

Working Paper: Hawkes-dictated Demand Applied to Economic Order Quantities

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Abstract: We study the effect of utilizing a demand set dictated by the Hawkes Process of self-exciting demand on the inventory problem from which the Economic Order Quantity equation is derived. We build a model to compare the optimal quantity at which reordering occurs in Poisson-dictated demand with that of Hawkes-dictated demand. We seek to find the optimal reorder point in models with self-exciting demand characteristics.

Working Paper This is a working paper. Working papers are preliminary versions for discussion purposes only. Working papers have not undergone external peer review. This paper outlines ongoing research by the authors.