

THREE ESSAYS ON INVESTOR HETEROGENEOUS BELIEFS

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This study empirically investigates the effect of investor heterogeneous beliefs on asset markets. The first essay examines the cross-sectional relation between heterogeneous beliefs and the implied volatility smile of stock options. We find stocks with greater belief heterogeneity have more pronounced volatility smiles. In the second essay, we use the volatility smile as a proxy for heterogeneous beliefs to test competing theories on the relationship between heterogeneous beliefs and future stock returns: the overvaluation theory, the risk/uncertainty theory and the irrelevance theory. Our results are mixed.

In the third essay, we combine a number of proxies for heterogeneous beliefs to find a latent variable representing heterogeneous beliefs. We use factor analysis and identify a latent factor measuring uncertainty and a latent factor measuring belief differences. Our results show that proxies capture both uncertainty and belief differences and thus provide an explanation for mixed empirical results. Using the latent factor for belief differences, we find stocks with larger belief differences earn lower future returns even after controlling for size, book-to-market and momentum effects, consistent with the prediction of the overvaluation theory.