THOMSON REUTERS DATASTREAM

UNRIVALLED, HISTORIAL FINANCIAL DATA

Thomson Reuters Datastream is designed for the strategist, economist and research communities, offering the world's most comprehensive financial historical database with time series content available from the 1950s.

It enables you to explore relationships between data series, perform correlation and relationship analysis, test investment and trading ideas, research countries, regions and industries.

With this vast database you can get a full picture of the macro environment and better understand economic cycles to uncover trends and forecast market conditions. The Datastream database has over 29 million individual instruments or indicators across all major asset classes. When paired with 18,000 data fields it creates a mammoth 350 million time series.

INTERNATIONAL MACROECONOMICS

Over 6.3 million active indicators are available providing headline and nationally sourced indicators for 118 markets and another 130 with comparable data from international agencies. Our history can extend as far back as the 1950s for G7, 1970s for other major markets, and 1980s for smaller countries.

Primary sourced series are from central banks, national statistical offices, ministries of finance and trade, research organizations, and trade associations. Detailed European statistics are collected from Eurostat for EA and EU members, the European Central Bank and European Commission. The IMF and OECD data provides global coverage of financial and external sectors, as well as macro indicators. Forecast data for developing and industrial economies is available from the renowned sources of the EIU and Consensus Economics, as well as OECD and the IMF.

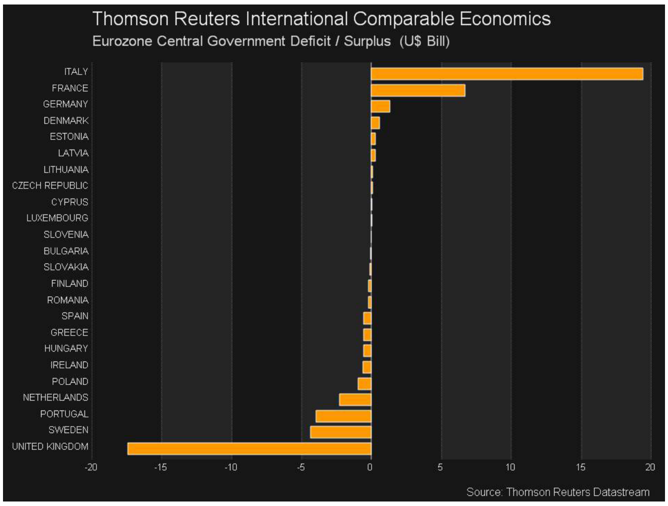
Short term expectations for key economic variables, as collected from national consumer and business surveys are also available. We also have exclusive rights for advance release of global purchasing managers' indices from Markit and business climate indices from OeKB.

VIEW ECONOMIC DATA AS IT WAS ORIGINALLY REPORTED

Our economics "point in time" data enables you to view economic data as it was originally reported upon release, then view how it changed over time. This information helps you more accurately understand the impact economic data has on the market, which supports your history analysis and back testing needs so that you can better understand how likely your investment strategy is to succeed. Over 1,800 economics point in time series from 10 years+ of history are included, for key G7 macroeconomic.

INTERNATIONAL COMPARABLE ECONOMICS

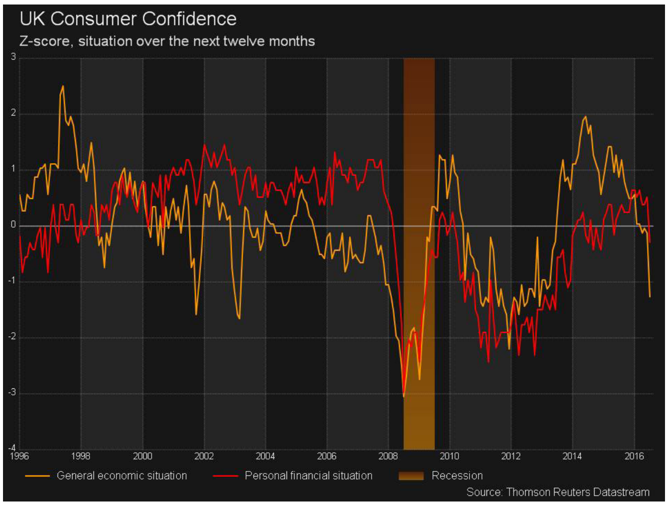
This proprietary data set provides standardized versions of 50 key indicators for up to 70 countries so you can more easily compare different economies in your research. Originally published by national sources, the data is adjusted to equivalent statistical form and released on the day of the relevant event.



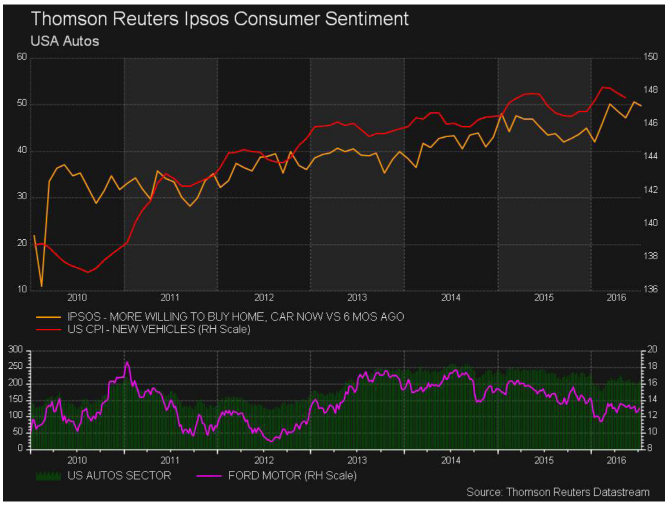
International Comparable Economics

EQUITIES

Historical data for over 98,000 active equities plus over 153,000 inactive equities covering 100 developed and emerging markets with over 200 fields including prices, volumes, market capitalization, earnings, dividend and corporate action data, plus classification data based on ICB. 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 direct from exchanges, leading international and local suppliers, and published reports.



Consumer Confidence



Consumer Sentiment

Equity Indices

Historical data for over 340,000 equity indices, which includes extensive coverage of market indices for 68 countries and emerging markets. Comprehensive equity index and constituent data is provided for the major index suppliers such as MSCI, FTSE Russell, S&P, Dow Jones and STOXX.

Historical constituent lists and weights data is provided for many developed and emerging market local indices. Global equity indices span over 30 years of daily index history and cover 55 markets, 32 regions and 170 sectors worldwide.

ESG (ENVIRONMENTAL, SOCIAL AND GOVERNANCE)

Thomson Reuters has in-depth coverage across 5,000+ global companies and over 400 metrics with history back to 2002. We also provide 14+ years of history on over 1.8 million officers and directors for over 80,000 public companies and over 1.1 million officers and directors for 135,000 private companies.

BROKER ESTIMATES

Consensus level estimates content is sourced from Thomson Reuters I/B/E/S Estimates and provides access to 30 measures, including earnings, profits, sales and price targets; covering more than 22,000 active and 40,000 inactive companies worldwide, from 920 contributors, across over 100 developed and emerging markets.

Our estimates data provides:

- Powerful aggregates for country, index, sector and industry level providing insight into areas with highest expected growth, associated risk and an indication of relative valuation.
- Extensive quality control, guaranteed consistency and proactive enhancements.
- Unrivalled history which dates back to 1976 for the US, 1985 for Canada, 1987 for EMEA and Asia.

Estimates Indices

Thomson Reuters I/B/E/S Global Aggregates provide a unique source of data for global investment applications, enabling key valuation comparisons across markets; includes earnings forecasts on over 15,000 indices, markets, regions, industries and sector levels.

FUNDAMENTALS

Company fundamental data and financial ratios are available for all developed markets and key emerging markets. Access 1,800 data items with coverage of over 47,000 active quoted companies and over 34,000 inactive companies across 118 markets.

FUNDS AND INVESTMENT TRUSTS

Thomson Reuters offers extensive global coverage of historical end of day funds data, with over 30 years of history and a range of measures including net asset value, dividends, performance measures and supporting data such as classifications and identifiers – all sourced directly from Thomson Reuters Lipper.

You can access daily estimated net asset values (NAVs) for UK sterling Investment Trusts. NAVs are estimated twice daily to capture real-time and closing market prices. Associated sector indices are also calculated daily. As well as current estimates, the database provides comprehensive historical published NAV data and historical estimates where published data is unavailable.

Fund Indices – Thomson Reuters Lipper

Over 700 indices sourced from Lipper are available for benchmarking. The Lipper indices include Lipper US indices, Global Classification indices, plus Lipper Investment Association indices; these indices complement the Lipper funds data already available on Datastream; they allow you to analyse an individual fund's performance against corresponding indices and may be used to describe the returns an investor could reasonably have expected in the past. The IA indices are equal weighted composites, based on fund constituent returns, net of fees and rebalanced at month-end.

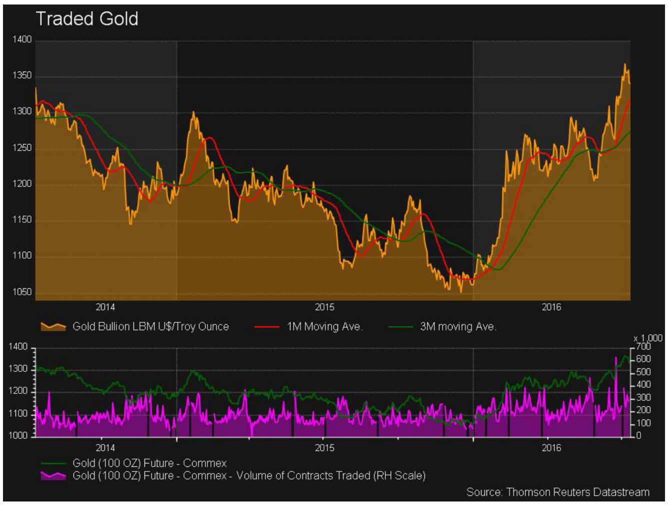
BONDS

Access a wide coverage of government and corporate bonds, warrants, convertibles, including global international and domestic issues in an increasing range of major currencies. In total, over 380,000 active bonds and convertibles and 170,000 active warrants across 66 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. You also have access to a unique database of over 1.1 million redeemed fixed income securities and 2.5 million warrants, significantly increasing the range of research you can perform.

Bond Indices

Access an extensive coverage of more than 70,000 live international and domestic bond indices that cover over 25 domestic markets, as well as supranational and comparative indices. Histories, in some cases, go back to 1969. Bond index content and the full suite of constituent data from the top five bond index providers: Citigroup, iBoxx, JPMorgan, Barclays and Merrill Lynch is available. More than 200 downloadable data types exist for third party bond indices with price index, return index and redemption yield data commonly available. Additional fields include duration, life, market value, optional adjusted spread, convexity to maturity, and daily return rates.



Commodity – Gold

COMMODITIES

More than 95,000 live spot prices, including Platts Dispatch and ICID Pricing pass through products. In total, over 115,000 series are available with coverage from 125 sources and exchanges including Goldman Sachs, SJ AIG and CRB.

- **Agricultural** prices covering exotics and minors, fats, feeds, fruit, oils, oilseeds, seeds and pulses, and soft commodities; extensive chemical prices covering aromatics, base oils inorganics, intermediates, olefins, plastics, solvents and fertilizers.
- **Energy** prices including coal, crude oil prices, spreads and stocks information, electricity, natural gas and oil products.
- **Metals** coverage includes precious, base and minor metals, ferrous and non-ferrous, oxides and steel. In addition other commodities content includes environmental prices, fibers, forestry products, diamonds and semiconductors.

Commodity Indices

Thomson Reuters Datastream provides an extensive suite of over 6,000 commodity indices from all major commodity index providers including Spot, Excess and Total Return indices. The main index families include Thomson Reuters Jefferies CRB, S&P GSCI, Dow Jones, Commodity Research Bureau, Rogers International, Economist and Deutsche Börse CX. History for some series start in the 1950s.

INTEREST AND EXCHANGE RATES

Interest rate coverage spans over 24,000 time series, updated daily, with history starting in the 1950s for some series. A broad range of money market instruments in various currencies are included, such as treasury bills and bonds; LIBOR and other interbank rates; certificates of deposits; 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 boasts more than 9,000 daily rates with history starting in 1957 for some for 179 currencies – all against USD and many against GBP, EUR and other major currencies and other major currencies. Data is sourced from central and other national banks, and global sources.

FUTURES AND OPTIONS

Thomson Reuters provides excellent futures coverage for end of day historical futures. Gain access to 80 regulated exchanges, over 2,300 futures contracts globally focused on key plain vanilla liquid contracts with history as far back as 1973. Users have access to all pricing and reference facts available for both active and dead futures, with prices, volume, open interest and other trading relating information plus static data such as tick sizes, expiry dates and tick values. In addition 12,800 continuous series calculated with six methods of calculations exist for various term structures.

Gain access to end of day quotes and histories. Datastream provides access to the most global liquid exchange traded options covering 28 countries with over 3,400 live options contracts. Long options histories go back to 2008 for many markets and several attributes start in 2000. Both active and dead options histories are available. Options continuous series exist to provide an uninterrupted view with up to six different types of implied volatility data types including at the money and constant maturities. In addition coverage is available for the main volatility indices and put call ratios. Volatility surfaces by delta and moneyness are available for all options contracts and histories back to 2008. Each options contract has put and call continuous series, each has ATM IVs with maturities of 30, 60, 90, 180, 360 and 720 days as well weighted by volume implied volatility, implied vol ATM interpolated and nearest ATM strike.

The options database covers 3,300 active contracts with over 1.2 million live series and over 12 million expired series available. Both trading derived data such as implied volatility and "Greeks" calculation with static information are available.

	Active	Inactive
Bond Indices	Over 70,000	Over 8,000
Bonds & Convertibles	Over 380,000	Over 1.1 million
Commodities	Over 95,000	Over 40,000
Constituent Lists	Over 255,000	Over 26,000
Credit Default Swaps	Over 76,000	Over 7,000
Economics	Over 6.3 million	Over 3 million
Equities	Over 98,000	Over 153,000
Equity Indices	Over 275,000	Over 65,000
Exchange Rates	Over 9,000	Over 1,500
Funds	Over 300,000	Over 180,000
Futures	Over 45,000	Over 260,000
Interest Rates	Over 18,000	Over 4,000
Investment Trusts	Over 700	Over 2,000
Options	Over 1.2 million	Over 12 million
Warrants	Over 190,000	Over 2.5 million

As of August 2016.

Visit Financial.tr.com/datastream

For more information, contact your representative or visit us online.