

Abstract

The dissertation consists of four essays which can broadly be classified into the following research themes - investor attention, information diffusion, variability deviation, and consumer confidence. Each essay has an element of information based on Google search queries where either it forms the basis for modeling or illustration of the underlying/proposed methodology. The results or insights obtained in these essays have implications in various management and scientific disciplines. In the first essay, we study the memory and correlation structure of the Investor Attention Time Series (IATS) for energy stocks as measured by Google search queries. In the second essay, we look at information demand diffusion process and propose a stochastic differential equation model to capture when and how does this process peak. The model has a closed form solution and explains the diffusion even when there are parallel sets of information about an event. The third and fourth essays are theoretical and data-driven respectively. In the former, we propose a new measure to capture outlying variability deviations. The distribution of this measure is exact and parameter-free when the original random variable belongs to a class of distributions. In the final essay, we carry out an extensive data analysis to show over/under confidence in respondents of consumer confidence survey. We also propose an index to quantify the expectation gap and illustrate how Google search queries could be used to obtain more frequent estimates of Consumer Confidence Index.