RUTGERS UNIVERSITY
DEPARTMENT OF STATISTICS AND BIOSTATISTICS
HILL CENTER #501, BUSCH CAMPUS, PISCATAWAY

Seminar

Speaker: Yangru Wu, Rutgers Business School

Title: Optimal Transaction Filters Under Transitory Trading

Date: Wednesday, February 24, 2010

Time: 3:20 p.m.

Place: 552 Hill Center

Abstract

If transitory profitable trading opportunities exist, transaction filters mitigate trading costs. We use a dynamic programming framework to design an optimal filter which maximizes after-cost expected returns. The filter size depends crucially on the degree of persistence of trading opportunities, transaction cost, and standard deviation of shocks. For daily dollar-yen exchange trading, the optimal filter can be economically significantly different from a naïve filter equal to the transaction cost. The candidate trading strategies generate positive returns that disappear after transaction costs. However, when the optimal filter is used, returns after costs remain positive and higher than for naïve filters.