

Decoupling Impacts on the Cost of Capital

Minnesota Public Utilities Commission

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Declining Sales Volumes Typically Reduce Net Income

- Without decoupling, utility sales and net income vary with sales volumes.
 - If short-run marginal cost is lower than average cost, and/or if there is a PGA / Fuel Clause, then net income declines with decreased sales. (Typical)
 - If short-run marginal cost is higher than rates, and there is no Fuel Clause, then there is an inverse relationship. (PacifiCorp).



Several Warm Years Can Deplete Retained Earnings

- Assume rates with 75% gas cost (with PGA) and 25% delivery cost, and net income = 20% of delivery cost.
- A 20% reduction in sales volumes causes net income to drop to zero.
- If the dividend is still paid (out of retained earnings), they can be quickly depleted.
- Many bond covenants prohibit paying dividend if retained earnings are depleted.
- If retained earnings are depleted and/or the dividend is suspended, a bond downgrade is likely, increasing borrowing costs for years to come.



Rating Agencies Value Stable Earnings

- A utility that can pay dividends out of cash earnings every year, regardless of weather, is likely to be viewed as lower risk.
- S&P has specifically identified a “**Business Risk Profile Rating**” that ties the utility’s risk profile to a required equity ratio to maintain a given bond rating.
- Most distribution utilities are rated 1, 2, 3, or 4 on a 10-point risk scale (independent power producers are rated 7 – 9)
- A lower risk utility needs less equity to get the same bond rating (and thus the same bond interest cost).

Northwest Natural:

1 Step Benefit From Weather Adjustment

Northwest Natural Gas received a partial decoupling (90%) in 2002.

Christensen Associates review prepared in 2005.

“CFO David Anderson believes that DMN and WARM were contributing factors to NW Natural obtaining the best rating in the Standard & Poor’s (S&P) business risk profile (scoring a 1 on a scale of 1 to 10). Similarly, he believes that DMN and WARM contributed to the upgrade in NW Natural’s S&P bond rating from A to A+. An improved risk profile has several beneficial effects. It allows NW Natural to maintain smaller lines of credit, reduce the share of equity in its capital structure, and maintain a lower coverage ratio.”



Benefit of a One-Step Improvement in the Risk Profile

- S&P Indicates that a 1-step reduction in the Business Risk Profile means about a 3% lower equity capitalization ratio is needed to maintain the same bond rating.

S&P Required Equity Capitalization

Risk Profile	BBB Rating	A Rating
3	35% - 45%	45% - 50%
2	32% - 42%	42% - 48%
Difference	3%	2.5%




How a Lower Equity Ratio Produces Lower Rates

Without Decoupling	Ratio	Cost	Weighted With-Tax Cost of Capital
Equity	45%	11.0%	7.62%
Debt	55%	8.0%	2.86%
Weighted Cost			10.48%
Revenue Requirement: \$1 Billion Rate Base			\$ 104,800,000
With Decoupling			
Equity	42%	11.0%	7.11%
Debt	58%	8.0%	3.02%
Weighted Cost			10.13%
Revenue Requirement: \$1 Billion Rate Base			\$ 101,280,000
Savings Due to Decoupling Cost of Capital Benefit:			\$ 3,520,000



A Lower Equity Ratio Does Not Mean A Lower ROE

- A lower equity ratio still means the utility earns the same return on equity. It simply has fewer shares of stock (and more bonds) making up its capital structure.
- In the previous example, the ROE was 11%, and the cost of debt was 8%, reflecting an identical rate of profit, and an identical bond rating (and interest cost).



Why Not Leave The Equity Ratio Unchanged, and Let The Bond Rating Rise?

- Either one will produce the same effective results in the long run.
 - A lower risk utility with an unchanged equity ratio will **eventually** get a higher bond rating.
 - The higher bond rating will result in lower interest rates over time.
- The bond rating benefits take decades to materialize.
- The equity ratio adjustment can be done at the same time (or in the next rate case) as decoupling.
- By synchronizing the changes, decoupling can produce a reduction in rates for consumers, at no cost to investors.
 - Equity holders get the same ROE as before
 - Bond investors get the same interest rate as before
 - Both are taking less risk.



Decoupling Can Mean A Win-Win For All

- The investor receives the same return, more stable earnings, and a lower business risk profile.
- The consumer receives a lower revenue requirement.
- If weather decoupling is done in real-time (every billing cycle), the consumer also receives a lower bill in cold years, when bills are most difficult to pay.