

State Street MediaStats

Forward-looking indicators for institutional investors

Make better-informed investment decisions supported by actionable data and insights.

Developed in partnership with MKT MediaStats, LLC, State Street MediaStats employs innovative techniques to deliver actionable intelligence from unstructured data.

Our suite of indicators quantifies content from over 100,000 digital media sources to analyze the potential impact on asset pricing, volatility, and liquidity.

Using a proprietary algorithm based on rigorous financial research, machine learning and natural language processing, State Street MediaStats Indicators collect, process and analyze digital text to produce indications of media attention and discussion at a company-, currency- or country-level. Our indicators help investment institutions manage the evolving risk and return profile of their portfolios and stay up to date on market movements.

Data collected from over 100,000 curated media sources for:

12 Central banks

34 Foreign currencies

44 Countries

More than
100 Market narratives

More than
3,000 US all-cap stocks

Key benefits

Successful investments often stem from being on the right side of information asymmetry — you outperform if you see things differently than your competitors. The real advantage lies in differentiated data sets that spark investment ideas and alert to downside risk.

Deep data pools

State Street MediaStats Indicators collect data from a wide range of curated media sources classified into General, Financial, Industry, International, Corporate Communications and other categories. The tendency of media outlets to frame the news from their perspective is widely recognized and has been analyzed by both practitioners and academics. State Street MediaStats Indicators help filter out noise by training machine learning algorithms to account for biases discovered through years of academic research, providing you with unbiased and relevant insights.

Media insights

When purchasing financial assets, investors face a number of challenges. The investment opportunity set is vast, with thousands of assets to choose from. Additionally, cognitive and time constraints can limit the amount of information one can digest. It is challenging for humans to assess thousands of alternatives while simultaneously processing information that may appear contradictory.

Investors manage this limitation by narrowing their search to assets that have recently caught their attention. Through our media indicators, we quantify attention by looking at several attributes of media coverage:

- **Sentiment:** the conditional tone of media coverage
- **Intensity:** the unusual news volume
- **Disagreement:** the level of disagreement among outlets
- **Hard content ratio:** the degree of factual content with which financial assets are discussed in the news

These measures — generated daily for individual companies, country equity indices and foreign currencies — have been shown to impact investor behavior and asset prices.

Media narratives

Media narratives — stories and themes circulating in news and digital media — have a profound influence on financial markets. Recent research in narrative economics highlights how the spread and contagion of narratives can drive economic change and investor behavior. State Street MediaStats brings this concept to life by providing real-time, quantitative measures of media coverage, sentiment, and intensity across thousands of sources. Using advanced natural language processing and proprietary media reservoirs, MediaStats tracks the frequency and tone of coverage for over 100 market themes.

This allows investors to identify which narratives are gaining traction, how they evolve, and — critically — how they impact asset prices.

Additionally, State Street's Narrative Map is a dynamic visualization tool within MediaStats that plots narratives in a two-dimensional space: media intensity (how much a theme is covered) versus market impact (how much it moves markets). The map demonstrates how narratives shift between quadrants over time. For instance, a theme may start as "hype" with little impact, but as market conditions change, it can become a key driver of volatility and returns. MediaStats quantifies these transitions, helping investors anticipate which stories are likely to move markets next.

By quantifying and mapping media narratives, State Street MediaStats empowers investors to see beyond traditional data, capturing the intangible forces that shape market sentiment and price action. Whether tracking the rise of recession fears, the fading impact of inflation news, or the emergence of new drivers like labor market dynamics, MediaStats provides actionable insights for portfolio construction, risk management, and strategic decision-making.

Central bank tones

Central banks are among the most influential institutions in global financial markets, but understanding their true impact requires more than just reading official statements.

State Street MediaStats Central Bank Indicators (CBI) offer a data-driven approach to quantifying the "hawkish" or "dovish" tone of central bank policy as interpreted by the media — capturing not just what central banks say, but how markets and investors perceive those messages.

Investors can leverage CBI to anticipate shifts in interest rates and foreign currency values, which in turn can help inform asset allocation and risk management decisions. The indicators also support event monitoring by tracking media tone around key policy events, such as FOMC meetings, helping investors gauge whether markets are overreacting or underreacting to central bank communications. With coverage spanning a wide range of central banks, CBI enable cross-market comparisons and are tailored to support global macro strategies.

Linkages

Most investors focus on narrow, industry-based peer groups to assess the outlook or valuation of an individual stock. Traditional classification schemes, such as GICS sectors or industry groups, however, are slow moving and backward looking. Digital media, on the other hand, captures evolving relationships more swiftly by assigning dynamic networks to each company. Our proprietary State Street MediaStats Linkages Indicators comb through tens of thousands of articles each day to capture economic links between companies.

To measure the strength of the economic link between two companies, our algorithm counts the number of times they are co-mentioned in the media. The greater the number of news items that co-mention both firms, the stronger the economic link between them during a given period.

Our Linkages Indicators enable you to glean insights into forward-looking business relationships that may impact a company's strategic development and stock price performance.

Similarly, to measure the strength of the macroeconomic link between two currencies (countries), our algorithm counts the number of times they are co-mentioned in the media. Trends in interconnectedness can be a powerful predictor of future volatility and risk in global markets. As investors continue to grapple with short-term uncertainty, our macro linkages indicators can help you make better-informed asset allocation decisions.

Comprehensive data

State Street MediaStats product suite has historical media data from as far back as:

- 2011 for US Broad Equity Indices
- 2013 for Country Equity Indices and Foreign Exchange Indices
- 2009 for EPTech Indices
- 2015 for market narratives and central bank tones

Our exhaustive data volumes provide insights based on past and present data and help inform your investment strategies.

Insights shared daily and available on our Insights platform

State Street MediaStats product suite

	Indicators	Universe	Frequency	Indicator units	Start date
US broad equity indices	<ul style="list-style-type: none"> Intensity Disagreement Sentiment Hard Content Ratio (HCR) HCR Dispersion 	<ul style="list-style-type: none"> ~ 3,000 US all-cap stocks 	Daily	Intensity, Sentiment and Disagreement: Z-score HCR: Percentage weight HCR Dispersion: standard deviation of HCR	May 2011
US broad equity aggregates	<ul style="list-style-type: none"> Intensity Disagreement Sentiment 	<ul style="list-style-type: none"> US Sector Industry Industry Group 	Daily	Z-score	May 2011
US social indices	<ul style="list-style-type: none"> Relative Intensity Combined Sentiment Emoji Sentiment Short Squeeze Intensity & More 	<ul style="list-style-type: none"> ~ 3,000 US all-cap stocks 	Daily	Normalized comment tone and counts	Oct 2020
Country equity indices	<ul style="list-style-type: none"> Intensity Disagreement Sentiment Hard Content Ratio (HCR) HCR Dispersion 	<ul style="list-style-type: none"> 44 Countries 	Daily	Intensity: log of article number Sentiment: difference between average daily sentiment and expected sentiment Disagreement: standard deviation of sentiment HCR: Percentage weight HCR Dispersion: standard deviation of HCR	March 2013
Thematic indices	<ul style="list-style-type: none"> Intensity Negative Intensity 	<ul style="list-style-type: none"> 103 Themes 	Daily	Percentage weight	January 2015

	Indicators	Universe	Frequency	Indicator units	Start date
FX indices	<ul style="list-style-type: none"> Intensity Disagreement Sentiment 	<ul style="list-style-type: none"> 34 Foreign currencies 	Daily	Intensity: log of article number Sentiment: difference between average daily sentiment and expected sentiment Disagreement: standard deviation of sentiment	March 2013
Central bank indices	<ul style="list-style-type: none"> Hawkish Dovish Hawkish/Dovish Adjusted Hawkish/Dovish 	<ul style="list-style-type: none"> 12 Central banks 	Daily	Hawkish: Percentage weight Dovish: Percentage weight Hawkish/Dovish: Percentage weight Adjusted Hawkish/Dovish: unitless, ranging from -1 to +1	January 2015
Linkage connections	<ul style="list-style-type: none"> Company's Cohort Currency's Cohort Country's Cohort 	<ul style="list-style-type: none"> ~ 500 US large caps 34 Currencies 44 Countries 	Daily	Percentage weight	Company: May 2011 FX & Country: March 2013
Linkage connections aggregates	<ul style="list-style-type: none"> Aggregate-Level Linkages Connection 	<ul style="list-style-type: none"> US Sector Industry Industry Group 	Daily	Percentage weight	May 2011
Linkages	<ul style="list-style-type: none"> Intensity Disagreement Sentiment 	<ul style="list-style-type: none"> ~ 500 US large caps 	Daily	Weighted average z-score	May 2011
EP Tech component indices	<ul style="list-style-type: none"> Web Brand Instore 	<ul style="list-style-type: none"> Over 350 US-Listed Stocks 	Monthly	Three-month growth rate	Instore & Brand: March 2009 Web: April 2014

For more information, please contact:

dataintelligence@statestreet.com

The material presented herein is for informational purposes only. The views expressed herein are subject to change based on market and other conditions and factors. The opinions expressed herein reflect general perspectives and information and are not tailored to specific requirements, circumstances and/or investment philosophies. The information presented herein does not take into account any particular investment objectives, strategies, tax status or investment horizon. It does not constitute investment research or investment, legal, or tax advice and it should not be relied on as such. It should not be considered an offer or solicitation to buy or sell any product, service, investment, security or financial instrument or to pursue any trading or investment strategy. It does not constitute any binding contractual arrangement or commitment of any kind. State Street is not, by virtue of providing the material presented herein or otherwise, undertaking to manage money or act as your fiduciary.

You acknowledge and agree that the material presented herein is not intended to and does not, and shall not, serve as the primary basis for any investment decisions. You should evaluate and assess this material independently in light of those circumstances. We encourage you to consult your tax or financial advisor.

All material, including information from or attributed to State Street, has been obtained from sources believed to be reliable, but its accuracy is not guaranteed, and State Street does not assume any responsibility for its accuracy, efficacy or use. Any information provided herein and obtained by State Street from third parties has not been reviewed for accuracy. In addition, forecasts, projections, or other forward-looking statements or information, whether by State Street or third parties, are not guarantees of future results or future performance, are inherently uncertain, are based on assumptions that, at the time, are difficult to predict, and involve a number of risks and uncertainties. Actual outcomes and results may differ materially from what is expressed herein. The information presented

herein may or may not produce results beneficial to you. State Street does not undertake and is under no obligation to update or keep current the information or opinions contained in this communication.

To the fullest extent permitted by law, this information is provided "as-is" at your sole risk and neither State Street nor any of its affiliates or third party providers makes any guarantee, representation, or warranty of any kind regarding such information, including, without limitation, any representation that any investment, security or other property is suitable for you or for others or that any materials presented herein will achieve the results intended. State Street and its affiliates and third party providers disclaim any warranty and all liability, whether arising in contract, tort or otherwise, for any losses, liabilities, damages, expenses or costs, either direct, indirect, consequential, special or punitive, arising from or in connection with your access to and/or use of the information herein. Neither State Street nor any of its affiliates or third-party providers shall have any liability, monetary or otherwise, to you or any other person or entity in the event the information presented herein produces incorrect, invalid or detrimental results.

To learn how State Street looks after your personal data, visit: <https://www.statestreet.com/utility/privacy-notice.html>. Our Privacy Statement provides important information about how we manage personal information.

No permission is granted to reprint, sell, copy, distribute, or modify any material herein, in any form or by any means without the prior written consent of State Street.

©2025 State Street Corporation and/or its applicable third party licensor. All rights reserved.

5698064.1.1.GBL.

Expiration date: December 31, 2026



State Street Corporation
One Congress Street, Boston, MA 02114-2016

www.statestreet.com