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Does Simple Pairs Trading Still Work?

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Pairs t ... ly attractive to he ... stocks of close ec ... ined to seminal ... ant, albeit declinin ... simple pairs tra ... endent scrutiny, ... ing.

We re-ex ... by using an extended dataset covering July 1962–June 2009. We confirmed a continuation of the

declining trend in profitability over time, with the mean excess return for the portfolio of the top 20 pairs dropping precipitously, from 0.86 percent a month for 1962–1988 to 0.37 percent for 1989–2002 and to just 0.24 percent for 2003–2009. Although the literature suggests that this decline is the consequence of increased competition within the growing hedge fund industry, which competes away the same opportunities, careful analysis shows that not to be the case in pairs trading. We argued that pairs trading is essentially a risky arbitrage; thus, its performance depends on not only the state of market efficiency but also the degree of arbitrage risks facing arbitrageurs. These risks encompass fundamental risk, noise-trader risk, and synchronization risk, all of which work to prevent or delay arbitrage or to inflict losses on arbitrageurs. Using a simple attribution analysis, we were able to show that the "market efficiency" story, in which the hedge fund factor is just one component, is only partly to blame for the decline. Instead, we found that the worsening arbitrage risks facing pairs traders contribute up to 70 percent of the drop in profits.

We also found that pairs trading performed particularly strongly during recent periods of prolonged turbulence, namely, the 2000–02 bear market and the 2007–09 global financial crisis. Although this finding seems counterintuitive, the increase in arbitrage risks during these periods of panic was outweighed by a corresponding decrease in market efficiency. Thus, some arbitrageurs have overcome worsening arbitrage risks to successf … nt periods.

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