



DEUTSCHE BÖRSE
GROUP

Stay on top of things
High-quality analytics for better
trading decisions

Market Data + Services



Table of contents

- 3** Table of contents
- 4** Bond Liquidity Data
- 5** Geographical Holdings Report
- 6** HHI Insights
- 7** Xetra Flow Insights
- 8** Eurex® Flow Insights
- 9** Eurex Open Interest Insights
- 10** Eurex Cleared Flow Insights
- 11** A7 Analytics Plattfrom
- 12** Xetra Auction Simulator on A7 Analytics Platform
- 13** High Precision Timestamps (HPT)
- 14** Options powered by Canari.dev
- 15** BMLL Daily Classified Trades – Europe
- 16** BMLL Classified Trades – US
- 17** Data Shop

Bond Liquidity Data

Post-trade data from Clearstream for an increased transparency of the Fixed Income market

- Clearstream's International Central Securities Depository (ICSD) is uniquely positioned at the end of the fixed income value chain, providing post trade data
- Bond Liquidity Data provides market insight on instrument liquidity and trading activity through a post-trade data set which is derived from Clearstream settlement instructions
- The product also includes post-trade information on Eurobonds and International Securities which are uniquely settled by Clearstream as one of the only hosts of settlement data in these markets
- The files contain an aggregated number of transactions, a transaction amount, the nominal volume as well as the average price per ISIN and denomination currency
- The compressed end of day csv file is distributed via our Data Shop (t+1)
- The subscription covers aggregated weekly, monthly, quarterly and annual files

Geographical Holdings Report

Insights on investor's location

- As a leading European CSD, Clearstream has unique visibility into security and transaction data for equities and debt
- The Clearstream Geographical Holdings Reports provide a breakdown of security holdings by ISIN, including key fields such as the investor's country, currency, maturity
- It supports participants in identifying the location of the investors who own securities
- The report components are: Date, ISIN, CFI Code, Issuing Currency, Maturity, Security Name, Operating Country of Account, Quantity Held and Value Held (in USD)
- The reporting scope includes only accounts at Clearstream
- The report is available on a single and multiple ISIN basis
- Delivered T+1 in csv format via API or Web GUI through Deutsche Börse's Data Shop

HHI Insights

Insights into market concentration

- The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration
- It helps market participants to assess the quality of available liquidity and to identify concentration risk
- The index captures the number of participants in the market and is expressed through an index value ranging from 0 to 1.
- Index values closer to 0 represent more equally distributed marketshares where marketshare is defined as fraction of the total traded volume executed by a trading participant.
- A value approaching 1 signals an extremely concentrated market with a few participants having a larger market share.
- HHI Insights does not just measure the number of participants, but also takes the respective volume into consideration for the ratio
- Along with an overall market concentration measure, HHI Insights also provides concentration indicators for several breakdowns, e.g. buy vs. sell, aggressive vs. passive
- Using Xetra® and Eurex® proprietary data, it offers unique insights into market concentration and the relative demand imbalance
- The analytics product gives our customers additional guidance when deciding whether to add a new market to their trading universe, set maximum position limits or when to adjust how aggressively they would like to enter and exit positions
- HHI Insights is available for both Eurex and Xetra instruments
- The history includes: Xetra: Back to 1 July 2017, Eurex: Back to 1 January 2014
- Xetra HHI Insights is calculated on an instrument level basis
- Eurex: HHI Insights is calculated on an expiry date basis (i.e. for options, all strikes for a specific maturity is computed as if it was only one instrument, put or call is also aggregated)
- The figures are calculated daily and delivered T+1

Xetra Flow Insights

Unique insights into Xetra market dynamics

- Flow is defined as the net traded volume (buy minus sell volume)
- Xetra Flow Insights provides flow breakdowns into aggressive, passive and auction activity for “agent”, “market maker” and “proprietary trader” market participants. This is further broken down by the side of trading activity, i.e. buy and sell
- The product offers more than 55 enhanced metrics in terms of number of executions, number of executed quantity and executed notional
- The customer group consists of trading flow executed on behalf of end customers, including DMA/Order Routing volumes
- Xetra Flow Insights can be used as momentum and market sentiment factor in systematic strategies
- The product covers more than 3000 Xetra instruments and provides ISIN level granularity
- All data is aggregated and delivered daily at T+1 in CSV format
- Xetra Flow Insights is available via the the Deutsche Börse Data Shop. It can be ordered separately for the two product classes Equity and ETP
- Sample files and free trials available on request

Eurex® Flow Insights

Understanding market sentiment and investor activity

- The data products Eurex Flow Insights Equity + Index and Eurex Flow Insights Fixed Income provide a daily analysis of order flow by market participant groups (agent, market maker and proprietary trader)
- Net traded flow (buy minus sell volume) is broken down by market participant groups and aggregated daily per instrument
- The flow analysis offers valuable insights into market sentiment and is available via the Deutsche Börse Data Shop
- The information allows clients to evaluate market positioning by participant group and identify market trends
- The data is provided at T+1 in CSV format at Deutsche Börse's Data Shop
- Sample files are available on request

Eurex Open Interest Insights

Key information by accessing the almost complete Eurex instrument universe

- Eurex Open Interest captures the net traded flow aggregated into market participants groups (agent, market maker, proprietary trader) similar to Eurex Flow Insights
- It provides an additional measure of Open Interest, giving insights into the distribution of exposure in the futures and options markets, offering key information regarding investor's risk appetites and convictions
- Open interest is broken down daily on an instrument level into long and short positions and market participant groups
- Options and futures strategies are decomposed and added to the outright positions
- The product universe includes all liquid Eurex products (approx. 350 products)
- History is available back to 2002 with previous stringent liquidity rules removed for expiries 2002–2018
- Historical expiries between 2002–2018 are further available for all Eurex instruments except Single Stock and FX Futures
- The product is available in two packages, Eurex Open Interest Insights - Equity + Index and Eurex Open Interest Insights – Fixed Income
- The data is provided at T+2 in CSV format at Deutsche Börse's Data Shop

Eurex Cleared Flow Insights

Unique lens into trading participants' derivative flow activities

- Eurex Cleared Flow Insights provides next-day analysis (T+1) of long and short positions for Eurex-listed Futures and Options, incorporating post-trade adjustments to help better understand investor risk appetites and identify emerging market trends
- It enhances market transparency, while allowing for more timely analysis and signal processing
- This product, like Eurex Open Interest Insights, offers aggregated data categorized by market participant groups such as agents, market makers, and proprietary traders
- The daily coverage encompasses an ever-expanding product scope of currently over 1.050 Eurex products
- Eurex Cleared Flow Insights provides more than 20 years of historical data, retrievable back to January 2002, while covering the full Eurex universe for instruments expiring between 2002-2021, excluding Single Stock Futures and FX
- T+1 delivery as a one-off order or on a subscription basis
- The Information Product is offered separately for Interest Rate and Equity + Index derivatives: Eurex Cleared Flow Insights Fixed Income file service and Eurex Cleared Flow Insights Equity + Index file service
- The data can be retrieved from the Deutsche Börse's Data Shop

A7 Analytics Plattform

Cloud based access to Eurex, Xetra, EEX and CME Group data for advanced analytics

- The cloud-based A7 Analytics online Platform offers the unique combination of Eurex, Xetra, EEX and CME Group data within an easy-to-use framework, providing insights into market situations and microstructures
- Based on most granular data, A7 gives you direct access to flexible analytics tools and lets you benefit from advance market insights to further enhance your trading and risk management capabilities
- It provides cost efficient and scalable solutions reducing the development cycles to focus on true value add
- A7 is a ready-to-use service which supports you in maximizing your trading efficiency, improving alpha generation, and developing and back-testing execution algorithms, among other use cases
- Users can quickly grasp market situations, easily drill down into the market microstructure, and adapt their own trading strategies accordingly
- A7 covers all Eurex, Xetra and EEX traded instruments
- The CME Group data includes all major asset classes from the Chicago Board of Trade (CBOT), the Chicago Mercantile Exchange (CME), the Commodity Exchange (COMEX) and the New York Mercantile Exchange (NYMEX) with history back to 2017
- Eurex and Xetra data is available as of April 2019 and intraday, EEX data is available as of November 2020 and intraday
- The CME Group data is available on a T+1 basis
- Access to A7 via a browser based frontend, the data can be retrieved via API

Xetra Auction Simulator on A7 Analytics Platform

Modeling the market impact of large orders in auctions

- The Xetra Auction Simulator allows the backtesting of strategies executed in auctions
- The tool, which is part of the Xetra intraday package, lets the market participants evaluate the scaling potential of strategies
- The Auction Simulator simulates opening, intraday, and closing auction outcome involving synthetic orders, based on the pre-uncross (dark) level 3 order books
- Simulation of market or limit orders and of different order submission times
- Simulation via GUI or API
- Xetra Auction Simulator includes DAX/MDAX/SDAX constituents and all scheduled auctions (opening, intraday, closing)
- History starts July 2017
- T+1 (DAX), T+3 (MDAX), T+5 (SDAX)
- Simulation of market or limit orders
- Simulation of different order submission times
- The Xetra Auction Simulator is available within the A7 Analytics Platform and included in the Xetra Intraday Package

High Precision Timestamps (HPT)

Unveiling market microstructure for Eurex® and Xetra®

- The High Precision Timestamp product suite offers valuable information on the flow of an order in the T7® trading architecture
- The timestamp is captured as an order arrives at the outer boundary of the exchange's network and acts as a measure to evaluate investment strategies
- The information allows clients to optimise their strategies and can be used for back-testing
- The information is available for all instruments traded on Eurex and Xetra
- The data is provided in CSV format for orders sent via Co-location 2.0 Service
- HPT files are available the next day (T+1) at Deutsche Börse Data Shop
- Sample files are available on request

Options powered by Canari.dev

Bringing the power of Machine Learning to option traders

- Canari.dev is a web-based platform aiming to bring the power of Machine Learning to option traders
- Canari uses Artificial Intelligence to track patterns in screen trades, cross underlying volatility spreads and term structure shapes among other use cases
- The data is derived from our A7 Analytics platform

We currently offer three different products in Deutsche Börse's Data Shop:

- Options and Greeks (Complete view of options' implied volatility to understand price dynamic)
- Option Trades and Imbalances (All trades on options and dividend futures including multileg strategies along with valuation information to find the aggressor)
- Option Forecasting Indicators (Product provides AI generated forecast indicators on implied and realised volatility)

BMLL Daily Classified Trades – Europe

Consistent view of daily traded volumes

- BMLL Technologies is the leading, independent provider of historical data and analytics
- As a historical data specialist, BMLL's data and analytics span global equities, ETFs and futures and options from more than 100 trading venues
- BMLL Classified Trades Europe enables market participants to quickly and easily identify the evolution of market dynamics by providing a normalised view of trading volumes across European equity markets
- It helps you identify trading opportunities by exploring the evolution of liquidity in response to market events (including index rebalancing, corporate events, regulatory changes, etc.)

Data Coverage

- Coverage across all major European equity venues (including all Primary Venues, MTFs and APAs on and off book trades (TES trades))
- All trade types across 22 trading mechanisms across European and UK execution venues
- Execution venue, classification name, daily traded volume, notional and trade count
- The dataset is available via the Deutsche Börse Data Shop

BMLL Classified Trades – US

Comprehensive insights into daily trading volumes

- BMLL Classified Trades – US gives a clear view of daily trading volumes across complex and fragmented markets.
- It maps trading volume data across every trade type across all execution venues and trading mechanisms into a single consistent dataset, including on- and off-exchange, lit and dark liquidity sources (including all FINRA-reported trades).
- Improve your execution performance by identifying where addressable and non-addressable liquidity resides.
- Enhance trading-related workflows by accessing a complete view of historical trading volumes (e.g. compliance, surveillance and data strategy)

Data Coverage

- Coverage across all US equity venues (incl. US SIP and FINRA data)
- Each instrument's daily traded volume, notional and counts are broken down and grouped by execution venue and classification name

BMLL Daily Classified Trades US is available via the Deutsche Börse Data Shop

Data Shop

Access to analytics and historical data derived from Deutsche Börse's trading venues

- Detailed and accurate historical data from Deutsche Börse's trading venues Eurex, Xetra and 360T
- The comprehensive analytics suite based on the proprietary data from Eurex and Xetra provides you with insights on market trends and sentiment and lets you adapt your trading strategies accordingly
- 24/7 access to 100 terabytes of Deutsche Börse Group data
- Purely file-based delivery platform
- High performance cloud-based infrastructure that scales from one to thousands of securities in seconds
- State of the art user-interface allows you to integrate the data into your business processes quickly and easily
- Flexibility in purchasing historical data – choose between payment by credit card or via bank transfer
- Fast and user-friendly online process
- Simplified processes - no contract signing required
- One common user pool for the Data Shop and the A7 Analytics Platform
- Choose between one-off purchases or subscription based data delivery

Contact information

Email: analytics@deutsche-boerse.com

Websites: www.mds.deutsche-boerse.com

<https://a7.deutsche-boerse.com/>

historical-datashop.deutsche-boerse.com

Published by

Market Data + Services
Deutsche Börse Group
60485 Frankfurt/Main
Germany

February 2025

© Deutsche Börse

Deutsche Börse AG is a public company registered under German law. All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed on the next page) are owned by Deutsche Börse AG including, without limitation, all patent, registered design, copyright, trademark and service mark rights. This publication is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for use as general information.

Trademarks

A7[®], DAX[®], Eurex[®] and Xetra[®] are registered trademarks of Deutsche Börse AG