MAR13-2012-020227

Abstract for an Invited Paper for the MAR13 Meeting of the American Physical Society

Self-consistency in Capital Markets

HAMID BENBRAHIM, TD Ameritrade

Capital Markets are considered, at least in theory, information engines whereby traders contribute to price formation with their diverse perspectives. Regardless whether one believes in efficient market theory on not, actions by individual traders influence prices of securities, which in turn influence actions by other traders. This influence is exerted through a number of mechanisms including portfolio balancing, margin maintenance, trend following, and sentiment. As a result market behaviors emerge from a number of mechanisms ranging from self-consistency due to wisdom of the crowds and self-fulfilling prophecies, to more chaotic behavior resulting from dynamics similar to the three body system, namely the interplay between equities, options, and futures. This talk will address questions and findings regarding the search for self-consistency in capital markets.