1044-60-20   **Weian Zheng*** (`wzheng@uci.edu`), Dept. of Mathematics, UC, Irvine, CA 92617, and **Wei Liu**, School of Finance and Statistics, ECNU, Shanghai, Peoples Rep of China. *Stochastic Volatility Model and Technical Analysis of Stock Price.* Preliminary report.

In the stock market, some popular technical analysis indicators (e.g. Bollinger Bands, RSI, ROC, ...) are widely used by traders. The efficiency of those indicators is "proved" by the observed relative frequency of occurrence of the corresponding behaviors of stock prices. In other words, the traders use the daily (hourly, weekly, ...) stock prices as samples of certain statistics and use the observed relative frequency to show the validity of those well-known indicators. However, those samples are not independent, so the classical sample survey theory (especially the laws of large numbers) does not apply to. Thus we need a new theory for those sample surveys. We discuss the law of large numbers related to those observations when one assumes stochastic volatility model stock price model. (Received June 26, 2008)