

Filtering Momentum Life Cycles, Price Acceleration Signals and Trend Reversals for Stocks, Credit Derivatives and Bonds

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Abstract : Recent empirical research shows a growing interest in investment decision-making under market anomalies that contradict the rational paradigm. Momentum is undoubtedly one of the most robust anomalies in the empirical asset pricing research and remains surprisingly lucrative ever since first documented. Although predominantly phenomena identified across equities, momentum premia are now evident across various asset classes. Yet few many attempts are made so far to provide traders a diversified portfolio of strategies across different assets and markets. Moreover, literature focuses on patterns from past returns rather than mechanisms to signal future price directions prior to momentum runs. The aim of this paper is to develop a diversified portfolio approach to price distortion signals using daily position data on stocks, credit derivatives, and bonds. An algorithm allocates assets periodically, and new investment tactics take over upon price momentum signals and across different ranking groups. We focus on momentum life cycles, trend reversals, and price acceleration signals. The main effort here concentrates on the density, time span and maturity of momentum phenomena to identify consistent patterns over time and measure the predictive power of buy-sell signals generated by these anomalies. To tackle this, we propose a two-stage modelling process. First, we generate forecasts on core macroeconomic drivers. Secondly, satellite models generate market risk forecasts using the core driver projections generated at the first stage as input. Moreover, using a combination of the ARFIMA and FIGARCH models, we examine the dependence of consecutive observations across time and portfolio assets since long memory behavior in volatilities of one market appears to trigger persistent volatility patterns across other markets. We believe that this is the first work that employs evidence of volatility transmissions among derivatives, equities, and bonds to identify momentum life cycle patterns.

Keywords : forecasting, long memory, momentum, returns

Conference Title : ICCFAT 2019 : International Conference on Computational Finance and Algorithmic Trading

Conference Location : Stockholm, Sweden

Conference Dates : July 15-16, 2019