1067-35-869 **Harumi Hattori** and **Zheng Zhang*** (zzhang719@gmail.com), 18B Glenn St, Morgantown, WV 26505. *Explicit Solutions for Optimal Portfolio and Consumption with Transaction Costs.*

In this paper, we study optimal portfolio and consumption with transaction costs. Explicit solutions to the corresponding HJB equations governing the no-transaction regions are found for typical utility functions such as a power function, an exponential function, and a natural logarithm function. An interesting finding is that contrary to the previous belief, the value function is not homothetic. Numerical results and some analytical results for the transaction and no-transaction regions are provided based on the value function. No-transaction regions are no longer straight wedges but curved ones. We also consider the cases where jump processes are added. (Received September 15, 2010)