High-Frequency Trading - HFT

What is 'High-Frequency Trading - HFT'

High-frequency trading (HFT) is a program trading platform that uses powerful computers to transact a large number of orders at very fast speeds. It uses complex algorithms to analyze multiple markets and execute orders based on market conditions. Typically, the traders with the fastest execution speeds are more profitable than traders with slower execution speeds.

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BREAKING DOWN 'High-Frequency Trading - HFT'

High-frequency trading became popular when exchanges started to offer incentives for companies to add liquidity to the market. For instance, the New York Stock Exchange (NYSE) has a group of liquidity providers called Supplemental Liquidity Providers (SLPs) that attempts to add competition and liquidity for existing quotes on the exchange. As an incentive to companies, the NYSE pays a fee or rebate for providing said liquidity. In July 2016, the average SLP rebate was $0.0019 for NYSE- and NYSE MKT-listed securities on NYSE. With millions of transactions per day, this results in a large amount of profits. The SLP was introduced following the collapse of Lehman Brothers in 2008, when liquidity was a major concern for investors.

Benefits of HFT

The major benefit of HFT is it has improved market liquidity and removed bid-ask spreads that previously would have been too small. This was tested by adding fees on HFT, and as a result, bid-ask spreads increased. One study assessed how Canadian bid-ask spreads changed when the government introduced fees on HFT, and it was found that bid-ask spreads increased by 9%.

Critiques of HFT

HFT is controversial and has been met with some harsh criticism. It has replaced a large amount of broker-dealers and uses mathematical models and algorithms to make decisions, taking human decision and interaction out of the equation. Decisions happen in milliseconds, and this could result in big market moves without reason. As an example, on May 6, 2010, the Dow Jones Industrial Average (DJIA) suffered its largest intraday point drop ever, declining 1,000 points and dropping 10% in just 20 minutes before rising again. A government investigation blamed a massive order that triggered a sell-off for the crash.

An additional critique of HFT is it allows large companies to profit at the expense of the "little guys," or the institutional and retail investors. Another major complaint about HFT is the liquidity provided by HFT is "ghost liquidity," meaning it provides liquidity that is available to the market one second and gone the next, preventing traders from actually being able to trade this liquidity.

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High-Speed Data Feed
A high-speed data feed transmits data such as price quotes and ...

Dark Pool Liquidity
The trading volume created by institutional orders that are unavailable ...

Liquidity Risk
Liquidity risk refers to the marketability of an investment and ...

Dollar Volume Liquidity
The price of a stock or ETF multiplied by its daily trading volume ...

Liquid Asset
A liquid asset is an asset that can be converted into cash quickly ...

Quote Stuffing
Quote stuffing is a tactic high-frequency traders use that involves ...

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