

# The analysis of demand and inventory steering model and its application

Piotr Hachuła

## **Abstract**

The demand and inventory steering model introduced by Ma-Feng has been analysed in regard to its application in real business case. It has been shown that the model can describe specific situation of a product with a time-limited sale and its sale stimulation. The case is modelled by a discrete dynamical system – three first order recurrence equations showing dependence between changes of stock, demand and deliveries over time. Stability analysis conducted with numerical methods and bifurcation diagram is shown.

**Affiliation:** Centrum Wiedzy Logistycznej, Instytut Logistyki i Magazynowania w Poznaniu