

## RISK PARITY

## Leverage Aversion and Risk Parity

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The risk parity (RP) approach to asset allocation has gained in popularity among practitioners. RP investing starts with the observation that traditional asset allocations, such as the market portfolio or the 60/40 portfolio of stocks/bonds, are not well diversified when viewed from the perspective of how each asset class contributes to the overall risk of the portfolio. Because stocks are so much more volatile than bonds, movement in the stock market dominates the risk in the market portfolio.

RP seeks take advantage of this by investing more money in low-risk assets than in high-risk assets, and leveraging the resulting portfolio to a desired volatility. Empirical evidence dating back to 1926 shows that RP portfolios have outperformed traditional portfolios over the long term, but we must ask ourselves whether this evidence alone is conclusive. More than 80 years of evidence in the U.S is great, but we would feel more comfortable if there were also theoretical justification for RP investing and broad tests across and within major asset classes and countries.

Frazzini and Pedersen (2010) have found these links. Following Black (1972), they showed that if some investors are averse to leverage, low-beta assets will offer higher risk-adjusted returns and high-beta assets will offer lower risk-adjusted returns. In contrast to the standard Capital Asset Pricing Model, leverage aversion suggests that the highest risk-adjusted return is achieved not by the market but, rather, by a portfolio that overweights safer assets (e.g., a risk parity portfolio). We test this theory across several international markets and globally and find evidence consistent with the theory of leverage aversion being one factor behind risk parity's superior performance.

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