LUMEN®

April 5, 2024

Ms. Angie Haller
Lead Utility Appraiser
Business Tax & Valuation Bureau
Montana Department of Revenue
PO Box 7149
Helana, MT 59604-7149

Dear Ms. Haller,

Re: Comments on the 2024 Capitalization Rate Study, Small and Medium Telecommunications

We've reviewed your 2024 small and medium telecommunications industry capitalization rate and wish to highlight the following:

A. COST OF EQUITY

Cost of equity calculations can be at times constrained in the communications industry depending on the guideline companies utilized and whether they are dividend payers and/or if they have reliable betas. Only two of the six guideline companies are paying dividends. Results of the Dividend Growth Models ("DGM" or "DCF") may appear low or distorted due to some companies not paying dividends. In addition, the sustainable long-term growth rates for the two dividend paying companies are counter intuitive as they are higher than the adopted GDP growth rate under the S&P 500, 3 Stage Dividend Growth Model.

A more sustainable approach would be to put more weight on the DGM/DCF growth rate based on change in earnings, which also accounts for distortions resulting from share buybacks.

Given this, we suggest giving some consideration to Build Up method results as another indicator of the cost of equity.

B. COST OF DEBT

Charts 1 and 2 from Standard and Poor's (S&P) Global Ratings *Industry Top Trends 2024: Telecommunications* of January 9, 2024 show that North American communications (telecommunications, cable and satellite) company ratings start at 'A-', with the bulk of companies falling between 'BB+' to 'CCC'. About 83% of U.S. telecom and cable issuers are speculative grade, including 63% in the 'B' or lower categories. Ratings in these categories largely reflect secular industry declines, intense competition, debt-financed M&A, and, in some cases, refinancing risk.

S&P expect ratings trends for U.S. telecom and cable will continue to skew negative, primarily among lower-rated issuers that are being squeezed by high interest rates. They have a more cautious view on U.S. wireline operators. Despite growth from fiber-based broadband, high interest expense, elevated capital expenditure (capex), and exposure to legacy services will keep credit metrics weak over the next year.

Although, Lumen Technologies, Inc. is not one of the guideline companies, its C+ Value Line financial strength is indicative of what other similarly credit rated, and Value Line financially rated companies could potentially command if they were to seek financing in the public debt markets. On March 16, 2023, Lumen announced an offer to exchange a basket of outstanding unsecured senior notes issued by Lumen maturing in 2025, 2026, 2028 and 2029 for 10.5% first lien senior secured notes due 2030 by Level 3. The exchange offer also included the Lumen unsecured senior notes due in 2039 and 2042.

Despite the dearth of affordable data on costs of debt, making adaptions to Prof. Aswath Damodaran's synthetic bond rating model, as shown on his website http://pages.stern.nyu.edu/~adamodar/ can give us representative costs of debt, more so for companies with no credit ratings or those with 'junk' credit ratings. Montana Department of Revenue ("Montana DoR") is already using Prof. Damodaran's data in the Capital Asset Pricing Model (CAPM) under ex ante equity risk premium measures.

Chart 1

Ratings distribution

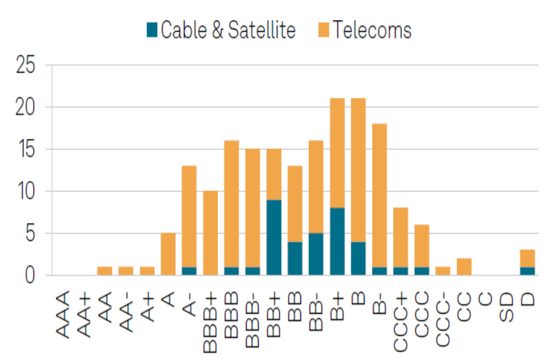
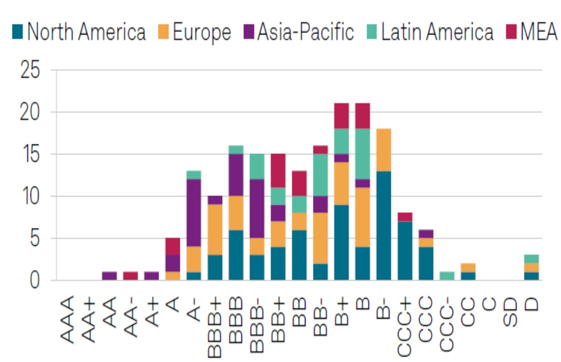


Chart 2

Ratings distribution by region



C. OVERALL WEIGHTED AVERAGE COST OF CAPITAL

Considering our comments would result in an upward movement to the estimated weighted average cost of capital which would be warranted when applying the rate to a company with the riskiness of Lumen.

Earlier on, we sent you a copy of Kroll's 2024 Communications Wireline Cap Rate (Small & Mid Cap) report showing a WACC of 10.95%, pre-tax debt without flotation costs. Our recommendation is that a cap rate of 10.95% or higher is adopted for the predominantly wireline communication companies.

F. OTHER OBSERVATIONS

We would recommend that Montana DoR places no weight on direct capitalization models as the two direct capitalization rates have conceptual flaws. The NOI After-tax direct capitalization rate has an equity rate that's lower than the debt rate. This goes against the finance theory of equity investors demanding higher returns than debt holders. The huge difference between the equity rate and the debt rate for the GCF Direct Capitalization rate questions the validity of this capitalization rate.

We would also like to highlight that there are other Lumen specific issues that are not addressed by having an overall telecommunications industry cap rate. These matters can be discussed with you later.

Thank you for considering Lumen's submission.

Sincerely,

Bwembya Chikolwa