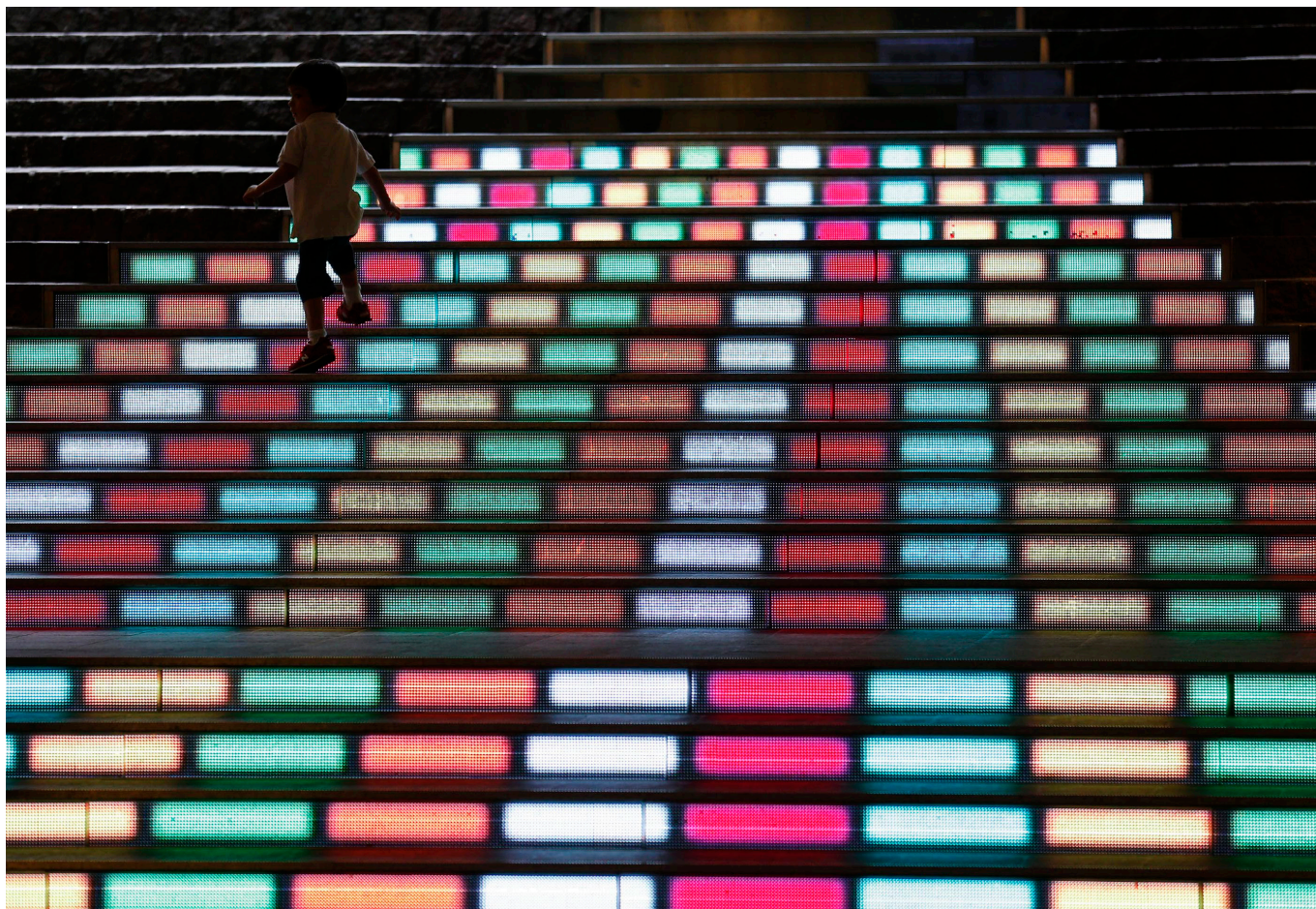


THOMSON REUTERS MARKETPSYCH INDICES



REUTERS/Kim Kyung-Hoon

Easy-to-interpret real-time analytics across news and social media

Where there are markets, there are emotions.

Where there are emotions, there are cycles.

Where you understand cycles, you profit.

Thomson Reuters MarketPsych Indices – Psychological insight. Market foresight.



THOMSON REUTERS™

Measuring the immeasurable

You can't measure the immeasurable –or can you?

Behavioral economists have discovered that investor perceptions affect markets in predictable ways. What if you could measure the state of market psychology in real time? You could see patterns as they emerge, not in hindsight. And you can. Thomson Reuters MarketPsych Indices scour the news and other media constantly. They analyze it and extract meaning. And they give it to you straight – in numbers you can use to drive profitable decisions.

THOMSON REUTERS MARKETPSYCH INDICES BY THE NUMBERS

Asset and Sentiment Coverage

- 7,500+ companies
- 130 countries
- 34 commodities
- 31 currencies
- 50+ unique indexes

Text Sources

- 40,000: Primary global news sources
- 7,000: Blogs, stock message boards and social media sites
- 1998 – present: Years of feed availability & historical archive

CONSTANT VIGILANCE, CLEAR SIGNALS	INFORMATION MOVES MARKETS
<p>Thomson Reuters MarketPsych Indices analyze news and social media in real-time. They convert the volume and variety of professional news and social media into manageable information flows that drive sharper decisions.</p> <p>The indices are delivered as real-time data series that can easily be incorporated into your analysis and decision processes – quantitative or qualitative.</p> <p>Three key types of indicator are provided:</p> <ul style="list-style-type: none"> • Emotional indicators such as Fear, Joy, and Trust • Fundamental perceptions including Earnings Expectations, Interest Rate Forecast, Long Short positioning and more • Buzz metrics that indicate how much market-moving topics – such as Litigation, Mergers, and Central Banks – are being discussed <p>The indicators are updated every minute for individual global equities and indices, countries, commodities, and currencies. They can be translated directly into dashboards or statistical tools that can be monitored by analysts or traders – or they can be plugged straight into your algorithms for rapid investment and asset allocation decisions.</p>	<p>Information alters the way investors transact. For example, social media fear indicates that traders are cautious, and as a result, prices will be susceptible to sharp short-term sell-offs. Positive fundamental news slowly percolates through investor's consciousness, driving longer-term price momentum. The indices accurately show the perceptions, preoccupations and concerns of market participants – which inevitably influence prices.</p> <p>For example:</p> <ul style="list-style-type: none"> • Identify which tech stocks are considered the most innovative or which banks are the most trusted according to social media • Monitor supply vs demand references for agricultural commodities • Compare the price forecast across currencies • Track the level of social unrest and inflation expectations in countries • Watch the sentiment on an individual stock to avoid the herd <p>You can understand the market's psychological state – vital for timing interventions across market cycles and understanding which information is driving prices.</p>

WHO BENEFITS FROM THIS INSIGHT?

- **Quant Traders/Investors** – Better identify changing market cycles, augment alpha-generation strategies, and improve risk models. Refine momentum, mean-reversion, and volatility strategies.
- **Global Macro Hedge Funds** – Understand market cycles based on the psychological perceptions in each country, market, and asset class. Make better global asset allocation decisions.
- **Online Brokerages** – Generate client trade ideas. Create compelling visualizations of current events and market impact. Clearly display the movement of social media sentiment across companies and regions.
- **Research Analysts** – Monitor market-moving events. Identify the specific price drivers of an asset.
- **Risk Managers** – Monitor speculative and crowding risk across assets in which your firm is positioned.
- **Forex and Currency Traders** – Identify news and social media flow that might impact investment theses. Find arbitrage opportunities by monitoring macroeconomic imbalances and attitudes towards countries and currencies.
- **Commodity and Energy Firms** – Track global information flow about agricultural and energy products, including supply and demand issues, industrial accidents, and weather damage. Better time trend emergence, exhaustion, and reversals.
- **Economists** – Monitor risk perceptions across currencies. Identify changes in key macroeconomic themes such as global interest rate forecasts and unemployment. Update leading economic indicators with news and information as it happens.
- **Communications and Consultants** – Understand memes that are moving the prices of the companies you track. Fashion communications to better address hidden issues and create a more transparent market.

INNOVATIVE TECHNOLOGY

MarketPsych is the market leader in quantitative behavioral economics. Performing high-speed text analysis on news and social media across the internet globally, MarketPsych's text analytics engine uses patented natural language processing software. The Thomson Reuters MarketPsych Indices are one-of-a-kind, delivering meaningful measures derived from the global information flow.

ENHANCED FLEXIBILITY

Thomson Reuters MarketPsych Indices are delivered as a hosted solution from Thomson Reuters News Feed Direct platform. The system is easy to connect to via the internet, but with the robustness of the Thomson Reuters network – which powers some 50,000 applications at over 2,600 sites worldwide.

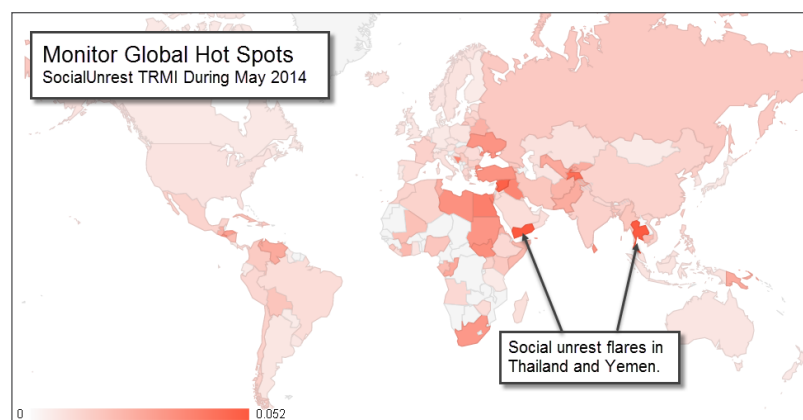
OUT-PSYCHING THE MARKETS

MarketPsych was founded by a practicing psychiatrist and quantitative trader – Dr Richard Peterson – who also authored *Inside the Investor's Brain: the Power of Mind over Money*. With dual expertise in laboratory science and high-end software development, the company has created language analysis software that measures market-impacting meaning conveyed in the written word. By honing in on the valuable and predictive aspects of this data, Thomson Reuters MarketPsych indices condense useful information for traders, investors, risk managers and others.

WHY THOMSON REUTERS?

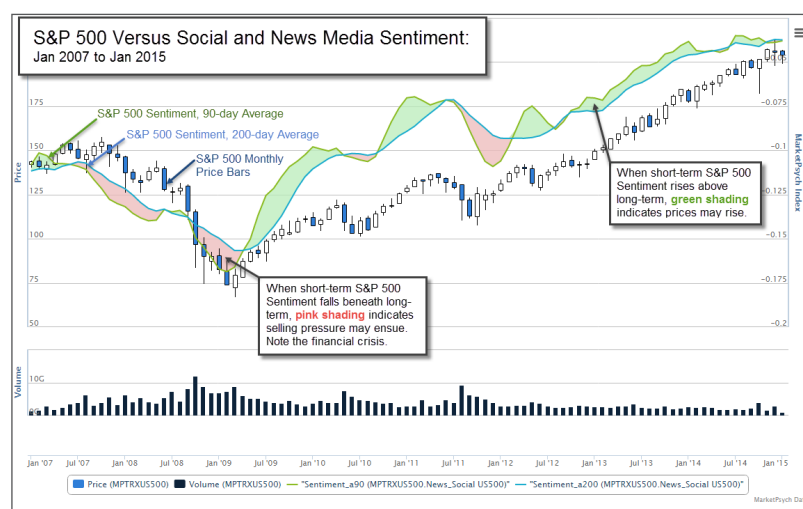
Thomson Reuters is the world's leading source of intelligent information for businesses and professionals. With an unrivalled legacy of providing trusted market-moving news to the global financial community, Thomson Reuters is also the leading provider of machine-readable news services powering both quantitative strategies and human decision support by combining the broadest news coverage, access to exclusive market-moving content, market-leading natural language processing capabilities and the lowest-latency delivery of critical information.

WATCH THE DRIVERS AND SEE EVENTS UNFOLD



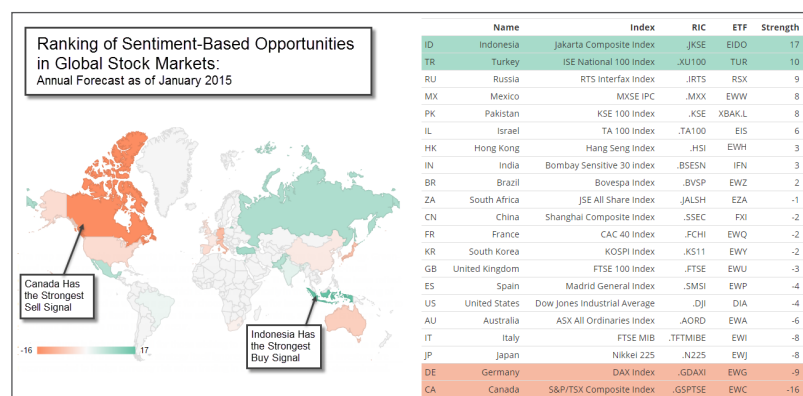
HEAT MAPS AND DASHBOARDS

Analysts can quickly summarize important information using the TRMI in dashboards and heat maps. To the left is a global map displaying references to social unrest during May 2014. Such heat maps are used to monitoring political and physical risk to employees and supply chains. Using heat maps, stock analysts can quickly identify which stocks have the highest earnings expectations and where investors are gripped by fear.



TIMING TRENDS WITH SENTIMENT

Media sentiment leads prices. Follow the trend and time the reversals using sentiment moving average crossovers. In the image to the left, when talk about the S&P 500 turns negative, prices trend downwards. Conversely, rising sentiment exerts an upwards pull on prices. Such sentiment-based moving averages have significant forward predictive power in MarketPsych research. In historical testing the Joy TRMI is a key predictor of Apple's stock price, while the PriceForecast TRMI is a significant predictor of the Japanese Yen.



RANKED PREDICTION MODELS

The map to the left displays a global equities investment strategy built on top of the Thomson Reuters MarketPsych Indices. According to this model, stock markets in high positive sentiment countries such as Canada and Germany are likely to underperform low sentiment countries such as Indonesia and Turkey over the following year. Brokerages may develop similar research applications on top of the TRMI to provide sentiment-based research ideas to their clients.

Visit financial.thomsonreuters.com

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