

Tax Rates and Stock Returns: An Empirical Analysis of the Information Content of Corporate Tax Rates

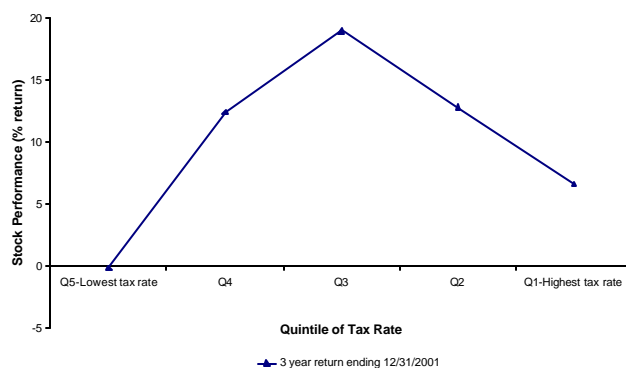
**Indrani D. Basak CFA, Senior Quantitative Analyst &
Michelle R. Clayman CFA, Managing Partner and Chief Investment Officer**

Investment analysis practitioners sometimes separate financial statement analysis from stock valuation. In the process, important linkages may be lost. One such linkage is the relationship between anomalous corporate tax rates and subsequent stock price performance. This paper examines the stock price performance of companies with abnormally high or low tax rates.

First, there is a discussion of the presentation of tax information in financial statements and how tax reporting and financial reporting may differ. Analysis was then conducted for the S&P 500 constituents on 12/31/98, 12/31/99 and 12/31/00 and their subsequent three, two and one year returns ending 12/31/2001. In each case, a computation was made of each company's prior 3-year average tax rate. Sixty percent of companies were found to pay taxes in the 30-40% bracket. Stocks with tax rates outside of this "middle group" were deemed to be abnormally high or low tax payers and were assigned to "upper or lower tail groups". Several tests were done: a comparison of tax rate quintiles versus ensuing stock returns, parametric T-Tests to test the difference in returns between (a) the middle group of tax payers and the tails, and (b) the lower and upper tails, and two regression models.

The tests found that most companies pay taxes in the 30-40% range and that there is a negative U-shaped relationship between stock returns and tax rates (see graph).

Tax Rates and Stock Performance: Quintile Analysis



Starting from the lowest tax rates, stock returns increase with higher tax payments. However after peaking in the 35 to 40% tax bracket, stock returns decrease with further increases in the tax rate. Thus there is a negative correlation between abnormal tax rates and stock returns. A movement away from a normal 35% tax rate in either direction tends to decrease stock returns. Low tax rate companies stock returns were by far the worst, significantly underperforming both the middle tax rate group and the high tax rate group of stocks. The stock market under-performance of the abnormally low or high tax payers is more accentuated over longer time horizons.

Selected companies with abnormally low or high rates were examined. It was found that, in both cases, changes in the deferred tax asset or tax liability accounts on the balance sheet were usually involved. Companies with low tax rates often had net operating loss carry forwards, implying poor underlying business health. High tax rate companies often had different policies for depreciation and amortization on their tax books and financial books. This had implications for corporate cash flow. Both low and high tax rate payers sometimes had complex accounting and business issues, whether merger-related or due to unconsolidated affiliates.

It is therefore important for financial analysts to realize that anomalous tax rates, by signaling information about a company's underlying business, can significantly affect stock returns and should be recognized in the stock valuation process.

*Indrani D. Basak, CFA
Senior Quantitative Analyst*

*Michelle R. Clayman, CFA
Managing Partner & CIO*