

Sophisticated participants-those with formal financial education-value order flow data in line with a fully optimizing Bayesian investor, while others pay only 59% of the fair value. Overconfidence leads to a 28% higher data valuation. Participants gain limited benefits from order flow data, capturing only 11.8% of a Bayesian trader's value and reducing trading errors by just 6.25% (11.7% for sophisticated traders). Data access mitigates the disposition effect but also fuels excessive trading. Cognitive load rises slightly with data access, particularly for unsophisticated traders.