Flow Trading

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Abstract

We propose a new market design for trading financial assets to remedy fundamental flaws in existing markets. Unifying the frequent batch auctions of Budish-Cramton-Shim 2015 and flow trading of Kyle and Lee 2017, the new design clears the market periodically and allows traders to directly express preferences in a simple, yet powerful way. Our solution technique is computationally efficient and readily handles many assets simultaneously. Traders can submit one order to trade an entire portfolio. An order expresses piecewise-linear demands for any linear combination of assets. Demands are expressed as flows—a rate of trade in shares per second. Market clearing involves aggregating orders to form a concave quadratic program that maximizes gains from trade.

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