

Alaska Interstate

Alaska Interstate began as a joint venture in 1966 with the combination of Alaska Gas and Service Co., a natural gas transmission company, with Anlin Companies, sulphur-recovery operations in New Jersey and Illinois. By January 1997, the AKI "portfolio of firms" contained such divisions as Alaska Pipeline (natural gas pipeline development), McAlester Fuel Company (oil and gas exploration for Rocky Mountain and Gulf Coast regions), Delta Engineering Corporation (design and construction of oil business facilities), Kranco (crane manufacturing), Lockwood Corporation (irrigation, harvesters, and other agricultural equipment), Stardust Cruiser Manufacturing Company (boats), and Sauder Industries (vessel and furnace manufacturing).

In January 1997, AKI's beta was estimated using linear regression to be 1.18. The betas for AKI's subsidiaries could not be calculated using the same method that had been used to estimate the AKI beta, since market price information was not available for the subsidiaries. Instead, betas of comparable firms were used to develop cost of capital estimates for the subsidiaries. This technique assumes that businesses in the same industry are subject to the same economic influences and are therefore subject to a similar degree of systematic risk.

The CFO of AKI has asked you to compute divisional cost of capital estimates for the Lockwood and Alaska Pipeline subsidiaries. Exhibits 1 and 2 summarize the comparable betas (levered) for Lockwood and Alaska Pipeline. AKI's overall debt ratio is approximately 60 percent, and its tax rate is 40%. AKI allocates the debt to the various divisions which ranges from 50 to 70 percent. AKI estimates that the debt-to-equity ratio for the Lockwood division is closer to the lower end of the range of the firm's divisions (50%) whereas the Alaska Gas division is closer to the top of the range (70%). Interest rate data is given in Exhibit 3.

Exhibit 1.
Comparable Betas for Lockwood Division

Company Name	Debt/Equity Ratio	Levered Beta	Unlevered Beta
Valmont	0.59	1.67	
Hesston	0.36	0.97	

Exhibit 2.
Comparable Betas for Alaska Pipeline Division

Company Name	Debt/Equity Ratio	Levered Beta	Unlevered Beta
Northwest	0.85	0.62	
Texasgas	1.49	0.86	

Exhibit 3.
Interest Rates as of Early 1997.

Instrument	Rate (%)
3-month treasury bills	6.24%
6-month treasury bills	6.54%
3-year treasury bonds	7.49%
10-year treasury bonds	7.92%
AAA corporate bonds	8.38%
Prime rate	7.95%