

Where is the “value” in value investing?

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Who is a value investor?

| Assets | | Liabilities | |
|--|-----------------|--------------------|--|
| Existing Investments Generate cashflows today Includes long lived (fixed) and short-lived (working capital) assets | Assets in Place | Debt | Fixed Claim on cash flows Little or No role in management <i>Fixed Maturity</i> <i>Tax Deductible</i> |
| Expected Value that will be created by future investments | Growth Assets | Equity | Residual Claim on cash flows Significant Role in management <i>Perpetual Lives</i> |

Three faces of value investing...

- *Passive Screeners*: Following in the Ben Graham tradition, you screen for stocks that have characteristics that you believe identify under valued stocks.
- *Contrarian Investors*: These are investors who invest in companies that others have given up on, either because they have done badly in the past or because their future prospects look bleak.
- *Activist Value Investors*: These are investors who invest in poorly managed and poorly run firms but then try to change the way the companies are run.

The three biggest Rs of value investing

- Rigid: The strategies that have come to characterize a great deal of value investing reveal an astonishing faith in accounting numbers and an equally stunning lack of faith in markets getting anything right. Value investors may be the last believers in book value. The rigidity extends to the types of companies that you buy (avoiding entire sectors...)
- Righteous: Value investors have convinced themselves that they are better people than other investors. Index fund investors are viewed as “academic stooges”, growth investors are considered to be “dilettantes” and momentum investors are “lemmings”. Value investors consider themselves to be the grown ups in the investing game.
- Ritualistic: Modern day value investing has a whole menu of rituals that investors have to perform to meet be “value investors”. The rituals range from the benign (claim to have read “Security Analysis” by Ben Graham and every Berkshire Hathaway annual report) to the not-so-benign...

Myth 1: DCF valuation is an academic exercise...

The value of an asset is the present value of the expected cash flows on that asset, over its expected life:

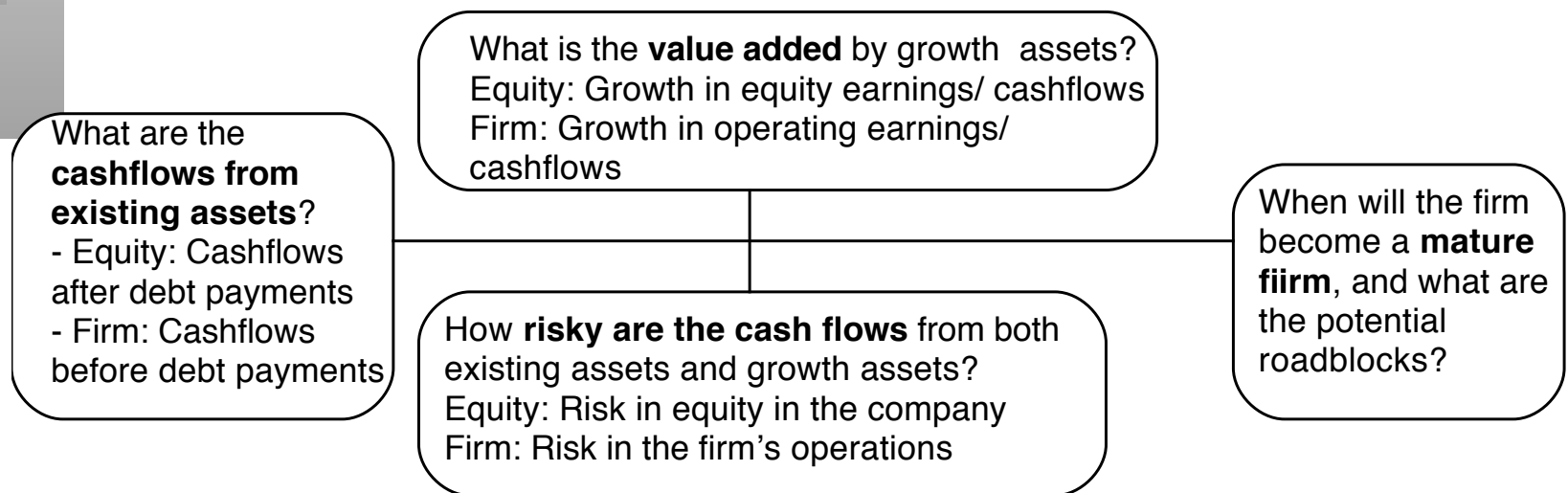
$$\text{Value of asset} = \frac{E(\text{CF}_1)}{(1+r)} + \frac{E(\text{CF}_2)}{(1+r)^2} + \frac{E(\text{CF}_3)}{(1+r)^3} \dots + \frac{E(\text{CF}_n)}{(1+r)^n}$$

Proposition 1: If “it” does not affect the cash flows or alter risk (thus changing discount rates), “it” cannot affect value.

Proposition 2: For an asset to have value, the expected cash flows have to be positive some time over the life of the asset.

Proposition 3: Assets that generate cash flows early in their life will be worth more than assets that generate cash flows later; the latter may however have greater growth and higher cash flows to compensate.

Here is what the value of a business rests on... in DCF valuation



Myth 2: Beta is greek from geeks...and essential to DCF valuation

- Dispensing with all of the noise, here are the underpinnings for using beta as a measure of risk:
 - Risk is measured in volatility in asset prices
 - The risk in an individual investment is the risk that it adds to the investor's portfolio
 - That risk can be measured with a beta (CAPM) or with multiple betas (in the APM or Multi-factor models)
- 1. Beta is a measure of relative risk: Beta is a way of scaled risk, with the scaling around one. Thus, a beta of 1.50 is an indication that a stock is 1.50 times as risky as the average stock, with risk measured as risk added to a portfolio.
- 2. Beta measures exposure to macroeconomic risk: Risk that is specific to individual companies will get averaged out (some companies do better than expected and others do worse). The only risk that you cannot diversify away is exposure to macroeconomic risk, which cuts across most or all investments.

If you don't like betas, here are your alternatives

- Market price based alternatives
 - Relative volatility: The ratio of a company's standard deviation to standard deviation of average company in market
 - Implied costs of equity and capital: Backed out of current stock prices...
 - *If you don't like betas because they are based on stock prices, you won't like these alternatives either.*
- Accounting information based alternatives
 - Accounting earnings volatility: The ratio of the stability in earnings in your company, relative to other companies.
 - Accounting ratios: Ratios that capture financial leverage (debt ratios) and liquidity of assets (current ratios).
 - *Accountants are better at measuring default risk than equity risk.*
- Proxies for risk
 - Dividend Yield: Higher dividend yields -> Less risk
 - Sector: Technology is risky, consumer product companies are not...
 - Company size: Small companies are risky, big companies are not...

And doing your homework is not going to make the big risks go away...

- There is a widely held view among value investors that they are not as exposed to risk as the rest of the market, because they do their homework, poring over financial statements or using ratios to screen for risky stocks. Put simply, they are assuming that the more they know about an investment, the less risky it becomes.
- That may be true from some peripheral risks and a few firm specific risks, but it definitely is not for the macro risks (which is all that you bring into the discount rate in a conventional risk and return model). You cannot make a cyclical company less cyclical by studying it more or take the nationalization risk out of Venezuelan company by doing more research.

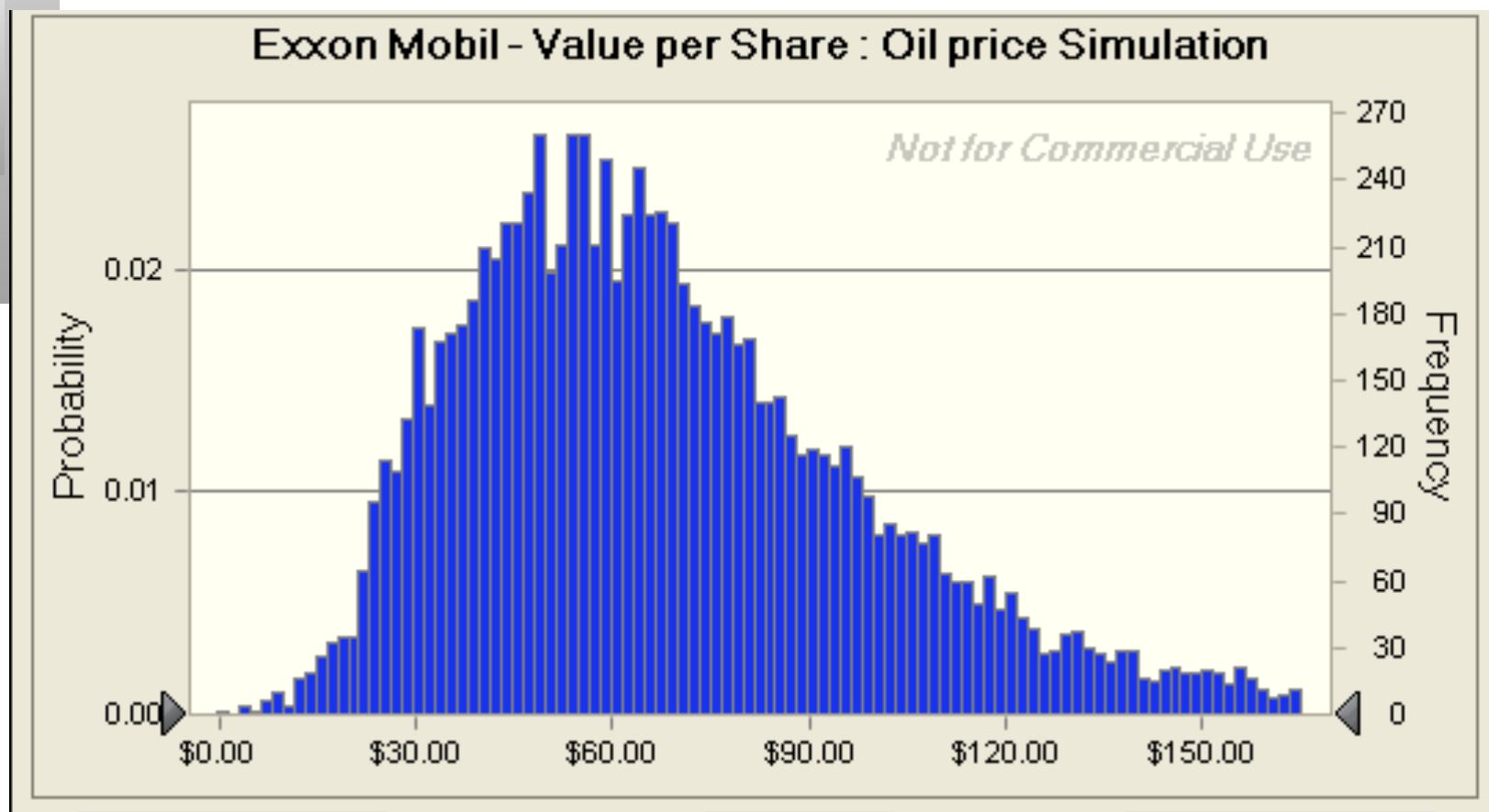
Implication 1: The need for diversification does not decrease just because you are a value investor who picks stocks with much research and care.

Implication 2: You can be a good value investor and your picks can still lose money.

Myth 3: The “Margin of Safety” is an alternative to beta and works better

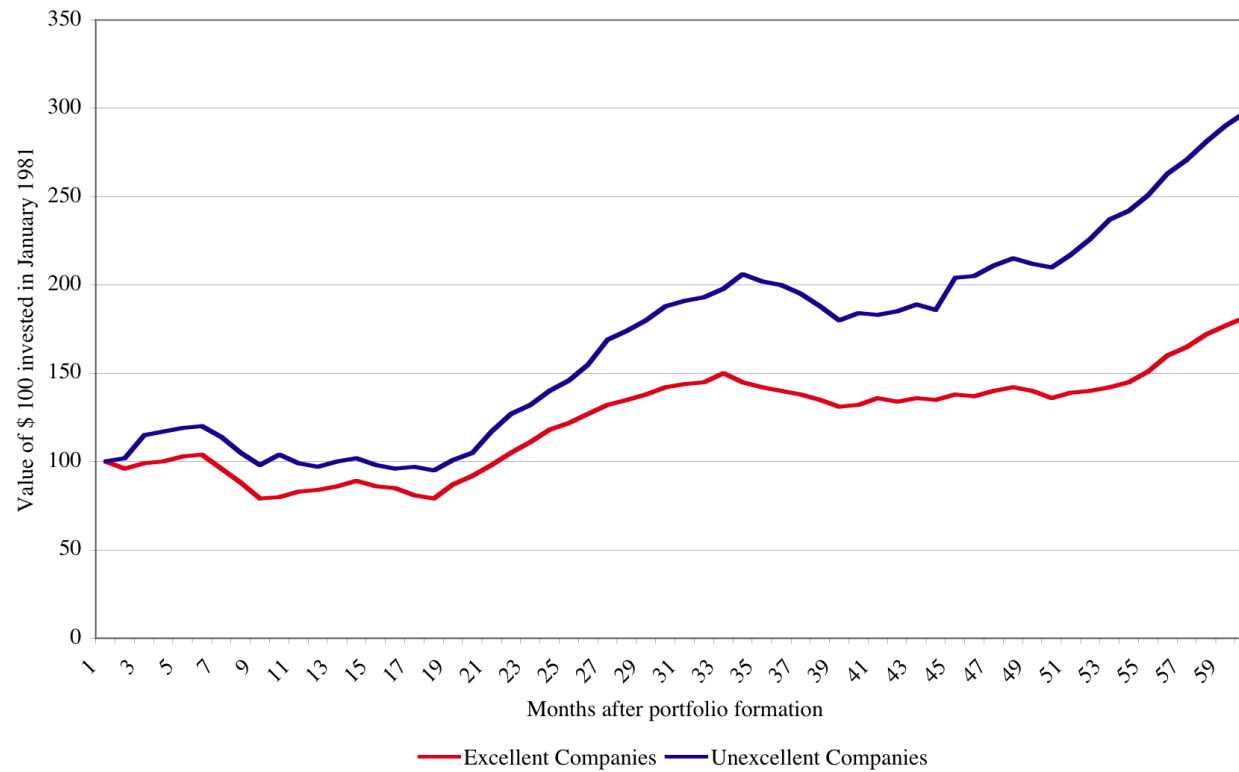
- The margin of safety is a buffer that you build into your investment decisions to protect yourself from investment mistakes. Thus, if your margin of safety is 30%, you will buy a stock only if the price is more than 30% below its “intrinsic” value. There is nothing wrong with using the margin of safety as an additional risk measure, as long as the following are kept in mind:
 - **Proposition 1: MOS comes into play at the end of the investment process, not at the beginning.**
 - **Proposition 2: MOS does not substitute for risk assessment and intrinsic valuation, but augments them.**
 - **Proposition 3: The MOS cannot and should not be a fixed number, but should be reflective of the uncertainty in the assessment of intrinsic value.**
 - **Proposition 4: Being too conservative can be damaging to your long term investment prospects. Too high a MOS can hurt you as an investor.**

If you need a MOS, here is one way to get it and use it...



Myth 4: Good management = Low Risk

Figure 8.7: Excellent versus Unexcellent Companies



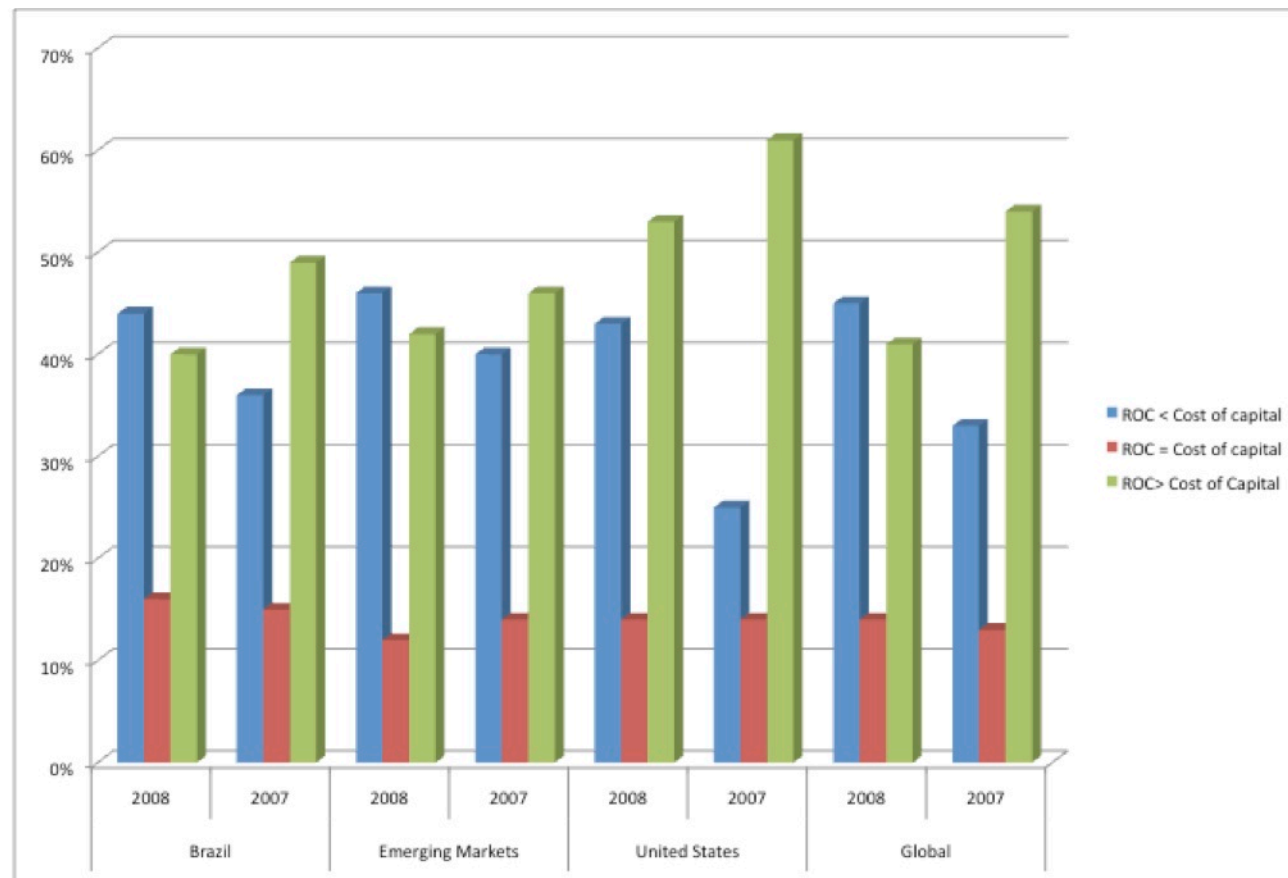
And it is time to get specific about what comprises “good” management...

- Which of the following characteristics would you look for in a good manager?
 - Stable Earnings
 - High Growth
 - Low Risk
 - High Dividends
 - Other: _____

Myth 5: Wide moats = Good investments

- Moats are the competitive advantages that allow companies to generate keep the competition out. In the process, they can keep their margins and returns high and improve the quality of their growth.
- Intrinsic value people and value investors do agree that moats matter to value: the wider the moat, the higher the value added by growth. But there are two places where they might disagree:
 - Moats matter more for growth companies than mature companies: Wide moats increase the value of companies and the value increase is proportional to the growth at these companies.
 - The returns on stocks are not a function of the width, but the rate of change in that width. So, companies with wide moats can be bad investments if the width shrinks and companies with no moats can be good investments if the width opens to a sliver.
 - It is easier to talk about moats than it is to measure their width...

The “one” number....

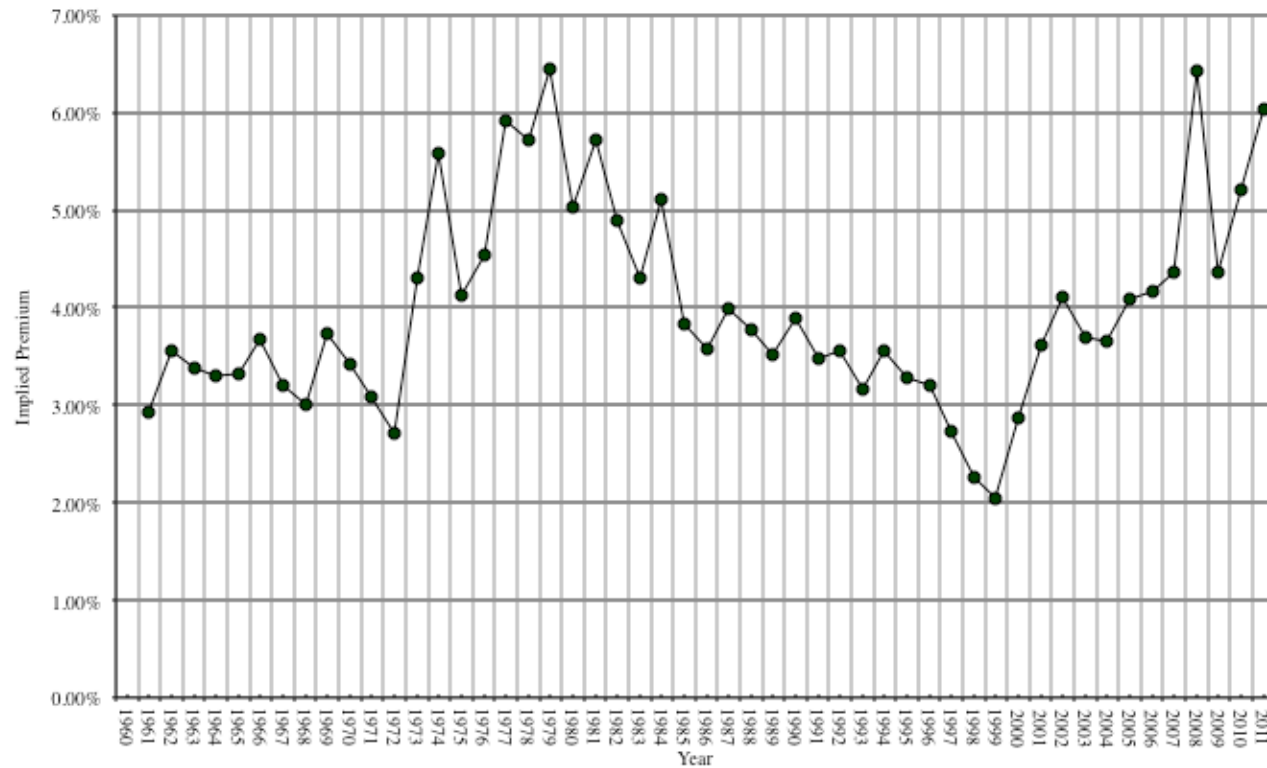


Myth 6: Intrinsic value is stable and unchangeable..

- There is a widely held belief that the intrinsic value of an investment, if computed correctly, should be stable over time. It is the market that is viewed as the volatile component in the equation. As a consequence, here is what we tend to do:
 - We make a decision on whether to buy or sell the stock and never revisit the intrinsic valuation.
 - We view market price changes as random, arbitrary and completely unjustified and ignore the fact that even there is information in market price changes in even the most unstable market.
- The intrinsic value of a company is viewed as a given, with investors having little impact on value (though they affect price)
 - We do not consider the feedback effects on intrinsic value, from changing stockholder bases and management teams.
 - We ignore the fact that the “intrinsic value” of a company can be different to different investors.

The intrinsic value of a company can change over time...
even if the company does not...

Implied Premium for US Equity Market



Hormel Foods: The Value of Control Changing

Hormel Foods sells packaged meat and other food products and has been in existence as a publicly traded company for almost 80 years. In 2008, the firm reported after-tax operating income of \$315 million, reflecting a compounded growth of 5% over the previous 5 years.

The Status Quo

Run by existing management, with conservative reinvestment policies (reinvestment rate = 14.34% and debt ratio = 10.4%.

Anemic growth rate and short growth period, due to reinvestment policy

Low debt ratio affects cost of capital

| Year | Operating income after taxes | Expected growth rate | ROC | Reinvestment Rate | Reinvestment | FCFF | Cost of capital | Present Value |
|---------------------------------|------------------------------|----------------------|--------|-------------------|--------------|---------|-----------------|---------------|
| Trailing 12 months | \$315 | | | | | | | |
| 1 | \$324 | 2.75% | 14.34% | 19.14% | \$62 | \$262 | 6.79% | \$245 |
| 2 | \$333 | 2.75% | 14.34% | 19.14% | \$64 | \$269 | 6.79% | \$236 |
| 3 | \$342 | 2.75% | 14.34% | 19.14% | \$65 | \$276 | 6.79% | \$227 |
| Beyond | \$350 | 2.35% | 7.23% | 32.52% | \$114 | \$4,840 | 7.23% | \$3,974 |
| Value of operating assets | | | | | | | | \$4,682 |
| (Add) Cash | | | | | | | | \$155 |
| (Subtract) Debt | | | | | | | | \$491 |
| (Subtract) Management Options | | | | | | | | \$53 |
| Value of equity in common stock | | | | | | | | \$4,293 |
| Value per share | | | | | | | | \$31.91 |

New and better management

More aggressive reinvestment which increases the reinvestment rate (to 40%) and length of growth (to 5 years), and higher debt ratio (20%).

Operating Restructuring ①

Expected growth rate = $ROC \times \text{Reinvestment Rate}$
 Expected growth rate (status quo) = $14.34\% \times 19.14\% = 2.75\%$
 Expected growth rate (optimal) = $14.00\% \times 40\% = 5.60\%$
 ROC drops, reinvestment rises and growth goes up.

Financial restructuring ②

Cost of capital = Cost of equity (1-Debt ratio) + Cost of debt (Debt ratio)
 Status quo = $7.33\% (1-.104) + 3.60\% (1-.40) (.104) = 6.79\%$
 Optimal = $7.75\% (1-.20) + 3.60\% (1-.40) (.20) = 6.63\%$
 Cost of equity rises but cost of capital drops.

| Year | Operating income after taxes | Expected growth rate | ROC | Reinvestment Rate | Reinvestment | FCFF | Cost of capital | Present Value |
|---------------------------------|------------------------------|----------------------|--------|-------------------|--------------|---------|-----------------|---------------|
| Trailing 12 months | \$315 | | | | | | | |
| 1 | \$333 | 5.60% | 14.00% | 40.00% | \$133 | \$200 | 6.63% | \$187 |
| 2 | \$351 | 5.60% | 14.00% | 40.00% | \$141 | \$211 | 6.63% | \$185 |
| 3 | \$371 | 5.60% | 14.00% | 40.00% | \$148 | \$223 | 6.63% | \$184 |
| 4 | \$392 | 5.60% | 14.00% | 40.00% | \$260 | \$235 | 6.63% | \$182 |
| 5 | \$414 | 5.60% | 14.00% | 40.00% | \$223 | \$248 | 6.63% | \$180 |
| Beyond | \$423 | 2.35% | 6.74% | 34.87% | \$148 | \$6,282 | 6.74% | \$4,557 |
| Value of operating assets | | | | | | | | \$5,475 |
| (Add) Cash | | | | | | | | \$155 |
| (Subtract) Debt | | | | | | | | \$491 |
| (Subtract) Management Options | | | | | | | | \$53 |
| Value of equity in common stock | | | | | | | | \$5,085 |
| Value per share | | | | | | | | \$37.80 |

Probability of management change = 10%
 Expected value = $\$31.91 (.90) + \$37.80 (.10) = \$32.50$ ③
 ④

Myth 7: Value investors get a bigger payoff from “active” investing than growth investors...

*Excess returns relative to appropriate index
(based on capitalization and philosophy)*

| | <i>Value</i> | <i>Blend</i> | <i>Growth</i> |
|-----------|--------------|--------------|---------------|
| Large Cap | -2.90% | -1.03% | 0.49% |
| Mid Cap | -1.30% | 0.25% | 2.08% |
| Small Cap | -0.37% | -0.08% | 1.08% |

If value investing is the “best way to invest”, how do we explain the fact that active growth investors beat a passive growth index fund far more frequently and by far more than active value investors do, relative to a passive value fund?