



MPI Quantitative Analysis

Mario H. Aguilar, CFA
Director, EMEA Client Services
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Markov Processes International
Tel +1 908 608 1558
www.markovprocesses.com

ASSET CLASS ANALYSIS

USD BONDS

USA Bond funds' performance ranges from -1.27% to 31.36% over the last 52 weeks (ending May 27, 2011), in USD terms. On average, the best 5% of the funds outperform the market (pegged to the Barclays Capital U.S. Aggregate Bond Total Return Index) by approximately 7.92% and the worst 5% underperform by approximately 5.03%. The bottom funds display a lower volatility than the top funds and benchmark during this period.

We examine factors describing the best and worst performing funds on an aggregate basis. When funds are aggregated in a group, their common factors crystallize and specific bets are diversified away, which provides the basis for such an analysis. Our analysis suggests that the top and bottom funds, on average, had exposures to different fixed income factors that can explain their very diverse performance. Please note that our conclusions may change if a different timeframe is used to select the best/worst funds.

Universe Overview – RBSA Analysis

- The universe is comprised of 116 funds that are classified under Lipper Global: Bond USD¹, with AUM of at least USD 10 million and denominated in USD. Our analysis takes into account the performance of the Primary Share Class, as defined by Lipper.
- Using MPI's Locally Weighted Regression algorithm, we run Returns Based Style Analysis (RBSA) using mpi Stylus Pro to estimate the average exposures using weekly observations for the period from May 31, 2010 to May 27, 2011. BofA Merrill Lynch Fixed Income indices are used as Style Factors.
- The average RBSA style loadings illustrate that the peer universe is diversified with exposures across all fixed income sectors — the highest exposure is approximately 35% to US Treasury Bills.

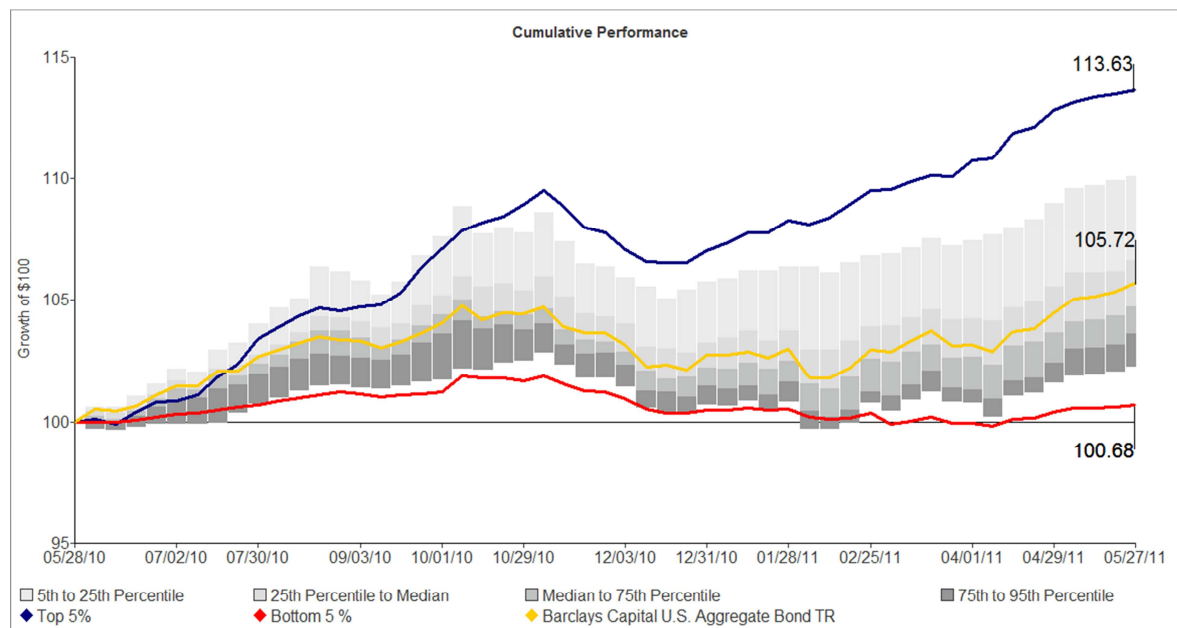
Selection of Top/Bottom Fund Groups

- Based on the universe of 116 funds, the total annualized performance is calculated during the last 52 weeks to rank the funds. Using the top 5% (6 funds) and bottom 5% (7 funds) equally weighted, daily rebalanced portfolios are created to try to identify why, on average, one group performed better in terms of style exposures.

¹ Bond USD funds, as classified by Lipper Global, are “Funds with the primary objective to invest in international fixed income securities of developed markets denominated in USD, irrespective of the debtor domiciles.” Source: Lipper Global Classification, Definitions document.

- On a cumulative basis, over the analyzed period, the top 5% of funds outperformed its peers, benchmark and bottom 5%. The top 5% group returns approximately 7.91% above the Barclays Capital U.S. Aggregate Bond Total Return Index while the bottom 5% group returns 5.03% below the index. The peer group's performance shows an overall positive tendency during this period.
- Starting in August 2010, the top funds have consistently outperformed their peers and the benchmark with an overall volatility, as defined by the annualized standard deviation, that is lower than that of the benchmark, 2.77% versus 3.02%. On the other hand, the bottom funds had a volatility of 1.36%, which hints at a safe style profile — a possible explanation for the very low performance. The additional top fund risk exposure is more than compensated by performance as this provides an Information Ratio of 3.59 versus -2.38 for the bottom funds and -0.39 for the Peer Average.

Chart 1: Cumulative Performance Chart



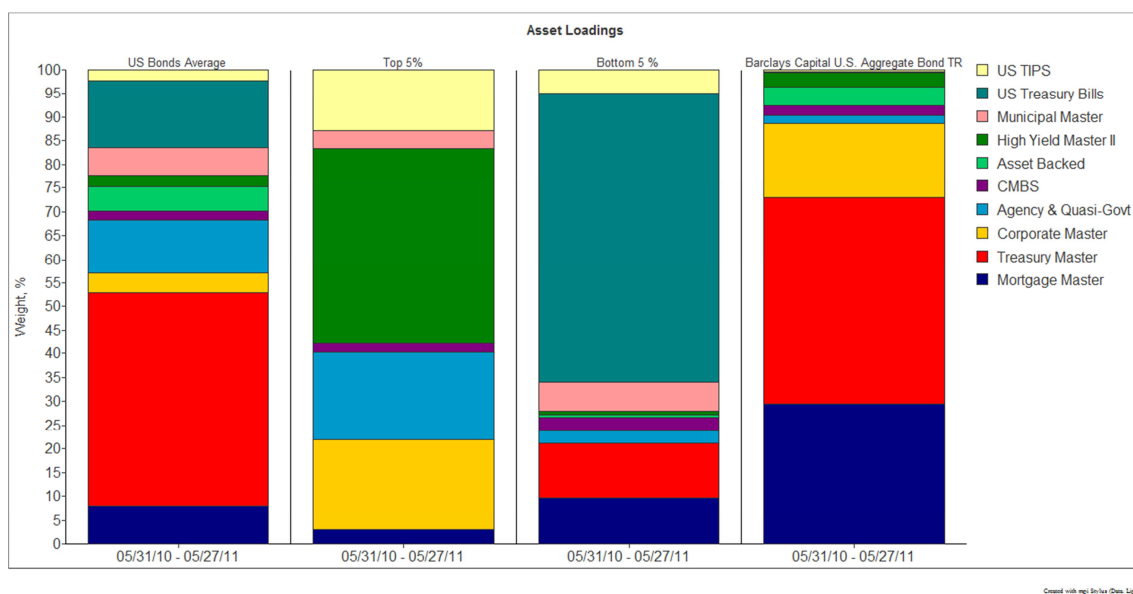
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Returns-Based Style Analysis Highlights

- As depicted by Chart 2, our RBSA analysis, which uses BofA Merrill Lynch fixed income indices as factors, demonstrates that both top and bottom funds have very different style exposures. The top funds' portfolio shows an exposure of over 15% to corporate bonds and 40% to high yield; on the other hand, the bottom funds' portfolio appears to be predominantly exposed to US Treasury Bills. A high exposure to treasury bills would translate into low volatility and performance for the portfolio, whereas exposure to corporates and high yield would translate into higher volatility and performance.

- A brief analysis into the top 10 holdings of the funds within the top 5% portfolio shows that these funds are mostly exposed to coupon yielding corporate and high yield bonds. The same analysis into the bottom 5% portfolio shows that these funds are exposed to cash and safe instruments yielding very low cash-like returns, such as US Treasury Bills. This brief holdings based analysis further confirms the results of our returns based style analysis.
- As expected, the benchmark displays no exposure to cash or cash equivalents, proxied by the BofA Merrill Lynch US Treasury Bills Index. Comparing the portfolio's exposures versus those of the benchmark helps us understand the sources of excess performance for the top and bottom portfolios.

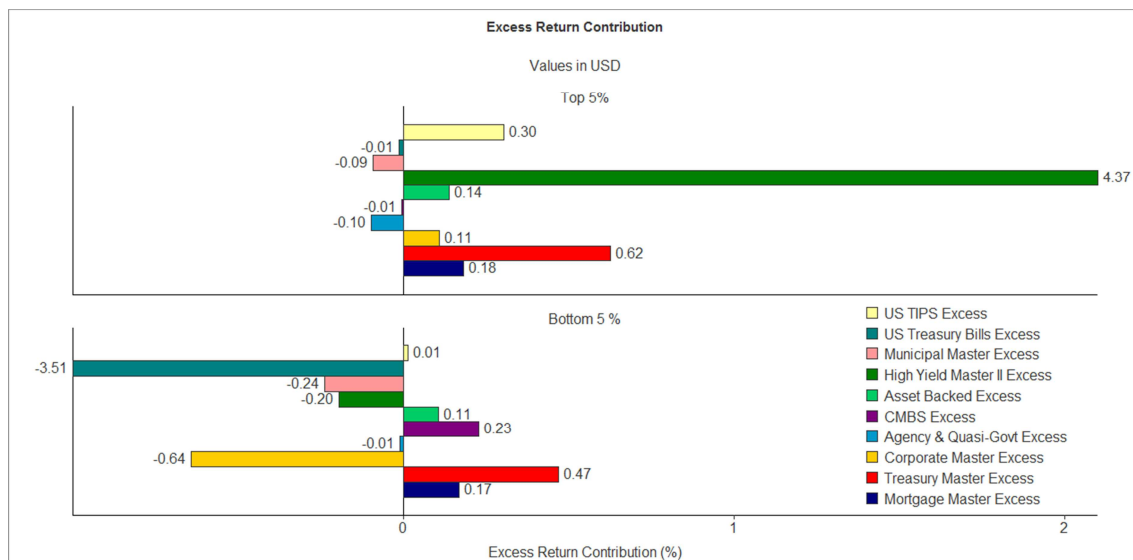
Chart 2: Universe, Funds', and Benchmark Average Asset Loadings



- The top funds overexposure to corporates and high yields clearly contrasts the bottom funds overexposure to treasury bills. The top funds outperformed by betting on corporate and high yield bonds, sectors that appear to have benefitted from the effects of the second round of quantitative easing of the Federal Reserve System of the United States. With borrowing rates down, the yields offered by corporate and/or high yield issuers become more attractive, which appealed to many managers searching for better performing assets. On the other hand, the bottom funds appear to have evaded the bond markets, with an exposure of over 60% to US Treasury Bills, which had negligible returns. It appears that the bottom funds seek to protect capital rather than looking for growth, which is reflected in their very low annualized standard deviation.
- As a group, the top 5% display strong selection and timing skills, whereas the bottom 5% show negative selection and timing. Selection and timing returns represent components of excess benchmark performance.

- Style attribution analysis can clarify if over- and under-exposures to different styles (versus the benchmark) aided or hindered the funds. As depicted by Chart 4, the top funds' over-exposure to corporate, high yield and TIPS factors and under-exposure to mortgages added to their performance, while overexposure to municipals, agency & quasi government appears to have slightly deducted from their overall performance. The bottom funds' over-weight exposures to treasury bills and under-weight exposure to corporates appear to have had the most negative effect on the funds' performance. Their over-exposure to treasury bills was responsible for the largest portion of their underperformance.

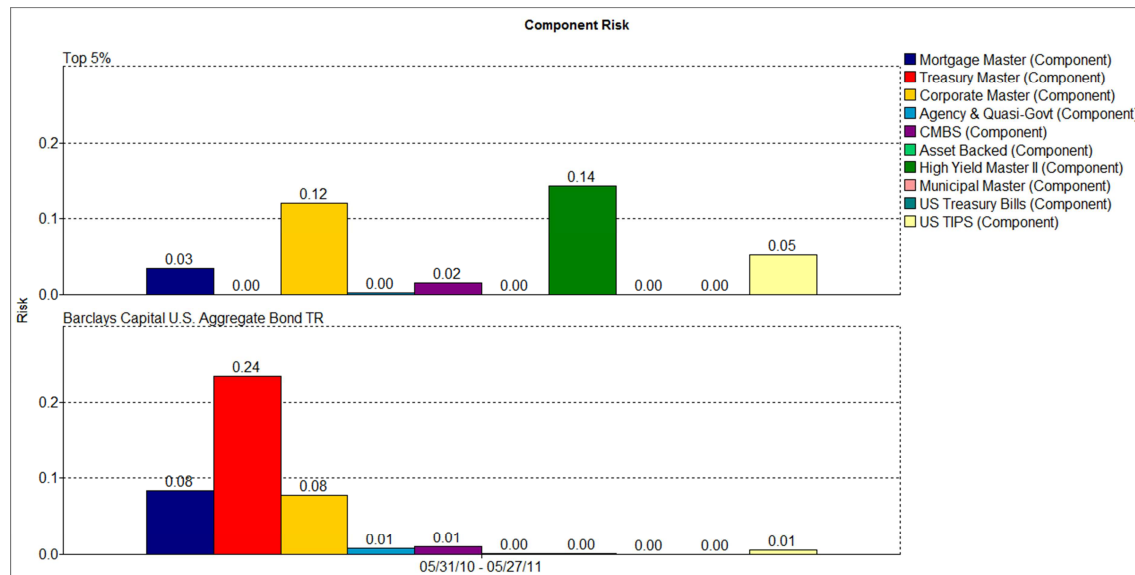
Chart 3: Excess Return Contribution



- As previously noted, the top funds overall risk, as measured by the annualized standard deviation, is lower, at 2.77%, than that of the benchmark (3.02%) and even that of the peer average (3.18%). This begs the question, how is a group of funds with large exposures to riskier factors over-performing while being subject to a lower risk level? We use style attribution to breakdown the risk of the top funds and the benchmark into their different components. Focusing only on the systematic risk², we break it down into its components (i.e. factors), as shown in Chart 4 below. The components explain close to 82% of the total risk for the top funds' portfolio and practically 100% of the risk of the benchmark. Based on the analysis, we can conclude that the overall exposures of the benchmark to the US Treasury Master, Mortgage Master, and Corporate Master indices are responsible for the largest contributions to risk, the sum of which exceeds the total systematic risk of the top funds' portfolio.

² Please refer to the "Universe Definitions & Assumptions" for the exact definition of Systematic Risk.

Chart 4: Contribution to Systematic Risk by Components



- The diversification effects of blending a large number of funds together in an equally-weighted portfolio results in an reasonable R-Squared values of close to 79% for the top 5%; 74% bottom 5%; 76% for the peer group average; and 99.61% for the benchmark, providing further credibility to the statistical exposures identified in this analysis.

Conclusions

Overall, funds within the Bonds USD universe produced positive returns over the 52 weeks ended on May 27, 2011. Our analysis suggests that the 71 of the 166 funds in the peer group underperformed the benchmark had safer style profiles over the past year than those that outperformed, with higher exposures to US Treasury Bills. To the contrary, funds that outperformed the benchmark and the rest of their peers were more heavily exposed to high yield and corporate bonds. It is intriguing to see that the top funds, in theory exposed to more volatile factors than the benchmark, had a lower volatility. Breaking down the total risk of the top fund's portfolio and the benchmark into their style components helps us understand why their risk patterns are so different. High exposures to US Treasury Master, Mortgage Master and Corporate Master, which have correlations of over 0.75 among themselves, did not help to diversify the portfolio's risk and actually accounted for the majority of the benchmarks systematic risk. The top funds' portfolio exposures show a more diversified profile, with systematic risk coming mostly from High Yield and Corporates, which have a very low correlation of 0.19. This exposure ultimately helped the funds lower their overall risk and generate higher returns.

UNIVERSE DEFINITIONS & ASSUMPTIONS

- **Database provider:** Lipper, a Thomson Reuters Company
- **Registered for sale countries:** Austria, France, Germany, Italy, Netherlands, Offshore, Spain, Sweden, Switzerland, and the UK
- **Filters:** Primary share class, at least 1 year of performance history, Asset Type: Bond, Lipper Global Category: Bond USD, AUM: minimum USD 10 Million, Denominated in USD.
- **Number of funds analyzed:** 116
- **Date interval:** Last 52 weeks starting on May 31, 2010 and ending on May 27, 2011
- **RBSA Model:** Locally Weighted Regression
- **Currency:** USD
- **Analysis frequency:** Weekly (with compounded daily data)
- **Cash proxy (Risk Free Rate):** The BofA Merrill Lynch U.S. Treasury Bills Index
- **Benchmark:** Barclays Capital U.S. Aggregate Bond TR Index
- **Style factors:** The BofA Merrill Lynch Indices – Mortgage Master, U.S. Treasury Master, U. S. Corporate Master, Agency & Quasi Foreign/Government, CMBS Fixed Rate, Asset Backed Securities Master, US High Yield Master II, Municipal Master, U.S. Treasury Bills, U.S. Treasuries Inflation Linked
- **Analysis performed with mpi Stylus Pro™**

Style Return: Return of the Best Fit Portfolio for the Manager Series, where the holdings of the portfolio are the Style Indices.

Selection Return: Calculated as the Manager's Return subtracted by the Style Return. This is an indication of the Manager's Selection or Stock Picking abilities.

Timing Return: Calculated as the Manager's Style Return subtracted by the Benchmark's Style Return. This indicates whether the Manager's decisions, to over or under weight the style holdings, as compared to the benchmark, added to the portfolio's return or not.

Style R Squared (R2): Measure of the model's power in describing the Manager's past behaviour in terms of style. The higher the Style R Squared value, the better the model's explanatory power.

Predicted Style R Squared (PR2): Measure of the model's power in predicting the Manager's future behaviour in terms of style. The higher the Predicted Style R Squared value, the better the model's predictive power.

Total Risk: calculated as $Total Risk = \sqrt{(Systematic Risk)^2 + (Specific Risk)^2}$, where Systematic Risk would be the portion of risk explained by the asset loadings and Specific Risk is the risk that cannot be attributed to market exposures. Systematic Risk is equal to the sum of the Component Risk.

Component Risk: is the portion of the Systematic Risk that can be attributed to each of the factors based on the estimated exposures.

Asset Loadings: Weights of the Style Indices, as holdings, of the Style Portfolio, as calculated by mpi Stylus Pro.

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