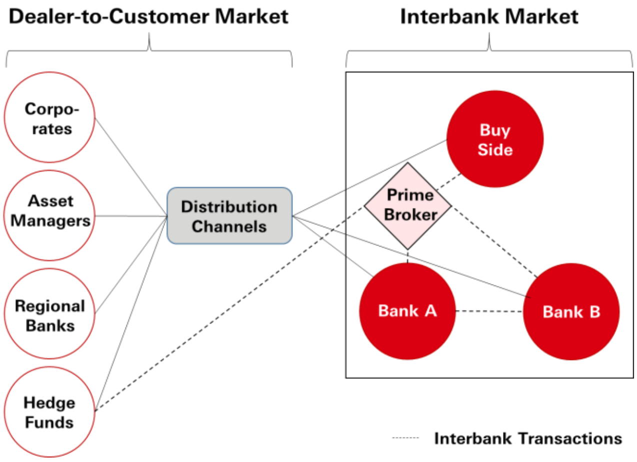
eFX "Explainers" Client Connectivity

The eFX "Explainers" series sheds light on how the electronic FX market operates. This issue focuses on the various ways our clients trade FX with their Liquidity Provider (LP) of choice.

How is the FX Market structured?

- Contrary to popular belief, the majority of FX trading volume is not transacted on the **Interbank Market**.
- The Interbank Market is dominated by large **Banks** and prominent **Buy Side** entities (Hedge Funds) who deal with each other via Primary (EBS, Refinitiv, **Explainer #1**), Secondary (Hotspot, Fastmatch,.., **Explainer #2**) and Alternative Venues (**Explainer #3**). The Interbank Market is mainly populated by FX Market Makers (**Dealers**).
- Outside of this community most other market participants (Corporates, Asset Managers, Regional Banks, Hedge Funds) trade on a **Dealer-to-Customer** (DTC) basis which makes up the largest part of the FX volume.

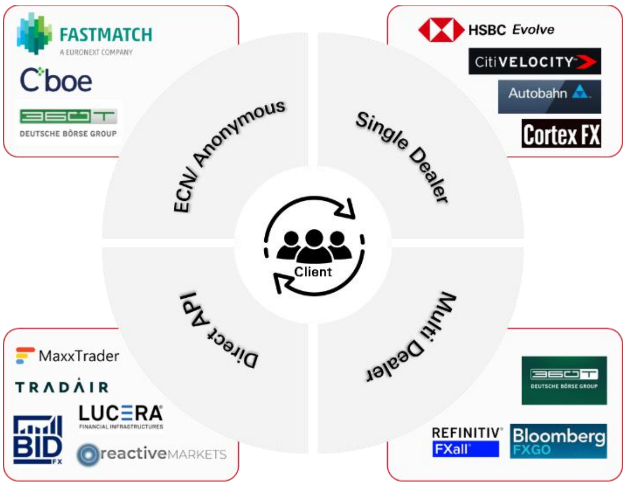


Why do clients seldom trade on the Interbank Market?

- In principle, there are few regulatory barriers to stop any client from setting up trading on the Interbank Market. However, 60% of global daily Spot volume, as well as 67% of outright volume is dealt outside of the Interbank Market (BIS Quarterly Dec 2022).
- What are the barriers?
  - **Cost of Entry** - including assignment of credit to each trading counterparty (as settlement is mostly direct), upkeep of system connectivity and market data subscription costs.
  - **Cost of Liquidity** – given Dealers aim to internalise much of the flow they receive (> 80% for the largest banks), the excess volume that gets traded on the Interbank Market (externalised) carries the sharpest flow profile, leading to wider prices than would be available in the DTC market.

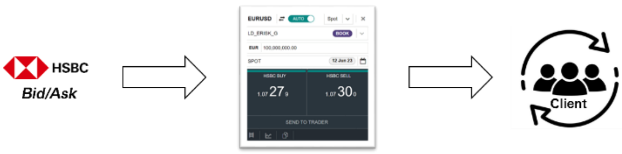
How do clients trade FX?

- We can break down the options into four categories, each with their own advantages and disadvantages, varying complexity of integration and quality of pricing received:
  - **Single Dealer Platforms**
  - **Multi Dealer Platforms**
  - **Direct APIs**
  - **Anonymous ECNs**



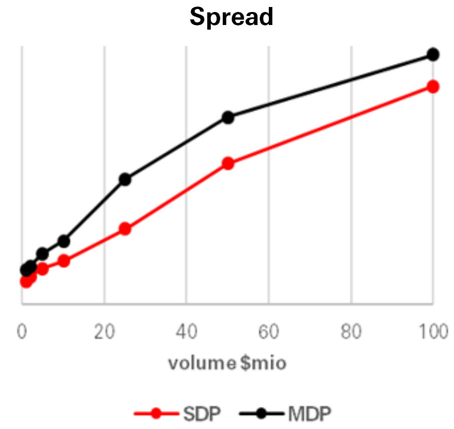
Single Dealer Platforms (SDPs)

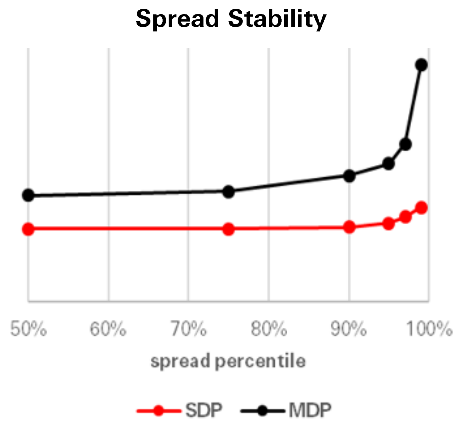
- SDPs provide a simplified, centralized method for clients to view and trade FX offered by a **single** Dealer (mainly Banks).



- SDPs offer a range of benefits for both clients and Dealers due to the more benign flow decay profile a Dealer experiences via this channel. The following reasons make SDP flow superior:
  - **Information Leakage**: As customers trade directly with their SDP Dealer the transaction stays invisible to the market. This is unlike trading on Multi Dealer Platforms where multiple dealers are made aware. This can lead to excess market impact for the winning LP and ultimately wider spreads for the client.
  - **Asymmetric Selection** ("Winner's Curse"): By definition a trade that has been won in competition means that the winning Dealer had the best bid/offer among all other Dealers that priced the trade. In other words, the winning Dealer is positioned for the most correction as the trade was won at a level that no other Dealer wanted to win the trade at. In order to monetize the flow, the Dealer needs to not only have the most competitive price but also not suffer from mispricing the market liquidity or direction.

- For these reasons HSBC welcomes flow over our Single Dealer Platform **Evolve** and customers benefit from our **tightest and most stable spreads** (see below comparison for spread and spread stability. We can see that a) SDP spreads are tighter b) at 90th percentile SDP spread is +2.7% wider against the median, while the equivalent for MDP is +18.5% wider.

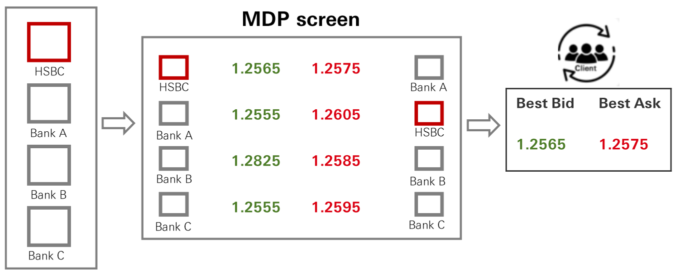




- Additionally, SDPs provide access to unique and proprietary FX solutions like Algorithmic Execution, Order Management Services, Post Trade Reconciliation Services, Index Trading, Order Blackouts etc.

Multi Dealer Platforms (MDPs)

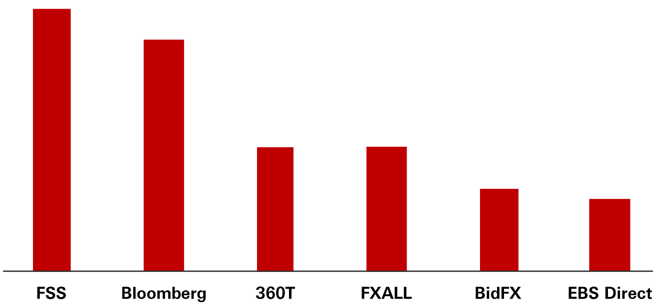
- MDPs, also known as multi-bank platforms, aggregate liquidity from **multiple** Dealers allowing clients to receive pricing in competition.



- The MDP landscape saw a wave of consolidation in the last decade with a handful of platforms now dominating the market (see volume breakdown[1]). Each differentiating itself by the GUI (user interface) they provide to their clients and often finding avid popularity with certain client segments (e.g. Corporates on FXALL).

Multi Dealer Platform – volume breakdown

1 HSBC estimate



Many reasons drive clients to use MDPs such as **regulatory obligation** (e.g. MiFID) to verify best price at the time of trading. In reality, wider pricing by dealers on MDPs to account for Information Leakage and Asymmetric Selection, could mean clients actually end up trading on a wider price despite asking multiple Dealers (i.e. trading over SDP would have achieved tighter spread).

- Another factor that impacts spreads on MDPs is the **brokerage** arrangement the Dealer has with each platform. Thus, spreads could reflect this cost, even for the same client trading over different platforms. In general, platforms with lower/no brokerage will see tighter spreads.
- However, a key benefit of trading via MDPs, in particular for regional bank clients is the utilization of the **"White-Label"** functionality. This functionality enables a client to take the price of a Tier 1 bank, add a margin either side and then show this price to their own end clients. The trade then gets booked back-to-back to the Tier 1 bank while the regional bank captures the margin.
- For HSBC's eFX Desk, MDPs are an important channel to service clients. We are present on all major MDPs, dominating rankings across currency pairs and products.

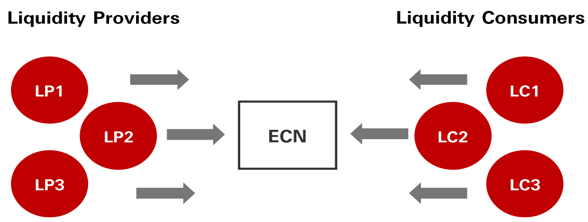
Direct APIs

- Direct APIs are direct connections between a client and Dealer, **without any intermediary**.

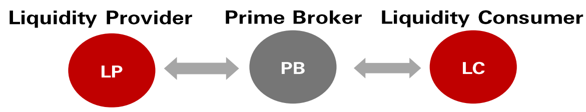
- This type of connection, with its ability to code directly to algo, is frequently used by the most **sophisticated set of clients** (Banks and Hedge Funds).
- Given the sophisticated nature and type of business conducted (e.g. HFT strategies), Direct API flow generally does not receive the tightest spreads. However, this **highly customizable solution** offers multiple benefits:
  - Latency and cost reduction allows to run lean systematic trading strategies
  - Ability to build highly automated bespoke workflows
- Direct API connections rely on the **FIX protocol**, an industry standard communication with highly flexible properties.
- Given latency reduction is at the forefront of the Direct API setup, it becomes essential to pick a close proximity location (co-location center), the subject of which will be covered in the upcoming **eFX "Explainer"**.
- HSBC is present in all major FX **colo centres**: **LD4**, **TY3**, **NY4** and **SG1**, and continues to invest in cutting edge technology, facilitating trading in an ultra-low latency environment.

Anonymous ECNs

- An ECN (Electronic Communications Network) facilitates trades in the FX market by bringing together multiple LPs and Liquidity Consumers.
- An ECN **does not trade directly with its participants** but facilitates trades between them.

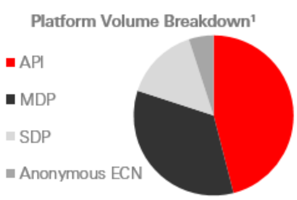


- In the case of an anonymous ECN, trades are **intermediated by a Prime Broker**.



- So why do clients trade via Anonymous ECNs?
  - The main benefit is that this type of distribution enables participants that otherwise do not have a **credit relationship** to trade.
  - Another reason may be to achieve anonymity, say an Asset Manager that wants to execute a large order but does not want their LPs to know their **exact** identity.
- While anonymity is provided by this means of distribution, in reality the client is **tagged** (unique identifier supplied by the platform) and thus the Dealer is able to monitor tag activity. The Dealer is therefore able to guard against poor behavior, customise spread and derive alpha from the flow.
- Additionally, the lack of direct identification between client and Dealer makes it impossible to nurture the relationship or resolve trade disputes effectively.
- While HSBC is also, in limited scope, active in providing liquidity via anonymous channels, we believe that clients are better served by **close, long-lasting and direct relationships**.

Venue Summary



Spread	Spread Stability	Latency Optimisation	Dealer Cost	Ease of Integration
Best	High	Yes	Zero	Easy
Medium	Medium	No	High	Moderate
Medium	Low	Yes	Low	Difficult
Widest	Low	No	Medium	Moderate

1 HSBC estimate

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