

## II. Abstract:

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Consecutive market crashes around the globe appeared to have systematically characterized the dynamics of speculative markets. These apparent high valuations in the aggregate market followed by devastating crashes cannot be attributed fully under the traditional dictum of market efficiency. Especially after nineteen eighties the intellectual dominance of efficient market theory has started to become far less universal. Many financial economists and financial mathematicians have started to believe that dynamics of speculative markets cannot be sufficiently explained in the backdrop of rational expectations. Going by these experiences a consensus for a new school of thought has started to grow among the financial economists to explain the market upheavals in the back drop of behavioural finance. Recently, theories from the fields of other social sciences like sociology, psychology etc. have been used widely in thre literature to exhibit strong influence of greed, fear and envy in shaping investors' behaviour. However, literatures on explaining upheavals in Indian equity market in the backdrop of behavioural biases are weak and scanty. Rather several scholars have identified patterns of price movements in Indian markets and its distributional shape that cannot be explained with the notions of random walk hypothesis. In such a backdrop, the present thesis is our humble approach to identify the presence of various behavioural biases of human decision making in Indian equity market and explain its upheavals.

In the current study we have followed the emerging trend in research in behavioural finance to analyse market dynamics in the structural heterogeneous agent model in multi agent framework. Market upheavals have been modeled in this new direction as an endogenous phenomenon arises quite naturally under the assumptions of bounded rationality.

In the empirical part of the present thesis we have studied the predictions of heterogeneous market model especially in the context of the patterns of price changes to offer coherent explanations of behavioural biases towards market upheavals. We have estimated the extreme returns , mean excess returns, Hill points and volatility of the Indian equity market considering the returns for the period ranging from 01.07.1997 to 30.8.2013 using some tools like EVT, GARCH etc. Empirical evidences of patterns in price changes In Indian equity market nicely confirm the predictions of heterogeneous market framework. Investors' decision making in the equity market appears as context specific. Their decisions in the

market can be modeled to have guided by an evolutionary force, generating adaptive belief in favour of price to price channels and ultimately results into bubble formation. These findings in turn attest the role of social and psychological biases in decision making in the backdrop of bounded rationality.