1114-65-5 **Eka Oche Ogbaji*** (ogbajieka@yahoo.com), Mathematics and Statistics Department,Federal, University Wukari P.M.B1020 Wukari, Wukari, Taraba 9600001, Nigeria, and **E. S. Onah** (ogbajieka@yahoo.com), University of Agriculture Makurdi, Makurdi, Benue 9600001, Nigeria.
Using Heston Model to Empirically verified Stock Prices Return. Preliminary report.

Volatility is a great concern to investors. Investors like to know how much volatility or risk that they are exposed to before they can invest in a stock. Potential investors are advised to invest in companies that exhibit relative calm or high stability. In Abdelmoula and Dobber(2006)where they used geometric Brownian motion model to study the behaviour of stock market prices. In their study, volatility was considered over a very long of time in such case, it is difficult for investors to predict the behaviour of stock price for a short period. AlsoYuan(2013) used Heston model, where volatility was considered over a short period.We used selected companies from Nigerian Stock Exchange to empirically verified Heston model. A Pascal programming language was used to code the Euler's –maruyama method of the solution of the Heston model. We conclude that Stock price is random distributed, positive rate of return and low volatility of stock price imply viable and growing company at a particular period, negative rate of return and high volatility of stock price imply non-viable and collapsing company at that particular period,volatility and rate of return are also random distributed. (Received January 30, 2015)