

Yield Spreads and Performance of Growth vs. Value Stocks*

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ABSTRACT

This study investigates effects of yield spread changes on performance of growth and value stocks for the period 2005-2007. Comparing performance of growth and value stocks during the sample period has empirical significance since yield spread changes during the sample period were historically dramatic. This study finds some link between yield spread changes and performance of different styles of investing, which suggests that yield spread changes could be timely signals for selecting growth vs. value stocks.

INTRODUCTION AND LITERATURE REVIEW

The primary research question of this paper is: Do yield spread changes affect performance of growth and value stocks differently? In order to answer this research question, this paper addresses the following specific investigative questions:

- 1) Do growth stocks perform better during the period of high yield spreads than during the period of low or negative yield spread levels?
- 2) Do value stocks perform better during the period of high yield spreads than during the period of low or negative yield spread levels?
- 3) Which style of the stock groups performs better during the period of high yield spreads?
- 4) Which style of the stock groups performs better during the period of low or negative yield spreads?

Historically, yield spread changes had demonstrated the power of predicting future changes in real output of economy. Using the quarterly sample from 1955 through 1988, abnormal yield spread changes signaled a pending economic recession (Estrella and Harouvelis, The Journal of Finance, 1991). If the spread was calculated from ten-year and three-month bond equivalent rates, an inversion had been a benchmark for predicting recessions in real time (Estrella and Trubin, Current Issues in Economics and Finance, 2006).

Professional money managers have used both styles of growth and value stock investing in recent years pervasively (Brown and Harlow, working paper, 2004). Growth stocks are stocks that generate a higher rate of return than other stocks with similar risk characteristics; value stocks are usually stocks with high dividend yields, low P/E ratios, or low price-to-book ratios (Reilly and Brown, Investment Analysis and Portfolio Management, 2006).

METHODOLOGY

This study uses rates of 10-year U.S. Treasury bonds minus 3-month U.S. Treasury bill rates collected from the Federal Reserve Board Statistics Release and Historical Data as yield spreads and uses historical daily stock data provided

by Commodity Systems, Inc. This study uses judgmental samples of twelve growth stocks, eleven value stocks, and a random sample of thirty-two stocks from S&P 500 index components as representative proxies. This study premises that yield spreads and overall market returns affect performance of stocks. The inverted yield spread appeared on February 24, 2006 for the first time during the sample period. Therefore, for investigative purposes, this study uses February 24, 2006 as the benchmark date to distinguish between the period of higher yield spreads (January 7, 2005 thru February 24, 2006) and the period of lower or negative yield spreads (February 24, 2006 thru February 2, 2007). This study runs Wilcoxon Matched-Pairs Signed-Ranks Test of SPSS© to handle the investigative questions.

TEST RESULTS AND FINDINGS

Descriptive data show the average yield spreads during the higher yield spreads and during the lower yield spreads were 0.78% and -0.10% respectively. Growth stocks outperformed value stocks during 49 weeks of higher yield spreads. During the second half of the sample period of lower yield spreads, the value stocks had outstanding 21.3% improvement; the growth stocks had 11.4% deterioration; S&P 500 index had mild improvement of 2.5%.

The tests compared holding period yields (HPYs) among two judgmental samples and the S&P 500 index sample. The tests compared their performance during 49 weeks of higher yield spreads and during 49 weeks of lower yield spreads. As indicated by its z values (-0.392 and -0.580 respectively), HPYs for the period of lower yield spreads were not significantly different from HPYs for the period of higher yield spreads for both the growth stocks and S&P 500 index. However, the value stocks showed comparatively stronger differences in HPYs between two periods (z value = -1.067).

CONCLUSION

The outstanding performance of value stocks during the period of lower or negative yield spreads could be due to factors other than yield spread changes. However, it is a reasonable assessment that lower or negative yield spreads might have contributed to positive performance of the value stocks of S&P 500 group in particular. The superior performance was probably due to higher demand for value stocks, as investors would have sought for defensive posture during the period of lower or negative yield spreads. They probably considered value stocks as better alternatives when yield spreads got lower or negative. Therefore, the possibly significant link between yield spread changes and effective style investing deserves further study. The yield spread effect could complement anomalies of efficient market testing such as the small firm effect.

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