Insider Trading and Market Structure

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Introduction

- Over the last decade, markets have experienced a sea change in how securities are bought and sold.
- Rather than relying on human traders to execute a strategy, this task is left to algorithms.
- Computerized trading allows trading to move at high speed, volume and to utilize enormous reserves of data.
- High frequency trading (HFT) represents about 50-70% of all share volume, about 60% in futures and growing volume in US Treasuries.

Motivation

- HFT demands deep access to the informational structure of markets.

- Exchanges and policymakers have responded by giving HFT physical and informational access to exchange information.

- In order for trades to move in microseconds, traders are allowed:

➢ To locate next to exchange servers – co-location.
➢ To receive direct feeds of exchange data from the exchange to an trader’s co-located server.
➢ To react immediately to new information through automated algorithmic decision-making and trade execution.

Argument

- This Article argues that HFT traders represent a cohort of "structural insiders" with first sight of information and an outsize impact on price formation – the ability to execute trades and impact prices before anyone else has even received the information.

- Structural insider trading challenges the doctrine and policy of corporate insider trading under Rule 10b-5.

- From the policy point of view, structural insider trading exhibits similar harms to those seen in corporate insider trading.

- But, structural insider trading is clearly legal. If investor protection is the goal of insider trading policy, it is not clear why the law protects investors against one set of insiders but not another.

High Frequency Trading

- While there is no definition of HFT, it generally refers to the use of algorithms to trade in microseconds and at high volume.

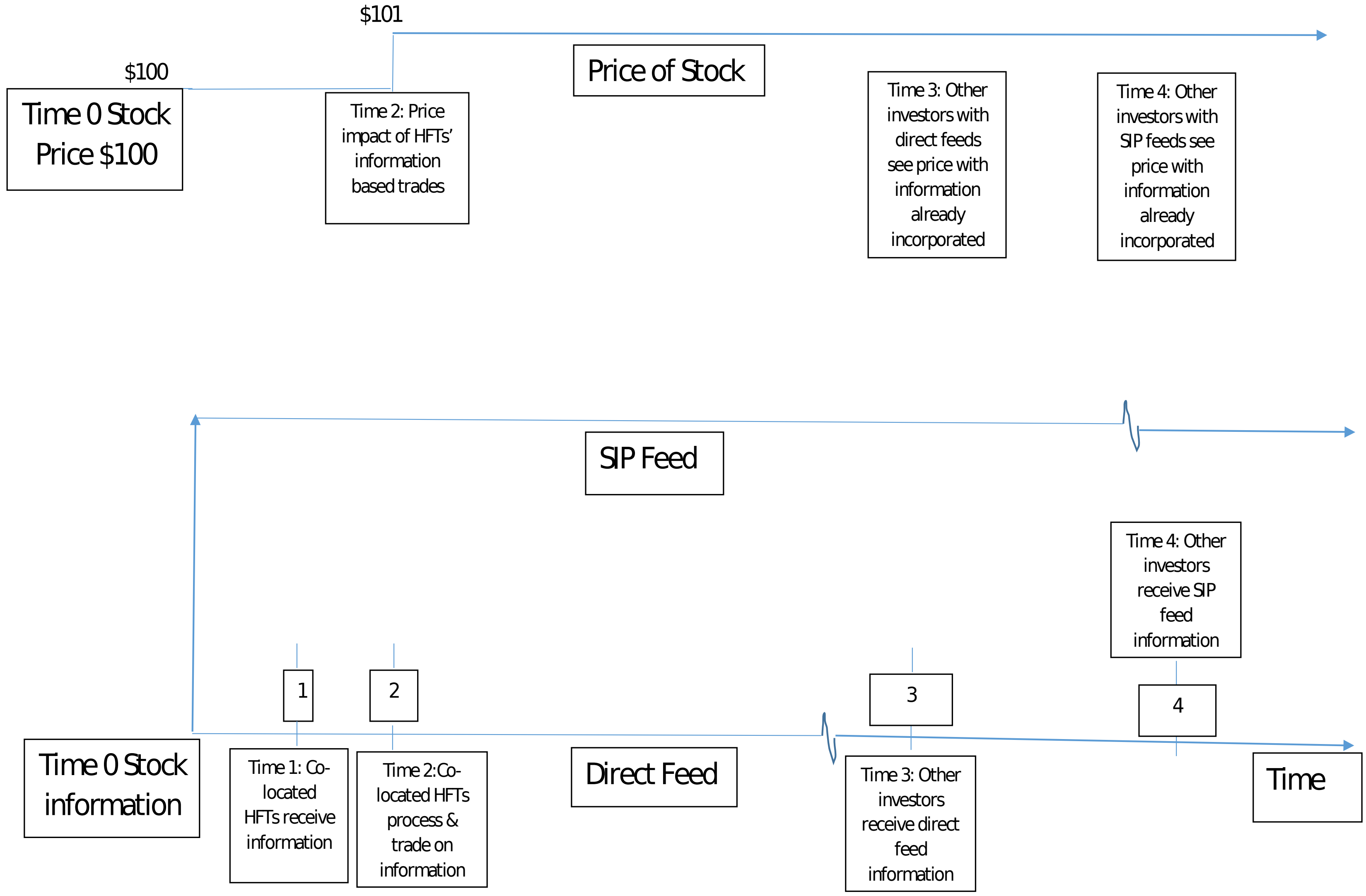
- HFT needs traders to be in close proximity to exchanges. Co-location is critical for HFT.

- Co-location refers to traders placing their servers next to those of exchanges. This lowers the distance that information travels.

- There is no restriction on this practice so long as traders gain approval from the SEC and give notice of their plans.

Information Feeds

- In addition to co-location, exchanges offer direct feeds of information to co-located traders.
- These data feeds are rich – e.g. the NASDAQ Total View – offering extensive information on the order book, imbalances and demand.
- For the public, exchanges provide their best bid and ask quote to for the Ticker through a Securities Information Processor (SIP).
- Each exchange supplies this basic information. The SIP consolidates this information for the public ticker.
- Public SIP information is usually inaccurate and out of date. By the time that public sees price information, HFT have already traded on it.


$101
$100
Price of Stock
Time 0 Stock Price $100
Time 2: Price impact of HFTs' information based trades
Time 3: Other investors with direct feeds see price with information already incorporated
Time 4: Other investors with SIP feeds see price with information already incorporated
SIP Feed
Time 4: Other investors receive SIP feed information
1
2
3
4
Time 0 Stock information
Time 1: Co-located HFTs receive information
Time 2: Co-located HFTs process & trade on information
Direct Feed
Time 3: Other investors receive direct feed information
Time

Insider Trading Policy

- Insider trading policy under Rule 10b-5 seeks to solve some key problems:

➢ Investor protection – theory argues that investors will lose if insiders can trade freely. Systematic losses can lead investors to discount the capital they invest.

➢ Equal access – originally, doctrine sought to provide that investors enjoy roughly equal access to information. This is no longer the case. But, under Reg FD, equal access retains a role.

➢ Market Quality – insider trading prohibitions protect markets. Investors that are protected will participate in markets, particularly informed investors who gain value from their information.

Doctrine

- Rule 10b-5 doctrine punishes fiduciaries that utilize confidential information for trading.
- In addition to corporate insiders like managers and directors, doctrine also punishes a wider cohort of actors like lawyers, doctors accountants in a fiduciary relationship to an information source.
- However, liability is negated if those that intend to trade make disclosure this intention –eliminating deception.
- Until recently, the reach of doctrine has been broadening.

Harms of Structural Insider Trading

- Structural insider trading exhibits many of the same harms as conventional corporate insider trading.

- **Investor protection**: HFTs are routinely able to see market data ahead of other outsider investors. This allows them to anticipate their orders and to make surer gains.

- Studies show that HFTs are hyper-efficient and predict the direction in which securities will trade over a few seconds.

- Studies also show that this creates systematic losses for information traders.

Harms of Structural Insider Trading

- **Equal Access**

- While equal access is lesser goal of insider trading policy, it reflects how information costs are allocated in the markets.

- Today, that allocation may be heavily skewed. The private data feeds are richer and allow more up-to-date information than the ticker.

- How much disparity is policy willing to tolerate? Scholars note that price uninformed traders may reduce their investment in trading.

Harms of Structural Insider Trading

- **Market Quality**

- The evidence on this is mixed. However, investors facing higher information and access costs may reduce their participation.

- No clear evidence. But, some anecdotal signs are emerging that investors are seeking venues where HFT is limited and using evasive techniques that may overcomplicate signaling.

- Rather than invest in information that may be anticipated, investors may instead allocate their resources elsewhere.

The Limits of Legal Doctrine

- Clearly, structural insider trading is not illegal.
- It is conducted in full public view. As with co-location, regulators expressly allow HFTs to enjoy structural advantages.
- Regulators – for example – in NY have attempted to impose doctrine, but without success.
- While the harms of structural insider trading may be similar to corporate insider trading, doctrine does not apply.

Conclusions

- The Article seeks to force a re-thinking of insider trading law and policy.
- If the core goal of Rule 10b-5 has been to protect investors against systematically informed insiders, it is not clear why the law protects them against one set of insiders rather than another.
- Either current laws have to be radically re-thought, or market structure needs to be aligned with law and policy.