

FACTOR MAP

Decoding the NOISE



Factor Map

A Weekly Quantitative Analysis of leading Indices

Our Philosophy: Data, Not Bias

Our core philosophy is "Data, Not Bias." In a world saturated with market noise and conflicting narratives, Factor Map provides a clear, objective signal. Our methodology is our creed: no emotion, no stories, no sentiments. The analysis is 100% based on quantitative market data, generated systematically to be free from human bias.

Proprietary Quantitative Model

Factor Map is the output of a proprietary quantitative model leveraging modern statistical methods and machine learning. Each week, our system processes vast datasets to analyze dominant statistical factors, quantify trend persistence, and assess volatility regimes. This is a top-down approach model. This is not a "black box"; findings are presented via clear charts and statistical summaries.

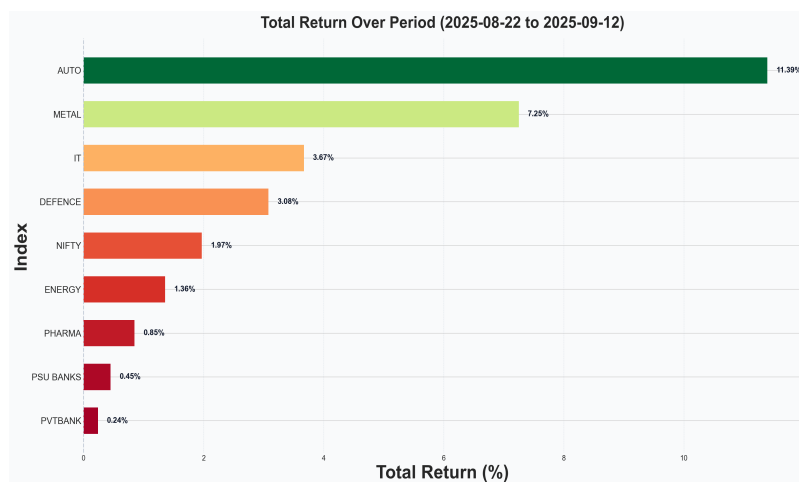
Who Is This For?

Factor Map is built for the serious market participant including systematic traders, discretionary traders, and institutional investors who values an evidence-based approach. Subscribers receive a concise, actionable report, providing a clear statistical snapshot of the Indian market to help build a more robust and objective framework for their operations.

**Please refer page i and ii at the end of the report for detailed strategy and rationale*

Index	Total Return (%)	Avg. Weekly Return (%)
AUTO	11.39 ▲	2.77 ▲
METAL	7.25 ▲	1.8 ▲
IT	3.67 ▲	0.93 ▲
DEFENCE	3.08 ▲	0.84 ▲
NIFTY	1.97 ▲	0.5 ▲
ENERGY	1.36 ▲	0.36 ▲
PHARMA	0.85 ▲	0.22 ▲
PSU BANKS	0.45 ▲	0.14 ▲
PVTBANK	0.24 ▲	0.07 ▲

**this data is sourced from angelone smart API.*



Market Overview: Over the last 4 weeks, the broader market (NIFTY) has shown a positive trend with a return of **1.97%**. This sets the backdrop for sector-specific rotations as capital moves in search of alpha.

Performance Divergence: We are seeing a significant spread in performance. **AUTO** has emerged as the clear outlier, delivering a robust **11.39%** gain. In contrast, **PVTBANK** has faced the most selling pressure, dropping **0.24%** during the same period.

Sector Leaders: The rally is being led by **AUTO, METAL, IT**. These sectors have demonstrated strong relative strength and consistent buying interest, making them prime candidates for momentum strategies.

Sector Laggards: On the flip side, **PHARMA, PSU BANKS, PVTBANK** are currently dragging. These areas are in a corrective phase or facing structural headwinds, suggesting a cautious approach until a reversal is confirmed.

Risk Analysis Framework: Efficient portfolio management requires a deep understanding of risk beyond simple volatility. Our statistical decomposition reveals the 'texture' of price action, highlighting not just how much prices move, but how they move, including the asymmetry of returns and the likelihood of extreme events.

Volatility Regime: Currently, **NIFTY** stands out as the most stable sector with the lowest volatility (1.53). This stability makes it a vital component for capital preservation during turbulent phases. In contrast, **DEFENCE** exhibits the highest volatility (4.68), implying rapid price swings. While this offers high-beta opportunities, it demands strict position sizing to manage drawdown risk.

Asymmetry & Tail Risk: Examining the shape of returns, **DEFENCE** shows positive skewness, indicating a higher probability of upside surprises, a rare and valuable trait. Meanwhile, **NIFTY** displays the highest Kurtosis (3.58), signaling significant 'fat tail' risk. This suggests that this sector is prone to outliers, unexpectedly large moves that occur more frequently than standard models predict.

Efficiency Conclusion: Ultimately, the goal is risk-adjusted performance. Here, **AUTO** reigns supreme with the highest Sharpe Ratio (6.25). This metric confirms that for every unit of risk taken, this sector delivers the most excess return, making it the most mathematically efficient allocation in the current market environment.

Index	Volatility (Std Dev)	Skewness	Kurtosis	Sharpe Ratio (Annualized)
AUTO	3.2	-0.93	-0.78	6.25
DEFENCE	4.68	0.79	0.5	1.3
ENERGY	2.1	-1.17	0.32	1.22
IT	2.62	0.65	-1.62	2.56
METAL	3.31	-0.19	1.46	3.93
NIFTY	1.53	-1.88	3.58	2.34
PHARMA	1.66	-1.06	2.14	0.97
PSU BANKS	2.76	-0.71	-0.13	0.37
PVTBANK	1.72	-1.44	1.86	0.29

Key Definitions:

Volatility: Higher value means higher risk (larger price swings).

Skewness: > 0 suggests a tendency for a few large gains and many small losses.

Kurtosis: > 0 (fat tails) indicates that extreme price moves are more likely than in a normal distribution.

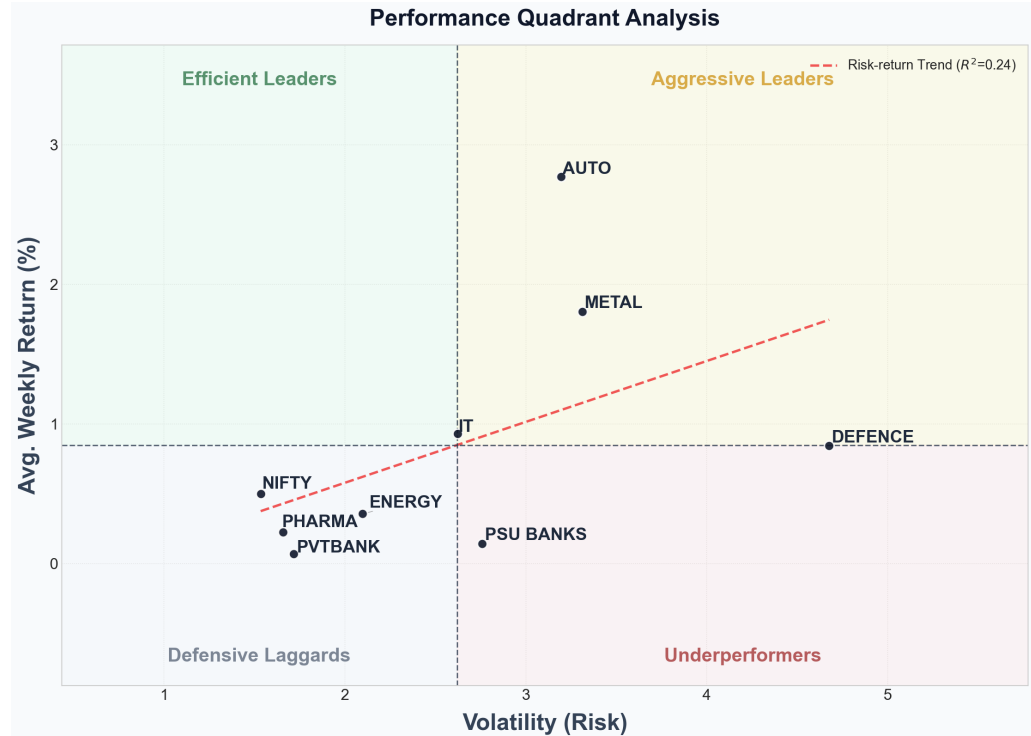
Sharpe Ratio: A higher value is better, indicating more return per unit of risk.

Our Quadrant Analysis breaks the market into four distinct zones based on Relative Strength (Return) and Stability (Risk). The center point is simply the market average. This helps instantly spot which sectors are driving the rally and which are dragging it down.

Efficient Leaders (Low Risk, High Return): This is the market's 'Sweet Spot'. Indices here, specifically None, are the primary alpha generators. They've delivered above-average returns without excessive volatility, showing a smooth, sustainable uptrend. We'd typically want to be overweight in these sectors.

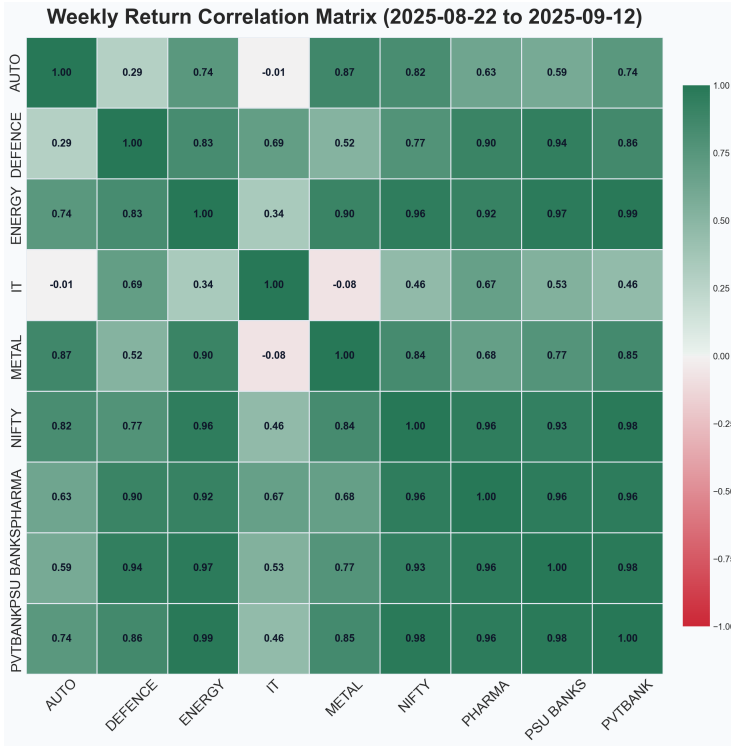
Aggressive Leaders (High Risk, High Return): This is high-beta momentum. Sectors like **AUTO**, **IT**, **METAL** are beating the benchmark, but it comes at the cost of higher jumps and drops. These are usually cyclical or high-growth themes that fuel returns in a bull run but need tight stop-losses because they can turn quickly.

Defensive Laggards (Low Risk, Low Return): These sectors, including **ENERGY**, **NIFTY**, **PHARMA**, **PVTBANK**, are currently out of favor. They offer stability and preserve capital, but they'll drag down performance during a strong rally. Think of them as hedging tools or places to park cash when the broader market looks shaky.



Underperformers (High Risk, Low Return): This is the 'Danger Zone'. Indices like **DEFENCE**, **PSU BANKS** show the worst mix: lagging returns with high volatility. Money stuck here faces a double penalty, opportunity cost plus drawdown risk. It's usually best to avoid or underweight these until the structure improves.

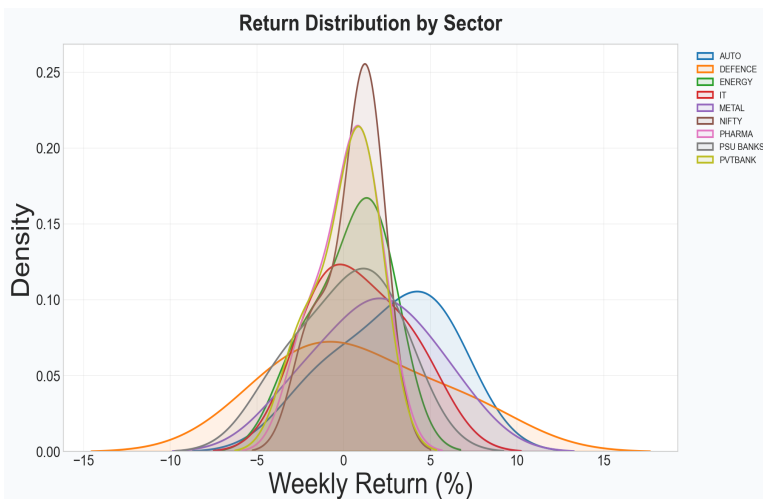
*** Note:** The regression line's R^2 (0.24) indicates a weak linear relationship between risk and return.



- Structural Correlation Analysis:** The correlation matrix acts as a fundamental gauge of systemic risk, mapping the intricate web of relationships between sectoral indices. Elevated correlation coefficients across the board typically signal a macro-driven market where asset classes are highly synchronized, thereby eroding the defensive value of diversification. However, isolating sectors with distinct, uncorrelated price behaviors provides a robust mechanism for dampening portfolio volatility and enhancing risk-adjusted returns independent of the broader trend.

- Distribution & Probability:** The Kernel Density Estimation (KDE) plot strips away the time series to reveal the raw statistical architecture of returns. We observe that **NIFTY** forms a concentrated, high-peak distribution. This leptokurtic shape highlights a regime of predictability and tight price clustering, confirming its role as a stable anchor.

- Volatility & Tail Risks:** In sharp contrast, **DEFENCE** displays a visibly flattened curve with extended tails. This platykurtic dispersion is the hallmark of uncertainty, indicating that returns are scattered over a wide range. Crucially, the 'fatter' tails suggest that extreme outlier events are not anomalies but structural features of this sector's behavior. Acknowledging this skew allows for more realistic stress testing, ensuring that position sizing accounts for the potential of sudden, outsized moves.

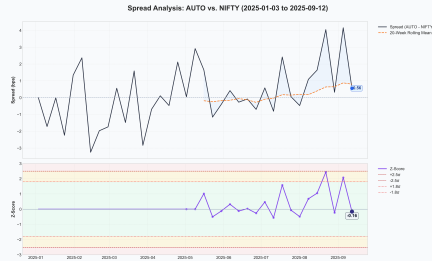


Key Standards

- * A tall, narrow peak (e.g., NIFTY) suggests low volatility and consistent returns near the average.
- * A wide, flat peak (e.g., REALTY) suggests high volatility, with returns spread out over a much larger range.
- * This chart visually confirms the 'Volatility' and 'Skewness' data from the Risk Characteristics table.

AUTO vs. NIFTY

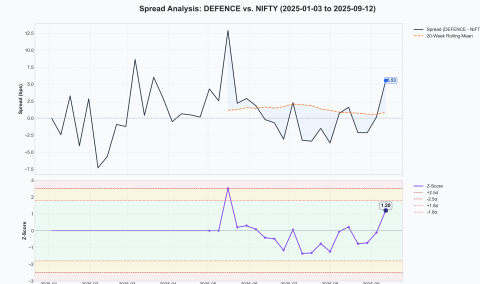
Neutral



Insight: The relative performance is NEUTRAL. The relationship between AUTO and NIFTY is within its normal, expected range (Z-score: -0.16).

DEFENCE vs. NIFTY

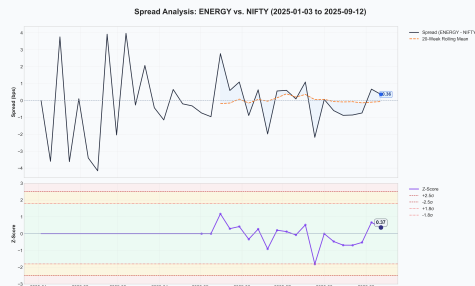
Strong



Insight: The relative performance is STRONG. DEFENCE is showing a clear outperformance trend against NIFTY (Z-score: 1.20).

ENERGY vs. NIFTY

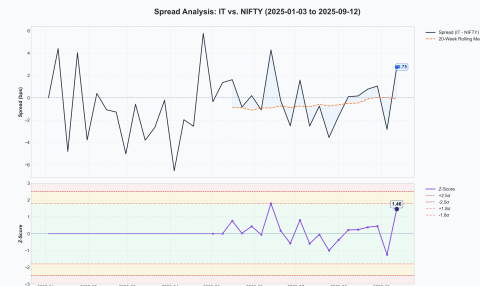
Strong



Insight: The relative performance is STRONG. ENERGY is showing a clear outperformance trend against NIFTY (Z-score: 0.37).

IT vs. NIFTY

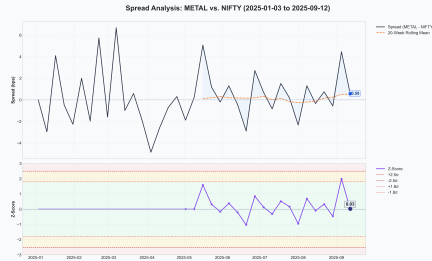
Strong



Insight: The relative performance is STRONG. IT is showing a clear outperformance trend against NIFTY (Z-score: 1.46).

METAL vs. NIFTY

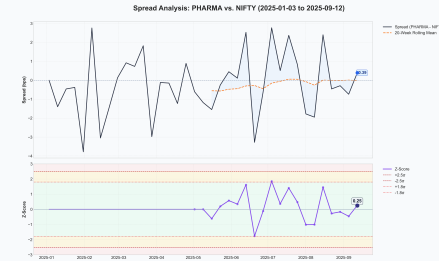
Neutral



Insight: The relative performance is NEUTRAL. The relationship between METAL and NIFTY is within its normal, expected range (Z-score: 0.03).

PHARMA vs. NIFTY

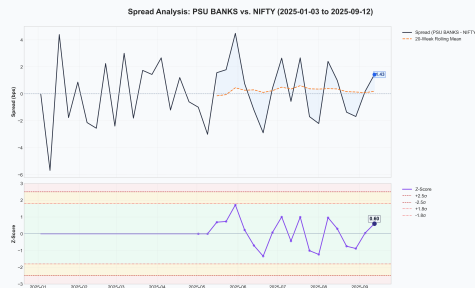
Neutral



Insight: The relative performance is NEUTRAL. The relationship between PHARMA and NIFTY is within its normal, expected range (Z-score: 0.25).

PSU BANKS vs. NIFTY

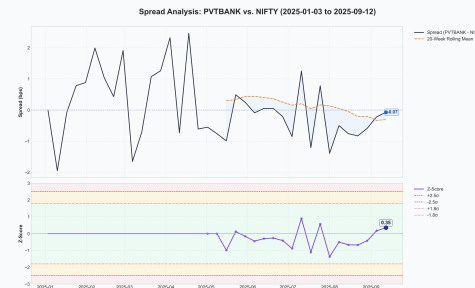
Strong



Insight: The relative performance is STRONG. PSU BANKS is showing a clear outperformance trend against NIFTY (Z-score: 0.60).

PVTBANK vs. NIFTY

Strong



Insight: The relative performance is STRONG. PVTBANK is showing a clear outperformance trend against NIFTY (Z-score: 0.35).

Outperformers

IT is positioned as an "Efficient Leader", balancing solid returns (3.67%) with moderate risk. Crucially, its Z-Score of 0.99 indicates it is trading below its mean historical valuation or performance average, suggesting it is undervalued despite its strong momentum. It also offers balanced exposure (Correlation: 0.58) independent of broad market moves. IT is currently experiencing accelerating momentum (ΔZ : +2.45), with returns of 3.67%. The rapid improvement in relative strength indicates growing market confidence and suggests the sector is entering a robust uptrend phase. This combination of solid momentum despite moderate risk levels offers a favorable setup for tactical positioning. **PHARMA** is positioned as an "Efficient Leader", balancing solid returns (0.85%) with moderate risk. Crucially, its Z-Score of 1.38 indicates it is trading below its mean historical valuation or performance average, suggesting it is undervalued despite its strong momentum. It also moves in sync with the benchmark (Correlation: 0.73), acting as a high-beta play. PHARMA is currently experiencing accelerating momentum (ΔZ : +2.05), with returns of 0.85%. The rapid improvement in relative strength indicates growing market confidence and suggests the sector is entering a robust uptrend phase. This combination of solid momentum despite moderate risk levels offers a favorable setup for tactical positioning.

Underperformers

ENERGY sector is stagnating with negligible returns (1.36%) and a low Sharpe Ratio (0.17). It is currently a "Defensive Laggard" with weak positioning. The Z-Score of 0.65 suggests even with poor performance, valuations remain elevated, leaving limited upside potential. ENERGY is losing momentum rapidly (ΔZ : -0.84). The accelerating deterioration in relative strength indicates growing selling pressure and suggests the sector is entering a pronounced downtrend. The combination of weak risk-adjusted performance and deteriorating momentum makes this sector unsuitable for tactical positioning at current levels. Given high correlation (0.82), this weakness may drag on broader portfolio performance. **PSU BANKS** sector is rolling over from overbought levels (0.45%) and a low Sharpe Ratio (0.05). The Z-Score of 1.24 suggests that even with poor performance, valuations or recent metrics are somewhat elevated (over 1), leaving little room for upside and a higher probability of mean reversion to the downside. PSU BANKS is exhibiting stagnant performance (ΔZ : +0.73). The lack of positive momentum coupled with weak returns suggests structural headwinds persist. The combination of weak risk-adjusted performance and deteriorating momentum makes this sector unsuitable for tactical positioning at current levels.

Mirage

PVTBANK displays strong historical performance (Z: 1.03) with 0.2% returns, but momentum is rapidly fading (ΔZ : -0.36). This divergence between high valuation and falling momentum suggests the uptrend is exhausted and prone to reversal (Correlation: 0.86).

Symbol	Action	Price	Target	Stop loss	Rationale
PERSISTENT FUT 30 Sep 2025	BUY	5421	6180	4987	Sector leader, positive momentum, balanced risk-reward profile.
INFY FUT 30 Sep 2025	BUY	1524	1692	1425	Sector leader, positive momentum, balanced risk-reward profile.
DRREDDY FUT 30 Sep 2025	BUY	1309	1492	1204	Sector leader, positive momentum, balanced risk-reward profile.
CIPLA FUT 30 Sep 2025	BUY	1577	1750	1474	Sector leader, positive momentum, balanced risk-reward profile.
TATAPOWER FUT 30 Sep 2025	SELL	388	334	419	Sector laggard, negative momentum, balanced risk-reward profile.
POWERGRID FUT 30 Sep 2025	SELL	288	256	307	Sector laggard, negative momentum, balanced risk-reward profile.

The above recommendations are formulated using a top-down analytical framework, which begins by assessing the broader market environment and sector-level trends before filtering down to individual stocks. The initial phase focuses on identifying sectors with sustainable momentum, areas that are not excessively extended, yet continue to demonstrate consistent strength and relative leadership. At the same time, we take note of sectors losing traction or exhibiting early signs of exhaustion, as these often provide useful contrarian or risk cues. Once the leading and lagging sectors were established, we analyzed their internal constituents to identify the key contributors, stocks that have not only supported sectoral strength but also display a favorable risk-to-reward configuration.

The emphasis here is on participation with discipline: capturing performance where momentum is justified by structure, rather than sentiment-driven spikes. From each favored sector, two stocks were shortlisted to represent the core directional bias, chosen for their relative stability and alignment with the sector's underlying trend. Conversely, from weaker sectors, we highlighted stocks that have persistently underperformed or shown structural weakness, helping illustrate where caution may be warranted. This layered methodology ensures that the resulting set of observations remains balanced and context-aware, offering a structured lens through which current market dynamics can be interpreted. It is a framework for understanding relative strength, sector rotation, and volatility management within the prevailing market landscape.

Symbol

A symbol is an arrangement of characters usually letters representing publicly-traded securities(instrument) on an exchange. This can be a Stock or Derivatives.

Action

A 'buy' action means research analysts like the underlying asset (Stock or Commodity) and think it's worth purchasing because its value is likely to increase. A 'hold' rating is neutral. It means research analysts are unsure which way price will move, so they recommend that you neither buy nor sell. A 'sell' rating means research analysts expect underlying asset (Stock or Commodity) prices to fall.

Price

An entry point refers to the price at which an investor initiates a position in an Instrument. A trade entry can be initiated with either a buy order for a long position, or sell order for a short position.

Target

A target price is an estimate of the future price of a instrument. Target prices are based on technical indicators or earnings forecasts or assumed valuation multiples or all of them.

Stop loss

Stop-loss can be defined as an advance order to sell an instrument when it reaches a particular price point. It is used to limit loss in a trade. The concept can be used for short-term as well as long-term trading.

Volatility (Standard Deviation)

It measures how much a stock or portfolio's returns vary from its average return. Higher volatility means wider swings, both gains and losses and greater uncertainty. It's often used as a proxy for overall investment risk.

Skewness

Skewness shows the asymmetry of the return distribution. A positive skew means more small losses and few big gains; a negative skew means frequent small gains but occasional large losses. Investors generally prefer positive skew because it implies limited downside surprises.

Kurtosis

Kurtosis measures the 'tailedness' or frequency of extreme returns in the distribution. High kurtosis indicates a higher chance of outliers (sharp rallies or crashes). Markets with high kurtosis tend to have unpredictable and more extreme moves.

Sharpe Ratio (Annualized)

This ratio compares excess return (over the risk-free rate) to volatility. It measures how efficiently a portfolio converts risk into return. A higher Sharpe Ratio implies better risk-adjusted performance. The Sharpe ratio formula is: $(\text{Investment Return} - \text{Risk-Free Rate}) / \text{Standard Deviation}$.

R-Squared from Regression

R^2 shows how much of an asset's movement is explained by its benchmark or market index. For example, an R^2 of 0.85 means 85% of the variation is due to market factors. Low R^2 suggests more idiosyncratic (stock-specific) behavior.

Correlation Matrix

It's a table that shows how closely pairs of assets move together. Values range from +1 (move exactly together) to -1 (move opposite). It helps in diversification, low or negative correlations reduce portfolio risk.

Return Distribution (KDE Plot)

A Kernel Density Estimate (KDE) plot smooths the histogram of returns into a continuous curve. It visually shows where returns are concentrated and how the distribution is shaped. This helps identify bias, volatility, and fat tails in return behavior.

Z-Score from Spread Analysis

Z-score measures how far a current value is from its historical mean, in standard deviations. A high positive Z-score means the value is above average (potentially overbought); a low negative one means below average (possibly oversold).

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