

[P6] First Passage Time in a Korean Stock Market*Moon-Yong Cha, Inha University*

We consider a first passage time (FPT) of the stock index in a Korean stock market. The first passage time is a smallest time needed for an index to cross a fixed return level. We observed that the distribution function of the FPT for a gain is different that for a loss. The asymmetry of the distribution of the FPT is a distinctive feature of the stock indexes in a stock market. We also reported the average FPT for the gain and loss. We observed a power-law of the average FPT over the return level. The average FPT of the gain is larger than that of the loss at a fixed return level in a considered period in a stock market.