1135-VT-1309 **Veera Holdai*** (vxholdai@salisbury.edu), **Ben Duklewski** and **Barbara Wainwright**. *On Some Limitations of Financial Models.* Preliminary report.

Thin-tailed probability distributions (like normal) are used in creating investment portfolios and assessing risks. Thick-tailed probability distributions (like Pareto) could be considered instead of thin-tailed distributions under the Brownian Motion model for put option pricing. Unfortunately, such models fall apart due to divergent integrals that arise from the Put-Call Parity. The arguments and results presented might be of interest to instructors and undergraduate students in actuarial science who are familiar with basic probability and interest theories, but not necessarily with stochastic calculus. (Received September 21, 2017)