Comomentum: Inferring Arbitrage Activity From Return Correlations

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We propose a novel measure of arbitrage activity to examine whether arbitrageurs can have a destabilizing effect in the stock market. We apply our insight to stock price momentum, a classic example of the type of unanchored, positive-feedback strategy that theory predicts can be destabilizing. We define our measure, which we dub comomentum, as the high-frequency abnormal return correlation among stocks on which a typical momentum strategy would speculate. We show that during periods of low comomentum, momentum strategies are profitable and stabilizing, reflecting an underreaction phenomenon that arbitrageurs correct. In contrast, during periods of high comomentum, these strategies tend to crash and revert, reflecting prior overreaction resulting from crowded momentum trading pushing prices away from fundamentals. Theory suggests that we should not find destabilizing arbitrage activity in anchored strategies. Indeed, we find that a corresponding measure of arbitrage activity for the value strategy, covalue, positively forecasts future value strategy returns and is positively correlated with the value spread, a natural anchor for the value-minus-growth trade. Similar tests in the currency market as well as further analysis of stock momentum at the firm, fund and international level confirm that our approach to measuring arbitrage activity in the momentum strategy is sensible.

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