

Discounted Cash Flow Part 1 Practice Problem

Re-working the Gentex or Alaska Airlines exercises from class is also good practice.

1. Your firm is attempting to value Wild Basin Inc., the boozy sparkling water division of Oskar Blues Brewing out of Fort Collins, Colorado. The division had \$100 million in Sales in 2019. You expect sales growth to be 25%, 20%, 15%, 10%, and 10% over the next 5 years. You expect cost of goods sold to remain constant at 42% of sales. SGA is expected to be 15% of Sales and capital expenditures at 10% of sales. Depreciation is 120% of capex and evenly approaches 100% over the forecast window. (Note: Depreciation is NOT included in COGS/SGA estimates) NWC is 15% of sales and was \$20 million in 2019. The division has a market value of debt of \$55 million and \$70 million in MV of equity. The average unlevered (asset) beta of peer firms is 1.30. The 10-year and 30-year treasury bonds are 1.8% and 2.5%, respectively. The cost of debt is estimated at 4.2% and the market risk premium is 5.9%. The stable growth rate is assumed to be equal to the current risk free rate assumption and we assume a marginal tax rate of 21%. What is the enterprise value of Wild Basin?
 - (a) What is the enterprise value if you estimate the terminal value using an EV/EBITDA multiple of 12.3x.
2. Try to replicate the beta listed on yahoo finance for any company (can do about 5,000 times!). Some assumptions: 1) Use monthly data (obtained from historical prices on yahoo) 2) Need 36 months of returns (therefore need 37 prices) 3) Yahoo uses closing price. 4) Use \hat{GSPC} as the proxy for the expected return on the market. 5) You may need to exclude the most recent month from your analysis (from my experience)
Note: You can use the function =SLOPE() or the COVARIANCE() AND VARIANCE() functions to estimate Beta in Excel.

Answer to above problems

- 1) a) 597.55M b) 862.56M
- 2) Answer should match Yahoo finance estimate (listed on main page of stock)