



CUT FEES AND REDUCE RISK WITH TTMZERO CONTENT FROM FIS MARKETMAP



Real-time Data Analytics for Better Investment Decisions

If you use FIS MarketMap for your market data and analytics operations, you know the value of being able to access high-quality information from over 180 global exchanges and over-the-counter (OTC) sources. FIS aggregates these reference and fundamental data, normalizes them into a single data model and delivers the data to you, to support valuation, risk management, portfolio analytics, reporting and investor information activities.

The solution works well, apart from computing accurate real-time pricing used to shape trading decisions in the face of investor accountability and regulatory scrutiny. Without the sophisticated algorithms and programming expertise to calculate these data points in real time, most trading houses are forced to purchase price feeds from market data providers who charge top dollar for their specialized information.

The more exchanges, financial instruments and asset classes you trade, the more data licenses you must maintain to justify your decisions – ultimately increasing your cost of doing business.

According to a recent Burton-Taylor International Consulting study, including detailed reviews of leading index providers such as S&P Dow Jones, MSCI, FTSE Russell and others, global index revenues topped \$2.7 billion in 2017, up 18.8 percent over the previous year, with asset-based fees leading the way at 23.1 percent for a record \$1.4 billion in revenues.

As these fees add up, industry-wide margins scale downward, making it very difficult to turn a profit, much less stay in business, depending on how large a book of business you happen to manage.

In response, FIS has partnered with TTMzero, an innovative technology and software solutions provider, to deliver independent, evaluated, real-time prices of financial instruments directly over the MarketMap platform. This capability allows for highly accurate evaluated real-time prices and risk indicators at dramatic cost savings.

By adding TTMzero's real-time data analytics solution as a complement to your MarketMap data services bundle, you suddenly gain the ability to use accurate risk indicators directly within the system. TTMzero's evaluated real-time prices are based on a large number of proprietary input-data sources and are supported by TTMzero's team of derivatives experts to ensure the accuracy and independence you need to control cost and risk, in compliance with global regulatory requirements.

FIS MARKETMAP - TTMZERO CONTENT FACTS & FIGURES

Evaluated real-time prices available for more than:

- 3,000 equities
 - 200 indices
 - 100 futures
 - 20 commodities
 - 200 FX pairs
 - 1.3 million bonds and structured products
 - 200 payoff types for OTC trades
- Real-time volatility surfaces for more than 500 underlying stocks.
 - More than 70 key figures and risk indicators for all common exchange-traded derivatives.
 - Pricing models contain quote data on financial instruments from more than 10 investment banks.
 - 95% of traded OTC volume covered.
 - Real-time data available from 8:00 a.m.-10:00 p.m. CET.
 - US daily market hours from 9:30 a.m.-4:00 p.m. ET.
 - Up to 10 updates per second per instrument.

Here's How It Works

Using the FIS API solution, you gain seamless access to the TTMzero content within your MarketMap platform. The platform provides both real-time and historical data time series.

The TTMzero real-time data analytics platform computes real-time pricing data for more than 1.3 million financial instruments, including liquid as well as complex and illiquid instruments, which do not have observable market prices. More than 300 payoff types for OTC instruments and structured products are covered. The underlying asset classes include equities, fixed income, credit, commodities, forex and inflation.

What's more, other complex computations and finance-mathematical evaluations may be performed using major market inputs to model:

- **Volatility Surfaces:** Based not only on observable market prices for exchange-traded options, but also on quotes for OTC options from the broker market. This results in a more realistic estimate for market consensus, compared to data based solely on prices for exchange-traded options. TTMzero volatility surfaces are available for more than 500 underlying stocks.
- **Expected Dividends:** Providing yield curves and forecasts for discrete dividend payments on more than 500 equities. Dividend forecasts are based on implied dividend values of a large number of OTC and exchange-traded derivatives.
- **Risk Indicators and Key Figures for Investment Products:** Data may be used to make informed investment decisions, assess risk and meet financial markets regulations, such as MiFID II. In all, TTMzero computes more than 70 Greeks and other key figures in real time.

KEY BENEFITS:

- **Simplicity in Data Licensing:** Proprietary data products licensed for public display and internal purposes. No further license agreements with third parties are needed.
- **Cost Savings:** Save more than 90% of costs compared to purchasing data from various sources.
- **Convenience:** Agile, highly scalable and simple-to-connect IT platform. Exchange of request and response files occurs via secure file transfer protocol (SFTP). Data can be retrieved via standard web services or streaming APIs, minimizing integration and connection efforts.
- **Accuracy:** Real-time data is highly reliable and accurate due to trained algorithms and an enhanced input data approach.
- **High Quality:** Guaranteed high data quality due to continuous review processes and thorough monitoring and documentation.
- **Flexibility:** Data may be used in multiple applications, such as internal risk management systems, mobile apps and public webpages.
- **Secure Service Delivery:** 99.9% uptime guaranteed.
- **Real-time and Historical Data:** Both real-time data feed and historical data time series provided.
- **Transparency:** Full documentation of evaluated real-time prices for less liquid instruments enables simplified change-tracking of valuation parameters over time across back- and middle-office functions.

A Versatile Solution across a Variety of Cases

Anyone who manufactures, sells, buys or deals in derivatives and structured products can benefit from TTMzero's accurate, independent, real-time pricing data. Here are just a few ways users can leverage TTMzero, within their MarketMap environment, to make better investment decisions and assess risk.

Valuation and Risk Management

Risk managers who engage in derivatives trading need to benchmark their estimates for volatilities and dividends to the expectations of market participants. Highly accurate data is based on proprietary input data sources from leading financial institutions worldwide and can confidently be used as market consensus.

Portfolio Analytics

To measure performance and risk for multiple portfolios and asset classes, accurate data is indispensable, especially when portfolios include complex and illiquid financial instruments, which often do not have observable market prices. Asset managers from major financial institutions rely on TTMzero's advanced data services to monitor portfolio exposure and assess risks. TTMzero also provides complete documentation of mark-to-model valuations for tracking changes in valuation parameters over time.

Regulatory Reporting – Market Conformity Check

According to MaRisk regulations, financial institutions must monitor their trading activities continuously and ensure that their transactions are in line with market conditions; this must be done by an independent pricing agent. The market conformity check offered by TTMzero is an independent and automated solution compliant with current statutory requirements. It determines fair value for each financial instrument at the time of trading and checks trade prices delivered from clients against qualified high-low spreads.

Validation of Mark-to-model Prices

The new FRTB regulation takes effect January 2022. Banks will then have to calculate capital requirements for market price risks according to one of two FRTB methods. The daily mark-to-market valuations will have to be reviewed independently. TTMzero, as an independent pricing agent, validates these mark-to-model valuations on a regular basis.

Investor Information

Manufacturers and distributors of investment products and derivatives are required to provide clear, transparent and non-misleading information to clients. Our enhanced data analytics platform provides independent, evaluated, real-time prices for more than 1.3 million instruments, which allows investors to make informed investment decisions.

MiFID Target Market Definition

Since January 2018, manufacturers and distributors of investment products must comply with new MiFID II regulations. For each investment product, a target market must be defined, which determines to whom the product can be sold. TTMzero's MiFID II engine computes the relevant risk indicators required for the target market definition for each product and monitors its compliance on a continuous basis.

Find Out More Now

Whether you are a manufacturer or distributor of investment products, risk controller, asset manager, insurance company, data vendor or online broker, FIS MarketMap - TTMzero pricing services for OTC derivatives and complex financial instruments provide the information and calculation tools you need to control cost, reduce risk and make accurate, timely investment decisions.

Cut your overhead while improving margins and maintaining compliance with FIS MarketMap - TTMzero Content. To learn more, contact FIS at www.fisglobal.com.



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About FIS

FIS is a global leader in technology, solutions and services for merchants, banks and capital markets that helps businesses and communities thrive by advancing commerce and the financial world. For over 50 years, FIS has continued to drive growth for clients around the world by creating tomorrow's technology, solutions and services to modernize today's businesses and customer experiences. By connecting merchants, banks and capital markets, we use our scale, apply our deep expertise and data-driven insights, innovate with purpose to solve for our clients' future, and deliver experiences that are more simple, seamless and secure to advance the way the world pays, banks and invests. Headquartered in Jacksonville, Florida, FIS employs about 55,000 people worldwide dedicated to helping our clients solve for the future. FIS is a Fortune 500® company and is a member of Standard & Poor's 500® Index. For more information about FIS, visit www.fisglobal.com

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