

Time Varying Volatility of Size-based Market Indices : Evidence from India

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Abstract

The present study attempts to analyse the volatility of five size-based micro indices of S&P Bombay Stock Exchange viz., Small Cap, Mid Cap, Large Cap, Large-Mid Cap, Mid-Small Cap indices. The study covers a span of 10 years from 2007-2017. The findings of the study report that daily return of indices follow a non-normal distribution with positive skewness and kurtosis. Returns are found to be stationary and heteroscedastic therefore ARCH based model have been applied to capture volatility. GARCH model reports low reaction and high persistence of market to shocks. AIC and SIC recommend the use of asymmetric i.e. EGARCH, TGARCH and A-PARCH models for volatility estimation. The results indicate that due to higher modulus gamma Large Cap and Large-Mid Cap indices should be carefully analyzed during the period of downturn. Mid Cap funds found to be relatively lesser affected by negative shocks and may be taken as cushion during odd timings.

I. Introduction

MARKET EFFICIENCY ASSERTS that stock prices follow a random walk and it is not possible to trace their behaviour accurately as they are very much responsive to all kinds of positive and negative shocks infused into the market. Statistically, the dispersion of a random variable around the average value is called volatility of the variable. Volatility represents the underlying uncertainty and risk of a security which is one of the most crucial determinants of investment decision. Black (1976) empirically found that shocks (news) doesn't influence the return only at a specific point of time but has impact on subsequent period's volatility in varying degree. It has time varying volatility whereby the period of huge oscillations in stock prices are followed by huge changes and similarly small swings are followed by small changes i.e. there is a clustering of volatility.

In case of normally distributed homoscedastic series, volatility may be captured through squared deviation of variable from its average value. Financial time series usually depicts high kurtosis skewed flat tail

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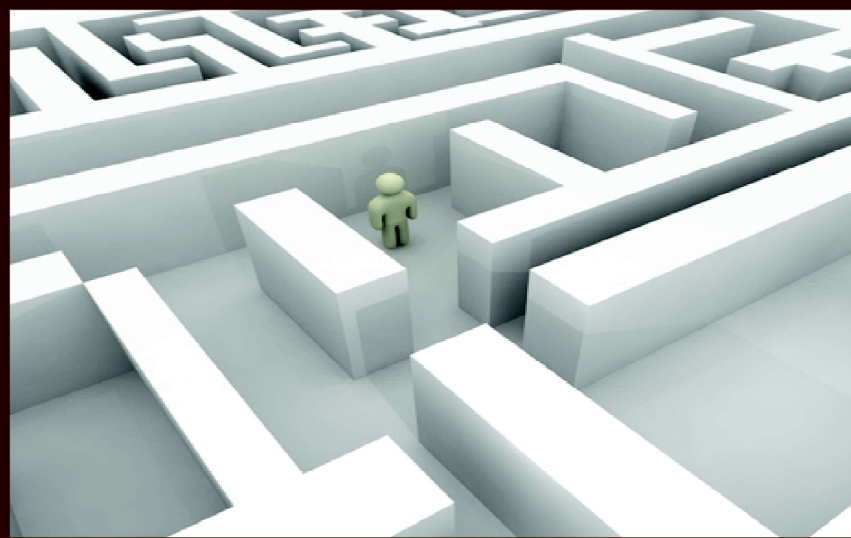
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Capital Structure Decisions



Under
Multiple Objectives
A STUDY OF INDIAN CORPORATES

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