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Why Isn't CAPM Being Retired?

Northern Trust Asset Management's quant chief Michael Hunstad challenges the assertion that investors need to take more risk to achieve greater returns.

BY **JULIE SEGAL**

The tradeoff for higher returns is higher risk — right?

A new paper argues that factor investing challenges the 50-year-old Capital Asset Pricing Model (CAPM) developed by William Sharpe, which asserts that the only way to outperform the market is by holding stocks with higher systemic risk.

Factors are characteristics of stocks — such as value and size — that tend to outperform the broader market.

"CAPM asserts that if you want more return you take more risk," said paper co-author Michael Hunstad, Northern Trust Asset Management's head of quantitative strategies, in an interview. "But also in same vein, nothing generates a higher risk-adjusted return than a market-cap portfolio, typically thought of as a market cap-weighted benchmark. And factors challenge that in that they have been shown to generate higher risk-adjusted returns than cap-weighted benchmarks," he continued.

As Hunstad and his co-author Robert Lehnherr, a quantitative research analyst, wrote in the yet-to-be-released paper, "The efficacy of style factors conflicts with modern portfolio theory."

Many studies have shown that factors beat plain vanilla market capitalization-weighted benchmarks and funds across most global markets, according to the paper. They also apply to other asset classes, such as fixed income, and even commodities to some extent, added Hunstad.

Jerome Favre/Bloomberg

"CAPM was a valiant first start," Hunstad said on the phone. "But that was 1964. We're in 2019. These theories have to evolve," he added.

II Deep Dive: [Why Factor Investing Isn't Working]

Factors, of course, have drawbacks. Foremost, they can underperform for long periods. According to Hunstad, it's the biggest risk for investors. "This cyclicality is problematic given that investors commonly evaluate strategies on a three-to-five year horizon and style factors are prone to underperform over such short holding periods, ultimately leading to divestment," Hunstad and Lehnherr wrote in the paper.

To combat the cyclicality, Northern Trust recommends diversifying across factors as well as eliminating hidden and uncompensated risks in factor-based funds. For example, the price-to-book measure was historically used to define a value stock. Using that today would lead an investor to overweight financial stocks, which can add significant risks during certain market environments.

The Northern Trust paper, called "Foundations in Factors," cites well known academic research that conflicts with CAPM, including inconsistencies around dividend yield and the groundbreaking work of Professors Gene Fama and Kenneth French. In 1992, they published their three-factor model — adding size and value to market risk — to explain historic stock returns. In 1997, Mark Carhart extended Fama and French's model to a fourth factor, momentum.

Northern Trust does give CAPM some credit, especially when it comes to the 'why' behind the paper's own assertions. For instance, will factors continue to behave in the future as they have in the past?

"This assumption lacks consensus and represents a key consideration for investors," the authors wrote. "Despite their success in explaining historic stock returns, multi-factor models face some theoretical difficulties. In particular, they do not address why a premium should result from investing in high value, small size, high momentum, low volatility, and high quality stocks. Unlike the CAPM, which provides an intuitive justification for returns (high systematic risk = high return), the connection between style factors and returns is not so clear."

Still, Hunstad remains critical of CAPM.

"It's fascinating how these ideas are ingrained in the common knowledge of the industry," Hunstad told *Institutional Investor*. "For example, beta. If CAPM doesn't make any sense, then beta doesn't matter that much. But for every single portfolio we have, clients ask 'what's the beta of the portfolio?'"

Find more insights on quantitative strategies at northerntrust.com/factors