This thesis provides new insights in the field of asset pricing and portfolio optimization by investigating the role of information and factor decompositions. In particular, I investigate the effect of disentangling specific risk factors as used in the earlier asset pricing and portfolio allocation literature into their different sub-components. I conclude that the decomposition of information to a sufficiently refined disaggregate level is important for both asset pricing studies and portfolio choice research. Aggregating information too much may hamper our understanding of what risk factors are actually priced. In addition, it may blur our insight into what part of typical state-variables or what technique for optimal portfolio choice is more relevant for investors, depending on their objectives, preferences, and time horizon. The set of tools developed in this thesis can be seen as a way forward in empirical research for improving our understanding of these aspects of financial decision making.