

Abstract

The Financial Crisis Observatory at ETH Zurich **Didier Sornette, Chair of Entrepreneurial Risks at ETH Zurich, Swiss Federal Institute of Technology, Switzerland**

The presentation will report on the progress of the Financial Crisis Observatory, which aims at testing and quantifying rigorously, in a systematic way and on a large scale the hypothesis that financial markets exhibit a degree of inefficiency and a potential for predictability, especially during regimes when bubbles develop. The presentation will focus on financial bubbles and crashes, as they constitute the most momentous and revealing financial events that have extraordinarily important impacts and consequences at all levels of the economic spectrum. I will discuss the different sources of financial market instability, including moral hazard, asymmetric risk sharing and information, rational and behavioral herding.

The presentation describes a simple, powerful, and general theory of how, why, and when stock markets crash. Most attempts to explain market failures seek to pinpoint triggering mechanisms that occur hours, days, or weeks before the collapse. I propose a radically different view: the underlying cause can be sought months and even years before the abrupt, catastrophic event in the build-up of cooperative speculation, into an accelerating rise of the market price, otherwise known as a "bubble." This view implies the possibility of predicting such events and we will describe the current status of predictions that have made for events in various markets.