

Independent Study Report – Personality and Investment Performance Measures

1. Abstract

This study aims at examining the effectiveness of Sharpe ratio and D-Index in predicting individual investors' portfolio choice and exploring the relationship between personality and risk preference. We have collected data from 207 adult participants about their personality and preferred investment portfolios using an online survey. Four investment portfolios were generated based on variations in Sharpe ratio and D-Index. The former measures the excess return per unit of variability while the latter measures the proportion of time with a price drawdown during the holding period. This study provides significant evidence about the combined effectiveness of both Sharpe ratio and D-Index in predicting individual investor's portfolio preference. The most chosen portfolio has both a higher Sharpe ratio and lower D-Index. Significant evidence is found about the positive association between neuroticism and risk aversion, especially for long-term investment, and the negative relationship between extraversion and risk aversion regardless of the length of investment period. However, risk preference is not significantly associated with macroeconomic condition or the remaining three personality traits, which are openness, conscientiousness, and agreeableness, among individual investors.