Laura martin: real options and the cable industry assignment

[Business]

Laura Martin: Real Options and the Cable Industry Introduction Laura Martin, an equity research analyst for cable stocks, believes that the best way to value cable stocks is through creative methods such as real options and not through more traditional or typical valuation methods such as EBITDA multiples, ROIC analysis and DCF analysis. In 1999 she presented at the Credit Suisse First Boston Broadband conference, where she wanted to portray the message that real options is a superior valuation technique for cable stocks.

She also wanted to have the opportunity to demonstrate her knowledge of the drivers of value in the cable industry. The main reason why Laura Martin argues that real options is the correct method for valuing cable stocks is mainly driven by the evolution that this industry was experimenting. In this time period, cable companies were upgrading their cable infrastructure to have 750 MHz of bandwidth capacity, which left unused bandwidth capacity that could be used for other interactive services or services that didn’t exist at the moment.

Laura Martin felt, and with reason, that the EBITDA multiplier and the DCF analysis did not account for this possible revenue stream which she named “ Stealth Tier”. Her analyses led to a higher stock value using the real options method and lower values using the traditional methods aforementioned. EBITDA, ROIC, DCF analysis Studies demonstrate a correlation between value and returns on invested capital ??? which is stated in the case at 70%. This implies that future ROICs are predictive of value.

ROIC is calculated by dividing net operating profit after taxes by the average invested capital for the period (sum of fixed assets and net working capital). The relationship between the ROIC and the valuation of cable and entertainment companies is defined by the ratio of enterprise value to average invested capital. By predicting the ROIC for the year, a regression line is used to estimate the target enterprise value to average invested capital multiple. This is adjusted for other factors and a target price of $50 is inferred for Cox stock.

This implies that there is upside potential relative to the current price of $37. 5; or that it is an undervalued stock. EBITDA multiple analysis was another common metric used in the cable industry. However, this method relies on historical data to predict the future which is recognized as not an effective way to value a stock. In spite of this, this methodology also yields a higher expected stock price. While performing a DCF analysis, a thorough understanding of the business being analyzed is needed to determine the correct assumptions and items used for the analysis.

For this reason, Laura believed this was still a good method to value stocks in this industry. This analysis yields a higher company value than current price. Real Options Valuation Analysis By using the Black Scholes model to value the European style call option some inputs are needed. First, the present value of the stealth tier needs to be calculated. The cost of acquiring this project or strike price is another necessary input. In this case, this was defined as the spending with the Stelth Tier, which is the opportunity cost of not lighting up the fiber immediately.

Next, the volatility is calculated as well as the life of the cable plant (time) and an interest rate. Clearly, this methodology includes the value of the " stealth tier" and yields a much higher value than the other methodologies. Conclusion It is important to keep in mind when valuating companies that industries evolve and valuation methodologies need to evolve with it. Analyzing methodologies and create ways to incorporate all factors impacting future cash flows is important to not over value or under value stocks.