

Quant Daily Digest

■ Daily Overview

Macro & Sentiment: Quant hedge funds have faced a rocky start to 2026, with Renaissance Technologies, Schonfeld, and Engineers Gate reporting notable losses amid continued market volatility following a turbulent 2025. This suggests persistent challenges for systematic strategies navigating ongoing macro uncertainty. Meanwhile, political tensions in the US have escalated as Senate Minority Leader Schumer's opposition to DHS funding raises the risk of a partial government shutdown, adding to risk-off sentiment. Investor focus remains split between geopolitical risks and evolving market dynamics. **Equities / Rates:** Equity markets show mixed signals. BitGo's IPO surged 25% above its offering price, closing up nearly 3%, highlighting strong investor appetite in the crypto sector despite broader quant underperformance. The broader equity environment remains choppy, with quant funds' struggles hinting at heightened dispersion and regime shifts. Rates markets are likely pricing in increased uncertainty given political gridlock risks and cautious Fed outlooks amid mixed economic data. **FX & Commodities:** No major FX or commodity moves reported today. Crypto sector enthusiasm around BitGo's IPO may support selective risk appetite in digital assets, but broader macro caution likely caps upside. **What to Watch:** • Further updates on DHS funding and potential government shutdown risks. • Quant fund performance trends and risk factor dispersion in early 2026. • Market reaction to upcoming mutual fund ratings update assessing 475 schemes through end-2025, which may influence flows in actively managed categories.

■ Hot List

What's in the latest MF ratings update?

The latest Star Track Mutual Fund Ratings assessed 475 schemes across 31 actively managed categories using data up to December 31, 2025. The update provides a comprehensive evaluation of mutual fund performance, aiding investors in identifying top-performing funds based on recent returns and risk metrics. This data is crucial for quant strategies focusing on fund selection and portfolio allocation. The ratings reflect shifts in fund flows and positioning trends, highlighting sectors and categories attracting investor interest. Such granular fund-level insights can inform market timing and asset allocation decisions in dynamic market conditions.

Read more: <https://www.thehindubusinessline.com/portfolio/mutual-funds/inside-the-latest-mf-rating-update/article70545646.ece>

BusinessLine

Renaissance, Schonfeld, and Engineers Gate stung in a shaky start for quants in 2026

Quant hedge funds including Renaissance Technologies, Schonfeld Strategic Advisors, and Engineers Gate faced significant challenges at the start of 2026 following a turbulent 2025. These firms experienced notable losses amid volatile market conditions, with data-driven strategies struggling to adapt to rapid shifts in price action and macroeconomic uncertainty. The choppy environment has impacted systematic trading models, highlighting difficulties in navigating policy changes and flow dynamics. Positioning adjustments have been necessary as quant funds recalibrate to evolving market signals and liquidity patterns. This rocky start underscores ongoing headwinds for quant strategies despite their historical resilience.

Read more:

<https://www.businessinsider.com/renaissance-schonfeld-engineers-gate-quants-lost-money-2026-1>

Business Insider

BitGo kicks off what could be a huge year for IPOs

BitGo's IPO marked a strong start to 2026, with initial trading surging 25% above the offering price, signaling robust investor demand in the crypto sector. Despite some profit-taking, the stock closed nearly 3% higher on the first day, indicating sustained positive sentiment. This performance could set the tone for a busy IPO calendar ahead, especially in tech and crypto-related firms. Market participants should watch for increased volatility and trading volumes as BitGo's debut may attract quant strategies focused on momentum and event-driven flows. The strong opening price action highlights potential opportunities in crypto equities amid evolving regulatory and market dynamics.

Read more: <https://siliconangle.com/2026/01/23/bitgo-kicks-off-huge-year-ipos/>

SiliconANGLE News

\$120+ Bn Stock Trading and Investing Applications Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, 2021-2031

The global stock trading and investing applications market is projected to exceed \$120 billion by 2031, driven by advancements in AI and machine learning for enhanced predictive analytics. Increased retail investor participation and growing financial literacy are key demand drivers. The market is also expanding its multi-asset trading capabilities, including cryptocurrencies, to attract a broader user base. These trends suggest significant shifts in market flows and positioning, with quant strategies likely to benefit from richer data and improved forecasting tools. The integration of AI/ML is expected to enhance algorithmic trading and risk management frameworks.

Read more: <https://www.globenewswire.com/news-release/2026/01/23/3224527/28124/en/120-Bn-Stock-Trading-and-Investing-Applications-Market-Global-Industry-Size-Share-Trends-Opportunity-and-Forecast-2021-2031.html>

GlobeNewswire

Partial government shutdown more likely over DHS funding fight after Alex Pretti killing

Senate Minority Leader Chuck Schumer announced he will oppose Department of Homeland Security (DHS) funding following the fatal shooting of Alex Pretti by federal agents in Minneapolis. This stance increases the likelihood of a partial government shutdown due to the DHS funding impasse. The political tension adds uncertainty to government spending and could impact market sentiment, particularly in sectors sensitive to federal budget decisions. Investors may monitor shifts in Treasury yields and risk assets as the funding dispute unfolds. Market participants should also watch for potential volatility in government bond markets and related flows amid heightened fiscal policy risk.

Read more: <https://www.cnn.com/2026/01/25/minneapolis-shooting-government-shutdown.html>

US Top News and Analysis

Flight disruptions from massive winter storm will linger Monday

A massive winter storm in the U.S. has led to tens of thousands of flight cancellations, significantly disrupting air travel and causing airlines to waive change fees. The ongoing weather event is expected

to continue affecting flight operations into Monday, impacting travel demand and potentially influencing airline stock volatility. Market participants may see increased volatility in airline and travel-related equities due to operational disruptions and revenue uncertainties. Additionally, the storm could affect broader economic activity in affected regions, influencing short-term consumer spending and logistics flows. Traders should monitor weather updates and airline sector responses for potential trading opportunities.

Read more: <https://www.cnbc.com/2026/01/23/winter-storm-fern-flight-cancellations.html>

US Top News and Analysis

Dow Jones Futures Fall; Trump Tariffs, Government Shutdown, Big Earnings In Focus

Dow Jones futures declined amid escalating trade tensions as President Trump threatened a 100% tariff on Canada, raising concerns over cross-border trade disruptions. Simultaneously, the risk of a U.S. government shutdown increased, adding to market uncertainty. Investors are also closely watching upcoming earnings reports from major tech companies including Tesla, Microsoft, Meta, and Apple, which could influence market direction. These factors combined are contributing to cautious positioning and potential volatility in equity markets. Market participants are likely adjusting exposure ahead of these key events, reflecting heightened risk sentiment.

Read more: <https://finance.yahoo.com/m/9c67d261-2ec7-3404-8375-4ecea0e235f3/dow-jones-futures-fall%3B-trump.html?.tsrc=rss>

Yahoo! Finance: ^GSPC ^IXIC ^DJI News

Is the bull market broadening? A closer look at the S&P; 500

The analysis compares the S&P; 500's market-cap weighted performance to the equal-weighted S&P; 500 index to assess if the bull market rally is broadening beyond large-cap leaders. A broadening rally, indicated by the equal-weighted index outperforming the cap-weighted index, suggests more widespread strength across sectors and smaller-cap stocks. Current data shows the equal-weighted index gaining relative to the cap-weighted S&P; 500, signaling improving breadth and participation in the rally. This shift could influence positioning strategies, favoring a more diversified exposure rather than concentration in mega-cap stocks. Market participants should monitor relative strength trends for potential shifts in momentum and flow dynamics.

Read more:

<https://finance.yahoo.com/video/bull-market-broadening-closer-look-190047495.html?.tsrc=rss>

Yahoo! Finance: ^GSPC ^IXIC ^DJI News

Fed Meeting, Apple, Meta, GM, Boeing, Chevron, and More to Watch This Week

This week features key earnings reports from major companies including Microsoft, Exxon, Visa, and GE Vernova, which could influence sector-specific flows and market sentiment. The Federal Reserve is widely expected to maintain current interest rates, with Chair Jerome Powell nearing the end of his tenure, suggesting a steady policy stance for now. Market participants will closely watch earnings for guidance on corporate health amid ongoing economic uncertainties. Price action may be volatile around these events as investors adjust positioning based on earnings surprises and Fed commentary. Overall, the combination of earnings and Fed signals will be critical for short-term market direction and quant models relying on macro and fundamental inputs.

Read more: <https://finance.yahoo.com/m/0e8a88e2-759a-3bc7-a374-278684fc8b89/fed-meeting%2C-apple%2C-meta%2C-gm%2C.html?.tsrc=rss>

Yahoo! Finance: ^GSPC ^IXIC ^DJI News

■ Articles

convert-to-quant 1.0.2

The release of convert-to-quant 1.0.2 on Pypi.org introduces a tool for converting safetensors weights into quantized formats such as FP8 and INT8. This version incorporates learned rounding optimization, which can enhance the precision and efficiency of quantization processes. The tool is relevant for quant-focused workflows, particularly in machine learning model compression and deployment where reduced precision formats are critical for performance gains. By enabling optimized quantization, it may impact data processing speeds and resource allocation in quant-driven trading algorithms or financial modeling systems. No direct market data or price action is involved.

Read more: <https://pypi.org/project/convert-to-quant/1.0.2/>

Pypi.org

convert-to-quant 1.0.1

The release of convert-to-quant 1.0.1 on Pypi.org introduces a tool for converting safetensors weights into quantized formats such as FP8 and INT8. This conversion leverages learned rounding optimization, potentially enhancing model efficiency and performance. While not directly financial, the improved quantization techniques could impact algorithmic trading models by enabling faster and more resource-efficient computations. Market participants utilizing AI-driven strategies may benefit from reduced latency and computational costs. The tool's availability may influence the deployment and scalability of quant-based trading systems.

Read more: <https://pypi.org/project/convert-to-quant/1.0.1/>

Pypi.org

convert-to-quant added to PyPI

The new Python package "convert-to-quant" has been added to PyPI, enabling conversion of safetensors weights into quantized formats such as FP8 and INT8. This tool incorporates learned rounding optimization, potentially improving model efficiency and performance in quantized neural networks. While primarily a technical development in machine learning, its relevance to quant finance lies in enhanced computational speed and reduced memory usage for large-scale quantitative models. This could facilitate faster backtesting and real-time analytics in trading strategies. No direct market data or price action impact is noted.

Read more: <https://pypi.org/project/convert-to-quant/>

Pypi.org

speterlin-stocks 1.2.4

The speterlin-stocks 1.2.4 Python package offers a comprehensive suite for quantitative trading in stocks, integrating multiple data sources and brokerage APIs. It supports margin trading up to 2x leverage on NYSE and NASDAQ via Alpaca brokerage, facilitating USD asset management. The package aggregates market data from Financial Modeling Prep, Google Trends, Yahoo Finance, and Google Finance, enabling enhanced market sentiment and fundamental analysis. This integration

allows quants to execute data-driven strategies with real-time price action and positioning insights. The tool is designed to streamline algorithmic trading workflows with robust API connectivity and diverse data inputs.

Read more: <https://pypi.org/project/speterlin-stocks/1.2.4/>

Pypi.org

speterlin-stocks 1.2.3.3

The "speterlin-stocks 1.2.3.3" Python package offers a comprehensive suite of quant-trading tools focused on stocks, integrating multiple data sources and brokerage APIs. It supports Alpaca brokerage for USD asset management and 2x margin trading on NYSE and NASDAQ exchanges, facilitating leveraged trading strategies. The package aggregates financial data from Financial Modeling Prep (FMP), Google Trends, Yahoo Finance, and Google Finance, enabling enhanced market sentiment and fundamental analysis. This integration allows quants to automate trading strategies with real-time data and margin capabilities, potentially improving execution and portfolio management. The tool is relevant for quant traders seeking multi-source data and API-driven trading workflows.

Read more: <https://pypi.org/project/speterlin-stocks/1.2.3.3/>

Pypi.org

Why Are Hybrid SIFs Leading India's New Investment Category?

Hybrid Structured Investment Funds (SIFs) are gaining significant traction in India, emerging as a leading investment category due to their risk-managed and tax-efficient return profiles. These funds combine equity and debt instruments, appealing to investors seeking balanced exposure amid market volatility. The demand surge reflects a broader investor preference for products that offer downside protection while capturing growth opportunities. This trend is influencing asset allocation strategies, with flows increasingly favoring hybrid SIFs over pure equity or debt funds. Market participants are closely monitoring positioning shifts as these funds reshape the investment landscape in India.

Read more: <https://www.ndtvprofit.com/markets/why-are-hybrid-sifs-leading-indias-new-investment-category-10863634>

Ndtvprofit.com

Tunable narrow-and-sharp defect modes and transmission peak degeneracy in periodic superconducting photonic crystals

The article discusses the optical properties of a one-dimensional superconducting photonic crystal (PC) with periodic SD/DS pairs, where S is superconductor and D is dielectric. It focuses on tunable narrow-and-sharp defect modes (DMs) and transmission peak degeneracy within the structure. The study highlights how central symmetry and periodicity influence transmittance and DM characteristics, potentially enabling precise control over photonic band gaps. While primarily a physics and materials science topic, insights into tunable transmission peaks and defect modes could inform future quantum computing hardware or photonic-based signal processing, indirectly impacting technology-driven market sectors. No direct financial market data or policy implications are presented.

Read more: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0341241>

Plos.org

Dupilumab attenuates the expression of TSLP and IL-8 induced by dsRNA and IL-4/IL-13 co-stimulation in human small airway epithelial cells

The study investigates the impact of Dupilumab on inflammatory markers TSLP and IL-8 in human small airway epithelial cells under co-stimulation by dsRNA and IL-4/IL-13, relevant to asthma exacerbations. Dupilumab, a monoclonal antibody targeting IL-4/IL-13 pathways, significantly reduces the expression of these cytokines, suggesting its potential to mitigate airway inflammation triggered by viral and type 2 cytokine interactions. This finding may influence pharmaceutical sector valuations, particularly companies involved in asthma and respiratory disease therapeutics. Market participants could monitor Dupilumab-related developments for potential shifts in biotech sector flows and positioning.

Read more: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0341562>

Plos.org

Alex Pretti killing: Minnesota CEOs, including UnitedHealth, Target, call for 'immediate deescalation'

The Trump administration has deployed additional federal law enforcement to Minneapolis amid heightened tensions following the Alex Pretti killing. This move aims to enforce immigration crackdowns and investigate alleged welfare fraud. In response, Minnesota CEOs from major companies like UnitedHealth and Target have publicly called for immediate deescalation to stabilize the situation. The increased federal presence and corporate appeals highlight potential risks to local economic activity and investor sentiment. Market participants may monitor developments closely for impacts on regional business operations and broader policy implications.

Read more: <https://www.cnbc.com/2026/01/25/alex-pretti-ceo-minneapolis-minnesota.html>

US Top News and Analysis

Videos of Alex Pretti shooting by federal agents in Minneapolis contradict Trump official claims

The news reports on videos showing federal agents shooting Alex Pretti in Minneapolis, contradicting claims made by a Trump official. Footage reveals a federal officer disarming Pretti before the shots were fired, challenging the official narrative. While this story is significant politically and socially, it does not directly impact financial markets, asset prices, or trading flows. There are no immediate data points, policy changes, or positioning shifts relevant to market participants or quantitative strategies. The focus remains on legal and political implications rather than market dynamics.

Read more: <https://www.cnbc.com/2026/01/25/alex-pretti-minneapolis-shooting-videos-trump.html>

US Top News and Analysis

Auto executives are hoping for the best and planning for the worst in 2026

Automakers face growing uncertainty in 2026 due to affordability challenges and weakening consumer demand, impacting production and sales forecasts. Industry executives are adjusting strategies, balancing cautious optimism with contingency plans for potential downturns. This environment may lead to reduced capital expenditures and inventory adjustments, influencing supply chain dynamics and

pricing. Market participants should monitor auto sector earnings and inventory data for signals of demand shifts. The sector's performance could affect related commodities and credit markets, given its economic sensitivity. Overall, the auto industry's cautious stance reflects broader concerns about consumer spending and economic growth.

Read more: <https://www.cnbc.com/2026/01/25/auto-industry-2026.html>

US Top News and Analysis

3 Safe Dividend Stocks Yielding At Least 3% to Buy Without Hesitation Right Now

The article highlights three dividend stocks currently yielding at least 3%, emphasizing their safety and potential for continued payout growth. These stocks are positioned as reliable income generators amid market volatility, appealing to investors seeking stable cash flows. The focus on dividend yield and payout sustainability suggests these equities may attract yield-focused investors, potentially influencing demand and price stability. No specific price data or market flows are detailed, but the emphasis on dividend safety aligns with a defensive positioning strategy in uncertain markets. This could impact quant models prioritizing dividend yield and stability factors.

Read more:

<https://www.fool.com/investing/2026/01/25/3-safe-dividend-stocks-yielding-at-least-3-to-buy/?tsrc=rss>

Yahoo! Finance: ^GSPC ^IXIC ^DJI News

These International ETFs Can Add Unique Diversity to Your Portfolio

The article compares two leading international ETFs that exclude U.S. stocks, highlighting their potential to enhance portfolio diversification. It examines key metrics such as expense ratios, geographic exposure, sector allocations, and historical performance to determine which ETF offers a better risk-return profile. The analysis also considers how these ETFs fit into global equity allocations amid evolving market conditions and geopolitical risks. Investors seeking non-U.S. equity exposure may find these ETFs valuable for reducing domestic concentration and capturing growth in emerging and developed markets abroad. The piece underscores the importance of ETF selection based on cost efficiency and strategic fit.

Read more: <https://www.fool.com/coverage/etfs/2026/01/25/these-international-etfs-can-add-unique-diversity-to-your-portfolio/?tsrc=rss>

Yahoo! Finance: ^GSPC ^IXIC ^DJI News

A better CAPE ratio

The FT Alphaville article discusses improvements in the Cyclically Adjusted Price-to-Earnings (CAPE) ratio as a valuation metric, highlighting its enhanced statistical reliability in assessing market valuations. The piece suggests that refined CAPE calculations, which adjust for factors like earnings quality and economic cycles, provide a more accurate gauge of equity market risk and potential returns. This has implications for quant strategies relying on valuation metrics for asset allocation and timing decisions. Improved CAPE measures could influence positioning by signaling more precise entry or exit points based on fundamental valuation rather than raw price action alone.

Read more: <https://www.ft.com/content/84b8a579-8634-47de-a421-a1eb39c8577d>

FT Alphaville

FTAV's Friday chart quiz

The FT Alphaville article presents a chart-based quiz focusing on recent market price action and technical patterns. It highlights key data points and trends relevant for quantitative analysis and trading strategies, emphasizing the importance of chart interpretation in understanding market dynamics. The piece underscores how visual data can signal shifts in positioning and potential policy impacts indirectly reflected in price movements. While not detailing specific policy changes or flows, the quiz format encourages readers to engage with market data critically. This approach aids quants in refining models based on observed technical signals and market behavior.

Read more: <https://www.ft.com/content/851111f9-eee3-4ef6-9b55-d4c9469aebfc>

FT Alphaville

FTAV's further reading

The FT Alphaville article discusses ongoing market inefficiencies highlighted by recent events involving Egan-Jones and VTB, reflecting persistent volatility in US markets. It touches on regulatory and geopolitical risks impacting asset flows and positioning, particularly in sectors exposed to US sanctions and credit rating controversies. The piece also explores technological shifts in transportation, such as Uber's expansion into robo-taxi services, signaling potential disruptions in mobility markets. These developments suggest evolving market dynamics with implications for quant strategies reliant on credit risk and sector rotation. Overall, the article underscores the importance of monitoring policy changes and technological innovation for market participants.

Read more: <https://www.ft.com/content/d9230100-80e5-4624-8f84-05bbc1278eff>

FT Alphaville

The (not-so) big Burnham bonds beef

UK government bond markets saw a modest reaction following comments from Rishi Sunak, dubbed the 'King in the North,' regarding fiscal policy. Despite initial jitters, gilt yields experienced only a slight uptick, reflecting limited market concern over potential changes in borrowing or spending plans. The move suggests that investors remain cautiously positioned, with no significant shifts in flows or risk premia. Market participants appear to be awaiting clearer signals on fiscal direction before adjusting their bond holdings substantially. Overall, the impact on UK gilts was contained, indicating stable positioning amid ongoing macro uncertainty.

Read more: <https://www.ft.com/content/4792417f-3eb3-4d84-af1d-3bd31993b5ce>

FT Alphaville

No FT, No Index (part 2)

The article discusses the implications of the Financial Times (FT) no longer providing certain index data, impacting market participants who rely on these benchmarks for trading and analysis. The absence of FT's index data disrupts the availability of reliable reference points, potentially affecting pricing models, risk assessments, and algorithmic strategies that depend on consistent and transparent index information. This change may lead to increased market fragmentation and challenges in maintaining accurate market positioning. Traders and quants will need to adjust their data sources and models to accommodate this shift, possibly increasing operational complexity and costs.

Read more: <https://www.ft.com/content/fc504668-caef-473e-a0b0-c21b45a03b44>

FT Alphaville

■ AI & Finance

95% of faculty say AI making students dangerously dependent on technology for learning: survey

The survey by the American Association of Colleges highlights that 95% of faculty believe AI is negatively impacting students' critical thinking skills. Additionally, 78% of educators report a rise in cheating linked to AI tools. This growing concern may influence educational technology investments and regulatory scrutiny. Market participants in edtech and AI sectors should monitor potential shifts in policy or institutional adoption rates. The data suggests increased risk around AI integration in learning environments, potentially affecting related equity and fixed income flows.

Read more: <https://www.foxnews.com/media/95-faculty-say-ai-making-students-dangerously-dependent-technology-learning-survey>

Fox News

World today resembles pre-Second World War era, tech may decide wars, says CDS General Anil Chauhan

India's Chief of Defence Staff, General Anil Chauhan, draws parallels between current global tensions and the pre-Second World War era, emphasizing the increasing role of technology in determining conflict outcomes. He warns of blurred distinctions between war and peace, highlighting risks such as cognitive colonialism, where external powers manipulate information and influence. This perspective underscores the growing importance of technological advancements and cyber capabilities in defense strategies, potentially impacting geopolitical stability and defense spending. Market participants should monitor defense tech sector developments and geopolitical risk premiums as these dynamics evolve.

Read more: <https://economictimes.indiatimes.com/news/defence/world-today-resembles-pre-second-world-war-era-tech-may-decide-wars-says-cds-general-chauhan/articleshow/127259084.cms>

The Times of India

The former Greco-Roman wrestler using AI to make used-car pricing transparent

George Chaumon, CEO of ACV Auctions, is leveraging AI to enhance transparency in used-car pricing. The platform uses machine learning algorithms to analyze vast datasets, improving price accuracy and market efficiency. This innovation could impact automotive market dynamics by providing real-time, data-driven valuations, potentially influencing consumer behavior and inventory management. The approach may also affect credit risk assessments and financing models tied to used vehicles. As AI-driven pricing gains traction, it could lead to more efficient price discovery and reduced information asymmetry in the automotive sector.

Read more: <https://www.irishtimes.com/business/2026/01/23/the-former-greco-roman-wrestler-using-ai-to-make-used-car-pricing-transparent/>

The Irish Times

■ Quant Keywords & Mini-Glossary

Fund Flows — [The net movement of money into or out of investment funds, indicating investor demand and positioning.]

Positioning — [The allocation and exposure of portfolios or funds to various assets or sectors.]

Volatility — [A statistical measure of the dispersion of returns for a given security or market index.]

Momentum — [The tendency of asset prices to continue moving in the same direction over a short to medium term.]

Event-Driven Flows — [Trading activity influenced by specific corporate or market events like IPOs or earnings.]

Market Breadth — [A measure comparing the number of advancing versus declining stocks to assess rally strength.]

Cap-Weighted Index — [An index weighted by the market capitalization of its constituent stocks.]

Equal-Weighted Index — [An index where each constituent stock has the same weight regardless of size.]

Risk Metrics — [Quantitative measures used to assess the risk of an investment or portfolio.]

Systematic Trading Models — [Algorithmic strategies that use quantitative rules to make trading decisions.]

Liquidity Patterns — [The availability and ease of trading assets without causing significant price changes.]

Algorithmic Trading — [Automated trading using computer algorithms to execute orders based on predefined criteria.]

Leverage — [The use of borrowed capital to increase the potential return of an investment.]

Margin Trading — [Buying securities using borrowed funds from a broker, amplifying gains and losses.]

Predictive Analytics — [Techniques using data, statistical algorithms, and machine learning to forecast future outcomes.]

Risk Management Frameworks — [Systems and processes designed to identify, assess, and mitigate financial risks.]

Treasury Yields — [The return on investment for U.S. government debt securities, reflecting interest rate expectations.]

Fiscal Policy Risk — [The uncertainty in markets caused by government spending and taxation decisions.]

Earnings Surprises — [When a company's reported earnings differ significantly from analyst expectations, impacting price action.]

Relative Strength — [A momentum indicator comparing the performance of one asset against another or an index.]

Sector Flows — [Capital movements into or out of specific industry sectors, influencing relative performance.]

Price Action — [The movement of an asset's price over time, used to inform trading decisions.]

Order Flow Imbalance — [A disparity between buy and sell orders that can signal short-term price pressure.]

Vol Surface — [The three-dimensional plot of implied volatility across different strikes and maturities.]

Quantization (FP8, INT8) — [Reducing numerical precision in models to speed up computations and reduce resource use.]