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## There are 6 variables Mitr Phol needs to consider when estimating the Cost of Capital

Factors	Possible Benchmarks or Parameters
Risk Free Rate	<ul> <li>Use long-term local government bond rate or;</li> <li>Use long-term global ("US") treasury bond rate plus country risk spread</li> </ul>
Debt Risk Premium	<ul> <li>Use market yield; or</li> <li>Use credit rating; or</li> <li>Use target credit rating; or</li> <li>Use bank's quote spread</li> </ul>
Tax Rate	<ul> <li>Effective tax rate</li> <li>Marginal tax rate</li> </ul>
Leverage	<ul> <li>Historical average/ actual leverage; or</li> <li>Target leverage</li> </ul>
Market Risk Premium	<ul> <li>Use local capital market risk premium; or</li> <li>Use global ("US") capital market plus country risk</li> </ul>
Business Risk Index	– Thai peers; and or – Global peers



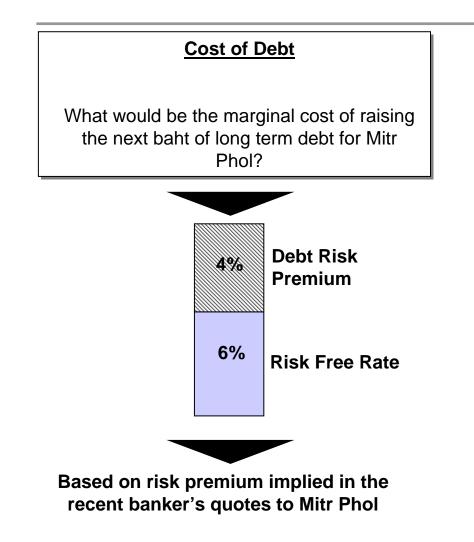
## We suggest Mitr Phol use the following parameters to determine the Cost of Capital for the sugar business

Factors	Benchmark/Parameter Recommendation	Values	
Risk Free Rate	<ul> <li>Use historical average of long-term local government bond rate for Thailand</li> <li>Use inflation differential from Thailand for China</li> </ul>	Thailand 6% China 7%	
Debt Risk Premium (over risk free rate)	<ul> <li>Use bank's quote spread &amp; best internal estimates</li> <li>3%-4%</li> </ul>		
Tax Rate	– Marginal tax rate	Thailand 30% China 33%	
Leverage	-Target Debt to Equity Ratio	Depending upon business 1:1 – 3:1	
Market Risk Premium	– Use global ("US") capital market plus country risk	Thailand 9% China 8% US 6%	
Business Risk Index	<ul> <li>Thai peers</li> <li>Global peers if Thai peers are not available</li> </ul>	Sugar 0.9 Board 0.6 Power 0.4*	

\*Note: Beta for Power based on IPP betas & applies to businesses using conventional fuel. No listed SPP data available. Since on the supply side, the business is exposed the same risks as sugar, though revenues are more secure, the real beta may be between 0.4 and 0.9



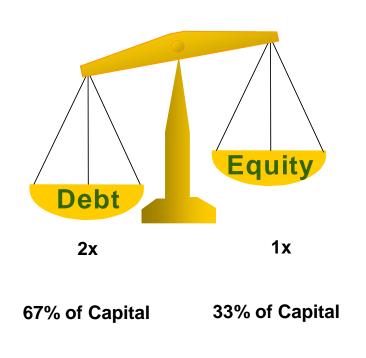
## Cost of debt was estimated using a risk premium over risk free rate, based on recent bank quotes & internal estimates.



- Individual corporate entities have different existing D/E ratios and potentially different risk premiums (estimated by finance team to be between 3%-4% over risk free rate)
- However, in effect MP raises debt (or equity) as an integrated entity. Debt is often raised on the balance sheet of one corporate entity and then moved to another through intercompany receivables or loans
- The recourse for debt is often to the parent or even underwritten by the personal assets of the directors
- This argues strongly for using the same debt risk premium of ~4% for all the businesses to reflect the close integration of businesses when financing



Finally, the relative contribution of debt and equity to capital was estimated by using long term target debt to equity ratio for the entire Mitr Phol Group (not the same as current D/E ratio)



- Individual corporate entities under Mitr Phol have their existing and target D/E ratios
- It is preferable to think of the target D/E ratio from the perspective of the entire MP Group
- This recognises the fact that there is a common pool of capital for all corporate entities, regardless of where capital was raised
- This argues strongly for using the same target D/E ratio of approximately 2:1 across all the businesses (based on internal targets for individual entities at 1:1 to 3:1)
- As a benchmark, most international sugar companies tend to have a D/E ratio of 1:1



## Should Mitr Phol use a single cost of capital for all its businesses, or individual costs of capital for Sugar, Board & Power.

SINGLE COST OF CAPITAL	VS.	MULTIPLE COSTS OF CAPITAL
Benefits		Benefits
<ul> <li>Is simple to use, and reduces the chances of misperception</li> </ul>		<ul> <li>Reflects the specific systemic risk to the shareholder of investing in each business</li> </ul>
<ul> <li>Reflects close integration of businesses, especially when raising capital</li> </ul>		<ul> <li>Is consistent with the EVA Centre choice of treating each line of business as independent</li> </ul>
Drawbacks		Drawbacks
<ul> <li>If the lines of business have scale that gives them the potential to raise capital on their own, then the proper economic treatment will be to use multiple costs of capital for all</li> </ul>		<ul> <li>Close integration of Board and Power businesses with sugar (in terms of dependence on Bagas) means that some risks are shared which could make their WACC close to the Sugar business</li> <li>Shareholder may have the same risk and return expectations from new businesses as from Sugar</li> </ul>

This choice will depend upon the relative independence and scale of the businesses and shareholders expectations of returns.



The buildup of assumptions to arrive at WACC is illustrated for Mitr Phol (under Thai Sugar Business) for reference.

