

Microstructure as a key role in the future of financial markets



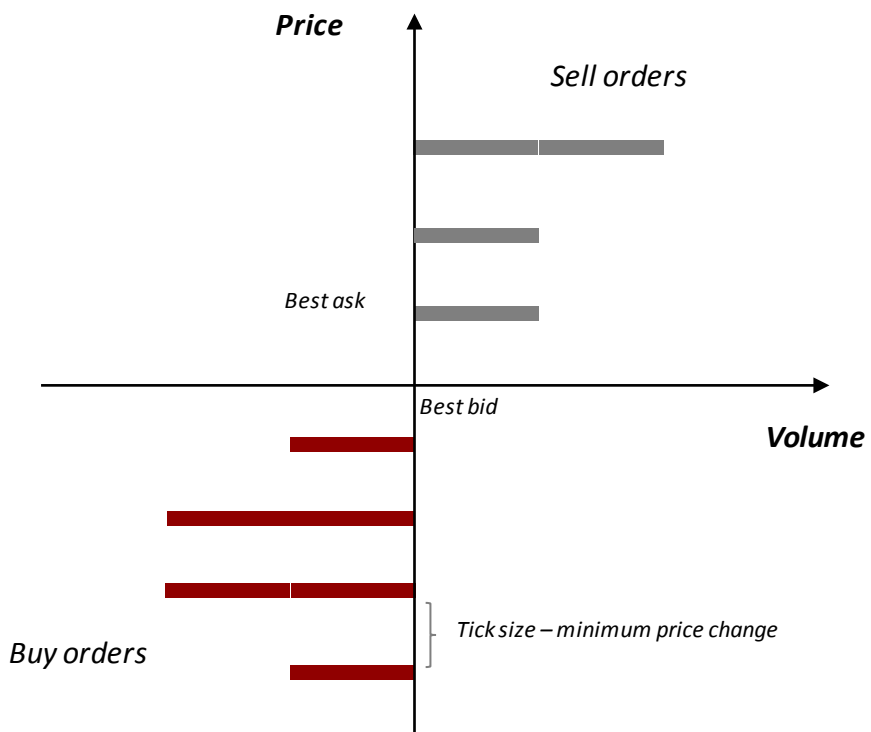
Vyacheslav Arbuzov
Prognoz Risk Lab

PROGNOZ



Regulation of double auction

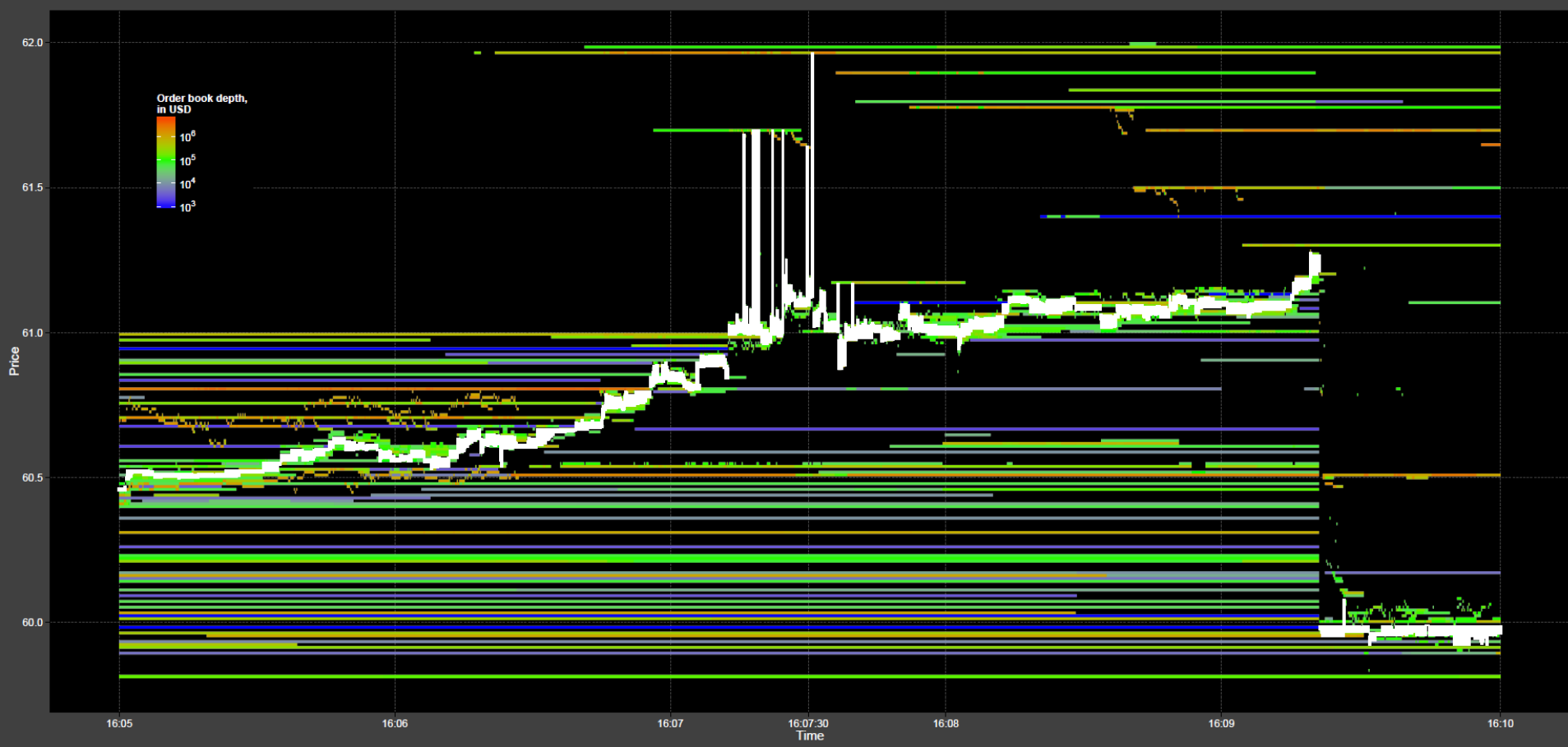
Continuous Double Auction



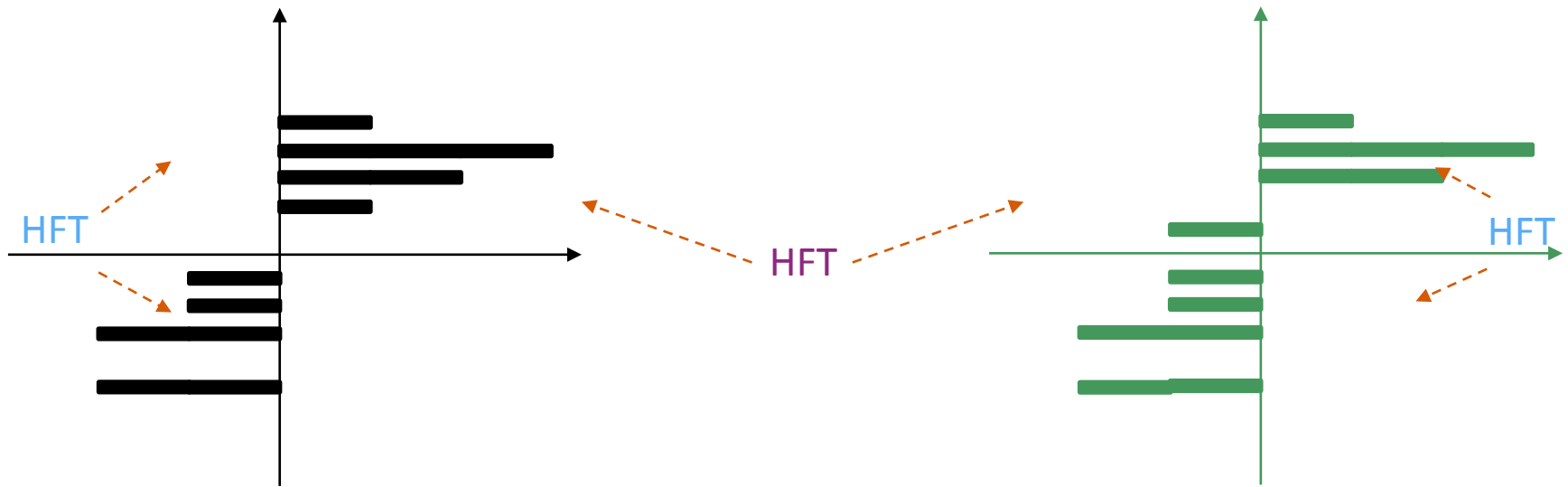
Orders characteristics:

- Time of enter
- Price of order
- Volume of order
- Time of cancellation
- Type (limit, market, FOK, FAK, etc.)

15 December 2014 USD/RUB TOD



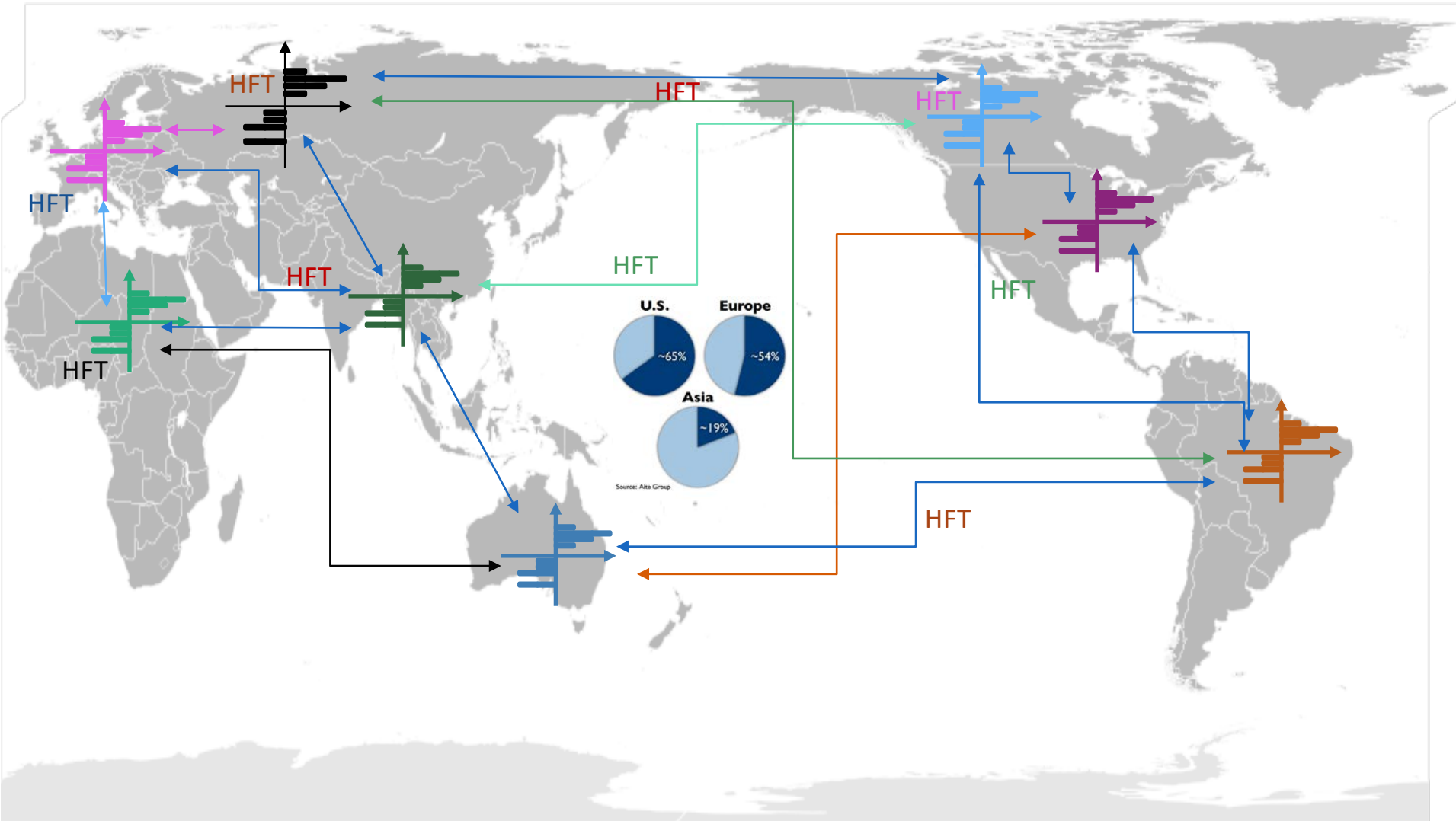
2 TYPES OF HFT



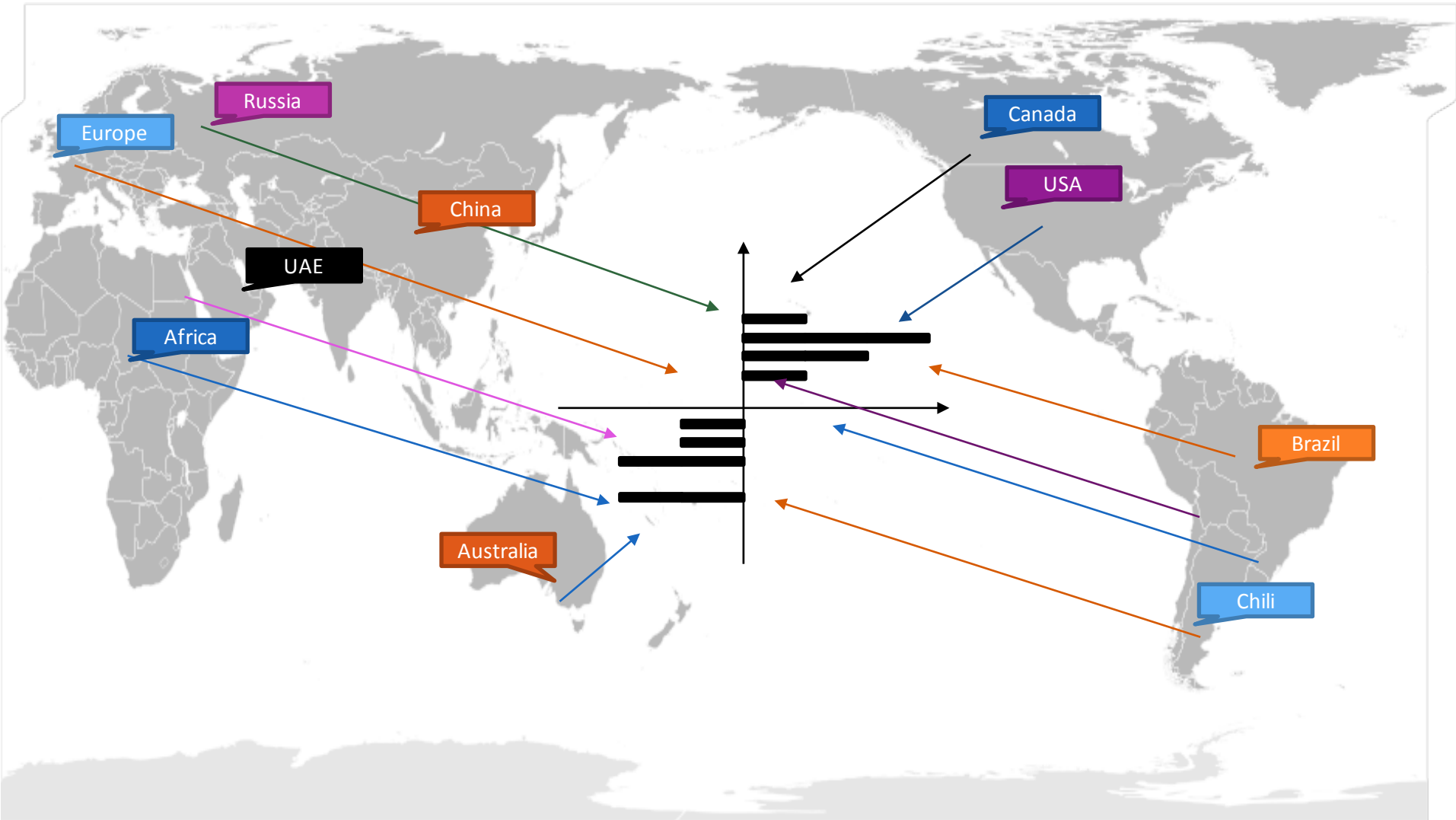
First market

Second market

HFT WORLD



ALTERNATIVE



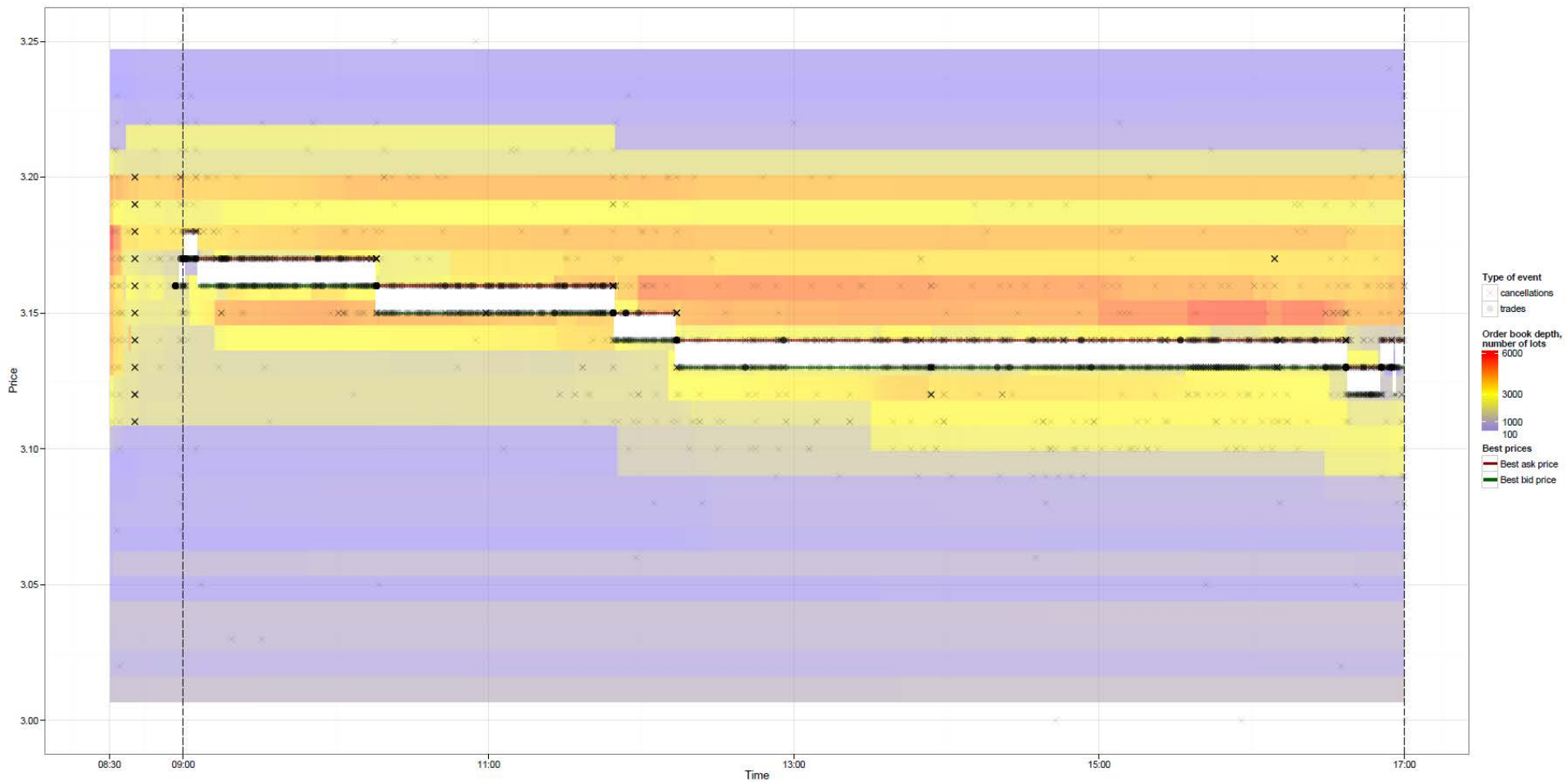
Frequent Batch Auction



τ – time between matching of order book

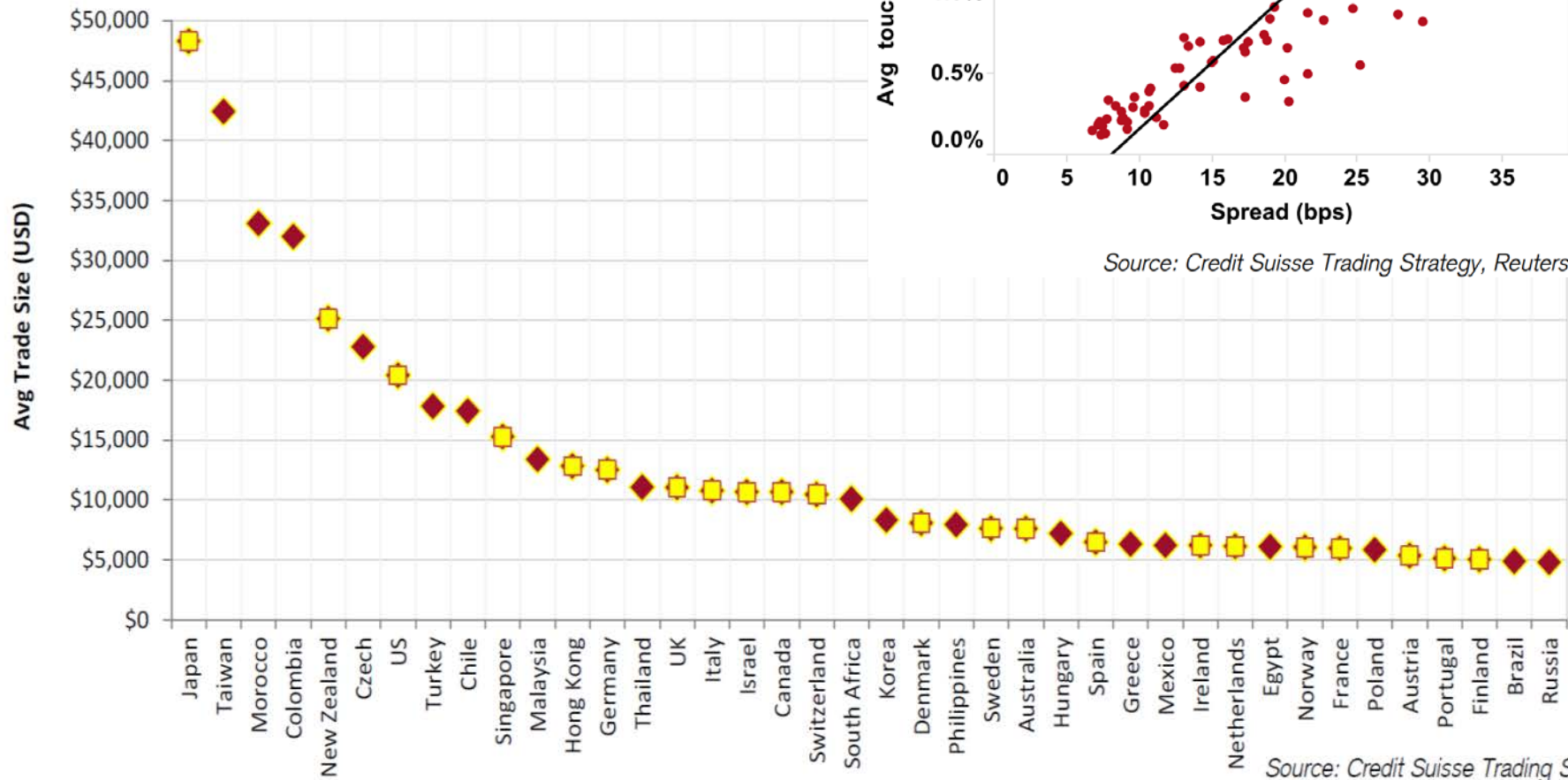
$$\tau = f(\text{liquidity, volatility, endogeneity, ...})$$

Tick size regulation



Tick size regulation

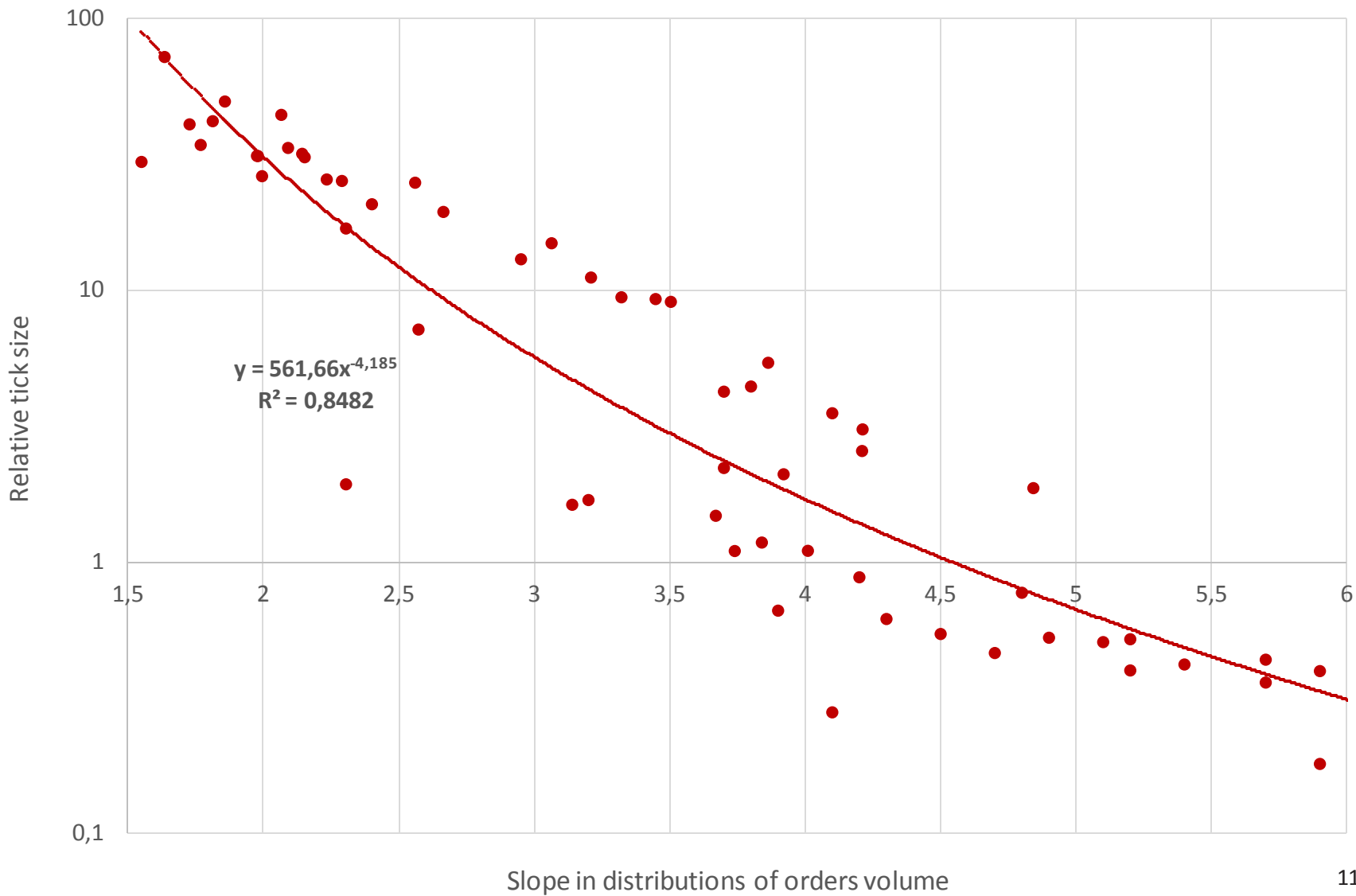
All microstructural characteristics strongly correlated with tick size...



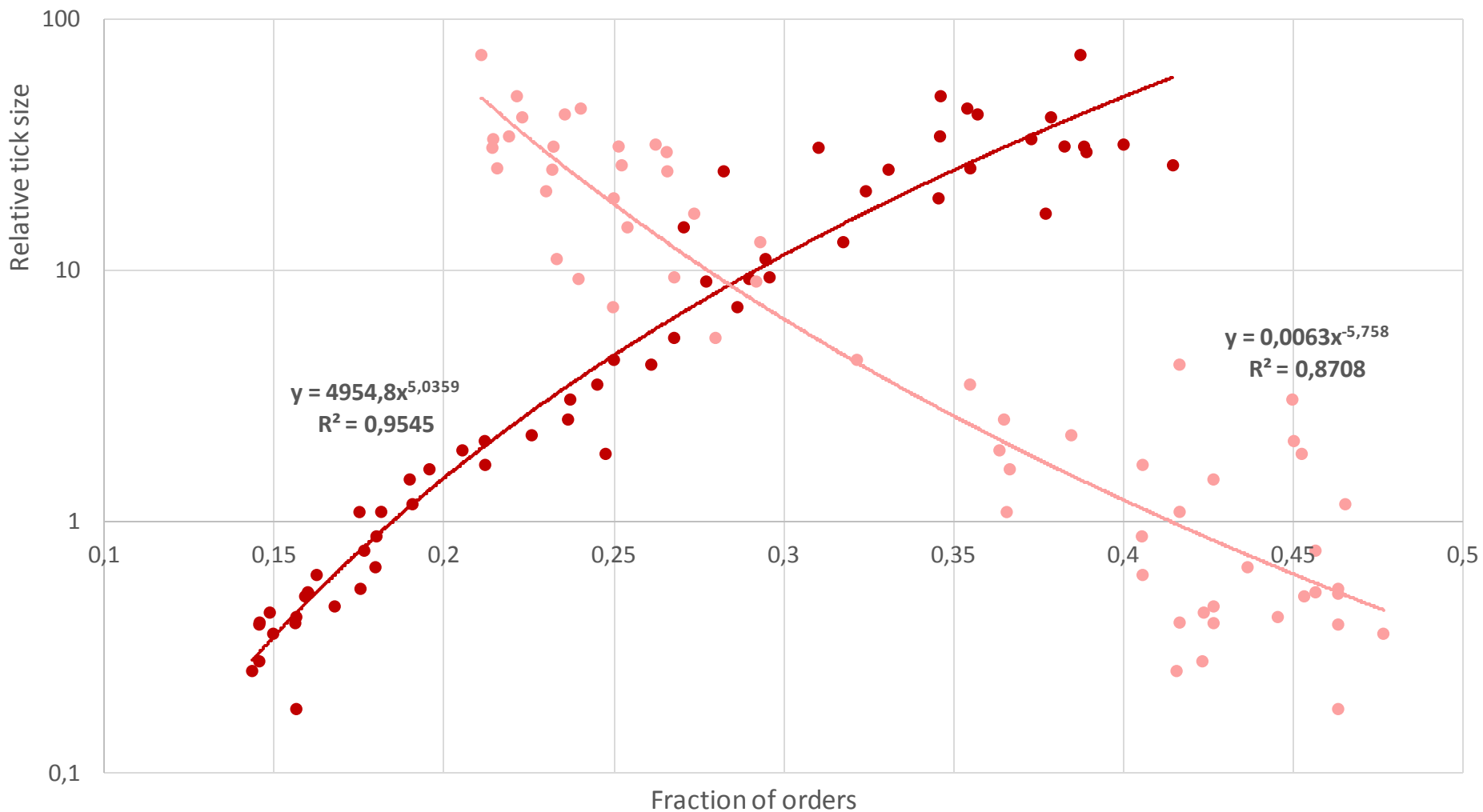
Source: Credit Suisse Trading Strategy, Reuters

Source: Credit Suisse Trading Strategy

Tick size regulation

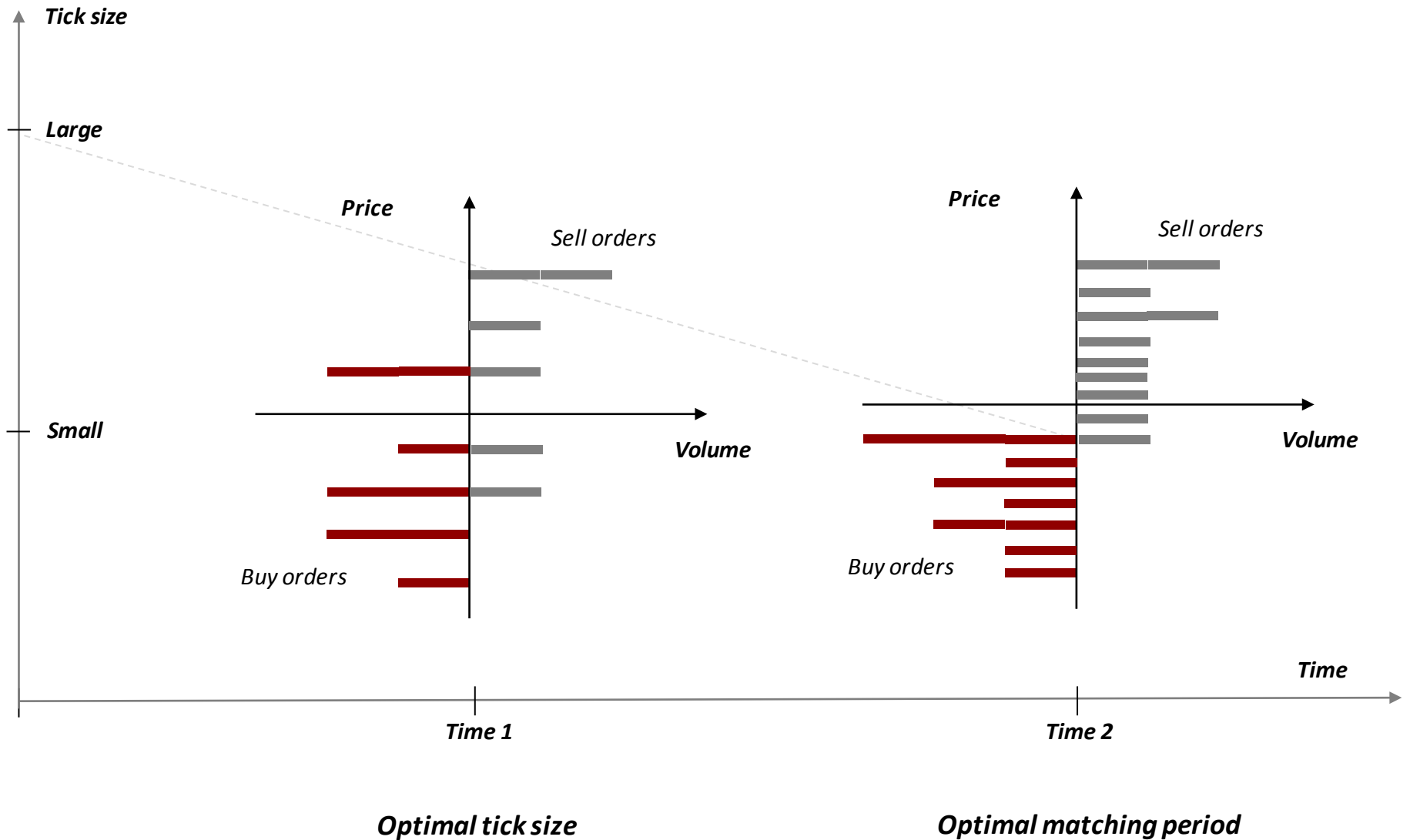


Tick size regulation



● Orders at best price of order book ● Orders at opposite price of order book

Frequent Batch Auction with conditional tick size





Thank you!