Delivering the fuel for FX algo trading:

Navigating the global data challenge

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IN FX MARKETS, DATA IS THE FUEL—AND INCREASINGLY THE BOTTLENECK.

FX has long been relatively difficult to navigate given how globally distributed and highly fragmented the asset class is. Unlike equities or futures, which centralize around relatively few dominant venues (often central limit order books, or CLOBs), FX liquidity is scattered across dozens of ECNs, bank platforms, bilateral streams, and now innovative cash pools like CME's new FX Spot+. This fragmentation creates not only opportunity, but also operational complexity—especially for algorithmic trading boutiques trying to access, integrate, and act on price signals with consistency and speed.

The complications don't stop there. Operating in FX means dealing with an extremely long list of potential catalysts: signals from equity indices, commodities, central bank actions, geopolitical headlines, and much more. An FX trading system may need to understand the price of crude in Singapore, interest rate futures in Frankfurt, and S&P futures in Chicago all within milliseconds of each other. This makes global state awareness not a luxury, but a requirement.

However, market data doesn't arrive equally or simultaneously, making it difficult to get the complete picture needed to act with confidence. It's not hard to see why, given all the variables at play. Without deliberate effort, any company's FX trading and risk management efforts can be badly hindered.

TRADING VENUE POLICIES HAVE A BIG IMPACT

Policies at trading venues can exacerbate the problem. One of the least discussed—but most important factors in FX infrastructure is access. How market data is made available to customers—when, to whom, and under what conditions—can have as much impact on trading outcomes as the data itself.

When trading venues have opaque or non-uniform access policies, that makes it hard for firms that lack deep pockets to do well. When some market participants get advantaged access to source data—whether through preferred network arrangements, venue-specific speed bumps, or private order handling protocols—those preferred customers tend to dominate trading volume. Market participation stagnates. While this customer concentration is beneficial to the bestresourced participants in the short term, over the long haul this suppresses innovation and prevents broad-based liquidity formation. Markets clearly suffer under those conditions, becoming less efficient.

Conversely, equal, transparent access to market data and execution venues is an incredible enabler. It gives smaller firms the confidence to build, deploy, and scale strategies without needing to own infrastructure. It creates conditions where firms can compete on signal quality and execution precision, not just physical proximity or exclusive vendor arrangements. More participants leads to better liquidity.

This is an unequivocally good thing for markets. (Full disclosure: Several companies, including my own—



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Quincy Data—can solve this problem for customers via fast and resilient data feeds. Our industry does the hard work of connecting to venues and collating a firehose of data from many geographically disparate sources in a structured way that any trading firm can use.)

In FX—where the number of venues is expanding, not shrinking—ensuring equal access to data isn't just a policy virtue, it's a necessity to keep access to this vital asset class open and transparent to more than just the biggest players in markets.

WHY PREFERRED ACCESS HARMS FX

Some believe the increased pace of trading has harmed FX (and other asset classes). And so there have been various attempts to slow things down. It's counterintuitive, but many attempts to reduce the role of speed in trading—such as artificial speed bumps, asymmetric dissemination, or exclusive infrastructure agreements—often degrade markets by making it difficult for anyone but the largest and best resourced firms to participate. Here's why:

1. Opaque rules reward the alreadyconnected

When access policies are unclear—such as when only certain firms understand

or are technically able to exploit a venue's data-dissemination behaviorit creates informational asymmetries that disadvantage the broader market. These advantages tend to accrue to firms with the deepest infrastructure, engineering teams, or privileged exchange relationships, allowing them to consistently extract value. Others—lacking such access, clarity, or the means to fairly compete—are left operating defensively or exiting altogether.

2. Deliberate slowdowns favor those with private alternatives

When a venue introduces a speed bump or deliberately slows its public feed, the goal is often to level the playing field by neutralizing latency advantages. But in practice, these mechanisms can devalue public data and increase the relative value of private or privileged access. The issue isn't just private networks it's advantaged private fills, selective disclosures, and geographic disparities in infrastructure.

For example, if a firm receives private fill information ahead of the public print, and the public data is then delayed by a speed bump, that firm has a multimillisecond head start—not because they were faster, but because they were first to know. Though well-intended to try to help less agile market participants (Banks, dealers) in highly global markets like FX, where venues are separated by oceans, milliseconds of divergence are commonplace, and the effects of a speed bump can easily be overwhelmed by private or geographically advantaged information channels.

Ironically, speed bumps that aim to neutralize latency arbitrage can entrench the very dynamics they're meant to fix. If not accompanied by transparent and equitable access policies—particularly around fill disclosure and data dissemination-these delays may end up benefiting firms already operating ahead of the public signal, rather than bringing others closer to it.

3. Lack of transport clarity limits participation

Even if a venue offers its feed to all participants, if the mechanisms for delivery (e.g., physical access, routing complexity, handoff details) are complex or undocumented, only the best-resourced firms can reliably access and integrate the data. This excludes smaller or newer firms and narrows the field of viable participants, leading to concentrated flow and reinforcing feedback loops around dominant players.

4. Favoring "anti-HFT" behavior often favors a few firms with exclusive deals

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WHAT PREVENTS THIS? **TRANSPARENT, EQUAL INFRASTRUCTURE**

The antidote to customer concentration isn't banning speed or regulating away behavior. It's ensuring equal, transparent, and frictionless access to core infrastructure:

- Clear data dissemination rules
- Equal opportunity to connect and receive feeds
- No exclusivity, no preferred paths Normalized access for firms of all

sizes By removing ambiguity and minimizing architectural privilege, markets can foster diverse, competitive ecosystems,

where new strategies can emerge, and

risk isn't concentrated among a handful

of entities.

STORAGE AND INTEGRATION: WHAT MAKES DATA HARD TO USE

Algorithmic FX trading strategies rely on accurate, timely, and complete data across a wide range of sources. This includes:

- Real-time pricing from multiple FX venues
- Futures data from exchanges
- On-chain and off-chain crypto data
- Macroeconomic indicators and interasset correlations
- Internal trade and fill data for alpha modeling

Each of these has its own guirks: formats, latencies, update behaviors, and integration risks. The challenge isn't just getting the data; it's aligning, storing, and indexing it at high frequency, and delivering it to inference systems or signal engines with minimal drift.

Well-designed systems prioritize deterministic latency, timestamp consistency, and redundancy in data flow. For machine learning models, consistency matters even more than sheer speed. In many cases, the most scalable systems trade nanoseconds of speed for microseconds of predictability—and that trade-off is worth it.

TECHNOLOGY TRENDS: FROM LATENCY TO RESILIENCE

The new frontier in FX data infrastructure isn't just latency. It's resilience and scalability. The best systems now combine:

- Geographically diverse wireless transport
- Hollow-core and 40/100/400 Gbps



The new frontier in FX data infrastructure isn't just latency. It's resilience and scalability

- fibers for high-capacity resilient transport Signal feeds that distill high-value
- data into fast formats Smart arbitration across redundant paths
- Precision timing and high capacity data capture for multi-venue synchronization

These technologies reduce dependence on single venues, central data centers, or exclusive carrier agreements. They empower firms to run inference at the edge, execute locally, and coordinate globally in real time.

The establishment of CME's FX Spot+ offering in Aurora illustrates this well: New pools of liquidity demand new connectivity models. If data transport doesn't scale with venue access, fragmentation will only deepen.

WHAT TO LOOK FOR IN A **DATA PROVIDER**

Trading firms looking to partner with a trusted vendor on data should evaluate:

- Latency and determinism, not just one-way speed
- Path diversity and resilience • Support for normalized formats and structured metadata Transparency in update timing, sequencing, and access

· Commitment to equal access and customer neutrality

The goal isn't just data. You also need trustworthy market state, delivered at scale, with the transparency to support competitive growth.

CONCLUSION: EQUAL ACCESS AS INFRASTRUCTURE

FX algo trading doesn't run on code alone. Data is vital too. And for data to be useful, it has to be available, integrated, and trusted. As markets fragment and correlations deepen across geographies and asset classes, the winning data infrastructure will be the one that delivers clean, resilient, and equal access to market-moving information.

Quincy Data and our peers exist to make that data infrastructure accessible-not just to the largest firms, but to any participant with a good strategy and a need for speedy access. By combining normalized data, low-latency global distribution, deterministic delivery, and equal access, Quincy and its competitors bring elite data distribution and insight within reach of even the smallest desks.

Equal access isn't just a principle. It's a performance advantage. And it's the foundation for the next generation of global FX innovation.