

ABL Digital Cryptoglobal Weekly

Cross-Exchange Crypto Analytics | week ending 2026-09-21

15 majors + derivatives, options & flows | BTC dominance 59% | 1827 days



REGIME: Risk-on

EXECUTIVE SUMMARY

The tape is risk-on and broad, and an investor should be leaning that way rather than fighting it. The Markov regime puts 74.6% posterior weight on risk-on with zero mass on neutral, and the composite risk-appetite scorecard reads +0.78, driven by coin breadth (+1.20) and alt appetite (+1.25) rather than by BTC trend alone (+0.51). With 57% of majors beating Bitcoin over 30 days and dominance at 58.9%, this is a broad-risk tape with an alt-season tilt, not a BTC-led one. The favoured expression is high-beta L1s and infrastructure — NEAR (+61.3% 7d), AVAX (+45.3%), SUI (+39.6%), SOL (+14.5%) — plus LINK, which screens 9.9% cheap on a well-fit model (R^2 0.78). Fade TRX (+1.8% 7d, +0% 30d) and treat ETH with more caution than its price action suggests: it screens 12.8% rich versus BTC and equities (R^2 0.62), and SOL is 9.1% rich versus ETH.

Three developments matter this week. First, Bitcoin itself screens 31.2% cheap against equities, the dollar and rates on the best-fitting model in the book (R^2 0.76, z -1.33) — meaning the macro complex has run harder than BTC and the laggard is the large-cap, not the alts. Second, DeFi TVL jumped 9.8% in a week to \$96bn while stablecoin supply barely moved (+0.2% to \$311bn): capital is rotating inside crypto, not arriving from outside. That caps how far this leg can run without new fiat. Third, BTC DVOL at 37.9 with put/call 0.52 and near-flat funding (0.002%/8h) says the rally has been spot-led and cheaply hedged — optionality is inexpensive here.

The biggest risk is that this is a late-stage, self-funded melt-up. Fear & Greed at 70 from 57 a week ago, ES5 tail risk of -16.6% on BTC and -29.4% on SOL, and 64% of variance in one factor mean a single shock hits everything at once. Watch stablecoin supply: sustained contraction below \$311bn while DeFi TVL stalls would confirm the melt-up read. Watch the BTC~Nasdaq DCC correlation at +0.37 — a move back toward the 365-day +0.43 means macro is driving again. And watch dominance: a break back above 60% would end the alt bid and argue for consolidating into BTC.

Crypto Dashboard

Market state and the week's key readings across majors, options and flows.

REGIME Risk-on	BTC DOM 59%	BTC DVOL 38	FEAR&GREED 70
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MAJORS (price | 7d | 30d | 90d)

BTC	85,835.69	+9.8%	+11.4%	+37.0%
ETH	2,741.20	+9.0%	+13.1%	+64.6%
SOL	117.40	+14.5%	+25.0%	+68.6%
BNB	795.84	+10.5%	+14.4%	+37.8%
XRP	1.49	+5.2%	+2.1%	+34.7%
DOGE	0.10	+16.8%	+6.2%	+23.9%
ADA	0.24	+16.1%	+7.1%	+60.0%
AVAX	10.99	+45.3%	+46.5%	+69.4%
LINK	12.83	+11.4%	+10.0%	+68.3%
TRX	0.34	+1.8%	+0.0%	+4.7%
DOT	1.18	+17.3%	+27.8%	+29.6%
NEAR	3.98	+61.3%	+111.3%	+100.9%
LTC	61.81	+16.3%	+17.7%	+46.7%
BCH	263.40	+17.9%	-4.8%	+35.4%
SUI	1.01	+39.6%	+23.3%	+42.9%

ETH/BTC 0.03194 | alt-breadth 57% of majors beating BTC (30d)

CRYPTO CROSS-ASSET SCORECARD

Crypto risk appetite and the macro (equity/dollar/rates) backdrop that drives it

CRYPTO RISK APPETITE

Risk-on

score +0.78

risk-off (-1.5)

(+1.5) risk-on



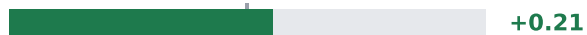
coin breadth



btc trend



low concentration



alt appetite



equity vix



MACRO BACKDROP (equity/dollar/rates)

Neutral backdrop

score +0.31

headwind (-1.5)

(+1.5) supportive



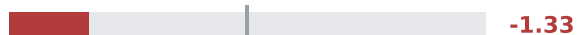
equity momentum



weak dollar



low us rates



low equity vol



Each component is a multi-year z-score, sign-aligned so higher = risk-on / more supportive; the headline is their average. The macro backdrop reads equity momentum, the dollar, US rates and equity volatility — crypto's key drivers.

WHAT CHANGED THIS WEEK

Week-over-week moves and how the market-state readings shifted · 2026-09-21

TOP GAINERS

ARB	+68.8%
NEAR	+61.3%
AVAX	+45.3%
SUI	+39.6%
UNI	+35.1%
RNDR	+28.7%
APT	+28.1%
INJ	+27.5%

TOP DECLINERS

Gold	+0.6%
DXY	+1.0%
TRX	+1.8%
S&P 500	+1.9%
FIL	+3.0%
Nasdaq	+3.5%
EM Equity	+4.1%
Silver	+4.3%

KEY LEVELS — week-over-week

BTC	85,835.7	+9.8%	Gold	4,377.9	+0.6%
ETH	2,741.2	+9.0%	DXY	100.4	+1.0%
SOL	117.4	+14.5%	VIX	15.0	-2.1
XRP	1.5	+5.2%	US 10Y	5.0	+0.0
Nasdaq	27,089.9	+3.5%	S&P 500	7,761.7	+1.9%

MARKET-STATE READINGS — now vs prior report

Regime	prior: R+	->	Risk-on
Risk appetite	prior: +0.38	->	+0.78
Macro backdrop	prior: +0.17	->	+0.31
PC1 share	prior: 48	->	48%

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

Cryptoglobal Analysis

Executive Summary

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Three developments matter this week. First, Bitcoin itself screens 31.2% cheap against equities, the dollar and rates on the best-fitting model in the book (R^2 0.76, z -1.33) — meaning the macro complex has run harder than BTC and the laggard is the large-cap, not the alts. Second, DeFi TVL jumped 9.8% in a week to \$96bn while stablecoin supply barely moved (+0.2% to \$311bn): capital is rotating inside crypto, not arriving from outside. That caps how far this leg can run without new fiat. Third, BTC DVOL at 37.9 with put/call 0.52 and near-flat funding (0.002%/8h) says the rally has been spot-led and cheaply hedged — optionality is inexpensive here.

The biggest risk is that this is a late-stage, self-funded melt-up. Fear & Greed at 70 from 57 a week ago, ES5 tail risk of -16.6% on BTC and -29.4% on SOL, and 64% of variance in one factor mean a single shock hits everything at once. Watch stablecoin supply: sustained contraction below \$311bn while DeFi TVL stalls would confirm the melt-up read. Watch the BTC~Nasdaq DCC correlation at +0.37 — a move back toward the 365-day +0.43 means macro is driving again. And watch dominance: a break back above 60% would end the alt bid and argue for consolidating into BTC.

Regime, Scorecard & Market State

The Markov filter on Bitcoin assigns 74.6% to risk-on, 25.4% to risk-off and — notably — 0.0% to neutral. A bimodal posterior with no middle state is a market that is not drifting; it is committed. The 25.4% risk-off weight is not noise, but it is a minority reading, and the practical implication is that mean-reversion trades against the trend carry poor odds right now.

The risk-appetite scorecard at +0.78 decomposes usefully. Alt appetite (+1.25) and coin breadth (+1.20) are the dominant contributors; btc_trend (+0.51) and low_concentration (+0.21) are supportive but secondary; equity_vix (+0.74) says the external volatility environment is permissive. Read together, the risk-on signal is being generated by the altcoin complex, not by Bitcoin. That matters because breadth-led rallies tend to be more fragile than price-led ones — breadth can deteriorate quickly without BTC moving much at all.

The macro backdrop at +0.31 is genuinely neutral and internally conflicted. Equity momentum (+1.41) is the single strongest input anywhere in the briefing, and a weak dollar (+0.42) with low equity vol (+0.74) adds support. Against that, low_us_rates reads -1.33: rates are not low, and that is the one macro channel actively working against crypto. So the backdrop is equities pulling crypto up while rates pull down, netting to roughly nothing. Crypto's strength this week is therefore largely endogenous, which is consistent with the flows picture below.

Seven-day returns are positive across all fifteen majors, from TRX at +1.8% to NEAR at +61.3%. Nothing is down. Over 30 days only BCH (-5%) and TRX (0%) fail to advance. That uniformity is itself a signal: when every name works, differentiation is low, dispersion is compressed, and the market is being carried by a single common force rather than by individual fundamentals.

Cryptoglobal Analysis (cont.)

Bitcoin Dominance & Alt-Season

Dominance sits at 58.9% against a total market cap of \$2.92T, with ETH at 11.5% and ETH/BTC at 0.0319. Dominance near 59% is historically elevated — a genuine alt-season typically runs with dominance falling through the low 50s — yet alt breadth shows 57% of majors beating BTC over 30 days. Those two facts sit in tension, and the resolution matters for positioning.

The most coherent reading is that this is an early- or mid-stage broadening, not a mature alt-season. Dominance has not broken down, so Bitcoin is still absorbing a majority of the complex's capitalisation, but capital at the margin is finding higher-beta destinations. The 57% breadth figure is meaningfully above the 50% coin-flip line without being extreme; it says outperformance is the majority case, not a stampede.

The dispersion within the alt complex reinforces this. NEAR at +111% over 30 days and +101% over 90 days, AVAX at +47%/+69%, SOL at +25%/+69%, and DOT at +28%/+30% are doing real work. Meanwhile XRP (+2% 30d), DOGE (+6%), ADA (+7%) and TRX (0%) have lagged badly despite strong seven-day prints. That pattern — a narrow set of L1s and infrastructure names leading, with the large-cap retail favourites trailing — is characteristic of a rotation driven by allocators rather than by broad retail speculation. It argues for concentrating alt exposure in the names that have already demonstrated leadership rather than reaching for the laggards on a catch-up thesis.

ETH/BTC at 0.0319 with ETH dominance of 11.5% is the weak link. Ether has delivered +9.0%/+13%/+65% across the three windows, which is respectable, but it has not led, and the fair-value model flags it as rich. For an investor building alt exposure, ETH is a lower-quality vehicle for that exposure right now than SOL or the mid-cap L1s — despite ETH appearing as a net leader in the Granger network, which is a statement about information flow, not about returns.

Factor Structure & Systemic Risk

Two PCA readings appear in the briefing, and both point the same way. On the majors, PC1 explains 64% of variance — this market is overwhelmingly a one-factor market, and that factor is BTC beta. On the wider 39-instrument panel, PC1 (labelled Ethereum beta) takes 48%, with PC2 equity risk at 9%, PC3 US rates at 6% and PC4 gold inverse at 4%. The crypto factor is roughly five times larger than the equity factor and eight times larger than the rates factor.

The investment implication is blunt: diversification across coins is close to an illusion. Holding fifteen majors instead of Bitcoin does not materially reduce exposure to the dominant risk; it changes the beta to that risk and adds idiosyncratic noise on top. A portfolio of NEAR, AVAX, SUI and SOL is not a diversified portfolio — it is a leveraged expression of the same single factor. Risk budgeting should be done on factor exposure, not on position count.

The systemic co-movement gauge — average pairwise conditional correlation from the multivariate DCC across twelve assets — reads +0.32 now, exactly where it was a year ago, with persistence 0.8552. This is the most reassuring number in the briefing. At +0.32 the complex is not moving as one body; there is genuine cross-sectional dispersion available, which is precisely why NEAR can print +111% over 30 days while TRX prints zero. The high persistence coefficient means this state is sticky — correlation regimes here do not flip in a day.

The apparent contradiction with the 64% PC1 reading is worth resolving, because it shapes how to trade this. PC1 measures the share of variance along the dominant direction; average pairwise correlation measures how tightly individual pairs track each other. High PC1 with moderate average correlation means there is a strong common direction but substantial variation in how hard each asset loads onto it. Practically: directional risk is common and cannot be diversified away, but relative-value and pair positioning still has room to work. The moment to worry is when +0.32 starts migrating toward +0.5 or higher — that is the signature of a stress event, where dispersion collapses and everything falls together.

Cryptoglobal Analysis (cont.)

Cross-Asset Correlation & Lead-Lag

The BTC~Nasdaq relationship is the headline cross-asset number and it is softening. The 365-day correlation is +0.43; the 90-day is +0.29; the DCC-GARCH conditional estimate now reads +0.37 with persistence 0.7026. Bitcoin is trading with less macro beta than its one-year average, but it has not decoupled. At +0.37, roughly an eighth of BTC variance is shared with equities — enough that a genuine equity drawdown would transmit, not enough for crypto to be a pure macro proxy. The relatively low persistence (0.7026) on this pair, versus 0.9174 for ETH~BTC and 0.9999 for SOL~BTC, means the macro link is the least stable of the three and can reassert quickly.

The gold relationship has inverted in character. BTC~Gold runs +0.20 over 365 days but +0.52 over 90 days — the shortest-window reading is now stronger than the equity correlation. Bitcoin is currently trading more like a debasement hedge than like a tech stock. That is consistent with the −0.36 ninety-day correlation to DXY (versus −0.19 over 365 days): a weakening dollar is doing more work for crypto than risk appetite in equities. The rates correlation at −0.14 over 90 days is weak but directionally consistent with the −1.33 rates drag in the macro scorecard.

Within crypto, the DCC estimates are ETH~BTC +0.89 and SOL~BTC +0.86, with SOL's persistence at 0.9999 — effectively a unit root, meaning that correlation will not mean-revert on any useful horizon. Treat SOL exposure as BTC exposure with amplified beta; do not model it as a diversifier under any circumstances.

The Granger network shows net leaders of US 10Y, Nasdaq, VIX and ETH, with followers XRP, BTC, DOGE and DXY. The macro block leading crypto is the expected structure and worth respecting: rates and equity volatility move first, crypto responds. ETH leading BTC within the complex is the more interesting result, and it makes ETH's behaviour worth monitoring as an early indicator even while ETH is a poor vehicle for exposure on valuation. The essential caveat: weekly Granger predictive skill is modest. These relationships are statistically detectable but carry small effect sizes over a weekly horizon. Use the network to set the order in which you read the tape — watch rates and VIX before you watch BTC — not to build a trading signal that assumes the lead is reliably tradeable.

Relative Value & Fair Value

Five residual models clear the $R^2 \geq 0.4$ bar, and they should be weighted by fit quality rather than read as a flat list.

The highest-conviction signal is Bitcoin cheap 31.2% against equities, the dollar and rates, with R^2 0.76 and z −1.33. This is a well-specified model with a large, statistically meaningful residual, and it says the same thing the macro scorecard says from the other direction: equity momentum has been strong (+1.41), the dollar weak, and Bitcoin has not kept pace with what those inputs would imply. For an investor, this is the case for holding core BTC rather than rotating entirely into alts — the large-cap is the laggard on a macro-anchored basis, even as it lags on a momentum basis.

Chainlink cheap 9.9% versus ETH and BTC carries the tightest fit in the book at R^2 0.78, though the residual is modest and z −0.51 is well inside normal variation. It is a quality signal with limited magnitude: a reasonable tilt within alt exposure, not a standalone position thesis.

Dogecoin cheap 40.9% versus BTC has the largest residual and the most extreme z -score (−1.60), but the weakest fit of the group at R^2 0.55. That combination warrants caution. A 45% unexplained-variance model produces large residuals routinely, and DOGE's price is driven by sentiment mechanics the model does not contain. The +16.8% seven-day print against +6% over 30 days suggests something is already moving; the signal is real but it is the lowest-quality entry on the list.

On the rich side, Ether +12.8% versus BTC and equities (R^2 0.62, z +0.55) and Solana +9.1% versus ETH (R^2 0.71, z +0.19) both screen expensive, though neither z -score is extreme. SOL's z of +0.19 is essentially at fair value with a positive residual — the model fits well but the deviation is small, so this is not a short signal. ETH's z +0.55 with a reasonable fit is the more actionable of the two, and it reinforces the case for preferring other vehicles for alt beta.

Cryptoglobal Analysis (cont.)

Synthesising: the cheap names (BTC, LINK, DOGE) and the rich names (ETH, SOL) suggest that the correct portfolio shape here is core BTC, tilted alt exposure toward LINK and the mid-cap L1s that have led, and underweight ETH. That is close to the opposite of what the momentum tape alone would suggest, which is exactly what relative-value work is for.

Derivatives, Options & Volatility

The derivatives picture is the most striking part of this briefing, because it is conspicuously clean for a market that has rallied this hard.

BTC funding at 0.002% per 8 hours is effectively zero — annualised, low single digits. ETH at 0.005% and SOL at 0.008% are slightly positive but nowhere near the levels that signal crowded longs. More telling, basis is –5bp across all three: futures are trading at a small discount to spot. A rally with flat funding and negative basis is a spot-driven rally. Leverage has not been the marginal buyer. This is materially healthier than the alternative and it means the market is not structurally primed for a long-liquidation cascade. Open interest of \$9.5bn BTC, \$6.5bn ETH and \$1.0bn SOL is meaningful in size but unremarkable relative to a \$2.92T complex.

Options confirm the same read with an added wrinkle. BTC DVOL at 37.9 is low for crypto, and the IV term structure — 37 on 22Sep rising to 40 by 24-25Sep, then easing to 38 on 02Oct — shows a mild bump into the back half of this week before settling. That is a market pricing a specific near-dated event, not a sustained volatility regime. With realised strength this pronounced and implied vol this contained, options are cheap relative to the moves being delivered. An investor wanting upside exposure or downside protection is being offered it at an attractive price, and that asymmetry is unusual.

The put/call ratio at 0.52 on BTC and 0.55 on ETH shows call-dominant positioning — roughly two calls for every put. Combined with Fear & Greed at 70, that is consistent with a market leaning long through options rather than through leverage. Low funding plus call-heavy options plus low IV is a coherent picture: participants are expressing bullishness in the cheapest available form.

ETH DVOL at 52.6 is 14.7 points above BTC's, and the ETH 25-delta skew at –10.7 shows puts meaningfully bid relative to calls. There is real demand for ETH downside protection that does not exist on the BTC side — BTC's 25-delta skew is unavailable, which is itself a data gap worth noting rather than papering over. ETH's term structure (51/53/54/54/51) mirrors BTC's shape at a higher level. The combination of ETH screening 12.8% rich, showing negative skew, and carrying a 52.6 DVOL is three independent signals pointing at the same caution.

Max-pain deserves careful framing. BTC max-pain at 75,000 against spot 86,341 puts spot roughly 13% above the level of maximum option-writer profit; ETH at 2,300 against 2,748 is about 16% above. Max-pain is a positioning descriptor, not a forecast — the gravitational pull toward it is weak and unreliable. What it does tell you is that spot has moved substantially beyond where the bulk of open interest was struck, meaning dealers are likely short gamma above spot. That can amplify upside moves rather than dampen them, which is consistent with the sharp alt moves this week and argues against assuming max-pain acts as a ceiling.

Flows, Stablecoins & the OTC Question

Start with the honest limitation: true OTC volume is not observable. Desks do not report it, and any number presented as an OTC figure is a fabrication or a guess dressed as data. What can be observed is stablecoin supply and on-chain flow, and those are proxies with real blind spots — stablecoin supply conflates settlement capacity with dry powder, and bilateral fiat settlement between institutions never touches a chain at all. Every inference below is an inference from proxies, not a measurement of OTC activity.

With that stated, the proxies tell a specific and important story. Stablecoin supply stands at \$311bn, up 0.2% over seven days — essentially flat. Meanwhile DeFi TVL rose 9.8% to \$96bn in the same week. That divergence is the single most informative flow observation in this briefing. If new capital were

Cryptoglobal Analysis (cont.)

entering crypto from outside, stablecoin supply would be expanding as fiat is converted at the on-ramps. It is not. TVL is rising while the stablecoin float is static, which means the capital driving this rally is already inside the system and is being redeployed, not added.

For positioning this is a genuine constraint. A rotation-funded rally has a finite reservoir. It can run further — \$311bn of stablecoins against a \$2.92T market cap leaves room, and the DeFi TVL move shows the reservoir is being actively tapped — but it cannot compound indefinitely without new fiat. It also explains the dispersion pattern: rotation produces winners and losers, which is why NEAR and AVAX can run while TRX and XRP go nowhere. Fresh inflows tend to lift everything; rotation does not.

The flat stablecoin supply is also the reason to discount the more aggressive alt-season interpretations of the 57% breadth number. Historically, the broad alt phases that dominance-watchers look for have been accompanied by visible stablecoin expansion as new money arrives. That precondition is absent. The honest conclusion is that this is a rotation within existing capital, showing genuine breadth, and the thing that would change the assessment is a decisive move in stablecoin supply — in either direction.

Tail Risk & What to Watch

The tail numbers set the boundary on how much risk to take. Expected shortfall at the 5% level is -16.6% for BTC, -22.8% for ETH and -29.4% for SOL — meaning that conditional on a bad-tail week, those are the average outcomes, not the worst ones. Current drawdowns of -30% on BTC, -43% on ETH and -54% on SOL show these assets are still well below prior highs despite strong recent returns, which contextualises the rally as recovery rather than breakout. For a high-beta alt book, stacking positions that each carry SOL-like tail risk inside a market where 64% of variance is one factor means the portfolio-level tail is close to the single-name tail. Size accordingly.

The core tension in this view is clean. The regime, the scorecard, breadth, funding and the BTC fair-value residual all support constructive positioning. Against that: Fear & Greed at 70 and climbing from 57, elevated dominance at 58.9% arguing this is not yet a durable alt-season, flat stablecoin supply capping the fuel available, and rates at -1.33 in the macro scorecard as the one channel that never turned supportive.

Here are the specific signals that would confirm or change it.

Confirming the view: stablecoin supply expanding meaningfully above \$311bn, signalling genuine external inflow rather than rotation, which would remove the main constraint on this rally. Dominance breaking below 58% with alt breadth holding above 57%, which would mark the transition from broadening to actual alt-season and justify increasing alt weight. Bitcoin closing the 31.2% fair-value gap toward equities and the dollar while funding stays near 0.002%, which would signal spot-led catch-up in the large-cap. DVOL staying below 40 as prices grind higher, confirming that volatility sellers remain comfortable and the rally is orderly.

Changing or invalidating the view: stablecoin supply contracting while DeFi TVL stalls — the clearest evidence that the rotation reservoir is exhausted and the melt-up thesis is correct. BTC dominance reclaiming 60% with breadth falling below 50%, which ends the alt case and argues for consolidating into BTC. The BTC~Nasdaq DCC correlation rising from +0.37 back toward or above the 365-day +0.43, meaning macro has reasserted control and crypto-specific analysis matters less than the equity tape. Average pairwise conditional correlation lifting from +0.32 toward +0.45 or higher, the signature of dispersion collapsing into a stress event. BTC funding turning persistently above 0.02%/8h with basis flipping positive, which would mean leverage has replaced spot as the marginal buyer and the liquidation risk that is currently absent has returned. BTC DVOL breaking above 50 alongside a widening ETH skew beyond -15 , indicating the options market has repriced for a genuine volatility event. And BTC losing the 75,000 max-pain level, which would put spot back where the bulk of open interest was struck and remove the short-gamma dynamic currently working in the rally's favour.



PART I

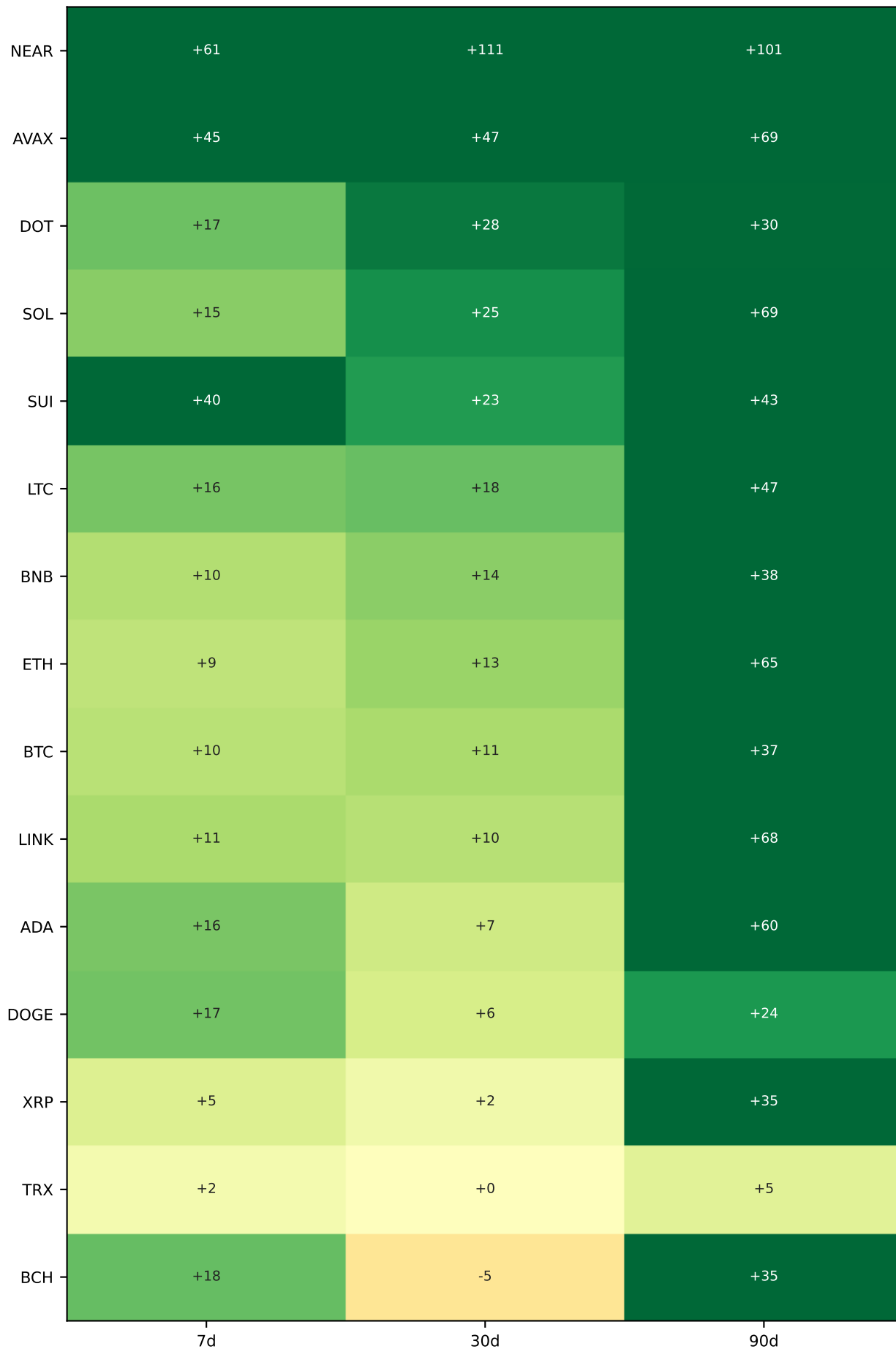
Market, Derivatives & Flows

The crypto tape, positioning and on-chain/derivatives internals.

- Returns, dominance & alt-season, derivatives (funding/OI/basis)
- Options (DVOL, put/call, skew, max-pain), stablecoins & DeFi TVL flows

Returns Heatmap

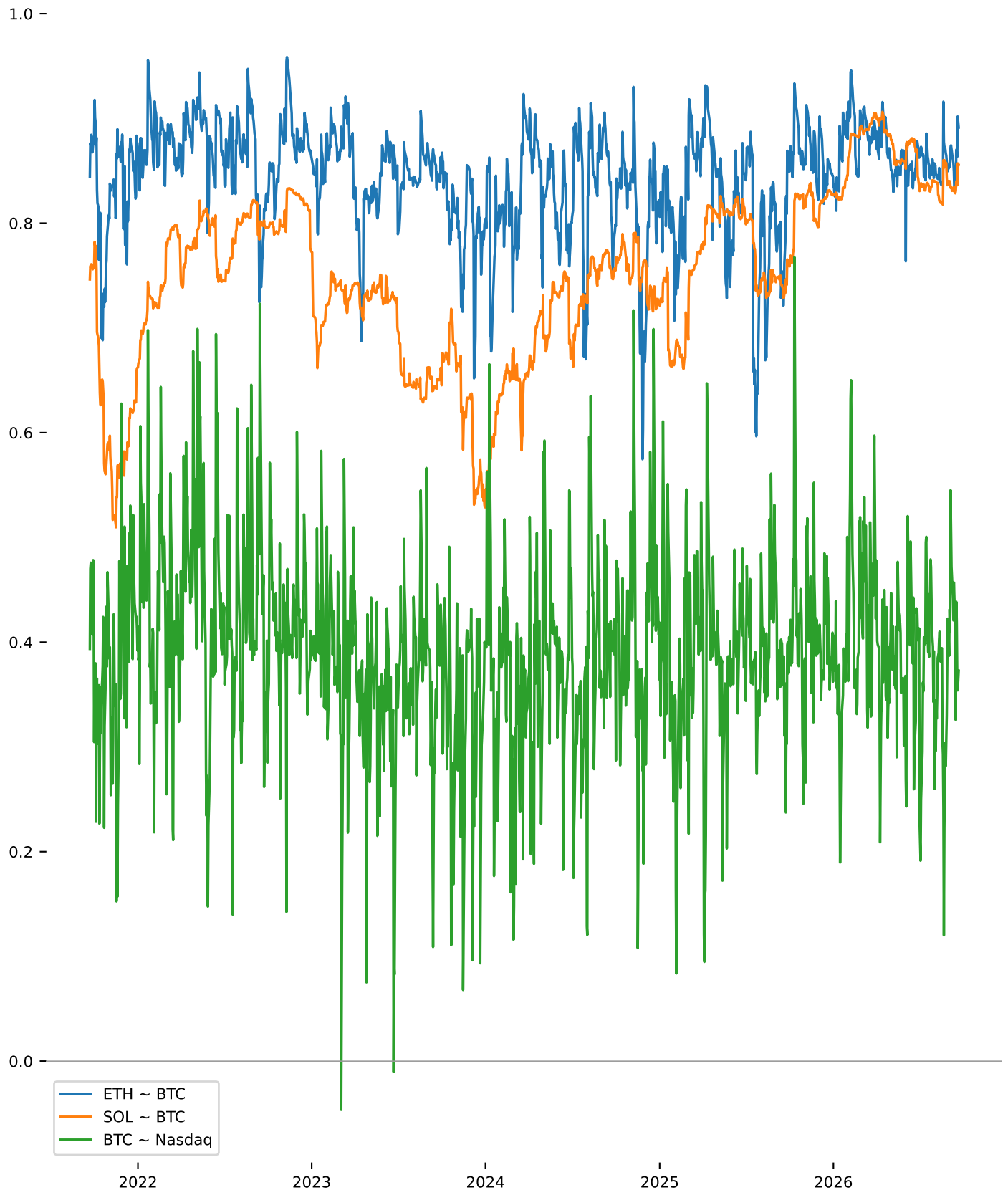
Price return (%) by coin over 7 / 30 / 90 days.



Regime & Conditional Correlations

Markov-switching regime on BTC: Risk-on. Posterior: Neutral 0.00, Risk-on 0.75, Risk-off 0.25

DCC-GARCH conditional correlation (BTC~ETH, SOL~BTC, BTC~Nasdaq)



Now: ETH ~ BTC +0.89, SOL ~ BTC +0.86, BTC ~ Nasdaq +0.37. A rising BTC~Nasdaq correlation = crypto trading as a macro risk-asset.

Perpetual Derivatives & Positioning

Binance USD-M perps: funding (leverage/sentiment), basis, open interest. Positive funding = longs pay shorts (crowded long).

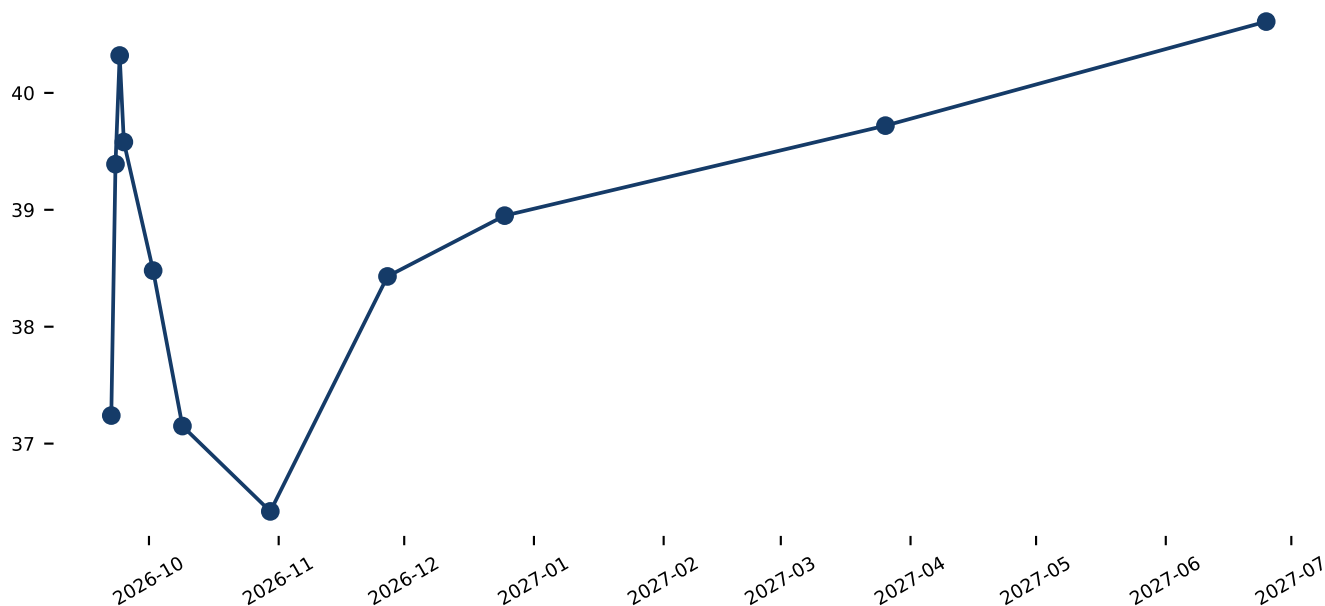
COIN	FUNDING %	BASIS (bp)	OI (\$bn)
BTC	+0.002	-5	9.47
ETH	+0.005	-5	6.52
SOL	+0.008	-5	0.95

Options & Volatility (Deribit)

BTC & ETH options: DVOL, open interest, put/call, max-pain, 25d skew and the implied-vol term structure.

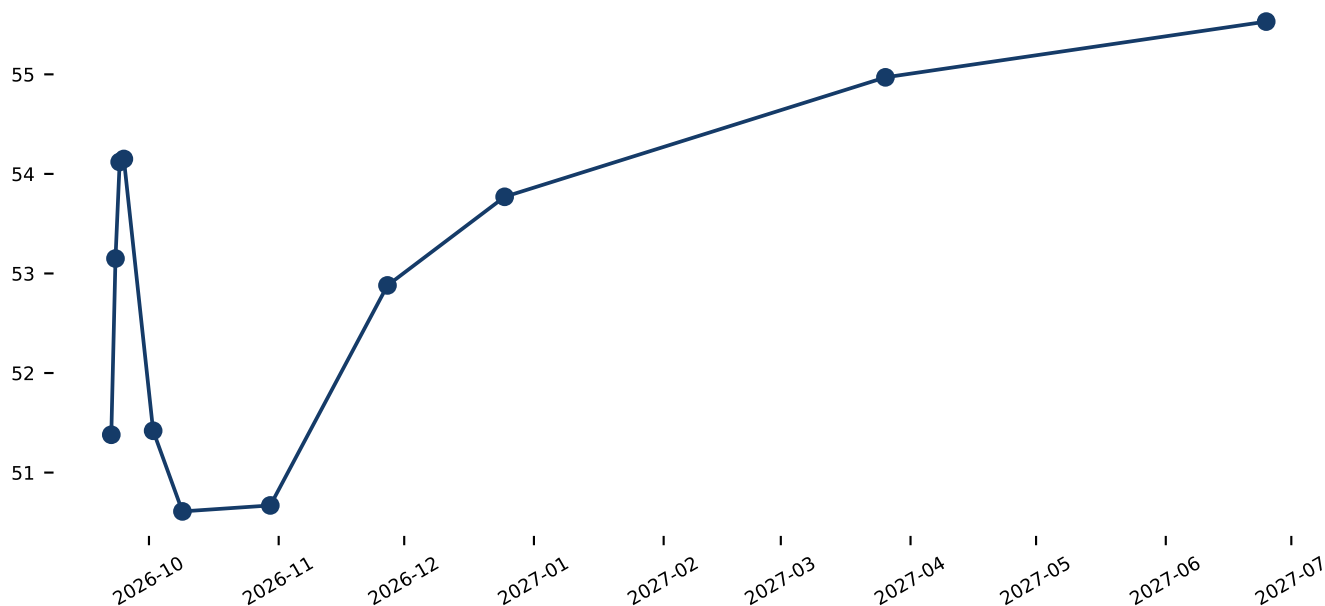
BTC DVOL 37.9 | OI 484,702 BTC | put/call 0.52 | max-pain 75,000 (spot 86,341) | 25d skew +nan

BTC implied-vol term structure (ATM %)



ETH DVOL 52.6 | OI 1,878,376 ETH | put/call 0.55 | max-pain 2,300 (spot 2,748) | 25d skew -10.7

ETH implied-vol term structure (ATM %)



Flows, Stablecoins & the OTC Question

Stablecoin supply = fiat 'dry powder'; DeFi TVL = on-chain risk appetite. True OTC volume is opaque (private, off-order-book) and is PROXIED by these on-chain flows - there is no clean OTC tape.

Stablecoin supply	\$311 bn	+0.2% 7d
DeFi TVL	\$96 bn	+9.8% 7d
Fear & Greed	70 (Greed)	vs 57 a week ago
BTC dominance	58.9%	
Total crypto mcap	\$2.92 T	

Deeper on-chain (exchange net-flows/reserves, whale wallets, NUPL/SOPR) needs a paid on-chain key (Glassnode/CryptoQuant) - the free build uses stablecoin & TVL flows as the accumulation/distribution proxy.



PART II

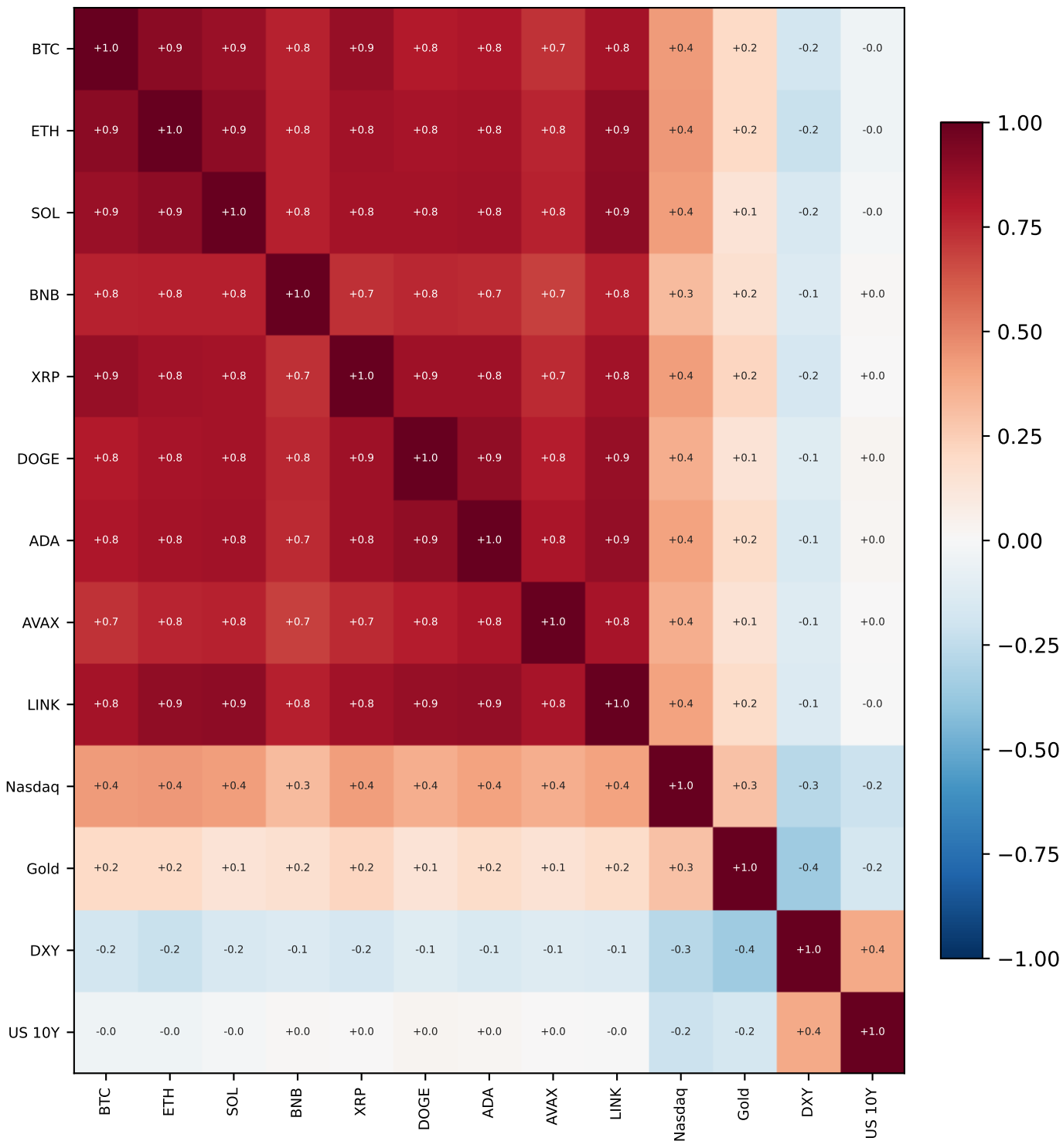
Cross-Asset Structure

How the coins and macro move together — factor structure, systemic co-movement, directional lead-lag and relative value.

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

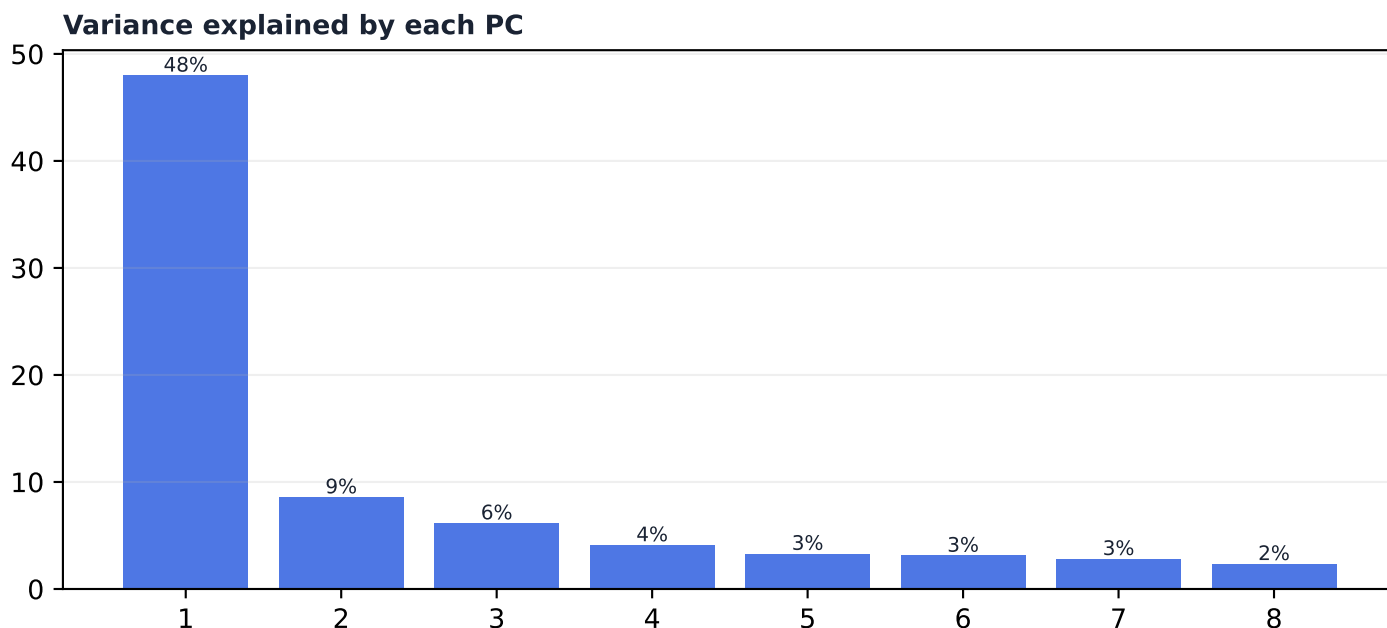
365-Day Correlation (daily returns)

Crypto majors + macro risk context.



CROSS-ASSET FACTOR STRUCTURE (PCA)

Independent forces driving the 39 instruments (156 weeks)



PC1 — Ethereum beta

47.9% of variance (cum 48%) · marker corr +0.85

+ DOT +0.21, ETC +0.20, ADA +0.20, VET +0.20, ARB +0.20
- VIX -0.08, DXY -0.03, US 10Y -0.01, US 2Y -0.01, Gold -0.00

PC2 — Equity risk (Nasdaq)

8.5% of variance (cum 56%) · marker corr +0.76

+ S&P 500 +0.43, EM Equity +0.42, Nasdaq +0.42, Silver +0.34, Gold +0.28
- VIX -0.37, DXY -0.23, US 2Y -0.12, US 10Y -0.12, DOGE -0.09

PC3 — US rates (10Y)

6.1% of variance (cum 63%) · marker corr +0.85

+ US 2Y +0.57, US 10Y +0.55, DXY +0.23, Nasdaq +0.20, S&P 500 +0.18
- VIX -0.23, Gold -0.18, ICP -0.15, FIL -0.15, DOT -0.10

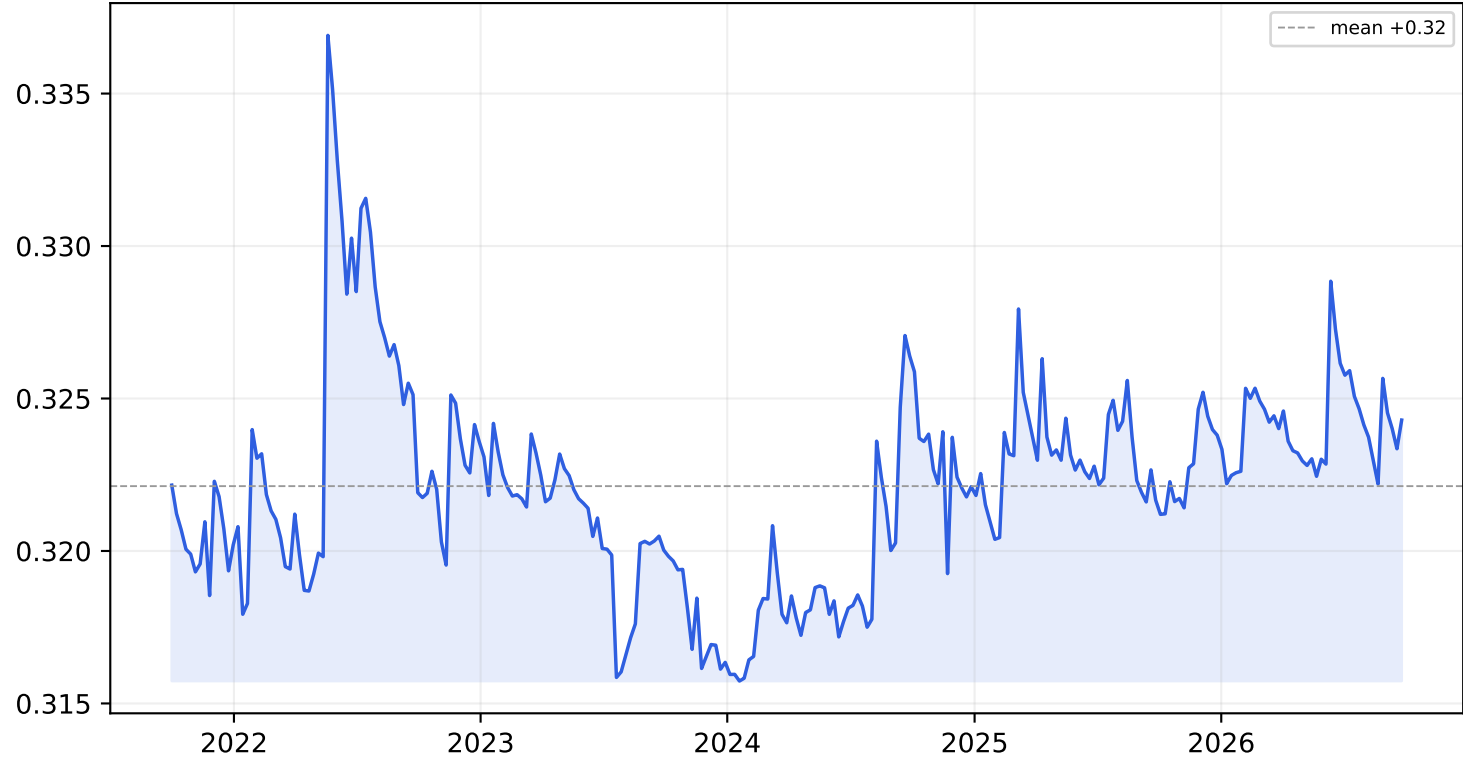
PC4 — Gold (inverse)

4.1% of variance (cum 67%) · marker corr -0.72

+ S&P 500 +0.25, Nasdaq +0.24, DXY +0.20, TRX +0.11, LTC +0.08
- Gold -0.57, Silver -0.49, US 10Y -0.26, US 2Y -0.23, VIX -0.19

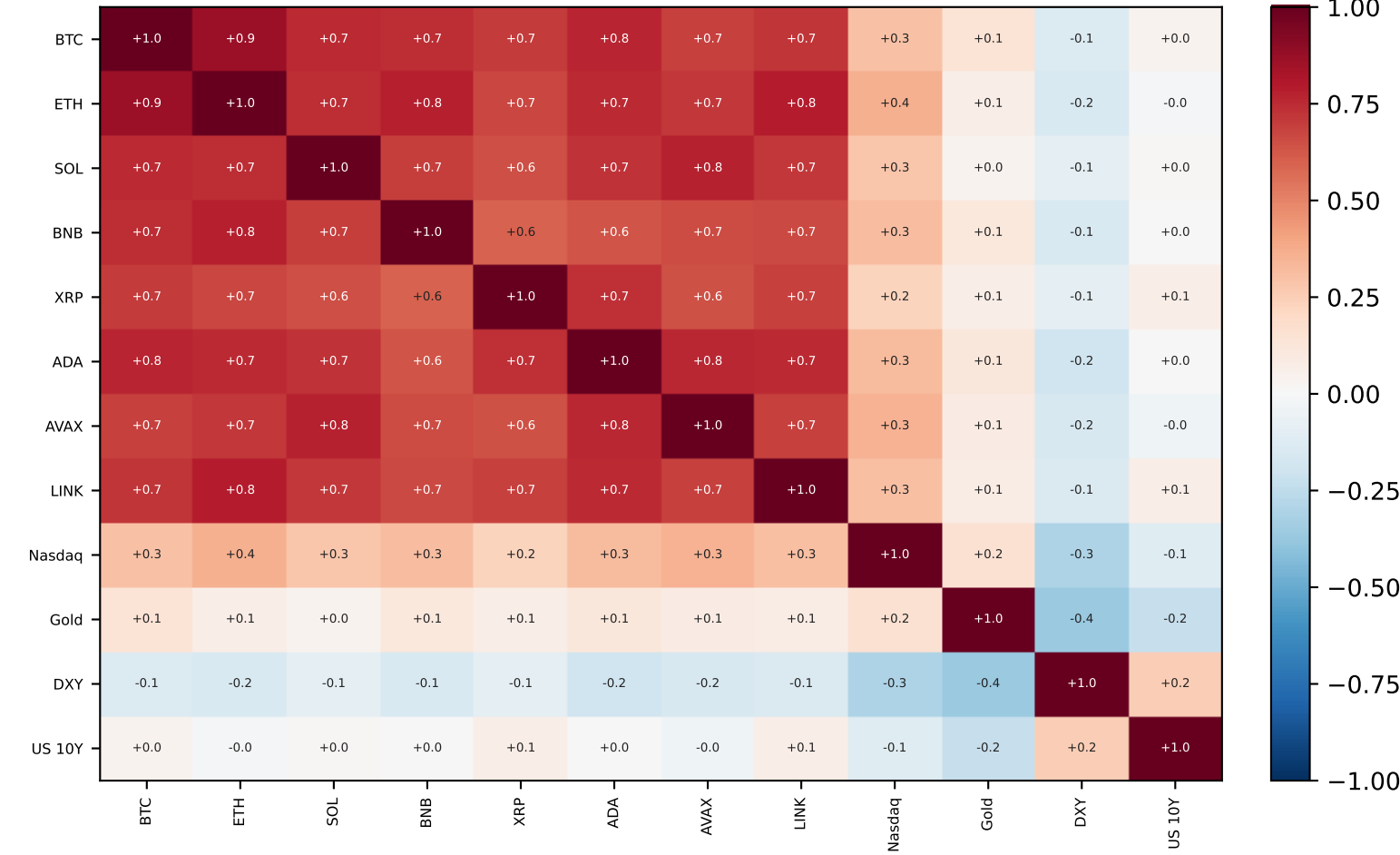
Principal components are the uncorrelated factors explaining the most joint variance. A high PC1 share means one force (usually broad risk) dominates — diversification is thin.

Average pairwise conditional correlation (multivariate DCC-GARCH)

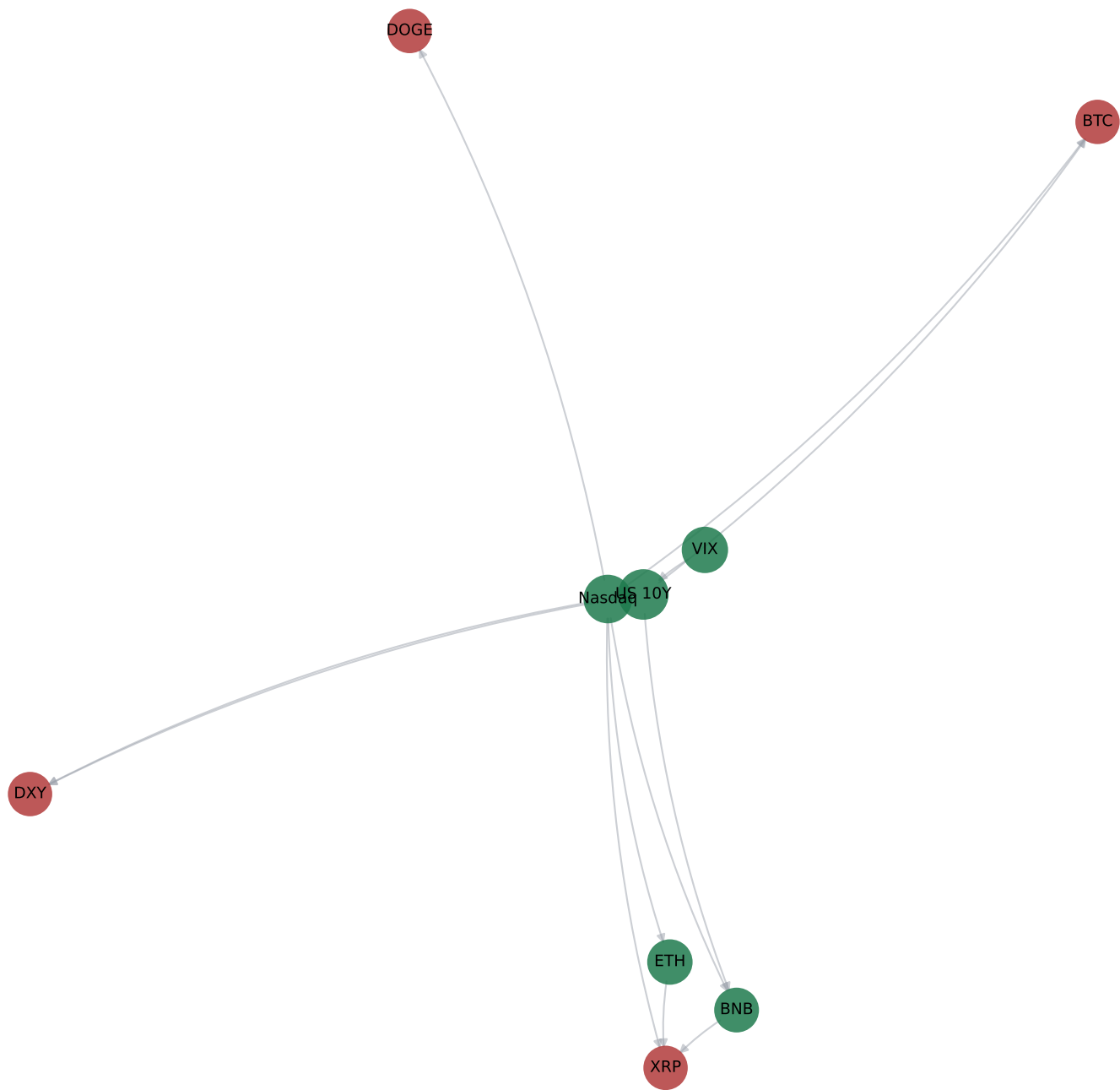


N=12 · persistence 0.8552 · now +0.32 · rising = diversification failing in real time

Latest conditional-correlation matrix



Directional lead-lag — Granger causality network

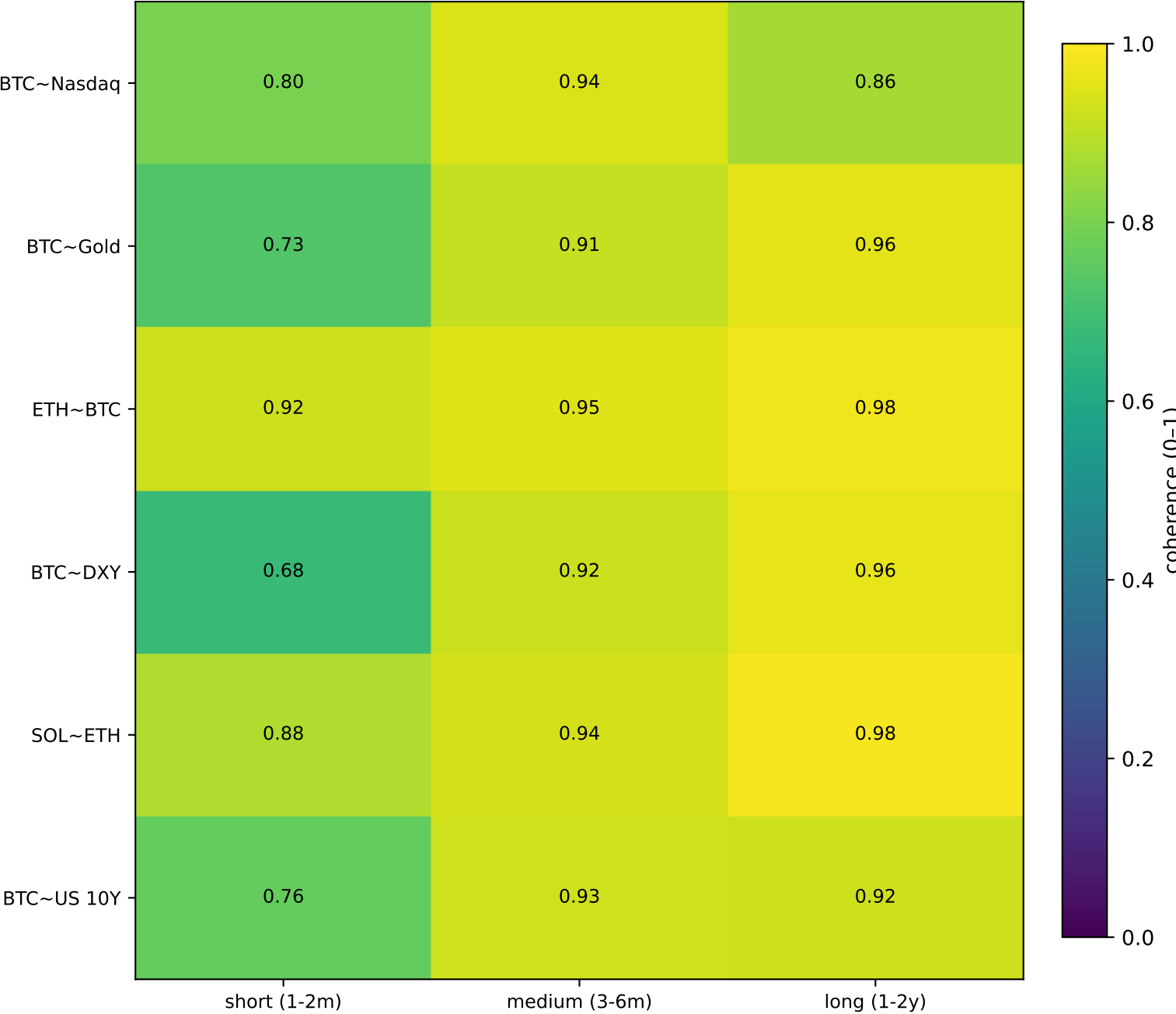


arrow = X Granger-causes Y (p<0.05); green/large = net information EXPORTER (leader)

LEADERS: US 10Y +0.03, Nasdaq +0.02, VIX +0.01, ETH +0.00, BNB +0.00

FOLLOWERS: XRP -0.02, BTC -0.02, DOGE -0.01, DXY -0.01, Gold +0.00

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



STATISTICAL RELATIVE VALUE (cointegration)

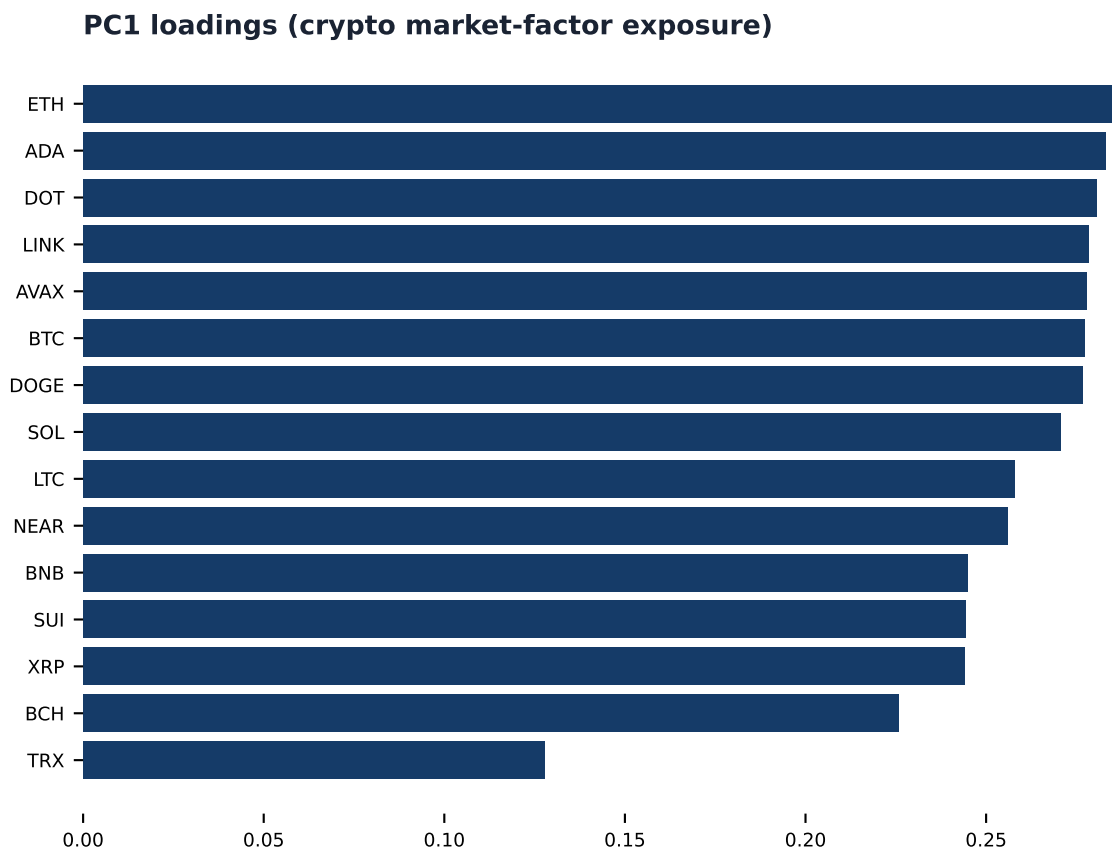
Mean-reverting crypto spreads and how stretched each is now

Pair	Coint?	p-val	Hedge	Half-life	Spread z
BTC vs Nasdaq	no	0.791	0.41	26w	+2.12
DOGE vs BTC	no	0.831	0.87	47w	+1.81
SOL vs AVAX	no	0.734	0.39	56w	-1.38
BTC vs Gold	no	0.708	0.46	40w	+1.35
ADA vs XRP	no	0.933	0.37	140w	+1.23
ETH vs BTC (ratio)	no	0.808	1.19	51w	+0.90
ATOM vs DOT	no	0.236	0.98	15w	-0.56
LINK vs ETH	yes	0.008	0.70	10w	+0.52
BTC vs ETH	no	0.251	0.45	15w	-0.37
LTC vs BCH	no	0.774	0.73	55w	+0.20
ETH vs SOL	no	0.251	2.04	16w	+0.19
UNI vs AAVE	no	0.544	0.73	23w	-0.08

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.

Risk Concentration & Lead-Lag

PCA on majors' daily returns: PC1 explains 64% of variance. High PC1 = the market is one big BTC-beta trade (little diversification v



DOES BTC LEAD THE ALTS? (BTC change -> alt next-day change; modest weekly skill)

Alt	Contemp. corr	BTC 1-day lead
ETH	+0.84	-0.02
SOL	+0.74	-0.02
XRP	+0.65	-0.02
DOGE	+0.72	-0.03



PART III

Momentum, Fair Value & Risk

Trend, what is rich or cheap versus its drivers, volatility and downside risk.

- Momentum & trend battery, factor-beta attribution, fair-value residuals
- Realised volatility and tail risk (VaR / expected shortfall, tail dependence)

MOMENTUM & TREND

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

Instrument	13w	26w	52w	Score	vs40wMA	<52wHi
BTC	+43%	+29%	-22%	+0.50	+17%	-30%
ETH	+74%	+38%	-32%	+0.50	+23%	-39%
SOL	+63%	+41%	-43%	+0.50	+28%	-50%
BNB	+40%	+30%	-17%	+0.50	+19%	-33%
XRP	+43%	+13%	-46%	+0.50	+7%	-51%
DOGE	+29%	+8%	-58%	+0.50	+2%	-62%
ADA	+63%	-2%	-69%	+0.00	-1%	-72%
AVAX	+67%	+25%	-62%	+0.50	+24%	-65%
LINK	+75%	+50%	-39%	+0.50	+31%	-43%
LTC	+48%	+15%	-41%	+0.50	+13%	-49%
DOT	+38%	-9%	-70%	+0.00	-6%	-73%
NEAR	+121%	+237%	+43%	+1.00	+128%	0%

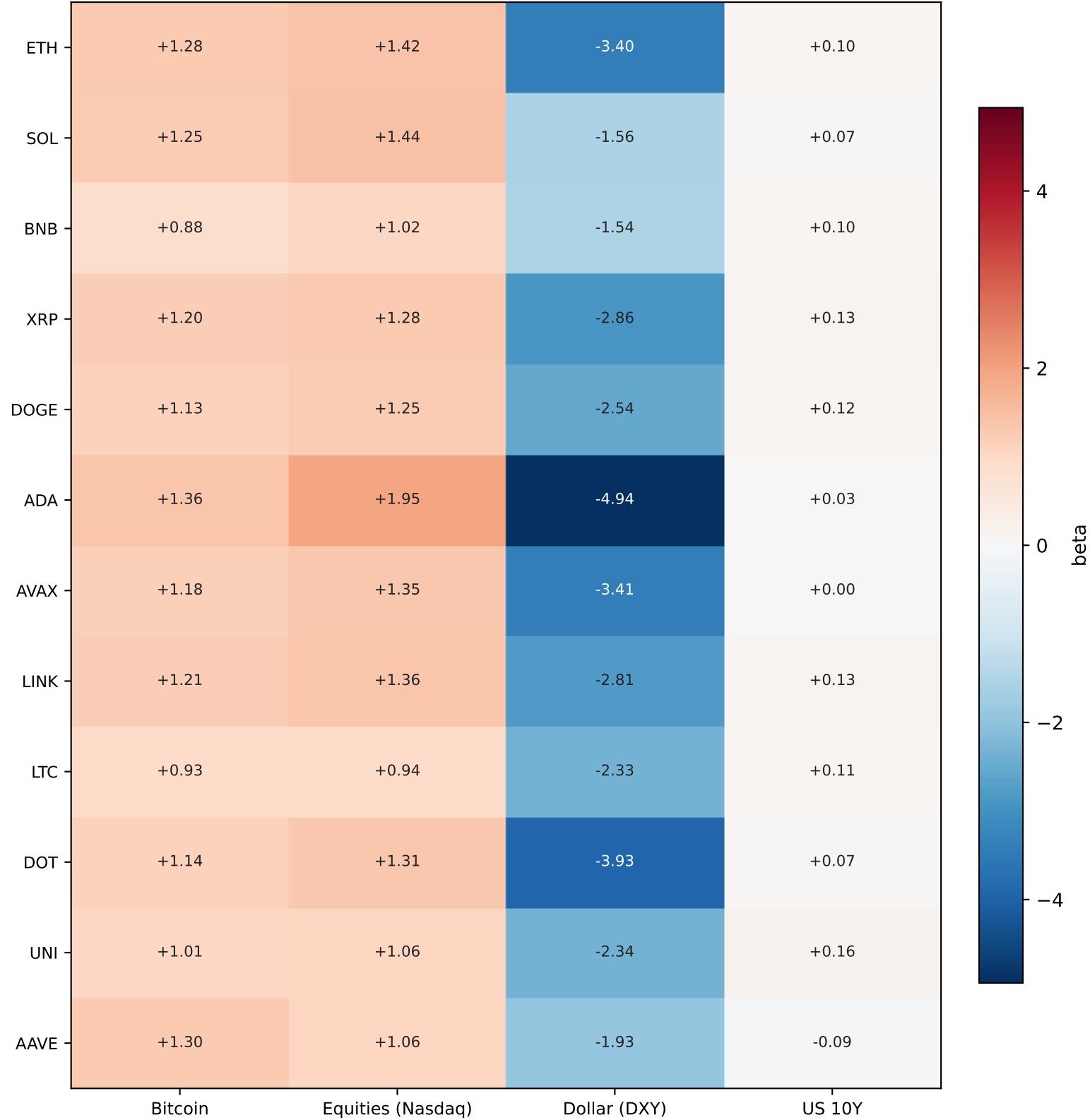
Altcoin 26-week relative strength:

LEADERS: INJ +178%, UNI +161%, ARB +150%, AAVE +45%, VET +32%, ICP +31%

LAGGARDS: APT -23%, MKR -1%, HBAR +3%, ATOM +7%, RNDR +7%, ETC +10%

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



FAIR VALUE — RICH / CHEAP vs DRIVERS

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

Dogecoin vs BTC

cheap z -1.60

actual 0.10 · model-fair 0.17 · gap -40.9% · R^2 0.55



Bitcoin vs equities, dollar & rates

cheap z -1.33

actual 85835.69 · model-fair 124776.73 · gap -31.2% · R^2 0.76



Ether vs BTC & equities

RICH z +0.55

actual 2741.20 · model-fair 2429.32 · gap +12.8% · R^2 0.62



Chainlink vs ETH & BTC

cheap z -0.51

actual 12.83 · model-fair 14.24 · gap -9.9% · R^2 0.78



Solana vs ETH

RICH z +0.19

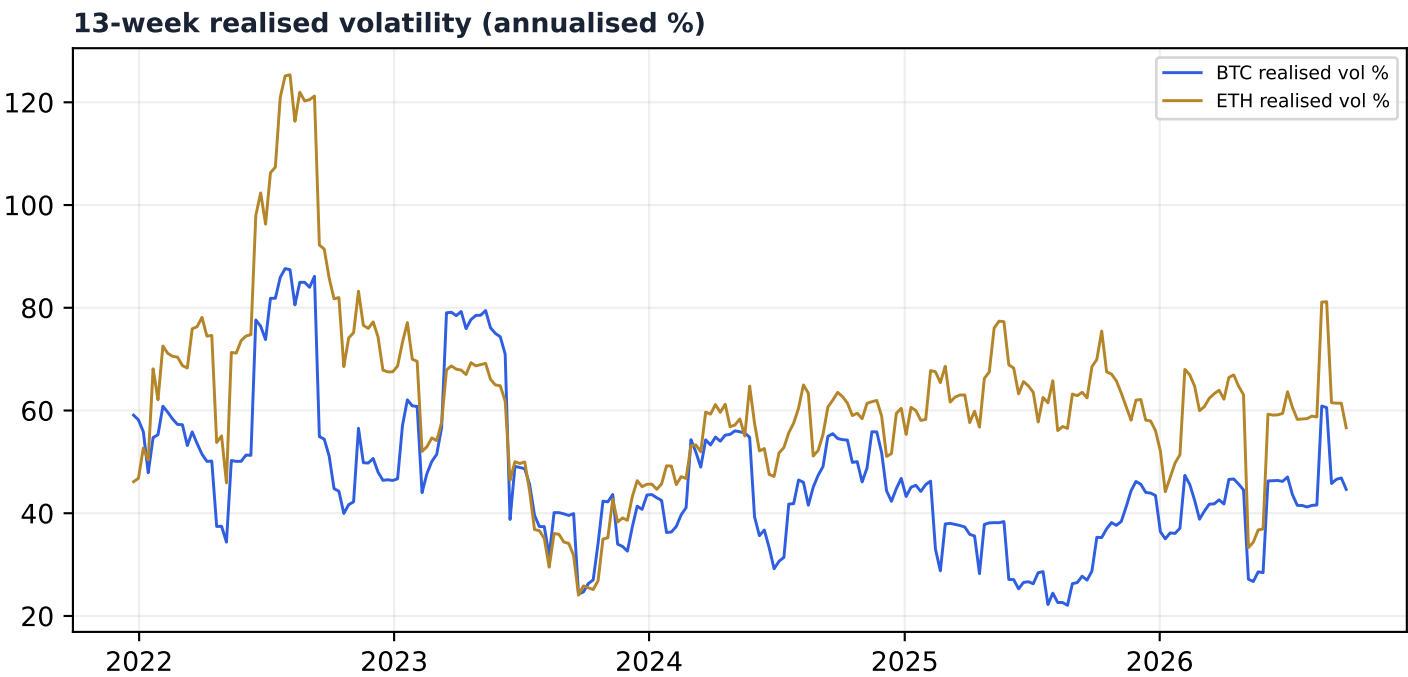
actual 117.40 · model-fair 107.63 · gap +9.1% · R^2 0.71



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.

VOLATILITY

Realised volatility of the majors, the equity-VIX backdrop, and the BTC-equity risk linkage



REALISED VOLATILITY (annualised, 5-year percentile)

BTC	45%		49th
ETH	57%		31th
SOL	55%		12th

Equity VIX 15.0 (27th %ile 5y)

BTC-Nasdaq 13-week correlation -0.12 — decoupled from equities

Crypto has no free implied-vol series in the panel (Deribit DVOL is a separate feed); realised vol and its percentile show whether volatility is stretched. A high BTC-Nasdaq correlation means crypto is trading as a macro risk asset.

TAIL RISK

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

Instrument	VaR5	ES5	DnVol	MaxDD	CurDD	Skew	Kurt
BTC	-10.2%	-16.6%	37%	-74%	-30%	-0.2	+3.7
ETH	-14.3%	-22.8%	49%	-77%	-43%	-0.5	+2.1
SOL	-20.2%	-29.4%	68%	-96%	-54%	-0.6	+4.2
BNB	-11.6%	-19.1%	41%	-67%	-33%	-0.4	+2.5
XRP	-15.3%	-20.9%	43%	-74%	-56%	+1.2	+5.4
DOGE	-17.1%	-25.6%	53%	-84%	-78%	+0.9	+4.6
ADA	-16.4%	-24.3%	49%	-93%	-89%	+0.3	+1.9
AVAX	-19.8%	-31.8%	64%	-95%	-90%	-0.2	+1.8
LINK	-18.4%	-25.8%	54%	-84%	-63%	-0.0	+1.3
Gold	-3.6%	-4.7%	11%	-23%	-17%	-0.1	+1.4

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

ETH 0.59 SOL 0.59 XRP 0.59 DOGE 0.52 Gold 0.19

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	07-13	07-20	07-27	08-03	08-06	08-10	08-17	08-24	08-31	09-07	09-14	09-21
Regime	R+	R+	R+	R+	R+	R+	R-	R+	R+	N	R+	R+	R+	N	N	N	N	N	R+	R+	R+	R+	R+	R+
Risk appetite																	-0.14	-0.11	-0.05	+0.37	+0.37	+0.39	+0.38	+0.78
Macro backdrop																	+0.18	+0.26	+0.26	+0.23	+0.25	+0.31	+0.17	+0.31
BTC.D %	-	-	-	-	-	-	-	-	-	-	-	-	56	56	56	56	57	57	56	59	59	59	59	59
Alt-breadth %	7	7	21	57	71	57	36	21	36	21	7	43	50	50	36	29	36	29	43	57	29	64	36	57
PC1 share																	48	48	48	48	48	48	48	48
BTC DVOL	-	-	-	-	-	-	-	-	-	-	-	-	38	36	37	36	35	35	34	45	37	39	38	38
Fear&Greed	-	-	-	-	-	-	-	-	-	-	-	-	28	29	30	28	25	30	31	73	62	71	57	70
BTC 1w %	+0.4	+0.9	+2.6	-1.4	-4.5	-2.8	-17.0	+4.3	-0.0	-5.5	+4.2	+2.5	-2.2	+3.2	+0.1	-2.0	-0.4	+2.4	+0.1	+22.7	+1.9	+0.3	-0.7	+9.8

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