Do cryptocurrencies extend the mean-variance frontier of an equity investor?

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The Project

In this project we will investigate if cryptocurrencies extend the mean-variance frontier of an equity investor. By using an industry portfolio dataset consisting of 12 different industries collected from Kenneth French data library combined with the 3 largest cryptocurrencies based on market capitalization, we extract the mean-variance frontier. We show that adding cryptocurrencies to the mean-variance frontier has a significant impact.

Analysis

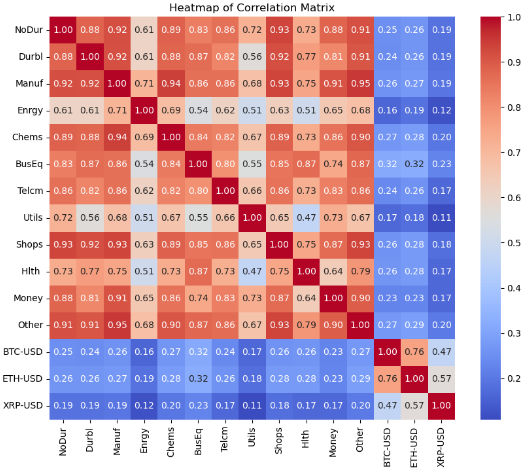

Figure: Full sample correlations

Analysis

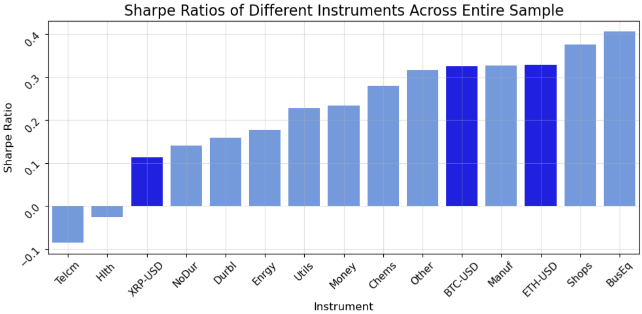

Figure: Full sample Sharpe's

Results

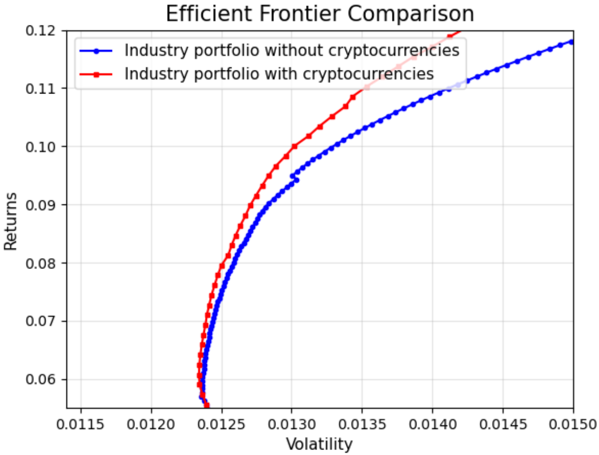

Figure: Full sample

Results

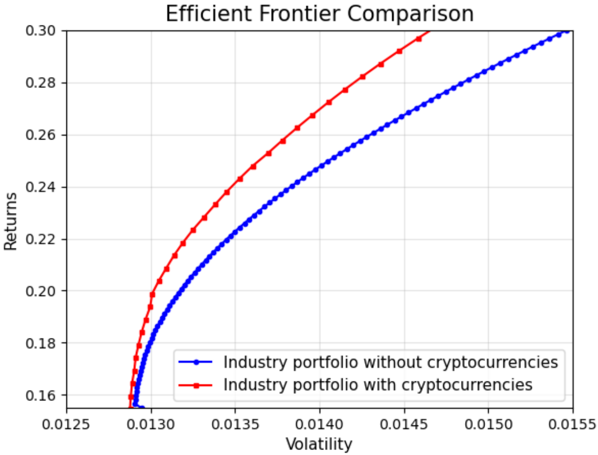

Figure: Restricted sample

Conclusion

The inclusion of cryptocurrencies in an investment portfolio extends the mean-variance frontier for an equity investor, introducing a new dimension to diversification strategies and expanding the spectrum of risk and return possibilities.

Bibliography

Wikipedia (2023).
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