Abstract

The Capital Asset Pricing Model has been remarkably successful and it is used as the benchmark model in academic research and in business finance. In spite of this fact, there is significant empirical evidence which contradicts the implications of this model. In light of the recent developments, this thesis examines the empirical validity of various alternative asset pricing models on Indian market. In order to address the empirical shortcomings of the traditional model, this thesis analyzes Fama-French three-factor and Carhart four-factor models, two of the most studied alternative asset pricing models in addition to the standard Capital Asset Pricing Model. To explore the dynamic nature of asset pricing model, conditional versions of the above models are also examined. Kalman filter based method is used to estimate the time-varying conditional betas for the conditional asset pricing models. Further, the fundamental definition of "market portfolio" plays an important role in asset pricing models. Therefore, a multi-asset market proxy is employed by including bond index, human capital and real estate returns along with stock index returns. The empirical tests are carried out using Fama-MacBeth cross-sectional regression. The test is performed on 25 test portfolios sorted by size and book-to-market ratio for a period from 1998 to 2013. In addition to 25 characteristic sorted portfolios, the thesis further considers 20 beta-sorted portfolios for robustness test. We find that there is an evidence of size and value premium which implies the existence of anomalies in Indian equity market. However, this evidence is found to be subject to characteristics of test portfolios. Moreover, irrespective of the characteristics of test portfolios, size, book-to-market, and momentum effects are explained by the conditional asset pricing models. Thus, information has a role to determine the expected returns and investors use prior belief and macroeconomic variables as predictive variables to determine expected returns. Finally, a multi-asset proxy for market portfolio does not improve the empirical test performance of Capital Asset Pricing Model. The expectation of return is concerned only with stock prices. The implications are useful for investors to take financial decision on future returns, cost of capital and portfolio management.