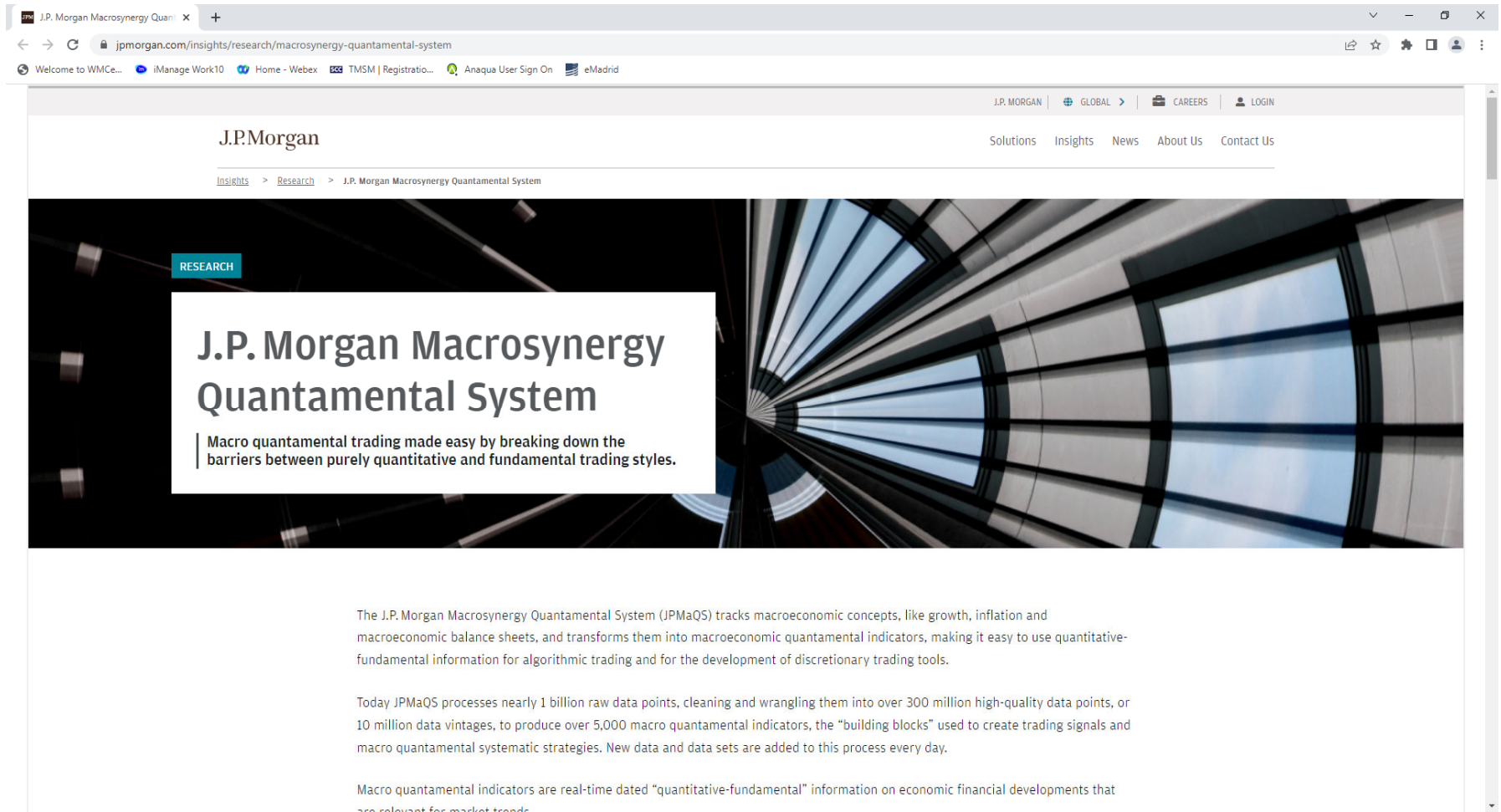


<https://www.jpmorgan.com/insights/research/macrosynergy-quantamental-system>



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RESEARCH

## J.P. Morgan Macrosynergy Quantamental System

Macro quantamental trading made easy by breaking down the barriers between purely quantitative and fundamental trading styles.

The J.P. Morgan Macrosynergy Quantamental System (JPMaQS) tracks macroeconomic concepts, like growth, inflation and macroeconomic balance sheets, and transforms them into macroeconomic quantamental indicators, making it easy to use quantitative-fundamental information for algorithmic trading and for the development of discretionary trading tools.

Today JPMaQS processes nearly 1 billion raw data points, cleaning and wrangling them into over 300 million high-quality data points, or 10 million data vintages, to produce over 5,000 macro quantamental indicators, the "building blocks" used to create trading signals and macro quantamental systematic strategies. New data and data sets are added to this process every day.

Macro quantamental indicators are real-time dated "quantitative-fundamental" information on economic financial developments that are relevant for market trends.

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Macro quantamental indicators are real-time dated “quantitative-fundamental” information on economic financial developments that are relevant for market trends.

Using macro quantamental indicators and strategies provides for an information advantage on macro factors across global fixed income, foreign exchange, equity, credit and commodity markets. It is also a major cost saver, compared to the alternative of building clean real-time macro data series for financial markets on an ad-hoc and single institution basis.

JPMaQS is a premium data offering and a commercial/paid data service - however the license fee is a fraction compared to the significant higher resources/costs necessary to source, clean and condense this type of data in-house. Information and documentation on JPMaQS is available on [J.P. Morgan Markets](#), and the macro quantamental indicators are available via [DataQuery API](#) (simple and fast authentication via OAuth).

## What is macro quantamental data? +

### Key Capabilities

Building strong quantamental indicators requires in-depth economic data knowledge, extensive data wrangling, logical rigor, econometrics/machine learning, careful documentation and consistency across countries.

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By translating fundamental data into a real-time measures of the market's information state, JPMaQS breaks down barriers between purely quantitative and fundamental trading styles.

JPMaQS adds complementary quantamental indicators to standard algorithmic trading features.

JPMaQS delivers four key services:



**Quick and easy access to tradeable data**



**Clear and concise explanations of the themes**



**Curation and common-sense oversight**



**Generic returns - as a service - for quick and easy backtesting**

## Data



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## Data

Quantamental indicators associate the measurement of an event with the time at which markets have access to it - and for as long as this measurement would be the latest relevant instance of information of its kind. This means values are associated with real-time dates, and quantamental indicators always represent information status.

For most types of information the real-time date principle implies that a quantamental indicator is based on a two-dimensional data set:



**The first dimension is the timeline of real-time dates**



**The second dimension is the timeline of observation dates**

Macro quantamental indicators are delivered in the right format for developing and backtesting trading strategies. The system provides clear and concise explanations of its indicators from the perspective of strategy builders.

## Themes

Trends are point-in-time indicators that capture actual fundamental developments. JPMaQS classifies macro quantamental indicators in six broad quantamental themes:



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Trends are point-in-time indicators that capture actual fundamental developments. JPMaQS classifies macro quantamental indicators in six broad quantamental themes:

 <b>Economic trends</b> Indicators of changes in economic conditions designed to capture actual fundamental development as opposed to data volatility.	 <b>Macroeconomic balance sheets</b> Indicators of the state of the economy in terms of stocks and valuations.	 <b>Financial conditions</b> Indicators that track the conditions of the broader financial system and its impact on the economy.
 <b>Shocks and risk measures</b>	 <b>Stylized trading factors</b>	 <b>Generic return</b>



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### Shocks and risk measures



### Stylized trading factors



### Generic return



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Indicators of changes in expectations, uncertainty and risk aversion.



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Stylized trading factors are generic indicators of basic trading strategy ideas based on macro quantamental indicators and, possibly, conventional trading factors.



### Generic return

Generic returns indicators are: Approximate daily profit and loss series of stylized derivatives positions in % of notional or risk capital. This includes returns on vol-targeted and hedged positions on all major asset classes.

How do macro quantamental indicators differ from standard economic data? +



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IDMaOS allows research analysts and portfolio managers to obtain the





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Quantamental indicators often have similar names as standard economic time series, even though their calculation and meaning are different. The main difference is that they measure market information status for any given day, not an ex-post (and often revised) actual state of the economy. Even where differences appear to be small, the distinction between a macro quantamental indicator and a standard economic time series can have a big impact on dynamic investment strategies, particularly during crises when exact real-time data can deviate drastically from simple approximations.

The JPMaQS data can be downloaded through DataQuery, either through its API or its User Interface on J.P. Morgan Markets.

[Access JPMaQS via J.P. Morgan Markets →](#)



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JPMaQS allows research analysts and portfolio managers to obtain the best possible information about the state of an economy at the time at which it was available. This means higher quality backtesting.

**Luis Oganés**  
Head of Global Macro Research  
J.P. Morgan



**An introduction to JPMaQS:  
a video with Ralph Sueppel and Luis Oganés**

