

1086-60-483

Radka Pickova* (radka@stat.columbia.edu), Room 1005 SSW, MC 4690, 1255 Amsterdam Avenue, New York, NY 10027. *Volatility-Stabilized Markets*. Preliminary report.

We consider models which generalize the Volatility-Stabilized Markets introduced in Fernholz and Karatzas (2005). We show how to construct a weak solution of the underlying system of stochastic differential equations, express the solution in terms of time changed squared-Bessel processes, and argue that this solution is unique in distribution. Moreover, we discuss sufficient conditions for existence of strong solution, and show that strong relative arbitrage opportunities exist in these markets. (Received September 04, 2012)