



Welcome to the September edition of the DB Quantitative Strategy Team's monthly newsletter, **Quantum**. The aim of Quantum is to make it easier for you to keep track of all the research we publish, and to serve as a forum to highlight the latest news and thinking in the quant investing world. If you only read one email from us every month, make it Quantum!

We have got a lot of questions on how to best integrate ESG/SRI in investment strategies since we published **The Socially Responsible Quant (April 24th, 2013)**. Should we simply screen out so called "sin" companies from our portfolios? What is the impact on portfolio performance and risk from negative exclusionary screens? Is there a better framework to integrate SRI convictions? What is the impact of SRI integration on tracking error, drawdown, portfolio constraints, transfer coefficient etc? As such, in our second ESG report, we try to answer the above questions. We also take an in-depth look at how SRI integration affects SMART beta portfolios such as minimum variance, maximum diversification, and risk parity. The results may surprise you.

Yin Luo will present a forthcoming research (*Dynamic Allocation: Extremes, Tail Dependence, and Regime Switching*) at the Axioma Quant Forum in London on September 26, 2013 (Andaz Liverpool, 8:30AM-6PM). It's a full day conference and a few other sell-side firms will also present their research. If you happen to be in London on that day, it'd be great to have you there. Please sign up at: <http://www.axioma.com/seminars.htm>

Thank you for your tremendous support. We have been honored to rank #1 in the *Institutional Investor* magazine's survey of sell-side research in the **Quantitative Research** category in the Americas, Europe, and Asia in the past few years. The II-All Europe survey is expected to be launched soon. If you do find our research useful, we would greatly appreciate your support again this year!

Regards,

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Recent Research

North America

- **The Quant View (September 4th, 2013)**: In this report we present our latest quantitative forecasts for bottom-up stock selection and top-down asset allocations. This month we studied the investment opportunities created by the recent market sell-off. To read the whole report, click [here](#).
- **The Quant View: Small cap edition (September 4th, 2013)**: In the world of small caps, we also studied the opportunities in different industries. To read the whole report, click [here](#).
- **SRI Integration using Smart Beta (August 20th, 2013)**: The overwhelming challenge faced by investment managers with an SRI mandate is to determine how best to integrate SRI convictions into an existing portfolio strategy. In this report we provide a methodical framework to analyze a multitude of ESG integration strategies from simple screening to SMART beta portfolios. To read the whole report, click [here](#).
- **The Quant View (August 2nd, 2013)**: This month we studied the performance of momentum and reversal, and their beta exposure. To read the whole report, click [here](#).
- **The Quant View: Small cap edition (August 2nd, 2013)**: In the world of small caps, we also studied the implications from the performance of momentum and reversal in the last few months. To read the whole report, click [here](#).

Global

- **Academic Insights: Harnessing the best ideas from academia (September 6th, 2013)**: Every month we survey the latest academic research for any ideas relevant to quantitative investing. This month an interesting paper challenges the standard book-to-price measure with more timely price data while retaining the necessary lag of book value. To read the whole report, click [here](#).

Note: to access these links you need a login to the DB Quant website; if you don't have a login, or have forgotten your password, please click [here](#) and fill out the requested details.

Quant in the News

Interesting news articles related to quant investing:

- **ETF that clones ideas from hedge funds has outperformed the market** ([finalalternatives.com](#), August 22th, 2013): The Global X Guru ETF is mining the trading ideas from 13F filings of large hedge funds to build its portfolio. Does its strategy really work? The fund was up 26% up to the end of July this year compared with 18.2% increase of S&P 500 Index. To read the whole article, click [here](#).
- **Being a sustainable investing officer is not easy** ([allaboutalpha.com](#), August 26th, 2013): Green or sustainable investment could cost money. Institutional investors and public investors bought ETFs that track green energy stocks have underperformed the benchmark over the past few years. To read the whole article, click [here](#).

Quantomatic: Latest trends in quant technology

Each month we use this section to focus on the technological side of quant investing. Our view is that better technology can be a source of alpha in its own right - either via new, cutting-edge data sources or through more data intensive modeling techniques.

Last month we discussed the merits of open source programming languages like R. One of the benefits of open source languages such as R is that they have a multitude of libraries that users can leverage. For quants that love Java, open source libraries are also available. We recently come across a Java-based quant library [Maygard](#). Maygard is a free open-source pricing and valuation engine for financial products including bonds, equities, commodities, futures, currencies, options, and exotic options. The library is written entirely in the Java programming language. The goal of Maygard is to free quantitative analysts from the low-level implementation details of the underlying mathematical and computational complexities, and allow them to focus on strategies and ideas generation.

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