

Market impact, price manipulations, and the positive portfolio problem

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The talk focusses on market impact models that are based on the dynamics of electronic limit order books. A first question is whether these models are viable or whether they give incentives for applying price manipulation strategies. We approach this question by analyzing liquidation or acquisition strategies that minimize the expected liquidity costs. It follows from this analysis that requiring the absence of price manipulation strategies in the usual sense is not sufficient to guarantee the viability of market impact models. We therefore propose additional requirements and single out a class of models that satisfies them. The talk is based on joint work with Aurélien Alfonsi and Alla Slynko.