Inside Trading in Kyle-Models

Abstract In his seminal paper, [3], Kyle studies a rational equilibrium setup with 3 types of players: a 'large' insider, market makers and liquidity traders. He shows how the insider can profit from his private information by rationally anticipating how his orders influence the market price. He hides his trade behind the orders from the noisy traders so that the market makers cannot determine the insider's orders and hence cannot infer the insider's signal. We will focus on the expansion given in [1] by Back. This paper is a generalization of [3] to a more general framework using HJB-techniques in continuous time. If time permits we will talk about the idea in [2] which contains a different and apparently more realistic way to model the insider, however resulting in a similar result as in [1].

References

[1] K. Back, *Insider trading in continuous time*, The Review of Financial Studies **5** (1992), no. 3, 387–409.

[2] K. Back and H. Pedersen, *Long-lived information and intraday patterns*, Journal of Financial Markets **1** (1998), no. 3-4, 385–402.

[3] A. S. Kyle, *Continuous auctions and insider trading*, Econometrica **53** (1985), no. 6, 1315–1335.