



# **FX Algo Strategies**



Strategy	Objective	Description	In-Flight Amendments	Features
EAGLE	Seek liquidity at or better than a specified limit price	Aggressive liquidity taking algorithm that will aggregate and sweep the order book using IOC slices to hide interest. Time to execute is the driving criteria. Limit price is required.	Allowed	<ul> <li>Does not post interest</li> <li>Limit of two venues per sweep to reduce impact</li> </ul>
FALCON	Seek liquidity opportunistically, while posting passively to capture spread	Volume opportunistic algorithm intended for urgent execution and larger sizes to source liquidity. Posts passively, while taking liquidity if depth exceeds a maximum threshold. It adapts to real time trading volume in the market based on aggressiveness. Limit price is not required, but recommended.	Allowed	<ul> <li>Low (30% participation),</li> <li>Medium (60%), High (90%)</li> <li>Stop Loss Threshold</li> </ul>
XTX ALGO	An implementation shortfall execution algorithm that seeks to reduce overall slippage to arrival price	XTX is one the largest market makers in the world by volume and its cross-asset pricing alpha (ability to successfully forecast short-term price movements) helps reduce adverse selection when trading, consistently achieving fill prices better than mid-price on public FX markets when trading billions of two sided volume.	Allowed, but cannot amend strategy	<ul> <li>Low, Medium, High</li> <li>Limit and Urgent Limit</li> <li>Default: Medium</li> </ul>
OWL	Target a certain percentage of volume participation	Trajectory based algorithm that uses historical volume curves to calculate the end time based on the participation rate. It will distribute orders over the trajectory to minimise impact. As market moves in your favor relative to the arrival price, the algo will trade more aggressively.	Allowed	'I Would Price' and 'I Would Quantity %'
TWAP	Minimise slippage against the Time Weighted Average Price for a fixed trading period	Trajectory based algorithm that works orders over a given time horizon by spreading the trades along a linear distribution. Price sensitivity allows the algo to diverge from the schedule to speed up or slow down the execution.	Allowed, but cannot amend strategy for crosses	<ul> <li>Price Sensitivity: Low</li> <li>(25% speed up), Medium</li> <li>(50%), High (100%)</li> <li>'I Would Price' and 'I</li> <li>Would Quantity %'</li> </ul>
SWAN	Capture spread by pegging in line with the market	Passive liquidity providing algorithm. It will dynamically re-peg based on the market and aggression level. It targets a certain percent of the trade activity for executing order passively and by not crossing the spread. It aims for the lowest market impact and the highest level of anonymity. High aggression can post at mid.	Allowed, but cannot amend strategy for crosses	<ul><li>Low, Medium, High</li><li>'I Would Price' and 'I Would Quantity %'</li></ul>

ASIA

: +852 2826 7844 EMEA : +44 (0) 20 7214 6000 America: +1 212 261 3676

# **Currency List**

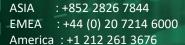


✓ CACIB FX Algorithmic strategies are available in the currency pairs detailed below

<b>G10</b>	Direct	EURUSD GBPUSD USDCAD NZDUSD EURCHF EURNOK USDJPY USDCHF AUDUSD EURGBP EURDKK EURSEK  AUDCAD* AUDNZD CADNOK* CHFSEK EURCAD* GBPCHF GBPSEK NZDDKK USDDKK
	Crosses	AUDCHF AUDSEK CADSEK* DKKJPY EURJPY GBPDKK NOKJPY NZDJPY USDNOK AUDDKK CADCHF* CHFDKK DKKNOK EURNZD GBPJPY NOKSEK NZDNOK USDSEK AUDJPY CADDKK* CHFJPY DKKSEK GBPAUD GBPNZD NZDCAD* NZDSEK AUDNOK CADJPY* CHFNOK EURAUD GBPCAD* GBPNOK NZDCHF SEKJPY
	Direct	USDCNH USDMXN USDRUB USDTHB USDZAR EURHUF USDHKD USDILS USDSGD USDTRY EURCZK EURPLN
EM	Crosses	AUDCNH CADTHB* CHFTHB DKKHUF GBPCZK HKDMXN NOKTHB PLNSEK SGDHKD TRYSEK* AUDHKD CADTRY* CHFTRY* DKKZAR GBPHKD HKDRUB NOKZAR RUBJPY SGDJPY TRYSGD* AUDMXN CADZAR* CHFZAR EURCNH GBPHUF HKDSEK NZDHKD RUBTHB SGDMXN TRYTHB* AUDRUB CHFCNH CNHHKD EURHKD GBPILS HKDTHB NZDMXN SEKCNH SGDRUB TRYZAR* AUDSGD CHFCZK CNHJPY EURILS GBPMXN HUFJPY NZDSGD SEKCZK SGDSEK USDCZK AUDTHB CHFHKD CNHRUB EURMXN GBPPLN MXNJPY NZDTHB SEKHUF SGDTHB USDHUF AUDTRY* CHFHUF CNHTHB EURRUB GBPRUB NOKCNH NZDTRY* SEKMXN TRYCNH* USDPLN AUDZAR CHFILS CNHZAR EURSGD GBPSGD NOKCZK NZDZAR SEKRUB TRYHKD* USDRON CADCNH* CHFMXN CZKJPY EURTHB GBPTHB NOKHKD PLNCZK SEKTHB TRYJPY* ZARJPY CADHKD* CHFPLN DKKCNH EURTRY* GBPTRY* NOKHUF PLNHUF SEKZAR TRYMXN* ZARMXN CADMXN* CHFRUB DKKCZK EURZAR GBPZAR NOKMXN PLNJPY SGDCNH TRYNOK* ZARRUB CADSGD* CHFSGD DKKHKD GBPCNH HKDJPY NOKRUB PLNNOK SGDDKK TRYRUB* ZARTHB

<sup>\*</sup> Currency pair not supported for SWAN algo

<sup>\*</sup>Highlighted is currency pairs that are currently available on XTX Algo





## **Liquidity Providers & Platforms**



### **FIRM**

# Exchanges

- EBS
- Reuters Matching
- LMAX

## FIRM & NON-FIRM

# ECNs

- CBOE
- GTX
- FastMatch
- FXAII
- Currenex FX
- ParFX

#### **NON-FIRM**

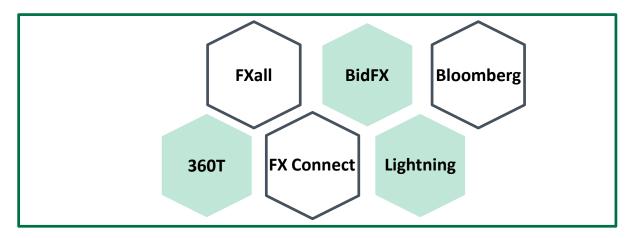
## **Market Makers**



- XTX Markets
- Citadel
- Jump Trading
- JetStream Internal
- Non-disclosed Banks

## Liquidity customisations available upon request

# **Execution Platforms**



ASIA : +852 2826 7844 EMEA : +44 (0) 20 7214 6000 America : +1 212 261 3676



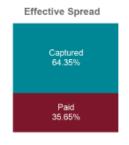
## **Post Trade TCA**

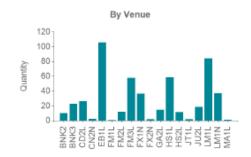


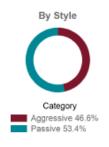
Executed	
Gross Spot Rate	1.123402
Net Spot Rate	1.123368
Value Date	2020-06-29
Order Quantity	500,000,000.00
Filled Amount	500,000,000.00

Benchmark*	Rate	Slippage Rate	Slippage Base
Risk Transfer Price	1.12255	0.00085	337,551
Arrival Price	1.12345	-0.00005	(19,017)
Start Mid	1.12340	0.00000	792
Twap Mid	1.12342	-0.00002	(7,024)
Weighted Risk Transfer Price	1.12329	0.00011	44,938

#### **Execution Analysis**







Trade Type	Quantity (USD)	Exchange	Price	Saving (EUR)
Passive	1,123,550.00	EBS:Firm	1.12355	45
Aggressive	1,123,580.00	Cboe:Firm	1.12358	27
Aggressive	337,071.00	Bank 3:Non Firm	1.12357	5
Aggressive	337,074.00	Bank 3:Non Firm	1.12358	8
Passive	1,123,450.00	LMAX:Firm	1.12345	45
Aggressive	1,123,260.00	Hotspot Jump:Non Firm	1.12326	53

- Performance benchmarks:
  - Risk Transfer price
  - Arrival Mid
  - TWAP
  - Weighted Risk Transfer Price
- ✓ Full Transparency on fees
- ✓ Shows how effectively spread is captured
- ✓ Breakdown of child order executions
- ✓ Venue analysis
- Available immediately post trade
- ✓ Distribution to BestX available



ASIA : +852 2826 7844 EMEA : +44 (0) 20 7214 6000

America: +1 212 261 3676

## **Disclaimer**



© 2021 CRÉDIT AGRICOLE CORPORATE AND INVESTMENT BANK, all rights reserved.

The information presented in this document (this "Presentation") has been prepared by Crédit Agricole Corporate and Investment Bank or one of its affiliates (together with their respective directors, officers or employees, "CACIB"). It has been provided to you for your information on a strictly confidential basis, solely for your use and it may not be reproduced or distributed without the written permission of CACIB.

#### No Offer:

Nothing contained in this Presentation should be construed as an offer or the solicitation of an offer (i) for services or products, or (ii) to enter into any contract or transaction.

#### Non-Reliance on CACIB:

CACIB does not act as a fiduciary or advisor to any recipient of this Presentation. Nothing contained in this Presentation should be considered as a recommendation to enter into any transaction or contract. CACIB is under no obligation to amend or update the information in this Presentation.

CACIB makes no representation as to the suitability of any service, product, transaction or contract or the tax, legal, regulatory or accounting treatment of any transaction or contract that may be described in this Presentation. You should ensure that prior to entering into a service, product, transaction or contract you have: (i) fully investigated, analysed and understood the potential risks, rewards and implications of the transaction or contract; and (ii) determined that it is suitable in the context of your investment objectives and circumstances. Accordingly, you should consult such financial, tax, accounting, legal, regulatory and other professional advisors as you consider appropriate before entering into any transaction or contract. This presentation has no effect on any contract entered into by you or CACIB.

#### Limitation of Liability:

CACIB makes no representation or warranty and gives no assurance, whether express or implied, as to (i) the accuracy, timeliness, completeness or fitness for any particular purpose of any information contained in this Presentation; or (ii) the accuracy, completeness or reasonableness of any assumption, forecast, scenario analysis or financial model related information contained in this Presentation. Under no circumstances shall CACIB have any liability whatsoever to any person or entity for any resulting loss or damage or other circumstances within or outside the control of CACIB.

While it is expected on average that Spread Capture and Expected Execution Time for the chosen algo strategy will follow the relationship shown in the chart there is no guarantee this will be the case.

When using the XTX Algo, you do so as a client of CACIB and all transactions will be entered into with CACIB. You will not be a client of XTX or be required to sign any documentation with XTX. You will be, however, required to sign a consent letter with CACIB in order to use the XTX algo service. CACIB notes that there must be a valid client consent to allow for the transfer of client confidential information to XTX to the extent necessary for XTX to provide the algo services.

#### Regulatory Status:

Crédit Agricole CIB is authorised and regulated by the Autorité de Contrôle Prudentiel et de Résolution (the "ACPR") and supervised by the European Central Bank (the "ECB"), the ACPR and the Autorité des Marchés Financiers (the "AMF") in France. Crédit Agricole CIB London is deemed authorised by the Prudential Regulation Authority ("PRA") and subject to regulation by the Financial Conduct Authority ("FCA") and limited regulation by the PRA. Details about the extent of our regulation by the FCA and the PRA are available from Crédit Agricole CIB London on request and details of the temporary permissions regime, which allows EEA based firms to operate in the UK for a limited period while seeking full authorisation, are available on the PRA's website.

CRÉDIT AGRICOLE CORPORATE AND INVESTMENT BANK is incorporated in France with limited liability and registered in England & Wales. Registered number: FC008194. Branch No. BR 1975. Registered office: Broadwalk House, 5 Appold Street, London, EC2A 2DA.

ASIA : +852 2826 7844 EMEA : +44 (0) 20 7214 6000 America : +1 212 261 3676

