Dynamics of the return distribution in the Korean financial market

JAE-SUK YANG, SEUNGBYUNG CHAE, WOO-SUNG JUNG¹, HIE-TAE MOON, Korea Advanced Institute of Science and Technology — In this paper, we studied the dynamics of the log-return distribution of the Korean Composition Stock Price Index (KOSPI) from 1992 to 2004. Based on the microscopic spin model, we found that while the index during the late 1990s showed a power-law distribution, the distribution in the early 2000s was exponential. This change in distribution shape was caused by the duration and velocity, among other parameters, of the information that flowed into the market.

¹Present address: Boston University

Woo-Sung Jung
Korea Advanced Institute of Science and Technology