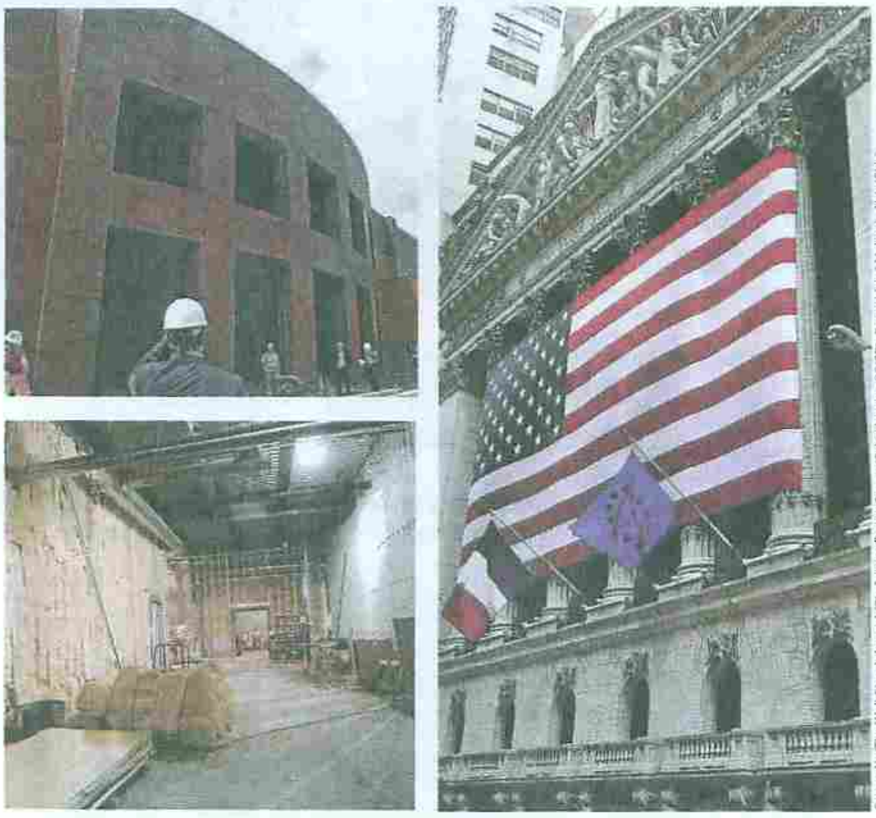
MONEY & INVESTING



Serena Ng/The Wall Street Journal (2); Agence France-Presse/Getty Images (NYSE); Township of Mahwah, N.J. (Sign)

NEW HOME, NO FLOOR: The Big Board's new high-frequency trading site in New Jersey, top left and bottom left, has a more modern look than the exchange's longtime home in Lower Manhattan.

NYSE's Fast-Trade Hub Rises Up in New Jersey

Big Board Points to Its Future as Critics See Systemic Risk

BY SCOTT PATTERSON AND SERENA NG
Mahwah, N.J.

THE FUTURE of the New York Stock Exchange is inside the red-brick building that is rising from the ground here about 35 miles from Wall Street.

Right now, the mammoth facility being constructed on the site of an old quarry is a largely empty shell with a jumble of high-tech gear. In about a year, the building is expected to house several football fields of cutting-edge computing equipment for hedge funds and other firms that engage in high-frequency trading, or the use of computers and complex algorithms to trade at lightning speed.

"When people talk about the New York Stock Exchange, this is it," said **NYSE Euronext** Co-Chief Information Officer Stanley Young. "This is our future."

As trading goes increasingly electronic, the last bastion of floor trading is embracing high-frequency trading as part of its race to keep up with competitors such as

Nasdaq OMX Group Inc. High-frequency trading now accounts for more than half of all stock-trading volume in the U.S. as banks, hedge funds and institutional investors seek to gain an edge by trading before rivals.

But even as the Big Board and other exchanges scramble to win more business, some regulators are growing concerned about the risks that high-speed trading potentially poses to the broader financial system. As trades flow at an ever-quicker pace, a computer glitch at even just one firm could trigger a wave of selling that sets off huge losses across financial markets, some people worry.

"Unfettered access by unregulated entities into a market where trades can ripple through multiple markets can rise to the level of systemic risk," said David Shillman, associate director of the Securities and Exchange Commission's division of trading and markets. "The very high-frequency traders could be doing more of these activities that could go awry."

SEC officials are particularly wary about "sponsored access," in which registered brokers lend out their identification numbers to high-speed trading firms. That effectively allows the firms to trade using a broker's code,

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The NYSE's Rapid-Trading Hub Is Rising in New Jersey Suburbs

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helping them remain anonymous. A rogue firm engaging in aggressive trading could destabilize parts or even all of the market, Mr. Shillman said.

These troubling scenarios haven't happened yet, although several high-frequency funds have been put out of business by erroneous trades, according to people familiar with the matter. The worry is that as speeds increase and more traders wield a rising hoard of cash, the risks will increase.

The NYSE says it offers risk-management software to firms that trade on its exchange to help reduce those risks, but use of the software isn't mandatory.

Controversy also is growing over a practice known as "flash" orders, in which exchanges allow traders to briefly see and react to certain orders ahead of the rest of the market. The SEC is looking into the practice and is widely expected to ban it, according to people familiar with the matter. Exchanges such as the NYSE, Nasdaq and **IntercontinentalExchange** Inc., or ICE, oppose the use of flash orders.

Some traders say that rather than adding to risks, high-frequency trading helps markets operate more smoothly by providing an ample, ever-ready pool of shares or other securities when investors need them. This has helped push down the spread between how much shares are bought and sold for, they say, ultimately benefiting individual investors.

"Most high-frequency trading provide liquidity to the market, and that's a good thing," said Larry Harris, a finance professor at the University of Southern California and former chief economist at the SEC.

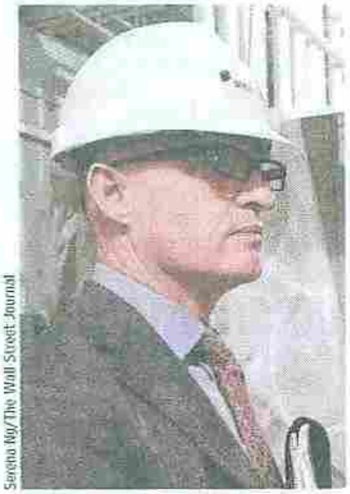
Just as traditional stock investors used to race to the phones to place an order based on a hot tip, today's new breed of high-tech wizards are deploying ever-faster equipment to make money on fleeting moves in the marketplace.

Typically, high-frequency traders use computers to search through markets for signals that can give them an indication about which direction parts of the market will go. If gold is rising, oil is falling and the dollar is losing ground against the Japanese yen, for instance, that could mean automotive stocks are likely to rise for the next hour, based on historical patterns. The high-frequency system will start putting in orders for shares of auto makers at superfast speeds, turning around and selling them an hour later.

The aim behind the NYSE site is to get firms' computers as close as possible to the trading site, helping shave off tiny amounts of time—trades here are calculated not in milliseconds but in microseconds, or millionths of a second.

Some firms trade only with their own money, while others trade on behalf of clients and investors. Others make money by facilitating trading activities, collecting tiny spreads between bid and offer prices and collecting fees exchanges provide in order to attract market participants.

Most worries about high-frequency trading aren't focused on established players such as **Goldman Sachs Group** Inc., hedge-fund firm **Citadel Investment Group** or high-frequency trading specialist **Getco** LLC. Rather, critics are more concerned about smaller and newer firms operating in the shadows with little regulatory oversight.



Serena Ng/The Wall Street Journal

'When people talk about the New York Stock Exchange, this is it. This is our future.'

Stanley Young
NYSE Euronext
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The NYSE has largely kept its facility under wraps, even keeping the exact location a closely guarded secret. Executives recently made oblique references to the company's plans, describing them as "critical" to the NYSE's future. When they discuss second-quarter earnings, set for release before the opening bell Thursday, those plans are likely to be addressed in more detail.

The NYSE is seeking to stem a slide in market share from more than 80% in 2004 to about 40% this year, according to data from Equity Research Desk, a research company in Greenwich, Conn. Second-quarter earnings are expected to slide 40% from a year ago to 45 cents a share, according to a survey of analysts by Thomson Reuters.

The NYSE's decision to build its own data center surprised some industry veterans. In the past, most exchanges have rented out space to data-center providers. The NYSE is rolling the dice that it will become a go-to venue for high-speed trading and is even offering space to other exchanges.

The exchange is building a similar facility outside London, which will cater to clients who want access to overseas markets. The combined price tag for the two data centers will be about $500 million, according to people familiar with the matter.

The NYSE started taking orders for space in the nearly 400,000-square-foot Mahwah facility, internally dubbed Project Alpha, this month. The exchange expects to attract everyone from large Wall Street banks to traditional brokerages and hedge funds. The NYSE won't say how many customers have signed up.

—Geoffrey Rogow contributed to this article.