

Abstract geometric lines in the top left corner, consisting of several overlapping, irregular polygons and lines in a light beige color.

ENHANCED SIGN-TRADING

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SIGN TRADING

Sign trading is a quantitative strategy that focuses on real-time market order flows to generate actionable trading signals

We distinguish between

- BUY trades: trades executed at the best available ask
- SELL trades: trades executed at the best available bid

Analysing the balance—and any imbalances—between these trades allows us to identify whether buying or selling pressure is currently dominant

Imbalances in buying or selling pressure signals temporary supply-demand imbalances that often lead to short-term price adjustments as more liquidity is being taken from one side of the market than the other

In essence sign trading is a high frequency momentum and sentiment strategy

ORDER FLOW IMBALANCE (OFI)

Order Flow Imbalance (OFI) is a quantitative strategy that leverages real-time market depth to generate actionable trading signals.

We distinguish between:

- **Best Bid Volume:** The total volume available at the highest bid.
- **Best Ask Volume:** The total volume available at the lowest ask.

Analysing the balance—and any imbalances—between these levels allows us to determine whether buying or selling pressure is dominant.

When one side of the order book has limited liquidity, incoming orders can quickly exhaust the available volume, forcing the bid or ask to shift by a tick.

In essence, order flow imbalance is a high-frequency liquidity and sentiment strategy that captures short-term momentum through rapid price adjustments driven by supply-demand imbalances.

INTEGRATED STRATEGY: COMBINING OFI & SIGN TRADING

- **Unified Approach:**
Our strategy fuses the real-time market order insights from Sign Trading with the liquidity insights from Order Flow Imbalance.
- **Holistic Market View:**
It captures market sentiment through trade classification and assesses liquidity dynamics by monitoring order book imbalances.
- **High-Frequency Estimator:**
This integration provides a powerful, high-frequency estimator of short-term price movements by revealing when aggressive order flows meet limited liquidity.
- **Momentum & Liquidity Insight:**
By tracking both trade activity and depth, the strategy identifies moments when supply-demand imbalances force rapid tick movements.

In essence, combining OFI and Sign Trading delivers a robust, comprehensive strategy that leverages market sentiment, liquidity, and momentum to forecast short time price movements.

INVESTABLE UNIVERSE: US EQUITIES FOR ENHANCED SIGN TRADING

- **Deep Liquidity & Robust Data:**
US equities offer abundant liquidity and rich, high-frequency data necessary for accurately capturing order flows and imbalances.
- **Real-Time Execution:**
The fast-paced, transparent US market provides the timely market order signals our enhanced sign trading strategy relies on.
- **Frequent Short-Term Opportunities:**
Dynamic price movements in US equities create ample opportunities for momentum-based, high-frequency trade execution.
- **Regulated Environment:**
A well-regulated market ensures data integrity and transparency, enhancing our model's effectiveness.
- **Optimal Market Microstructure:**
The complex yet stable US equity microstructure allows our strategy to effectively exploit subtle shifts in market sentiment and liquidity.

COMPETITIVE EDGE

- **Integrated Signal Framework:**
We uniquely combine Sign Trading with Order Flow Imbalance, providing a holistic view of market sentiment, liquidity, and momentum that uncovers subtle trading opportunities.
- **Academic Rigor:**
Leveraging our deep quantitative training from UChicago, we apply cutting-edge financial mathematics and innovative research to refine our models.
- **Agility & Adaptability:**
Our lean, research-driven approach allows us to rapidly adapt strategies based on evolving market microstructures, capitalizing on inefficiencies that larger players might overlook.
- **Niche Focus:**
By concentrating on identifying overlooked high-frequency patterns and imbalances, we exploit opportunities without relying solely on heavy technological infrastructure.