MarketPsych Indices from Refinitiv

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

refinitiv.com

Psychological insight. Market foresight.

Where there are markets, there are emotions.
Where there are emotions, there are cycles.
Where you understand cycles, you profit.

REFINITIV™

DATA IS JUST
THE BEGINNING

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 economic and market psychology in real time? You could see patterns as they emerge, not in hindsight. And you can. MarketPsych Indices from Refinitiv 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.

MarketPsych Indices by the numbers

Asset and Sentiment Coverage:

- Over 12,000 companies
- 36 commodities and energy subjects
- 187 countries
- 62 sovereign markets
- 45 currencies
- 50+ cryptocurrencies

Textual Coverage and Archives:

- 2,000 news sources
- 800 blogs, stock message boards and social media sites
- Start date of 1998 archives (2009 for Cryptocurrencies)

CONSTANT VIGILANCE, CLEAR SIGNALS

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.

The indices are delivered as real-time data series that can easily be incorporated into your analysis and decision processes – quantitative or qualitative.

Three key types of indicators are provided:

- Emotional indicators such as fear, joy and trust
- Fundamental perceptions including earnings expectations, interest rate forecasts and long vs. short discussions
- Buzz metrics that indicate how much market-moving topics – such as litigation, mergers and central banks – are being discussed

The indicators are updated every minute for individual global indices, companies, bonds, countries, commodities, currencies and cryptocurrencies. 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.

INFORMATION MOVES MARKETS

Information alters the way investors transact. For example, social media fear indicates that traders are cautious and as a result, prices will be vulnerable to sharp short-term sell-offs.

Positive fundamental news slowly percolates through investors' consciousness, driving longer-term price momentum. The indices accurately show the perceptions, preoccupations and concerns of market participants – which inevitably influence prices.

For example:

- 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
- Determine which national bond offerings are most uncertain
- Follow sentiment swings in cryptocurrencies
- Watch the sentiment on an individual stock to avoid the herd

You can understand the market's psychological state – vital for timing interventions across market cycles and understanding which information is driving prices.

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.
- **Cryptocurrency Investors, Miners and Exchanges**
  Deploy Artificial Intelligence and machine learning strategies to anticipate swings in sentiment. Hedge as investor enthusiasm wanes. Identify trending coins and innovative technologies.

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, delivering meaningful measures derived from the global information flow.

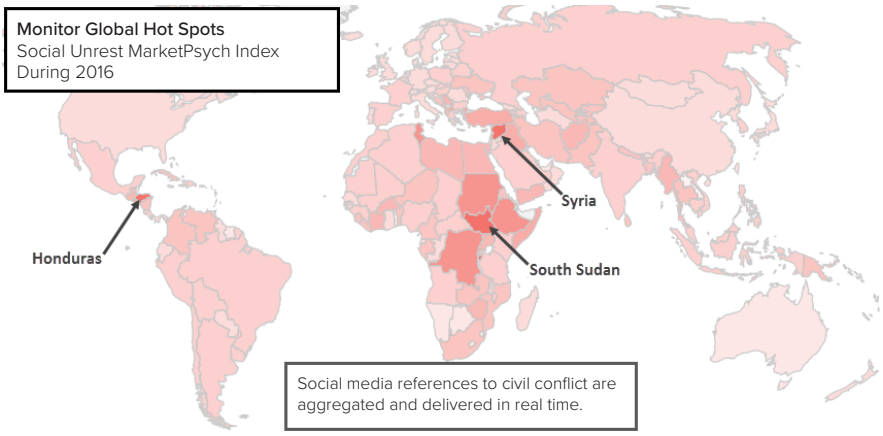
Out-psyching the markets

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* and *Trading on Sentiment: The Power of Minds Over Markets*. 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, MarketPsych Indices condense useful information for traders, investors, risk managers and others.

Why Refinitiv?

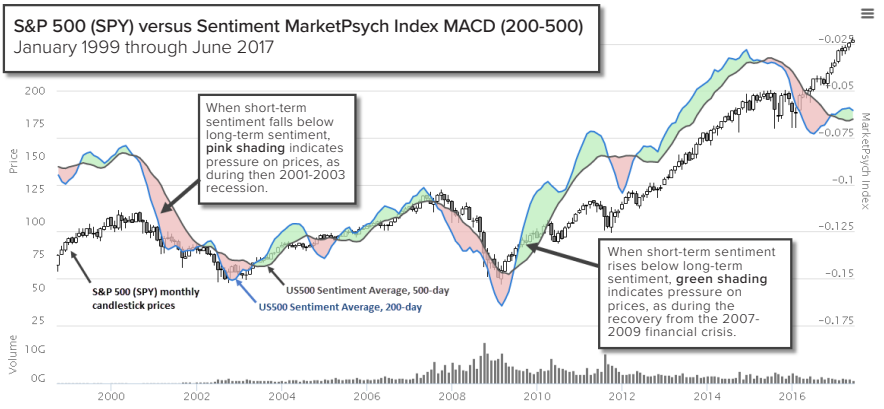
Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in over 190 countries. We are new market pioneers with 167 years of confidence. We provide leading data and insights, trading platforms and open data and technology platforms 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.

Watch the drivers and see events unfold



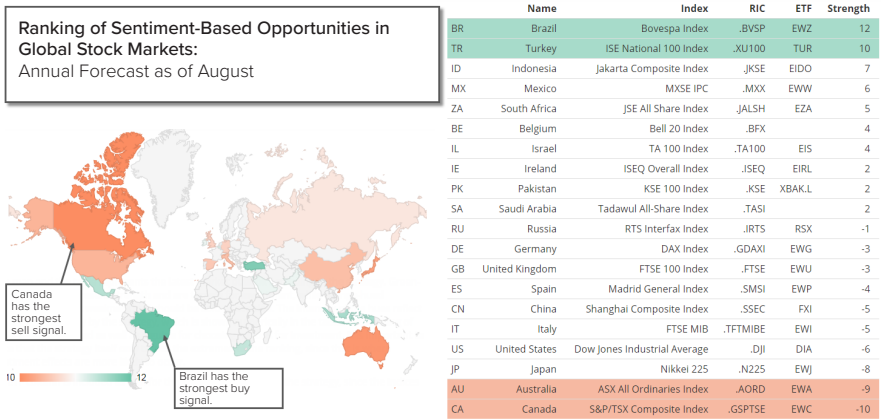
Heat maps and dashboards

Analysts can quickly summarize important information using MarketPsych Indices in dashboards and heat maps. To the left is a global map displaying references to social unrest during 2016. Such heat maps are used to monitor 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 downward. Conversely, rising sentiment exerts an upward pull on prices. Such sentiment-based moving averages have significant forward predictive power in MarketPsych research. In historical testing, the Joy MarketPsych Index is a key predictor of Apple's stock price, while the Price Direction MarketPsych Index is a significant predictor of crude oil.



	Name	Index	RIC	ETF	Strength
BR	Brazil	Bovespa Index	.BVSP	EWZ	12
TR	Turkey	ISE National 100 Index	.XU100	TUR	10
ID	Indonesia	Jakarta Composite Index	.JKSE	EIDO	7
MX	Mexico	MXSE IPC	.MXX	EWW	6
ZA	South Africa	JSE All Share Index	.JALSH	EZA	5
BE	Belgium	Bell 20 Index	.BFX		4
IL	Israel	TA 100 Index	.TA100	EIS	4
IE	Ireland	ISEQ Overall Index	.ISEQ	EIRL	2
PK	Pakistan	KSE 100 Index	.KSE	XBAK.L	2
SA	Saudi Arabia	Tadawul All-Share Index	.TASI		2
RU	Russia	RTS Interfax Index	.IRTS	RSX	-1
DE	Germany	DAX Index	.GDAXI	EWG	-3
GB	United Kingdom	FTSE 100 Index	.FTSE	EWU	-3
ES	Spain	Madrid General Index	.SMSI	EWP	-4
CN	China	Shanghai Composite Index	.SSEC	FXI	-5
IT	Italy	FTSE MIB	.TFTMIBE	EWI	-5
US	United States	Dow Jones Industrial Average	.DJI	DIA	-6
JP	Japan	Nikkei 225	.N225	EWJ	-8
AU	Australia	ASX All Ordinaries Index	.AORD	EWA	-9
CA	Canada	S&P/TSX Composite Index	.GSPTSE	EWC	-10

Ranked prediction models

The map to the left displays a global equities investment strategy built on top of the MarketPsych Indices. According to this model, stock markets in high positive sentiment countries such as Australia and Canada are likely to underperform low sentiment countries such as Brazil and Turkey over the following year.

Brokerages may develop similar research applications on top of the MarketPsych Index to provide sentiment-based research ideas to their clients.