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COMBINING DIVIDEND PAYING STOCKS WITH LOW VOLATILITY ONES – A SHORT COMMENTARY

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Abstract

Investors have been showing a strong interest in certain themes like dividends and low volatility. The purpose of this document is to investigate the possibility of enhancing the historical performance of the STOXX Europe Select Dividend 30 Index by complementing it with a straightforward low volatility screen. This "hybrid" dividend and low volatility approach has produced encouraging performance during the period between March 2008 and March 2013.

In the wake of the credit crisis which swept the globe in 2008, interest in decade-old investment themes has been reinforced whilst renewed focus on dealing with stock market volatility has been at the top of investors' agenda ever since. The case for investing in dividend paying stocks is very straightforward: In general, companies that pay dividends regularly demonstrate not only an ability to turn in a profit but also confidence in the future of their business operations. No surprise then that such companies are a strong magnet for investors. Dividend yield (i.e. the ratio between the dividend paid and the share price) is a key metric when evaluating competing stock investments. The higher the yield - all other things being equal - the more attractive a stock is considered to be. Further, when dividend yields are higher relative to sovereign and corporate paper, the investment case for dividend paying stocks becomes even more compelling. The world's central banks have certainly helped in this regard through their quantitative easing and exceptionally low rate policies. Such policies have aimed at kick-starting economic growth by encouraging the private sector to invest rather than park their excess reserves in low yielding fixed-income assets. Thanks to such policy-driven re-pricing of risk, interest in the dividend yield theme has received an extra shot in the arm over the last few years. As a result, there has been a global proliferation of investment vehicles that allocate money to dividend paying baskets. In turn, these investments are constructed and evaluated against a vast array of indices and benchmarks that the indexing industry has produced in order to facilitate the process. According to the ETF database (www.etfdb.com), the biggest global dividend-themed ETFs collectively have about \$50bn in assets under management. Obviously, this is only the tip of the iceberg because such a figure excludes the amount of money that is managed actively in this space. In short, investors are allocating considerable amounts of money to dividend-paying stocks. STOXX has a range of dividend indices which mirror investment opportunities in different markets and geographies. A case in point is the STOXX Europe Select Dividend 30 (that selects stocks from the underlying STOXX Europe 600 index) which is widely followed by investors that are specifically focused on European dividend paying companies.

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Chart 1. STOXX Europe Select Dividend 30 Price Index (rebased at 100) between March 31, 2008 and March 31, 2013

As the left part (i.e. March 2008 – March 2009) of Chart 1 demonstrates, when there is turmoil in the markets there is no shelter for investors to hide from the storm. Correlations increase - across major asset classes - and volatility spikes up. Whilst there is an array of different financial instruments (and each of them comes with their pros and cons) that investors could employ as volatility insurance policies, the reality is that investor portfolios have traditionally suffered a lot on the back of sudden and prolonged volatility bursts and heightened risk levels.

Over the last few decades, an ever growing army of academics and practitioners have studied the volatility phenomenon at lengths with the view not only to understand it better but also with the ultimate aim of using such knowledge to tame (and even take advantage of) violent market movements. Part of this body of research has been studying the so-called low volatility anomaly where low volatility stocks have historically produced higher risk adjusted returns (compared to higher volatility stocks), globally¹. Without wanting to go into the reasons (please see references at the end of this document for more detailed discussions on the subject) of why such anomaly arises, the historical evidence of the existence of such anomaly has generated considerable investor interest, especially over the last few years. As a result, dedicated ETF and structure products are benchmarked to a suite of low volatility indices.

The purpose of this short document is to test whether bringing together the themes of dividend and low volatility - under one roof - has helped enhance the historical performance of the STOXX Europe Select Dividend 30 index. The hope here is that if the low risk anomaly has been also active in the dividend paying stocks' space, then maybe a new index could be created that would bring the best of both worlds into being. The following bullet points describe the step-by-step process which has guided the construction of such a "hybrid" STOXX Europe Select Dividend and Low Risk 30 index:

¹ Baker, Nardin and Haugen, Robert A. (2012), "Low Risk Stocks Outperform within All Observable Markets of the World"

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- » At the end of each March - between 2008 and 2012 - we obtain the list of stocks that are candidate for inclusion (CI) in the STOXX Europe Select Dividend 30 index (for a description of the ground rules governing the index see respective pages in our STOXX Index Methodology Guide [www.stoxx.com/download/indices/rulebooks/stoxx_indexguide.pdf]);
- » At the end of each March - between 2008 and 2012 - rank CI stocks from highest to lowest in terms of dividend yield. Assign a rank to each stock;
- » At the end of each March - between 2008 and 2012 - and for each CI stock, calculate the realized volatility over the immediately past 252 trading days;
- » At the end of each March - between 2008 and 2012 - rank CI stocks from lowest to highest in terms of realized volatility. Assign a rank to each stock;
- » At the end of each March - between 2008 and 2012 - and for each CI stock, work out the average rank between the above individual rankings. That is, if Stock A ranks as number 1 in terms of the dividend yield rank and number 15 in terms of the realized volatility rank, then the average rank of Stock A would be 8;
- » At the end of each March - between 2008 and 2012 - and for each CI stock, reorder their average rank score from lowest to highest;
- » At the end of each March - between 2008 and 2012 - the top 30 stocks in terms of the average rank will be the constituents of the STOXX Europe Select Dividend and Low Risk 30 index;
- » Index is rebalanced annually (end of each March);
- » Two separate versions have been backtested² between 31 March 2008 and 31 March 2013: the equal-weighted (where an equal amount of cash is allocated to each constituent at Index rebalancing date) and market cap-weighted versions, respectively.

Following the above procedure, we have created a "hybrid" STOXX Europe Select Dividend & Low Volatility 30 index whose performance characteristics are indicated in table 1 below. Clearly, combining low volatility with our existing select dividend process has managed to enhance performance over the last five years. This "hybrid" approach has outperformed the STOXX Europe Select Dividend 30 in both return and volatility terms. In addition, such performance is more pronounced for the equal cash version rather than the market cap-weighted one. This is not entirely surprising as we suspect the widely known smaller cap risk premium has (again) manifested itself .

² A simplifying assumption has been made in that only those stocks - for which the whole price history (between the past 252 trading days and next year's rebalancing date) is available - have been included in the historical backtests.

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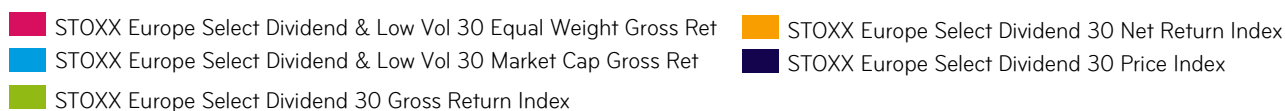


Chart 2. Performance measured between 31 March 2008 and 31 March 2013

Table 1. Performance characteristics

| | Return (cumulative) | Return (annual geometric) | Volatility (annualized) | Sharpe Ratio ³ | Drawdown |
|---|------------------------|------------------------------|----------------------------|------------------------------|----------|
| STOXX Europe Select Dividend & Low Volatility 30 Equal Weight Gross Return Index | 2.90% | 0.57% | 24.57% | 0.02 | -56.59% |
| STOXX Europe Select Dividend & Low Volatility 30 Market Cap Gross Return Index | -17.88% | -3.86% | 25.24% | -0.15 | -59.58% |
| STOXX Europe Select Dividend 30 Price Index | -46.31% | -11.70% | 28.92% | -0.40 | -65.53% |
| STOXX Europe Select Dividend 30 Net Return Index | -32.13% | -7.46% | 28.95% | -0.26 | -64.67% |
| STOXX Europe Select Dividend 30 Gross Return Index | -27.17% | -6.14% | 28.97% | -0.21 | -64.43% |

³ An assumption of a zero riskless rate is made for the purpose of calculating this metric.

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Conclusion

The purpose of this study has been to investigate whether complementing the existing dividend selection process with low volatility principles has helped enhance historical performance. The historical analysis of the past five years in Europe has demonstrated that this has indeed been the case. The low volatility anomaly has manifested itself and has helped boost performance in both return and volatility terms. As a result, higher risk-adjusted returns and more attractive drawdown numbers have been generated.

Appendix

The following table provides a snapshot of each index with respect to a set of valuation metrics (in addition to the dividend yield, prices are compared to earnings, sales and book value, respectively). Such a snapshot is taken at the end of March 2013 (using the previous year's index selection). As far as the crucial DY metric is concerned, the difference between the equal weight version of the STOXX Europe Select Dividend & Low Volatility 30 Index and the pure play Select Dividend 30 is fairly negligible at this particular point in time. Bringing in low volatility stocks - into the dividend mix - does not seem to have caused much harm to the dividend profile of the (equal-weighted) combined index.

| | DY | P/E | P/S | P/B |
|---|-------|-------|------|------|
| STOXX Europe Select Dividend & Low Volatility 30 Equal Weight | 7.03% | 19.03 | 1.49 | 2.03 |
| STOXX Europe Select Dividend & Low Volatility 30 Market Cap | 6.47% | 37.99 | 1.26 | 2.32 |
| STOXX Europe Select Dividend 30 | 7.12% | 12.41 | 0.55 | 1.31 |

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The views and opinions expressed in this paper are solely those of the author and not necessarily the view and opinion of STOXX Ltd

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*Blitz, David C., and Pim van Vliet. (2007), "The Volatility Effect: Lower Risk without Lower Return." *Journal of Portfolio Management*, vol. 34, No. 1, Fall 2007, pp. 102-113.*

About STOXX

STOXX Ltd. is a global index provider, currently calculating a global, comprehensive index family of over 6,000 strictly rules-based and transparent indices. Best known for the leading European equity indices EURO STOXX 50, STOXX Europe 50 and STOXX Europe 600, STOXX Ltd. maintains and calculates the STOXX Global Index family which consists of total market, broad and blue-chip indices for the regions Americas, Europe, Asia, and Pacific, the sub-regions Latin America and BRIC (Brazil, Russia, India and China), as well as global markets.

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The STOXX indices are licensed to over 400 companies around the world as underlyings for Exchange Traded Funds (ETFs), Futures & Options, Structured Products and passively-managed investment funds. Three of the top Exchange Traded Funds (ETFs) in Europe and 30 percent of all assets under management are based on STOXX indices. STOXX Ltd. holds Europe's number one and the world's number three position in the derivatives segment.

In addition, STOXX Ltd. is the marketing agent for the indices of Deutsche Boerse AG and SIX, amongst them the DAX and the SMI indices.

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