Underdiversification in Portfolio Decisions

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According to Portfolio Theory, investors should always hold a well-diversified portfolio, i.e. combine investments to reduce the variance of possible returns (i.e. risk) while keeping the expected return constant. In real life, however, investors hold fairly underdiversified portfolios. One reason for this observation might be that investors substantially neglect the correlation between returns of different investments, resulting in distorted perceptions of risk. In this study, we investigated this hypothesis in detail. We could show that individuals indeed prefer single investments over portfolios that offer the same returns with the same variance. Based on behavioral data, different explanations of this observation are hard to distinguish. A distorted subjective expected return, a distorted risk perception, and a combination of the two can in principle account for the data. Here, we used fMRI to show that return expectations are reduced in portfolios and that risk is perceived to be higher.

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