EUROPE

Introducing the BBVA USPI

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Executive Summary

This report introduces the BBVA US Equity Positioning Indicator (USPI), a tool designed to measure investor risk appetite by mapping capital flows and positioning across options, ETFs, mutual funds, futures, cash, and systematic strategies. By combining this positioning framework with BBVA's six-stage US growth model (see - A six-stage asset cycle based on a proprietary leading cyclical/inflation index – 3 February 2023) and Financial Conditions Index (FCI) (see Introducing BBVA FCI – 16 September 2025), investors gain a comprehensive view of market turning points and volatility risk. Core insights:

- **Mismatches in Sentiment Drive Volatility:** When equity market sentiment decouples from underlying economic sentiment, markets become vulnerable to sharp corrections or sudden rebounds, even in the absence of a macro-economic shock.
- **Flushing Out Speculative Leverage Helps Clear Market Distortions:** High concentrations of leveraged, speculative positioning—such as the recent surge in AI equities—can trigger severe downturns. As demonstrated by the Korean Kospi index's 40% correction and subsequent rebound, flushing out crowded speculative leverage helps clear market distortion, stabilising volatility for long-term investors.
- **Price Dynamics Result in an Asymmetric Market Impact:** While share ownership is inherently a zero-sum accounting identity—where every long position is offset by a short or neutral stance—the price dynamics are non-linear. Because prices are set at the margin by urgent order flow, rapid liquidations by systematic or leveraged traders inflict widespread, asymmetric wealth creation or destruction.

Our USPI is currently at 0.73x, at its highest levels since January of this year.. Our positioning indicator troughed in early April this year and since then we have seen steady inflows into equity markets. The composite USPI at current overweight levels signals heightened vulnerability to short-term pullbacks.

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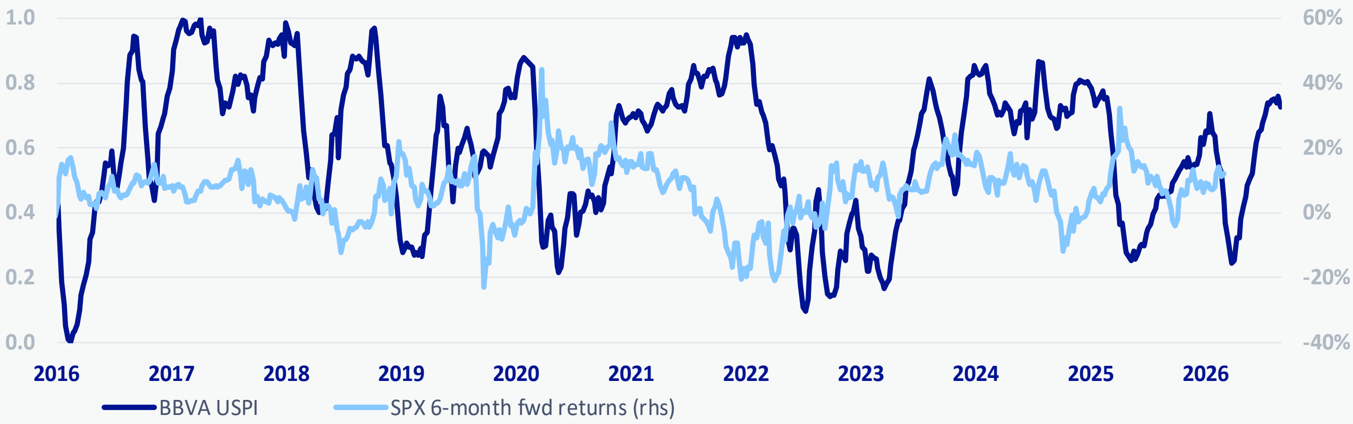
1. Introduction

Equity positioning tracks how heavily market participants—including hedge funds, asset managers, retail traders, and systematic strategies—are allocated to stocks relative to cash and historical benchmarks. **While traditional economic indicators offer a fundamental, backward-looking view of macroeconomic health, positioning provides a real-time gauge of institutional risk appetite, capital deployment, and structural market vulnerability.**

Beyond acting as a market gauge, equity performance actively feeds back into the real economy via the wealth effect. Rising stock prices expand household net worth, boosting consumer confidence and spending—the primary engine accounting for roughly two-thirds of US GDP. Strong markets simultaneously lower corporate borrowing costs, stimulating business investment, hiring, and capital expenditure. Conversely, sustained market drawdowns erode balance sheets, tighten financial conditions, and curtail discretionary spending. **This dual interaction underscores how equity markets act not merely as economic mirrors, but also as active transmission mechanisms that can amplify macroeconomic data in either direction.**

Figure 1

BBVA US EQUITY POSITIONING INDICATOR (BBRIUSPI Index)



Source: Bloomberg and BBVA Global Markets Strategy

The Mechanics of Positioning Signals

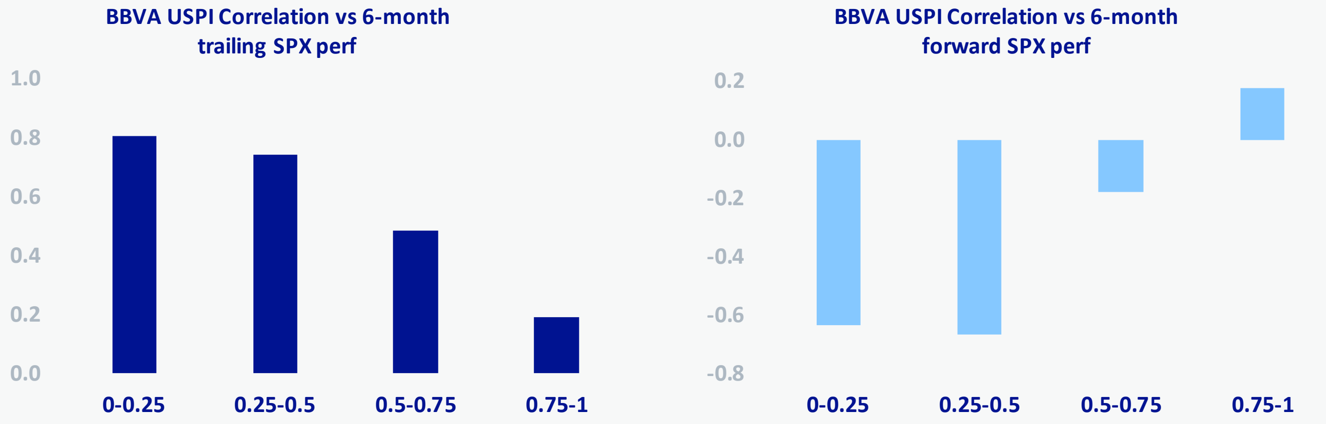
Under normal conditions, equity positioning functions as a coincident indicator, moving in tandem with prevailing price trends as capital tracks momentum. At statistical extremes, however, positioning transforms into a powerful contrarian tool characterised by a pronounced behavioural asymmetry:

- **Extreme Defensive Positioning (Strong Buy Signal):** Severe capital compression, widespread capitulation, and heavy short exposure leave bad news fully priced in. This creates a fragile structural floor where the market becomes hyper-sensitive to any positive catalyst, triggering explosive, FOMO-driven short-covering rallies as sidelined capital scrambles to re-enter.
- **Extreme Offensive Positioning (Slower Sell Signal):** Hyper-bullish positioning builds internal market tension and erodes safety cushions as valuations stretch beyond underlying macro or earnings fundamentals. However, behavioural biases lead investors to stay fully invested in overcrowded trades to capture the final stretch of gains. The unwinding process is often delayed until an unexpected catalyst - such as earnings miss, rising capex concerns, or competitive disruptions - sparks rapid profit-taking.

We see this behaviour in our BBVA US positioning indicator as well. It acts as a strong coincident indicator, showing high positive correlation with trailing six-month S&P 500 performance at low positioning levels. Crucially, at extremes, it transforms into a powerful contrarian signal, exhibiting a negative correlation with six-month forward returns to reliably forecast turning points. The signal strength is stronger in forecasting market troughs than peaks.

Figure 2

US EQUITY POSITIONING INDICATOR CORRELATION WITH EQUITIES

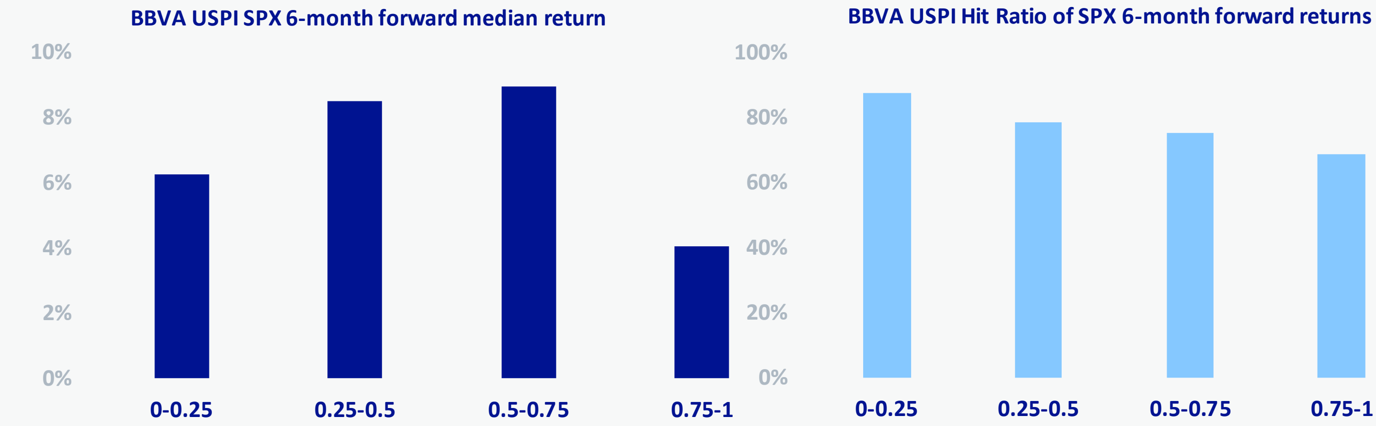


Source: Bloomberg and BBVA Global Markets Strategy

This dynamic was vividly illustrated during recent AI stock corrections. Concentrated, leveraged positioning pushed semiconductor and infrastructure valuations to historical extremes. When positioning became overly crowded, modest catalyst shifts - such as competitive model releases like DeepSeek or changing rate expectations - sparked sharp, mechanical unwinds across AI equities despite their solid multi-year growth outlooks.

Figure 3

US EQUITY POSITIONING INDICATOR PERFORMANCE METRICS



Source: Bloomberg and BBVA Global Markets Strategy

Market Microstructure and Systematic Flows

While share ownership is inherently a zero-sum accounting identity—where every long position is offset by an equivalent short or neutral stance—the price impact of positioning shifts is profoundly non-linear. Modern equity price discovery is increasingly dictated by systematic flows, which operate independently of economic micro-fundamentals:

- **Automated Feedback Loops:** Systematic strategies like Commodity Trading Advisors (CTAs), Volatility Control, and Risk Parity funds adjust exposures based on volatility and technical price thresholds rather than valuation. When market pullbacks breach these levels, algorithmic risk models execute simultaneous automated sell orders, triggering liquidity squeezes and sharp price declines regardless of economic health.
- **Options Dealer Gamma:** The explosive growth of short-dated options forces market-making algorithms into real-time delta hedging. In negative gamma environments, dealers are forced to sell into falling markets and buy into rising ones, significantly amplifying intraday price swings.
- **Reduced Passive Liquidity:** The structural expansion of passive index strategies has shrunk the pool of active, discretionary human traders who historically provided liquidity against order-flow imbalances, leaving markets prone to sudden "flash" moves and momentum swings.

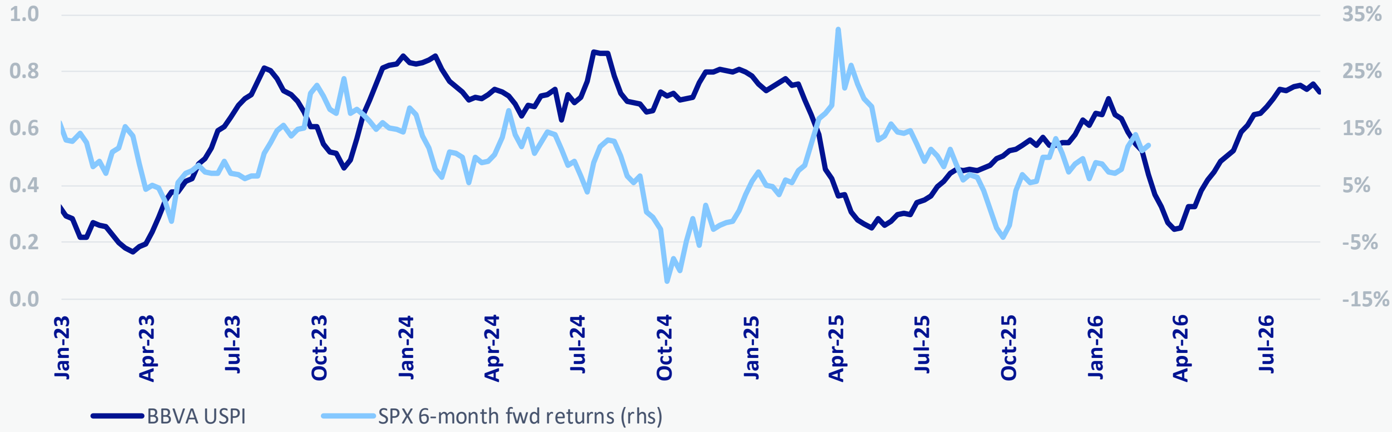
- By integrating capital flows across options, ETFs, mutual funds, futures, and cash with systematic flow modelling, the BBVA US Equity Positioning Indicator (BBRIUSPI Index) bridges the gap between macroeconomic reality and market microstructure. Combining positioning metrics with broader economic growth frameworks and financial condition indices equips investors with a forward-looking toolkit to anticipate asymmetric drawdown risks, navigate structural turning points, and capture high-conviction contrarian opportunities.

2. What is the USPI telling us?

Our USPI is currently at 0.73x, at its highest levels since January of this year. Our positioning indicator troughed in early April this year and since then we have seen steady inflows into equity markets. Despite the large recent correction in AI stocks, we do not see that on our chart because the broader equity market remained resilient and the rotation out of AI-related semiconductor stocks only helped flows into the broader markets. The current overweight level of our composite USPI signals heightened vulnerability to short-term pullbacks.

Figure 4

US EQUITY POSITIONING INDICATOR FRAMEWORK



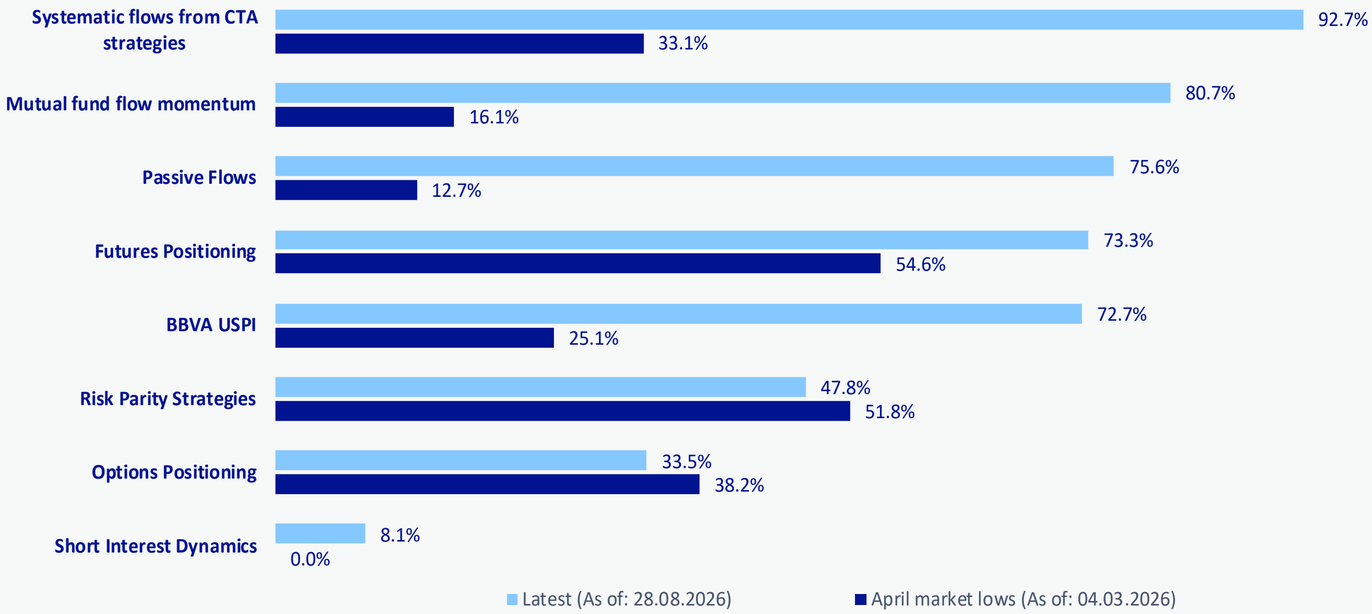
Source: Bloomberg and BBVA Global Markets Strategy

Between April and August 2026, the market experienced a pronounced positioning regime shift, transitioning from institutional capitulation to stretched bullishness as captured by the BBVA US Positioning Indicator (USPI). At the April market lows, the overall USPI index dipped to a defensive 0.25x, driven by a severe capitulation in positioning by discretionary mutual funds (to 16.1%) and passive ETF flows (to 12.7%). This widespread clean-out of speculative leverage removed market fragility and set the stage for a powerful contrarian rally.

The recovery was aggressively spearheaded by systematic trend-followers, with CTA strategy positioning surging from an underweight 33.1% in April to a near-saturated 92.7% by mid-August as automated models mechanically bought into rising momentum. Accompanied by a strong rebound in mutual fund momentum (80.7%) and futures positioning (73.3%), sidelined institutional capital surged back into equities. Meanwhile, options positioning fell to 33.5%—reflecting compressed volatility premiums and growing market complacency—while risk-parity strategies held steady around 47.8%, ultimately elevating the composite USPI to an overweight 0.73x and signalling heightened vulnerability to short-term pullbacks.

Figure 5

US EQUITY POSITIONING INDICATOR FRAMEWORK



Source: Bloomberg and BBVA Global Markets Strategy

3. How does it work?

To capture the multi-dimensional nature of market exposure, our BBVA US Equity Positioning Indicator (USPI) synthesises flow dynamics and capital commitments across the entire spectrum of market participants. The framework integrates data from option surfaces, ETFs, mutual funds, futures contracts, constituent-level short interest, and quantitative systematic strategies into a single, standardised score ranging between 0 and 1.

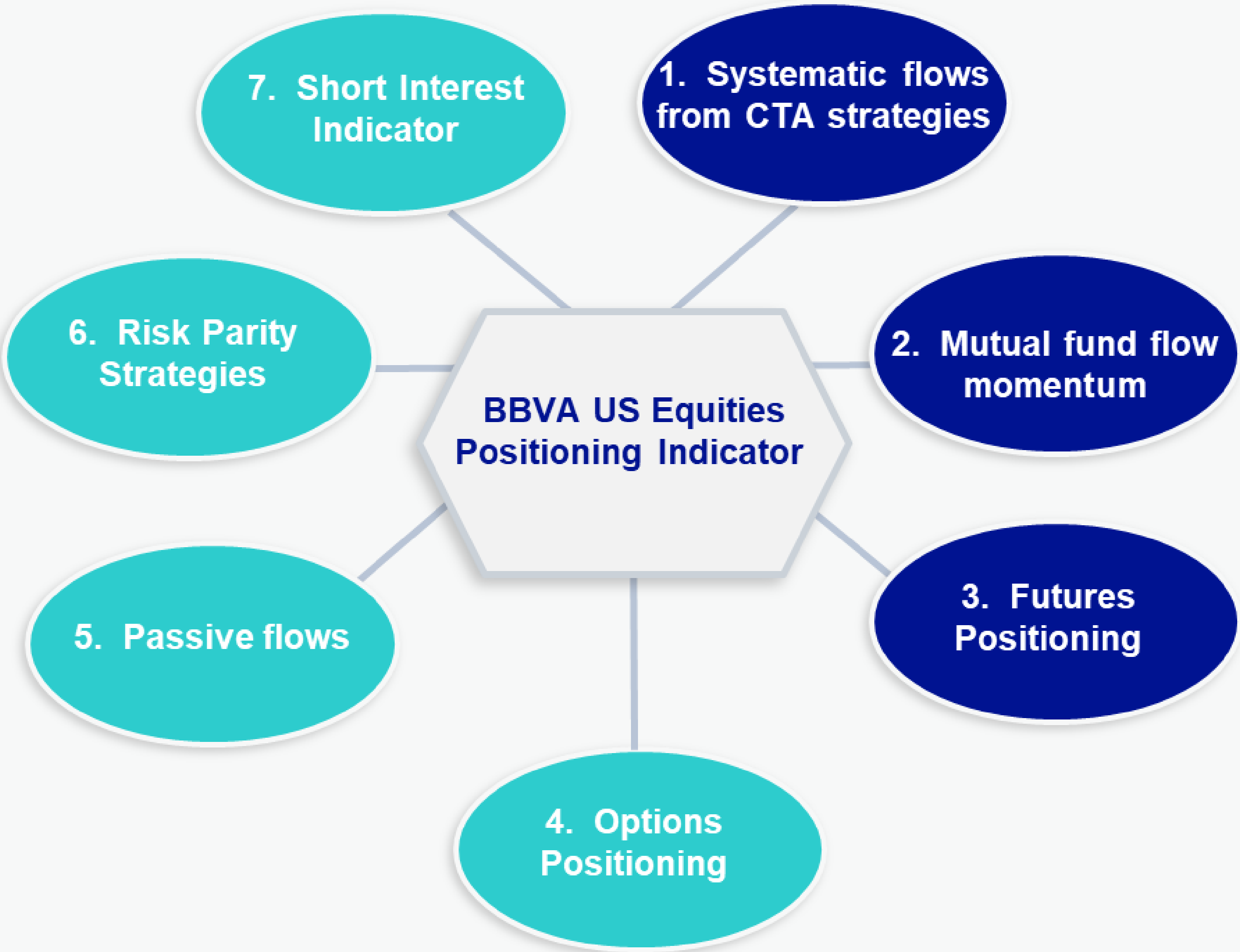
The Two-Tier Calibration Framework: Rather than relying on a naive equal-weighting scheme or an overly complex dynamic model, we employ a disciplined two-tier weighting architecture. This design choice deliberately avoids look-ahead bias and overfitting, preserving the model's robust out-of-sample predictive power. Sub-models are weighted based on three rigorous criteria:

- **Empirical Predictive Power:** Back-tested performance evaluating each sub-model's correlation with six-month forward S&P 500 returns and drawdown probability.

- **Flow Magnitude:** The absolute capital scale deployed by the underlying participant class.
- **Market Impact Conviction:** Our analytical assessment of a segment's ability to drive short-term price discovery and force liquidity squeezes.

Figure 6

US EQUITY POSITIONING INDICATOR FRAMEWORK



Source: Bloomberg and BBVA Global Markets Strategy

While the two-tier weighted model yields result that closely track a simple equal-weighted baseline—primarily because different market participant classes tend to buy and sell in a highly correlated fashion during major market moves—this structured weighting architecture significantly enhances the overall robustness of the indicator.

Rather than relying on a naive assumption that every flow source carries identical market impact, the framework explicitly accounts for empirical predictive power, capital scale, and execution mechanics. This extra layer of structural rigour should give investors greater confidence in the signal's reliability, ensuring that the indicator is properly grounded in market microstructure and resilient against look-ahead bias.

Core Drivers (60% Aggregate Weight / 20% Each)

We allocate a dominant 20% individual weight to the three primary engines of forward market returns and structural liquidations:

- **Systematic Flows from CTA Strategies (20%):** Models trend-following algorithms, the volatility-scaled mechanics of which trigger aggressive, non-discretionary buying or selling at key technical levels.
- **Mutual Fund Flow Momentum (20%):** Captures flow momentum into mutual funds and institutional pooled vehicles, representing longer-term fundamental re-allocations.
- **Futures Positioning (20%):** Measures high-conviction directional exposure from discretionary macro managers and institutional speculators using S&P 500 futures contracts.

Satellite Signals (40% Aggregate Weight / 10% Each)

The remaining four sub-models each carry a 10% individual weight, acting as vital diagnostic overlays that refine market entry/exit timing and highlight localised market microstructure risks:

- **Options Positioning (10%):** Tracks options-market hedging demand and complacency by combining the Volatility Risk Premium (VRP), three-month volatility skew, and put/call open interest ratios.
- **Passive Flows (10%):** Monitors retail and passive benchmark flows across S&P 500 and Nasdaq 100 ETFs to detect procyclical extremes.
- **Risk-parity Strategies (10%):** Gauges implicit equity exposure in risk-parity and managed-volatility mandates, identifying potential deleveraging triggers when realised volatility spikes.
- **Short-interest Dynamics (10%):** Evaluates aggregate constituent-level short interest across S&P 500 stocks to measure institutional hedging density and short-squeeze potential.

By combining these primary and secondary drivers into a unified ensemble, the USPI provides institutional investors with a robust, forward-looking signal to navigate structural turning points, anticipate mechanical liquidity squeezes, and optimise tactical asset allocation.

4. Understanding the inputs

In this section we provide a detailed explanation of each of the above inputs.

Systematic Flows from CTA Strategies (20%)

Commodity Trading Advisors (CTAs) are quantitative, rule-based investment funds that employ systematic trend-following strategies across global asset classes, including equities, commodities, currencies, and fixed income.

Unlike fundamental investors who evaluate earnings reports, macroeconomic data, and/or corporate valuations, CTAs trade exclusively on mathematical price signals and quantitative risk parameters. They use programmatic algorithms—such as moving-average crossovers, breakout channels, and time-series momentum models—to automatically buy assets that are trending upward and short assets that are trending downward.

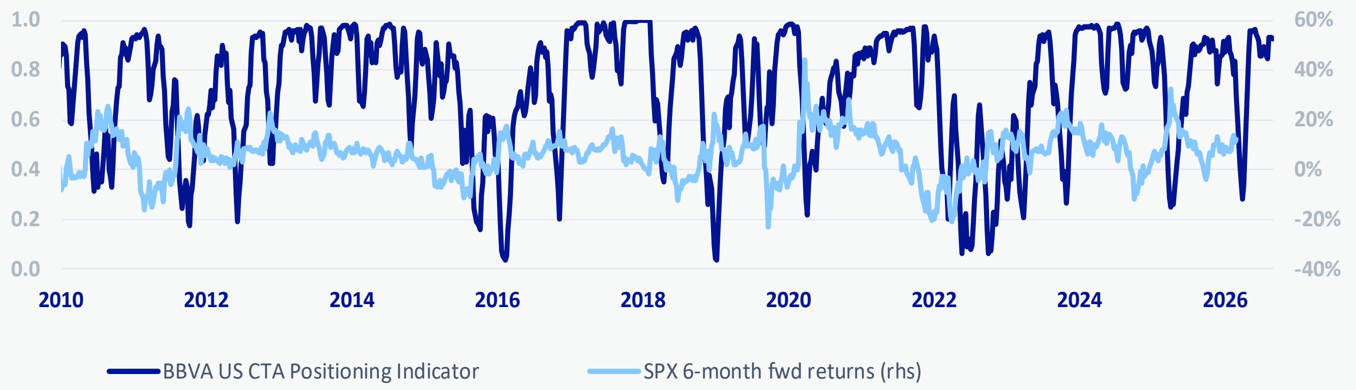
Systematic Flows from CTA Strategies surged from a depressed **33.1%** positioning during the April market lows to a near-saturated **92.7%** recently, reflecting massive automated re-leveraging as trend-following models bought into rising momentum.

While CTAs represent a specific subset of institutional capital, their structural mechanics give them a disproportionate influence on short-term stock market price action and intraday volatility:

- **Inflexible, Agnostic Execution:** CTAs do not care why an asset is moving; they only respond to how it is moving. Because their execution is purely rule-based, they will aggressively buy into market tops or short into market bottoms as long as their quantitative models detect momentum, irrespective of whether equities are fundamentally over or undervalued.

Figure 7

BBVA US CTA POSITIONING INDICATOR (BBRIUSTI Index)



Source: Bloomberg and BBVA Global Markets Strategy

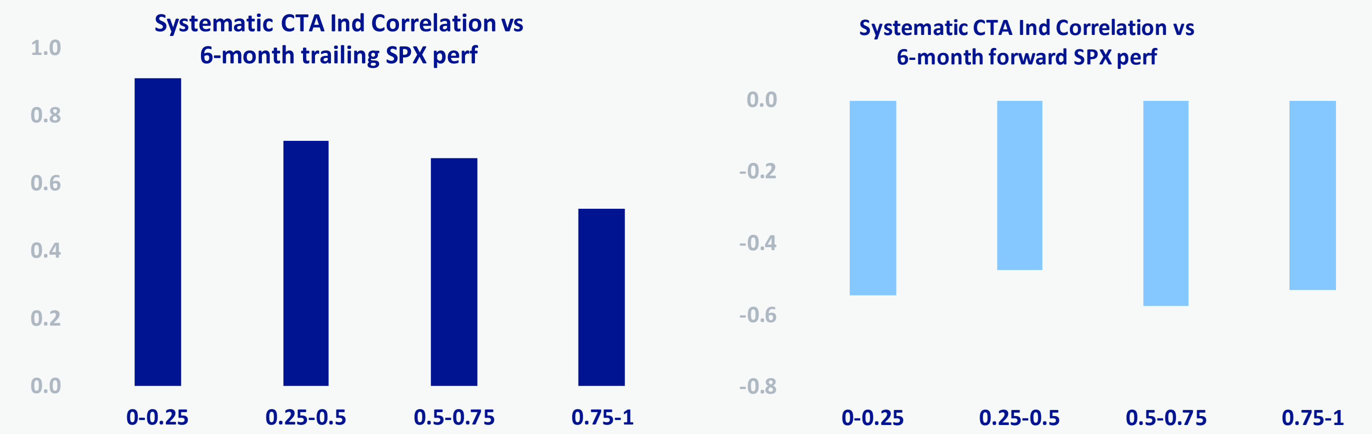
- **Shared Technical Triggers:** Most institutional CTAs rely on similar time horizons for trend detection (such as 21-day, 63-day, and 252-day moving averages). When the S&P 500 breaches a critical technical support level, dozens of multi-billion-dollar CTA funds receive automated sell signals simultaneously, creating massive order-flow imbalances in a matter of hours.

- **Volatility-based Position Sizing:** CTAs target constant risk contributions rather than fixed dollar amounts. They dynamically size positions inversely to market volatility. When market volatility is low, CTAs build heavily leveraged long positions. If a sudden news event causes volatility to spike, their risk models force immediate, automated deleveraging—turning minor pullbacks into violent selloffs.
- **Mechanical Feedback Loops**: Because passive index funds have reduced the pool of active, discretionary human traders who act as liquidity providers, large CTA order flows frequently drive short-term price discovery. Their mechanical buying or selling pushes prices further in the direction of the prevailing trend, which in turn triggers additional algorithmic signals, compounding momentum and creating sharp, non-linear market swings.

Although precisely quantifying the total capital allocated to systematic trend-following strategies remains challenging, CTA equity exposure is a mechanical function of quantitative trend models rather than discretionary views, making it remarkably predictable from price action alone. To capture this dynamic, we synthetically estimate aggregate CTA positioning in US equities by constructing a proprietary model that replicates industry-standard trend-following strategies. Our framework integrates trend signals across fast-, medium-, and slow-moving horizons using canonical institutional timeframes, paired with volatility-based position sizing to mirror real-world risk-management mechanics.

Figure 8

BBVA US CTA POSITIONING INDICATOR'S CORRELATION WITH EQUITIES



Source: Bloomberg and BBVA Global Markets Strategy

As shown in Figure 8, the BBVA US CTA Positioning Indicator maintains a solid positive correlation with trailing market performance regardless of the positioning tier, reinforcing its role as a coincident tracking metric. Crucially, its forward-looking relationship is inverse across all buckets, peaking in the 0.5-0.75x bucket with a negative correlation close to -80%. This structural inversion underscores the tactical value of overlaying systematic flow tracking onto fundamental equity analysis to anticipate market turning points and risk unwinds.

Mutual fund flow momentum (20%)

Mutual funds—particularly institutional and active pooled investment vehicles—serve as one of the largest, most persistent structural drivers of long-term US equity demand and short-term price dynamics.

While high-frequency quantitative strategies often dictate intraday noise, mutual funds manage trillions of dollars in real, core capital. Their flows reflect fundamental macroeconomic shifts, corporate earnings trends, and broad risk preferences across pension funds, endowments, sovereign wealth funds, and 401(k) retirement accounts.

Mutual Fund Flow Momentum: Mutual Fund Flow Momentum jumped from a capitulation low of 16.1% during April market lows to 80.7% recently, indicating a strong return of discretionary institutional capital.

Figure 9

MUTUAL FUND FLOW MOMENTUM INDICATOR

Source: EPFR, Bloomberg and BBVA Global Markets Strategy

- **Structural Capital Scale:** Mutual fund allocations represent a primary destination for long-term domestic and international capital. Because of their vast Assets Under Management (AUM), even minor percentage reallocations by mutual fund managers translate into tens of billions of dollars entering or exiting the market.
- **Longer Holding Horizons:** Unlike tactical retail traders or systematic CTA funds that rebalance across days or weeks, mutual fund managers operate on longer investment horizons. Persistent net inflows into mutual funds provide sustained, multi-month buying pressure that supports higher market valuations and dampens downside volatility.
- **Indicative of Institutional Sentiment:** Mutual fund flows offer a clean window into fundamental discretionary positioning. Sustained accumulation across mutual fund

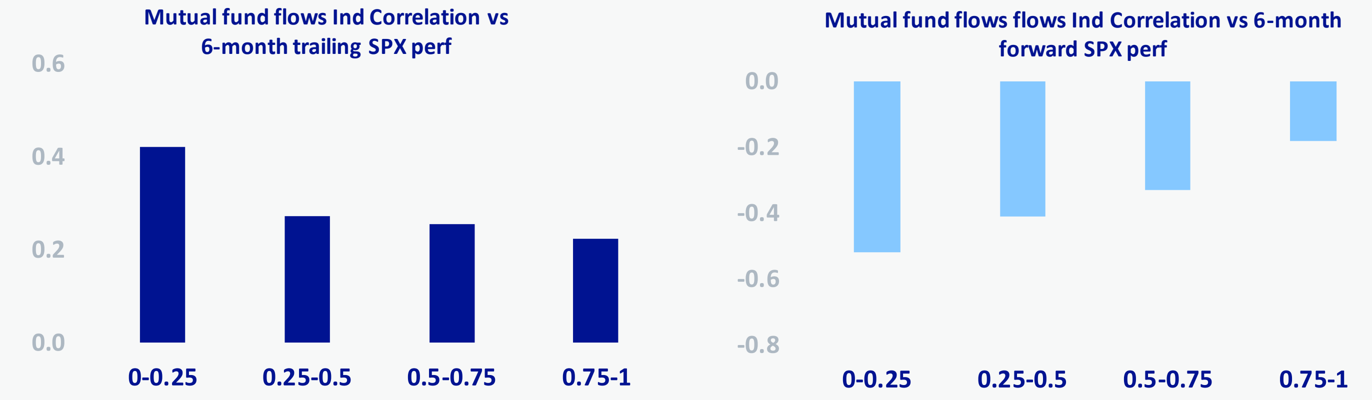
categories signals broad-based institutional confidence, whereas heavy cumulative redemption phases reflect deep-seated capitulation.

- **Contrarian Exhaustion Signals**: Mutual fund flows tend to be directional and persistent over medium-term horizons. When cumulative inflows or outflows reach historical extremes relative to total AUM, it signals that institutional buying power is either stretched or exhausted. At these allocation extremes, markets frequently hit major turning points—making mutual fund flow data a highly reliable contrarian indicator for forward returns.

Mutual fund flow momentum acts as a steady coincident metric while delivering its strongest contrarian signal during severe institutional capitulation. As shown in Figure 10, the indicator maintains a moderate positive correlation with trailing S&P 500 performance across all tiers but displays a consistently negative correlation with six-month forward returns - peaking at approximately -0.5 in the lowest 0-0.25x bucket. This structural inversion demonstrates that deep mutual fund redemption phases reliably set the stage for explosive market recoveries.

Figure 10

MUTUAL FUND FLOW MOMENTUM INDICATOR'S CORRELATION WITH EQUITIES



Source: EPFR, Bloomberg and BBVA Global Markets Strategy

Futures positioning (20%)

Futures positioning—specifically large speculative and institutional exposure in contracts like the E-mini S&P 500—is one of the most critical drivers of short-term US equity returns and market liquidity. Because futures markets allow market participants to deploy substantial financial leverage and execute rapid asset allocation shifts without navigating the illiquidity of individual cash equities, they serve as the primary engine for real-time price discovery.

Futures Positioning: Futures Positioning (CFTC) expanded from 54.6% during the April market lows to 73.3% recently, signalling a steady accumulation of long directional bets by speculative macro traders.

- **High-Leverage Price Discovery:** Discretionary macro funds, global hedge funds, and institutional traders utilise index futures to express immediate top-down directional views.

Because futures require only a fraction of initial margin, capital shifts occur rapidly. When large speculators move aggressively long or short, futures prices instantly lead the underlying cash market, forcing arbitrageurs and market makers to adjust equity index components in real time.

Figure 11

FUTURES POSITIONING INDICATOR

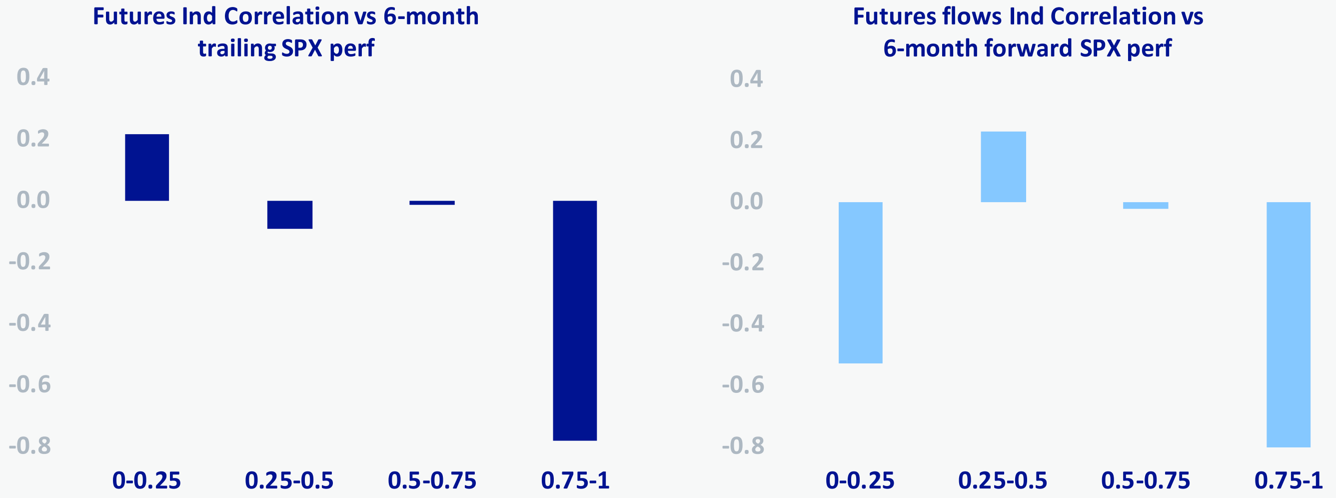
Source: CFTC, Bloomberg and BBVA Global Markets Strategy

- **Contrarian Signals at Positioning Extremes:** Speculative futures positioning tracks high-conviction directional consensus. When net futures exposure reaches multi-year high percentiles, it signals that speculative buying capacity is largely exhausted. At these bullish extremes, even minor unexpected catalysts can spark rapid profit-taking and unwinds. Conversely, when futures speculators capitulate into net-short positions, the market becomes heavily asymmetric, creating fertile ground for explosive short-covering rallies at the first sign of positive news.
- **Liquidity Squeezes and Non-Linear Moves:** Futures markets sit at the centre of institutional risk management and mechanical hedging. Sudden position adjustments in futures contracts—such as systematic funds rebalancing or market makers hedging delta—can trigger mechanical liquidity squeezes. These urgent order flows drive non-linear price swings, amplifying intraday volatility and setting the short-term direction for the broader equity market.

The Futures Positioning Indicator demonstrates a distinct dynamic, functioning as a powerful contrarian signal primarily at historical extremes. As shown in Figure 12, correlation with trailing and forward six-month S&P 500 performance is negligible across middle tiers but turns sharply negative (near -0.8%) in the highest 0.75-1x bucket. Crucially, its forward-looking relationship reveals strong contrarian power at both ends. This structural inversion underscores that speculative futures capitulation provides a strong buy signal, while overcrowded futures positioning creates severe downside market vulnerability.

Figure 12

FUTURES POSITIONING INDICATOR'S CORRELATION WITH EQUITIES



Source: CFTC, Bloomberg and BBVA Global Markets Strategy

Passive flow momentum (10%)

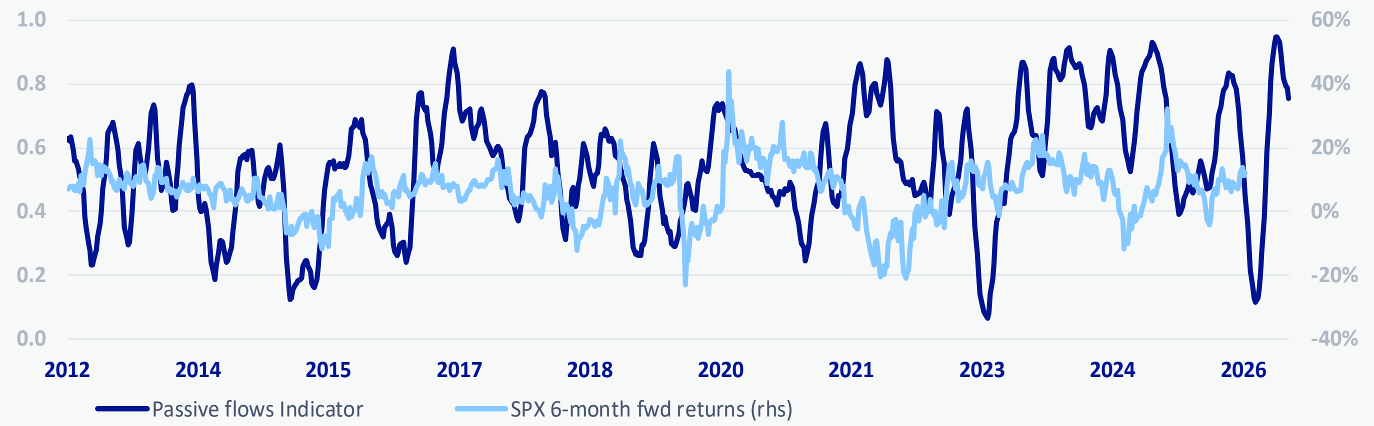
Exchange-Traded Fund (ETF) flow momentum represents one of the most powerful structural drivers of modern US equity returns and market microstructure. Over the past two decades, ETFs have evolved into the dominant vehicle for retail, tactical, and institutional investors to gain passive, index-level exposure to US equity benchmarks like the S&P 500 and Nasdaq 100.

Passive Flows: Passive Flows (ETFs) rebounded from a low of 12.7% during April market lows to 75.6% recently, highlighting a sharp recovery in retail and tactical passive allocation.

- **Procyclical Flow Mechanics:** ETF flows exhibit a strong behavioural pattern of momentum following. Retail and systematic passive investors tend to allocate heavily during rising markets and withdraw capital during downturns. Sustained multi-month ETF inflows create continuous, price-agnostic buying pressure that supports higher market valuations and pushes equity prices higher regardless of underlying corporate fundamentals.
- **Mechanical Primary-Market Liquidity Creation:** Unlike traditional stock purchases, large ETF inflows trigger the primary-market creation mechanism. Authorised Participants (APs) buy the underlying basket of constituent stocks in the cash market to create new ETF shares. When ETF flow momentum accelerates, APs execute massive, simultaneous basket-buying across top index constituents, directly lifting the market capitalisation of major equities and driving intraday price momentum.

Figure 13

PASSIVE FLOWS POSITIONING INDICATOR

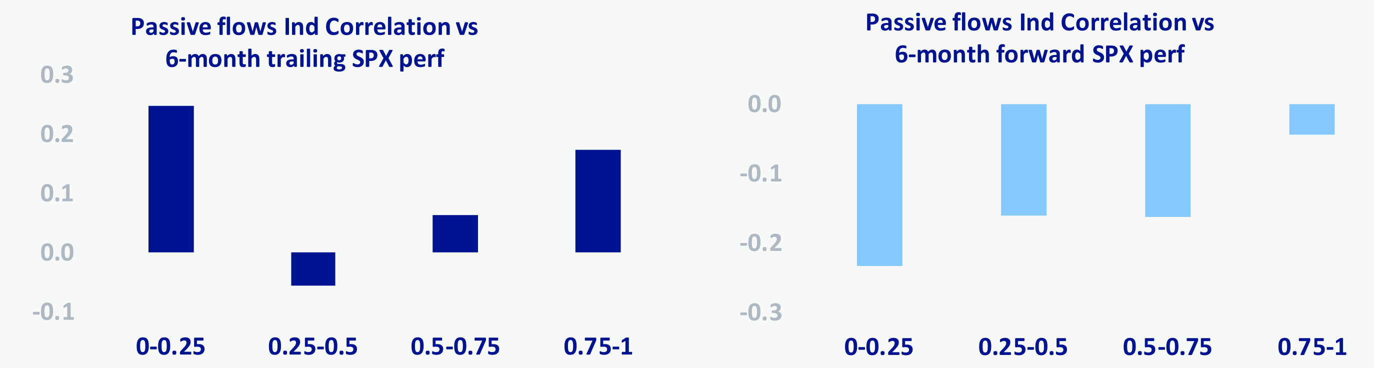


Source: EPFR, Bloomberg and BBVA Global Markets Strategy

- **Contrarian Signals at Flow Extremes:** Because passive ETF flows reflect broad-based investor sentiment, extreme flow momentum serves as a reliable contrarian positioning indicator. Stretched, multi-month ETF inflows signal that passive demand is saturated, leaving the market fragile to profit-taking or sudden sentiment reversals. Conversely, heavy, sustained ETF outflows reflect capitulation, where aggressive selling exhausts sidelined supply and sets the stage for powerful market bottoms.

Figure 14

PASSIVE FLOWS POSITIONING INDICATOR'S CORRELATION WITH EQUITIES



Source: EPFR, Bloomberg and BBVA Global Markets Strategy

Passive ETF flows serve as a significantly better contrarian predictor of market troughs than market peaks. As shown in Figure 14, the indicator's negative correlation with six-month forward S&P 500 performance is strongest at extreme low levels, the 0-0.25x bucket near -0.25%, confirming that deep retail and passive capitulation provides a reliable buy signal. Conversely, as positioning stretches into the upper 0.75-1.0x tier, the forward correlation weakens to near zero, demonstrating that heavy passive ETF inflows can persist during strong bull runs rather than triggering immediate market pullbacks.

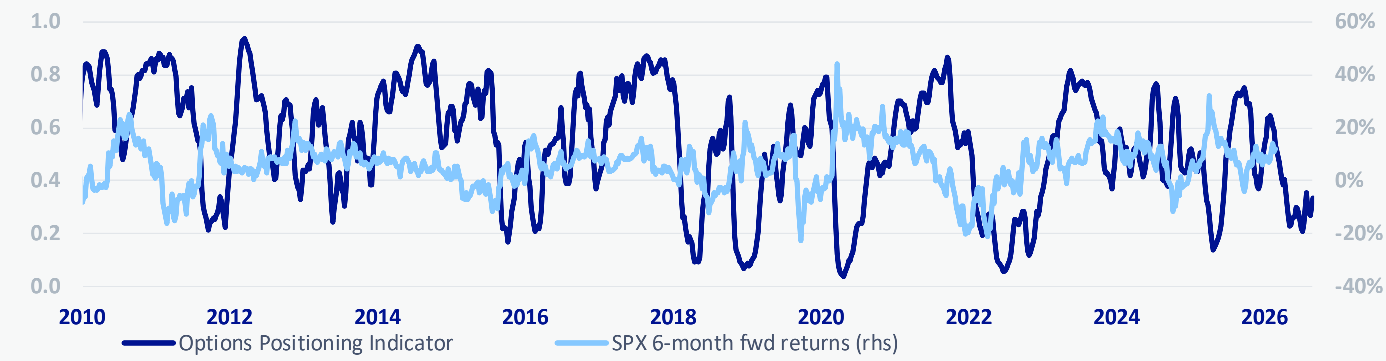
Options positioning (10%)

Option positioning plays a vital, non-linear role in shaping US equity returns and short-term volatility dynamics by acting as both a real-time gauge of institutional risk appetite and a direct mechanical driver of cash market prices. Unlike linear instruments like cash stocks or futures, options embed key qualitative information across market-maker hedging mechanics, downside tail-risk pricing, and investor risk premiums.

Options Positioning declined from 38.2% during April market lows to 33.5% recently, reflecting compressed volatility premiums and growing market complacency, especially given the lack of hedging appetite now vs. during March.

Figure 15

OPTIONS POSITIONING INDICATOR



Source: Bloomberg and BBVA Global Markets Strategy

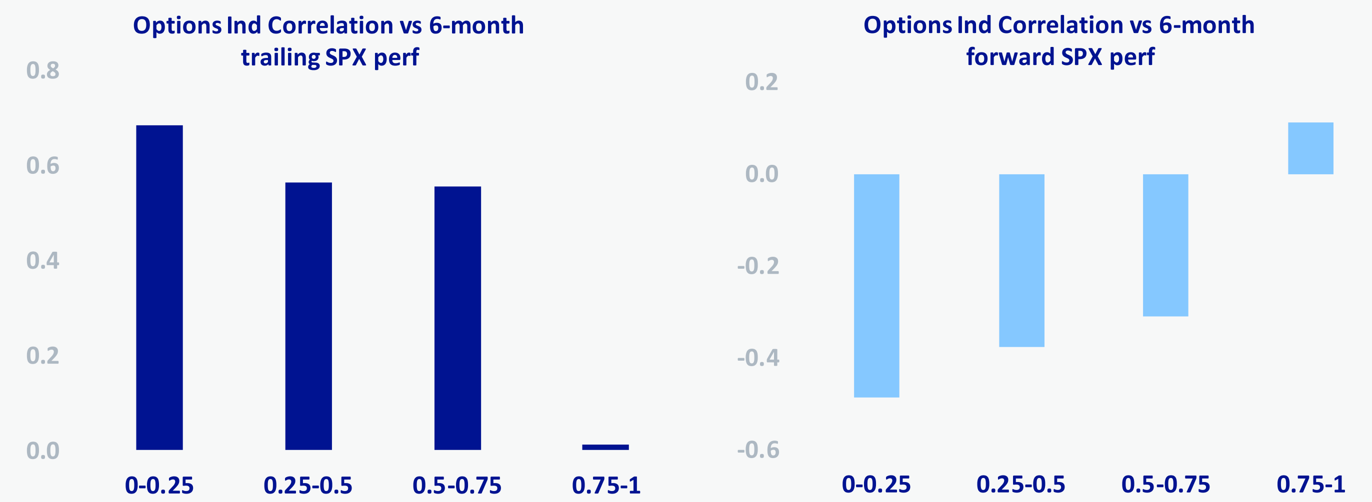
- **The Volatility Risk Premium (VRP) & Complacency:** The Volatility Risk Premium measures the spread between forward-looking protection costs (implied volatility) and historical price swings (realised volatility). Compressed VRP readings, paired with flat volatility skew (a low ratio of downside put vol to upside call vol), signal that market participants are under-pricing protection and exhibiting widespread complacency—leaving equity prices vulnerable to sharp pullbacks.
- **Contrarian Bottoming Signals:** Extreme defensive option positioning—characterised by elevated Volatility Risk Premiums, steep downside skew, and high put-to-call trading volume ratios—indicates that the market is maximally hedged. Historically, when options-market hedging reaches these pessimistic extremes, bad news becomes fully priced in, creating the mechanical conditions for explosive contrarian market rebounds.
- **Market-maker Hedging & Gamma Dynamics:** Option market makers strive to remain delta neutral. When investors buy calls or puts, market makers must hedge their exposure by trading underlying cash equities or futures. In a "short gamma" environment (where market makers hold net short option exposure), they are mechanically forced to sell into falling markets and buy into rising ones, accelerating price moves and amplifying market volatility. Conversely, "long gamma" environments suppress volatility as market makers buy dips and sell rallies.

Within the BBVA US Equity Positioning Indicator (USPI) framework, the Options Indicator operates as a Satellite Signal carrying a 10% weight. It synthesises three distinct options dimensions into a single composite score ranging between 0 and 1:

1. **Volatility Risk Premium (VRP):** Measures three-month ATM implied volatility relative to 30-day realised volatility.
2. **Volatility Skew:** Tracks the ratio of three-month 95% moneyness implied volatility (downside puts) to 105% moneyness implied volatility (upside calls).
3. **Put/Call Open Interest Ratio:** Captures total put open interest divided by total call open interest.

Figure 16

OPTIONS POSITIONING INDICATOR'S CORRELATION WITH EQUITIES



Source: Bloomberg and BBVA Global Markets Strategy

Options positioning serves as a powerful contrarian indicator for detecting market troughs rather than peaks. As shown in Figure 16, the indicator's negative correlation with six-month forward S&P 500 performance is strongest at extreme low levels, the 0-0.25x bucket at -0.5. Conversely, as positioning shifts to the upper 0.75-1x tier, the forward correlation turns slightly positive, indicating that complacent option sentiment can persist during extended market rallies rather than acting as a reliable top-calling signal.

Risk-parity positioning (10%)

Risk-parity strategies and volatility-targeting mandates serve as a major mechanical driver of US equity returns and market volatility, operating through automated risk-budgeting frameworks rather than fundamental valuations.

Figure 17
RISK-PARITY POSITIONING INDICATOR

Source: Bloomberg and BBVA Global Markets Strategy

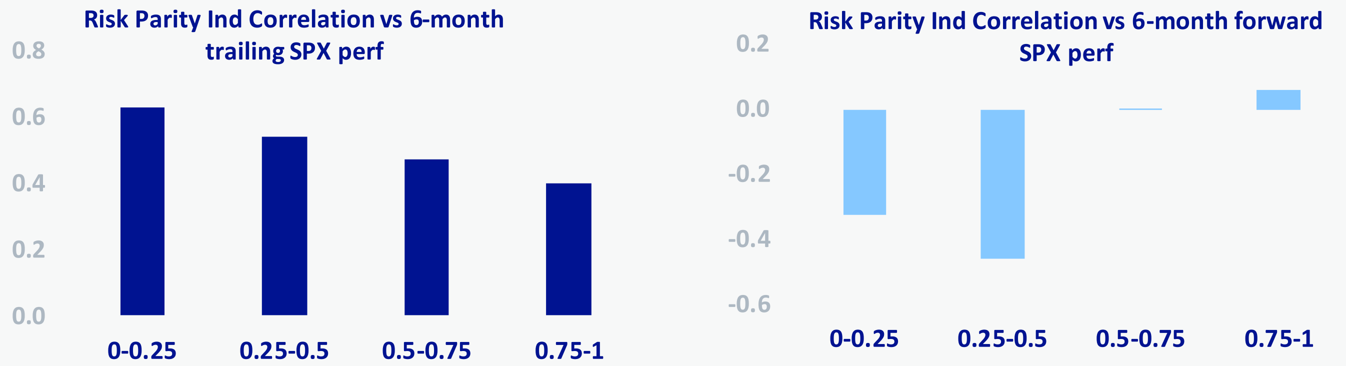
- **Volatility-Inverse Position Sizing:** Unlike traditional multi-asset portfolios (such as a static 60/40 allocation) that maintain fixed dollar weights, risk-parity funds allocate capital based on equalised risk contribution. Equity allocations are dynamically scaled inversely to realised asset volatility. When realised volatility is low, these funds mechanically leverage up their equity holdings.
- **Mechanical Deleveraging and Liquidity Squeezes:** When a market shock causes realised volatility to spike above a fund's volatility budget (typically anchored around USD10%), risk-parity models trigger immediate, non-discretionary risk reductions. These strategies are forced to sell equities into falling markets to shrink portfolio volatility—regardless of long-term economic or corporate earnings strength. This automated selling can exacerbate intraday liquidity squeezes and amplify market downturns.
- **Feedback Loops During Re-Leveraging:** Conversely, during extended periods of market calm, declining realised volatility forces risk-parity funds to mechanically re-lever and accumulate equities. This creates persistent, price-insensitive buying pressure that compresses volatility further, driving equity valuations higher until the next volatility event triggers a rapid unwind.

Risk-parity strategies held essentially flat, moving slightly from 51.8% during April's market lows to 47.8% recently, as risk-parity funds maintained steady exposure amidst stable realised volatility.

The Risk -parity Positioning Indicator acts as a strong contrarian predictor of market troughs rather than peaks. As shown in Figure 18, the indicator maintains a stable positive correlation (0.4-0.6%) with trailing S&P 500 performance but displays an asymmetric forward-looking relationship. At lower positioning tiers (0-0.5x), correlation with six-month forward returns is sharply negative (peaking near -0.45%), confirming that severe systematic de-leveraging sets up powerful buy signals as stabilising volatility forces re-leveraging. Conversely, in upper tiers (0.5-1.0x), forward correlation flattens near zero, indicating high risk-parity exposure can persist without triggering immediate tops.

Figure 18

RISK-PARITY POSITIONING INDICATOR'S CORRELATION WITH EQUITIES



Source: Bloomberg and BBVA Global Markets Strategy

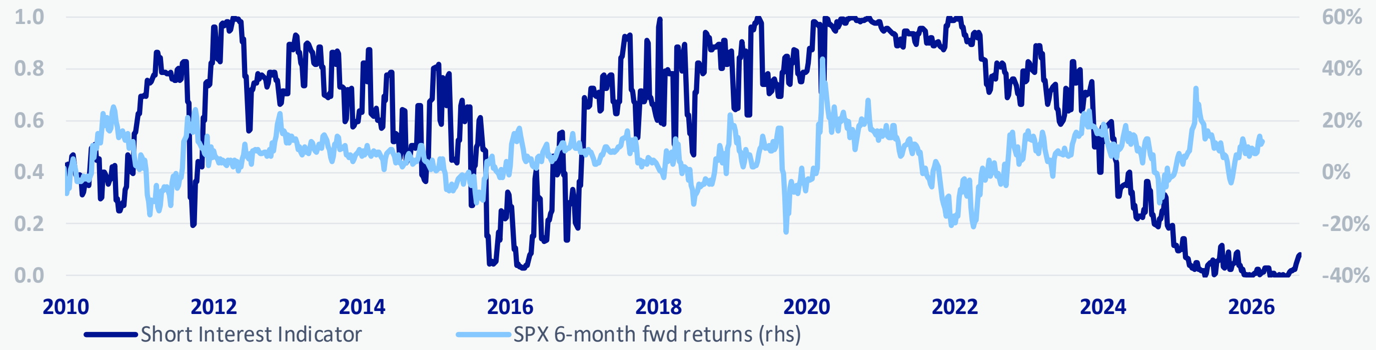
Short Interest positioning (10%)

Short interest—the total volume of shares sold short by investors and not yet covered—is one of the most transparent, high-conviction measures of bearish positioning in US equities. Because maintaining short positions incurs continuous borrowing costs, margin requirements, and theoretically unlimited downside risk, short interest reflects active, targeted conviction rather than passive asset allocation.

- **Squeezes & Asymmetric Upside Risk:** When short interest accumulates heavily across index constituents, it creates an asymmetric risk profile. Because short sellers must eventually buy back shares to close their positions, any unexpected positive catalyst—such as a surprise earnings beat, a product launch, or a macro shift—can trigger a rapid scramble to cover. This forced buying elevates prices, triggering trailing stops and compelling other short sellers to exit, sparking explosive, non-linear short-squeeze rallies.

Figure 19

SHORT INTEREST DYNAMICS INDICATOR



Source: Bloomberg and BBVA Global Markets Strategy

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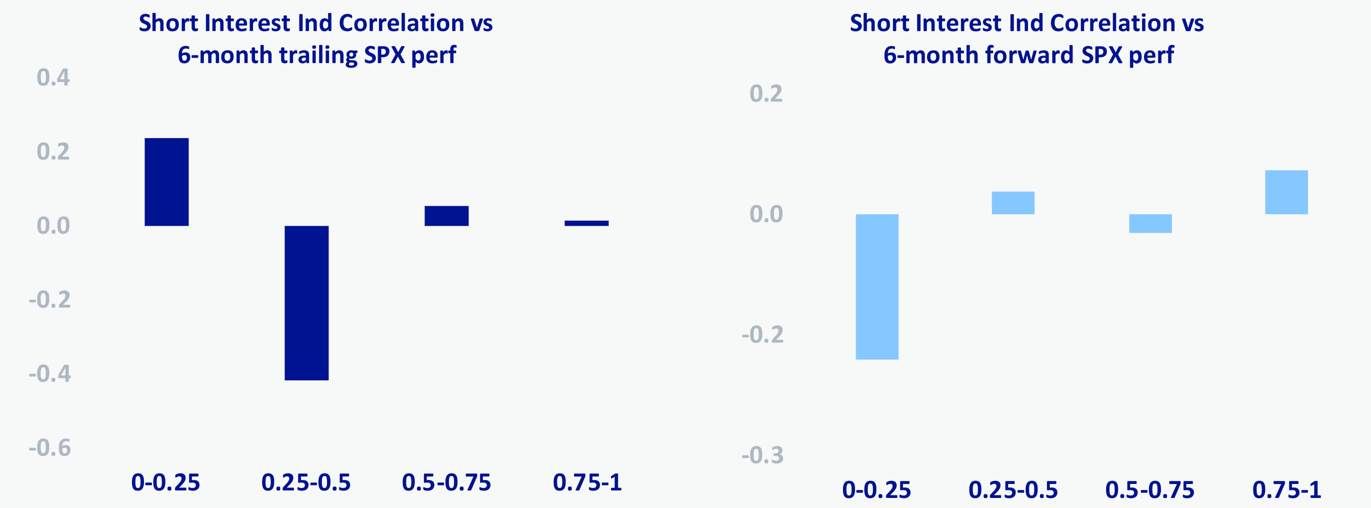
- **Institutional Hedging & De-risking Density:** Aggregate short interest serves as a primary window into sophisticated institutional risk management, particularly among hedge funds and proprietary trading desks. Elevated short interest across broad market benchmarks indicates that institutional portfolios are heavily hedged against downside risk. Conversely, depressed short interest signals a distinct lack of defensive hedging, leaving the broader market exposed to unhedged sell-offs if sentiment turns.
- **Contrarian Bottoming Indicator:** High aggregate short interest frequently acts as a reliable contrarian bullish indicator. When short interest reaches historical extremes, it signals that bearish sentiment and active selling pressure are largely exhausted. With bad news fully priced in and substantial short-covering demand waiting in the wings, the market develops a strong structural floor.

Short Interest Dynamics rose marginally from an exhausted 0.0% during April market lows to 8.1% recently, showing that institutional players remained significantly short single-name equities. The recent rebound could be explained by the short-covering rally in AI.

The Short Interest Dynamics Indicator acts primarily as a localised contrarian signal at market troughs rather than peaks. Because the indicator is sign-inverted, values near 0 represent heavy, high short interest, while values near 1 reflect low short hedging. As shown in Figure 20, the correlation with trailing S&P 500 performance is mixed and weak across most tiers. Crucially, its forward-looking relationship is asymmetric: at extreme low positioning (0- 0.25x bucket, representing peak short interest).

Figure 20
SHORT INTEREST DYNAMICS INDICATOR'S CORRELATION WITH EQUITIES



Source: Bloomberg and BBVA Global Markets Strategy

Figure 21

US EQUITY POSITIONING INPUTS PERFORMANCE METRICS

Metric	SPX six-month forward median return							
Indicator/ Bucket	BBVA USPI	Systematic flows from CTA strategies	Mutual fund flow momentum	Futures Positioning	Options Positioning	Passive Flows	Risk Parity Strategies	Short Interest Dynamics
0-0.25	6.27%	10.92%	6.83%	9.29%	8.17%	1.17%	9.26%	7.47%
0.25-0.5	8.50%	10.79%	8.28%	7.67%	9.13%	7.72%	5.30%	7.79%
0.5-0.75	8.95%	7.10%	6.89%	8.90%	6.92%	7.11%	5.58%	6.74%
0.75-1	4.04%	6.39%	6.34%	3.78%	4.44%	7.73%	7.61%	6.80%

Source: Bloomberg and BBVA Global Markets Strategy

Figure 22

US EQUITY POSITIONING INPUTS HIT RATIO

Metric	Hit Ratio of SPX six-month forward return							
Indicator/ Bucket	BBVA USPI	Systematic flows from CTA strategies	Mutual fund flow momentum	Futures Positioning	Options Positioning	Passive Flows	Risk Parity Strategies	Short Interest Dynamics
0-0.25	87.76%	86.36%	77.53%	86.34%	82.52%	51.28%	83.08%	88.28%
0.25-0.5	78.62%	84.55%	92.24%	78.00%	87.17%	83.75%	70.48%	75.17%
0.5-0.75	75.24%	78.97%	76.60%	84.93%	73.91%	80.31%	66.51%	87.78%
0.75-1	68.86%	76.46%	75.00%	64.41%	75.61%	83.50%	89.72%	71.35%

Source: Bloomberg and BBVA Global Markets Strategy

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