The Risk Profile and Predictability of Hedge Fund Returns: Implications for Asset Management

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Executive Summary

This paper attempts to provide evidence on the predictability of hedge fund index returns. Based on a broad review of existing academic literature and a comprehensive risk assessment of these alternative investment strategies, we define a set of 25 independent factors trying to capture the various risk characteristics the underlying indices are subjected to. With the help of an efficient multiple regression framework which discloses the intertemporal relationships between the mentioned hedge fund indices and the independent factors, we calculate one-, two and three-month-ahead return forecasts for each hedge fund strategy index. Overall, we find that there is strong evidence of very significant predictability in hedge fund returns. The derived forecast models do not only convince with a promising in-sample performance but also prove their practical usability under "real-life conditions", respectively, in the corresponding back-testing periods. To be specific, the forecasting ability of our empirical framework is challenged by a so-called tactical style allocation (TSA) model in which an investor is confronted with the task to create a portfolio out of the mentioned indices. This application-oriented model should figure out whether an investor really could extract advantages from employing return predictions for his investment decisions. In fact, the obtained results indicate that there is an economic value-added in predicting future hedge fund returns. The investor whose portfolio decisions also consider model-generated return predictions achieves significantly higher risk-adjusted returns as compared to three benchmark investors. However, the introduced model also reveals some major drawbacks of integrating return predictions in the investment decision process of an investor. Most notably, returns predictions made under extreme bearish markets sometimes emerged as not be really reliable as they tempt investors to undertake sub-optimal TSA decisions in some cases. Even though our empirical framework seems to be more appropriate when the financial markets are moving side- or upways, our studies showed that it is nevertheless reasonable to make use of such forecast models, regardless of whether the sentiment in the markets is good or bad. We highly recommend to leverage such sophisticated tools as they could be seen as some kind of a risk management instrument providing valuable information about how such a strategy might develop in the next months. Thus, we are convinced that the presented analysis could make a decisive contribution to the understanding of hedge funds and the risk inherent in the underlying strategies.