

## FX alternative data

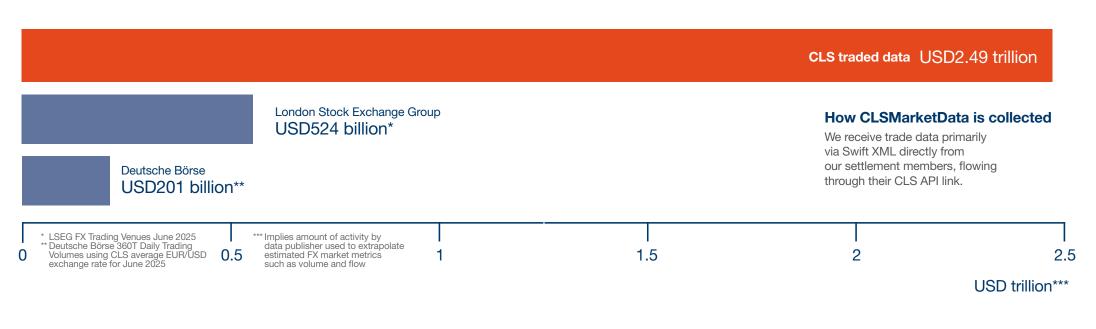
We speak in volumes You achieve greater insight

CLSMarketData

As the largest single source of FX executed data available to the market, our datasets include data based on over 3 billion trades executed since 2011.

We leverage the power of this information to help market participants understand market dynamics and improve decision making.

Average daily volume by source June 2025



## Data quality recognition:

Foreign Exchange Volume by Giovanni Cespa, Antonio Gargano, Steven Riddiough and Lucio Sarno, 2022. Review of Financial Studies. 2.15<sup>+</sup>
USD trillion
average daily traded
volume in 2024

 $\underset{\text{major currency pairs}}{40}$ 

18 of the most traded currencies globally<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Australian dollar, Canadian dollar, Danish krone, euro, Hong Kong dollar, Hungarian forint, Israeli shekel, Japanese yen, Korean won, Mexican peso, New Zealand dollar, Norwegian krone, Singapore dollar, South African rand, Swedish krona, Swiss franc, UK pound sterling and US dollar.

# CLSMarketData can add value throughout the buy-side community.

	Seeking alpha*  • Assess current trading models  • Use data to enhance execution models	Trade execution  Optimizing execution models  Better understand market conditions	Risk management  • Additional insights into risk management • Better understand your risk	Transaction cost analysis  • Enhance existing trade cost analysis  • Better estimate and track FX cost	
FX Volume	Develop uncorrelated models	Optimize and time your trading	Measure liquidity risk Measure volatility better	Measure market impact	
FX Flow FX Outstanding	Calibrate models effectively Quickly identify shifts in market trends	Fine tune trading strategies	Manage risk with insights into market behaviour	Improve best execution monitoring Reduce transaction costs	
S FX Pricing		Optimize VWAP / TWAP execution models		Benchmark against VWAP / TWAP	
	<ul><li>Quantitative analysts</li><li>Heads of research</li><li>Portfolio managers</li></ul>	Execution traders	<ul><li>Risk managers</li><li>Portfolio managers</li></ul>	Performance analysts	

<sup>\*</sup> The data sets described here do not constitute investment or financial advice. Past performance is no guarantee of future results.

# CLSMarketData can add value throughout the sell-side community.

	Business development*	Sales tools	Trade execution	Risk and compliance	
	Enhance client and market share analysis	Access comprehensive independent data to support sales activity	<ul> <li>Optimize execution models</li> <li>Enhance intraday visibility of market activity across FX instruments</li> </ul>	Enhance reporting and monitoring	
FX Volume	Measure regional market share activity to identify gaps and opportunities	Provide an independent view of traded activity by tenor	Add volume depth to trading analysis and build a comprehensive view of volumes by tenor	Identify abnormal activity Measure liquidity risk	
FX Flow FX Outstanding	Identify synergies and areas for growth Enhance visibility across forwards and swaps	Provides independent market colour on traded flow by sector Provide holistic view of net traded flows	Provides informed volume depth by sector	Augment volatility and risk modelling	
> FX Pricing		Benchmark execution by providing independent VWAP/ TWAP rates	Reference market traded VWAP/TWAP rates	Identify abnormal pricing activity using market traded average rates	
	<ul><li>Heads of FX trading and sales</li><li>Client development</li></ul>	• FX and eFX sales	<ul><li>Spot and eFX traders</li><li>STIR traders</li><li>Quantitative analysts</li></ul>	<ul><li>Risk managers</li><li>Compliance officers</li><li>Risk analysts</li></ul>	

\* The data sets described here do not constitute investment or financial advice. Past performance is no guarantee of future results.

## FX Volume

Quality, executed trade volume data to enhance your trading models, support post-trade analysis and reporting and strengthen investment and research analysis.

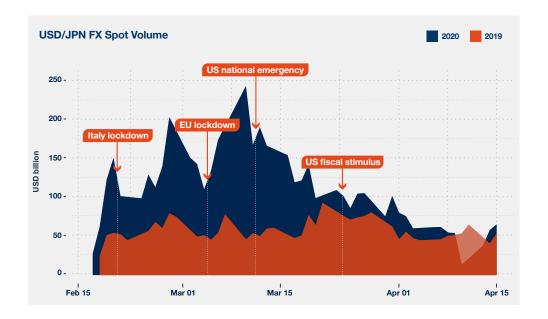
#### **Data highlight**

FX Volume provides intraday hourly or daily executed FX spot trade volume data in 40 currency pairs. Trade volumes are aggregated by currency pairs, region, trade size, number of trades and total value in USD equivalent.

Executed FX outright swaps and forwards volume data with detailed tenors and tranches can be delivered hourly and end-of-day to help meet your requirements.

#### **Benefits**

- Improve your understanding of the changing nature of global currency markets and trading performance by researching historical trends.
- Strengthen your liquidity strategies and support trend analysis over different tenors.
- Enhance your trading models and strategies and support post-trade analysis and reporting by incorporating liquidity at each tenor.
- Evaluate performance, achieve greater. insight into market dynamics and support your business and trading models by developing new forwards and swaps market analytics.
- Reduce trading risk quickly and accurately by analyzing trends over time.



## FX Pricing

Volume and time-weighted executed trade spot pricing data provides a comprehensive view of market activity to help improve your analysis of pricing trends, measure the quality of your business decisions and enhance data-driven trading algorithms.

#### **Data highlight**

Price data values are created using market standard VWAP/TWAP conventions and broken down by five-minute intervals, updated hourly and daily.

#### **Benefits**

- Improve capital and operational efficiencies through daily pricing trend analysis.
- Enhance your trading algorithms and minimize market impact.
- Strengthen financial and risk control around valuations and mark-to-market assessments.
- Drive a better outcome for best execution and transaction cost analysis.

66

Volume helps predict next day currency returns and is economically valuable for currency investors.



Foreign Exchange Volume by Giovanni Cespa Antonio Gargano, Steven Riddiough and Lucio Sarno, 2022 Review of Financial Studies

## FX Flow

FX flow data helps inform your directional trading strategy by enabling you to track the flow and volume of market participants to detect and/or generate trading signals.

#### **Data highlight**

Provides data illustrating aggregate flow between certain counterparty types: market makers and price takers; non-bank financial institutions and banks; funds and banks; and corporates and banks. The data includes built-in parameters to capture volume purchased and sold, as well as number of trades executed across the market. Data is predominantly updated daily and aggregated in hourly intervals but is also available in a dynamic delivery window every ten minutes.\*

#### **Benefits**

- Achieve an improved understanding of trading flows by calibrating your trading models more effectively and structure your positions according to likely increases in flow.
- Manage your risk and liquidity through in-depth insight into market participant behaviors to incorporate liquidity at each tenor.
- Improve accuracy of trading rules and strategies with enhanced transparency of the forward-looking net positions across various market participant segments.

## **FX Outstanding**

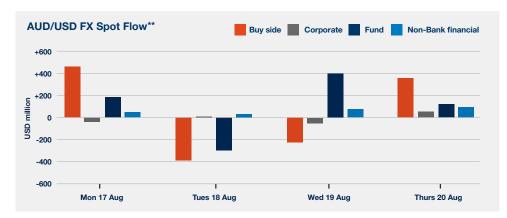
FX outstanding data offers insights into forward-looking net positions by capturing outstanding forward and swap trades across market participants to provide insights into market dynamics.

#### **Data highlight**

This end-of-day report provides daily insights into outstanding forward and swaps positions across the FX market. Offering further transparency across short and long term tenors by market participant type including corporate, fund, non-bank financial institutions and bank segments.

#### **Benefits**

- Enhance your visibility of market activity and trading flows across short- and long-term forward and swap tenors.
- Augment volatility modelling of asset and derivative prices for greater market transparency.
- Improve accuracy of trading rules and strategies with enhanced transparency of the forward-looking net positions across various market participant segments.



<sup>\*</sup> The average delivery can be between 15-30 mins and slightly longer delays can occur.

Our data history aids analysis to predict future events, supports market research and helps in understanding past evolution patterns.

CLSMarketData products	Daily Daily	Hourly Daily	5-Minute Daily	Hourly Hourly	5-Minute Hourly	Dynamic 5-Minute
(Earliest available)						
FX Spot Volume	31 Oct 2011	31 Oct 2011	31 Oct 2011	03 Jul 2017	27 Feb 2019	-
FX Forward Swap Volume	31 Oct 2011	31 Oct 2011	_	30 Sep 2021	-	-
FX Spot Flow	03 Sep 2012	03 Sep 2012	03 Sep 2012	27 Oct 2017	_	10 Jul 2022
FX Forward Swap Flow	03 Sep 2012	03 Sep 2012	_	30 Sep 2021	_	_
FX Spot Pricing	-	-	01 Sep 2015	-	22 Aug 2017	-
FX Forward Swap Outstanding	03 Sep 2012	-	-	_	_	-

### Methodology

The underlying data is adjusted to follow the reporting convention used by the Bank for International Settlements (BIS) and the local semi-annual foreign exchange committee market reports. These surveys only report the bought currency values, or one leg of the trade, to avoid double counting the total amount of trades.

### Accessing CLSMarketData

CLSMarketData is available via a REST API or downloadable in .csv format from the CLS Direct portal.

<sup>\*\*</sup> The data used in the above chart is for illustrative purposes only.



Access to over 50% of global FX volumes



Aggregated executed trade data for 18 currencies across 40 currency pairs



Available for subscription via open data delivery platform

