

Behaviour of Asset Pricing Models in Pre and Post Crisis Period : An Evidence from India

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Abstract

The study endeavours to confirm whether size, book to market, investment, momentum and profitability effects exist in Indian equity market. It attempts to compare empirically the behaviour of standard capital asset pricing model, three and five-factor model of Fama French and four-factor model of Carhart as well as also examine whether these models of asset pricing are valid and are able to explain the stock returns during the pre-crisis, crisis and post-crisis period. The study adopts Fama French methodology of time series regression for examining the influence of different risk premiums on excess portfolios' return. The results exhibit that three-factor model is an effective model which brings a lot of improvements over CAPM and suggests that market premium and size factors are the most effective and strong factors explaining the variation in returns, throughout the study period. It is a comprehensive study in itself. It contributes to the existing literature related to performance of extended forms of asset pricing.

I. Introduction

HOW THE ASSETS are priced in capital markets is always a core issue in finance that makes Capital Asset Pricing Model (CAPM) one of the pillars of finance theory. CAPM was first in answering the central question of finance how the expected return of an investment can be affected by its risk. The model says that not all kinds of risk affect the asset price. It is only the systematic risk for which investors are compensated. In the early 1960s, CAPM was developed independently and simultaneously by four economists: Jack Treynor (1962), William Sharpe (1964), John Lintner (1965a, b) and Jan Mossin (1966). It was an extension of initial work of Harry Markowitz (1952) to establish market equilibrium. A substantial body of empirical researches criticized this single-factor model and said that CAPM left a lot of variations in the average return that is unexplained. This gives motivation to researchers to do their research in finding out the additional

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