

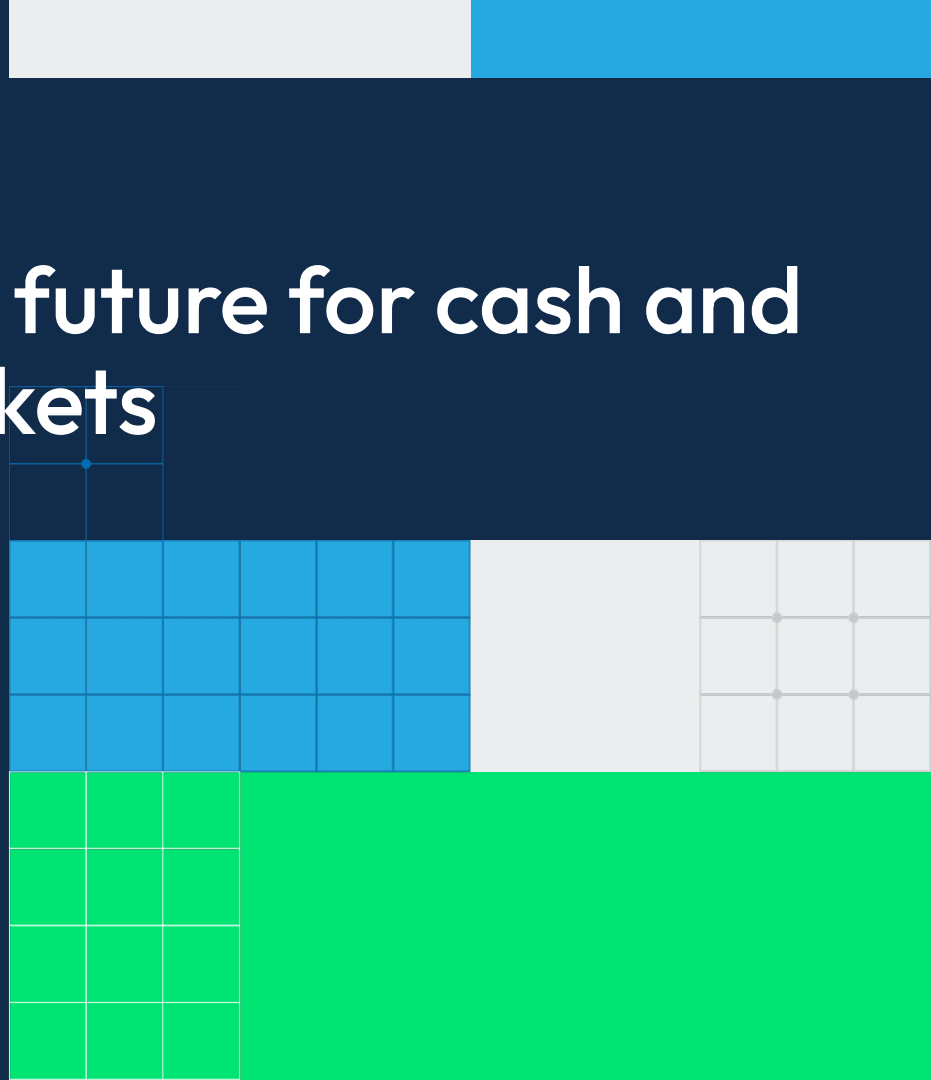
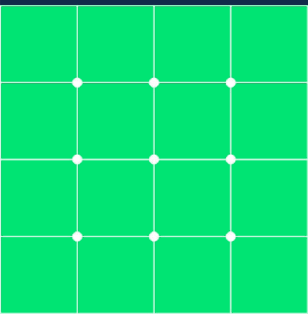
Brokertec: Driving the future for cash and securities finance markets

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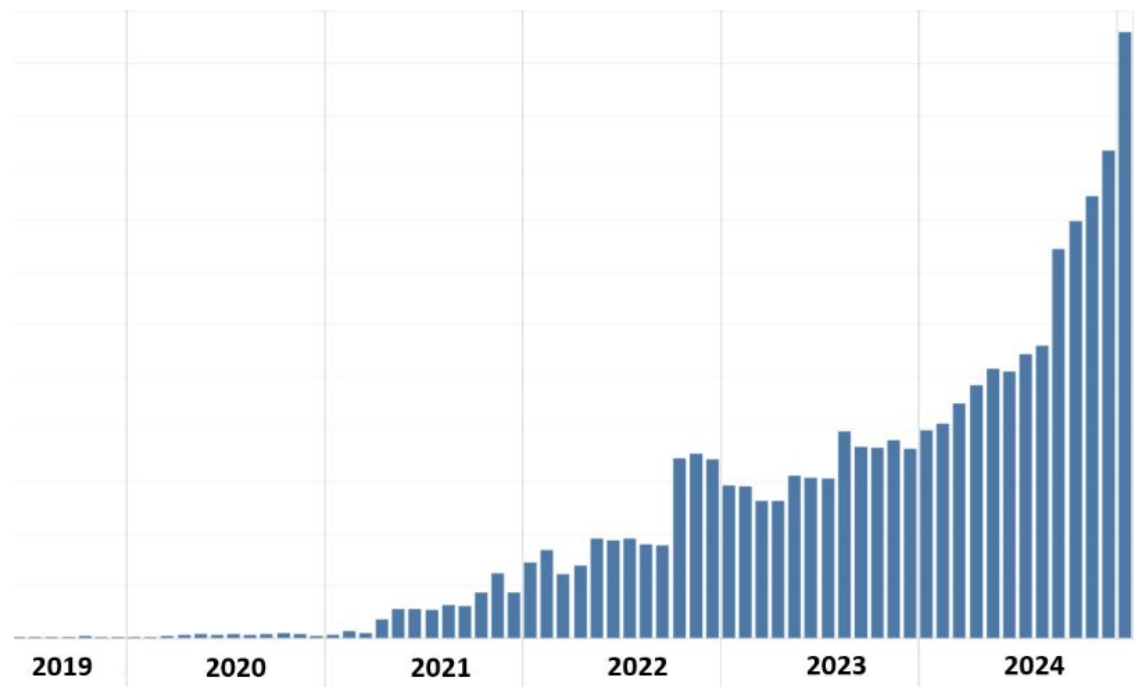


BROKERTEC QUOTE

Platform driven efficiencies for the dealer to client repo market.

September 2025

BrokerTec Quote Dealer to Client volumes



Parabolic rise in dealer to client volumes on BrokerTec Quote

Repo Dealer-to-Client evolution



Dealer to Client Repo & Secured Funding

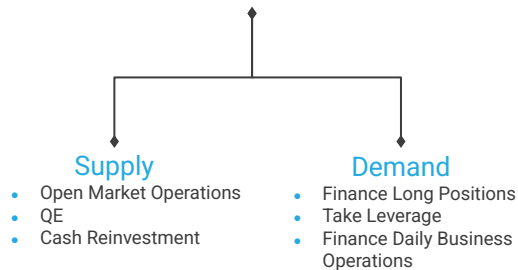
- The dealer to client repo and secured funding market has grown markedly over the last 10 years
 - Post crisis regulations make it costly to hold lots of repo on balance sheet, therefore dealers seek capital efficient ways to conduct repo; this encourages netting sheet with clients.
 - Clients such as hedge funds seek leverage via a dealer's balance sheet to amplify trading strategies.
 - Dealers seek a continuous source of high quality collateral to support trading operations and margin requirements.
 - High quality collateral a common feature for liquidity management, hedging and margin management.
- Growth in volumes necessitates operational efficiency
 - Repo & Secured Funding historically burdened by intense operational challenges.
 - Risk of fails, meeting margin requirements, reputational damage requires an efficiency driver.
 - Electronification and platforms push an operationally intense though necessary activity further up the efficiency curve.
 - STP direct into risk systems greatly reduces operational errors.

What are the main drivers?

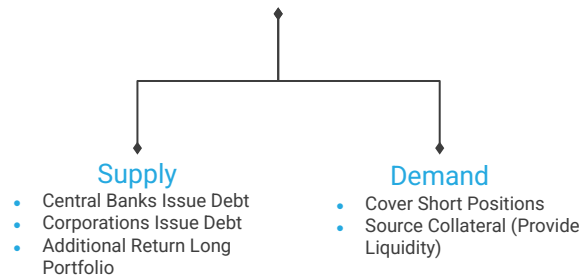
Simple Answer:

Supply and Demand

Cash



Collateral



Underpins Behaviour:

- Regulation (HQLA, LCR, NSFR, UMR, RWA, BASEL III)
- Macro Economic Forces (QE, Interest Rates, etc)
- Daily Business Operations
- Financial Operations

RFQ

- “Request-for-Quote” a type of trading order that aligns the interests of the price seeker and the price maker in a relationship based market.
- Orders can be negotiated, term and size vary, dealers can be placed into competition.
- Unlike Central Limit Order Book markets that operate via an anonymous order stack.
- Dealer sales teams maintain relationships with clients, understand needs and flows.
- Clients and dealers maintain multiple trading relationships.
- RFQ particularly suited to repo given the mid-life events that are a key part of this market.

Overview

- Electronic D2C RFQ Repo platform launched in 2019
- Banks, Central Banks, Hedge funds and Asset managers conduct RFQ activity
- Typically, RFQ activity is for longer duration repo

Supported products:

- Government bond Repo and Agency securities,
- Corporate bond Repo and Securities Lending in EGB/Gilts,
- Mortgage-backed securities and Securities Lending in USD to follow

Key Functionality

- Supports all Secured Financing Transactions.
- Providing full automation across the lifecycle of a trade
- Full audit history of all negotiations relating to a trade
- Rapid product enhancements tailored to market requirements

Pipeline

- Interoperability between BrokerTec CLOB and BrokerTec Quote
- SOFR and ESTR futures (view only) prices on BTEC GFE / Quote UI
- Emerging market and Money Market Repo extension
- Distributed ledger/Tokenization for post trade integration for Repo
- Upgrade Analytics on GCP
- Equities Securities Lending

Market Landscape (D2C):

Highly competitive market across voice, electronic and direct trading.

- The 2 main competitors in the space are GLMX (Market leader) and Tradeweb - crucial differentiator for BTQ is the ability to leverage the strong D2D position in form of Market Data and the ability to link workflows across the BrokerTec CLOB D2D and BrokerTec Quote D2C

Repo processing complexities

Pre Trade

Trades typically fixed rate, but can be variable rate with spreads to an index (SOFR, ESTR).

Fixed term or Open.

Dealer sales team manage client credit lines.

Trades STPd through bank/client trade gateways, consumed into risk systems.

Post Trade

Open repo presents processing challenges

Systems tend to deal with these 'interlife' or 'midlife' events with related IDs, creating event chains.

Trade falls into a position ladder, collateral and margin teams manage price variance with clients, trading re-rates or closes out where necessary.

Settlement instructions produced via back office systems.

Types of Collateral



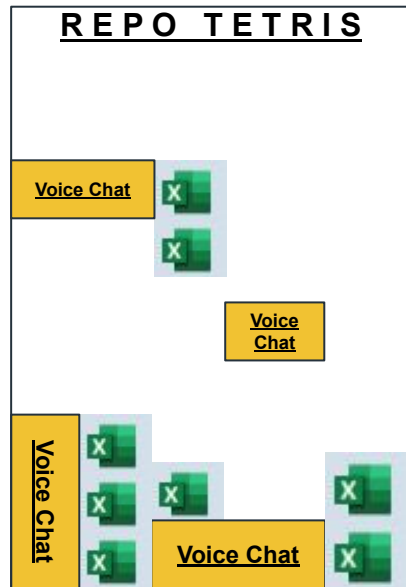
Repo Trade Actions / Midlife Events



“Your size is my size”

The right size, the right price, the right term, the best fit.

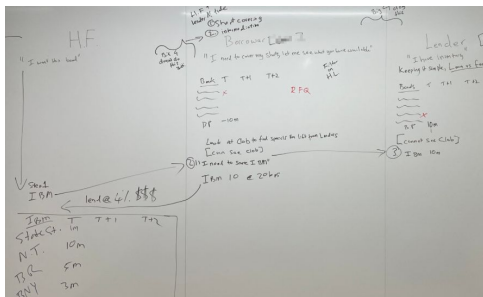
- Client sends sales contact spreadsheet, pastes interest on chat.
- Repo sales team field client inquiries i.e. a hedge fund with netted pack composed of 90 bonds for a term of two weeks.
- Repo sales source prices and haircuts from their repo traders.
- Repo sales ensure enough line is available with the client.
- Repo sales communicate prices and haircuts back to clients.
- Clients negotiate on the prices (counter).
- Back and forth until the right price results in a done deal. More spreadsheets. More chats.
- Imagine ~ 30/40 different chats, each with own spreadsheets / requirements / negotiations / client idiosyncrasies.
- Tools utilised: Spreadsheets, chat, haircut matrix, credit line tools, risk/position capture systems.
- Generally an organised mess, with a non-zero likelihood of misbookings resulting in real economic (i.e. fails) or reputational damage.



BrokerTec Quote

- Seamless connectivity
 - Across dealer and client risk systems.
 - Full FIX STP flow reduces booking errors.
 - Deeper integration supports dealer aggregator flow.
- Consistent evolution
 - Continuous development.
 - Feature requests / Requirements integration.
 - Client needs at the forefront.
- Full SME support

- Intuitivity
 - Simple, low click, intuitive platform.
 - Order upload via spreadsheet → evolving automation.
 - Clear transparency on trade economics.
 - All midlife events supported.
- Low cost



Initiated - All

Ungranted	RFQ ID	Collection	Comments	Status	Dir	Currency	Term	Collects...	Coures...	Rate	Collateral	Notional	Hel...	Start Date	End Date
	6			PRICED	BUY	EUR	5-W	Bund 5-W	STBRD1	-0.050%		250,000,000		19/09/2025	26/09/2025
				PRICED	BUY	GBP	5-2W	Gilt 2W	STBRD1	-0.250%		25,000,000		19/09/2025	03/10/2025
				PRICED	BUY	USD	T-0	UST Open	STBRD1	4.370%	UST 6.75 08/15/26	50,000,000		18/09/2025	
				PRICED	BUY	USD	T-0	UST Open	STBRD1	4.370%	UST 6.625 02/15/27	50,000,000		18/09/2025	

Putting the F-U-N into Funding

Business as Usual

Client Challenges

- Manage billions for treasury.
- Control risks for investors.
- Working with 10s of dealers to source prices / funding.
- Seek leverage from dealers.
- Collateral management and margin calls.
- Funding requirements from PMs.
- Small teams / large sums.

Dealer Challenges

- Fund balance sheet using D2D and D2C markets, relationships.
- Trade management: partials, splits, rerates, resizes, close outs.
- Manage balance sheet: funding, triparty, margin, netting, risk, P&L.
- Thousands of trade tickets per day.
- Shift positions around different dealer entities / global locations.
- Work with treasury
- Settlements.

BAU with BrokerTec Quote

Client Benefits

- Efficiently source best prices from >40 dealers, in one screen.
- Full STP into risk systems
- Colleagues see the same screen.
- Receive prices / negotiate.
- Less spreadsheet mess.
- Central point of trade maintenance.
- Fewer disparate chats / less distraction.
- Increased focus / reduced operational burden.

Dealer Benefits

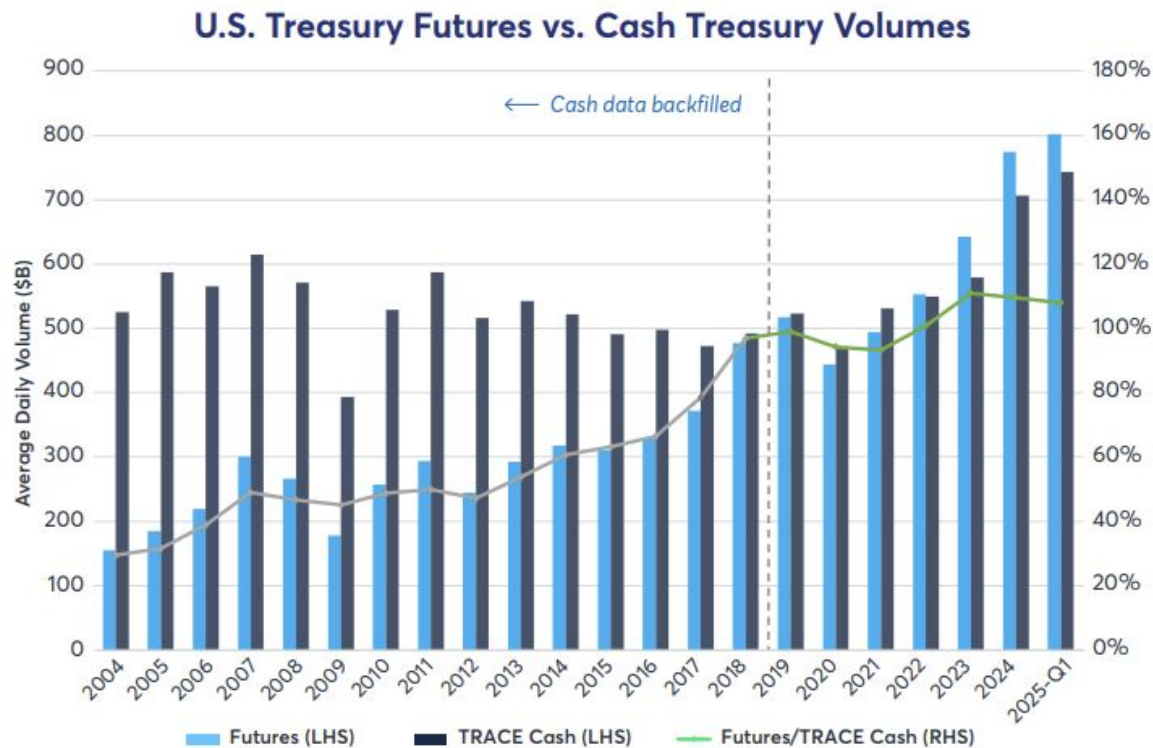
- All client inquiries in one screen.
- Full STP into risk systems.
- Plugged into pricing architecture, i.e. aggregators.
- Trading & Sales see the same activity.
- Traders make prices / sales manage the relationship.
- Central point of trade maintenance.
- Less spreadsheet mess.
- Fewer disparate chats.
- Increased efficiency, reduced operational burden.

BROKERTEC CHICAGO

Bringing US Treasury Cash & Futures Markets Closer Together

September 2025

Growth of UST Interest Rate Trading



* Trailing 52-wk avg. Prior to 2019, TRACE Cash is backfilled as 120% of primary dealer volumes reported by the Federal Reserve Bank of NY.

UST Cash Market Evolution

BrokerTec Secaucus UST CLOB

- #1 D2D CLOB in the market.
 - Tailored for efficient execution of large risk transfer trades in benchmark issues.
 - Wider MPIs than our competitors, more relatable to D2C spreads.
 - \$1mm min size.
-
- Continued growth of algorithmic trading the past decade has led to an increased need for latency sensitive, granular cross-asset execution.
 - Relative Value Execution Providers
 - Basis Trading (cash v futures)

BrokerTec Chicago - An Orderbook Tailored for Cash v Futures Trading

Initial Product Scope	
Product Scope	On-The-Run Benchmarks
Notional Size	\$200k for 2Y - 3Y \$100k for 5Y - 30Y <i>Matches Futures, smaller than BTEC CLOB</i>
Minimum Price Increment	1/16th of a 32nd <i>Matches Competitors, tighter than Futures & BTEC CLOB</i>

A second, additional UST CLOB, co-located with our Futures markets in Aurora, to unlock efficiencies in Cash-Futures trading.

- Products tailored for granular spread trading
- Compliments our existing Secaucus CLOB, which remains positioned for large outright risk transfer in US Treasuries

Reduced Slippage

Matching engine co-located with Futures in Aurora, creating a lower latency experience when spreading cash vs futures

Precise Hedging

Futures-aligned notional sizes to reduce tails in spread strategies

Inside Pricing

Tighter price increments at 1/16th of a 32nd

Shared Connectivity

Leverages existing BTec APIs & CMEG connectivity in the listed derivatives data center

Alignment with our existing Secaucus CLOB

- **Trading Hour:** Matching current BrokerTec UST CLOB
- **Match Engine Algo:** FIFO
- **Order Types:** Matching the current BrokerTec UST CLOB
- **Clearing Models Supported:** CAT2, FICC Netting Member, FICC Agent, FICC S1-Prime Broker
- **Market Integrity Controls:** Aligned with UST CLOB: Limits & Price Bands, Cancel-on-Disconnect, In-Flight Mitigations, Self Matching Protection

Key Differentiators

- **Smaller MPIS:** 1/16th of 1/32nd across all tenors
- **Minimum notional size:** \$100k / \$200k (aligned with futures)
- **Co-location with Futures Markets in Aurora**

Designed for Seamless Integration and Connectivity

Area	Description
Onboarding	No additional KYC or documentation for existing BrokerTec clients.
Entity	Existing signatures to trade on BrokerTec Chicago (GFID, GUS, API Sessions)
Connectivity	<ul style="list-style-type: none">• Clients with listed derivatives connectivity can access BrokerTec Chicago with existing cross-connects.• Clients with BrokerTec Secaucus connectivity can access BrokerTec Chicago with additional configurations*
Market Data Order Entry STP Client Reporting	<p>Leverages the existing BrokerTec US Treasury Actives APIs & Feeds</p> <ul style="list-style-type: none">• New Market Data Channels (504 and 505)• New Market Segment (48)• Integrates into existing EOD Reporting

*CME network and client-side configurations.

Significant Positive Momentum ahead of Launch

- Launch Date: **October 6th**
- Committed and enthusiastic customer base;
 - Investment Banks;
 - Citigroup
 - J.P. Morgan
 - Morgan Stanley
 - Market-makers committed to providing liquidity from day one
 - Large number of market-takers completed the connectivity process

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