

REFINITIV[®] DATASTREAM[®]

The world's most comprehensive financial historical database

Refinitiv[®] Datastream[®] is an industry-leading analytical data source that enables detailed exploration of relationships between data series. Perform correlation and relationship analysis, test investment and trading ideas, and research countries, regions and industries – with time series available from the 1900s onwards.

Datastream is an agile platform that offers the user increased access points and data availability:

- Refinitiv[®] Eikon and Workspace – for powerful charting, integrated with Microsoft Office
- Refinitiv[®] Datastream[®] Web Service (DSWS) – accessed via our dedicated API, Python or R. Fully integrated with EViews and MATLAB
- Custom FTP service – for bulk downloads

Datastream's powerful analytical functions and charts work across all our data sets – all integrated with Microsoft Office.

Global macroeconomics

Get the complete picture on virtually any macro environment, and better understand economic cycles to uncover trends and forecast market conditions.

Economists, strategists and research communities use our 12 million economic time series every day. Our history extends as far back as the 1900s for G7 countries, the 1970s for other major markets and the 1980s for smaller countries.

View economic profiles of 162 countries from national primary sources. These include government agencies (central statistical offices and ministries), central banks, and public and private institutions that compile indicators of renown. Coverage also includes series from all major economic news releases and other important publications and national databases.

Access comparable data covering 175 countries from international organizations for a worldwide perspective. Historical macro content is available from the International Monetary Fund (IMF), the World Bank and the Organization for Economic Co-operation and Development (OECD). Historical micro content comes from a number of well-established industry sources. Forecast and poll series are supplied by leading authorities including the Economist

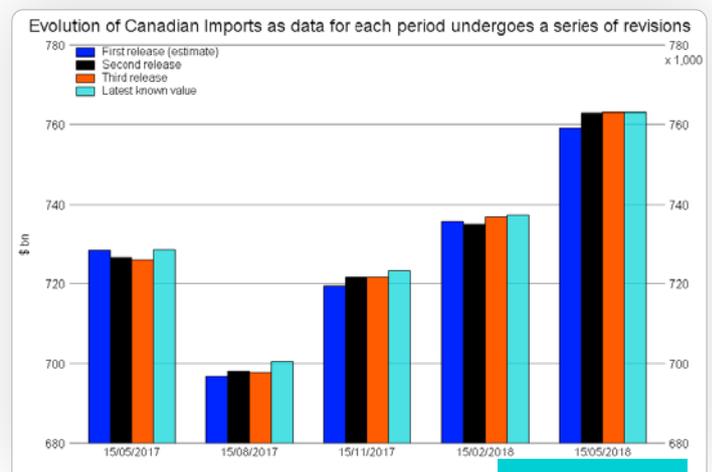
Intelligence Unit, Oxford Economics, Consensus Economics, the World Bank and the OECD.

Pinpoint data accurately

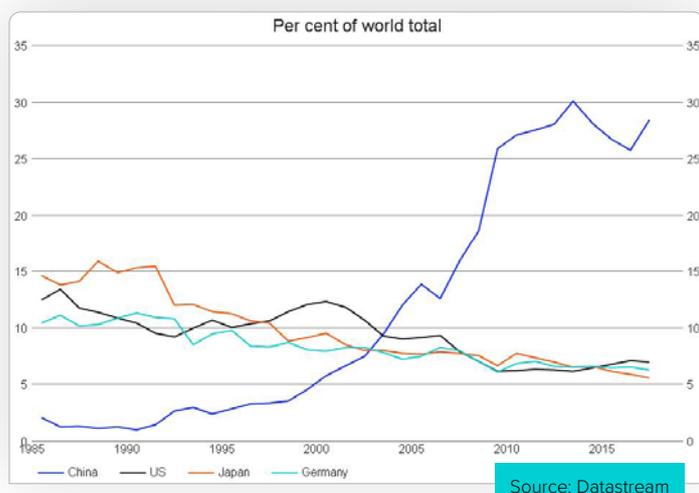
Our economics point in time tool enables you to view economic data as it was reported on release, giving you a strategic view of how the reported figures changed over time. This supports historical analysis and backtesting, offering far greater insight into the success rate of any given investment strategy.

Refinitiv economics point in time offers the highest data quality and brings greater precision to your analysis. With a value accuracy rate of 99.85%, it regularly exceeds our rigorous targets for both headline and component economic series. Headlines are updated two to three minutes after their release time for time series data.

ECONOMICS POINT IN TIME DATA



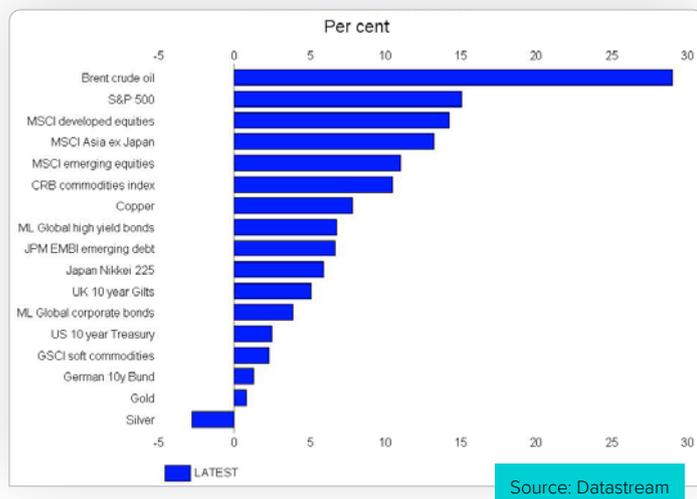
IMPORTS OF ORES AND METALS



Content sets and sizes unique to Datastream

Datastream has an unmatched database, with 39 million individual instruments across all major asset classes. Harness the power of our time series with market-leading presentation charting tools that let you succinctly display highly complex arguments. Our interactive, intuitive charting interface contains a comprehensive set of analytical tools for slicing, correlation and technical/performance analysis. To further cement the strength of our charting solutions we have partnered with Fathom Consulting to offer an array of unique content sets like the Sovereign Fragility Index and the Financial Vulnerability Indicator. Datastream allows users to investigate a huge array of Business & Governance Indicators for a macro view of ESG style content.

ASSET RETURNS IN 2019



Equities – stock market

Access historical data for more than 107,000 active equities, covering 100 developed and emerging markets. View over 3,000 fields, including price, volume, market capitalization, earnings, dividends and corporate action data. For many markets there is full coverage of all traded equity instruments, with over 50 years of history for the key developed markets. Data is sourced directly from exchanges.

International Comparable Economics

Datastream has its own proprietary comparable macroeconomic series. This data set provides standardized versions of more than 50 key indicators for up to 140 countries and regions, so you can easily compare different economies. Originally published by national sources, the data is adjusted to equivalent statistical form and released on the day of the relevant event.

Company fundamentals – broker estimates and aggregates

Company fundamental data and financial ratios are available for all developed markets and key emerging markets. Access 8,000 data items, with coverage of over 50,000 active quoted companies and over 35,000 inactive companies across 125 markets.

Available only through Datastream, get estimate content from more than 900 contributing firms, sourced from Refinitiv® I/B/E/S®. Access over 200 measures including earnings, profits, sales, price targets and industry KPIs, covering more than 22,000 active and 40,000 inactive companies worldwide.

This data can provide pivotal analysis at an aggregate level of country, index, sector and industry performance. It can highlight areas with expected growth, help identify associated risk and be a transparent indicator of relative valuation. It dates back to 1976 for the U.S., 1985 for Canada and 1987 for EMEA and Asia, offering unrivaled history.

Bonds

Datastream offers wide coverage of government and corporate bonds, warrants and convertibles, including global international and domestic issues in most major currencies. In total, over 502,000 active bonds and convertibles and 12.1 million matured or called bonds across 72 markets are available. For each bond there are up to 200 terms and conditions items, as well as full historical evaluated and composite bid/mid/ask prices.

Commodities

Explore more than 140,000 commodity series, with coverage from 183 sources and exchanges including Goldman Sachs, AIG and CRB. Agricultural prices cover exotics and minors, fats, feeds, fruit, oils, oilseeds and soft commodities, plus extensive chemical series. Energy prices include coal, crude oil, spreads and stocks information, electricity, natural gas and oil products. Metals coverage comprises precious, base and minor metals, ferrous and non-ferrous metals, oxides and steel. Other commodities content includes environmental prices, fibers, forestry products, diamonds and semiconductors.

Futures and options

Datastream provides extensive coverage of end-of-day historical futures. Users have access to all available pricing and trading data for both active and inactive futures. In addition, 34,000 continuous series determined with six methods of calculation exist for various term structures.

Access the most global liquid exchange-traded options, covering 28 countries with over 3,400 live options contracts. Options continuous series provide an uninterrupted view of activity, with up to six different types of implied volatility datatypes including at-the-money and constant maturities.

Benchmarking and indices

Datastream has had a number of marked firsts within the industry and was a pioneer when it came to calculating indices' relative data on a daily basis.

Thanks to our vast coverage of constituents across the major asset classes, users can construct benchmarks tailored to their respective strategies. This means a fund's relative performance can be tracked more accurately.

Across equity, we cover the main indices and their constituents in MSCI, FTSE, Russell, S&P, Dow Jones and STOXX. This includes extensive coverage of market indices for 68 countries and emerging markets.

Within fixed income, our market-leading functionality allows us to break down indices and their related constituents. Access extensive coverage of more than 80,000 live international and domestic bond indices from over 25 domestic markets, plus bond index content from the top five bond index providers: FTSE, Markit, JPMorgan, Bloomberg and ICE BofAML. More than 200 downloadable datatypes exist for third-party bond indices, with common price index, return index and redemption yield data.

Mutual funds and investment trusts

Datastream offers extensive global coverage of historical end-of-day fund data, with over 30 years of history and a range of measures including net asset value, dividends and performance metrics, plus supporting and operating data such as classifications, identifiers and legal entity – all sourced directly from Refinitiv® Lipper®.

Our comprehensive daily coverage of global markets allows you to view estimated net flows and pricing on a daily, weekly or monthly basis. The database provides extensive historical published net asset value data.

Fund indices

Over 700 indices sourced from Refinitiv® Lipper® are available for benchmarking, allowing you to analyze an individual fund's performance against corresponding indices. These include Lipper U.S. Indices, Global Classification Indices and Lipper Investment Association Indices.

Interest and exchange rates

Interest rate coverage is updated daily. A broad range of money market instruments in various currencies are included, such as treasury bills and bonds, ICE LIBOR and other benchmark interbank rates, certificates of deposit, repo rates and central bank policy rates. Swap series from ICAP include swap options, caps, floors, spreads over treasuries and zero curves.

Exchange rate coverage includes more than 11,000 daily rates for 179 currencies – all against USD and many against GBP, EUR and other major currencies. Data is sourced from central and other national banks.

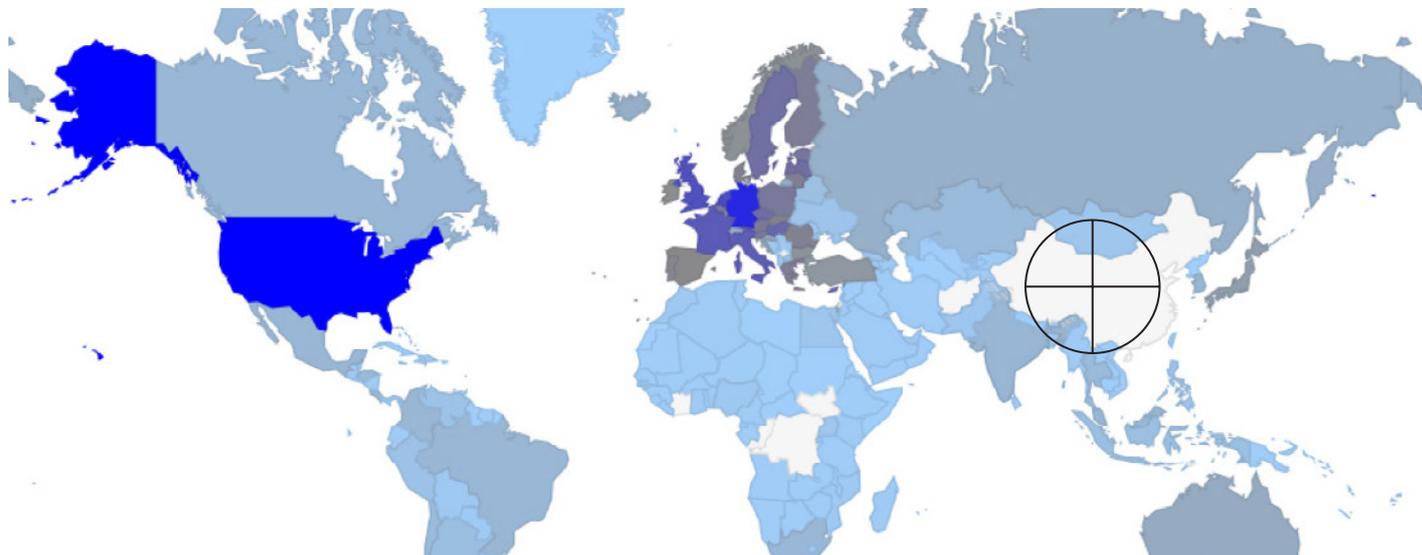
ESG (environmental, social and governance)

Refinitiv offers in-depth coverage of more than 7,500 global companies across 64 countries, with over 400 metrics and history dating back to 2002. We also provide data going back 14 years on over 1.8 million officers and directors for more than 80,000 public companies, and over 1.1 million officers and directors for 135,000 private companies.

Our coverage

| | ACTIVE | INACTIVE |
|------------------------|-----------------|------------------|
| Bond indices | Over 60,000 | Over 6,300 |
| Bonds and convertibles | Over 630,000 | Over 2.2 million |
| Commodities | Over 110,000 | Over 40,000 |
| Constituent lists | Over 273,000 | Over 17,000 |
| Credit default swaps | Over 112,000 | Over 8,000 |
| Economics | Over 11 million | Over 3.2 million |
| Equities | Over 114,000 | Over 182,000 |
| Equity indices | Over 284,000 | Over 68,000 |
| ESG | Over 8,300 | Over 1,500 |
| Exchange rates | Over 11,000 | Over 1,500 |
| Funds | Over 372,000 | Over 296,000 |
| Interest rates | Over 24,000 | Over 5,000 |
| Investment trusts | Over 665 | Over 2,400 |
| Options | Over 2 million | Over 13 million |
| Warrants | Over 700,000 | Over 3.1 million |

Economics global coverage – China enhancement*



* 350,000 new series available from 120 Chinese data sources, mainly in-country sources and major international databases (including Belt and Road indicators). Covers over 400 cities, with more than 200 indicators.

Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in approximately 190 countries. It provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community – driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime.

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DATA IS JUST
THE BEGINNING[®] 