



## Factor/Style Investing

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### Betting Against Beta: Original Paper Data

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This data set is related to “Betting Against Beta” (Frazzini and Pedersen, 2014). A basic premise of the capital asset pricing model (CAPM) is that all agents invest in the portfolio with the highest Sharpe ratio, or expected excess return per unit of risk, and leverage or de-leverage this portfolio to suit their risk preferences. However, many investors — such as individuals, pension funds and mutual funds — are constrained in the leverage that they can take, and therefore overweight risky securities instead. This behavior of tilting toward beta suggests high-beta assets require lower risk-adjusted returns than low-beta assets. Indeed, the security market line for U.S. stocks is too flat relative to the CAPM and is better explained by the CAPM with limited borrowing. This raises several questions: What is the magnitude of this anomaly relative to the size, value and momentum effects? Is betting against beta rewarded in other countries and asset classes? How does the return premium vary over time and in the cross section? How does one bet against beta? To explore these questions, we construct market-neutral betting-against-beta (BAB) factors, which are long leveraged low-beta assets and short high-beta assets.

This is the original data set used by Frazzini and Pedersen (2014), with long/short BAB factors through March 2012. BAB factors are constructed for: U.S. equities and 19 international equity markets (as well as an aggregate of international equities); U.S. Treasuries; U.S. credit indices (unhedged and hedged); U.S. corporate bonds; equity indices (aggregate of 13 global equity index futures); country bonds (aggregate of 9 global bond futures); foreign exchange (aggregate of 9 global exchange rate forwards); commodities (aggregate of 24 commodity futures).

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