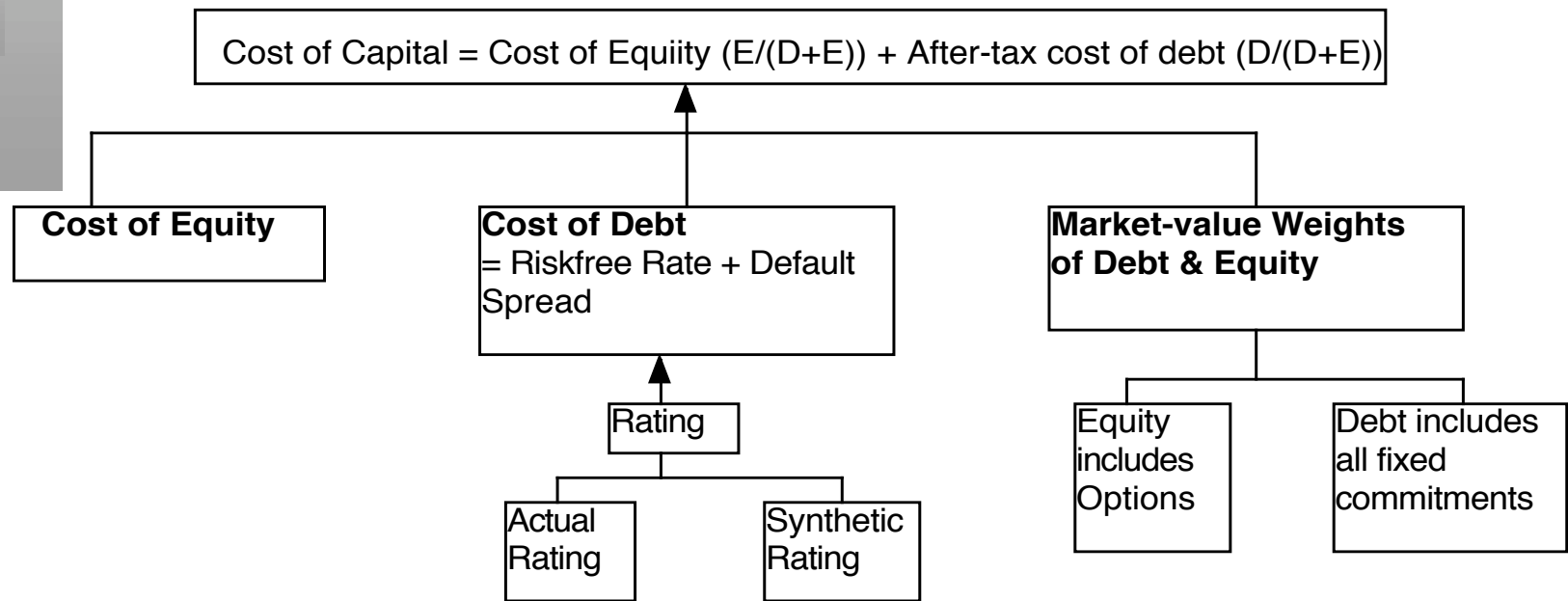
Jensen's Alpha Distribution



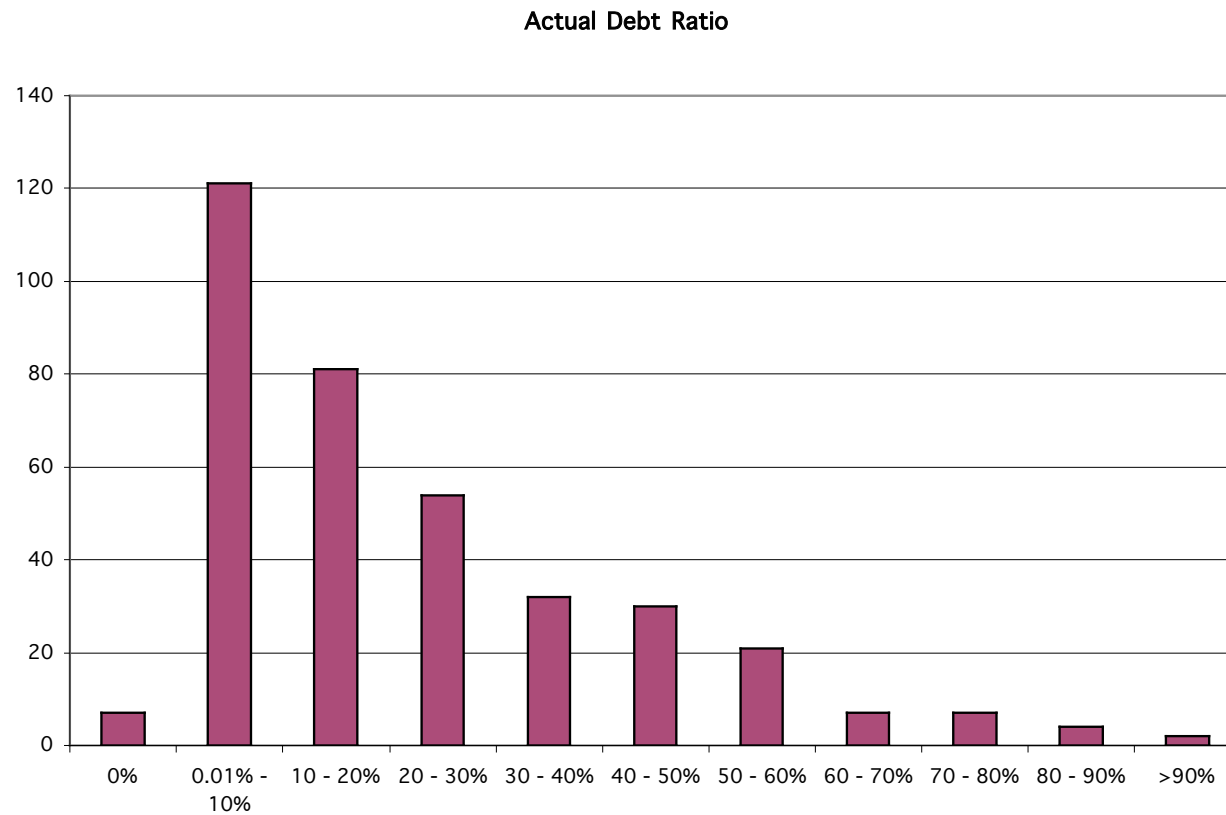
R Squared



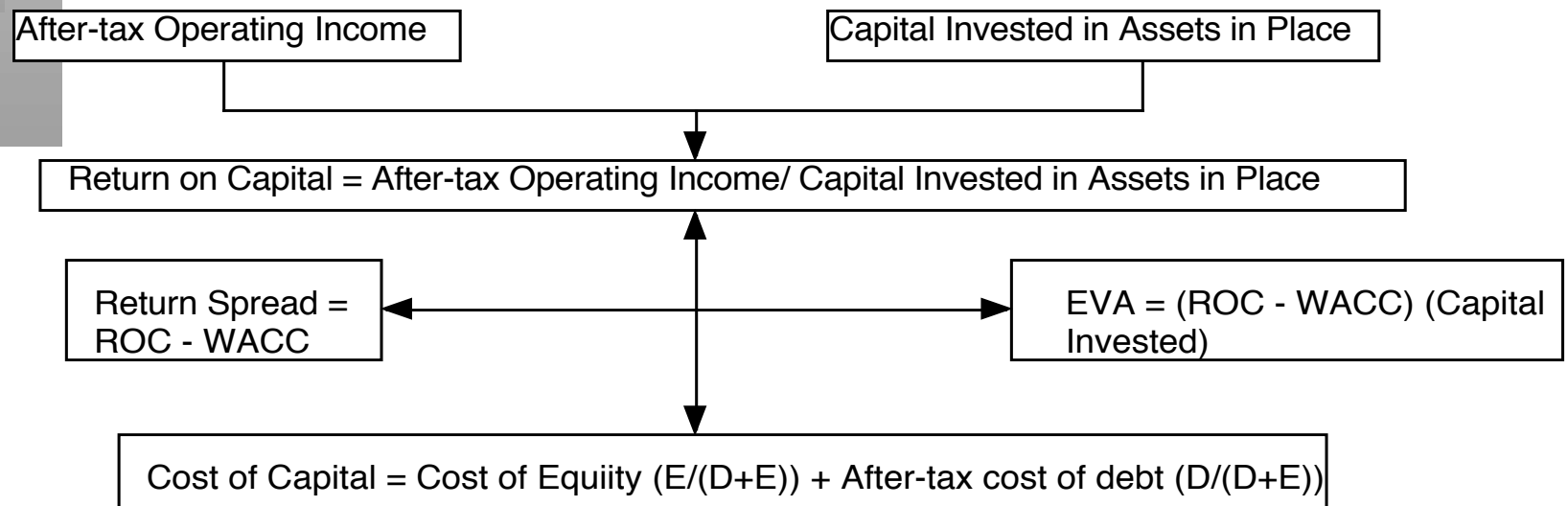
Cost of Capital



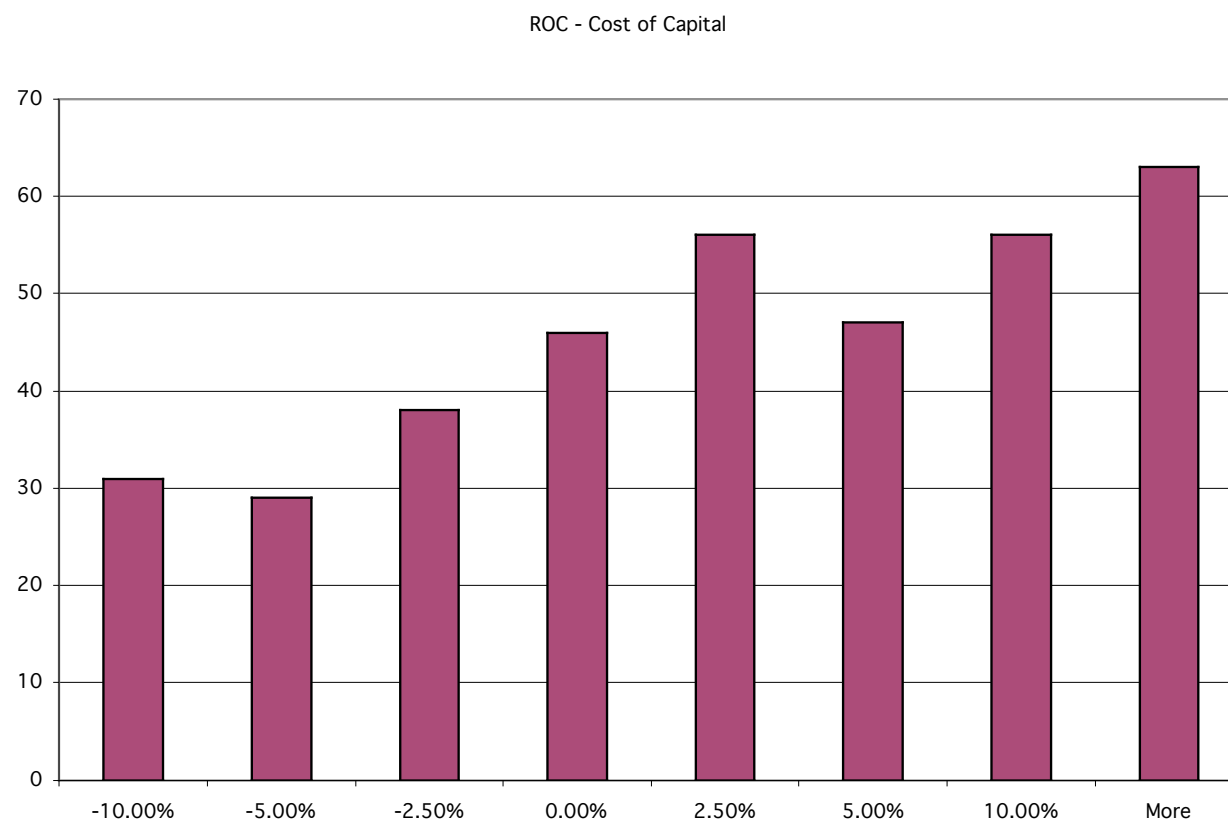
Distribution of Current Market Value Debt Ratios



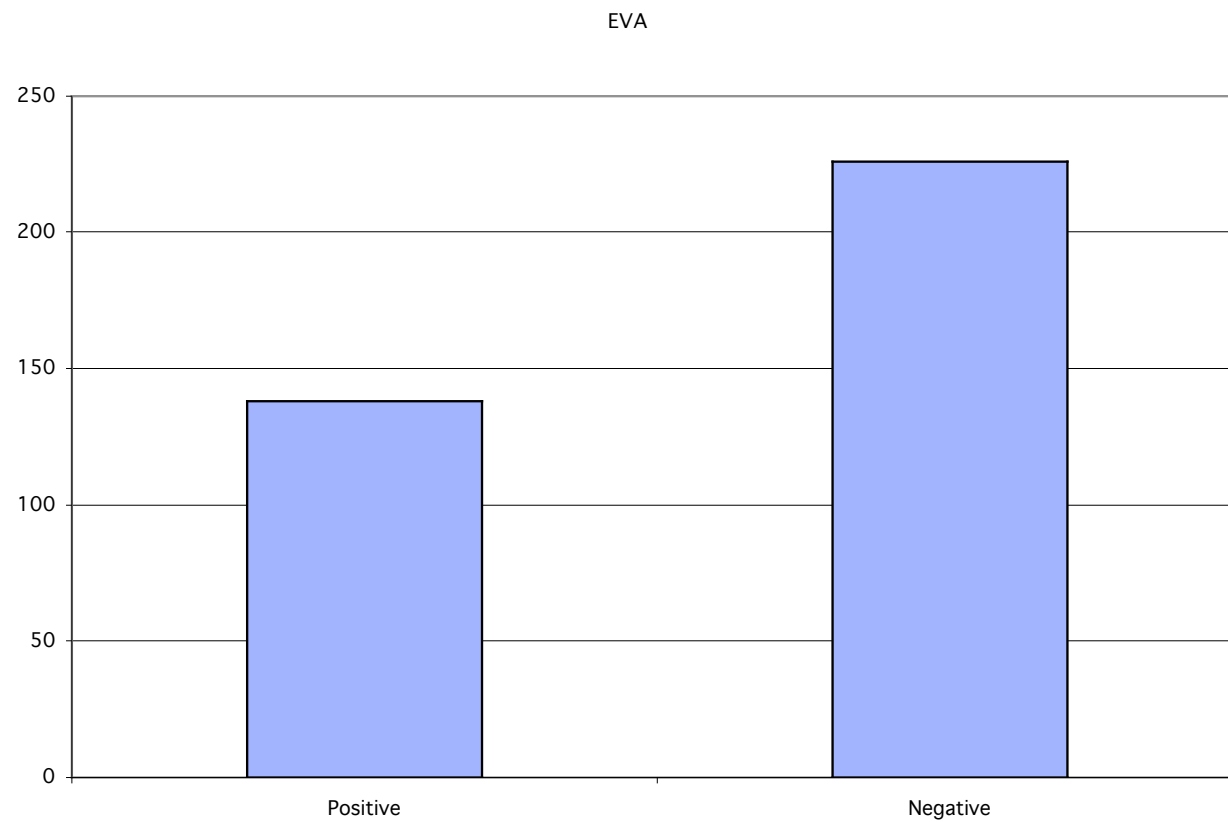
The Quality of Investments: The Firm View



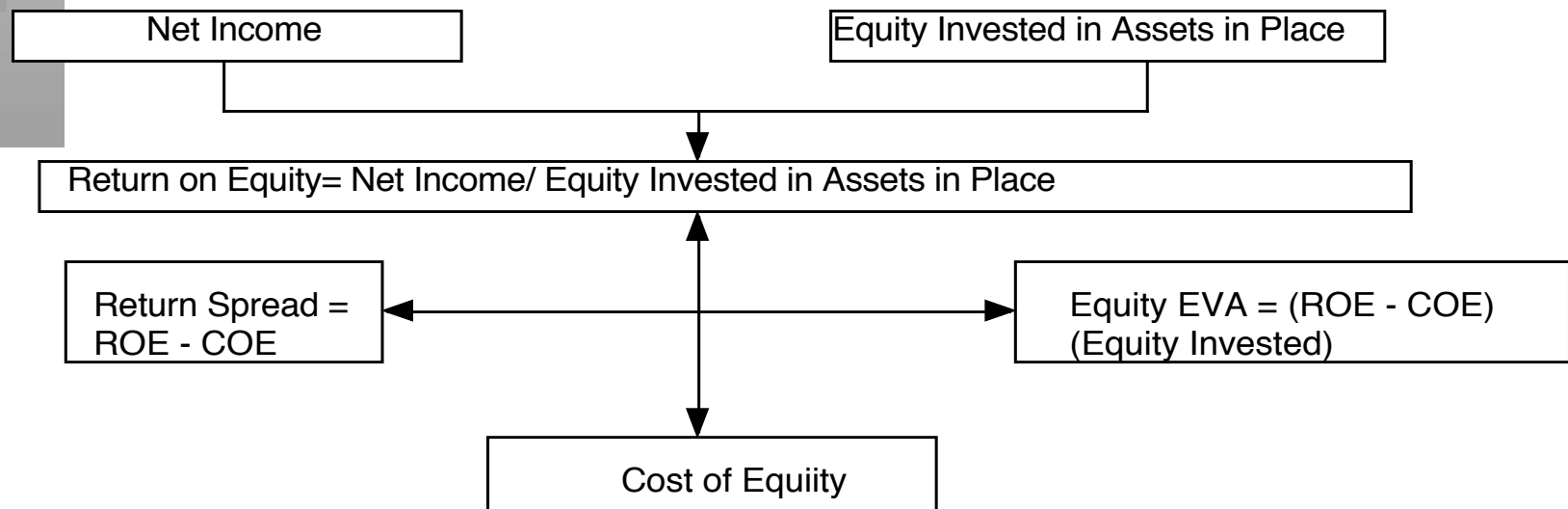
ROC versus Cost of Capital



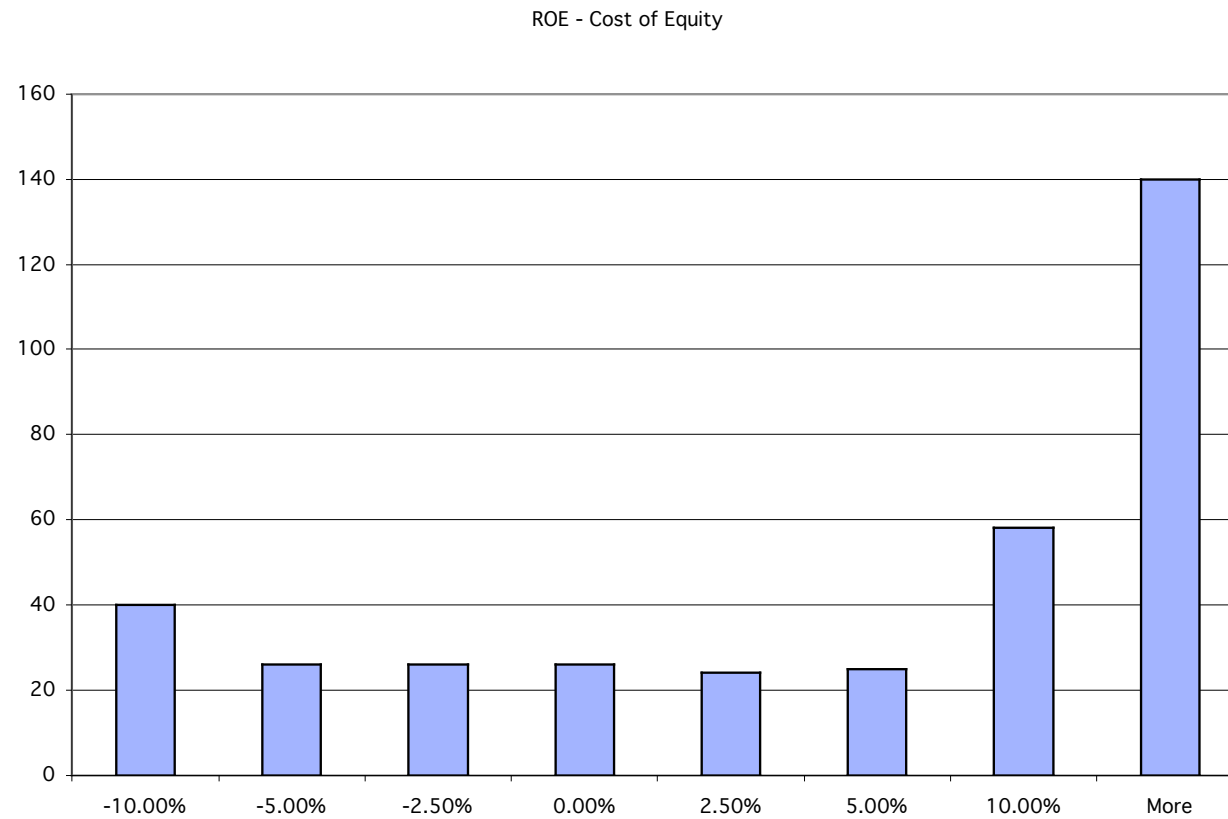
Economic Value Added



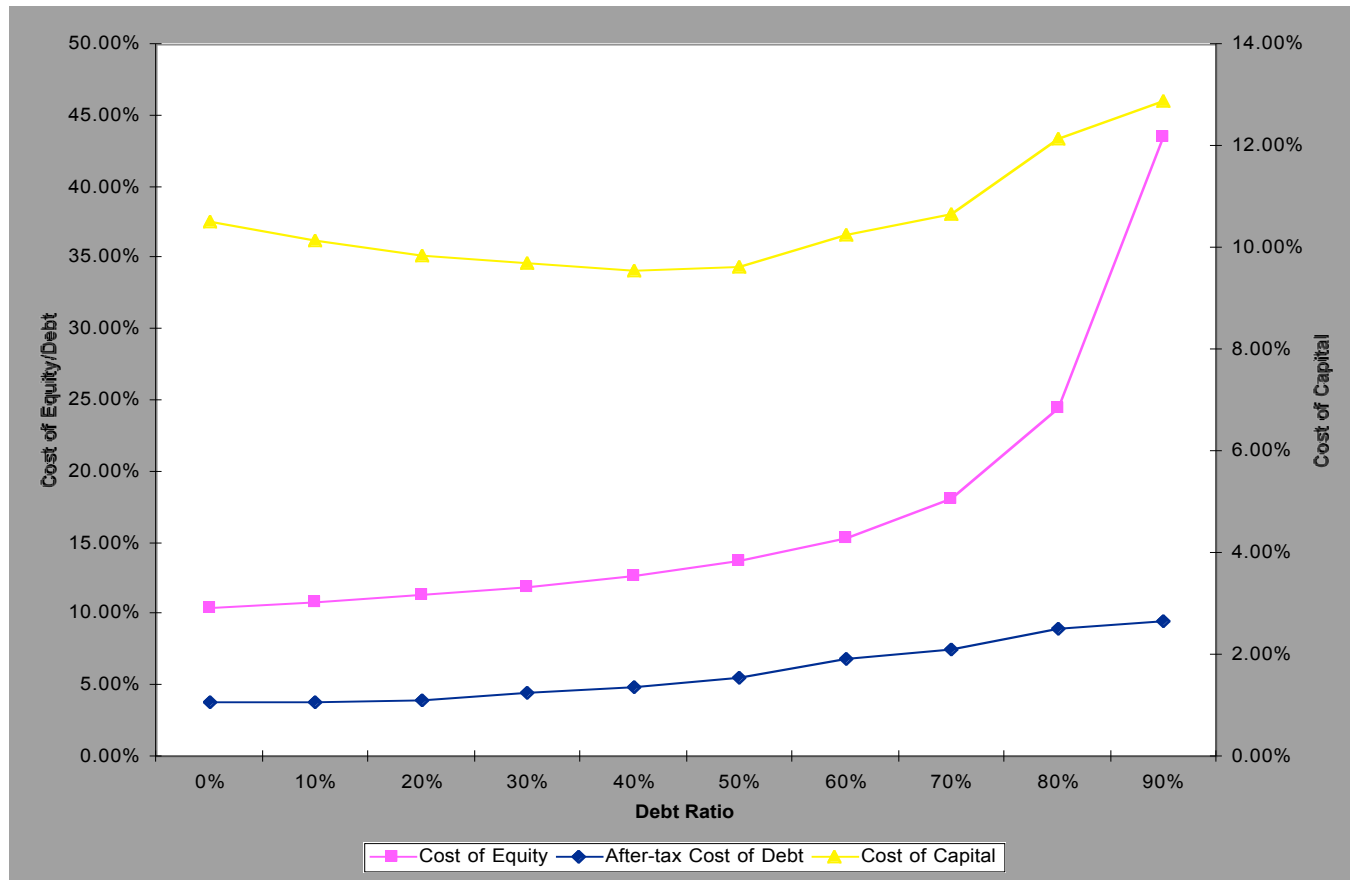
The Quality of Investments: The Equity View



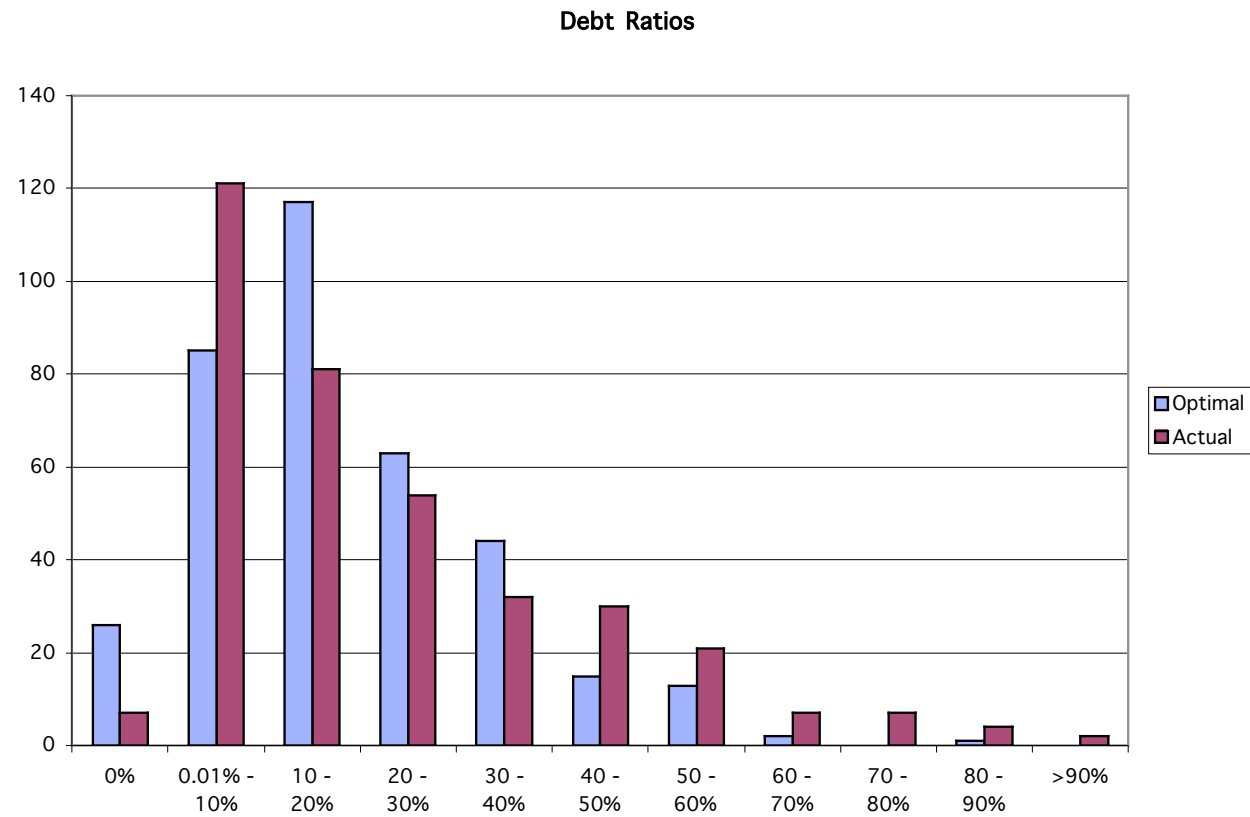
ROE versus Cost of Equity



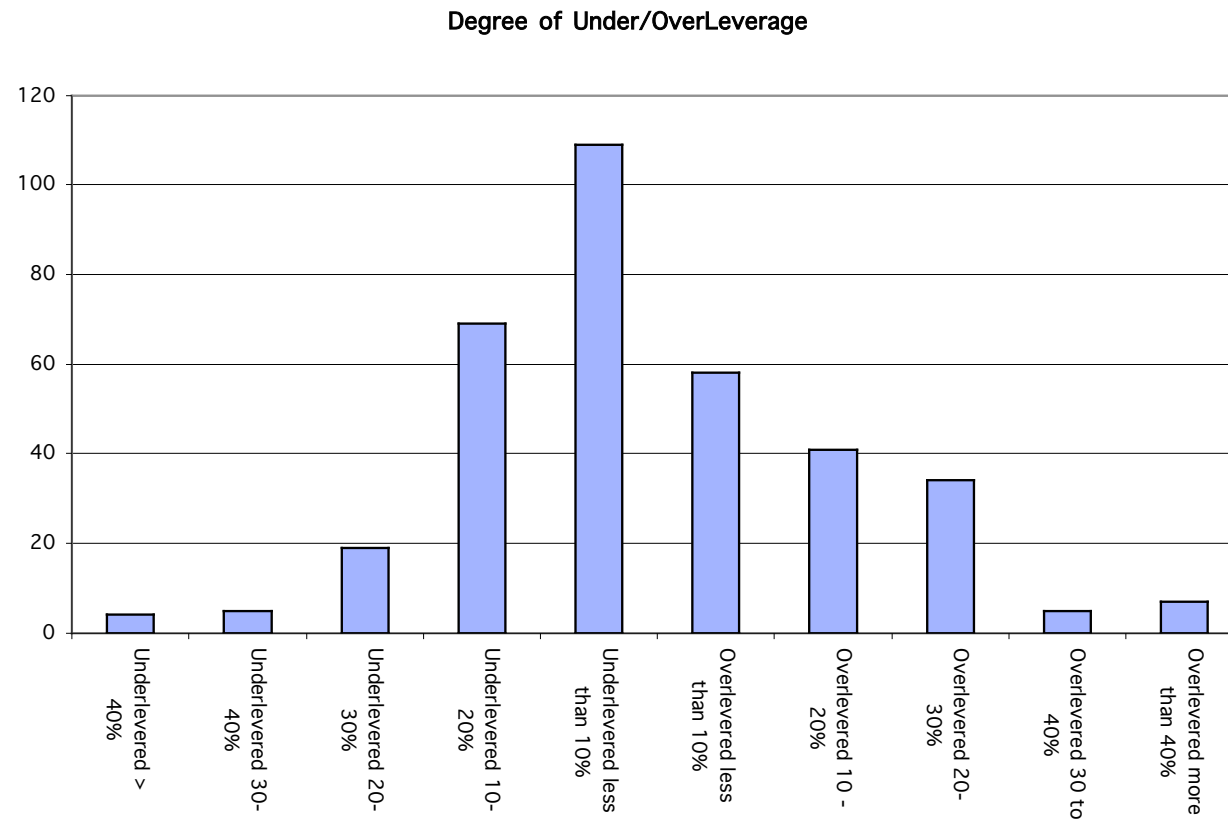
The Optimal Financing Mix



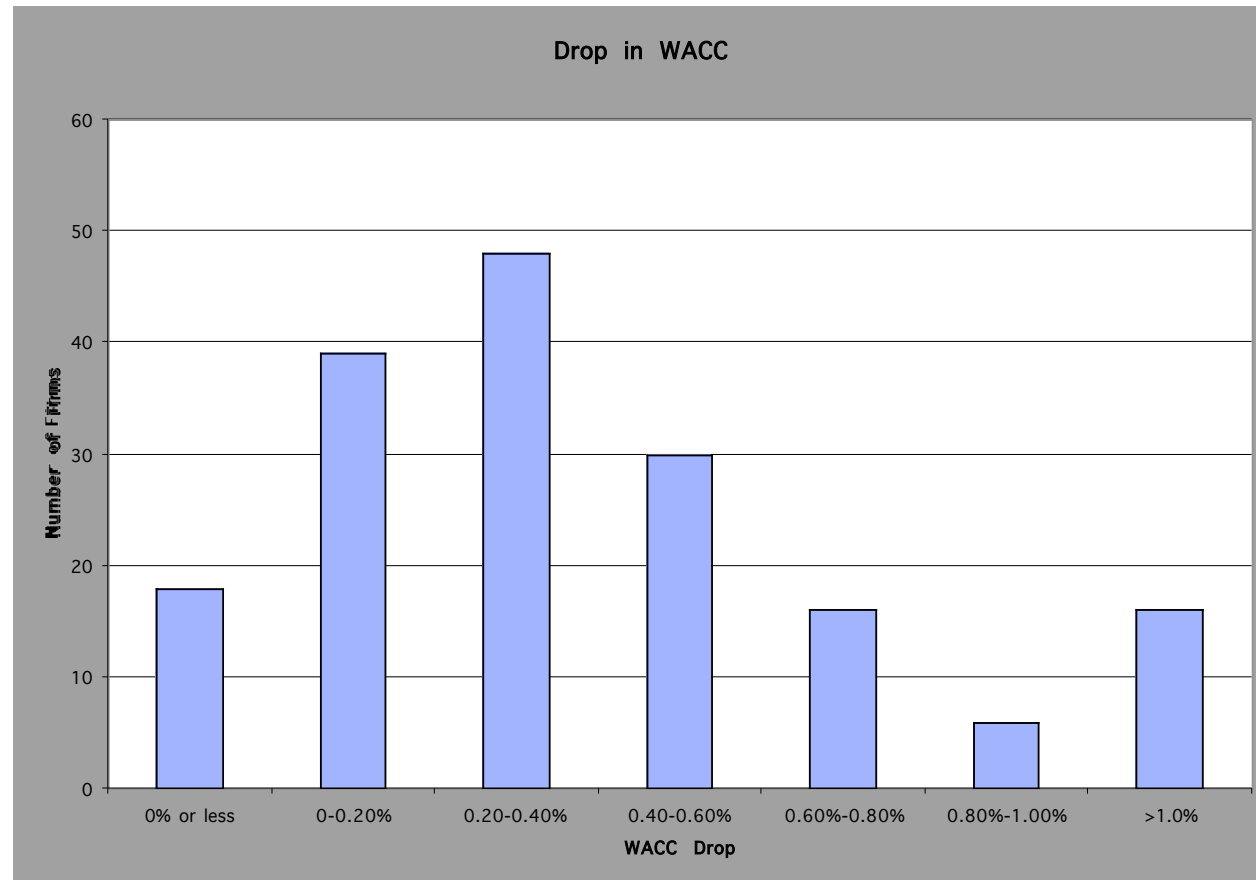
Optimal Debt Ratios



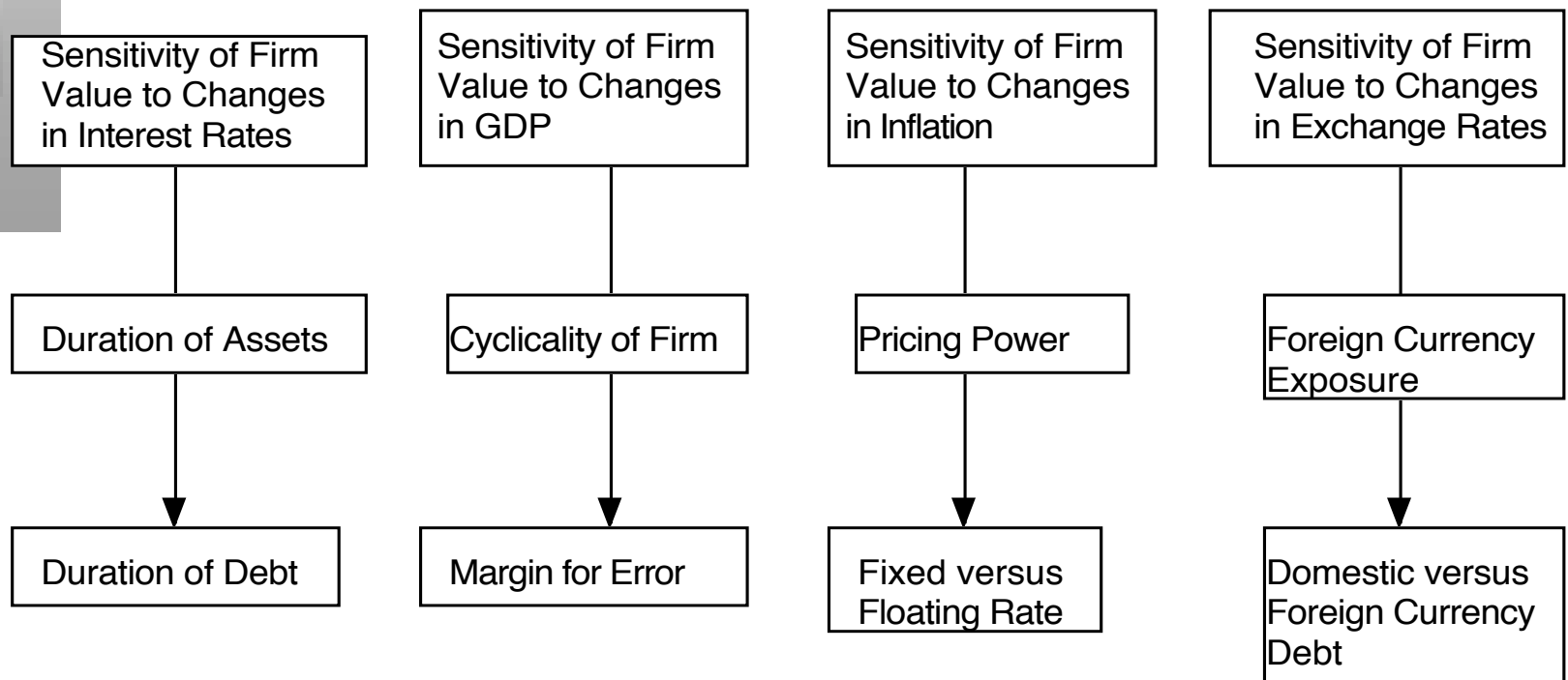
Under versus Over Levered Firms



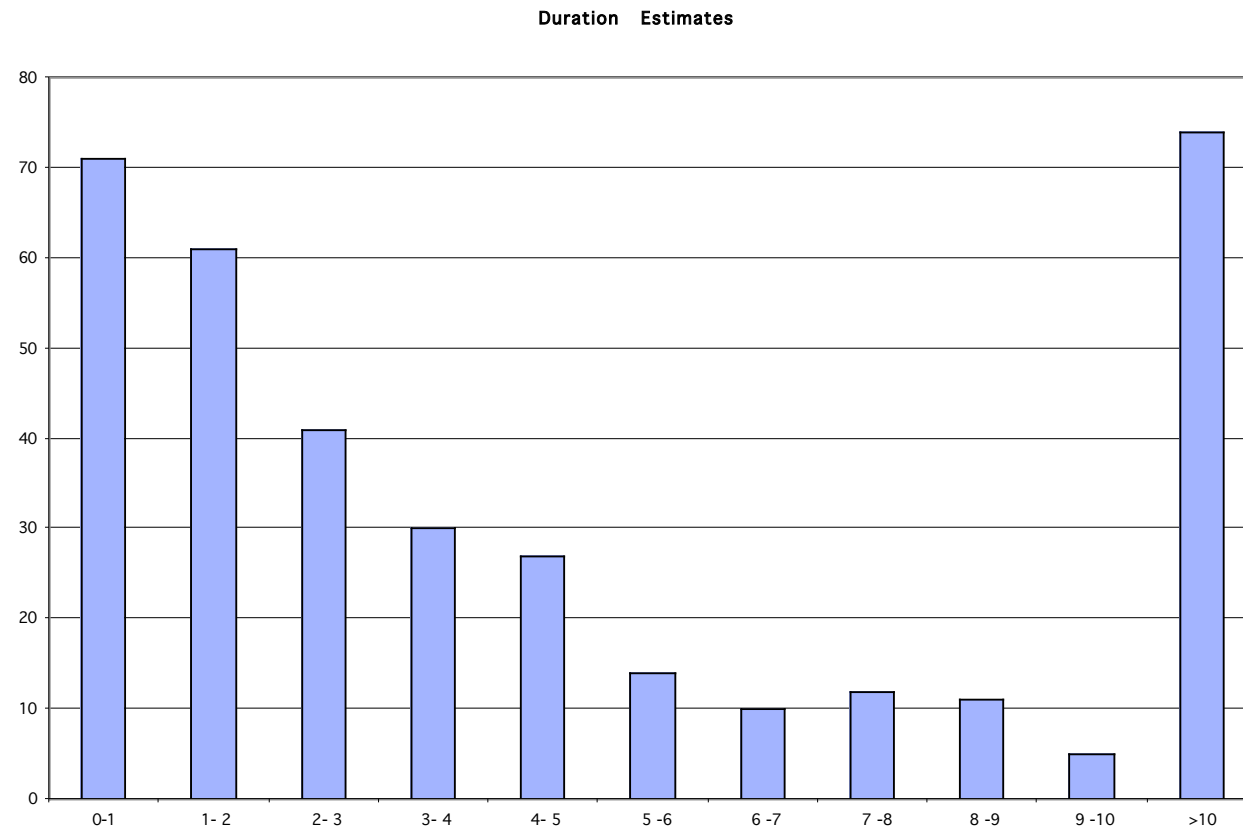
Change in Cost of Capital



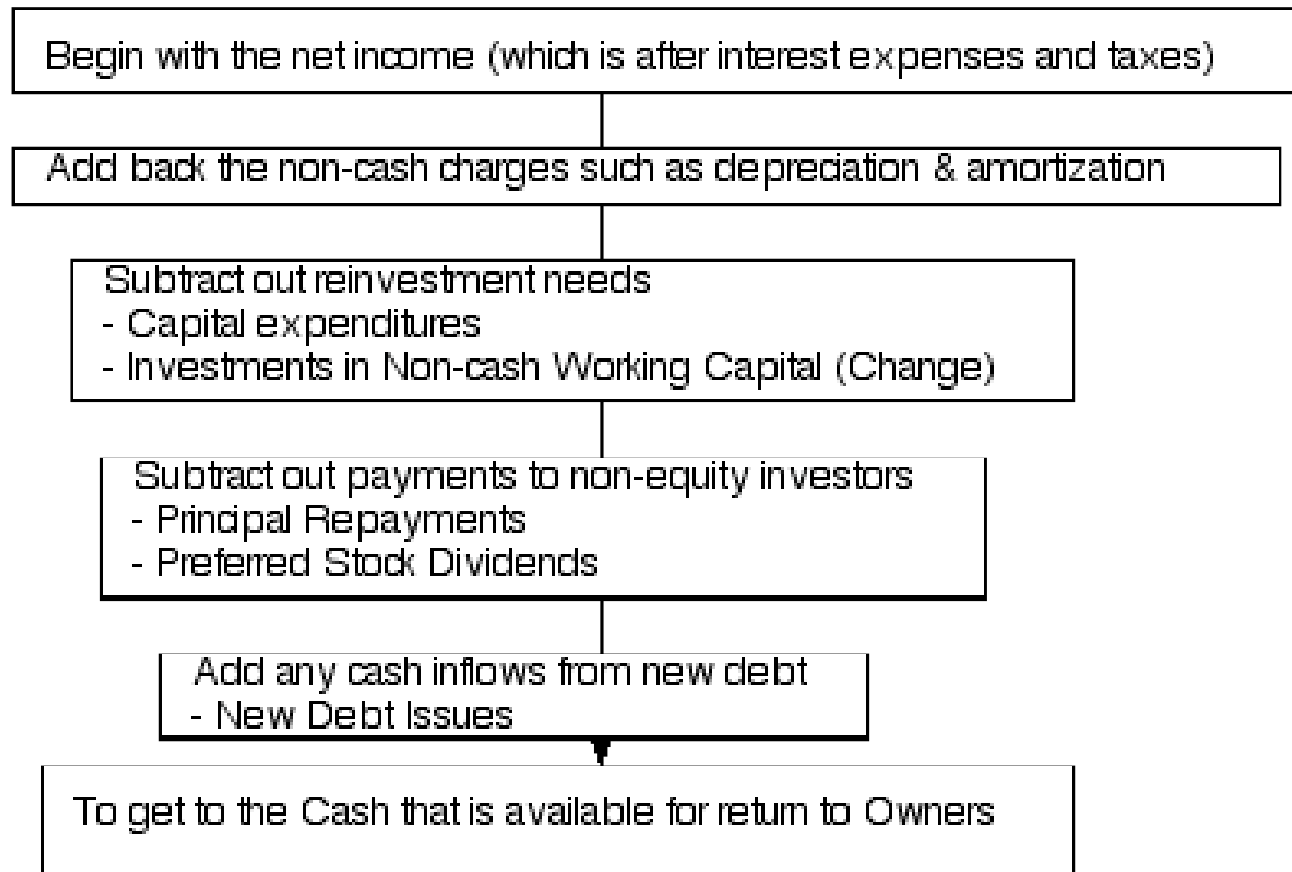
The Right Kind of Financing



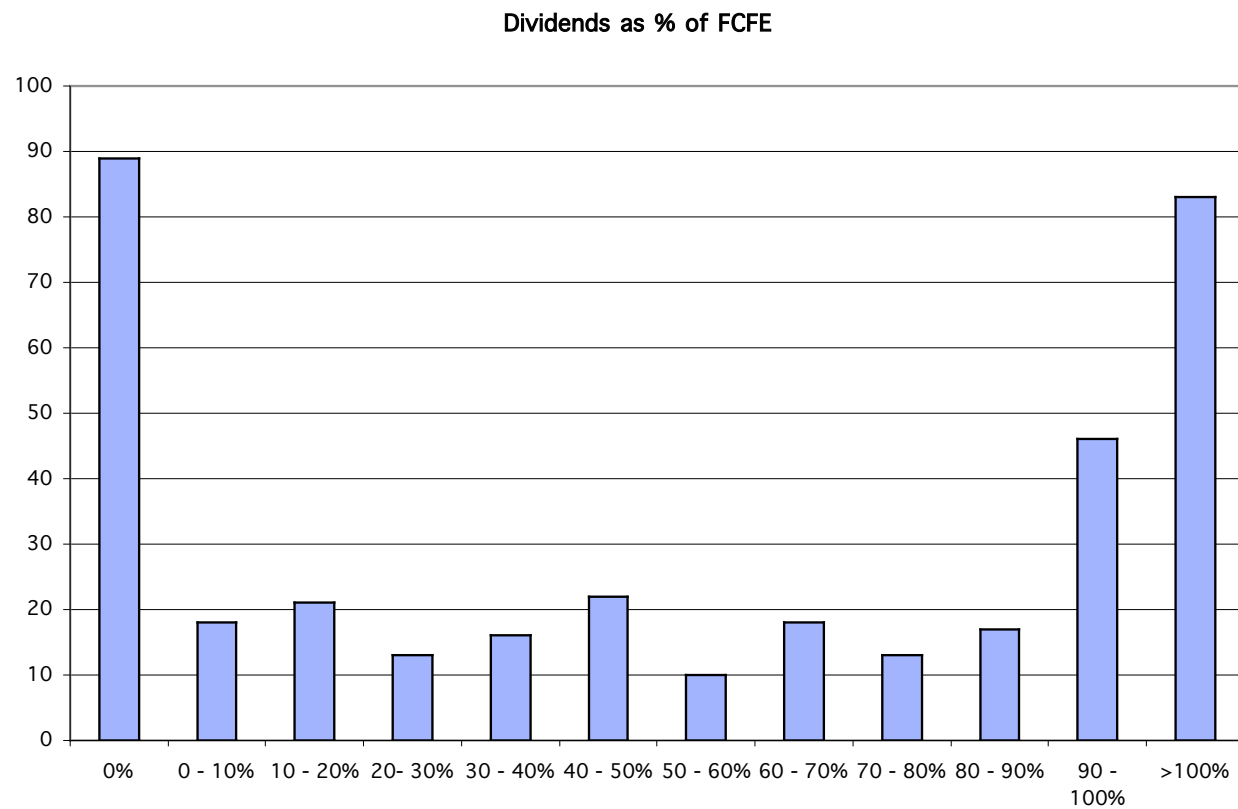
Duration of Assets



Measuring Potential Dividends

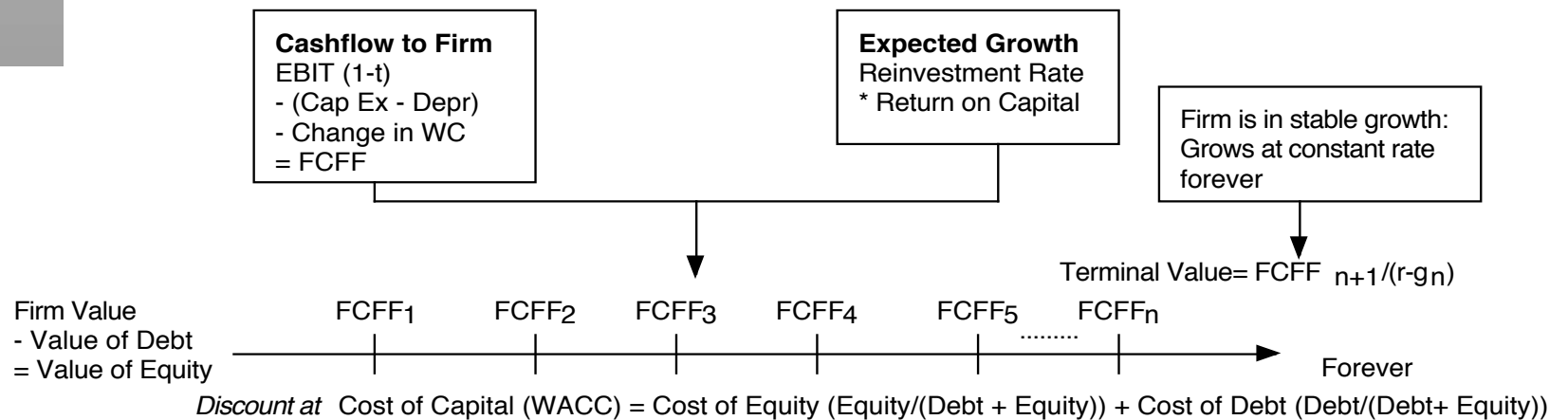


Dividends versus FCFE

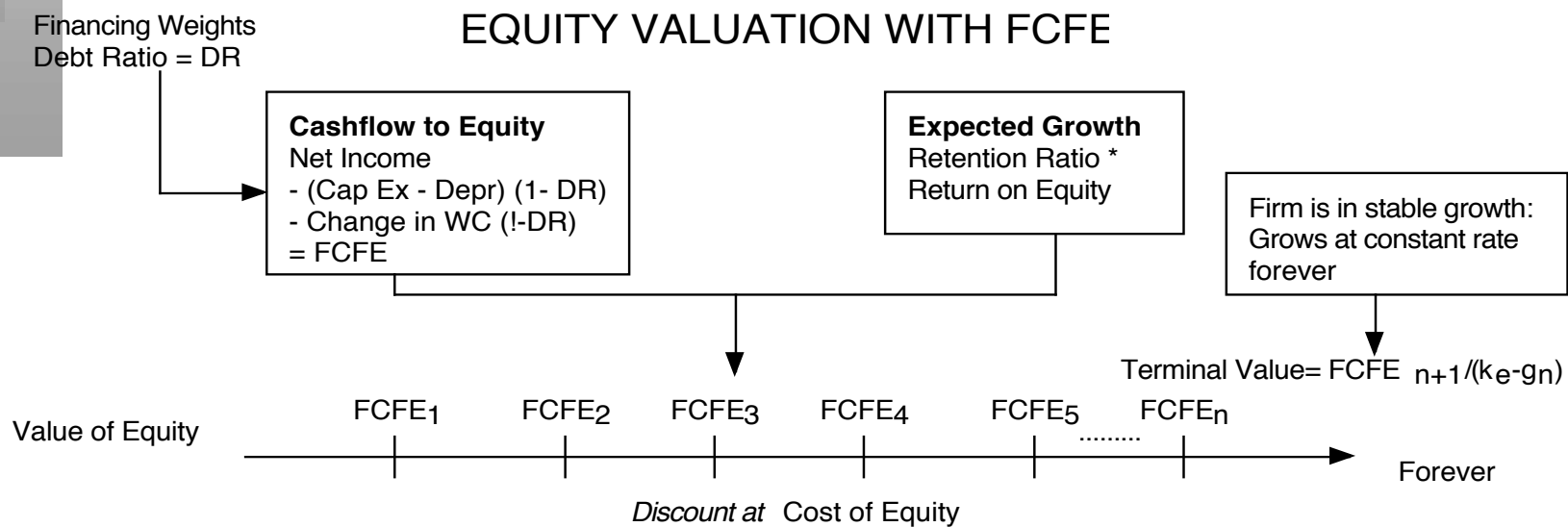


The Value of a Firm

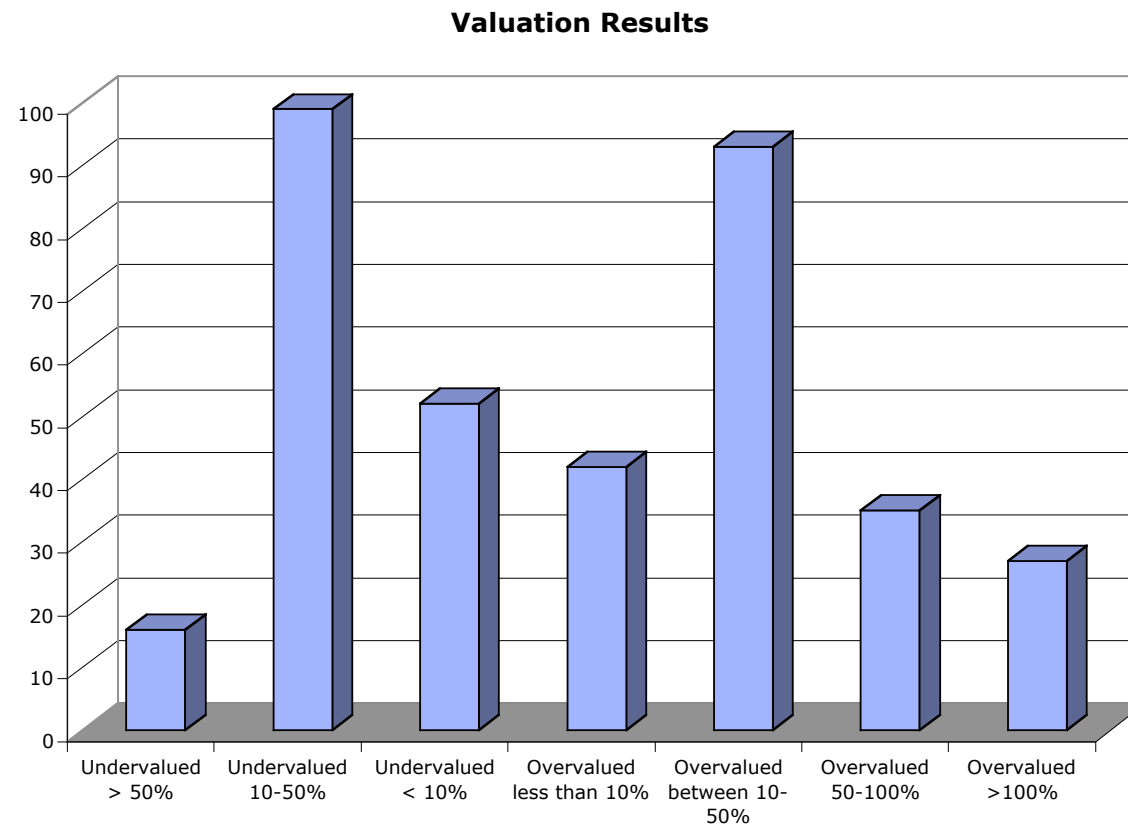
DISCOUNTED CASHFLOW VALUATION



The Value of Equity



Valuation versus Price



Most Under Valued Stocks

Company	Valuation		Price/Value
	Value/share	Price/Share	
Princeton Video I	\$ 18.74	\$ 1.10	-94.13%
Acclaim	\$ 33.27	\$ 5.04	-84.85%
TiVo	\$ 18.74	\$ 3.97	-78.82%
Ford	\$ 74.61	\$ 16.80	-77.48%
Sports Authority	\$ 29.25	\$ 8.20	-71.97%
Morton's of Chica	\$ 43.95	\$ 12.98	-70.47%
Delta	\$ 84.32	\$ 26.83	-68.18%
Delphi	\$ 37.55	\$ 13.81	-63.22%
GemStar	\$ 21.18	\$ 8.72	-58.83%
Redhook Ale	\$ 6.03	\$ 2.51	-58.37%
Frontier	\$ 37.30	\$ 16.21	-56.54%
General Mills	\$ 103.74	\$ 45.17	-56.46%
International Hou	\$ 67.21	\$ 29.30	-56.41%
Toys R Us	\$ 35.82	\$ 16.56	-53.77%

The Triple Whammy: Underlevered, Cash Build-up and Under valued?

Company	Capital Structure				Dividend Policy		Valuation	
	Current Debt ratio	Optimal Debt Ratio	Change in WACC	Duration	Dividends	FCFE	Value/share	Price/Share
Abercrombie (AN)	16.74%	40.00%	0.59%	13.22	23.6	77.3	\$ 47.11	\$ 30.62
Abercrombie and	16.77%	40.00%	0.30%	25.8	0	35.17	\$ 47.05	\$ 31.85
Amerada Hess	43.15%	60.00%	0.21%	0	94	2660	\$ 90.44	\$ 77.55
Apple	3.22%	20.00%	0.17%	2.19	64	119	\$ 28.00	\$ 23.51
Automatic Data P	2.92%	20.00%	0.59%	11	334.28	53099.25	\$ 84.41	\$ 50.58
Compaq	10.92%	30.00%	0.87%	2.14	158	2472	\$ 13.00	\$ 11.00
ExxonMobil	4.35%	30.00%	0.32%	10.06	6254.000	15254.000	\$ 50.52	\$ 40.80
Ford	33.28%	60.00%	0.85%	4.86	2751	4089	\$ 74.61	\$ 16.80
GlaxoSmithkline	4.82%	20.00%	0.40%	7.92	3940.5	8661.5	\$ 23.12	\$ 18.00
Guidant	6.11%	20.00%	-0.25%	18	102.5	144.57	\$ 62.22	\$ 41.25
Guidant	7.48%	20.00%	0.29%	6.75	0	321	\$ 44.28	\$ 38.40
K-Swiss	1.00%	40.00%	1.00%	0	13.24	17.7	\$ 54.49	\$ 47.76
MDC Holdings	17.28%	60.00%	-0.86%	0	4.21	27.73	\$ 76.14	\$ 52.80
Merck	6.41%	20.00%	33%	10.55	445.2	7593	\$ 81.50	\$ 54.47
Nautica	22.78%	40.00%	-0.32%	0	21.34	57.78	\$ 22.35	\$ 14.25
Neiman Marcus	25.77%	40.00%	0.66%	0	15.16	59.69	\$ 54.11	\$ 38.80
Pfizer	4.22%	20.00%	0.30%	5.5	1717.8	4166	\$52.21	\$36.27
Pfizer	4.00%	20.00%	0.34%	9.55	2621	2961	\$ 50.85	\$ 36.18
Pfizer	3.73%	20.00%	-0.31%		2367.9	2842.2	\$ 45.67	\$ 37.50
Schering Plough	2.54%	20.00%	0.44%	17.05	916.11	1113.16	\$ 40.83	\$ 32.50
Schering Plough	3.28%	20.00%	0.45%	11.7	1052.8	1553.6	\$ 31.26	\$ 27.50
Schering-Plough	2.42%	30.00%	0.63%	17.13	1266	1657	\$ 33.28	\$ 27.50
Schering-Plough	1.58%	30.00%	0.64%	17.13	719.6	1707.48	\$ 31.78	\$ 27.50
Takeda	0.37%	20.00%	0.29%	2.5	23,251	43,240	\$ 8,957.00	\$ 5,540.00
The Sharper Imag	27.37%	50.00%	0.48%	4.45	0	1.147	\$ 43.69	\$ 22.85

Objectives of this class

- Big picture of corporate finance
- Tools and techniques that you need to answer corporate finance questions in the real world
- Corporate finance is fun!!!