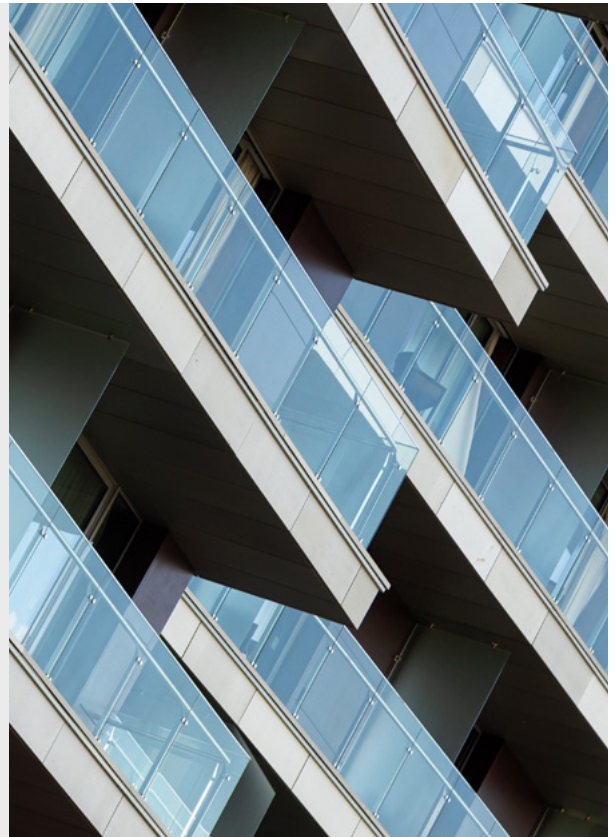


Case Study

Goldman Sachs Asset Management

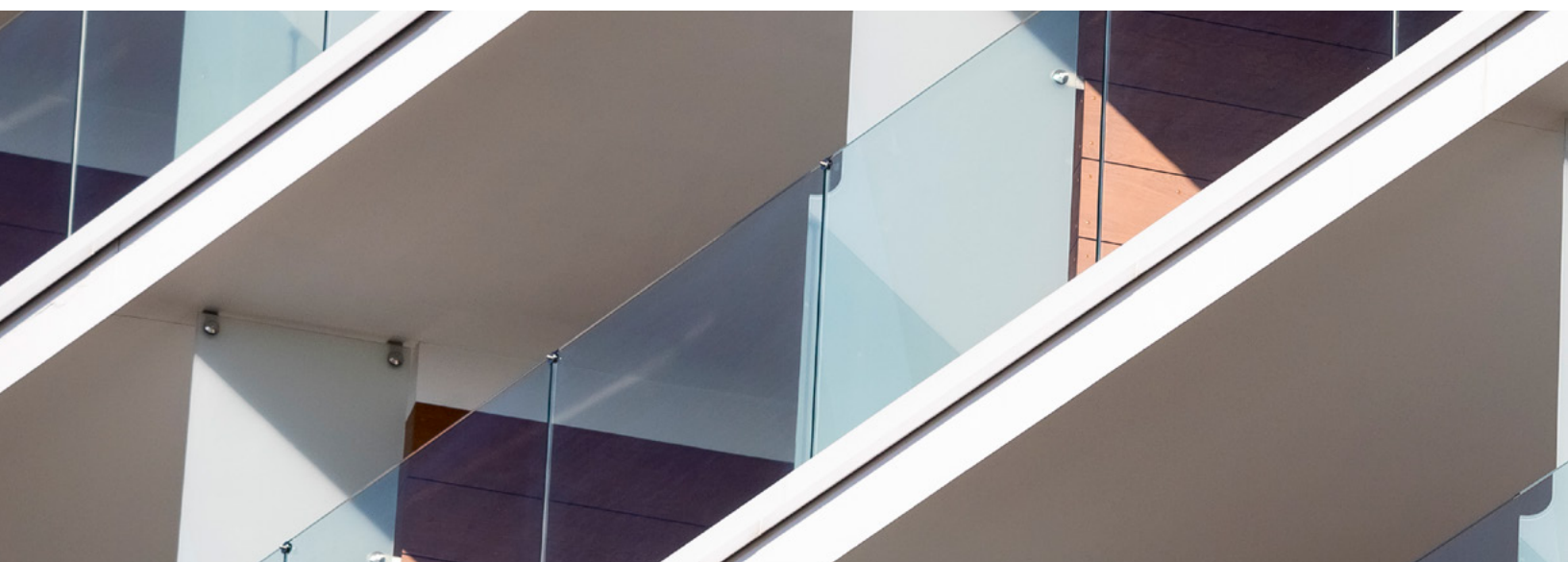
Goldman Sachs Asset Management uses electronic trading to help lower trading costs, accelerate execution speed, and develop new trading and portfolio construction strategies.



Fewer questions, better answers

“Going back three or four years, new clients coming on board would ask us two things,” recalls **Andrew Parra, Head of Investment Grade Corporate Trading at Goldman Sachs Asset Management**, a leading active manager in corporate fixed income. The first was about speed—how quickly Goldman Sachs Asset Management would be able to convert cash into a functioning portfolio. The second was about the cost to do so, given the notoriously high transaction costs in the credit markets.

Electronification of bond trading, broadening the types of trading approaches, has calmed both concerns. “Today they’ve stopped asking the first question, because they’ve learned that our answer now is a few days, down from the weeks or months creating a portfolio would take.” Accordingly, clients no longer see the need for ‘performance holidays’—giving investment managers a month or so to get up to speed versus a benchmark.



Case Study: Goldman Sachs Asset Management

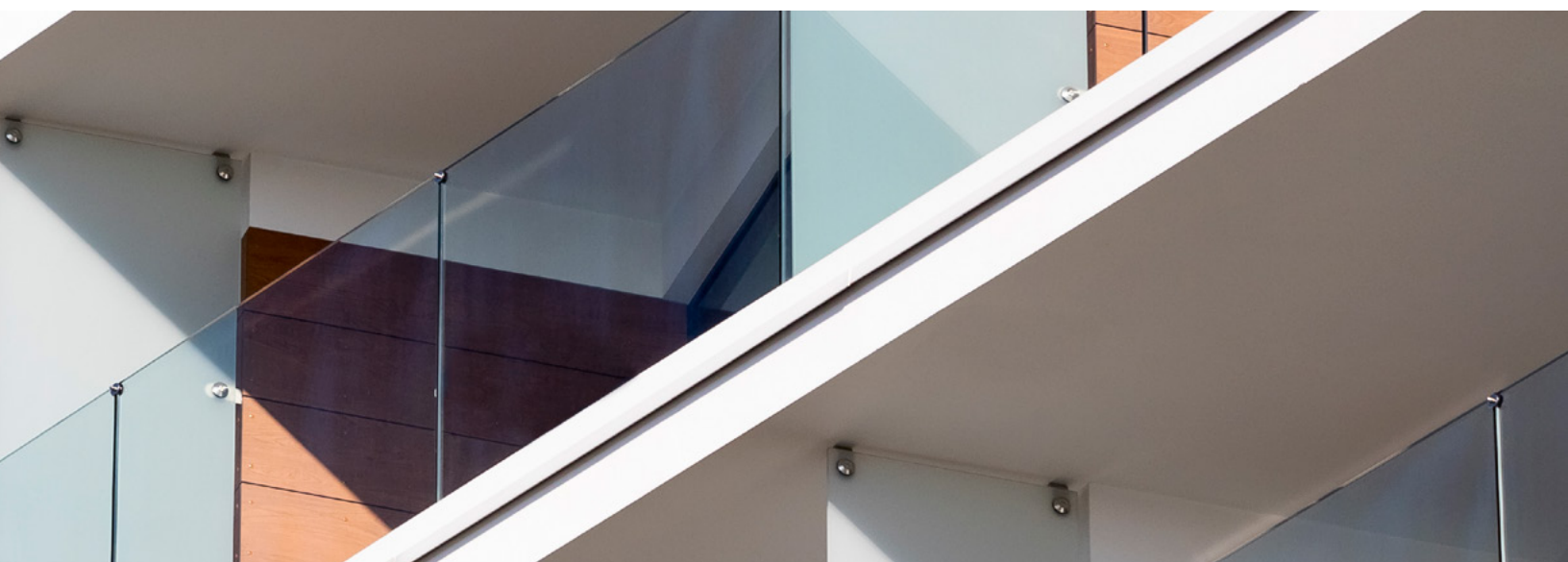
The cost of establishing a portfolio has been mitigated as well, Parra notes. “It used to be very costly—easily 15 to 20 basis points to ramp up from cash. But real-time fixed income pricing and trade data, from MarketAxess and other sources, now tells us more accurately what we can buy and what style of trading we can do. And with the expansion of electronic trading across credit classes, the cost of implementation has been brought down from the double digits to a much more palatable level.”

As electronic trading adoption has gained momentum, so Goldman Sachs Asset Management has enhanced its ability to diversify and evolve its trading strategies.

Parra notes:



The complex liquidity, price, and market data now available also enables us to move beyond traditional core benchmarks, and develop portfolios more specifically targeted to clients' unique strategic goals.”



Price data is the first link

The greater availability and accuracy of trade-by-trade price data has transformed what was once an opaque, asymmetric market. In addition to creating a more level playing field, it's also led to an inflection point in the development of better informed, more systematic portfolio management strategies, says Parra.

“

We are fundamental investors, but how we capture alpha opportunities has become more systematic—applying factors and processes to back up our intuition and position our portfolios.”

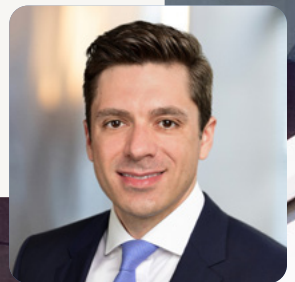


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Up until three or four years ago, we took an old-line approach of deciding what issuers we liked, and then looking at the entire curves of each one to try to find the sweet spot. Dealers did not yet send their inventories in a FIX pipe, so we had to go through a lot of e-mails and spreadsheets from over 50 counterparties. Finally, the dealers' price data became centralized and electronic."

— **Andrew Parra**

Global Head of Investment Grade Corporate Trading

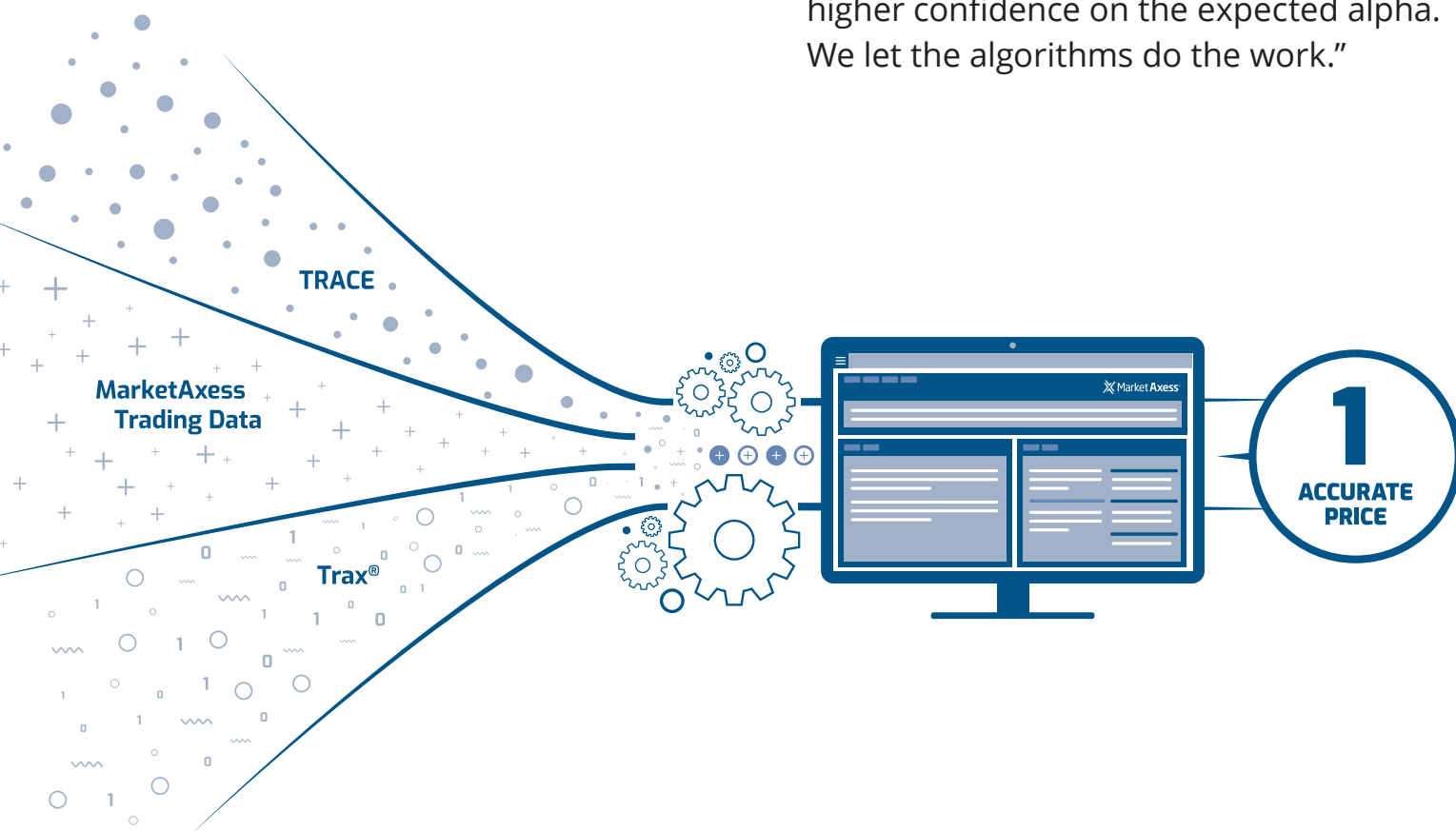


Case Study: Goldman Sachs Asset Management

"We codified our logic for choosing bonds and married that to the market data. The computer does a better job of assessing bonds' attributes than we could," Parra explains: "How will this bond roll down, and what is its expected return?" He cites **Composite+™**, the AI-powered pricing engine by MarketAxess, which predicts where a given bond is likely to trade in the current market climate, as being critical to the assessment process.

This is complemented by **Relative Liquidity Score**, a new MarketAxess analytics tool which uses inputs such as the Composite+ price to rank the relative difficulty of buying or selling a bond at a point in time without significantly disturbing the price, thus inferring the bond's relative liquidity.

As for portfolio construction, "It used to take weeks for us to manually build them out, but now we're able to build a portfolio almost at the push of a button and have higher confidence on the expected alpha. We let the algorithms do the work."



Smarter, more efficient trading

The evolving state of electronic fixed income trading offers a range of portfolio execution possibilities. “Pre-trade transparency has improved a lot, as we now know what securities actually are tradable, and we have a more informed view of what we’ve planned even before going to market,” Parra says. “And the ability to trade on a centralized platform such as MarketAxess, and even trade automatically, frees up our traders’ capacity. They’re not forced to hit and lift orders all day—they can do higher-level thinking and add value for our portfolios and clients.”



Automation also provides secondary benefits,” adds Misha Boroditsky, Head of Quantitative Investment Strategy. “We can reliably benchmark outcomes of our decisions and reproduce them in a back-test, and this in turn gives us a way to improve the process in the next iteration.”

Misha Boroditsky

Head of Quantitative
Investment Strategy



Case Study: Goldman Sachs Asset Management

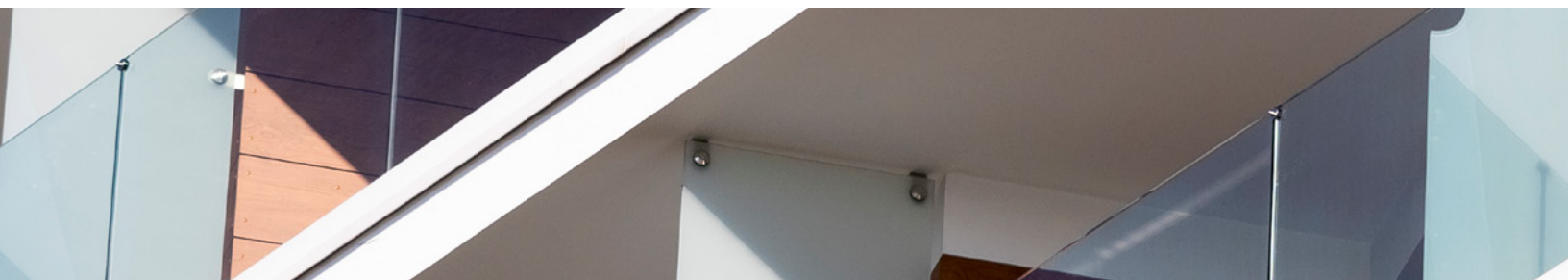
Electronic trading has also changed the market liquidity dynamic, bringing together asset owners, dealers and alternative liquidity providers in new ways through all-to-all networks such as MarketAxess Open Trading. “Ten years ago, the sell side were the liquidity providers, and the buy side liquidity takers,” says Boroditsky. “Now the types of counterparties and trading protocols available have expanded dramatically. As smart market participants we can rely on both present and historical data, and the variety of trading options, to get the best price.”

“For bonds of low to medium liquidity, Request for Quote (RFQ) and working with a dealer was always a preferred mode, and probably still is,” he adds. “But as trade sizes shrink, and technology is more widely adopted, people may choose simpler options, such as click-to-trade. And people in the market, especially those on the buy side, seem to feel good about

the fairness of midpoint auctions. We’ve shown that we can save money for our clients by buying around the middle of the market.”

“If we need to do a quick cash raise, there’s no point in trying to be a liquidity provider—we just put it out to the market. But some trades can wait, and we can get a better price in exchange for our patience and providing liquidity. And automated trading gives us a first-mover advantage in market dislocations.”

Parra adds: “In a market that is starved for alpha, we have to be smarter in how, where, and when we trade. The environment has forced us to become more precise.”



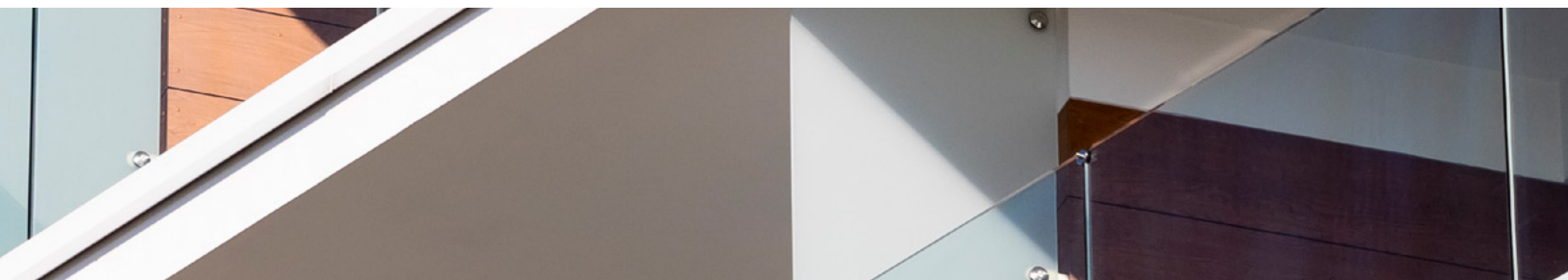
The evolution from CUSIPs to risk factors

Better-informed portfolio construction and execution has brought an evolution in the client portfolios, too. “Our process used to be very bottom-up—like, ‘I’m buying tickers A, B, and C.’” says Andrew Parra. “Now we’re looking at the bonds’ risk premia and asking ‘Am I loading on carry and roll? Am I loading on growth, or value?’ Those are the factors we can isolate and seek to build into portfolios. Some purely systematic investors have been investing this way all along, but three years ago few were looking at portfolios through these lenses.”



Automation and more intelligent security selection also have an impact on what part of the curve we are on, and what sectors we gravitate to. Portfolios also have probably become more diversified thanks to automation.”

Parra sees these moves to factors as the future of fixed income management. “It won’t happen overnight, but I expect we will see more thematic baskets, as we see in the land of equities. We’ve proven that we have efficient scalable ways to gain access to hybrid beta with high yield, and we hope to go one layer deeper, evolving away from the historical fixation on CUSIPs to portfolios defined by sectors, themes, and constraints.”





“

In a market that is starved for alpha, we have to be smarter in how, where and when we trade. The market has forced us to become more precise.”

— **Andrew Parra**

Global Head of Investment Grade Corporate Trading

About Tradability, a new data tool from MarketAxess

The Goldman Sachs Asset Management team are also beginning to take advantage of **Tradability**, a new data tool by MarketAxess, which uses the total number of disclosed and anonymous responses to a given client RFQ inquiry to deliver an accurate pre-trade prediction of the depth of the market for a given security at any moment in time.

Tradability encompasses nearly 18,000 bonds daily and leverages the same AI as the award-winning Composite+ pricing engine by MarketAxess. Andrew Parra notes, “We’re taking cues from the equity world. The data paints a full picture of liquidity, so we should do something with it.”

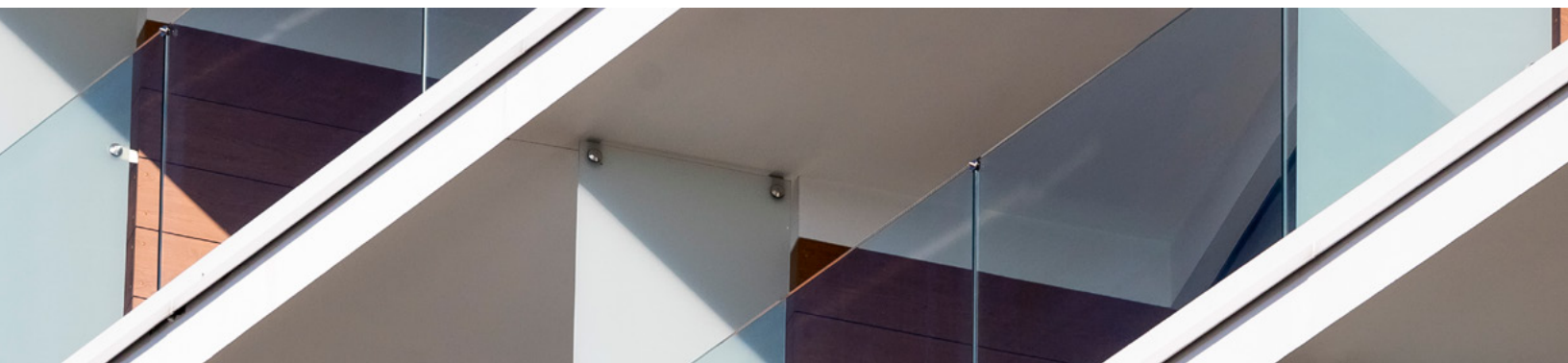


About Goldman Sachs Asset Management

The Global Fixed Income and Liquidity Solutions team within Goldman Sachs Asset Management numbers 300 professionals in nine global offices and oversees client portfolios of \$822 billion (all as of December 2021). “We are known for customized, separately managed accounts as opposed to large, commingled funds,” says Andrew Parra, Head of Investment Grade Corporate Trading.

A MarketAxess client since 2002, Goldman Sachs Asset Management relies on trading and data solution providers such as MarketAxess for data on completed trades, live market trends, liquidity and pricing predictions, as well as a variety of execution protocols.

Goldman Sachs Asset Management is also active in developing its own in-house market analytics and automated trading tools: “The providers’ tools are great to start with, but we prefer to build our own infrastructure on top of them,” notes Misha Boroditsky, Head of Quantitative Investment Strategy.





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