

Ameritrade case essay



**ASSIGN
BUSTER**

Background In his effort to increase returns for Ameritrade shareholders and make Ameritrade the largest brokerage firm worldwide by trading volume, Joe Ricketts, Chairman and CEO of Ameritrade, seeks to improve Ameritrade's competitive position in the deep-discount brokerage industry by taking advantage of emerging economies of scale.

To attract more investors, his strategy involves, first, cutting trade commissions from the existing rate of \$29.95 per trade to \$8.00. Second, he seeks to invest \$100 million in technology advancements to make the online trading platform faster and closer to 100% reliability. Lastly, he has proposed increasing Ameritrade's advertising budget to a cumulative \$155 million for 1998 and 1999 fiscal years.

Issue The question presented is what weighted average cost of capital should be employed to value the planned investments and changes in the advertising budget.

Comparable Firms In my view, the true competitors of Ameritrade are securities brokerage firms, not Internet firms, as Ameritrade derives the majority of its revenues from its brokerage business. In contrast, Internet firms like Yahoo! derive their income from advertising and other sources dissimilar to Ameritrade. For Ameritrade, the Internet is merely the channel through which its brokerage services are provided. Therefore, I have limited our consideration of comparable firms to brokerage firms.

The discount brokers E*Trade, Charles Schwab, Quick & Reilly Group, as well as Waterhouse Investor Services have the most similar business concept, but provide only a very limited scope of returns and accounting data for

comparison. Therefore, looking at firms with sufficient available data, the first metric I used to identify comparable firms was the proportion of revenue attributable to brokerage income.

I sought firms with a percentage similar to Ameritrade's at 65%. I determined that Bear Stearns, Merrill Lynch, A. G. Edwards, Paine Webber, and Raymond James were the most appropriate by this metric. From this list, I further narrowed down by finding firms with a debt-to-capital ratio similar to Ameritrade's (91%), leaving Bear Stearns, Merrill Lynch, and Paine Webber. Given that debt amplifies equity beta, choosing firms with significantly de-levered capital structures would skew the calculations downward.

Bear Stearns, Merrill Lynch, and Paine Webber have equity betas of 1.81, 1.96, and 1.89, respectively. Assuming a 5-year time period, I chose the VW NYSE, AMEX, and NASDAQ return series as a proxy for the overall market portfolio. I assumed a 5-year time period to capture enough historical data to make reasonable statements about the computed figures while not diluting our results with returns, which may not fit to the current market situation anymore. I chose the value-weighted index as it more accurately reflects the overall economic return of the portfolio, whereas an equal-weighted index may be heavily influenced by the action of a single security regardless of its relative market power.

Because of the very short price history of Ameritrade (six months worth of stock prices and therefore only five returns), I adopted an equity beta equal to the average beta of the comparable firms (1.89). A calculation based on the given return figures for Ameritrade would be misleading (-1.36).

As shown in Exhibit 1 below, the asset betas for the comparison firms, Bear Stearns, Merrill Lynch, and Paine Webber, were 0.87, 0.85, and 0.93, respectively, compared to a 0.39 asset beta for Ameritrade. This relatively large difference results from the very high debt/capital ratio of Ameritrade versus the aforementioned firms.

Relative Inputs for Calculation of Cost of Capital As stated before, for Ameritrade's equity beta, I averaged the betas of the three comparable firms because there was not enough information to calculate it accurately for Ameritrade. Based on the 5-year time horizon (annualized market return and annualized return of the 5-year bonds during the last 46 years), we used the CAPM to estimate the equity cost of capital at 0.32. I used a rate of 8.5% for the return on debt, based on the 8-9% borrowing costs, as reported by Ameritrade managers. The tax rate of Ameritrade was approximately 35% in 1997.

Using this information, I calculated a weighted average cost of capital of 0.08. This figure is comparably low due to the very high debt/capital ratio of Ameritrade, which places a lower weight on the cost of equity.