

Transitioning & Optimising FX Trading

Executive Summary

- Uncleared margin rules (UMR), together with pressures on dealer balance sheets and a continued focus on best execution, are driving a material revisit of the FX marketplace.
- Legacy market structure resulted in many hedge funds and proprietary trading firms intermediating their trades against an FX Prime Broker (FXPB), whilst asset managers often remained on a purely bilateral basis against each of their liquidity providers. The direct and indirect impact of regulation such as UMR means that all of these client types may need to transition and optimize at least a portion of their FX trading behaviour in order to mitigate or avoid increased costs on their businesses.
- This summary document outlines the main factors driving clients to consider transitioning their FX trading, along with some of the potential alternatives available in the FX market. We encourage clients to engage with us further to analyze and understand specific solutions for their businesses.

Key Features

Liquidity & Best Execution

- OTC clearing and futures enables access to more liquidity providers.
- Trading on a regulated CLOB helps demonstrate price discovery and best execution.

Ease of Allocations and Operational Consistency

- Use of OTC clearing and futures can enable clients to more easily trade one block and allocate across all of their funds.
- Use of futures also enables clients to utilize average pricing functionality.
- All 26 CME CSFs ('G10 NDFs') use the WMR 4pm London rate for the fixing. This centralizes and standardizes the fixing process.
- Cleared FXO auto-exercise against the 10am NY WMR rate helping to remove manual processing and PIN risk.

Initial Margin

- OTC cleared and exchange traded derivatives are not included within the average aggregate notional amount (AANA) calculation when ascertaining the direct impact of UMR. Migrating to OTC clearing or futures may remove clients from the direct impact of UMR.
- Using cleared products also enables potential IM efficiencies to be achieved. For example:
 - FX options are included in the bilateral Initial Margin calculation, but typical delta hedge instruments

(physically settled FX FWDs) are not. This can, therefore, generate bilateral IM requirements. Clearing FXO can optimize the IM via both netting and model benefits, and the delta hedge can be cleared alongside the FXO within CME in order to further optimize the IM requirement.

- FX Link enables customers to consolidate their spot and FX Futures positions in order to optimize their IM requirements.

Constraints on Trading

- Using OTC clearing and futures can help clients manage limits on deliverable FX, mitigate counterparty risk and free up bilateral credit lines.
- OTC cleared cash-settled forwards and cash-settled options can provide unique solutions to obtain FX exposures without needing to pay or prepare for physical settlement at expiry.

Optimization of FXPB

- Use of OTC clearing and futures can be more capital efficient for dealers than bilateral trades while also delivering similar netting and access to liquidity benefits for clients.
- Centralizing trades versus a CCP helps optimize dealer capital and allows the use of CME compression tools such as blending.

What are the Challenges and Considerations for Different Styles of FX Trading?

Current Trading Approach	Challenges & Considerations
G10 FX FWDs / Swaps	<p>Deliverable FWDs are currently included in the AANA calculation to determine impact of UMR</p> <p>Some entities have limits / constraints on amount of deliverable FX exposure they can hold</p> <p>Broken dates are hard to compress so remain open until expiry / being rolled, which consumes dealer balance sheet</p>
Non-Deliverable Forwards (NDFs)	<p>NDFs are included in the AANA calculation to determine impact of UMR, and are also included in the IM calculation under ISDA SIMM</p> <p>Broken dates are hard to compress so remain open until expiry / being rolled, which consumes dealer balance sheet</p>
Bilateral G10 NDFs	Fixing risk against each dealer counterpart
FX Options	<p>FX options are included in the AANA calculation to determine the impact of UMR. They are also included in the ISDA SIMM IM calculation</p> <p>Have to manually manage expiries by calling dealers</p> <p>PIN risk / uncertainty around strikes close to ATM</p> <p>The typical delta hedge is a deliverable FX FWD which isn't included in the ISDA SIMM calculation, and as such the ISDA IM for FXO can be very large</p>
FX Futures and Bilateral FX Spot	Bifurcated positions mean IM posted to CME for the futures and IM posted to a Prime Broker for the spot activity

CME Group Tools

The transition of existing trades in to either OTC clearing (backload) or to futures (EFRP) can remove the gross notional of those trades from the AANA calculation

The compression of legacy (existing) trades can reduce the gross notional included in the AANA calculation

Using OTC cleared trades or futures for new risk can remove the gross notional of those trades from the AANA calculation

Included* in the AANA Calculation

- FX Options
- Swaptions
- Hedging Trades
- NDFs
- FX FWDs

Not Included in the AANA Calculation

- Centrally Cleared OTC Swaps
- Exchange Traded Derivatives (Listed Futures & Options)

* List is not exclusive

Average Aggregate Notional Amount (AANA) Calculation in the US

AANA is calculated by summing up the notional amount of all in-scope OTC derivatives on the last business day of each month in the observation period

Phase	Observation Period	AANA Threshold	IM Compliance Date
4	March, April & May 2019	>USD 750bn	Sept 1, 2019
5	June, July & August 2019	>USD 8bn	Sept 1, 2020

FX Trading & Clearing at CME Group



Broadest Product Offering

Trading: 100 FX futures & options contracts

Clearing: 11 NDF pairs, 26 cash-settled forwards (CSFs), and 7 pairs of cash-settled FX options



Portfolio Margining Opportunities

CME has regulatory approval to support the portfolio margining of FX futures versus OTC cleared FX. Potential savings of up to 85% for NDF futures vs. NDFs



Growing Volumes

Trading: \$100bn average daily volume

Clearing: Over \$22.6 billion notional and 2,500 trades cleared across 23 currency pairs since September 2018



Connectivity

CME is connected to leading affirmation platforms including MarkitWire, Traiana, and Bloomberg VCON, along with optimization providers triBalance and Quantile



Dealer Support

Trading: 6 liquidity providers have traded CME cleared OTC FX trades

Clearing: 3 FCMs are actively clearing OTC FX trades for their clients and 4 more FCMs are onboarding for readiness in 2019



Clearing Fees

OTC FX is free for all clients for whole of 2019 to encourage early adoption

Portfolio Margining analysis conducted in Q1 2018. All other figures accurate as of 1 May 2019.

To discuss FX solutions for your business, please contact a member of our team:

EMEA

Phil Hermon

phil.hermon@cmegroup.com

+44 20 3379 3983

Stephanie Hicks

stephanie.hicks@cmegroup.com

+44 20 3379 3867

North America

Deepa Josyula

deepa.josyula@cmegroup.com

+1 212 299 2368

Jenna Goldberg

jenna.goldberg@cmegroup.com

+1 212 299 2138

APAC

Shawn Creighton

shawn.creighton@cmegroup.com

+61 2 8051 3211



cmegroup.com

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade.

CME Group, the Globe Logo, CME, Globex, E-Mini, CME Direct, CME DataMine and Chicago Mercantile Exchange are trademarks of Chicago Mercantile Exchange Inc. CBOT is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. All other trademarks are the property of their respective owners.

The information within this communication has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this communication are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and superseded by official CME, CBOT, NYMEX and COMEX rules. Current rules should be consulted in all cases concerning contract specifications.