VIDEO - Are You Running More Diversified Than Normal Today?

Are You Running More Diversified Than Normal Today?

Background

When we are analyzing portfolios for our clients, we often ask them how they think about diversification vs. concentration. If a portfolio manager says they run with 50 positions today, we like to probe about whether that could oscillate between 25 and 100 positions; for example, over a multi-year period, and what set of conditions might cause them to want to run more diversified or concentrated. While much has been written about portfolio diversification in academic literature over the years, in today's research, we investigate the practical implications of diversification and concentration in portfolio construction.

Methodology

Every month since 1999, we simulated portfolios drawn from the Top 500 U.S. equities to study how diversification changes return and risk outcomes over a 12-month holding period. For each start month, we form random portfolios of 25, 50, 75, and 100 names within the investable universe, evaluate both equal-weight and cap-weight constructions, and then hold those portfolios constant without rebalancing for the next year so the results reflect the effect of diversification rather than ongoing trading rules. This process was repeated 500 times for each start month, portfolio size, universe, and weighting

Adam Parker
Founder
646-734-7070
adam@trivariateresearch.com

scheme to estimate the distribution of outcomes across simulations. We then compared each portfolio size with the corresponding 50-stock benchmark formed under the same conditions and summarized the impact on 1-year returns, the dispersion of those returns across simulations, annualized volatility, and annualized Sharpe, while also examining how these relationships vary across different market and financial-condition environments. No transaction costs or taxes are assumed.

Diversification Has Mattered Much More Since 2019

Frankly, the benefits of diversification for the median-performing portfolio manager weren't meaningful from 2000-2019. Generally, concentrated portfolios performed as well or better than more diversified portfolios from 2000 to 2012. However, since 2019, diversification has been a much better idea. The benefits of a 100-stock portfolio vs. a 75-stock portfolio since 2019 are relatively small. However, owning 75 stocks vs. 50 or 25 has generally been much better since 2019. Very recently, the more diversified the better. But perhaps this is all a confidence game. For bad stock pickers, the 10th percentile performance of a 25-stock portfolio is worse than the 10th percentile performance of a 50-stock portfolio. But of course, at the 90th percentile, the best performance is a concentrated portfolio. For the most skilled managers, the more concentrated the portfolio, the better. But for the median portfolio, 75 or 100 stocks are better than 50 stocks over the long-term.

Volatility Is The Reason Why Portfolio Managers Should Be Diversified Today

We calculated the monthly return volatility over each 12-month period for each of the 500 simulated portfolios at each level of diversification. We then compared the volatility among 25-, 50-, 75- and 100-stock portfolios over time. The 25-stock portfolios have been more volatile than the 50-stock portfolios since 2019, and at the same time, the 75-, and 100-stock portfolios have been less volatile than the 50-stock portfolios. Annualized volatility declines as a portfolio becomes more diversified, with 75- and 100-stock portfolios consistently running below the 50-stock benchmark. In particular, more diversified portfolios have been less volatile relative to the 50-stock portfolios over the past few years.

Financial Conditions and Big Market Moves Don't Matter

Our prior was that diversification would have mattered more to performance during periods of financial stress, as defined by a major tightening of the Bloomberg Financial Conditions Index. We looked at the 20% of periods where the Bloomberg Financial Conditions Index tightened the most and observed the average portfolio's volatility and Sharpe Ratio by portfolio size. The impact on portfolios from tighter financial conditions was similar across portfolio sizes, meaning the benefits of diversification do not appear to be isolated to just periods of financial stress. The same was largely true for big market moves.

Poor Performing Funds

For the 25th percentile performing fund, concentrated portfolios consistently lag and have done particularly poorly since 2019. 100-stock portfolios have been slightly better than 75-stock portfolios, but unsurprisingly, more diversification than 50 stocks appears to be prudent for funds performing in the 25th percentile of the distribution.

75th Percentile Performing Funds

For "skilled" managers performing above the 75th percentile, diversification hurt performance from 2000 through 2018 but has been more mixed since. Hence, even skilled managers should be running with more diversification than normal today.

Important Disclosures

Disclaimer

This presentation is confidential and may not be reproduced or distributed without the express prior written permission of Trivariate Research LP and its affiliates (collectively, "**Trivariate**").

The information contained herein reflects the opinions and projections of Trivariate as the date of publication, which are subject to change without notice at any time subsequent to the date of issue. Trivariate does not represent that any opinion or projection expressed herein will be realized. All information provided is for informational and research purposes only and should not be deemed as investment advice or a recommendation to purchase or sell any specific portfolio investment, security or other asset. While the information presented herein is believed to be reliable, no representation or warranty is made concerning the accuracy of any data or other information presented. Information obtained by Trivariate from third party sources in connection with the preparation of this presentation has not been independently verified by Trivariate. Additional information regarding Trivariate is available on request.

Any projections, forecasts, targets or other estimates presented herein constitute "forward-looking statements" that can be identified by the use of forward-looking terminology such as "may," "will," "should," "could," "would," "predicts," "potential," "forecasted," "continue," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates," or the negatives thereof or other variations thereon or comparable terminology. Furthermore, any projections, targets, forecasts or other estimates in this presentation are "forward-looking statements" and are based upon certain assumptions that may change. Due to various risks and uncertainties, actual events or results or the actual performance of the funds may differ materially from those reflected or contemplated in such forward-looking statements. Moreover, actual events are difficult to predict and often depend upon factors that are beyond the control of the Trivariate. Nothing herein shall under any circumstances create an implication that the information contained herein is correct as of any time after the earlier of the relevant date specified herein or the date of this presentation. In addition, unless the context otherwise requires, the words "include," "includes," "including" and other words of similar import are meant to be illustrative rather than restrictive. Forward-looking statements and discussions of the business environment included herein (e.g., With respect to financial markets, business opportunities, demand, investment pipeline and other conditions) are subject to the ongoing novel coronavirus outbreak ("**COVID**" or "**COVID-19**"). The full impact of COVID-19 is particularly uncertain and difficult to predict, therefore such forward-looking statements do not reflect its ultimate potential.

This shall not constitute an offer to sell or the solicitation of an offer to buy any interests in any fund, product or account that is or may in the future be advised or managed by, Trivariate or any of its affiliates.

All data sourced from S&P Global, Bloomberg, or our Trivariate estimates. All forward-looking-statements reflect the opinion of Trivariate.