

Value Spreads as Style Predictors

A Columbine Mini-Report

16-December-03

For the past five years we have been working on the problem of forecasting the value/momentum (growth) cycle. **Figure 1** demonstrates the challenge. The chart graphs the year-by-year top- minus bottom-decile return spread from the multifactor Columbine Valuation Model (five value-oriented factors combined) and from the Columbine Momentum Model (five momentum-oriented factors) in the same test universe. The cyclic nature of the two styles' effectiveness is readily apparent, but all our attempts to make useable forecasts of when one style will dominate the other have failed. Compared to either style used alone, combining valuation and momentum generates superior return with reduced volatility. But as all practitioners know, such combinations necessarily show inferior performance compared to pure value or momentum during periods when they cyclically shine. The ability to accurately time the cycle would be extremely valuable.

Recently, some of our clients have suggested that value-oriented investment strategies are more effective after there have been large spreads between the most over- and under-valued companies in the market. The rationale for this phenomenon comes from the theory that reversion to the mean is the driver behind value's extra-market returns. If the distribution of over- and under-valued stocks is more extreme, their subsequent reversions will produce larger than normal active returns. We decided to investigate this idea. If it was proven correct, it would provide a tool to forecast the value/momentum style cycle.

THE TESTS

Our choice for a measure of value was the simple cash flow-to-price ratio. This is one of the most robust individual value factors in terms of predictive ability. If the basic concept of value spreads as predictors of value-style performance has any credence we should be able to observe it in operation using cash flow-to-price.

HYPOTHESIS: Value works better when cash flow-to-price spreads are large.

We tested the cash flow-spread hypothesis in a universe of 1500 non-survivor, big-cap stocks through the years 1971 through 2002. Initially, we computed every stock's cash flow-to-price ratio for each month and rank-ordered all the issues from the largest (1st) to smallest (1500th) ratio. To minimize the effects of outliers we took the difference between the 150th and 1350th ranked stocks as the spread between the "highest" and "lowest" cash flow-to-price ratios. This gave us a monthly series of cash flow-spreads for the entire test period. We also produced a

rolling monthly five-year and ten-year series that let us compare a given month's spread to the spread history for the previous periods.

As a proxy for the effectiveness of the value style in general we used the Columbine Valuation Model, an optimal combination of five widely used value measures, including cash flow-to-price. We measured value's effectiveness both as the Valuation Model's top-decile active return and as the model's top- minus bottom-decile return spreads. To assess the predictive ability of each month's cash flow-spreads we compared them with subsequent value style results, looking out at intervals of one, three, six, twelve, twenty-four, and thirty-six months in the future.

THE RESULTS

Looking across the entire time period of the study, cash flow-spread appeared to hold promise as a predictor of future value style effectiveness. Cash flow-spreads rose to unprecedented levels from 1995 through 2002. (See **Figure 2**) Strong performance from the value style in 2001 and 2002 corresponded to these historically high levels of cash flow-spread. (See **Figure 1**) However, when we used rolling periods to normalize current month spreads, cash flow-spread showed no forecasting power at all. In other words, over the past three decades a predictive relationship between spreads and value is unique to only two years.

CONCLUSION

Sadly, such a short-lived, end-of-the-bubble result does not give us confidence that we have found anything useful. It does however lend further support to the emerging view that pure value or momentum strategies are subject to extreme and unpredictable swings in effectiveness. We think the best that can be said for value spreads as a predictor of these swings is: Scotch verdict—case not proven.

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December 16, 2003

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Figure 1. Value-Momentum Cycle

Results through November, 2003

Momentum Valuation

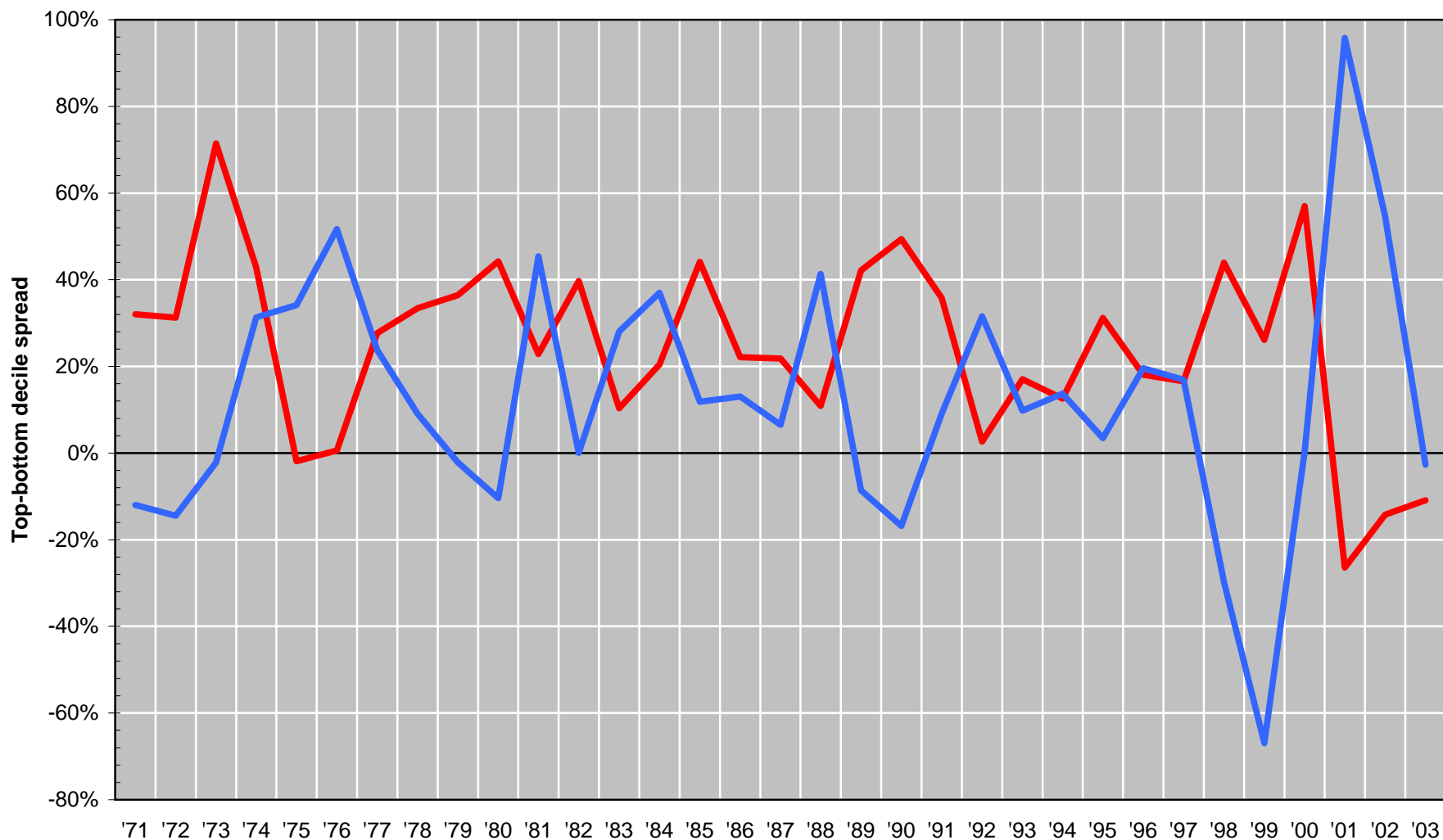


Figure 2. Annual Average Spread between Highest and Lowest Cash Flow-to-Price Ratios

