Public defense for Doctor of Business Economics

Essays on dynamic portfolio strategies

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Abstract

In this thesis, I contribute to the quantitative approach to solving investment problems. In Chapter 1, I examine the impact of using high-frequency data in the risk estimation on the performance of monthly rebalanced risk-based portfolios. In Chapter 2, I propose a market timing rule that uses a regime switching model with time-varying transition probabilities to timely switch between an equity and cash investment. In Chapter 3, I investigate the properties of the Margrabe Best-of-two strategy in case of the bond-equity investment problem. In Chapter 4, I propose the Performance/Risk Contribution Concentration metric to measure the aggregate balance between the component performance and risk contributions. Overall, the thesis provides academics and professionals with a better understanding on how investment objectives can be translated into dynamic investment rules.