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Phong Luu* (phong.luu@ung.edu), 3820 Mundy Mill Rd, Oakwood, GA 30566, and **Jingzhi Tie** and **Qing Zhang**. *A Threshold Type Policy for Trading a Mean-Reverting Asset with Fixed Transaction Costs*.

A mean-reverting model is often used to capture asset price movements fluctuating around its equilibrium. A common strategy trading such mean-reverting asset is to buy low and sell high. However, determining these key levels in practice is extremely challenging. In this paper, we study the optimal trading of such mean-reverting asset with fixed transaction (commission and slippage) costs. In particular, we focus on a threshold type policy and develop a method that is easy to implement in practice. We formulate the optimal trading problem in terms of a sequence of optimal stopping times. We follow a dynamic programming approach and obtain the value functions by solving the associated HJB equations. The optimal threshold levels can be obtained by solving two quasi-algebraic equations. Sufficient conditions are given in the form of a verification theorem. Finally, a numerical example is reported to demonstrate the results. (Received January 11, 2019)