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# Forecasting stock market returns by summing the frequency-decomposed parts\*

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#### Abstract

We generalize the Ferreira and Santa-Clara (2011) sum-of-the-parts method for forecasting stock market returns. Rather than summing the parts of stock returns, we suggest summing some of the frequency-decomposed parts. The proposed method significantly improves upon the original sum-of-the-parts and delivers statistically and economically gains over historical mean forecasts, with monthly out-of-sample  $R^2$  of 2.60% and annual utility gains of 558 basis points. The strong performance of this method comes from its ability to isolate the frequencies of the parts with the highest predictive power, and from the fact that the selected frequency-decomposed parts carry complementary information that captures different frequencies of stock market returns.

Keywords: predictability, stock returns, equity premium, asset allocation, frequency domain, wavelets

JEL codes: G11, G12, G14, G17

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