Utility Cost of Capital

A Markets (and Judgment) Based Approach to Setting Utility Cost of Capital

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This material represents the personal views of the author

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DEFINITION OF CAPITAL AND RETURN AND LEGAL REQUIREMENTS

What is Capital?

- *Capital is the wealth, whether in money or property, owned or employed in business by an individual, firm, or corporation etc.*
- For our purposes capital means money (not property)
- Return on capital means the return on money invested in rate base including money invested in **necessary** working capital
- Capital here includes both debt and equity money

Cost of Capital versus Return on Capital

- Utilities are entitled to (an expectation of) a fair return on capital
- Utilities must pay a cost to raise capital
- The cost of debt capital is the interest rate that must be paid
- The cost of equity capital cannot be easily observed, but when a utility issues shares and when it retains earnings, investors expect some return on that capital
- The return on capital of a utility can be thought of as the "wages of capital"
- A regulator usually tries to set the return on capital **equal to its cost, therefore:**
  - For regulated utilities, the terms **cost of capital** and **return on capital** can generally be used interchangeably

The Supreme Court of Canada said

- *By a **fair return** is meant that **the company** will be allowed as large a return on the **capital** invested in its enterprise (which will be **net** to the company) **as it would receive if it were investing the same amount in other securities** possessing an attractiveness, stability and certainty **equa**l to that of the company's enterprise.*

(*1929 Northwestern Utilities case*)

Capital invested in rate base

*…the company will be allowed as large a return on the **capital** invested in its enterprise (which will be **net** to the company)…*

- Capital invested by customers would not be part of the company's **net** capital investment
  - The utility is not entitled to any return on customer money invested in rate base (customer money is no-cost capital)
- There is **no** (regulated) return on any capital **not invested in** its (utility) enterprise
- If a utility holds "excess" cash , (**unnecessary** working capital) this would not be considered to be invested in rate base or necessary working capital (therefore no regulated return)

Understanding Rate Base and Capital Invested

CURRENT ASSETS				
Cash	$1			
Accounts Receivable	$40			
Inventory	$9			
(Deduct Current liabilities)	$(20)			
Subtotal (Working Capital)	$30			
FIXED ASSETS			**LIABILITIES & EQUITY**	
Property, Plant & Equipment	$1,120		Customer Contributions	$50
			Hearing Reserve	$50
			Deferred Income Tax	$50
			Debt (Capital) (60%)	**$600**
			Equity (Capital) (40%) (Book Value)	**$400**
Total Assets, net of current Liabilities = Rate Base	**$1,150**			**$1,150**

Return on Rate Base (Return on Capital)

- "Return on Rate Base" should be thought of as short-hand for:
  - Return on **capital invested in rate base**, or more completely…
    - Return on **investor (or company) capital prudently invested in rate base** including invested in **necessary** working capital

Example of Return on Capital

- Imagine a rental house that costs $100,000 can be rented for a $10,000 annual profit after all expenses.
- If the house is financed with all equity the return is 10%.
- However, if 90% of the money can be borrowed at 5%, then the net profit will be $10,000 minus $90,000 times 0.05 or $10,000 minus $4,500 or $5,500.
- Now the return on equity invested is $5,500 divided by $10,000 = 55%
- This scenario illustrates how leverage and low-cost debt can really boost an investor's return (but it also adds to risk as I will address later in this presentation)

What is a Fair Return?

- The Supreme court said:
  - ***…the company*** *will be allowed as large a return on the* ***capital invested… as it would receive if it were investing the same amount in other (equal) securities…*** (i.e. a comparable return)
- How can this **comparable** level of **return** be determined?
  - By looking to the capital **markets** to observe the **available** returns on "equal" **securities?**

The Fair Return Standard

- Various Decisions and court rulings indicate that a fair Return must:
  1. Match the returns **available** from comparable risk investments
  2. Allow the **attraction** of new capital
  3. Allow for the company to maintain **financial integrity**
- All three must be met but it seems likely that a return that meets point one would also meet point two. A sufficient equity ratio (lack of excess debt) is arguably the main key to the third point.

The Standalone Principle

- The Standalone Principle holds that a Utility's return or cost of debt and equity capital should be set based on the utility as a standalone operation and not based on the cost of capital of its parent company.
- The Standalone Principle is based on regulatory practice and not court or legislative dictates. Regulators may deviate from the standalone principle at times.
- Utilities are often components of larger entities and therefore the need to estimate the cost of debt and equity on a standalone basis arises.

Use of U.S. Comparables

- Canadian comparable utilities are preferred but there may be insufficient utilities and insufficient analyst earnings growth estimates
  - There are very few “pure-play” (regulated-operations-only) utilities with shares that trade on a Canadian exchange
  - There are however a reasonable number of pure-play regulated utilities that issue debt
- U.S. utilities may enjoy attractive ROEs but it may not be the case that those returns are **available** to new investors if they trade at say twice book value
- U.S. regulatory risks are arguably different

Major Steps in Setting Cost of Capital

- **Determine the fair market return on equity**
- Determine an appropriate equity ratio
- Determine the fair return on debt

Determine Market Return on Equity

- Big problem – the return that equity investors expect or require is **not directly observable** in the market.
- This is because, unlike the case for bonds, the future expected cash flows from an equity share investment are unknown. **If** we knew the cash flows and the current stock price we could solve for the rate of return such that the present value of the cash flows is equal to the share price.

Determine Market Return on Equity

- Fair Return (to utility) = Investor Required Return plus Flotation Cost
  - Flotation cost reflects the fact that some money invested by investors will be lost to underwriting brokerage companies and also usually includes a cushion to allow a utility to issue equity without driving the share price below book value .
  - Canadian regulators have traditionally allowed 0.50% as a flotation cost
  - Flotation costs really apply only to equity raised in the market and not to retained earnings. Therefore, 50 basis points applied to all equity may be generous.

Determine Market Return on Equity

- Fair Return (to utility) = Investor Required Return plus Flotation Cost
- Investor Required Return is estimated in one of two ways:
  - Directly estimated (Direct methods include: Dividend discount Model, Comparable Earnings Model, historical returns achieved, awards of other regulators, returns forecast by experts to be available in the market)
  - Estimated as a required Premium over **forecast** 30-year government bond returns (Equity risk premium methods and particularly the capital Asset Pricing Model)
    - The forecast 30-year government bond return has usually been based on the forecast prepared by Consensus Economics Inc.
  - The ROE is often estimated using various methods and then an overall estimate is arrived at after deciding how much weight to place on the different methods

Determine Market Return on Equity

- Estimation Methods and Indirect Evidence are used
  - **Equity Risk Premium** methods including the Capital Asset Pricing Model (CAPM)
  - The **Dividend** Discount Model
  - Comparable **Earnings** Model
  - **Price to book value** at which utility equity trades (including in acquisitions)
  - **Returns expected** by investment fund managers
  - **Returns available on long-term utility bonds**
  - Other evidence of available ROEs including **survey results**
  - Awards of **other regulators**

Equity Risk Premium Model

- Equity Investors require a premium return over and above the risk-free rate on government treasury bills
- The Capital Asset Pricing Model (CAPM) estimates the equity risk premium for the overall stock market and asserts that the required equity return of a particular company relative to the market is determined (only) by how that company's share prices vary with the market (the variance measurement is called beta)

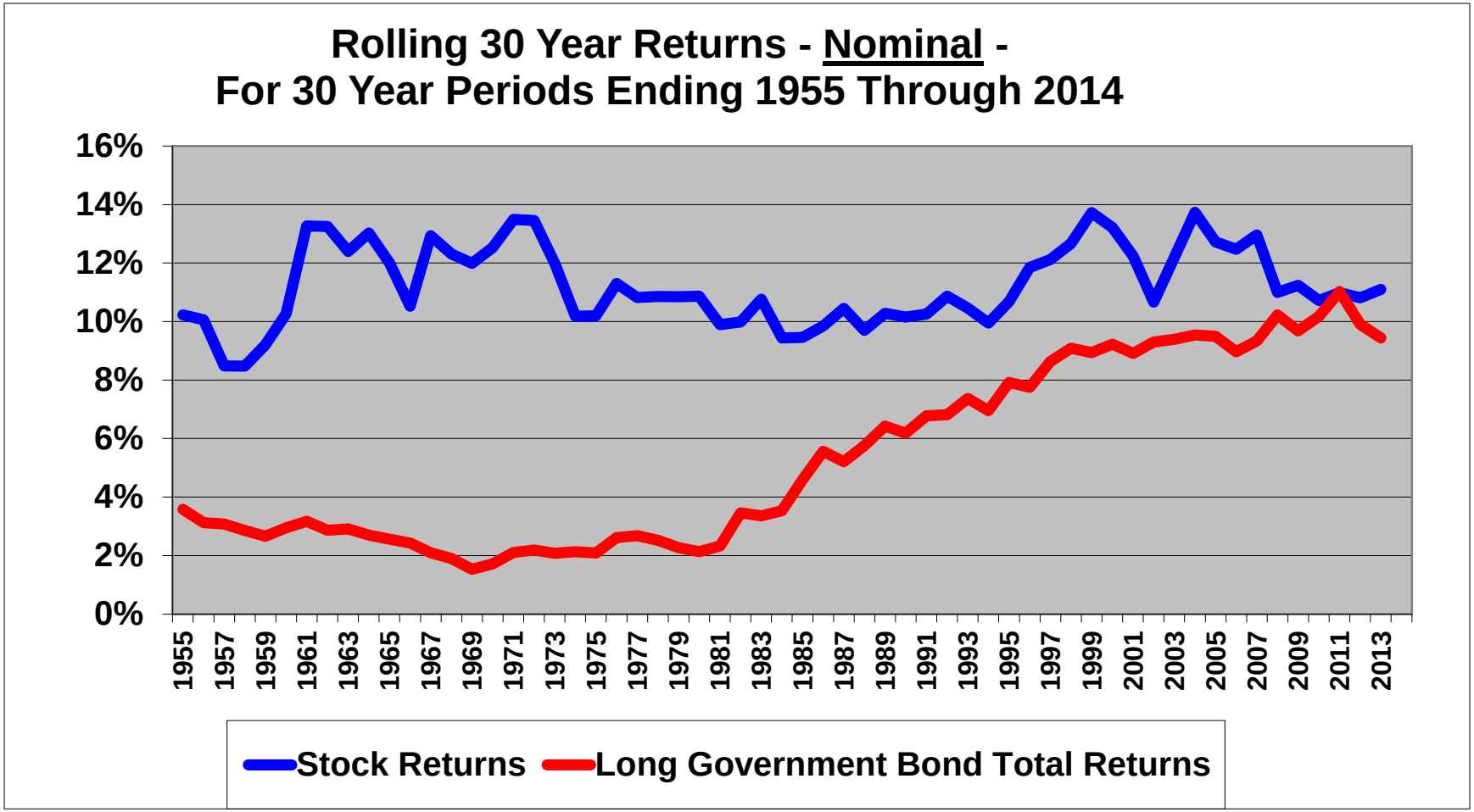
CAPM – Devil's in the details

- Market Equity Risk Premium
  - The Model dictates an equity risk premium over **short-term** floating interest rates but utility regulation applies a premium over a **long-term** fixed interest rate
  - The model does not state **how to determine** the equity risk premium nor does it state that the equity risk premium remains constant over time
  - Does a floating equity return require a different equity premium than a fixed equity return?
  - Does a floating equity return **always** require a premium over a long-term fixed corporate debt return?

CAPM – Devil's in the details

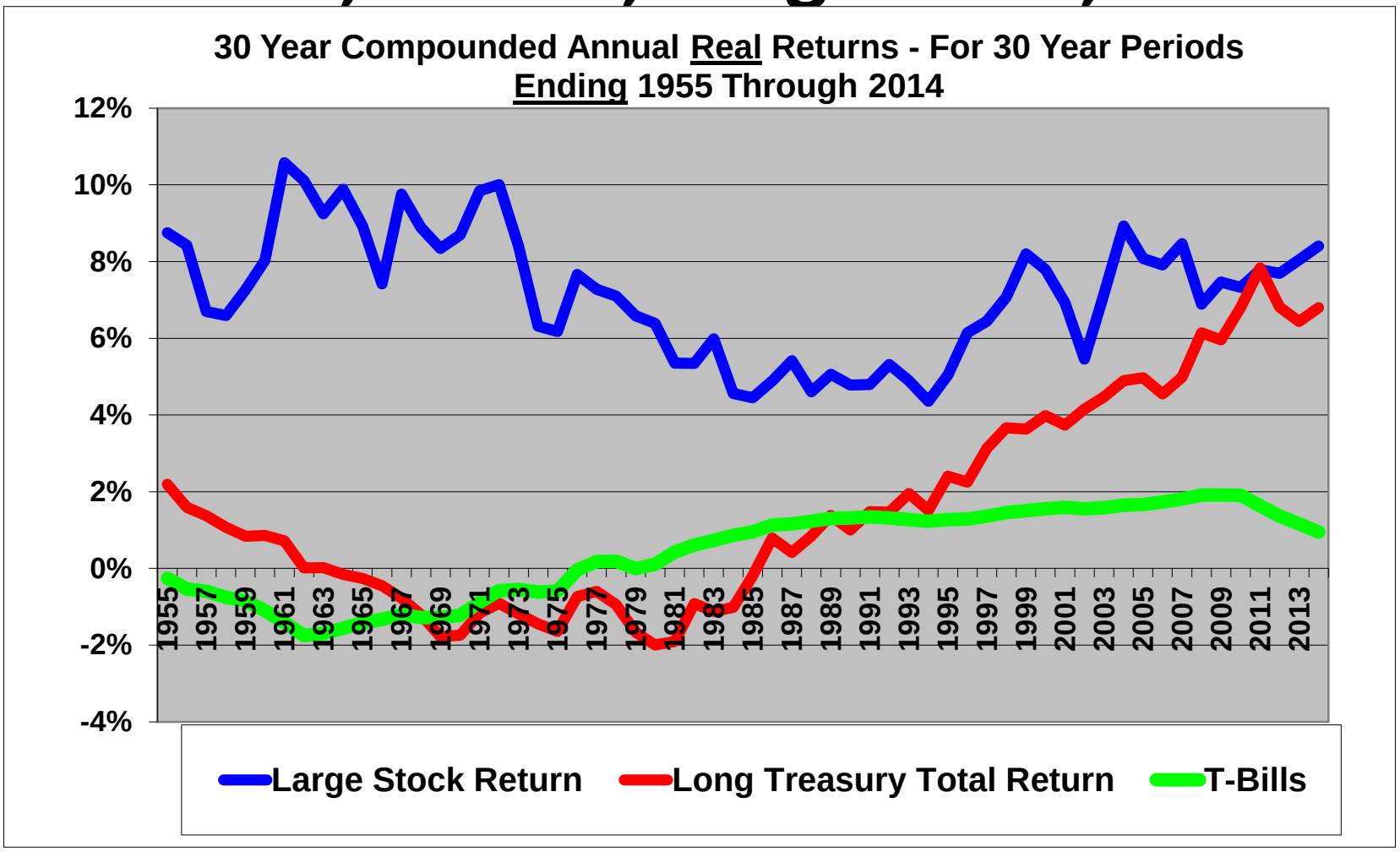
- Regulators have usually assumed that the current expected market equity risk premium is equal to the historic average equity risk premium over some long period of years, but…
  - CAPM does not require or even suggest that the market equity risk premium is constant over time
  - The historic market equity risk premium varies greatly even over rolling 30-year periods
  - The market equity risk premium may change with interest rates (It appears to change inversely)

Historical 30-Year Rolling Period Returns, Stocks vs. long Bonds



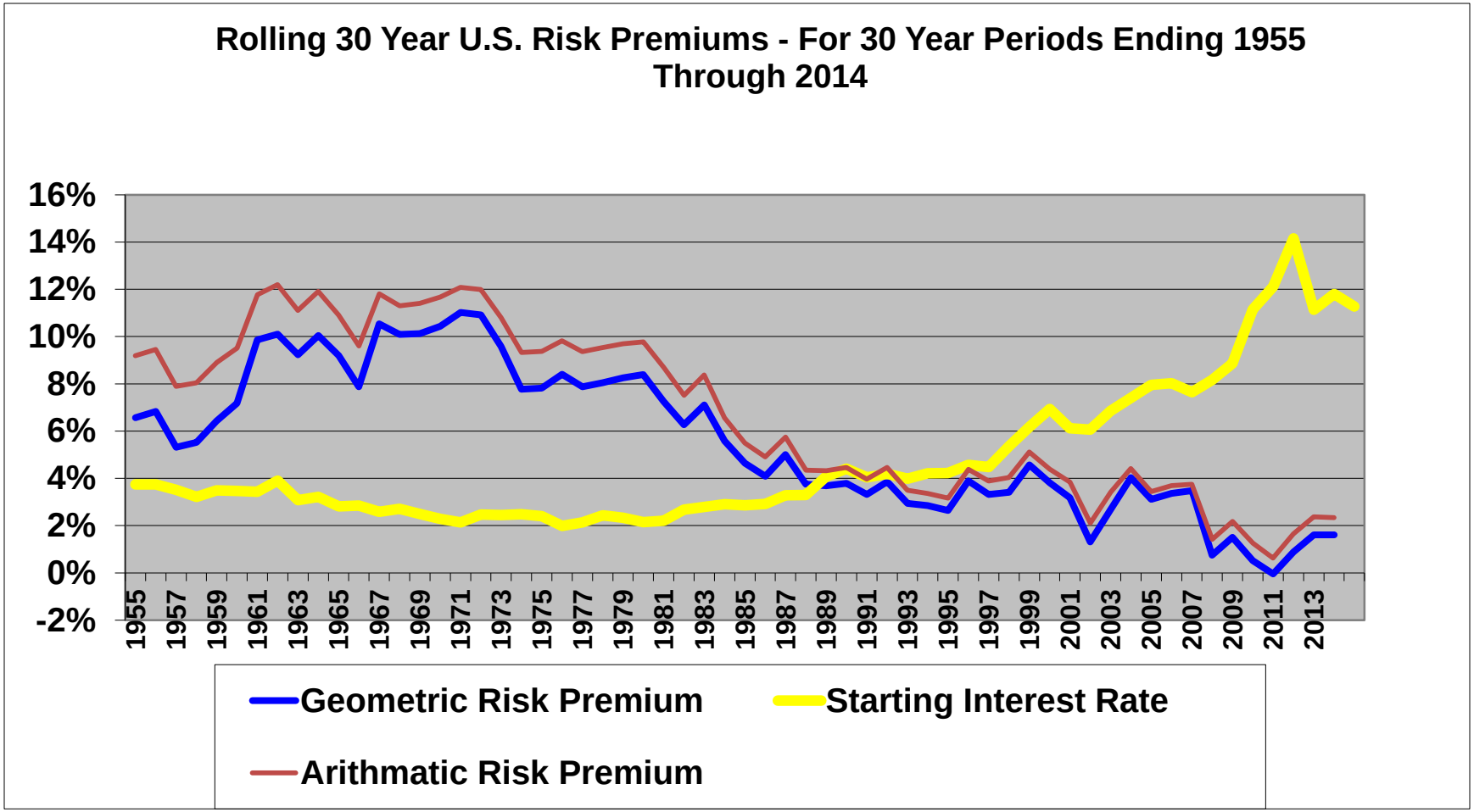
Note that each point on each line represents the nominal return over the 30 years ending in that year. Stock returns were remarkably stable.

Historical 30-Year Rolling Period Real Returns, Stocks, long Bonds, T-Bills



In theory, real returns should have been more stable than nominal returns over 30 years, but that has not been the case

30-year Market Equity Risk Premium over long bonds



The interest rate shown for 1955 is the starting rate 30 years earlier in 1925.
The risk premium appears to rise at lower starting interest rates

CAPM – Devil's in the details

- Slavish use of beta based on historical calculated betas is neither required by the model nor is it rational
- Think of beta as a **relative risk** factor, it is **forward looking** and can therefore may require using judgment
- The model does not state how to determine the (forward) beta nor does it state that the beta is necessarily constant over time
- Beta based on utility ROE versus unregulated ROEs might show very low beta
- Historical beta can be observed in the market but the future beta may **require** judgment
- Beta varies widely over time

Dividend Discount Model

- This model relies on the mathematical fact that expected return equals the dividend yield plus the expected **growth** rate of the dividend
- If the growth rate can be estimated then the **market required ROE** on the investment is known. This is theoretically appealing and is easy to calculate once the growth estimate is known
- The difficulty with this model is the problem of estimating the growth rate assumed by investors, especially given that the growth rate will change over time.
- This model has been very popular in the U.S. especially at the Federal level

Dividend Discount Model

- Changing growth rates over time can (arguably) be dealt with using two-stage or multi-stage models
- The terminal stage growth should probably not be greater than estimates for long-term nominal GDP growth lest the utility eventually grow larger than the total economy
- Investors' true expectations for dividend growth are hard to know. Analyst growth forecasts are usually considered optimistic
- This method is partly **market based** (the yield) and partly **expert evidence based** (growth)
- The results of this model should be considered as long as due care is taken with the growth assumptions

Comparable Earnings Model

- This model suggests that utilities be allowed an ROE similar to the ROEs made by low-risk unregulated companies
- **Sounds** promising – sounds like it would provide the **comparable returns available in the market**, **BUT**…
  - Comparable earnings provide what **companies** are making on their **book value** of equity. This return is not typically **available** to new investors who typically have to pay (say) twice book value for equity **securities** of comparable companies.
  - The amount an unregulated company is earning on its **historic** investments is not necessarily the amount it will earn on those assets going forward or what it will earn on incremental investments.
  - When companies trade at book value this may be a logical test but when companies trade far above or below book value it is simply not a good indication of returns actually **available** in the market on equity **securities**.
  - This model used to be given weight in Alberta but has not been given significant or even any weight since the early 1990's.

Major Steps in Setting Cost of Capital

- Determine the fair market return on equity
- **Determine an appropriate equity ratio**
- Determine the fair return on debt

How to Set the Equity ratio

- Consider the extreme points…
  - Why not go 100% Equity, 0% debt?, or
  - Why not go 0% equity, 100% debt?
- The **capacity** of a company to use debt depends on the **level of** and **stability** of its earnings
  - Similarly home owners with two well-paying secure jobs are in a better position to borrow money than homeowners with lower incomes and, importantly, less secure jobs
- Various credit metrics are used to measure the capacity to use debt

Condensed Simplified Income Statement

- Revenue or Sales

  minus operating expenses (wages, rent, admin)

  =Earnings Before Interest, Tax, Depreciation and Amortisation (**EBITDA**)

  minus depreciation and amortisation (amortisation is for intangible assets)

  = Earnings Before Interest and Tax (**EBIT**)

  minus interest on debt

  = Earnings Before Tax (**EBT**)

  minus income Tax

  = Net Income (profit or net earnings)

Condensed Simplified Cash Flow Statement

Starting Cash in bank

plus Gain (or loss) in **cash from operating** business

minus **Cash used to** add to (**invest** in) fixed capital equipment

plus or minus Cash used to repay debt or pay dividends and cash from new borrowings or equity issuance (**cash from financing**)

= Ending Cash in bank

Condensed Simplified Cash Flow From Operations

Net earnings

plus deprecation and amortization (added back because these are not paid in cash)

plus deferred or future income tax (the portion of accounting income tax not actually payable)

minus capitalised interest (minus AFUDC in the case of utilities)

minus gains on unusual asset sales (this gain is picked up in the investment section of the cash flow statement)

= **Funds From Operations** (**FFO**)

plus or minus the net changes in accounts payable, and accounts receivable (changes in non-cash working capital)

=**Cash Flow from Operations** (often somewhat misleadingly referred to as simply **Cash Flow)**

Why Not Go 100% Equity?

- Equity usually requires a higher return than debt
- In addition, debt interest is tax deductable to the utility (and that saving is passed to customers)
- Including taxes, the cost of equity is **substantially higher** than the cost of debt
- That is, the revenue requirement is lower when some debt and less than 100% equity is used
- In short, 100% equity would be much more expensive for customers

Why Not Go (close to) 100% Debt?

- Lenders (debt investors) would face unacceptable risks
- Equity investors could be easily wiped out
- At some high level of debt it might be difficult to attract any equity investment
- But some government utilities where the cost and risk of debt is based on the government's credit rating may use close to 100% debt.
- A private corporation needs someone to own it…

Leverage Example

- Assume $1000 million rate base, 50% debt at 6%, 50% equity at 10% ROE and a 35% income tax rate.
- Forecast equity return or net income will be $50 million ($1000 times 50% times 10%)
- Forecast income before tax must be $50 / (1 - 0.35) = $77 million
- Forecast debt interest is $30 million ($1000 times 50% times 6%)
- Forecast earnings before interest and taxes must be $107 million ($77 plus $30)

Impact of Equity Ratio

(Revenue Requirement increases with equity)

Rate Base	$ 1,000		
ROE	10%		
Debt cost	6.0%		
Tax Rate	35%		
Equity ratio	**50%**	**10%**	**100%**
Debt Ratio	50%	90%	0%
Forecast Earnings before Interest and Tax	**$ 107**	**$ 69**	**$ 154**
Forecast Interest cost	$ 30	$ 54	$ -
Forecast Income Before Tax	$ 77	$ 15	$ 154
Forecast Net Income	$ 50	$ 10	$ 100

With 10% equity, the revenue requirement is lowest since earnings before interest and taxes are lowest. Net income is low but the ROE remains 10%

How Low Can We Go?

- What is the lower boundary of the equity ratio, how much debt can we use?
- If too much debt is used then there is only a sliver of equity and the equity profit would swing wildly, therefore **equity investors will not want to see the equity ratio get too low**
- The equity cushion protects the bond investors (Shortfalls in revenue lower profits but interest must still be paid)
- **Debt investors need a significant equity cushion** before they will feel safe investing
- Equity and debt investors each would place a constraint on having too much debt. But it is the constraint of the debt investors that is the **active constraint**

Risk Averseness – equity versus debt investors

- With added debt, equity investors see wider swings in earnings. Sometimes they will win, sometimes they will lose. Equity investors can diversify. Loses on some investments are offset by unexpected gains on others
- But debt investors (who hold to maturity) never get more than they are promised. The benefits of diversifications are largely absent. With too much leverage they might not get their money back in bad times, and there is no upside in good times to offset this
- Debt investors are therefore much more risk averse than equity investors

Impact of reduction in EBIT (at low equity ratio, $20 million hit causes loss)

Equity ratio	**50%**	**10%**	**100%**
Debt Ratio	50%	90%	0%
Forecast Earnings before Interest and Tax	**$ 107**	**$ 69**	**$ 154**
Forecast Interest cost	$ 30	$ 54	$ -
Forecast Income Before Tax	$ 77	$ 15	$ 154
Forecast Net Income	$ 50	$ 10	$ 100
Impact of $20 million decline in EBIT due to cost over-runs or revenue shortfalls			
Actual Earnings before Interest and Tax	$ 87	$ 49	$ 134
Actual Interest cost	$ 30	$ 54	$ -
Actual Income Before Tax	$ 57	$ (5)	$ 134
Actual Net Income	$ 37	$ (3)	$ 87
Reduction in Net Income	**26%**	**130%**	**13%**

Constraint on Debt

- Equity investors might impose some constraint on debt such as no more than 85% debt, 15% equity
- Debt investors also impose some constraint such as no more than 65% debt
- The debt investor constraint is the **active constraint**, because debt investors are more risk averse because they have no up-side

How high should the debt ratio be?

- Debt is a LOT cheaper (assuming we are in a range where higher debt does not increase the cost of equity)
- An increase in debt from 10% to 20% probably has no impact on the cost of equity, but going from 80% debt to 90% debt would increase the risk and cost of equity
- Therefore the debt ratio should be as high as reasonably possible (but not higher)
- The constraining point for debt investors can be considered the point at which an inadequate debt credit rating results. BBB- is the lower limit for investment grade, but we may want to target A- to give an extra margin of safety

What equity ratio results in an "A" credit rating?

- Rating Agencies have guidelines which may say that 40% equity is needed for utilities
- But Credit rating Agencies may in fact award A ratings at (say) 35% equity ratio
- Should we go by what credit rating agencies **say** or by what they **do**?

What Credit Metrics are Needed for an "A" credit Rating?

- Rating Agencies have guidelines for utilities which may say that :
- 2.5 times EBIT interest coverage is needed
- 3.5 times FFO interest coverage is needed
- FFO over debt must be at least 12%
- But Credit Rating Agencies may in fact typically award A ratings at lower credit metrics
- Should we go by what credit rating agencies ***say*** or by what they ***do***?

Credit Ratio Examples

1	Rate Base	$ 1,000	Tax Rate	25%
2	Regulated ROE	8.75%	**Equity ratio**	**40%**
3	Debt cost	6.0%	Debt Ratio	60%
4	**Forecast Earnings before Interest and Tax (EBIT)**	**$ 83**	(5) + (6)	
5	Forecast Interest cost	$ 36		
6	Forecast Income Before Tax	$ 47		
7	**Forecast Net Income**	**$ 35**		
8	**EBIT interest coverage Ratio**	**2.30**	(4) / (5)	
9	Portion of taxes that are deferred to future	$ 14		
10	Average Composite Depreciation Rate	3.0%		
11	Depreciation $	$ 30		
12	**Funds From Operations (FFO)**	**$ 79**	(7) + (9) + (11)	
13	**FFO Interest Coverage Ratio**	**3.19**	((12) + (5)) / (5)	
14	**FFO / Debt**	**13%**	(12) / ((1)*0.60%)	

How Business Risk relates to the required equity ratio

- Business risk is **defined** as the uncertainty in operating earnings (earnings before interest and taxes, EBIT).
- A higher business risk lowers the **capacity** of a company to use debt financing (financial risk)
- Risk to both debt and equity holders is a function of both business risk and financial risk (leverage)
- Financial risk (debt) can be added until such point as the risk to debt holders reaches the **constraining** point. The risk to equity holders will be acceptable because they have a higher appetite for risk.

Categories of Business Risk

- Regulatory Risk (for monopoly utilities, this is easily the largest risk or eliminator of risk)
- Supply Risk (supply of gas could dry up)
- Revenue Risk (customers could use less or be lost to competition)
- Operating Risks (expenses could be higher than forecast)
- The risks that are relevant are the risks that are faced by investors, not risks that will simply be passed on to customers

Analyzing business risks

- Companies in various industries are usually considered to have relatively similar business risks
- Rate regulated utilities subject to similar regulation are considered to have similar risks. Within the regulated utility segment, gas utilities versus electric and transmission versus distribution are sub-segments with somewhat different business risk.
- Individual utilities may have different risks

Translating various business risks into a required equity ratio

- A “laundry list” of various risks cannot be mathematically translated into a required equity ratio
- We may be able to use the laundry list and the segments to rank order utilities
- In general, the estimate of the required equity ratio is not formulaic enough to change with the presence of absence of each particular risk or deferral account

Analyzing business risks

- If we set an **equity ratio equal** to that of other pure-play utilities that have achieved an A credit rating, can we expect that equity ratio to be sufficient and appropriate?
- If we set an equity ratio that achieves the **minimum credit ratios** of other pure-play utilities that have achieved an A credit rating , can we expect that equity ratio to be sufficient and appropriate?
- This approach relies on the market (bond raters)
- A more direct market approach would be to target equity ratios or credit metrics similar to utilities that have achieved a bond credit spread in the **market** of the level associated with an A credit rating.

Implications of Setting Equity Ratio to Achieve an A range rating

- This process equalizes the debt risk of all utilities involved
- It also equalizes the equity risk of all the utilities
- It allows a common ROE to be used
- It implicitly accounts for ALL risks perceived by investors
- The market and credit rating agencies are considered to be aware of all risks due the markets being efficient
- Setting an equity ratio that is high enough to achieve an A rating implicitly includes all risks that are perceived by investors.

2009 AUC Cost of Capital Findings

- Sample of relatively pure-play regulated utilities **with A credit ratings** were examined
- Interest coverage minimum **observed** was about 2.0
- Funds From Operations minimum coverage **observed** was about 3.0
- FFO / debt ratio minimum **observed** was 11.1 to 14.3%
- These **observed** minimum credit metrics are (arguably) market based, they are the ratios that were **in fact** acceptable to credit rating agencies as opposed to the (higher) ratios that the agencies **say** are needed

2009 AUC equity ratio versus credit ratios: sample group

- AltaLink L.P. (Alberta utility)
- AltaLink Investments L.P. (parent with added leverage)
- Fortis Inc. (Canadian multi-utility holding company)
- CU Inc. (Alberta multi-utility holding company)
- FortisAlberta Inc. (Alberta utility)
- Newfoundland Power

2009 AUC equity ratio versus credit ratios: sample group

- As much as possible, Alberta and Canadian **pure-play** utilities with **stand-alone** credit ratings were used
- “Utilities” with significant non-regulated operations were excluded
- Government owned utilities were excluded because the credit rating is usually increased by the government ownership
- In some cases the credit rating agencies noted that the equity ratio was effectively lower if goodwill was accounted for . Utilities with goodwill need a higher equity ratio to achieve a given credit ratio.

Calculating the equity ratio to arrive at certain coverage ratios

- EBIT coverage ratio can be calculated given the equity ratio, the ROE, the debt interest rate and the tax rate
  - Adjust the equity ratio to insure the forecast interest coverage ratio meets the minimum required
- Funds from Operations ratios can also be calculated if the overall depreciation rate is known
  - Adjust the equity ratio to insure the forecast FFO ratios meet the minimums found in samples
- An adjustment can also be made to account for CWIP

Major Steps in Setting Cost of Capital

- Determine the fair market return on equity
- Determine an appropriate equity ratio
- **Determine the fair return on debt**

Determine Fair Cost of Debt

- The debt cost paid is contractual in nature for up to 30 or even 50 years
- This cost lends itself to “flow-through” treatment, like most costs of the utility, the allowed debt cost can be set equal to the actual or expected cost
- The cost of debt is easily observable in the market

Conclusion

- To the extent possible, look to the **market** to determine the equity ratio and ROE that the market appears to require.
  - For equity ratios allow sufficient equity to achieve the minimum credit metrics observed on A rated utilities and / or with bond spreads typical of A rated firms.
  - For return on equity focus on CAPM and multi-stage Dividend Discount models
- In the end, some judgment will be required

ADDITIONAL COST OF CAPITAL TOPICS

WHO IS ENTITLED TO A FAIR RETURN? THE UTILITY OR INVESTORS?

Who is Entitled to a Fair Return?

- Is there a difference between the return earned by the company and the return earned by its investors? (In the short term?, In the long term?)
- Is the return measured by changes in the market value of shares or by the accounting earnings?
- There is a difference between the Company's return and the return made by debt (bond) and equity investors

Who is entitled to a fair return?

- Who is entitled to a fair return?
  - An original investor in the utility?
  - An investor who bought shares last year or last week?
  - An original bond investor?
  - A bond investor who bought last year?
  - The company that owns the utility?
- The Supreme court said:
  - **the company** will be allowed as large a return…
    - Therefore, it is **the company** that must earn a fair return. We must look to the **company's return** on capital. Shareholders and bond investors are **not** mentioned here.
      - It would be circular to try to set a fair return for investors that depended on a return on current prevailing market prices for shares since the market price in turn clearly depends on the return awarded.

Company versus Investor return

- Assume a utility **company** recovers in revenue the **6%** interest rate that it pays on its bonds (debt) and that it recovers **10%** on its equity capital. Assume the utility is financed 50% by equity and 50% by debt. The **company** thus has a return on debt of 6% and a return on equity of 10%.
- Do debt (bond) **investors receive** the 6% and do they **make** a return of 6%?
- Do equity **investors receive** the 10% and do they **make** a return of 10%?

Diversification Impacts

- The Utility may claim it is a non-diversified Investor and should be compensated as such
- Individual Investors are assumed to be diversified
- In theory, the market does not provide additional returns for risks that are easily diversified away

The Nature of Debt (Bond) Investor Returns

- A Bond investor can be compared to a bank that has loaned out mortgage money
- No matter what happens to the value of the house, the bank expects to receive back the agreed upon interest and principal, no more, no less
- Similarly, a bond investor in a utility expects to receive back the agreed rate of interest and return of the principal and has no up-side no matter how well the utility does. A bond investor could lose money in the event of bankruptcy, although this would be highly unlikely in the case of regulated utilities.

Company versus Investor Return

Bond **Investor** Returns:

- A bond **investor's return** for a given year will be the cash interest payments received **plus or minus** any change in the **market value** of the bond during the year
- The bond **investor** here will receive the **contractual** 6% on the originally issued **face value** of his or her bonds. In a given year the **market value** of a long-term bond can rise or fall significantly. The **investor's** return on the **market value** of his bonds can therefore be significantly different than 6%
- And various bond **investors** may have paid significantly more or less than the original **face value** for their bonds. The return on the price each investor paid for the bonds therefore differs among investors, and would rarely be the 6%.

Company versus Investor Return

Equity **Investor** Returns:

- An equity **investor's** return for a given year will be the cash dividend (if any) received **plus or minus** any change in the **market value** of his or her shares during the year
- The annual return an **investor** makes on the market value of his equity shares can (and will) differ significantly from the ROE earned by the **company.** For example, the share price could fall despite the company earning 10% in a given year
- And various equity **investors** will have paid significantly differing amounts for their shares. The return on the price each investor paid for the shares therefore differs widely among investors, although they all make the same return on market value and none of these returns need be anything close to the 10% ROE (at least in the short term)

ADDITIONAL ITEMS THAT IMPACT THE EQUITY RATIO

Should Market Value Equity ratios be used, rather than book value?

- Academics argue that risks to bond holders depend on the market value of the equity and **not** its book value
- However, in the case of regulated utilities the market value of equity is logically tied to the book value of equity upon which a return is allowed
- It would be circular to try to set a fair return for investors that depended on a return on current prevailing market prices for shares since the market price in turn depends on the return
- Credit metric ratios (EBIT and FFO coverage) are **not** affected by the market value of equity
- Use of market value equity ratios may contravene legislation that requires a return on original cost to be awarded

Can We used Observed Credit Spreads to set risks?

- Utility debt cost is measured by the amount by which the interest rate is higher than the government of Canada pays. This called the “spread”
- Imagine most A rated utilities have “spreads” lower than 140 basis points for 30-year debt
- Can we then look at the credit metrics of those utilities and then assume that if we insure our utilities have those minimum credit ratings then they would also get the same spread associated with A credit ratings?
- This is even more **market based** than requiring all sample utilities to have an A rating.

Accounting Goodwill Defined

- Accounting “goodwill” arises when one company purchases another and pays more than market value for the assets (For utilities , more than a $1.00 is paid to acquire each $1.00 of rate base)
- For utilities, goodwill is excluded from rate base and does not earn any return

Impact of Goodwill on Business Risk

- All else equal, if purchased accounting goodwill is partly financed by debt, the profit of such a utility must be lower, due to the interest payments not offset by any return, resulting in weaker credit ratios
- Mathematically, the presence of goodwill financed in any part by debt is a self-inflicted wound or reduction in credit metrics unless the goodwill is financed 100% by equity

Do Contributions in Aid of Construction (CICA) impact the equity ratio?

- The risks of a utility are proportional to its assets and revenue
- A utility with 50% contributed assets has the same risks as it would have with no contributed assets but it may only have half the equity cushion to absorb losses before there is insufficient money to make interest payments
- The various credit ratios of a utility with 50% contributed assets remain the same as the utility with no contributed assets (assuming the same equity ratio)
- A utility with higher contributed assets has a smaller EBIT and therefore a given dollar reduction in EBIT is a higher percentage and therefore a higher risk and **needs stronger credit ratios** (and therefore needs a higher equity ratio)

Adjustments for Utilities with higher than average business risk

- Adjust the equity ratio rather than ROE because:
  - It is the debt risk that sets the active constraint on the equity ratio
  - A higher equity ratio has a more direct and cost-effective benefit in reducing the risks to debt investors than does increasing the ROE applicable to all equity.
  - From an equity investor perspective company-specific risks can be diversified away since losses on one company may be offset by gains on another
    - But, this is not true for debt investors (who face downside with no offsetting upside)
    - The required return assumes that the equity investor is diversified

Do Contributions in Aid of Construction (CICA) impact the equity ratio?

- When we look at actual utilities with certain equity ratios and credit ratios and bond ratings, those credit metrics "work" for the level of contributed assets that the reference utilities have
- When the AUC used a sample of utilities it implicitly assumed that the CICA levels of its regulated utilities would be similar to the sample.
- In the case of the AUC the sample utilities were mostly its own Alberta utilities
- The minimum credit ratios that were observed would not apply to a utility with a percentage CICA level that was much higher than the average CICA level of the AUC sample. This is because the risk of a high CICA utility is higher.

How Does Construction Work in Progress Impact the Analysis?

- In 2009, the AUC calculated the credit metrics that would result from a given equity ratio using the allowed ROE, the average debt cost, the average depreciation rate and the statutory income tax rate
- But the AUC acknowledged that the ratios would be lower in the presence of CWIP or where the effective tax rate was lower
- In 2011, the AUC assumed a 5% CWIP level which reduced the credit ratios calculated for a given equity ratio and the AUC also allowed utilities with very high CWIP to put CWIP in rate base

How Does Income Tax Affect Risk and Credit ratios?

- Risks are proportional to assets and revenues and are not affected by the income tax rate (other than the risk of the tax rate being higher than forecast)
- Paradoxically, a utility that is allowed to collect for a 30% income tax rate has a higher **capacity to absorb risk** than a utility that collects no income tax or a lower level of tax
- When a taxable utility takes a $1 million dollar “hit” to expenses, it shares the pain with the tax man
- The income tax has been **collected** from customers but if expenses rise and profit dissipates, then the income tax is not payable

THE WEIGHTED AVERAGE COST OF CAPITAL APPROACH

Weighted Average Cost of Capital

- Utilities have often argued that we should approve a weighted average cost of capital (WACC) approach
- In this approach we would not approve the three separate items of ROE, equity ratio and debt cost. Instead, we would approve a single return applicable to the total debt and equity capital. The utility would be free to set and manage its own equity ratio

Should we set a return on capital as opposed to separate debt and equity returns?

- The Supreme court speaks of return on **capital**
- Corporations, it is often said, invest capital and use minimum "hurdle rates" based on their cost of capital. (Their weighted average cost of (debt and equity) capital)
- Projects and firms, it is said, can be evaluated based on a return on capital approach without regard to how the debt and equity will be split.
- Cost of capital is (arguably) flat and does not change with the ratio of debt to equity (Modigliani Miller proposition, but this is in the **ABSENCE** of income tax and other frictions)
- This theory suggests that as debt leverage is added the cost advantage is lost because the risk increases and equity investors require a higher return

Is there actually an optimum capital structure?

- Firms in a given industry tend to use similar levels of debt (implying there is some optimum or at least normal level)
- When firms make acquisitions they usually disclose how it will be financed, so much equity and so much debt
- When income tax is considered there is an optimum capital structure (Debt is not only cheaper but the interest is tax deductible)
- **Customers** of regulated entities may perceive an optimal capital structure that is different than **equity investors** perceive (customers want the lowest possible cost, for utilities the lower cost advantage flows to customers not investors)

Is there a capital market where combined equity and debt is invested?

- Utilities have sometimes implied there is and that they can observe the market cost of capital directly rather than as the weighted average of its components.
- Firms may tell you that they invest **combined debt and equity** in projects internally. Do they really when one considers they maintain a corporate debt / equity ratio?
- Firms will tell you their minimum "hurdle rates" for capital but is this reliable as an indication of the true returns available, is this a "**market**"?
- If there is such a market where combined debt and equity is invested by firms is it open and observable?
- One such market is real estate that trades on a capitalization basis and also some companies trade on the basis of a multiple of EBITDA. These markets can be hard to observe but some data is available. Even here, the EBITDA multiple may depend on the cost of debt and equity capital and the ratio of each.
- Any lack of an observable market for **capital** may be a show-stopper for attempts to directly find the market weighted average cost of capital

Are the markets for debt versus equity investments quite separate?

- There are clearly separate markets where debt trades and where equity trades
- Investors tend to keep separate track of debt and equity investments and their asset allocation
- There are some examples of hybrid securities but in the main, debt and equity are in totally separate markets
- If the markets are separate then perhaps the cost of capital can only be calculated as a weighted average

So, Can or should regulators set separate debt and equity returns?

- Few would argue against the notion that the combination of a fair split of debt and equity, a fair return on debt and a fair return on equity would **automatically** result in a fair return on the total debt and equity capital.
- If there is an optimal capital structure then it would seem **necessary to proceed separately.**
- If there are separate debt and equity **markets** and no combined capital **markets** and if one wishes to set the return required in the **market** then it would seem **necessary to proceed separately**.
- Awarding current (and floating) market WACC would have placed utilities at enormous risk regarding debt costs as market WACC has declined with lower debt costs, while utilities were locked into historic higher cost debt
- The WACC award by the NEB to the Trans Quebec pipeline in 2008 used current debt yields rather than the contracted historic cost of debt. This might be problematic to apply in 2015 due to the dramatic decrease in market interest rates since 2008

Does ROE Change With Equity ratio?

- In theory, yes.
- But the same ROE can apply across utilities if the equity ratio is set to allow a similar A range credit rating for all utilities.
- In this case, differences in risk can be dealt with by adjusting the equity ratio
- The fair ROE is the one that can be earned on equity investments in similar risk investments
- Similar would include the ROE in equity investments where the debt rating is also in the A range.

PRICE TO BOOK VALUE CONSIDERATIONS

Book Value Explained

- Book value refers to the accounting values on the “books” of a utility
- Book value of equity is the amount the owners have invested in the corporation including retained earnings
- Book value of debt is the amount of money borrowed that remains owing
- Regulated debt and equity returns are paid on book value, not on market value, which usually differs
- The “books” for regulatory purposes may differ from those for external accounting purposes due to, for example, disallowed expenses and because assets are not marked to market for regulatory purposes

Return on Book Value versus Return on Market Value

- If a bond that originally yielded 10% trades well over book value and now yields (to maturity) only 5%, it is irrefutable that a current purchaser will not earn more than 5% if the bond is held to maturity
- Similarly, if a utility equity share on which the underlying assets earn 10% trades at twice book value there is a *prima facia* (but not irrefutable) case that investors should expect less than the 10% return in the long run
- But investors **may** expect to earn the full 10% because
  - Retained earnings invested in new rate base earn the full 10%
  - Investors may expect the utility to earn more than the 10% ROE
  - If **ALL** earnings are retained **and** if the utility can later be sold for twice book, then the investor can make the full 10%
- In financial theory it is difficult to justify why an asset **that earns only on book value** would trade at twice book value in the long run unless it is earning more than the market required return

Points to Ponder – Floating versus Fixed Rates of Return

- Unregulated firms are "stuck" with whatever return the market provides. Utilities can get a **re-set** on their return on capital as often as annually. Utilities get a **floating return**. If interest rates rise, comparable unregulated companies may find that the market resets the return, or it may not. Competitive firms face numerous risks that in a utility world are non-existent or are passed on to customers (technology risk, lower cost competitor risk, interest cost fluctuations)
- Prospective **investors** in an unregulated firm's **securities** in any event cannot expect to necessarily earn a return equal to the return the unregulated **company** makes.
- Is it unfair that a regulated utility return is lower than competitive ROEs or that the utility price to book ratio is lower?

Price to book Value Considerations

- An asset expected to earn its cost of capital should theoretically trade at precisely book value
- Utilities will acknowledge that recently they must pay **double** book value of equity in transactions (In decades past, utility equity traded much closer to and even under book value)
- Investors and utilities pay twice book to obtain a regulated return that is paid only on book value
- Utilities argue that this is no indication whatsoever that they are willingly accepting returns below the regulated levels (much less, that they are accepting returns at **half** the regulated level)
- Price to book value is **market** evidence but its interpretation requires **judgment**

Points to Ponder

- Regulated companies in recent years have traded in the stock market at about two times their accounting book value.
- This means that their ROEs (company return on book equity value) are twice the earnings returns on their market values. 10% on $100 book value per share becomes 5% on $200 market value per share
- Non-regulated companies also tend to usually trade well in excess of book value although some trade well below book and the price to book ratio varies widely across and within industries

Points to Ponder

- Many companies on the stock exchange earn far higher than 10% ROE's. However since their share prices are usually at least twice book value, it is not the case that new investors can necessarily earn these high ROEs by buying shares
- Utilities have argued that they should be allowed to earn the same return on the book value of their capital (or equity) as comparable unregulated firms earn on their book value. (The same ROE – or comparable earnings)
- But the Supreme court said "the company will be allowed as large a return on the capital invested… as it would receive if it were investing the same amount in other (equal) **securities**…" it did not say the same return on **book value** made by other **companies**.

Understanding Price to Book value and its impact on ROE

- Imagine Joe bought a rental house years ago for $100,000 and today he rents it out for a profit after all expenses of $20,000.
  - That is a 20% return on Joe's book value
- But now imagine that Frank purchases the rental house at today's market value of say $400,000. Assume the profit remains $20,000. Assume the profits are not reinvested.
  - Frank's return on investment is only 5%
  - The price Frank paid was four times Joe's book value and so his return on his purchase price is one fourth as high

Why Might Investors Pay Twice Book Equity Value?

- Investors **may** be indicating they don't require a return as high as the current ROE
- If **all** earnings are retained and earn the book ROE, the investor's return may approach the book ROE asymptotically
- Growth, in some cases, may initially be sufficient to retain and invest all earnings but cannot be sufficient in the long run
- Investors may expect the price to book ratio to remain at 2.0 (Is this logical and if so, what does it imply about expected returns versus required returns?)
- How can long-term investors earn 10% if the utility earns 10% but the investor pays twice book?

Why Utilities Pay Twice Book Equity for transactions

- If investors pay twice book for a perpetual government bond we **KNOW** that they are accepting a long-term return of precisely **half** the coupon rate
- If investors pay twice book for a utility that earns a regulated return on book value is it reasonable to conclude that they are implicitly accepting a long-term return of less than the expected ROE on book? Of less than the awarded ROE?
- Utility management may have different incentives than investors (salaries may be linked to size not to ROE)
- There may be ways to increase the ROE well above the regulated ROE (an upcoming slide lists the possible reasons)

Why Pay Twice Book Equity?

- If you **pay twice book** value for the equity in a utility and if ROE is 10% and **all** earnings are retained (no dividend is paid) and you **sell at twice book** at **any time** in the future your return is **the full 10%.** This is because return equals 0% yield plus 10% growth. (See spreadsheet 1)
- If you **pay twice book** and if ROE is 10% and the dividend is 30% of earnings and **you sell at twice book** at **any time** in the future your return is 8.5%. This is because initial dividend yield is 1.5% (half of 30% of 10%) and growth is 7% (70% retained times 10% ROE). (See spreadsheet 2)
- If you **pay twice book** and if ROE is 10% and dividend is 30% of earnings and **you sell at 1.5 times book in 20 years** then your return is 7.18% (See spreadsheet 3)
- If you **pay twice book** and if ROE is 10% and dividend is 0% (all earnings retained) and **you sell at 1.5 times book in 100 years then** your return is 9.68% (return asymptotically approaching 10% due to reinvestment, but not there yet at 100 years). (See spreadsheet 4)

Why Pay Twice Book Equity?

- If you **pay twice book** and if ROE is 10% and dividend is 30% of earnings and **you sell at 1.0 times book in 20 years** then your return is 5.43% (Spreadsheet 5)
- If you **pay twice book** and if ROE is 10% and dividend is 100% of earnings and you **sell at 1.5 times book in 20 years** then your return is 4.17% (Spreadsheet 6)
- If you **pay twice book** and if ROE is 10% and dividend is 100% of earnings and you **sell at 1.0 times book in 20 years** then your return is 3.17% (Spreadsheet 7)
- If you **pay twice book** and if ROE is 10% and dividend is 100% of earnings and you **sell at 1.5 times book in 100 years** then your return is 4.99% (Spreadsheet 8)

Why Pay Twice Book Equity?

- If you **pay twice book** and if ROE is 10% and you take no dividend and instead you annually invest new money in an amount equal to three times the earnings (This is only possible with a utility that is growing extremely fast) and **you sell at 1.0 times book in 20 years** then your return is 9.76% (i.e. approaching 10%, Spreadsheet 9)
- If you **pay twice book** and if ROE is 10% and you take no dividend and instead you annually invest new money in an amount equal to three times the earnings (This is only possible with a utility that is growing extremely fast) and **you sell at 2.0 times book in 20 years** then your return is 25.0% annually (i.e. you are minting money because each new dollar invested at book value is worth twice book value, Spreadsheet 10)

Why Pay Twice Book Equity?

	Price to Book Paid	Utility ROE Earned	Dividend Payout Ratio	Price to Book When Sold	Years Held	Investor Return Made
1	2.0	10%	0%	2.0	Any #	10%
2	2.0	10%	30%	2.0	Any #	8.5%
3	2.0	10%	30%	1.5	20	7.18%
4	2.0	10%	0%	1.5	100	9.68%
5	2.0	10%	30%	1.0	20	5.43%
6	2.0	10%	100%	1.5	20	4.17%
7	2.0	10%	100%	1.0	20	3.17%
8	2.0	10%	100%	1.5	100	4.99%

Conclusion, paying twice book can works out well if the price to book stays at or near 2.0 **or** you hold for a very long time **and** the company retains most of its earnings to reinvest at the 10% **or** you are in fact satisfied to make less than the regulated return.

Why Pay Twice Book Equity?

	Price to Book Paid	Utility ROE Earned	Dividend Payout Ratio (Pay-in)	Price to Book When Sold	Years Held	Investor Return Made
9	2.0	10%	-300%	1.0	20	9.76%
10	2.0	10%	-300%	2.0	20	25.0%

Here we show an unusual situation where rather than paying out a dividend, the owner invests annually new money equal to 300% or three times the earnings. This is only possible if the utility is growing extremely rapidly.
In this case even if the value of the utility ultimately reverts to 1.0 times book value the investor will earn close to the utility allowed return since so much new money is going in and earning that rate. If the utility will continue to trade at twice book value (perhaps because the allowed return is higher than required, then the investor can make very large returns as in effect all the new dollar bills invested immediately turn into two dollars of market value.

Spreadsheet 1

Equity Price to Book Ratio Paid				2.0
Equity Book Value Purchased				1000
Price Paid				2000
ROE				10.0%
Dividend Payout Ratio				0.0%
Price to Book Ratio When Sold				2.0
Annual Compounded Return				10.00%
Year	Book Value	Earnings	Dividend	Cash Flows
0	1,000			(2,000)
1	1,100	100	-	-
2	1,210	110	-	-
19	6,116	556	-	-
20	6,727	612	-	**13,455**

Spreadsheet 2

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**30.0%**
Price to Book Ratio When Sold				**2.0**
Annual Compounded Return				**8.50%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,070	100	30	30
2	1,145	107	32	32
19	3,617	338	101	101
20	3,870	362	108	**7,848**

Spreadsheet 3

Equity Price to Book Ratio Paid				2.0
Equity Book Value Purchased				1000
Price Paid				2000
ROE				10.0%
Dividend Payout Ratio				30.0%
Price to Book Ratio When Sold				1.5
Annual Compounded Return				7.18%
Year	Book Value	Earnings	Dividend	Cash Flows
0	1,000			(2,000)
1	1,070	100	30	30
2	1,145	107	32	32
19	3,617	338	101	101
20	3,870	362	108	**5,913**

Spreadsheet 4

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**0.0%**
Price to Book Ratio When Sold				**1.5**
Annual Compounded Return				**9.68%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,100	100	-	-
2	1,210	110	-	-
99	12,527,829	1,138,894	-	-
100	13,780,612	1,252,783	-	**20,670,919**

Spreadsheet 5

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**30.0%**
Price to Book Ratio When Sold				**1.0**
Annual Compounded Return				**5.43%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,070	100	30	30
2	1,145	107	32	32
19	3,617	338	101	101
20	3,870	362	108	**3,978**

Spreadsheet 6

Equity Price to Book Ratio Paid				2.0
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**100.0%**
Price to Book Ratio When Sold				**1.5**
Annual Compounded Return				**4.17%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,000	100	100	100
2	1,000	100	100	100
19	1,000	100	100	100
20	1,000	100	100	**1,600**

Spreadsheet 7

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**100.0%**
Price to Book Ratio When Sold				**1.0**
Annual Compounded Return				**3.17%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,000	100	100	100
2	1,000	100	100	100
19	1,000	100	100	100
20	1,000	100	100	**1,100**

Spreadsheet 8

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio				**100.0%**
Price to Book Ratio When Sold				**1.5**
Annual Compounded Return				**4.99%**
Year	**Book Value**	**Earnings**	**Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,000	100	100	100
2	1,000	100	100	100
99	1,000	100	100	100
100	1,000	100	100	**1,600**

Spreadsheet 9

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio (note huge investment annually)				**-300.0%**
Price to Book Ratio When Sold				**1.0**
Annual Compounded Return				**9.76%**
Year	**Book Value**	**Earnings**	**Negative Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,400	100	(300)	(300)
2	1,960	140	(420)	(420)
19	597,630	42,688	(128,064)	(128,064)
20	836,683	59,763	(179,289)	**657,393**

Spreadsheet 10

Equity Price to Book Ratio Paid				**2.0**
Equity Book Value Purchased				**1000**
Price Paid				**2000**
ROE				**10.0%**
Dividend Payout Ratio (note huge investment annually)				**-300.0%**
Price to Book Ratio When Sold				**2.0**
Annual Compounded Return				**25.00%**
Year	**Book Value**	**Earnings**	**Negative Dividend**	**Cash Flows**
0	1,000			(2,000)
1	1,400	100	(300)	(300)
2	1,960	140	(420)	(420)
19	597,630	42,688	(128,064)	(128,064)
20	836,683	59,763	(179,289)	**1,494,076)**

How Utilities Justify Paying Twice Book Equity in Transactions

- Accretive to (increases) earnings per share
- Expect to beat the awarded returns through:
  - Cost efficiency
  - Double leverage (borrow part of the “equity’ at a parent level)
  - Cross border – deduct the same interest costs in two territories
  - Allocate some existing head office costs to a purchased utility
  - Performance Based Regulation
- Willing to pay for opportunity to expand territory (foothold)
- Willing to pay due to strategic fit

All or most of these do not work in theory, but, strangely enough, may work in practice, at least in the short term

Problems with Utility Justifications for Paying Twice Book Equity

- Accretive to earnings – If shares trade at a P/E of 20, then the earnings yield is 5% and any investment that yields more than 5% is accretive to earnings. But the utilities are not suggesting that a 6% return is acceptable simply because it is accretive.
- Synergies and cost efficiencies should ultimately be passed on to customers
- Rational companies do no not accept low returns on large investments just to get a foothold in a new territory or because of strategic fit
- If utilities can be double leveraged, or interest can be deducted in two countries, why is that benefit not passed on to customers?