MPI Quantitative Analysis

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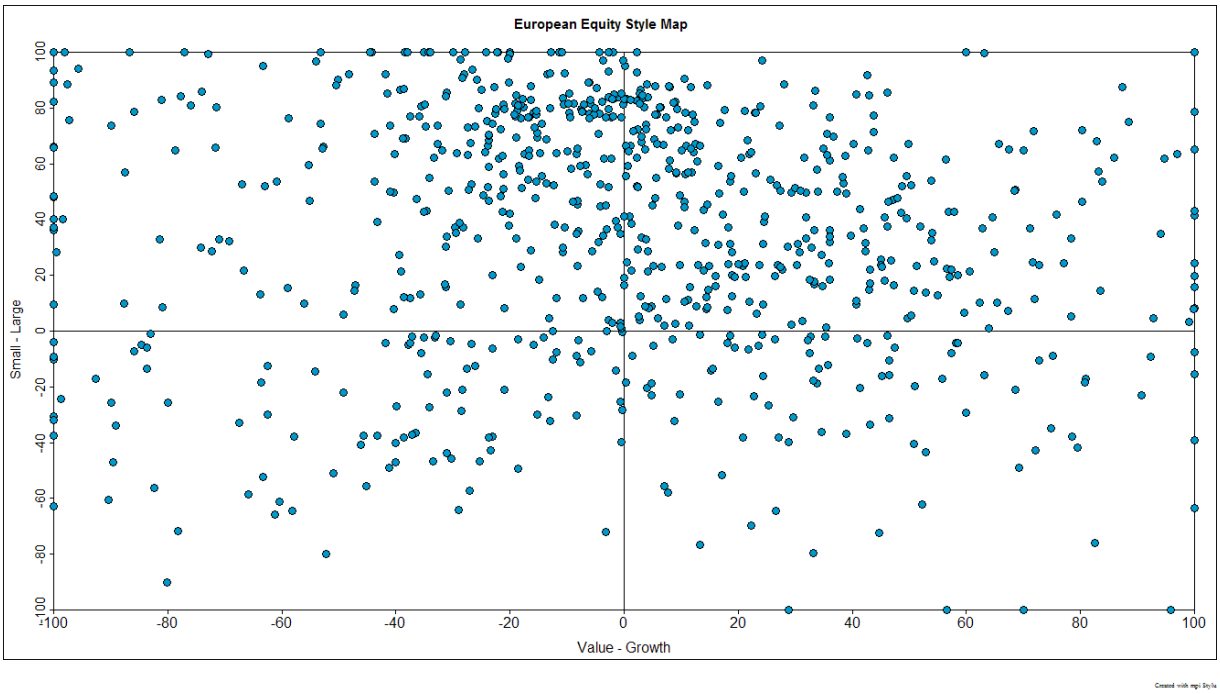
EUROPEAN EQUITY CLASS ANALYSIS

Abstract

European Equity funds' performance varies significantly across the category, with the best 5% of the funds in the universe outperforming the market (pegged to MSCI Europe) by approximately 15% over the trailing 12 months, and the worst 5% underperforming by approximately the same amount over the same time period. When one focuses on each success or failure, it seems that they were the result of very specific allocations (timing bets) or stock/sector picks (selection). What part of this wide spread is due to favourable style allocations? We decided to look at common factors describing best and worst funds by looking at these groups on an aggregate basis. When top performing funds are aggregated in a group, their common factors crystallize and specific bets are diversified away, which provides the basis for such an analysis. As expected, we find that top- and bottom-performing funds, on average, belong to different style categories which impacted their performance. Top-performing funds benefited from their style allocation (positive timing); while for worse performers, timing negatively impacted their performance. At the same time, security/sector bets had a more pronounced impact on performance of funds in both categories. Please note that our conclusions may change if a different timeframe is used to select the best/worst funds.

Returns-Based Style Analysis (RBSA) Approach

- Upon review of the strategy of a number of funds, a theme emerged: a large number claimed that they sought an absolute performance over time, regardless of the movement of the market by hedging their bets using derivatives or taking long/short positions. For this reason, we used a modified RBSA model to allow for sensing hedging.
- In terms of style and capitalization average exposure over the past 12 months, the funds in the universe cover the entire equity style space:

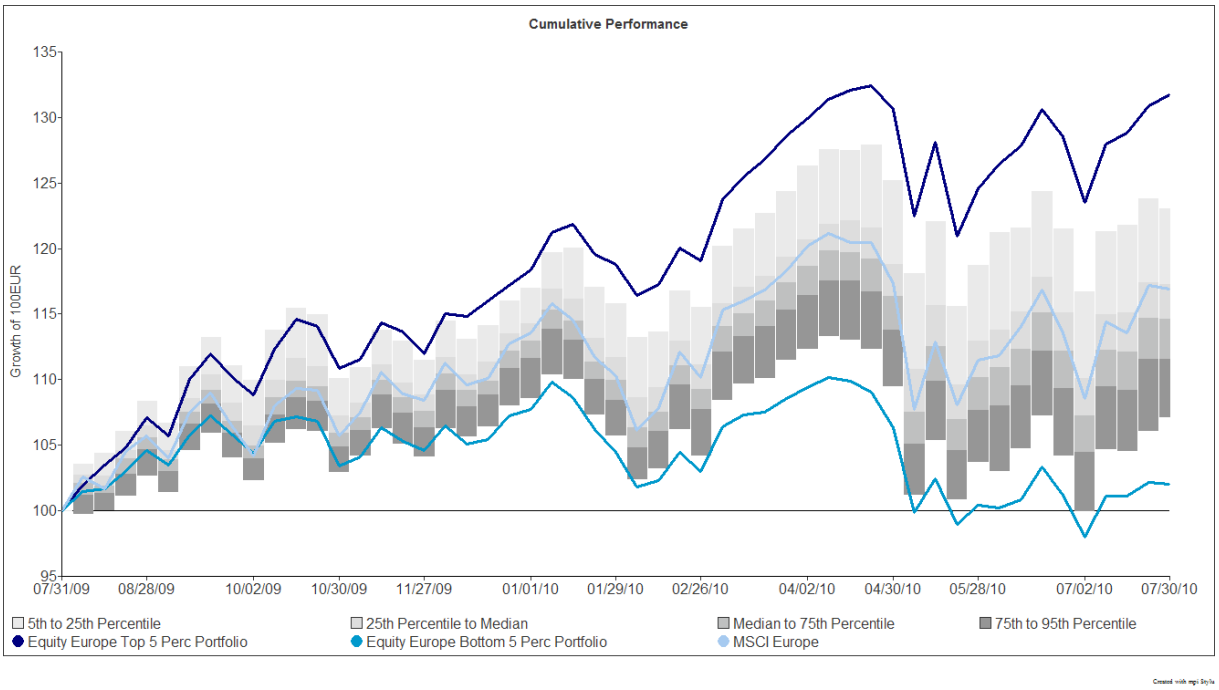


Selection of Top/Bottom Groups of Funds

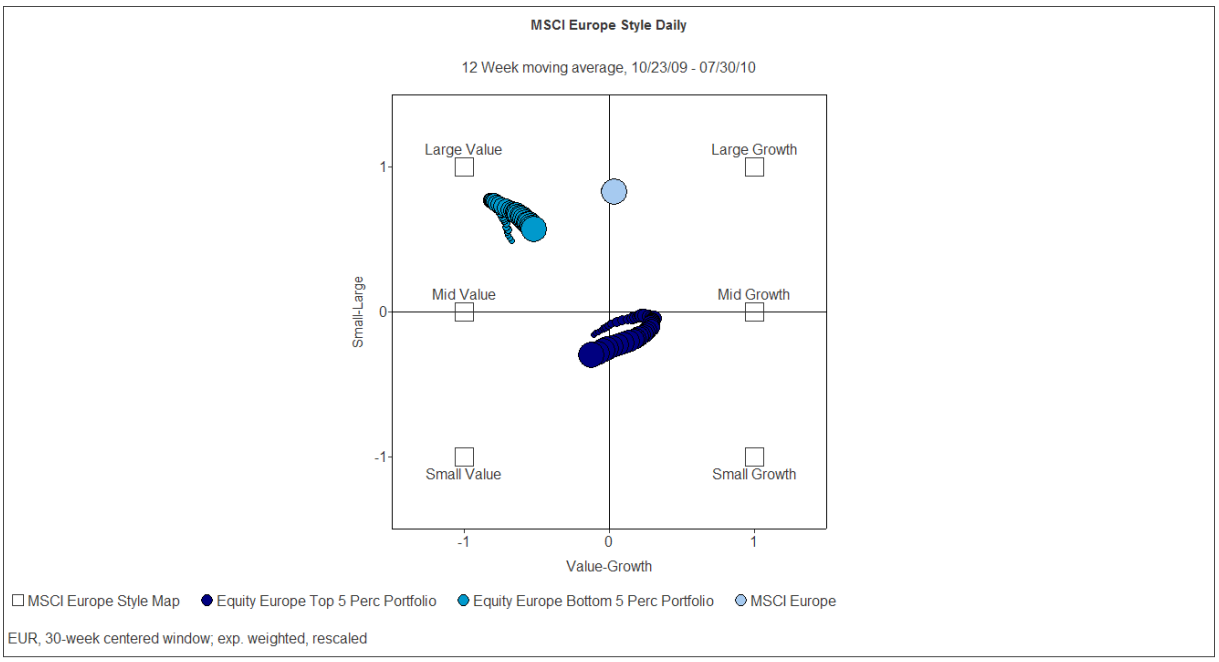
- Based on the universe of 797 funds, we calculate the total annualized performance over the last 52 weeks and rank the funds from the best to the worst performers. Using the top 5% (39 funds) and bottom 5% (25 funds) we create equally weighted, daily rebalanced portfolios in order to understand why, on average, one group performed better than the other in terms of style exposures.

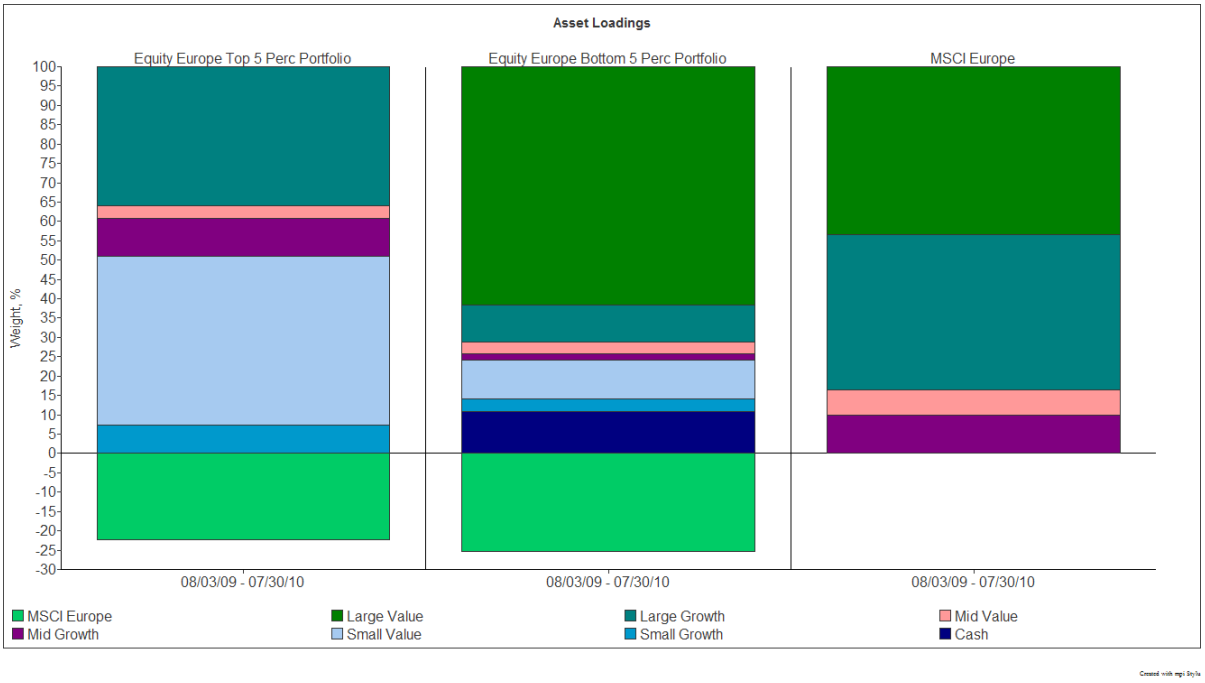
Analysis Highlights

- As evidenced by the chart, the top 5% outperforms its peers, benchmark, and the bottom 5%. Over the period of analysis, the top 5% return is approximately 15% on top of MSCI Europe, while the bottom 5% return is 15% below MSCI Europe.



- The style map and asset loadings give us some insight into how the top and bottom performers differ:

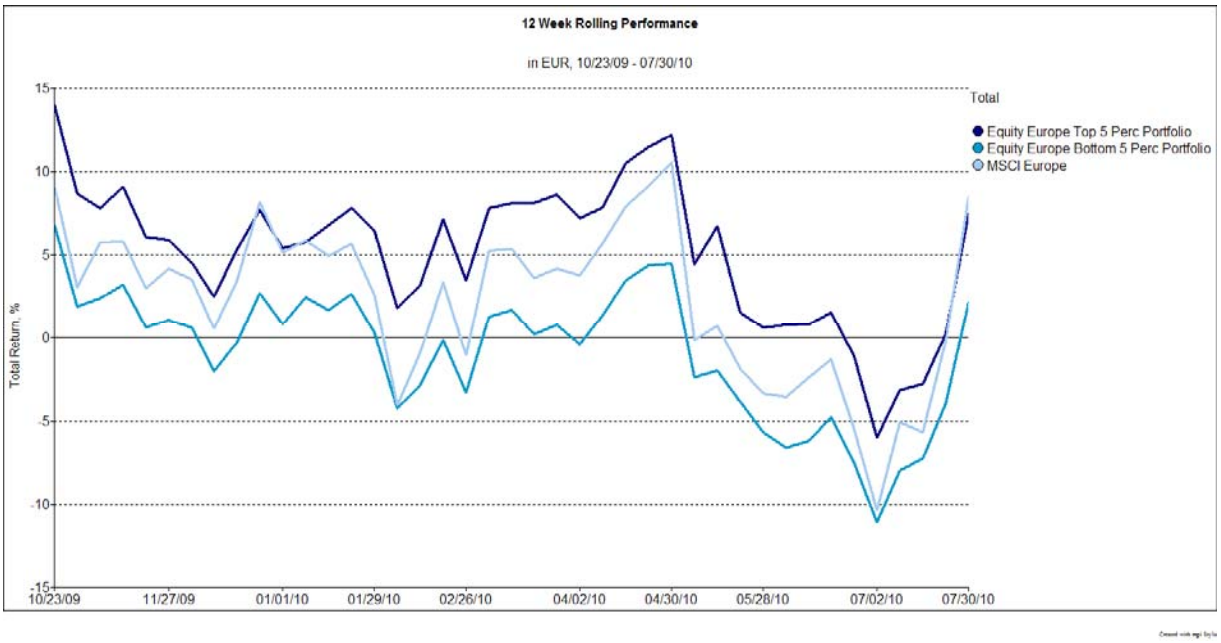




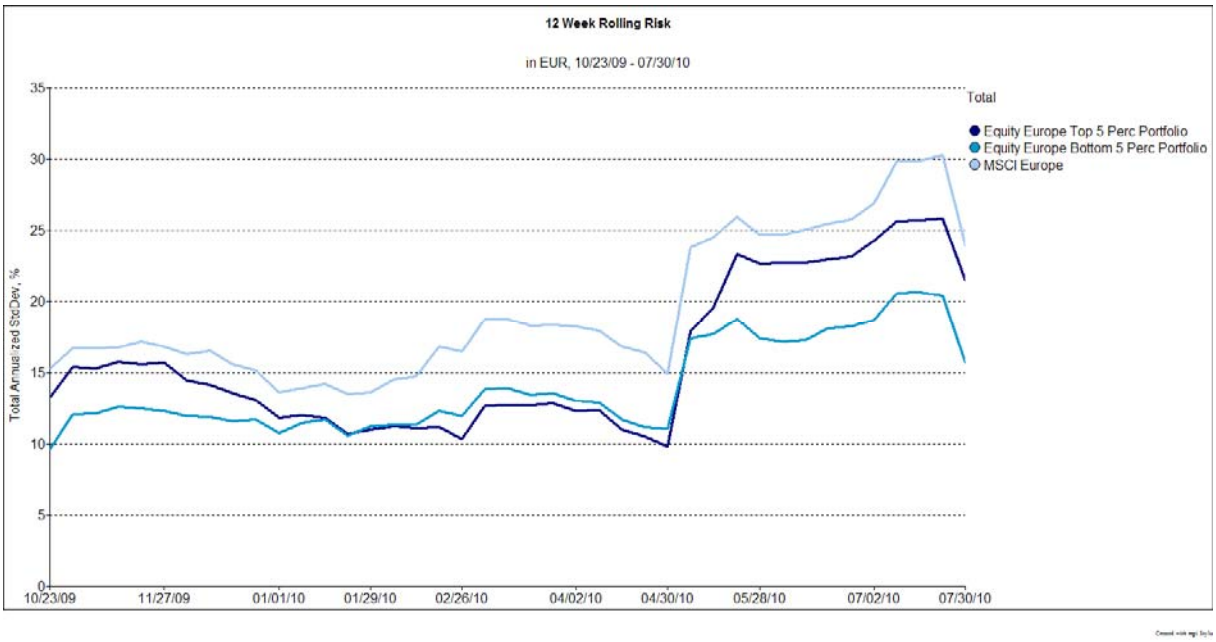
- The average style exposures suggest that the top 5% (in average) had over-weighted exposures to small value and large growth, whereas the bottom 5% had a significant large value bias. The negative exposure to MSCI Europe suggests that hedging decisions were made.
- As expected, the diversification effects of blending a large number of funds together in an equally-weighted portfolio results in very high explanatory power of the analysis with R-squared values in the 90s. As a group, the top 5% group displays strong selection and timing skill whereas the bottom 5% group displays the opposite. Both, selection and timing returns represent components of excess benchmark performance.

Rolling Risk/Return Analysis: C*onsistent Behaviours*

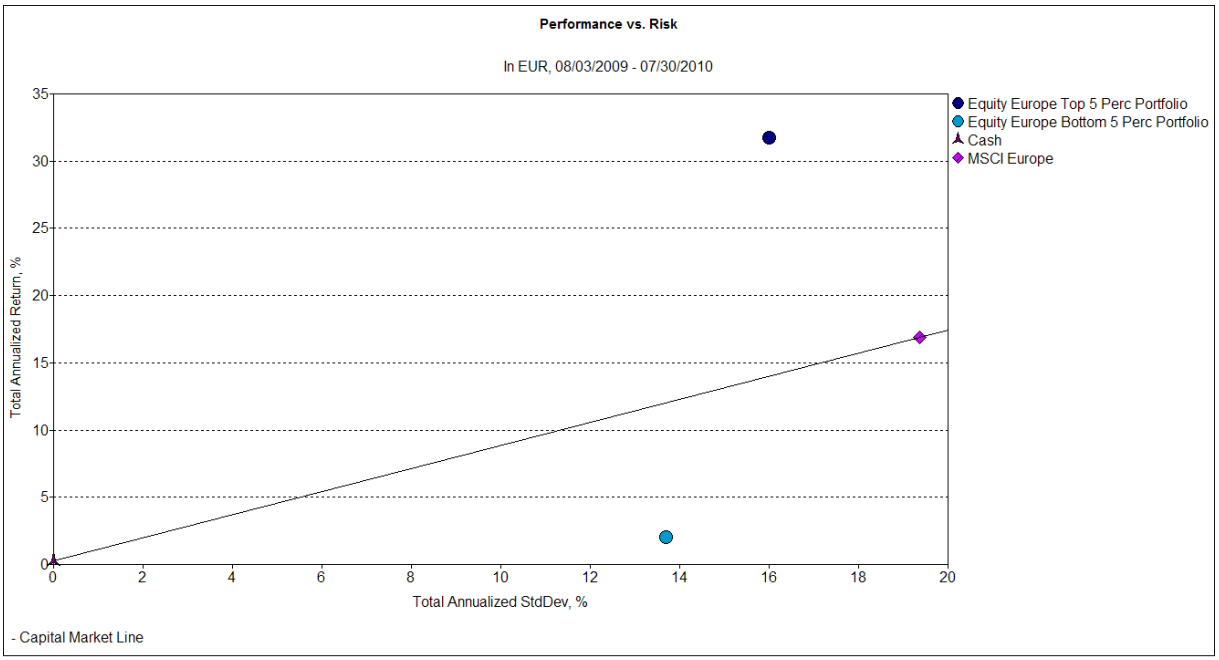
- Over the period of analysis, one can see that the top (bottom) 5% consistently outperformed (underperformed) the benchmark on a 12-week rolling return basis. This over (under) performance account to the 14.82% (-14.86%) return in excess over (under) the benchmark during this period.



- Both portfolios display less risk than the benchmark, as defined by the 12-month rolling standard deviation. For the majority of the period, the top 5% has a higher risk than the bottom 5%, which once again confirms the adage that the higher the risk, the higher the return.



- On a risk-adjusted basis, the top 5% portfolio clearly dominates, providing a higher return per unit of risk than the benchmark and the bottom 5%.



UNIVERSE 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, Lipper Global Category: Equity Europe, Assets Under Management of at least EUR 10 Million
- **Number of funds analyzed**: 797
- **Date interval:** Last 52 weeks ending on July 30th 2010
- **Currency**: Euro
- **Analysis Frequency**: Weekly (with compounded daily data)
- **Cash proxy (Risk Free Rate):** EONIA Index
- **Benchmark**: MSCI Europe
- **Style factors:** MSCI Europe Large Value, Large Growth, Mid Value, Mid Growth, Small Value, and Small Growth. MSCI Europe as a generic hedging instrument.
- **Analysis performed with mpi Stylus Pro™**

UNIVERSE DEFINITIONS

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.

Style Map: Graphic representation of the results of the Style Analysis. The series being analyzed are mapped unto a Cartesian plane, in which the X and Y axis represent exposures to different Styles and Sizes.

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

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