Introduction

The Intrepid Small Cap Fund, managed by Eric Cinnamond of Intrepid Capital Funds, has garnered noteworthy media attention in 2009. Bloomberg Online's June 3, 2009 article featured Cinnamond's fund as the only diversified stock manager to outperform Bill Gross' venerable Pimco Total Return Bond fund over the trailing 3-year period (through 5/26/09). Wall Street Journal's October 5, 2009 article puts this fund in second place in the Winners' Circle contest for the 12-months through September 2009 (posting a return of 29%). What explains Intrepid Small Cap's outperformance? MPI takes a closer look using daily data and returns-based style analysis (RBSA), and finds Mr. Cinnamond's selection skills over the past nineteen months have been strikingly strong relative to other small capitalization mutual funds.

In this post we illustrate a step-by-step performance attribution approach using returns-based style analysis, daily data, and holdings information. High frequency daily data enables practitioners to detect style changes with greater speed and accuracy. Daily data also provides a better performance attribution especially for a fund with short history and high turnover. The attached report contains more detailed descriptions along with supporting charts and tables generated by an mpi Stylus Pro performance attribution template (note that this template is available for client use; please contact Support at support@markovprocesses.com for more information). The report demonstrates how a performance attribution narrative can be crafted in a straightforward, efficient, and compelling way.

Background

Mr. Cinnamond is a devout bottom-up stock picker who is openly resistant to efficient market and asset allocation theories and practices. Although Intrepid Small Cap is categorized as a small cap value manager, Mr. Cinnamond's strict focus on small capitalization companies' operating fundamentals can be described as being somewhat style-agnostic. He focuses on businesses with strong free cash flow, asset and transaction valuations, respectively. According to the Wall Street Journal's online “Ask a Fund Manager” series in April 2009, Mr. Cinnamond typically has a potential buy list of roughly 300 small cap companies. As of June 30, 2009, the Fund held roughly 60 of those names with annual turnover on the high side of approximately 160%.
Step 1 - Factor Exposures & Composition

Intrepid Small Cap is a non-diversified, highly concentrated portfolio, with relatively high turnover. Because of this, we decided to use small capitalization (S&P 600) sector indices instead of "generic" style indices to compute factor exposures. After running the RBSA optimization, we found the Predicted R-Squared was very high at about 93% using sector indices and felt confident in proceeding with the attribution analysis. SEC filings showed extremely high cash positions, and the RBSA results confirmed the holdings-based information.

High-frequency RBSA analysis detects a fairly large structural reallocation in the portfolio beginning in mid-2008. Note the decline in cash and utilities, and sizeable shifts into energy, healthcare and consumer discretionary. In February 2009, the shift was away from consumer discretionary and healthcare into utilities and energy. SEC filings and associated holdings information support the overall directional shifts but there are differences in terms of magnitude. RBSA exposures to cash seem to be more pronounced than the actual holdings indicate; the latter being about 10% less.
Step 2 – Exposure and Style

At this point, we know the validity of the model factors are high based upon the Predicted R-Squared and are also reasonable in light of the fund filings. A few items stand out in terms of exposure relative to the Russell 2000: (a) large cash exposure; (b) underweight in financials and health care, information technology, and industrials. In terms of Style, we see (a) sizable cumulative outperformance relative to both the benchmark and factor portfolio (i.e. Style); and (b) negative monthly style returns during significant periods last year. The immediate conclusion from this narrative is that the manager’s outperformance is most likely due to superior selection skills.
Step 3 - Performance Attribution (Selection)

The manager changed its cash and sector exposure during periods of significant market volatility; one would expect the contribution of timing of such changes to have an impact on the performance. Yet we see that timing component is negligible. Most of the excess performance is generated through superior selection. The combination of both timing and selection skill led to dramatic excess outperformance of 23% over the Russell 2000 Index for the period. As indicated by the Monthly Performance Attribution chart, there were 10 monthly periods between 6/30/08 and 6/30/09 that Mr. Cinnamond shows positive selection return skill. The cumulative selection chart shows a dramatic straight line rise beginning in the last quarter of 2008. This would indicate that Mr. Cinnamond's security picks made during this period appear to be very strong. Taking a deeper dive into holdings obtained from SEC's website indicate that his bets on Applied Signal Technology, Oil Dri Corporation of America, Family Dollar Stores and Scotts Miracle Gro companies made very positive contributions. The monthly selection and style attributes chart provides further granularity on the periods where selection skill appears. It is interesting to note that during October – November 2008 and January – February 2009 the only value added appears to have come via superior security selection (light pink bars). Sector exposures during the same period detracted value. Mr. Cinnamond’s security selection capabilities compensated and offset the poor sector performance.
Step 4 - Performance Attribution (Timing)

Overall timing contribution for the fund was marginally positive. This is primarily because the contribution from Cash is very negligible. While the timing component is accurately measuring the contribution from each sector bet, it doesn't say whether it was a good or bad decision on the part of the manager. To get a more intuitive and better picture of how effective the timing decisions were, we look at Excess timing attribution. (Note: Excess timing attribution is calculated as the product of a manager excess weight in a particular factor and the respective factor's excess return over the benchmark). Since Mr. Cinnamond had excess factor exposures to cash, and cash outperformed the overall benchmark (Russell 2000), the excess cash timing (green bars) helped the fund during declining markets. However, during the market outperformance periods shown in the bottom chart, the excess cash holdings negatively impacted the fund.
Step 5 - Return Performance

Once we have a good grasp of the behavior/dynamic of the fund, we can turn our attention to the return and risk that result. The fund returned 29.1% from September 30, 2008 through September 30, 2009, while Russell 2000 returned -9.5% over the same period. The trailing 12-month excess return through the end of September 2009 was about 40%. YTD excess return is positive as well.

The Cumulative and Performance to Date charts indicate that the manager was tracking the benchmark more or less for period before October 2007 and after March 2009. The decisions that Mr. Cinnamond took between this period made a difference. Note that for the later part of this period the stock market went south. His decision to not follow the market and avoid this huge setback appears to have set him apart from the rest of his Russell 2000 peer group.
Step 6 - Distribution Profile

The return distribution of the fund shows thinner tails whereas the benchmark distribution exhibits fatter tails. The lower end of the benchmark distribution is also much more pronounced than that of the fund.

The Decile/Value (D/V) chart plots manager returns against benchmark returns with distributions expressed in terms of its deciles along the X-axis. The D/V plot is indifferent to specific time period, and evaluates the entire time series and partitions into decile buckets. In some ways, this is a visual extension of Up/Down market statistics. The average return of both the benchmark and the fund for each decile are plotted along y-axis. Clearly, the manager returns are independent to that of the benchmark. Particularly at the lower end, the fund's risk/return has a much better profile than that of the benchmark.
Step 7 - Risk

Risk taken by Mr. Cinnamond has been consistently lower than that of the benchmark. During the last quarter of 2008 risk in the market skyrocketed. The fund’s risk also spiked, however, it was well below that of the benchmark. The last 1-year when the benchmark standard deviation was 51%, the fund had a standard deviation of 35%. The drawdown profile has also been relatively better. The max drawdown is almost half of what the benchmark produced since March 2008. 95% rolling 90 day VaR shows lower that the manager consistently took lower risk than that of the benchmark.
Step 8 - Portfolio Level Safeguard

With concentrated managers such as Intrepid, an additional due diligence sanity check can be helpful by loading actual holdings as a representative portfolio. In this case, we took Intrepid Small Cap's top holdings for the semi-annual periods for the past 2-years obtained from SEC filings. Note that this is not an accurate representation of their daily holdings but rather a proxy. In June 2009, the top 35 funds accounted for more than 85% of funds total assets. We compared daily return values versus the returns obtained from these actual underlying holdings just to rule out any foul play. In addition, you'll find a portfolio-analysis level decomposition into risk and return components. While Applied Signal Technology contributed the most towards the fund's annual return, Unit Corp contributed the most towards fund's risk during the January 2008 to August 2009 period.
Summary Take Aways

• Daily data and returns-based style analysis can provide timely insight into the investment strategies of a fund. For a fund with shorter history and high turnover, monthly analysis would lack accuracy, robustness and granularity.

• A manager with exceptional selection skills can offset poor timing decisions and negative style impacts.

• Factor and benchmark selection biases are very important considerations. The analysis above can be broadened to include peer group benchmarks, other factor models, and benchmarks respectively.

• Portfolio Analysis using historical top holdings can provide a useful, “back-of-the-envelope” ‘sanity check’ measure for concentrated portfolios.