

ABL Digital India Cross-Asset Weekly

Trend, Correlation & Macro Report | week ending 2026-10-02

46 instruments across equities, sectors, FX, commodities, rates & REITs | 614 weeks



REGIME: Risk-off

EXECUTIVE SUMMARY

The India tape is in a risk-off regime with 79.4% posterior probability, yet the risk-appetite composite sits at just -0.09, effectively neutral. That gap is the week's central tension and it argues for a defensive-but-not-liquidated posture: stay invested, cut beta, favour Pharma (+23% on 26-week relative strength) and IT over Bank (-2.0% on the week, -6% over three months), and treat rallies as opportunities to reduce rather than add. The scorecard's internals explain the split — sector breadth at -0.67 and Nifty trend at -0.49 are genuinely weak, while India VIX (+0.41) and high-yield credit (+0.43) refuse to confirm stress. Own the defensives, underweight rate-sensitives, and keep hedges cheap while vol is still cheap.

Three developments matter. Crude is up 3.8% on the week and 30% over three months at ₹9,182 on MCX — for a net oil importer this is the single most consequential print, threatening the 3.5% CPI cushion and the RBI's 5.25% neutral stance, and it is why Bank underperforms. External conditions scored -0.55 (headwind), driven by low_oil at -1.95 and low_us_rates at -1.92, with the US 10Y at 5.3%. And IT screens 17.2% cheap against rupee and US tech on a model with R^2 0.43 — a real but moderately-fit dislocation worth sizing modestly.

The biggest risk is that crude keeps running and drags USDINR through 96.0 toward 97, forcing a hawkish repricing. Watch India VIX above 16-17 from 13.6, Bank breaking recent lows, and the US 10Y above 5.5%. A crude reversal below ₹8,700 with breadth recovering above 50% would flip this view constructive.

Executive Dashboard

India cross-asset state and the week's key readings.

REGIME Risk-off	NIFTY 1W -1.6%	SECTOR BREADTH 0% up	INDIA VIX 13.6
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KEY CROSS-ASSET READINGS (level | 1w | 1m | 3m)

Nifty 50	22,780.2	-1.6%	-4.7%	-6.1%
Bank	54,471.6	-2.0%	-5.1%	-6.0%
IT	28,086.5	-0.3%	-8.5%	+2.4%
USDINR	96.0	+0.2%	+1.6%	+0.5%
DXY	101.2	+0.2%	+2.1%	+0.3%
US 10Y	5.3	+0.1	+0.5	+0.8
India VIX	13.6	+1.5	+3.0	+1.8
Gold	146,416.0	-3.0%	-4.8%	+1.9%
Crude	9,182.0	+3.8%	+0.9%	+29.8%
Copper	1,388.3	-1.5%	-2.5%	+9.5%
Embassy REIT	437.7	+0.0%	-0.2%	-2.1%

INDIA CROSS-ASSET SCORECARD

Domestic risk appetite and the external (global) backdrop that drives India

DOMESTIC RISK APPETITE

Neutral

score -0.09

risk-off (-1.5)

(+1.5) risk-on



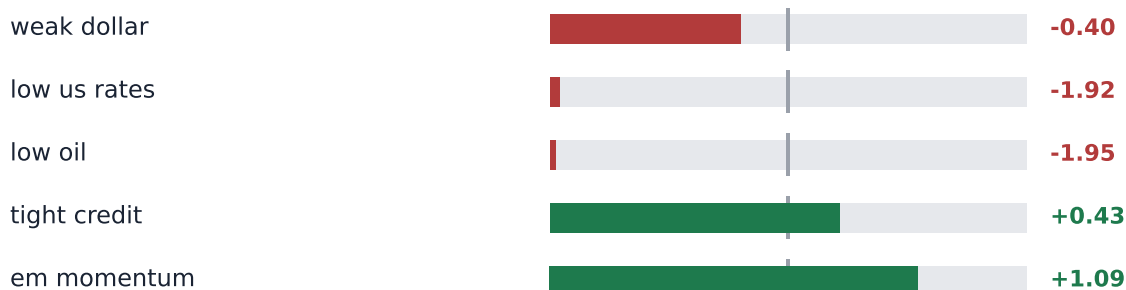
EXTERNAL CONDITIONS (global backdrop)

Headwind backdrop

score -0.55

headwind (-1.5)

(+1.5) supportive



Each component is a 10-year z-score, sign-aligned so higher = risk-on / more supportive; the headline is their average. External conditions read the dollar, US rates, oil, global credit and EM risk — India's key channels.

WHAT CHANGED THIS WEEK

Week-over-week moves and how the market-state readings shifted · 2026-10-02

TOP GAINERS

Crude	+3.8%
Hang Seng	+0.5%
DXY	+0.2%
GBPINR	+0.2%
USDINR	+0.2%
USDJPY	+0.1%
EURINR	+0.0%
Nexus REIT	+0.0%

TOP DECLINERS

Brent	-4.1%
Silver	-3.6%
Gold	-3.0%
Nifty Next 50	-2.0%
Bank	-2.0%
MSCI India	-1.8%
EM Equity	-1.7%
China	-1.7%

KEY LEVELS — week-over-week

Nifty 50	22,780.2	-1.6%	US 10Y	5.3	+0.1
Bank	54,471.6	-2.0%	US HY OAS	2.9	+0.0
IT	28,086.5	-0.3%	Gold	146,416.0	-3.0%
USDINR	96.0	+0.2%	Crude	9,182.0	+3.8%
India VIX	13.6	+1.5	S&P 500	7,679.0	-0.8%

MARKET-STATE READINGS — now vs prior report

Regime	prior: R+	->	Risk-off
Risk appetite	prior: +0.10	->	-0.09
External backdrop	prior: -0.24	->	-0.55
PC1 share	prior: 34	->	34%

The fastest orientation: what actually moved and how the headline state shifted since last week. USDINR/VIX/rate/spread increases are shown as adverse (red).

India Cross-Asset Analysis

Executive Summary

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Three developments matter. Crude is up 3.8% on the week and 30% over three months at ₹9,182 on MCX — for a net oil importer this is the single most consequential print, threatening the 3.5% CPI cushion and the RBI's 5.25% neutral stance, and it is why Bank underperforms. External conditions scored -0.55 (headwind), driven by low_oil at -1.95 and low_us_rates at -1.92, with the US 10Y at 5.3%. And IT screens 17.2% cheap against rupee and US tech on a model with R^2 0.43 — a real but moderately-fit dislocation worth sizing modestly.

The biggest risk is that crude keeps running and drags USDINR through 96.0 toward 97, forcing a hawkish repricing. Watch India VIX above 16-17 from 13.6, Bank breaking recent lows, and the US 10Y above 5.5%. A crude reversal below ₹8,700 with breadth recovering above 50% would flip this view constructive.

Regime, Scorecard & Market State

The Markov-switching model puts 79.4% probability on risk-off against 15.4% risk-on and 5.3% neutral — a decisive classification, not a marginal one. The rule-based read corroborates it: Nifty sits below its 40-week average, only 33% of sectors are above their 10-week moving average, and the index fell 1.6% on the week with zero sectors up. Breadth of 0% up on the week is the kind of reading that says selling was indiscriminate rather than rotational.

But the risk-appetite composite at -0.09 sits squarely in neutral territory, and the reconciliation matters more than either number alone. Two components carry the negative weight: sector_breadth at -0.67 and nifty_trend at -0.49, both pure price-and-participation measures, plus low_concentration at -0.39 which flags that leadership has narrowed. Against them, india_vix at +0.41 and credit_hy at +0.43 are actively supportive, and risk_over_haven at +0.15 is mildly so. The market is trending badly and participating poorly, but the two instruments that price fear directly — implied volatility and credit spreads — are not confirming. India VIX at 13.6 is the 54th percentile of its history and the 46th percentile over five years, which is unremarkable.

For an investor this is the profile of a grinding, trend-driven drawdown rather than an event-driven shock. Trend-following and breadth-based frameworks are flashing; stress-based frameworks are not. That combination historically rewards reducing exposure into strength rather than capitulating into weakness, because the absence of a volatility bid means there is no forced-seller cascade underway. It also means the market is under-hedged relative to the deterioration in the tape — protection is available at prices that do not reflect a 79% risk-off posterior. The current drawdown of 13% on the Nifty is real but not extreme against a 5% expected shortfall of -4.0% on a weekly horizon.

Global Backdrop & External Conditions

External conditions score -0.55, a headwind backdrop, and the composition is unusually clean about where the pressure originates. Two components dominate the negative: low_oil at -1.95 and low_us_rates at -1.92. Both are named for the favourable state, so the readings mean the opposite — oil is high and US rates are high, each roughly two standard deviations away from where India would want them. Weak_dollar contributes -0.40 with DXY at 101.2. Offsetting these, tight_credit reads +0.43 (global credit is not tight) and em_momentum is strongly positive at +1.09, the single best thing in the global picture for India.

India Cross-Asset Analysis (cont.)

The US 10-year at 5.3%, up 0.1 on the week and a full point over three months, is the anchor of the problem. It raises the discount rate on Indian equity duration, compresses the carry advantage that funds portfolio inflows, and shows up directly in the correlation structure — Nifty against US 10Y runs -0.38 over 52 weeks and tightens to -0.56 over 13 weeks. Bank against US 10Y is worse still at -0.44 and -0.65 respectively. The banking sector is the transmission point where global rates hit Indian equity hardest, which is entirely consistent with Bank being the worst performer at -2.0% this week and -6% over three months.

The verdict is that the world is a net headwind, but a specific rather than a general one. EM momentum at +1.09 and untroubled global credit say the world is not rejecting emerging-market risk wholesale. What is hurting India is the particular combination of expensive crude and high US yields — the two variables to which a net oil importer with a current-account deficit and a rate-sensitive banking system is most exposed. That is diagnostically useful, because it means relief does not require a global risk-on turn. It requires crude to break or the US 10-year to top out. Either alone would materially improve India's standing versus the EM complex.

Sector Rotation & Momentum

The weekly sector picture is uniformly negative but differentiated in degree, and the degree is the signal. IT fell 0.3%, Pharma 0.9%, Bank 2.0%. Over three months the spread widens: IT +2%, Pharma +4%, Bank -6%. On 26-week relative strength the ranking is Pharma +23%, Bank +6%, IT -8%. Note the tension in Bank's position — respectable on six-month relative strength but the clear loser over the recent three months and this week, which is the signature of a leader rolling over rather than a laggard basing.

Pharma is the cleanest defensive expression available. It leads on medium-term relative strength by a wide margin, has low PC1 loading (it appears in the lowest-loading group alongside IT and Bank), and its business model is structurally insulated from the crude-to-inflation-to-rates chain that is doing the damage. Its 0.9% weekly decline in a 0% breadth week is noise, not a break.

IT is the more interesting case because two signals point opposite ways. Momentum is the worst of the three at -8% on 26-week relative strength, but the fair-value model has it 17.2% cheap against the rupee and US tech, with z at -1.83 and R^2 of 0.43. IT also benefits mechanically from rupee weakness — IT against USDINR correlates -0.28 over 52 weeks and -0.44 over 13 weeks, meaning IT rises as the rupee weakens. If the crude-driven INR pressure that is the central risk to this note actually materialises, IT is the sector that gets paid for it. That makes IT a legitimate hedge against the dominant risk rather than merely a value screen.

Bank is where the macro chain lands hardest. It is a net follower in the Granger network, it carries the tightest negative correlation to US yields of anything in the sector set, and the fair-value model has it 3.7% rich against Nifty and US rates — and that model has R^2 of 0.94, by far the most reliable fit in the entire briefing. Modest overvaluation measured well is more actionable than large mispricing measured poorly. Underweight Bank.

Factor Structure & Systemic Risk

PC1 explains 81% of equity and sector variance, with the highest loadings on Nifty 100, Nifty 200 and Nifty 500 — which is to say the dominant factor is simply broad market direction. Concentration is high. Diversifying across Indian equity indices is close to no diversification at all; an investor holding Nifty 100, 200 and 500 exposure holds one position three times. The lowest PC1 loadings sit on IT, Pharma and Bank, which is where whatever genuine sector-level idiosyncrasy exists can be found. Across the wider 38-instrument set, PC1 (Risk, Nifty) explains 34%, PC2 (US rates, inverse) 13%, PC3 (Global risk, S&P, inverse) 10% and PC4 (US rates) 6%. One dominant risk factor with US rates as the clear second — the factor structure itself tells you the same story the external-conditions score does.

The systemic co-movement picture is more encouraging. Average pairwise conditional correlation from the multivariate DCC model across eight assets is +0.05 now against +0.06 a year ago, with persistence of 0.8887. Cross-asset diversification is working — a near-zero average conditional correlation means the

India Cross-Asset Analysis (cont.)

assets in the set are not moving as one, and the direction of travel over the year is slightly lower, not higher. This is the important distinction of the week: concentration is high *within* Indian equity, but *across* asset classes, diversification is intact.

The practical implication is that the way to reduce risk here is not to spread across Indian equity indices, which buys nothing, but to hold genuinely different exposures. The high persistence of 0.8887 also means that if correlation does start rising, it will keep rising — this measure has memory, and a turn in it would be a durable signal rather than noise. Watching this number is worth more than watching any single pairwise correlation.

Cross-Asset Correlation & Lead-Lag

The Granger network is unambiguous about hierarchy: net leaders are Crude, India VIX, US 10Y and Gold; net followers are EM Equity, Bank, USDINR and the S&P 500. Indian equity and the rupee are on the receiving end of this network, not the driving end. The tape is being set by commodities, volatility and the global rate complex, and Indian assets are responding.

The lead-lag correlations into Nifty add nuance. Crude runs -0.19 contemporaneously and -0.26 at a one-week lag — the relationship strengthens with the lag, meaning crude moves now show up in Nifty next week. That is the most directly tradeable relationship in the set and it points squarely at this week's 3.8% crude move as a drag still working through. India VIX is -0.55 contemporaneous decaying to -0.23 lagged, which is mostly a same-week reflection of the market itself rather than a predictor. DXY (-0.31 contemporaneous, -0.02 lagged) and USDINR (-0.34 contemporaneous, -0.01 lagged) both show essentially no predictive carry into the following week — currency effects are immediate and fully priced. US 10Y at -0.01 and -0.06 shows almost nothing on a weekly lag basis, despite the strong level correlation, which is a reminder that a persistent relationship in levels need not generate weekly timing signal.

The DCC conditional correlations sharpen this further. Nifty against India VIX is -0.56 with persistence of only 0.2284 — the hedge relationship is strong but unstable, so volatility protection works when you need it but its effectiveness varies. Nifty against USDINR is -0.31 with persistence 0.3346. Nifty against Crude is -0.19 with persistence 0.591, notably the most durable of the three. The crude relationship is the one you can rely on to persist, which reinforces treating the oil channel as structural rather than episodic. Over 13 weeks the raw Nifty-crude correlation is -0.26, softer than the 52-week -0.43, but the DCC persistence says not to read that softening as a regime change.

One correlation worth flagging: Nifty against Gold has moved from +0.17 over 52 weeks to +0.46 over 13 weeks. Gold is behaving less like a haven against Indian equity and more like a co-moving risk asset, which reduces its portfolio utility here — and gold's 3.0% weekly fall alongside the Nifty's 1.6% decline is exactly that behaviour in action.

Relative Value & Fair Value

Five fair-value models clear the $R^2 \geq 0.4$ threshold, and the discipline is to weight each by its fit rather than by the size of the dislocation it reports.

The most reliable is Banks versus Nifty and US rates, with R^2 of 0.94 — an exceptional fit that means the residual is close to genuinely interpretable. It reads 3.7% rich, z of +0.89. Small in magnitude, but measured with high confidence and pointing the same direction as momentum, the Granger network and the rate-correlation structure. Four independent lines of evidence converging on underweight Bank is worth more than any of them alone.

Next is the rupee versus dollar, oil and US rates, R^2 of 0.72, showing 0.9% cheap with z of -0.37. Essentially fair. That is meaningful information: at USDINR 96.0, the currency is already reflecting the crude and US-rate levels that prevail. There is no hidden cushion and no obvious overshoot — further crude strength should translate fairly directly into further rupee weakness rather than being absorbed.

Nifty versus global rates, dollar and oil has R^2 of 0.57 and reads 0.2% cheap, z of -0.08 — the index is

India Cross-Asset Analysis (cont.)

at fair value given the global inputs. The market is not mispriced relative to the macro; it is correctly priced to a macro that is unfavourable. Gold versus US real yield and dollar, R^2 of 0.55, is 6.2% cheap at z of -0.35, a mild dislocation on a moderate fit.

The largest reported dislocation is the weakest-fit: IT versus rupee and US tech at 17.2% cheap with z of -1.83 and R^2 of only 0.43. That z -score crosses the $|z| > 1.5$ stretched threshold and is the only one in the set that does. But an R^2 of 0.43 means 57% of IT's variation is unexplained by the model, so the residual is substantially noise. Discount it accordingly — a 17.2% gap on a 0.43 fit does not carry the conviction of a 3.7% gap on a 0.94 fit. It supports a modest IT position, reinforced by the separate and independent argument that IT hedges rupee weakness, but it does not support sizing IT as though a 17% mispricing were established fact.

Currency, Rates & the Oil-INR Channel

This is where the note's threads converge. Crude at ₹9,182 on MCX is up 3.8% on the week and 30% over three months. For a net oil importer, that 30% is the dominant macro fact in this briefing. It widens the import bill, pressures the current account, feeds into the rupee, transmits to inflation with a lag of roughly one to two quarters, and ultimately constrains the RBI.

The rupee at 96.0 has moved only 0.2% on the week and 0% over three months, which looks like resilience but should not be read as immunity. Forex reserves excluding gold at USD 588 billion give the RBI genuine capacity to smooth, and the fair-value model — the R^2 0.72 one — says the currency is fairly valued at current oil and rate levels. The rupee has absorbed the crude move so far; the models say it has absorbed it, not escaped it.

The inflation chain has not yet caught up. CPI at 3.5% with core at 3.7% (April print) is comfortable and sits well within tolerance. But that print predates a substantial portion of the 30% crude run. India's 10-year G-sec at 6.76% is already flagged as positive on crude and US yields, which says the bond market is pricing what the CPI data has not yet shown. The RBI holds at 5.25% in a neutral stance as of July. The market's forward view, visible in the G-sec, is that neutral is doing work it may not be able to sustain if crude holds these levels.

The rest of the macro is genuinely solid and should not be lost in the caution. Manufacturing PMI at 54.2, Services PMI at 57.3, IIP at +5.1%, GST collections at ₹1.95 lakh crore up 13.9% year-on-year, and FY27 real GDP projected at 6.6% describe a healthily expanding economy. This is not a growth problem. It is an external-price and global-rate problem layered onto a sound domestic base — which is precisely why the appropriate response is a defensive tilt rather than an exit.

For positioning: Bank is the direct casualty of this chain, with a -0.65 thirteen-week correlation to US yields and rate-sensitive margins. IT is the natural offset, gaining on rupee weakness at -0.44 over thirteen weeks. Pharma is largely orthogonal. Gold's usual role as an inflation and rupee hedge is compromised this cycle — Gold against USDINR is -0.03 over both windows, so it provides essentially no rupee hedge, and its rising correlation to Nifty (+0.46 over 13 weeks) further reduces its defensive value.

Volatility, Tail Risk & What to Watch

India VIX at 13.6 is up 1.5 on the week and 2 over three months, sitting at the 54th percentile of its own history and the 46th percentile over five years. The India-minus-US VIX spread is -0.6, meaning Indian implied volatility is marginally below US implied volatility — an unusual configuration for an emerging market in a 79% risk-off regime. The volatility risk premium is +8.5 and positive, so implied continues to exceed realised, which mildly favours systematic premium-selling strategies but also confirms that options are not expensive in absolute terms.

The combination is the week's clearest asymmetry: a decisively risk-off regime, weak breadth and a deteriorating trend, priced alongside middle-of-the-range volatility. Hedging is available at unremarkable cost. For an investor who wants to retain the constructive domestic growth exposure — the

India Cross-Asset Analysis (cont.)

PMI, IIP and GST data justify that — buying protection is the more efficient route to reducing risk than selling equity into a 0%-breadth week. The caveat is the DCC persistence of 0.2284 on the Nifty-VIX relationship: the hedge is strong at -0.56 now but unstable, so it should be sized with that variability in mind.

Tail risk is contained but not trivial. The Nifty's 5% expected shortfall is -4.0% on a weekly basis against a current drawdown of 13%. Gold's ES5 is worse at -6.7% with a current drawdown of 12%, which is a further argument against leaning on gold as a defensive holding this cycle — it currently carries more tail risk than the equity index it is meant to protect.

Weekly predictive skill in all of this is modest and none of it should be treated as forecast. What follows are observable markers, not predictions.

Signals that would confirm the defensive view: crude sustaining above ₹9,200 on MCX or extending toward ₹9,500, which given the -0.26 one-week lagged correlation into Nifty would carry a mechanical drag into the following week; USDINR breaking through 96.5 toward 97, confirming the currency has stopped absorbing the crude move; the US 10-year moving above 5.5%, given Bank's -0.65 correlation to it; India VIX above 16-17, which would mean the volatility complex finally confirms what the regime model already says; sector breadth falling from 33% below 25%; and the MV-DCC average conditional correlation rising from +0.05 toward +0.15 or higher, which given 0.8887 persistence would signal diversification genuinely failing and would be the strongest argument for cutting gross exposure.

Signals that would change it toward constructive: crude reversing below ₹8,700 on MCX, which unwinds the central transmission chain; the US 10-year breaking below 5.0%, which would directly relieve Bank and lift the external-conditions score off -0.55; sector breadth recovering above 50% with the Nifty reclaiming its 40-week average, which would move the Markov posterior off 79.4% risk-off; the risk-appetite composite crossing from -0.09 into clearly positive territory on breadth and trend improving rather than on the VIX and credit components doing the work; and Bank turning up on relative strength, which given its position as a net follower in the Granger network would be the signal that the rate pressure upstream has genuinely eased.



PART I

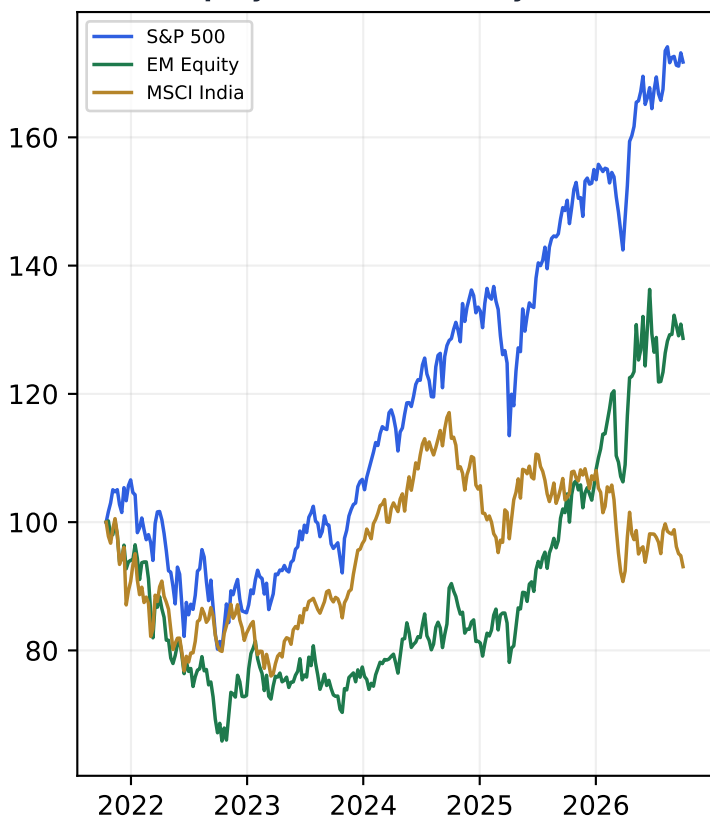
Global Backdrop & Macro

The external forces that drive India — global equity risk, US yields, credit, the dollar and the domestic macro pulse.

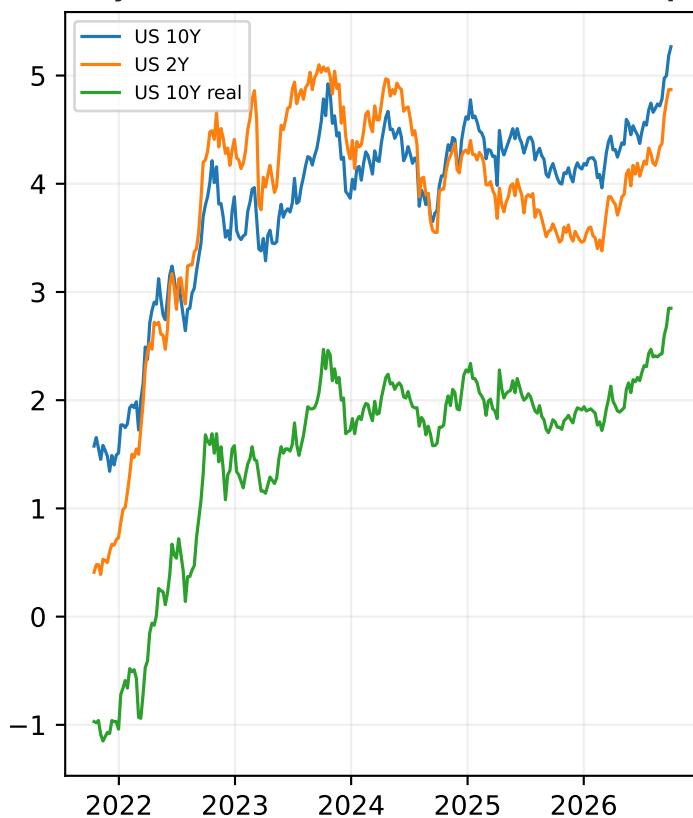
- Global equity, US yields & credit spreads, dollar & Fed balance sheet
- India macro prints (repo/CPI/GST/PMI/IIP) and FII/DII flows

Global Backdrop & Rates

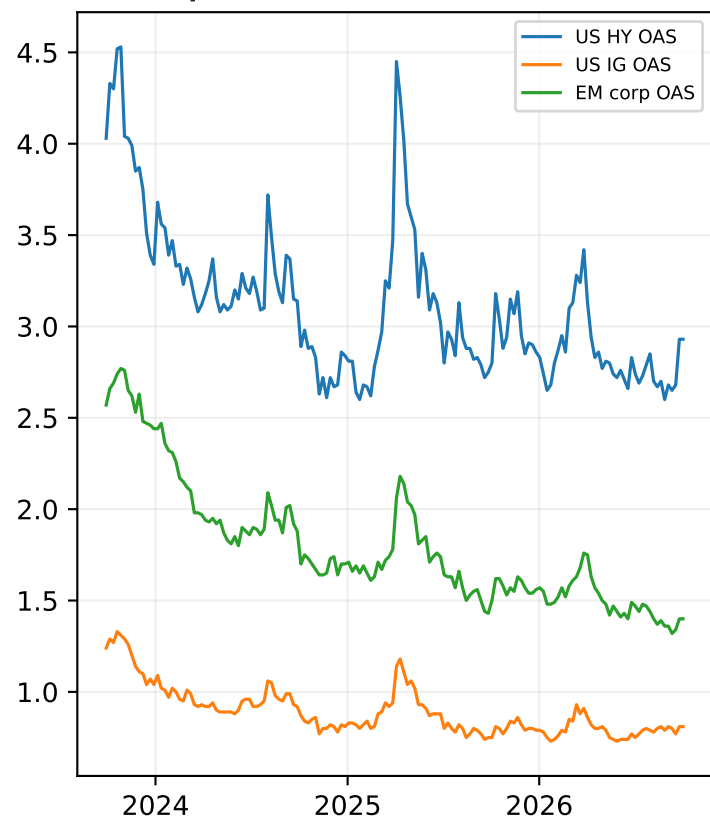
Global equity (indexed=100, 5y)



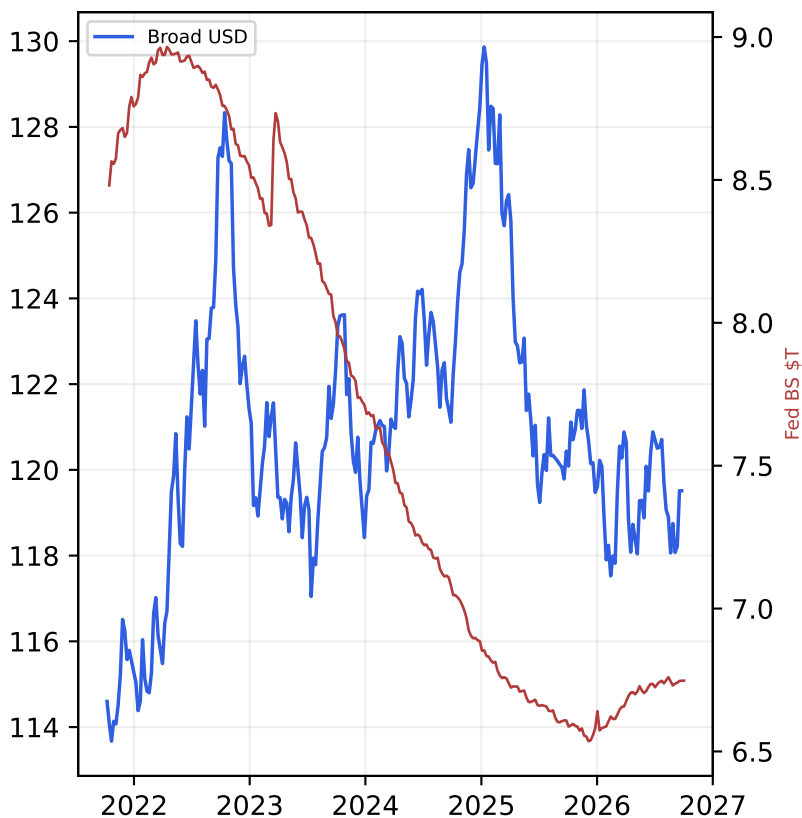
US yields (%) — India's external cost of capital



Credit spreads (%)



US dollar & Fed balance sheet



Macro Pulse

Latest India macro prints (release-based figures are the official print with its as-of date; markets are weekly).

FII/DII latest cash flows: DII net Rs 5,189 cr, FII net Rs -5,353 cr

INDICATOR	LATEST	AS OF
RBI Repo Rate	5.25%	Jul 2026 (MPC, neutral)
India 10Y G-sec yield	6.76%	Jul 2026 (RBI/FBIL; +ve on crude/US-yields)
CPI Inflation YoY	3.5% (core 3.7%)	Apr 2026
GST Collections	Rs 1.95 lakh cr (+13.9% YoY)	Jun 2026
Mfg PMI	54.2	Jun 2026
Services PMI	57.3	Jun 2026
IIP YoY	+5.1%	May 2026
Real GDP growth	6.6% (FY27 proj.)	RBI FY2026-27
Forex Reserves (ex-gold)	USD 588 bn	2026-07
Real House Prices (idx)	161.9	2026-01 (NHB/BIS)
CPI Index (FRED/OECD)	157.6	2025-03

Release-based series (repo/CPI/GST/PMI/IIP/GDP) are entered from official releases in config/macro_prints.yaml and refreshed monthly.



PART II

Cross-Asset Structure

How Indian and global assets move together — factor structure, systemic co-movement, directional lead-lag and relative value.

- PCA factor model & multivariate DCC conditional-correlation
- Correlation heatmap, wavelet coherence, Granger causality & cointegration

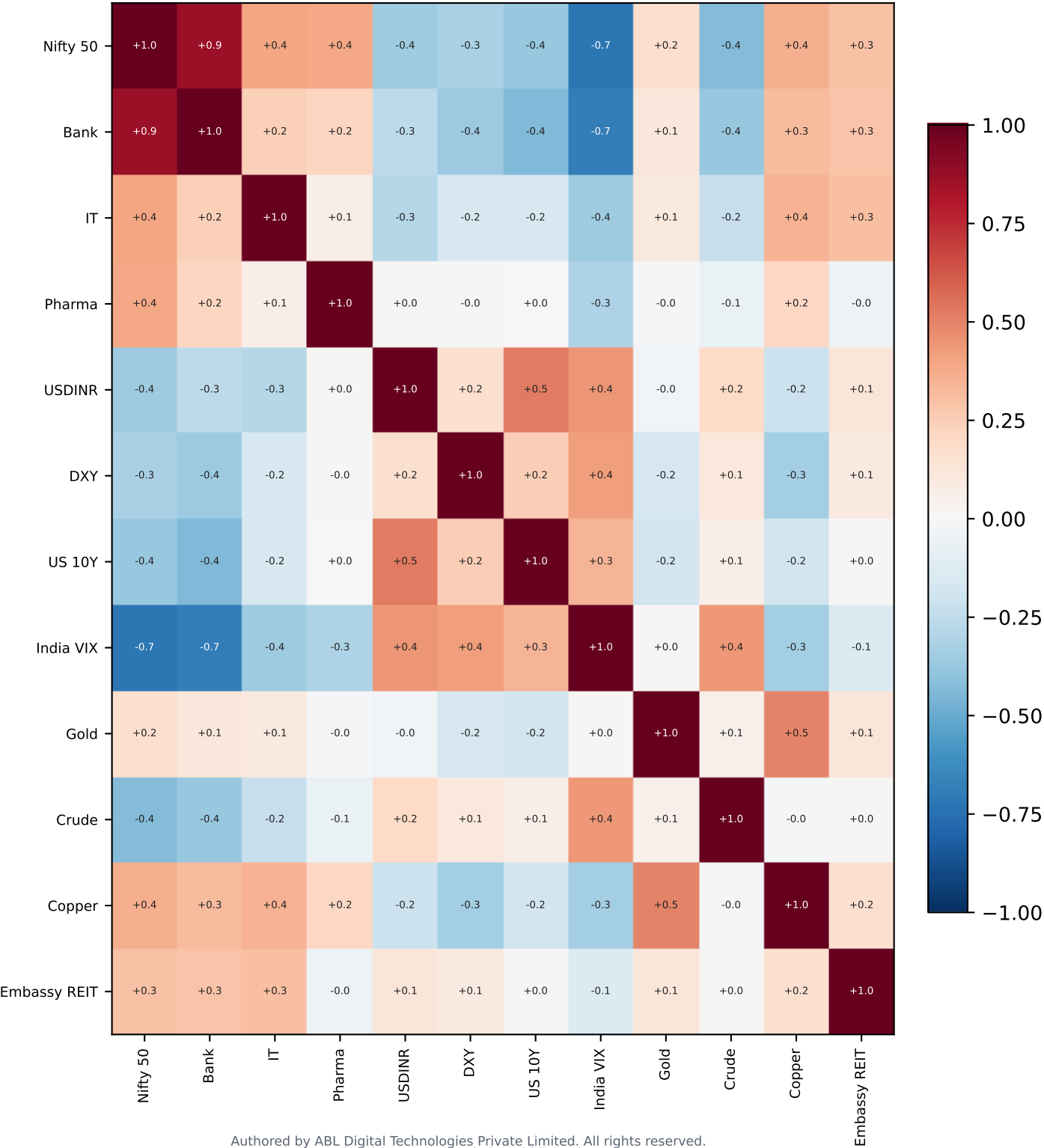
Weekly Returns Heatmap

Price return (%) by instrument over 1w / 1m / 3m. Commodities priced in MCX (INR, Kite).

Midcap 50	-1.5	-5.1	-3.2
Sensex	-1.5	-4.9	-6.4
Nifty 50	-1.6	-4.7	-6.1
Smallcap 250	-1.6	-3.3	-0.7
Midcap 150	-1.6	-4.7	-3.6
Nifty 500	-1.6	-4.4	-4.6
Nifty 200	-1.6	-4.6	-5.1
Nifty 100	-1.6	-4.5	-5.5
Nifty Next 50	-2.0	-3.5	-2.7
IT	-0.3	-8.5	+2.4
Pharma	-0.9	+1.1	+3.9
Bank	-2.0	-5.1	-6.0
DXY	+0.2	+2.1	+0.3
GBPINR	+0.2	-0.4	-0.0
USDINR	+0.2	+1.6	+0.5
EURINR	+0.0	-0.5	-0.1
Broad USD	+0.0	+0.6	-1.1
JPYINR	-0.2	+0.8	+3.0
Crude	+3.8	+0.9	+29.8
Aluminium	-0.4	-2.3	+3.0
Zinc	-1.1	-2.5	+13.5
Copper	-1.5	-2.5	+9.5
NatGas	-1.6	+11.8	-2.0
Gold	-3.0	-4.8	+1.9
Silver	-3.6	-7.3	+1.3
Brent	-4.1	+3.9	+38.7
Embassy REIT	+0.0	-0.2	-2.1
Brookfield REIT	+0.0	-1.1	+0.3
Nexus REIT	+0.0	+0.0	+1.8
Hang Seng	+0.5	-3.9	+5.5
USDJPY	+0.1	+0.8	-2.4
Fed Balance Sheet	+0.0	+0.2	+0.3
EURUSD	-0.2	-2.2	-0.7
S&P 500	-0.8	-0.5	+2.6
Nasdaq	-1.0	+1.1	+3.8
China	-1.7	-2.7	-5.4
EM Equity	-1.7	-2.7	+1.7
MSCI India	-1.8	-5.8	-5.2
	1w %	1m %	3m %

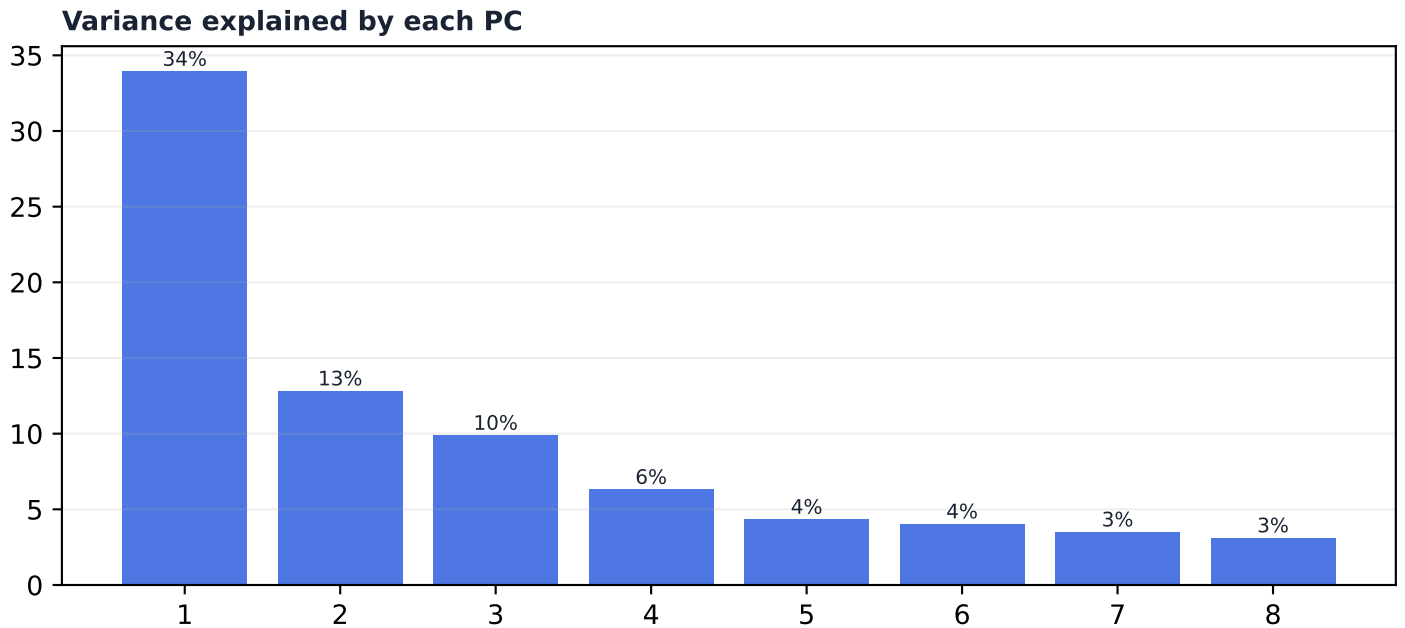
52-Week Cross-Asset Correlation

Correlation of weekly changes (log-returns; diffs for VIX & rates).



CROSS-ASSET FACTOR STRUCTURE (PCA)

Independent forces driving the 38 instruments (156 weeks)



PC1 — Risk (Nifty)

33.9% of variance (cum 34%) · marker corr +0.93

+ Nifty 200 +0.27, Nifty 500 +0.27, Nifty 100 +0.27, Nifty 50 +0.26, MSCI India +0.26
- India VIX -0.17, US VIX -0.13, US HY OAS -0.11, USDINR -0.11, US 10Y real -0.11

PC2 — US rates (10Y) (inverse)

12.8% of variance (cum 47%) · marker corr -0.57

+ EM corp OAS +0.37, US HY OAS +0.33, US IG OAS +0.30, US VIX +0.27, JPYINR +0.18
- US 2Y -0.31, US 10Y -0.26, USDJPY -0.26, Nasdaq -0.26, S&P 500 -0.25

PC3 — Global risk (S&P) (inverse)

9.9% of variance (cum 57%) · marker corr -0.29

+ DXY +0.41, USDJPY +0.25, US HY OAS +0.13, US VIX +0.12, US IG OAS +0.12
- EURUSD -0.39, GBPINR -0.36, EURINR -0.34, EM Equity -0.22, JPYINR -0.21

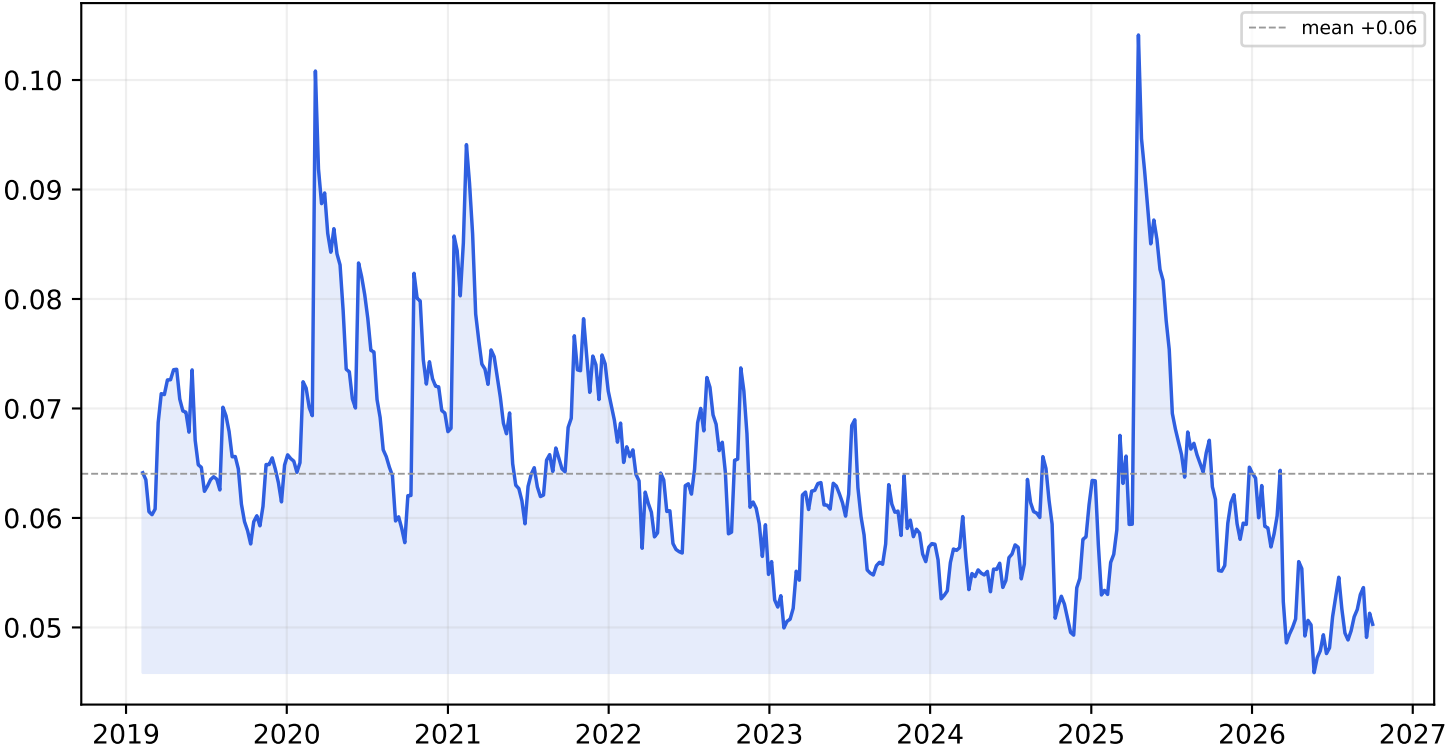
PC4 — US rates (10Y)

6.3% of variance (cum 63%) · marker corr +0.63

+ US 10Y real +0.42, US 10Y +0.41, US 2Y +0.33, EURINR +0.32, USDINR +0.25
- S&P 500 -0.17, China -0.16, Nasdaq -0.15, EM Equity -0.13, DXY -0.12

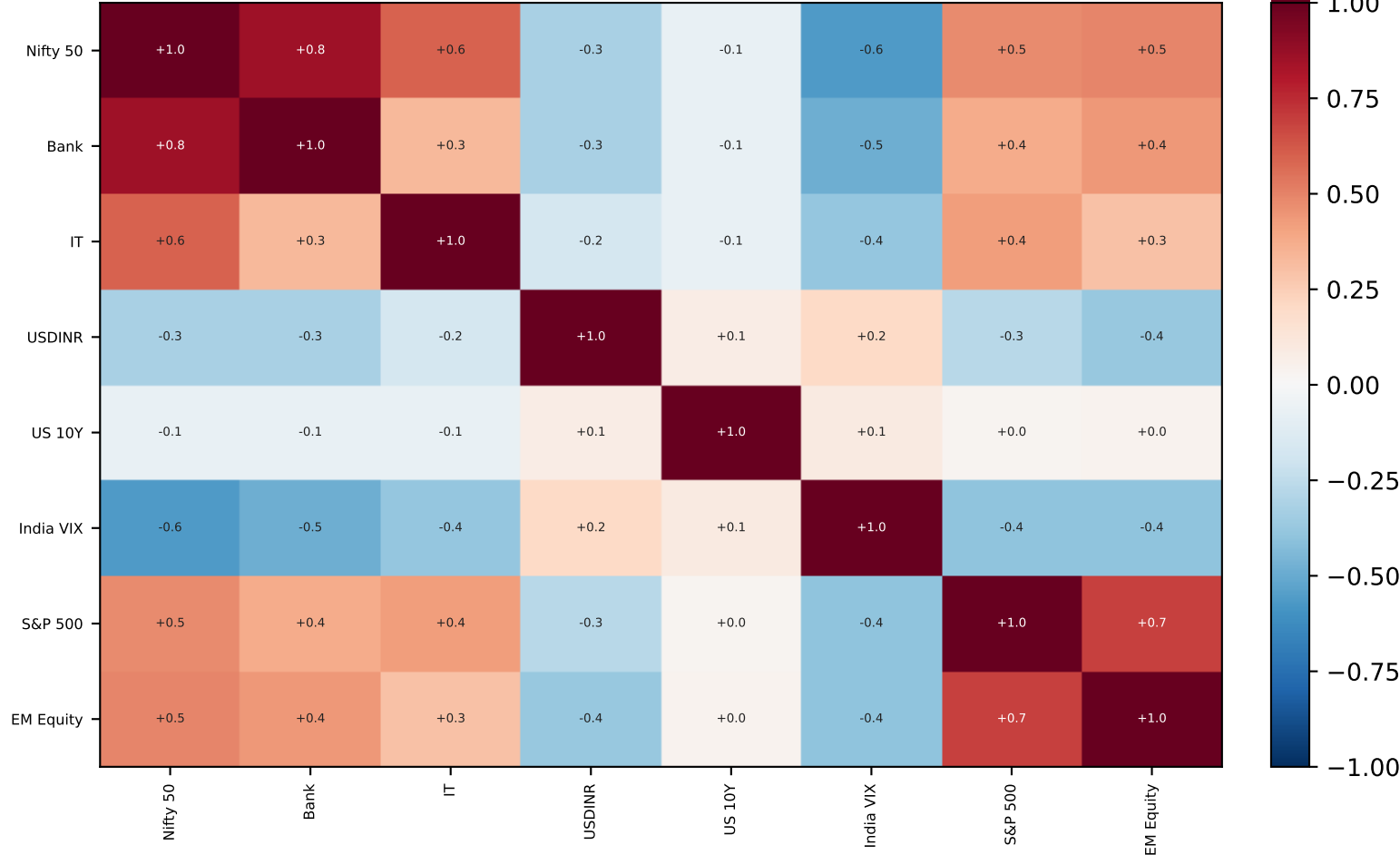
Principal components are the uncorrelated factors explaining the most joint variance. A high PC1 share means one force (usually broad risk) dominates — diversification is thin.

Average pairwise conditional correlation (multivariate DCC-GARCH)



N=8 · persistence 0.8887 · now +0.05 · rising = diversification failing in real time

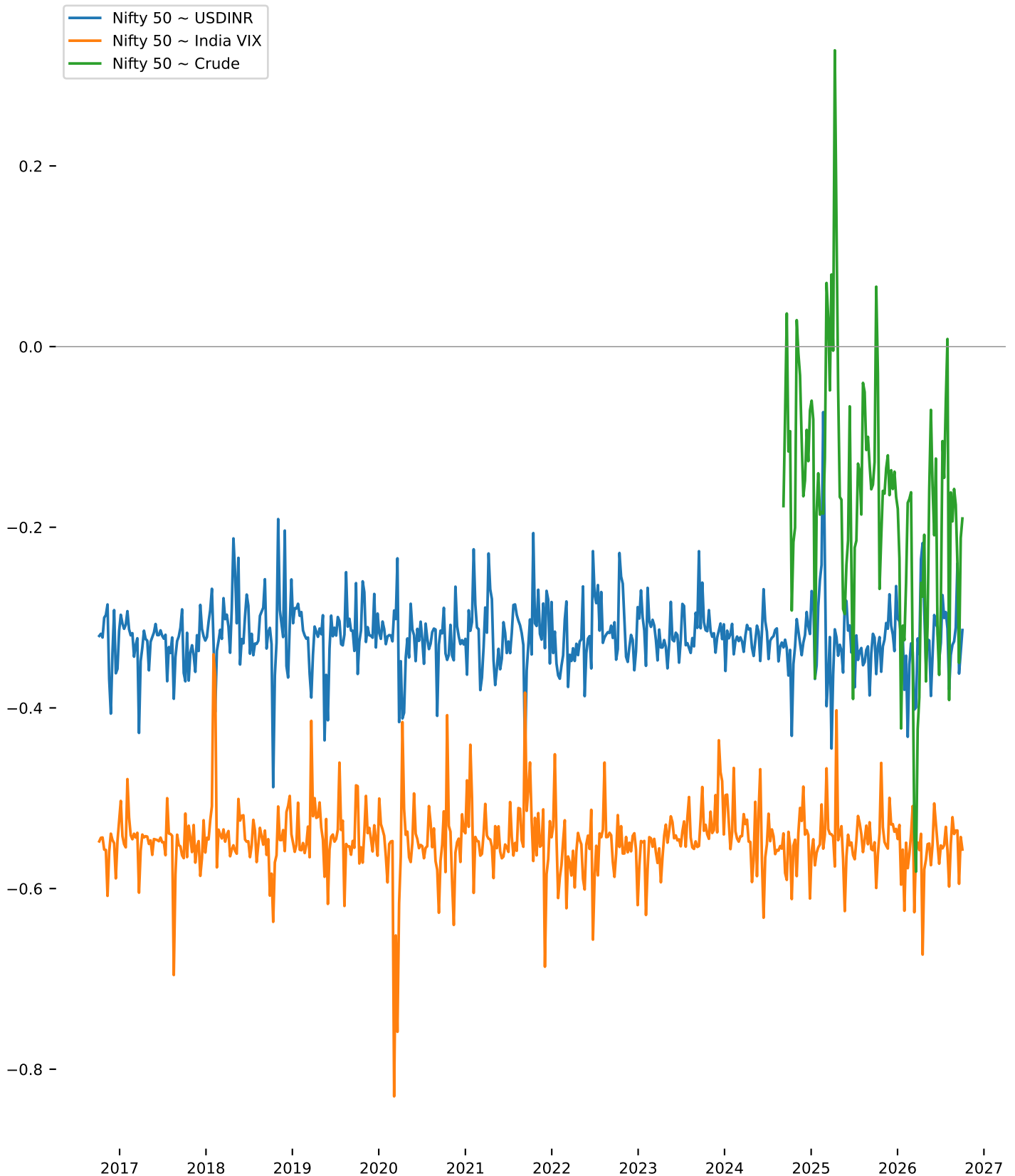
Latest conditional-correlation matrix



Regime & Conditional Correlations

Markov-switching regime: Risk-off (Markov-switching). Smoothed posterior: Risk-on 0.15, Risk-off 0.79, Neutral 0.05

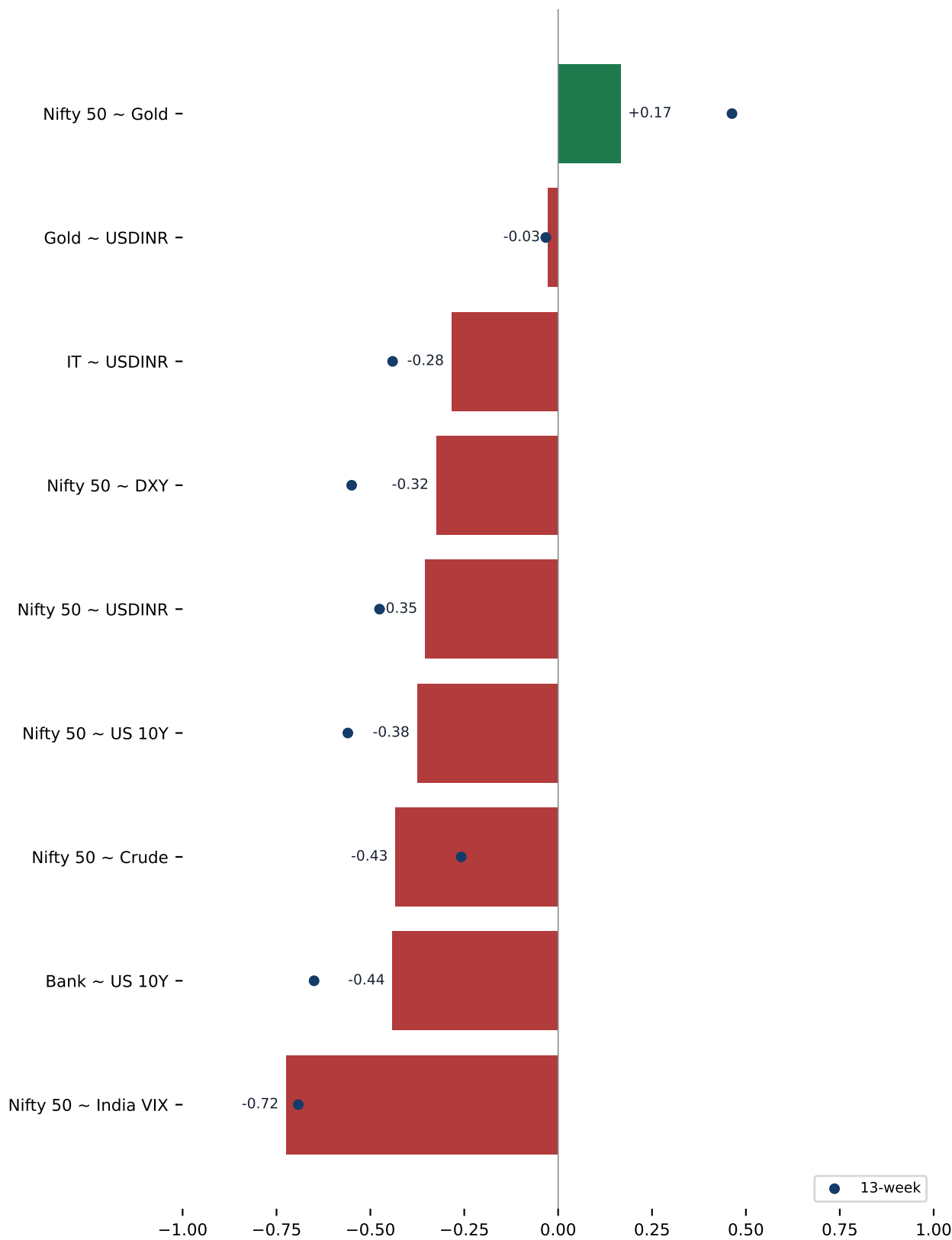
DCC-GARCH conditional correlation (time-varying)



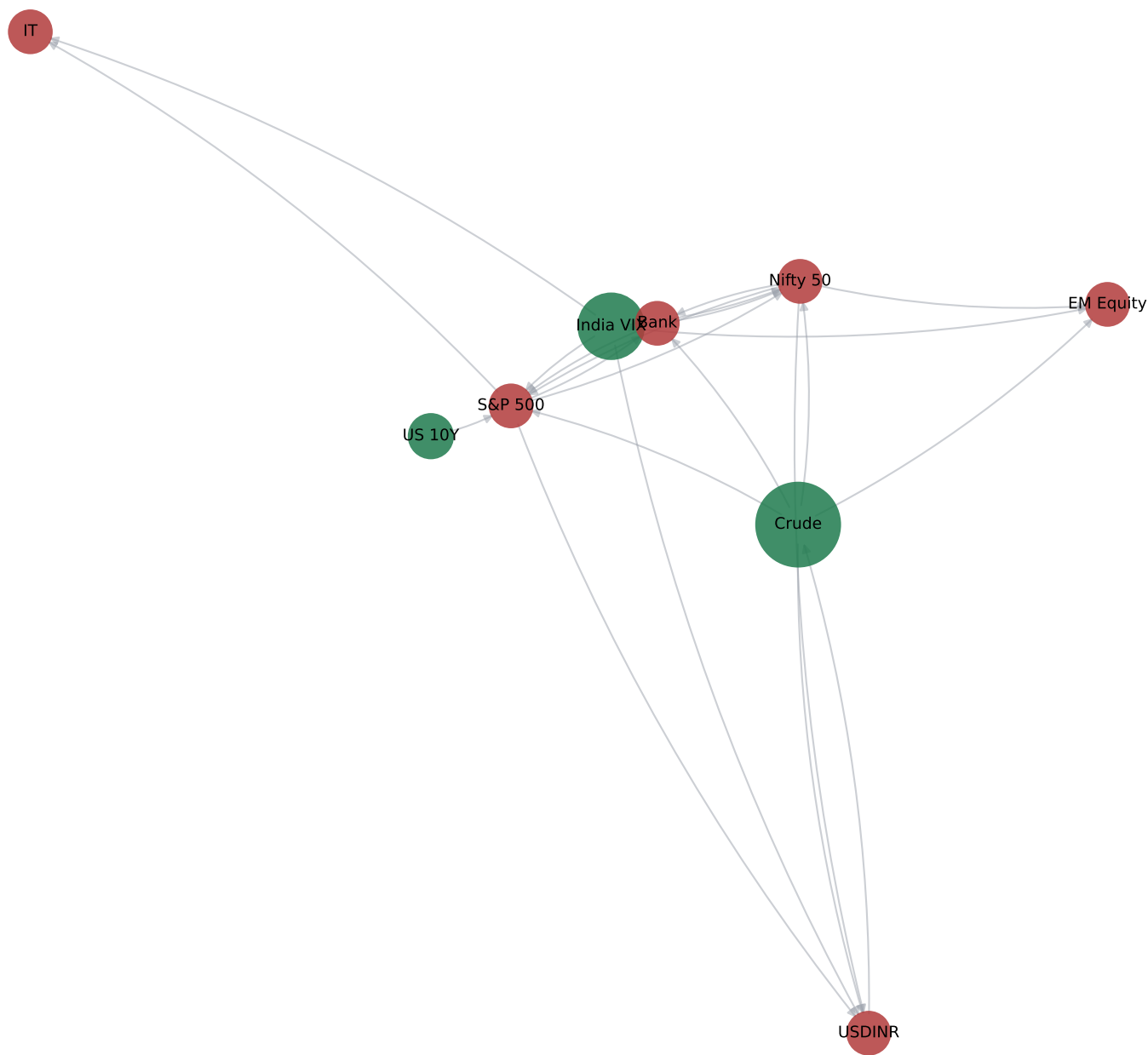
Now: Nifty 50 ~ USDINR -0.31 (persist 0.3346), Nifty 50 ~ India VIX -0.56 (persist 0.2284), Nifty 50 ~ Crude -0.19 (persist 0.591)

Cross-Asset Relationship Watch-List

India-specific pairs: 52-week correlation of weekly changes (dot = last 13 weeks).



Directional lead-lag — Granger causality network

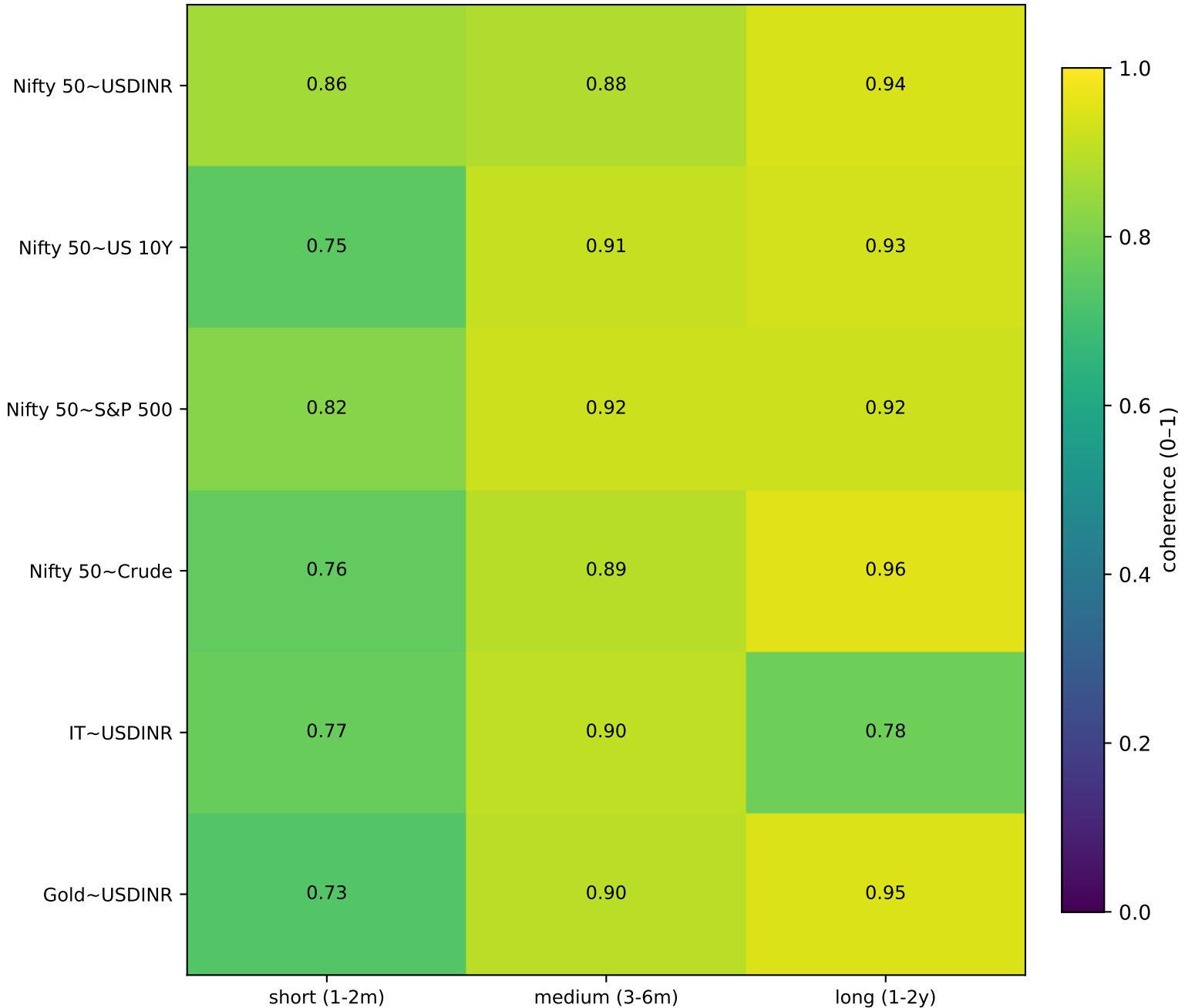


arrow = X Granger-causes Y (p<0.05); green/large = net information EXPORTER (leader)

LEADERS: Crude +0.25, India VIX +0.12, US 10Y +0.01, Gold +0.00, IT -0.01

FOLLOWERS: EM Equity -0.10, Bank -0.08, USDINR -0.08, S&P 500 -0.06, Nifty 50 -0.05

Wavelet coherence by time-scale — short-term or structural?



STATISTICAL RELATIVE VALUE (cointegration)

Mean-reverting India spreads and how stretched each is now

Pair	Coint?	p-val	Hedge	Half-life	Spread z
Nifty vs Nifty500	no	0.727	1.25	18w	+3.23
Nifty vs S&P 500	no	0.971	1.23	58w	+2.91
Nifty vs Sensex	no	0.896	0.91	43w	-2.80
Nifty vs EM Equity	no	0.954	0.60	114w	+2.30
IT vs USDINR	no	0.964	-0.02	269w	+2.00
WTI vs Brent	yes	0.000	0.81	1w	-0.32
USDINR vs DXY	no	0.193	-0.05	16w	-0.07
Gold vs Silver	no	0.500	1.57	9w	+0.01

Low p-value = the spread is statistically mean-reverting. Half-life = weeks to close half a dislocation. $|z| > 2$ (red) flags a historically wide gap. Pairs shown NOT cointegrated: the long-run link has broken — the z is informational only.



PART III

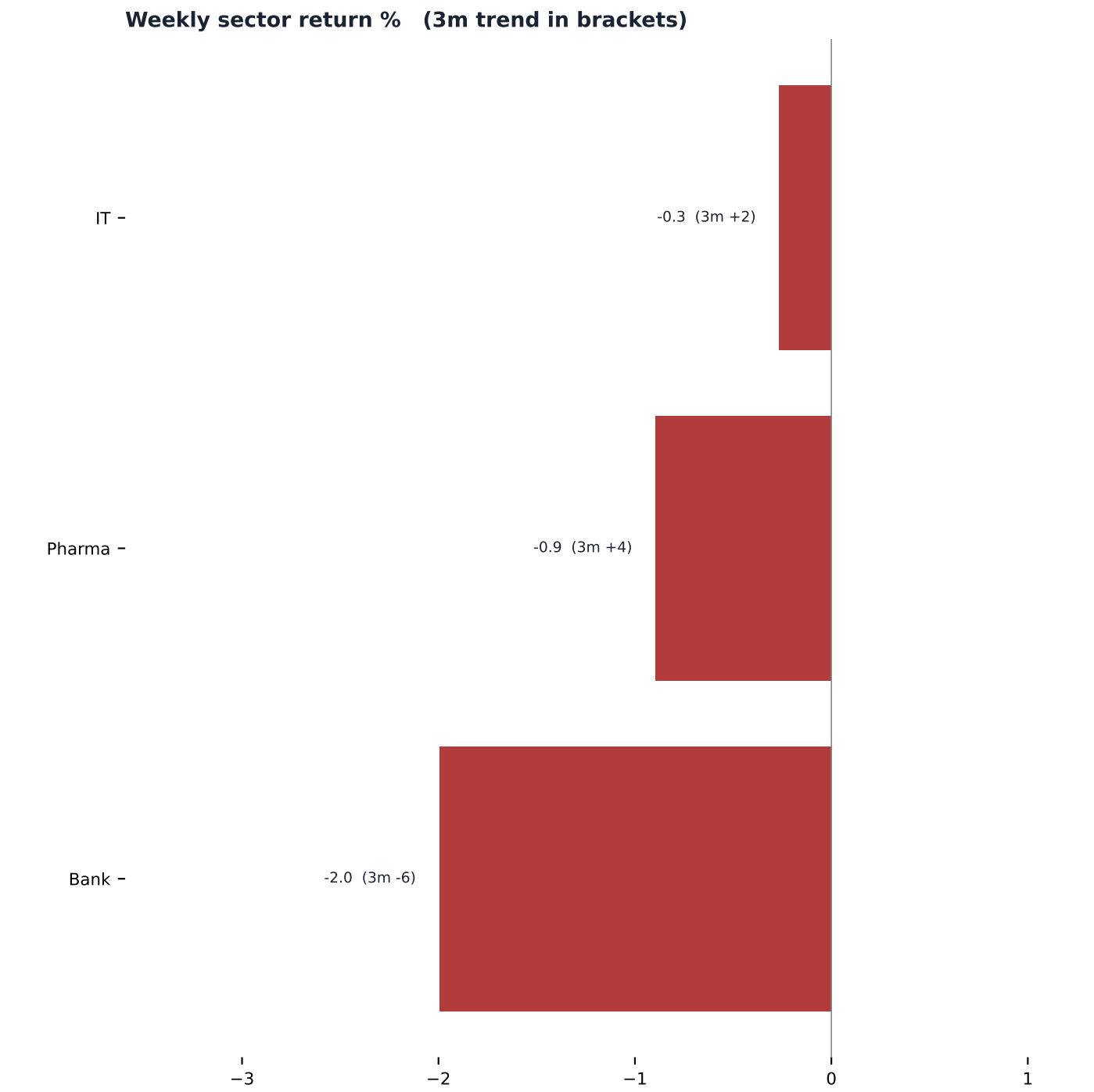
Sectors, Momentum & Fair Value

Where the money is rotating and what is rich or cheap versus its drivers.

- Sector rotation, momentum & trend battery, factor-beta attribution
- Fair-value residual models (rich/cheap vs economic drivers)

Sector Rotation

NSE sectoral indices, weekly return. Breadth: 0% of sectors up this week; 33% above their 10-week average.



MOMENTUM & TREND

Time-series momentum, trend state and distance below the 52-week high

Instrument	13w	26w	52w	Score	vs40wMA	<52wHi
Nifty 50	-6%	+0%	-8%	-0.50	-6%	-13%
Smallcap 250	-1%	+21%	+5%	+0.00	+6%	-3%
Bank	-6%	+6%	-2%	-0.50	-4%	-11%
IT	+2%	-8%	-17%	-0.50	-9%	-28%
Pharma	+4%	+23%	+23%	+1.00	+11%	-1%
Gold	+2%	-4%	+19%	+0.00	-4%	-12%

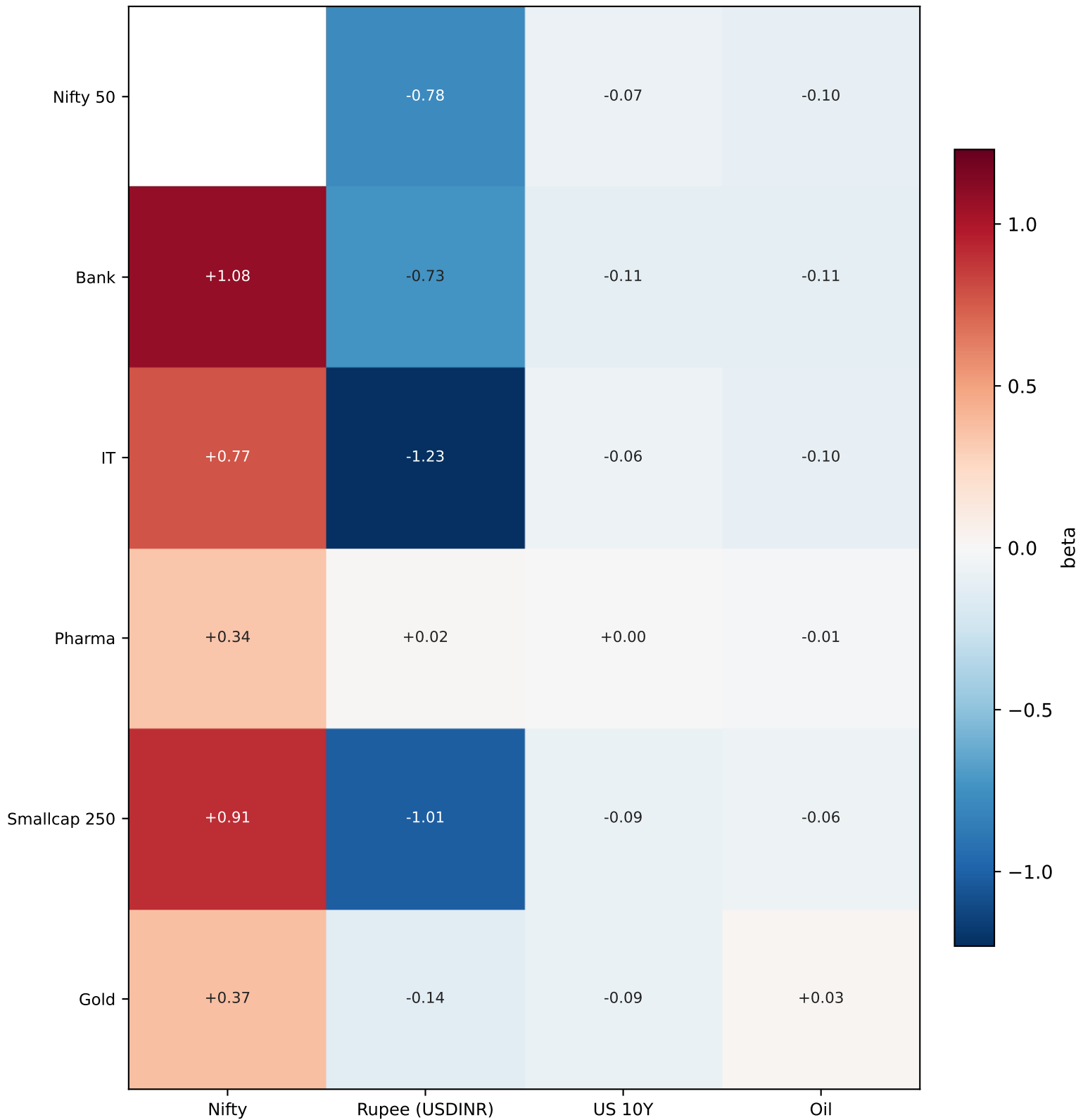
Sector 26-week relative strength:

LEADERS: Pharma +23%, Bank +6%, IT -8%

LAGGARDS: IT -8%, Bank +6%, Pharma +23%

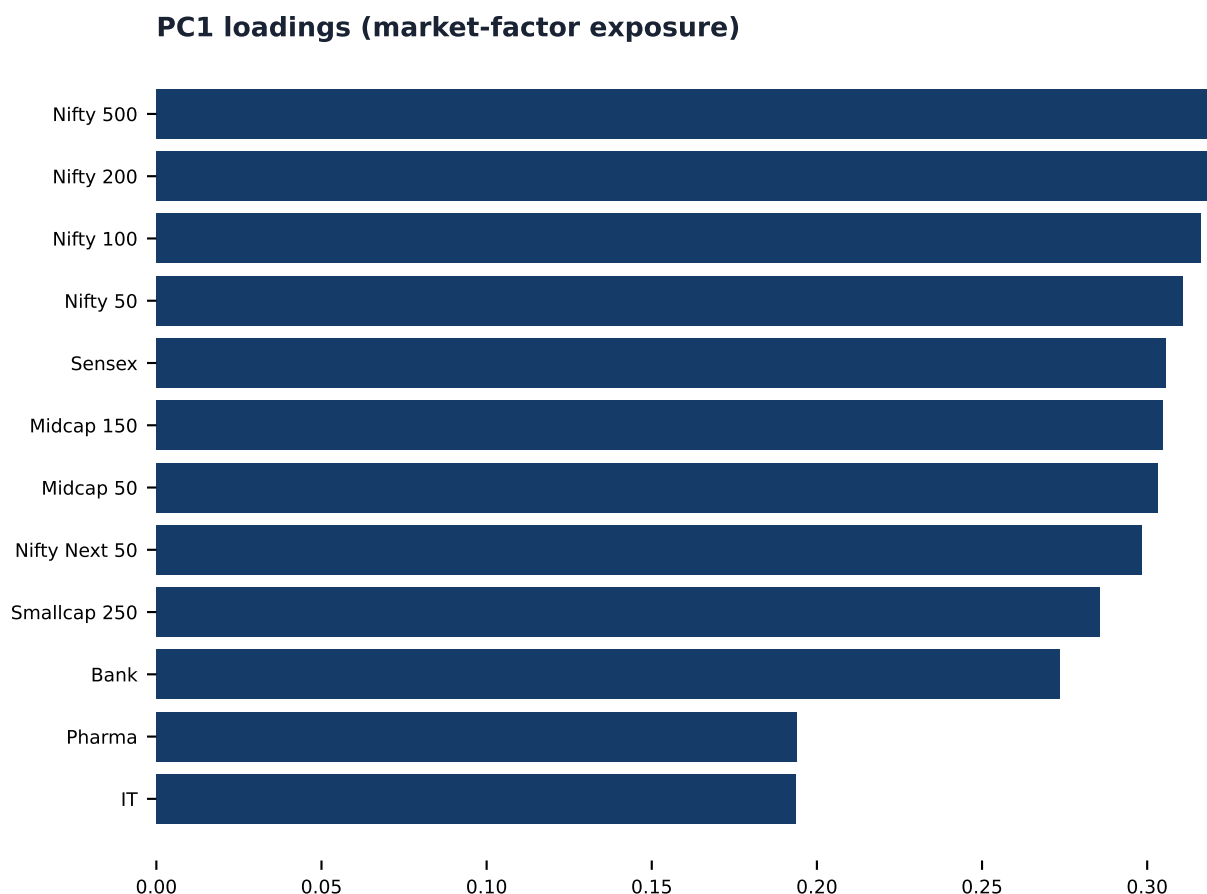
Score = mean sign of the 4/13/26/52-week returns (+1 = uptrend across all horizons). 'Golden' vs 'death' = 10w vs 40w MA cross.

Factor betas — 52-week sensitivity to the master factors



Risk Concentration & Lead-Lag

PCA on equity + sector weekly moves: PC1 explains 81% of variance (PC2 7%). Higher PC1 = more single-factor.



LEAD-LAG INTO NIFTY 50 (weekly; honest — skill is modest)

Leader	Contemp. corr	1-week-lag corr
Crude	-0.19	-0.26
India VIX	-0.55	-0.23
US 10Y	-0.01	-0.06
DXY	-0.31	-0.02
USDINR	-0.34	-0.01

FAIR VALUE — RICH / CHEAP vs DRIVERS

Each asset regressed on its economic drivers; the residual is the rich/cheap signal

IT vs rupee & US tech

cheap z -1.83

actual 28086.50 · model-fair 33930.00 · gap -17.2% · R^2 0.43



Banks vs Nifty & US rates

RICH z +0.89

actual 54471.65 · model-fair 52527.92 · gap +3.7% · R^2 0.94



Rupee vs dollar, oil & US rates

cheap z -0.37

actual 95.97 · model-fair 96.83 · gap -0.9% · R^2 0.72



Gold vs US real yield & dollar

cheap z -0.35

actual 146416.00 · model-fair 156131.34 · gap -6.2% · R^2 0.55



Nifty vs global rates, dollar & oil

cheap z -0.08

actual 22780.25 · model-fair 22831.02 · gap -0.2% · R^2 0.57



Model-fair value is what the drivers justify; the gap is how far actual sits from it. $|z| > 1.5$ flags a stretched dislocation. Trust in proportion to R^2 — a low- R^2 model is a weak anchor, stated honestly.



PART IV

Volatility & Risk

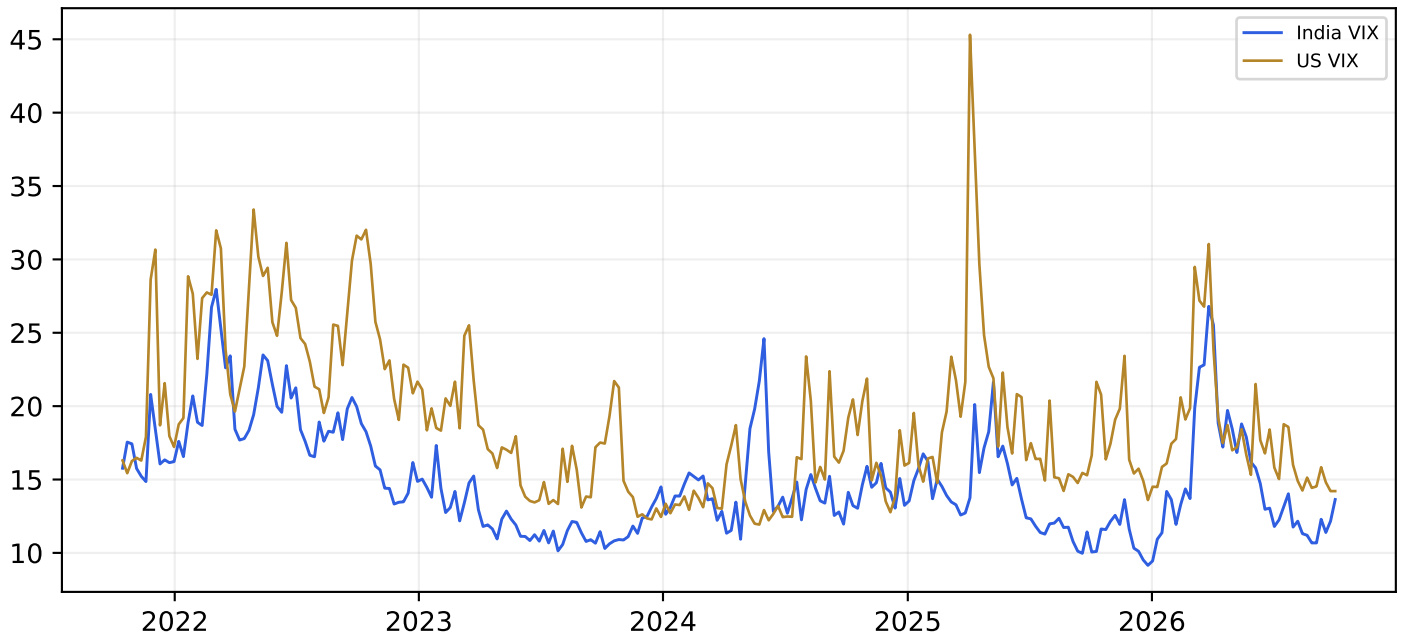
The volatility complex and downside risk.

- India VIX in context, the volatility risk premium, India-vs-US fear
- Tail risk: VaR / expected shortfall, drawdowns, tail dependence

VOLATILITY

India VIX in context, the volatility risk premium, and India-vs-US fear

India VIX vs US VIX (5y)



VOL RISK PREMIUM (India)

+8.5 pts

India VIX 13.6 – realised 5.1
positive (implied > realised, carry cushion)

FEAR CONTEXT

India VIX 46th %ile of 5y

India–US VIX -0.6

India calmer than US (global-led risk)

A positive vol-risk premium (implied > realised) is the usual carry cushion; negative flags realised stress. India VIX above US VIX = a domestic risk premium; below = globally-led risk.

TAIL RISK

Downside: 5% VaR / expected shortfall, drawdowns and fat-tailedness (5-year weekly)

Instrument	VaR5	ES5	DnVol	MaxDD	CurDD	Skew	Kurt
Nifty 50	-2.8%	-4.0%	9%	-17%	-13%	-0.3	+0.5
Smallcap 250	-4.8%	-6.6%	15%	-25%	-4%	-0.5	+1.4
Bank	-3.9%	-5.0%	11%	-19%	-11%	-0.0	+0.9
IT	-6.0%	-7.7%	17%	-41%	-39%	-0.6	+0.7
Gold	-4.5%	-6.7%	16%	-15%	-12%	-0.5	+1.5
Crude	-10.2%	-14.0%	31%	-36%	-9%	-0.2	+0.9
USDINR	-1.0%	-1.3%	3%	-3%	-1%	-0.1	+1.6

Lower-tail dependence WITH the Nifty (P both crash together):

Bank 0.64 IT 0.38 Gold 0.09 USDINR 0.04

VaR5 = the typical bad-week loss (5% quantile); ES5 = the average loss BEYOND it. Lower-tail dependence near 1 = crashes together; near 0 = a genuine diversifier when it matters.

Historical Trend - Key Metrics

Key readings from every weekly report, most recent on the right. Cells are colour-coded green (favourable / risk-on), amber (neutral) and red (adverse / risk-off) so the multi-month trend is readable at a glance.

	04-24	05-01	05-08	05-15	05-22	05-29	06-05	06-12	06-19	06-26	07-03	07-10	07-17	07-24	07-31	08-07	08-14	08-21	08-28	09-04	09-11	09-18	09-25	10-02
Regime	R-	R+	R+	R-	R+	N	R-	R+	R+	R-	R+	R-	R-	N	R+	N	R+	R+	R+	R+	R+	R+	R+	R-
Risk appetite																+0.51	+0.50	+0.40	+0.23	+0.39	+0.39	+0.28	+0.10	-0.09
External backdrop																-0.28	-0.31	-0.31	-0.39	-0.16	-0.24	-0.41	-0.24	-0.55
Nifty 1w %	-1.9	+0.4	+0.7	-2.2	+0.3	-0.7	-0.8	+1.1	+1.7	+0.2	+0.9	-0.3	+0.0	-0.4	+1.0	+1.0	+0.1	-0.3	-0.1	-0.0	-0.5	+0.0	+0.3	-1.6
Breadth %	33	75	92	17	50	67	25	67	92	42	75	50	50	58	58	72	56	50	44	50	22	0	67	0
PC1 share																33	34	34	34	34	34	34	34	34
India VIX	20	18	17	19	18	16	16	15	13	13	12	12	13	13	13	12	12	11	12	11	11	12	11	14
USDINR 1w %	+1.8	+0.7	-0.5	+1.6	-0.3	-0.7	-0.1	+0.2	-0.8	-0.0	+1.3	-0.2	+0.4	+0.2	-0.7	-0.2	+0.1	+0.2	+0.0	-0.3	+0.0	-0.0	-0.1	+0.2
Bank 1w %	-0.8	-2.2	+0.8	-2.9	+0.6	+0.3	+0.5	+4.3	+1.5	+0.9	-0.4	+0.2	+0.1	-1.0	+0.7	+1.4	-0.1	+0.0	-0.4	+0.9	-0.5	+0.0	+0.2	-2.0

Each column is one weekly report - read left (older) to right (latest) for the trend over the past months.