1059-60-140 **Dragos Bozdog*** (Dragos.Bozdog@stevens.edu), Stevens Institute of Technology, Dept. of Mathematical Sciences, 1 Castle Point on Hudson, Hoboken, NJ 07030, and **Ionut Florescu**, **Khaldoun Khashanah** and **Jim Wang**. *Rare Events Detection and Analysis of High-Frequency Financial Data.*

In this work we present a methodology to detect rare events defined as large price movement relative to the volume traded. We analyze the behavior of equities after these detected rare events. We provide methods to calibrate trading rules based on the detection of these events and we exemplify for a particular trading rule. We apply the methodology to tick data for thousands of equities over a period of five days. In order to draw comprehensive conclusions we group the equity into classes and we calculate probabilities of price recovery after these rare events for each class. The methodology developed is based on non-parametric statistics and makes no assumption about the distribution of the random variables in the study. (Received February 22, 2010)