1063-62-221   **Michael D. Porter*** (`mike.porter@spadac.com`), 7921 Jones Branch Dr, McLean, VA 22102, and **Gentry White**. *Self-exciting Hurdle Models for Terrorism.*

The contagiousness of terrorism is investigated by studying the influence that a terrorist attack has on the likelihood of future incidents. Examination of terrorism data from Indonesia, which has been subjected to 454 terrorist attacks between 1977 and 2007, reveals evidence that terrorist activity does indeed increase following successful attacks.

Our analysis employs a shot noise process to explain the self-exciting nature of the terrorist activities. This model estimates the probability of future attacks as a function of the times since the past events. In addition, the possibility of multiple coordinated attacks on the same day compelled the use of hurdle models to jointly model the probability of an attack day with the number of attacks per day. Interpretation of the model parameters and the suitability of these models for Indonesian terrorism is discussed. (Received August 16, 2010)