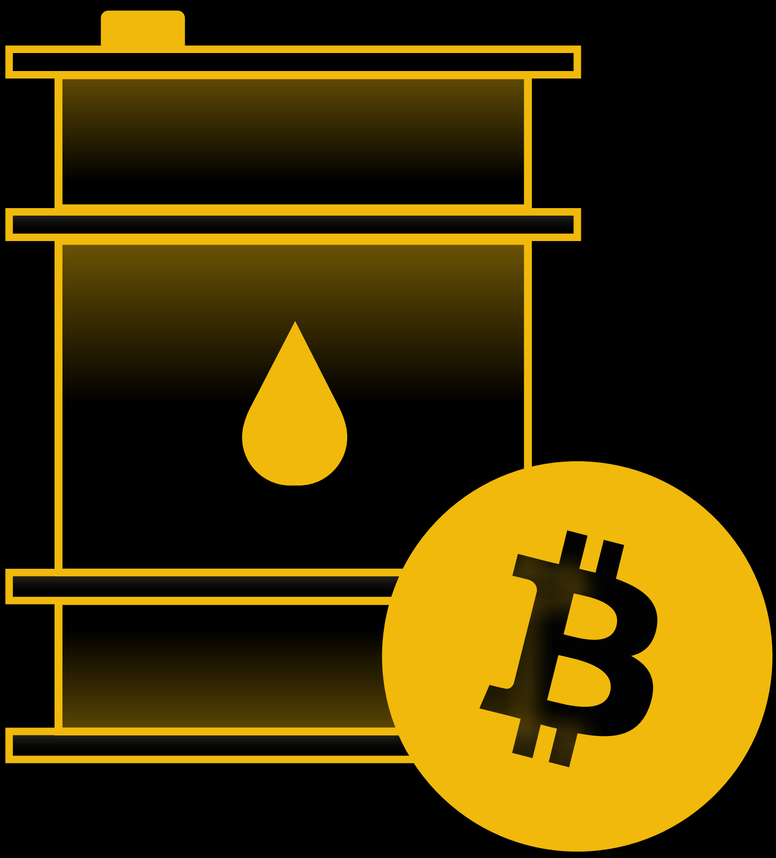
The Impact Mechanism of Oil Prices on Bitcoin

MARCH 2026



Michael JJ

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01 / Key Takeaways

1. No Stable Return-Level Relationship Between BTC and Oil. Using ten years of weekly data (N=532, 2016–2026) and rigorous econometric methods (DCC-GARCH, rolling-window regression, Granger causality), we find that BTC and crude oil returns are statistically independent processes. A significant positive correlation ($\beta=0.34$, $R^2=0.069$) existed only during 2020–2022—a period of unprecedented monetary easing—and is best explained by a shared liquidity factor rather than any direct causal link. Across all other sub-periods, the correlation coefficient is indistinguishable from zero.

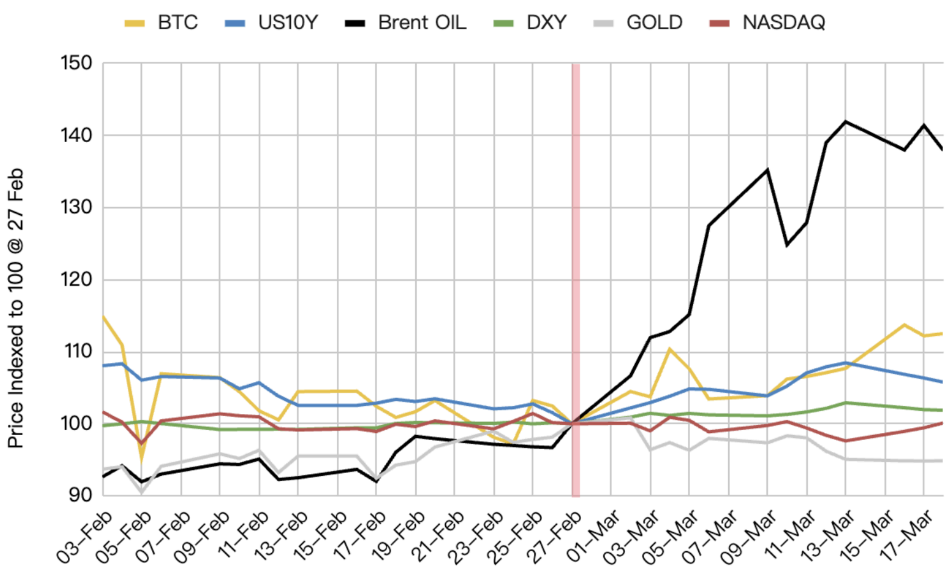
2. The Hormuz Crisis Stress-Tested BTC's Crisis Resilience. From February 23 to March 18, 2026, Brent crude surged +46% as the Strait of Hormuz faced supply disruptions. Over the same window, BTC gained +15%, outperforming the Nasdaq (+1%) and gold (−3%). A clear three-phase response pattern emerged: brief initial weakness (Days 1–3) → range-bound absorption (Days 4–14) → independent rally (Days 15–24).

3. Institutional Capital Was the Decisive Factor. Spot BTC ETF net inflows totaled +US$1.7B during the crisis period (March 2–17). The Coinbase Premium flipped positive in early March, and corporate treasury buyers remained active throughout. Three independent demand channels—ETF flows, U.S. spot market buying, and corporate accumulation—collectively absorbed the macro shock and drove the subsequent rally.

4. Oil Shocks Amplify Volatility, Not Direction. Consistent with Ali et al. (2025), oil price shocks increase BTC's short-term volatility (second moment) but do not determine its return direction (first moment). Geopolitical oil price events are more likely to create allocation entry points than sustained risk events under the current institutionally-anchored market structure.

5. Historical Pattern Holds: Crypto-Native Credit Events Are BTC's Real Risk. The 2022 Russia-Ukraine conflict showed the same pattern: BTC rose +24% in the four weeks following the conflict. The subsequent crash was driven by Terra/Luna and Three Arrows Capital—crypto-native credit events, not oil prices.

Figure 1: Cross-Asset Performance During the 2026 Hormuz Crisis



Source: Tradingview, Binance Research, as of March 18, 2026

02 / Introduction

The Strait of Hormuz handles approximately 20% of global seaborne oil trade. When security conditions in the waterway deteriorated sharply in late February 2026, Brent crude prices surged from US$69 to over US$104 in less than three weeks—a +50% shock that ranked among the largest short-duration oil price dislocations in modern history.

For researchers and market participants, the event created a rare natural experiment: a large, exogenous supply-side shock to oil, arriving in a clearly defined time window, against a BTC market that had recently undergone a fundamental structural change with the January 2024 introduction of U.S. spot ETFs.

This report addresses three core questions:

1. **Does a reliable, quantifiable return-level relationship exist between BTC and crude oil, and is it stable over time?**
2. **Has BTC's response function to exogenous macro shocks changed structurally since the spot ETF approval in January 2024?**
3. **What are the practical implications for institutional asset allocation and risk management?**

Our core finding is that BTC and crude oil operate as independent pricing processes at the weekly return horizon. The only documented period of statistically significant co-movement—2020–2022—was driven by a shared macro factor (extreme monetary accommodation), not a persistent structural link between the two assets. The Hormuz crisis provides fresh out-of-sample confirmation of this finding.

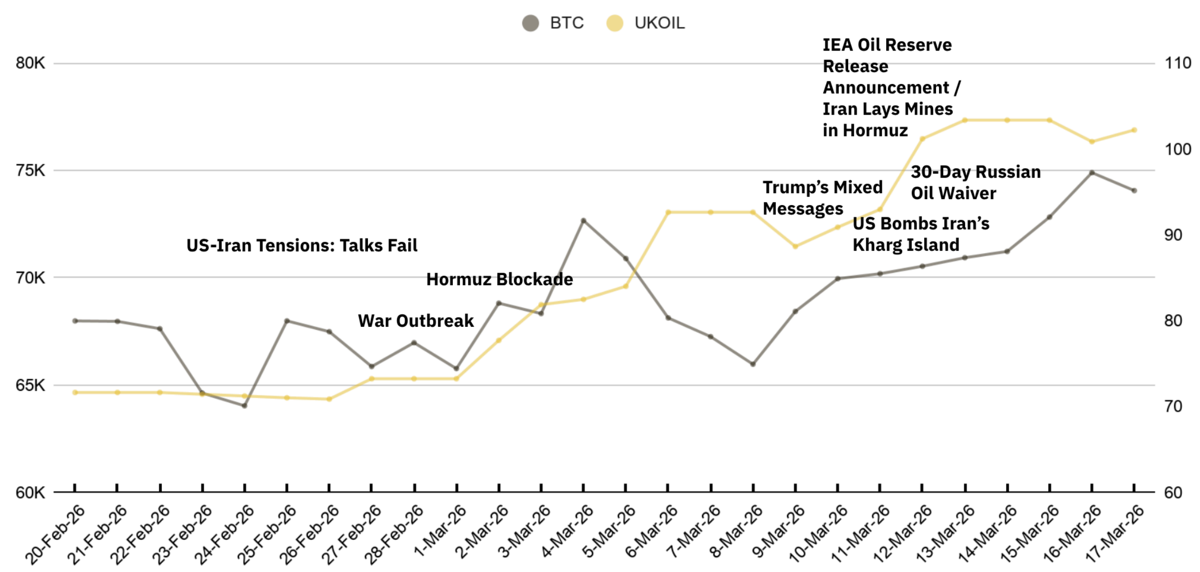
03 / Background: The Hormuz Crisis and BTC Market Context

While previous literature has debated the BTC-Oil relationship, historical studies often suffered from methodological flaws or failed to account for the post-2024 Spot ETF market structure. To ensure empirical robustness, this report implements three critical enhancements:

1. **Data Scope:** Weekly data from Jan 2016 to Mar 2026 (N=532) for macro analysis, and daily data for the Feb-Mar 2026 crisis micro-structure analysis.
2. **Log Returns over Log Prices:** We utilize log returns (Δln) rather than log price levels (ln). Both ln(BTC) and ln(Oil) are I(1) non-stationary series, and Engle-Granger tests confirm they are not cointegrated ($p>0.10$). Regressing non-cointegrated I(1) series yields spurious regressions (Granger & Newbold, 1974) with artificially high R^2 values. Using Δln (I(0) stationary) ensures statistical validity.
3. **Time-Varying Analysis:** We deploy DCC-GARCH (Dynamic Conditional Correlation) and 52-week rolling beta regressions to capture the dynamic nature of the correlation, moving beyond static full-sample averages.
4. **Causality Testing:** Bivariate Granger Causality tests and Cross-Correlation Functions (CCF) are utilized to distinguish mere contemporaneous correlation from actual predictive power.

3.1 The Hormuz Crisis: Timeline

Figure 2: Brent & Bitcoin with event annotations



Source: Tradingview, Binance Research, as of March 18, 2026

Figure 3: Key Events and Brent Oil Price During the Hormuz Crisis

Date	Event	Brent Price
Feb 10–21 (avg.)	Baseline period	US$69.31
Feb 27	Strait passage disruption rumors emerge	US$73.20 (+6%)
Mar 2–8	Disruption confirmed; oil accelerates	US$93+ (+35% wk.)
Mar 9–16	Supply disruption persists; OPEC+ spare capacity response insufficient	US$100+
Mar 17	Report writing time	US$104.09 (+50%)

Source: Tradingview, Binance Research, as of March 16, 2026

The speed and magnitude of the move—Brent crossing US$100 for the first time since the 2022 Russia-Ukraine conflict—ensured the shock registered immediately across global financial markets.

3.2 BTC Market Context at Crisis Onset

BTC entered the Hormuz crisis already in a corrective phase entirely unrelated to oil. From its January 2026 high of approximately US$90,000, BTC had declined to the US$65,000 range by mid-February—a move driven by sustained spot ETF net outflows (cumulative −US$1.2B from February 2–26). **This pre-crisis decline began and progressed while oil prices were flat, providing a clean baseline for distinguishing oil-driven effects from existing crypto-native dynamics.**

When war rumors surfaced on February 27, BTC experienced a brief additional leg lower, reaching an intraday crisis low of US$63,047 on February 28 (Saturday, when liquidity is structurally thinner). The subsequent price action—from US$66,000 to US$75,000 between March 9 and March 18 while oil continued rising—constitutes the central empirical puzzle this report addresses.

3.3 Research Questions

The Hormuz episode raises a question that existing literature has not cleanly answered: **in a post-ETF market structure where institutional capital can be observed at daily frequency, how does BTC process a large exogenous oil price shock?** The prior academic literature on BTC-oil relationships was written before the January 2024 structural break. This report extends the analysis and provides the first systematic treatment of BTC-oil dynamics in the ETF era.

04 / Methodology

4.1 Data

Weekly data: January 2016–March 2026 (TradingView), covering BTC, Brent Crude, U.S. 10-year Treasury yield, EFFR, DXY, Gold, and Nasdaq 100. Total observations: N=532.

Daily data: February 1–March 18, 2026, for the crisis case study.

ETF flow data: January 2024–March 2026, 562 trading days, covering all U.S. spot BTC ETF products.

4.2 Methodological Choices and Their Justification

Three methodological choices differentiate this report from prior work in ways that directly affect the conclusions.

Choice 1: Log returns (Δln) rather than log price levels (ln).

This is a statistical necessity, not a preference. ADF unit root tests confirm that both ln(BTC) and ln(Oil) are I(1) non-stationary series. The Engle-Granger cointegration test fails to reject the null of "no cointegration" ($p>0.10$). Regressing two non-cointegrated I(1) series in levels produces spurious high R^2 and significant coefficients (Granger & Newbold, 1974)—a methodological error that inflates the apparent BTC-oil relationship in several prior studies. After first-differencing to log returns, both series are I(0) stationary and regressions are valid.

Choice 2: Time-varying analytical tools.

The DCC(1,1)-GARCH(1,1) model captures week-by-week variation in the conditional correlation coefficient. A rolling 52-week beta window provides intuitive visualization of regime changes. Fixed-coefficient regressions over multi-year samples mask the episodic nature of the BTC-oil correlation and are the source of much of the conflicting evidence in prior literature.

Choice 3: Bi-directional Granger causality testing and cross-correlation function (CCF) analysis.

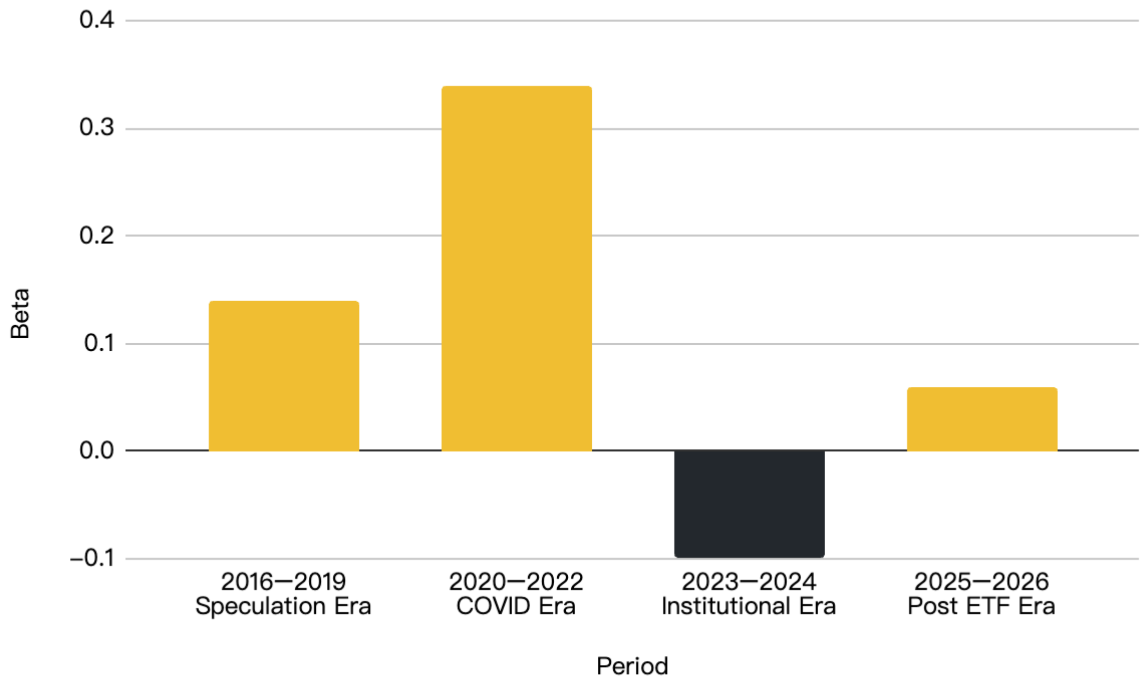
Contemporaneous correlation, even when statistically significant, does not imply predictive power or causality. Granger tests across lags 1–10 weeks examine whether lagged oil returns improve BTC return forecasts (and vice versa). The CCF characterizes linear lead-lag relationships across a range of time shifts. This distinguishes genuine causal channels from spurious co-movement driven by common factors.

05 / Empirical Results

5.1 Sub-Period OLS Regressions

We partition the sample into four macroeconomic regimes and estimate $\Delta\ln(BTC) = \alpha + \beta \cdot \Delta\ln(Oil) + \varepsilon$ for each.

Figure 4: BTC-Oil Beta Across Macroeconomic Regimes



Source: Tradingview, Binance Research, as of March 18, 2026

Figure 5: Sub-Period Regression Results by Macroeconomic Context

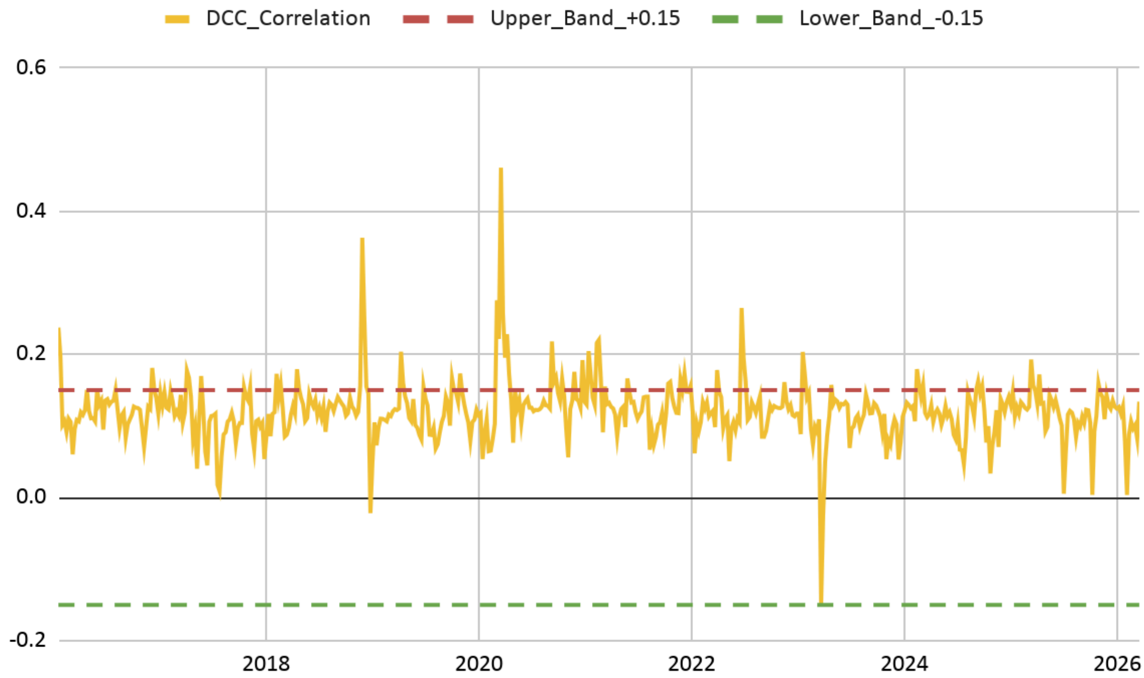
Period	Macro Context	β	p-valu e	R^2	N
2016–2019	Rate hike cycle, early BTC adoption	+0.14	>0.10	0.003	157
2020–2022	**Zero rates + QE + fiscal stimulus**	**+0.34**	**<0.01**	**0.069**	**156**
2023–2024	Peak rates, spot ETF approval	−0.10	>0.10	0.003	105
2025–2026	Early rate-cut cycle, Hormuz crisis	+0.06	>0.10	0.003	63

Source: Tradingview, Binance Research, as of March 16, 2026

The results are unambiguous: **statistical significance appears only in 2020–2022, and even there the explanatory power is modest** (R^2=6.9%, meaning over 93% of BTC's weekly return variation is explained by factors other than oil). The popular narrative of a BTC-oil correlation "turning from positive to negative" is not supported by the data. The actual trajectory is: near-zero → brief positive co-movement during COVID-era liquidity flood → return to zero.

5.2 DCC-GARCH Dynamic Conditional Correlation

Figure 6: DCC-GARCH Dynamic Conditional Correlation — BTC vs. Brent



Source: Tradingview, Binance Research, as of March 18, 2026

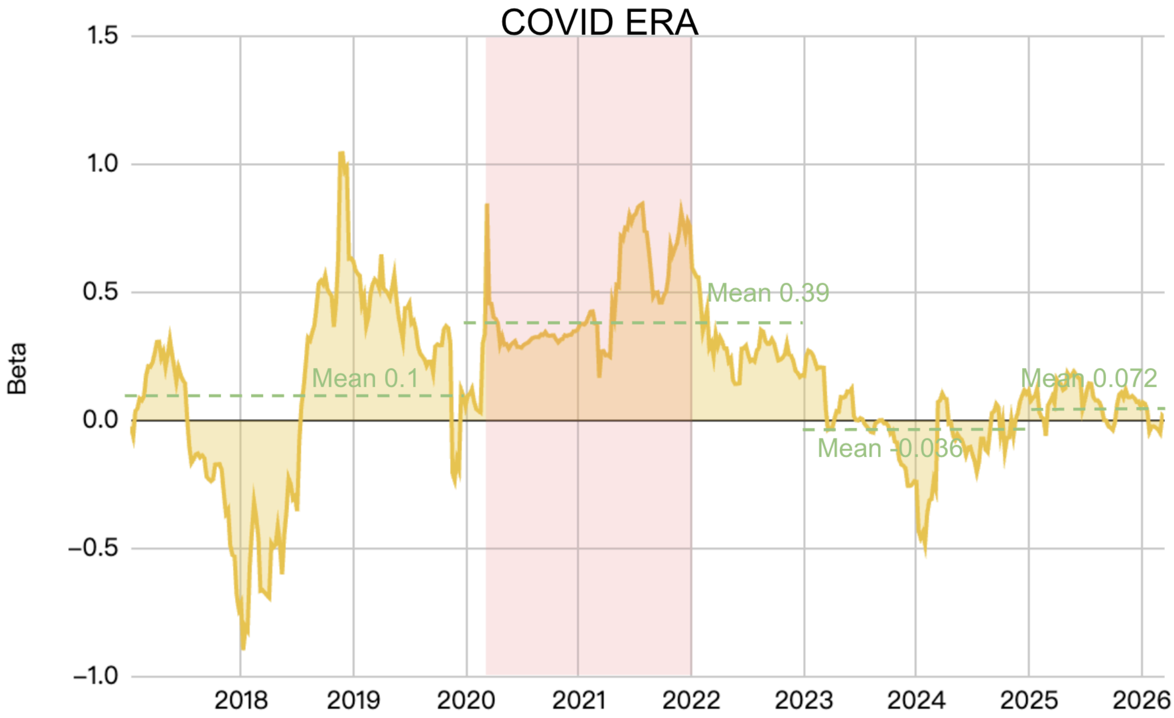
The DCC model reveals a picture that sub-period averages obscure. Baseline state (most of the sample):

- The conditional correlation is low and economically inert, averaging approximately +0.10–0.12, with no sustained directional trend.
- The single sustained deviation: From March 2020 through end-2021, ρ rises materially above baseline—peaking above +0.40 on a weekly basis, averaging +0.14 over the period—reflecting the "everything rallies together" dynamic of unlimited liquidity.
- Post-2023: ρ reverts toward the long-run baseline (~0.10–0.12) and remains there through the Hormuz crisis.

The key insight: low, economically inert correlation is the structural baseline; the 2020–2022 elevation was the anomaly.

5.3 Rolling 52-Week Beta

Figure 7: Rolling 52-Week Beta — BTC on Brent Crude, Jan 2017–Mar 2026



Source: Tradingview, Binance Research, as of March 18, 2026

The rolling beta swings between −0.9 and +1.0 over the sample period. The extreme instability of the rolling beta is itself the central finding. A coefficient that random-walks between −0.8 and +1.0 provides no actionable information for portfolio construction. **Models that treat BTC-oil beta as a stable parameter could be misspecified.**

5.4 Lead-Lag Testing

Contemporaneous correlation, even if genuine, does not establish predictive ability. We test for lead-lag relationships using two complementary approaches.

5.4.1 Granger Causality Tests

Figure 8: Granger Causality Test F-Statistics — Oil→BTC and BTC→Oil, lags 1–10 weeks

Direction	Lag Range	F-Stat Range	p-value Range	Verdict
Oil → BTC	1–10 weeks	0.50–1.02	0.31–0.89	**All insignificant**
BTC → Oil	1–10 weeks	0.62–1.78	0.18–0.80	**All insignificant**

Source: Tradingview, Binance Research, as of March 16, 2026

Neither series Granger-causes the other at any lag specification. Critically, even during 2020–2022—the only period with significant contemporaneous correlation—the Oil→BTC Granger test remains insignificant (lag 1: $p=0.30$). This is the statistical signature of a **common factor** (global liquidity) driving both series simultaneously, not a direct causal channel from oil to BTC.

5.4.2 Cross-Correlation Function

The CCF across lags −6 to +6 weeks yields coefficients uniformly below ±0.05, with none achieving statistical significance. This eliminates any linear predictive relationship between the two series, regardless of direction or time shift.

Summary of Sections 5.1–5.4: At the weekly return horizon, BTC and crude oil are independent random processes. The apparent correlation of 2020–2022 is a transient, liquidity-driven phenomenon, not a structural feature of the BTC-oil relationship.

5.5 Dialogue with Existing Literature

Our findings align closely with **Ali et al. (2025)**, whose Diagonal BEKK-GARCH analysis of GCC markets concludes that oil prices generate significant *volatility* spillovers to crypto but no *return* spillovers. We replicate this asymmetry over a longer sample and in the context of a live geopolitical shock.

Our results are not inconsistent with **Salisu et al. (2023)**, who identify an oil-to-mining-cost transmission channel affecting BTC's *volatility level* (second moment). Oil price increases may make BTC trade more erratically without determining whether it goes up or down.

Our reinterpretation of **Ahmadova et al. (2024)** is that their documented positive relationship is concentrated in the 2020–2022 outlier period. When the sample is extended to include the ETF era (2024–2026), the relationship dissolves.

06 / Case Study: The 2026 Hormuz Crisis in Detail

6.1 Daily Price Timeline

Phase 1: Expectation Shock (Feb 26 – Feb28)

On February 26, the US and Iran held indirect nuclear talks in Geneva. On the 27th, news of the talks failing spread quickly, raising fears that war might start soon, triggered a single-day oil jump to US$73 on February 27. BTC, already under ETF-outflow-driven pressure, slid to an intraday crisis low of US$63,047 on Saturday February 28—the lowest print of the entire episode, amplified by thin weekend liquidity. By March 1, BTC had stabilized at US$65,771.

The BTC drawdown in this phase (approximately −3% from prior week close, −7% intraday) was consistent with broad risk-asset initial reactions and represented a generalized risk-off transmission—not a BTC-specific response to oil prices.

Phase 2: Oil Price Surge — Absorption (Mar 2–8)

This was the most intense phase for oil, with Brent rallying from US$78 to US$93 intraweek (+35%)—the largest weekly gain since the 2022 Russia-Ukraine conflict. Conventional macro logic would predict maximum BTC stress here.

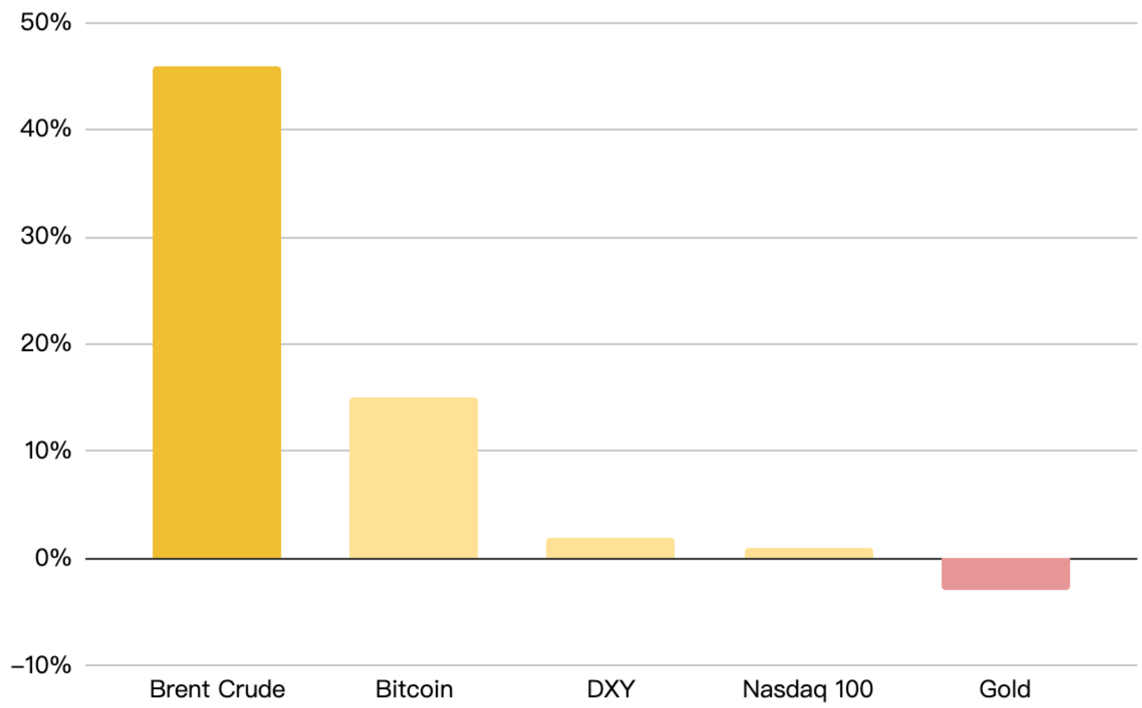
Instead, BTC ranged between US$66,000 and US$73,000. Sell pressure was present—BTC pulled back to US$68,100 on March 6 when oil spiked—but each dip was met with buying. The source of that buying is identified in Section 7.

Phase 3: Decoupling Rally (Mar 9–18)

From March 9 onward, BTC and oil diverged decisively. Oil continued climbing toward US$104; BTC launched from US$66,000 to US$75,000 (+15% over 9 trading days). By March 18, BTC had recovered +18.8% from its crisis intraday low and was +15% versus the pre-crisis week.

6.2 Cross-Asset Performance Comparison

Figure 9: Post-War Cross-Asset Performance

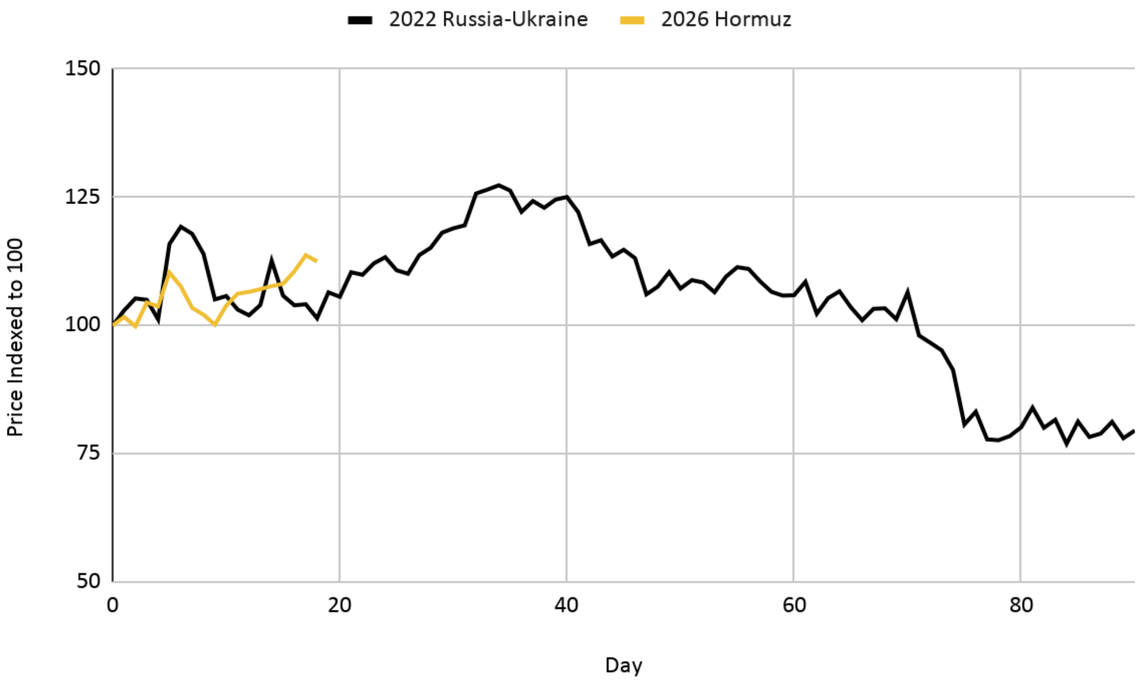


Source: Tradingview, Binance Research, as of March 18, 2026

BTC was the strongest-performing non-oil asset during the crisis. Notably, gold—the traditional safe-haven—declined throughout, reflecting USD strength and rising real rate expectations. BTC's +15% gain cannot be classified as either "safe-haven" behavior (gold moved in the opposite direction) or pure "risk-on" behavior (Nasdaq was essentially flat). The more accurate characterization: **BTC followed its own flow-driven and cycle-driven logic, with oil providing only brief initial noise.**

6.3 Historical Parallel: The 2022 Russia-Ukraine conflict

Figure 10: BTC Response Comparison — 2022 Russia-Ukraine vs. 2026 Hormuz Crisis, indexed from shock date



Source: Tradingview, Binance Research, as of March 16, 2026

The 2022 Russia-Ukraine sent Brent from US$94 to US$120+ within days. The popular narrative attributes BTC's 2022 crash to this macro deterioration. Price data tells a different story:

BTC rose 24% in the four weeks immediately following the war. The subsequent collapse began in May (Terra/Luna implosion) and accelerated in June (Three Arrows Capital insolvency)—both crypto-native credit events with no direct link to oil prices.

The pattern across both crises is remarkably consistent:

Figure 11: BTC Performance During Major Geopolitical Crises

	2022 Russia-Ukraine	2026 Hormuz
Oil price surge	+28% (4 weeks)	+46% (3 weeks)
BTC performance (first 4 weeks)	+24%	+15%
Subsequent BTC trajectory	Crashed May–Jun (Luna/3AC)	Continued rising (as of report date)
True driver of BTC	Crypto-native credit events	Institution buying

Source: Tradingview, Binance Research, as of March 16, 2026

The empirical regularity: geopolitical oil shocks do not break BTC. Crypto-native systemic credit events do.

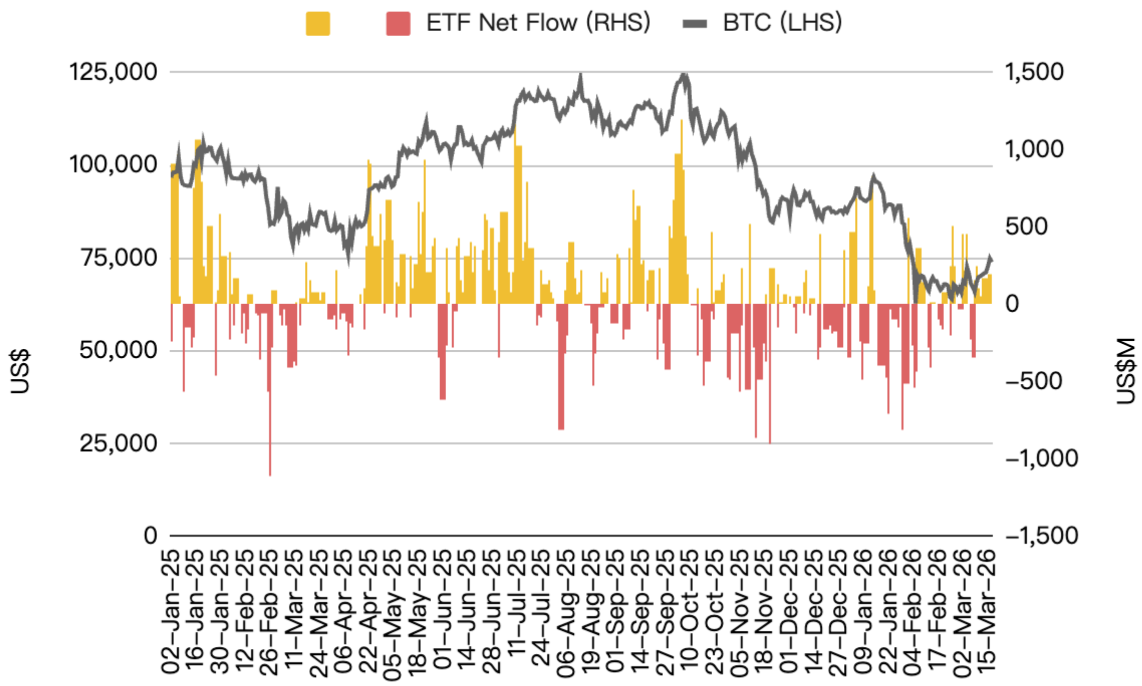
07 / Mechanism: Why BTC Decoupled

The preceding sections establish what happened. This section addresses why. Because crypto is decentralized, we can't see all liquidity, but data shows U.S. institutions are buying during the dip.

7.1 Institutional Capital: Three Independent Demand Channels

7.1.1 Spot ETF Flows

Figure 12: U.S. Spot BTC ETF Daily Net Flows vs. BTC Price



Source: Tradingview, Binance Research, as of March 16, 2026

The January 2024 approval of U.S. spot BTC ETFs created an observable, daily-frequency proxy for institutional demand. ETF flow data during the crisis tells a clear narrative:

Pre-crisis outflows drove the drawdown, not oil. From February 2–26, cumulative ETF net outflows reached approximately −US$1.2B. This is what pushed BTC from US$90,000 to US$65,000—the move was already underway before Hormuz disruption rumors appeared. Any argument that BTC fell "because of oil prices" is falsified by the timeline.

Post-shock flows reversed sharply. On March 2–4, ETFs recorded three consecutive days of net inflows: US$458M, US$225M, and US$462M (total: US$1.15B). Institutional capital treated the oil-shock-induced dip as a buying opportunity, not a reason to exit.

The one vulnerable day. March 6—when oil spiked intraday to US$93—saw the largest single-day ETF outflow of the crisis period (−US$349M). This brief capitulation was followed by immediate flow recovery the next session.

Recovery phase: sustained institutional accumulation. March 9–17 saw seven consecutive trading days of positive net inflows, averaging +US$166M/day, totaling +US$1.16B. This flow pattern precisely aligns with BTC's US$66,000→US$75,000 rally.

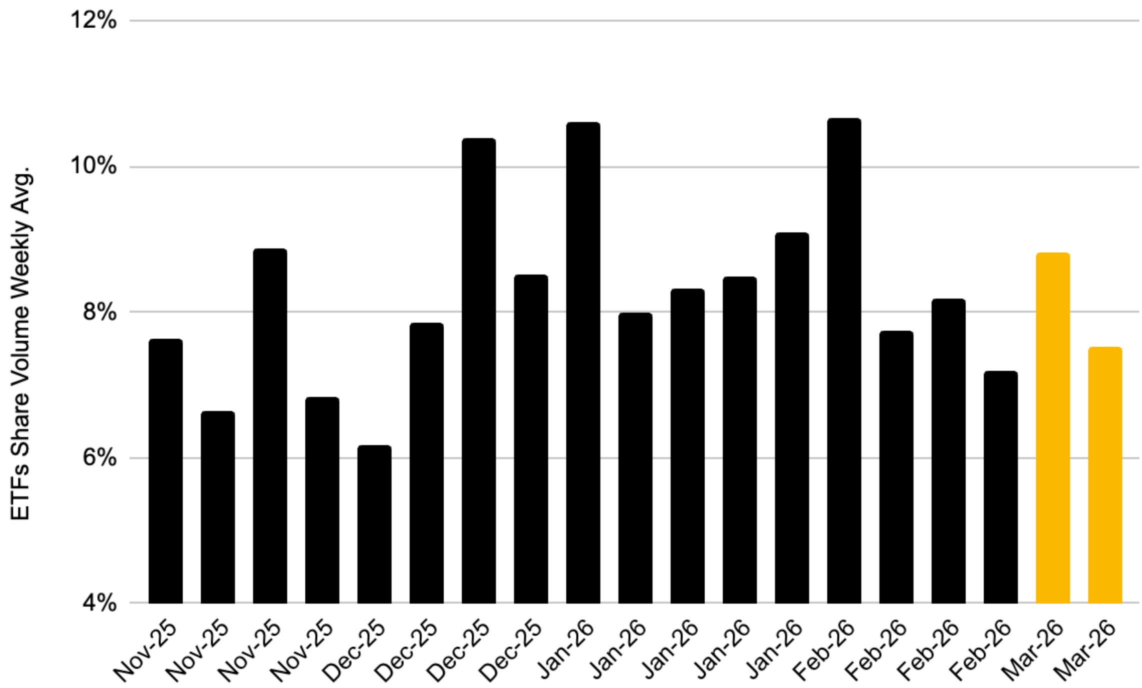
Figure 13: U.S. Spot BTC ETF Net Flows During Crisis Phases

Phase	Period	ETF Net Flows	Daily Avg
Pre-crisis outflows	Feb 2–26	−US$1.2B	−US$67M
Shock absorption	Feb 27–Mar 8	+US$540M	+USUS$90M
Recovery accumulation	Mar 9–17	+US$1.16B	+US$166M

Source: Tradingview, Binance Research, as of March 16, 2026

Also we note that the share of trading volume originating from the U.S. ETF market has rebounded over the past few weeks, signaling a return of U.S. trading interest — a constructive signal. ETF flows are the most observable component of institutional behavior, functioning as a high-frequency proxy for the broader demand signal.

Figure 14: BTC Spot ETF Volume as % of BTC Spot Volume



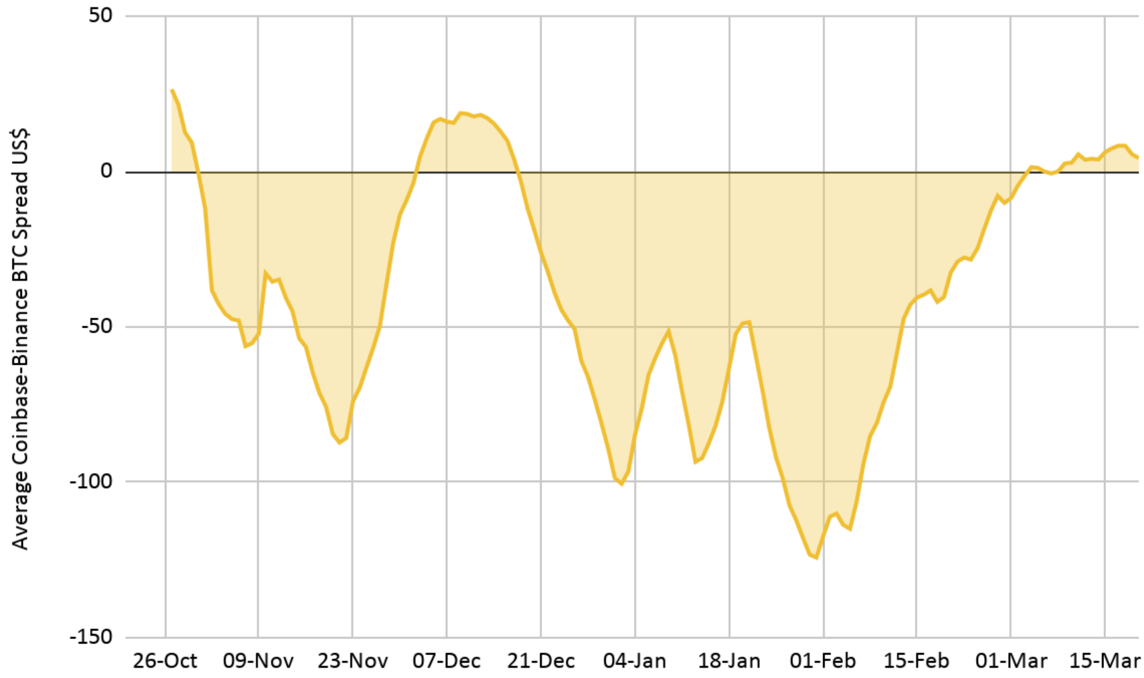
Source: Sosovalue, CoinGecko, Binance Research, as of March 13, 2026

7.1.2 Coinbase Premium

The Coinbase-Binance BTC price spread measures the relative buying or selling pressure from U.S.-based market participants. The premium was persistently negative during January–February (U.S. investors were net sellers relative to global investors), consistent with the pre-crisis ETF outflows.

In early March, the Coinbase Premium flipped positive. The timing and direction align precisely with ETF inflow data: **U.S. institutional capital shifted from net seller to net buyer during the crisis or at least their selling pressure has been exhausted.**

Figure 15: Coinbase-Binance Bitcoin Premium



Source: Tradingview, Binance Research, as of March 20, 2026

7.1.3 Corporate Treasury Accumulation

Publicly disclosed corporate treasury activity (including continued purchases by strategy-oriented Bitcoin treasury companies) remained consistent with pre-crisis accumulation plans, e.g. Microstrategy & Bitmine have been increasing their cryptocurrency holdings every week since 2026, with a total amount reaching US$8.3 billion. The overall direction corroborated the ETF and Coinbase signals.

The convergence of three independent, observable demand channels—ETF flows, U.S. spot market premium, and corporate treasury activity—provides stronger evidence than any single indicator. **Institutional demand absorbed the macro shock from multiple directions simultaneously.**

Figure 16: DTAs Accelerate Acquisition Pace in 2026 Despite Falling Prices

Source: Tradingview, Binance Research, as of March 20, 2026

7.2 Attenuation of the Supply-Side Transmission Channel

Salisu et al. (2023) proposed an economically intuitive transmission pathway: higher oil prices → higher electricity costs → higher mining cost of production → reduced market activity and lower BTC volatility. This channel retains theoretical logic but its marginal explanatory power has likely diminished materially since 2024, for three reasons:

1. Mining energy mix transformation. BTC mining has shifted substantially toward hydro, wind, and natural gas. Bitcoin Mining Council data indicates sustainable energy now accounts for over 50% of global BTC mining electricity consumption. Direct oil price exposure to mining costs has declined.

2. The 2024 halving restructured mining economics. The block reward reduction from 6.25 to 3.125 BTC eliminated higher-cost operations. Surviving miners are structurally low-cost operators, less sensitive to incremental energy price changes.

3. ETF volume dilutes miner pricing power. Post-ETF, institutional capital flows—not miner selling decisions—increasingly set the marginal price of BTC. Even if oil-driven cost pressures reduce miner supply, that reduction is absorbed within the much larger ETF-driven trading volume.

7.3 Decoding the 2020–2022 Anomaly

Understanding why positive correlation appeared in 2020–2022 is essential for assessing whether it will recur. The macro context of that period was uniquely extreme: the Fed Funds Rate at 0–0.25% for nearly two years; the Fed balance sheet expanding from US$4.2T to US$8.9T; multiple rounds of direct fiscal transfers that directly amplified retail risk appetite.

In this environment of unconstrained global liquidity, virtually all risk assets—equities, crypto, commodities, real estate—appreciated simultaneously. BTC and oil shared a common driver (the global liquidity factor), not a direct causal link. The defining statistical evidence: **even during 2020–2022, the Oil→BTC Granger causality test is insignificant (lag 1: p=0.30).** Co-movement without lead-lag predictability is the textbook signature of a common factor, not a direct causal relationship.

When the common factor withdrew (Fed rate hikes beginning March 2022), the BTC-oil correlation reverted immediately to zero. This was not a "correlation turning negative"—it was the return to the structural baseline after a liquidity-driven anomaly ended.

7.4 BTC's Independent Pricing Architecture

Stripped of macro resonance effects, BTC price is primarily driven by crypto-native factors:

- **Halving cycles:** The April 2024 fourth halving reduced new supply issuance by 50%. Historically, each halving has been followed by significant price appreciation within 12–18 months.
- **Institutional ownership structure:** Spot ETFs absorbed over US$30B in their first year, accelerating the shift of marginal BTC ownership from retail traders and miners toward institutional allocators with different risk tolerances and investment horizons.
- **Crypto-native narrative cycles:** DeFi, Layer 2 scaling, AI+Crypto application development—these demand drivers operate independently of traditional macro.

On-chain supply dynamics: Long-term holder (LTH) accumulation ratios, exchange balances, and miner reserve positions have substantially greater explanatory power for BTC price than any macro variable.

08 / Investment Implications and Risk Scenarios

8.1 Portfolio Construction Implications

Oil price is not a valid BTC risk factor for portfolio optimization. The full-sample beta is insignificant; the time-varying beta is highly unstable (ranging −0.8 to +1.0); Granger tests confirm zero predictive content. All three tests converge on the same conclusion: incorporating a BTC-oil beta into portfolio optimization models lacks statistical foundation.

Practical guidance for institutional allocators:

- It is generally not advisable to adjust BTC positions solely based on oil price forecasts or geopolitical energy supply scenarios, as a decade of data offers limited support for using oil as a tactical signal for BTC positioning.
- Instead, BTC position management might benefit from focusing more on crypto-native indicators such as spot ETF flow direction and magnitude, on-chain long-term holder (LTH) accumulation ratios, miner reserve behavior, and stablecoin supply trends.
- While oil price shocks do not appear to determine the overall direction of BTC returns, evidence—including findings from Ali et al. (2025) and our daily crisis analyses—suggests that such shocks can contribute to increased short-term volatility in BTC. Therefore, derivatives overlay strategies and volatility-targeting mandates may consider incorporating geopolitical event risks into their volatility models to better manage short-term fluctuations.

8.2 Risk Scenarios

The above analysis is conditional on the current market structure. The ongoing 2026 Strait of Hormuz crisis is providing a real-time stress test. Despite de facto passage restrictions and Brent crude surging to US$100–110+, BTC has shown notable resilience, supported by continued institution inflows. However, the following scenarios could still alter BTC's response to oil shocks.

Scenario 1: Hawkish Monetary Policy Response. If central banks, led by the Federal Reserve, react to persistent high oil prices by implementing more aggressive rate hikes or accelerated quantitative tightening than currently priced in, this could trigger a broad risk-off environment. Tighter financial conditions and rising real yields would increase BTC's sensitivity to macro shocks and weaken the institutional bid that has buffered recent volatility.

Scenario 2: Crypto-Native Credit Event. The 2022 Luna/3AC/FTX cascade demonstrated that BTC is most vulnerable not to external macro shocks but to internal leverage liquidations and credit collapses. A forced de-risking by a major institutional BTC holder (a large corporate treasury or leveraged fund) could trigger cross-asset contagion.

Scenario 3: Prolonged High Oil Prices Trigger a Global Liquidity Crisis. A systemic liquidity crunch reminiscent of 2008 could occur, similar to when oil prices once approached $150 per barrel. Currently, many leading institutions expect oil prices to reach or exceed US$150 if the Strait of Hormuz remains fully blocked for 6 months+. If this scenario materializes, it could force simultaneous multi-asset liquidations to meet margin calls—BTC would likely not be exempt. In extreme risk-off environments, cross-asset correlations tend to converge toward 1, amplifying the impact across markets.

Scenario 4: Prolonged Strait of Hormuz Disruption. Current disruptions have already escalated to effective closure levels. While short-term restrictions have been partially buffered, a prolonged shutdown lasting more than 3–6 months could drive non-linear energy price escalation, significantly alter inflation expectations, and elevate stagflation and recession risks to levels that force broad institutional de-risking across all asset classes. In this scenario, BTC would not be immune—but the transmission mechanism would be "universal risk-off deleveraging" rather than oil directly impacting BTC.

09 / Conclusion

This report combines ten years of weekly data (2016–2026, N=532) with daily granularity during the 2026 Hormuz crisis to deliver four principal conclusions.

First, no stable return-level relationship exists between BTC and crude oil. Prior reports citing high beta coefficients were based on regressions of I(1) price level series—a spurious regression error. Using correct log-return methodology, statistical significance appears only in 2020–2022 (β=0.34), and that relationship is explained by a shared liquidity factor rather than direct causation. Granger causality tests and CCF analysis confirm zero predictive content in either direction.

Second, the Hormuz crisis confirmed BTC's independent pricing capability. Against a +46% oil price surge, BTC gained +15%, outperforming both gold and the Nasdaq. Three independent evidence chains—ETF net inflows, Coinbase Premium turning positive, and continued corporate treasury accumulation—document institutional capital executing a counter-cyclical allocation strategy during the crisis.

Third, BTC's response pattern to oil shocks is "short-term volatility amplification followed by independent medium-term pricing." Both the 2022 Russia-Ukraine and 2026 Hormuz crises exhibited the same two-phase structure: elevated volatility for 1–3 days post-shock, followed by BTC trading on its own fundamentals. What breaks BTC is not exogenous macro shocks but crypto-native systemic credit events.

Fourth, this independence is conditional on current market structure. The institutional ownership base created by spot ETF introduction serves as a structural shock absorber. Should that structure be disrupted by policy reversal, a credit event, or a generalized liquidity crisis, BTC's macro sensitivity could re-emerge.

10 / Appendix

Figure 17: ADF Unit Root Test Results

Variable	Level (ln)	First Difference (Δln)
ln(BTC)	−1.83 (p=0.68) — fail to reject H_0	−22.4 (p<0.01) — reject H_0
ln(Oil)	−2.10 (p=0.55) — fail to reject H_0	−20.7 (p<0.01) — reject H_0

Source: Tradingview, Binance Research, as of March 16, 2026

Both series are I(1); first differences are I(0) stationary.

Engle-Granger Cointegration Test:

ADF test applied to the residuals of $\ln(BTC) = \alpha + \beta \cdot \ln(Oil) + \varepsilon$ fails to reject the null of no cointegration at the 10% level. Direct regression of log price levels is therefore statistically inadmissible.

Figure 18: Full Granger Causality Results

Oil → BTC (Full Sample, N=531)

Lag	F-Statistic	p-value
1	1.017	0.314
2	0.475	0.622
3	0.652	0.582
4	0.598	0.664
5	0.530	0.754
8	0.537	0.829
10	0.500	0.890

BTC → Oil (Full Sample, N=531)

Lag	F-Statistic	p-value
1	1.784	0.182
2	1.209	0.299
3	0.793	0.498
4	1.023	0.394
5	0.818	0.537
8	0.684	0.706
10	0.616	0.801

Source: Tradingview, Binance Research, as of March 16, 2026

11 / References

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12 / New Binance Research Reports

Monthly Market Insights - March 2026 Link
A summary of the most important market developments, interesting charts and upcoming events

Full-Year 2025 & Themes For 2026 Link
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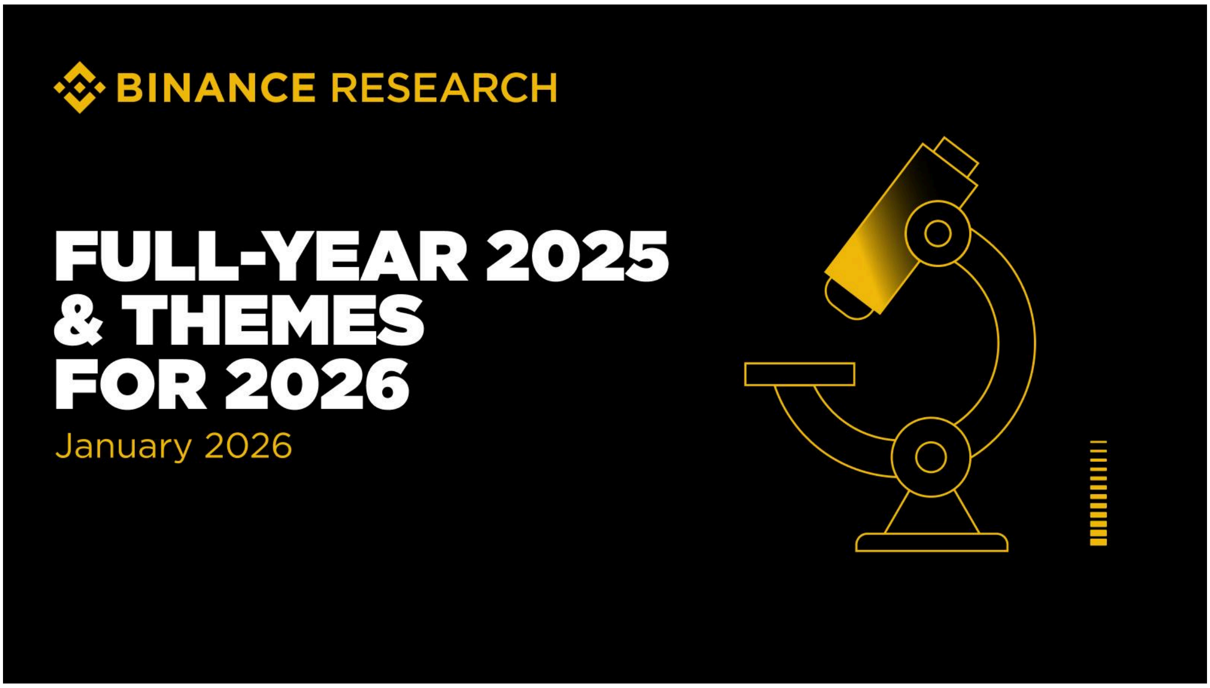

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Binance Research is the research arm of Binance, the world's leading cryptocurrency exchange. The team is committed to delivering objective, independent, and comprehensive analysis and aims to be the thought leader in the crypto space. Our analysts publish insightful thought pieces regularly on topics related but not limited to, the crypto ecosystem, blockchain technologies, and the latest market themes.

Michael JJ

Macro Researcher

Michael is a macro researcher at Binance. Prior to this, he worked as an economist at a U.S. private wealth management firm, focusing on cross-asset allocation. He also served as editor-in-chief at a media company, overseeing cryptocurrency reporting and educational content. Earlier in his career, he was a consultant at Ernst & Young and a crude oil trader at an energy firm.

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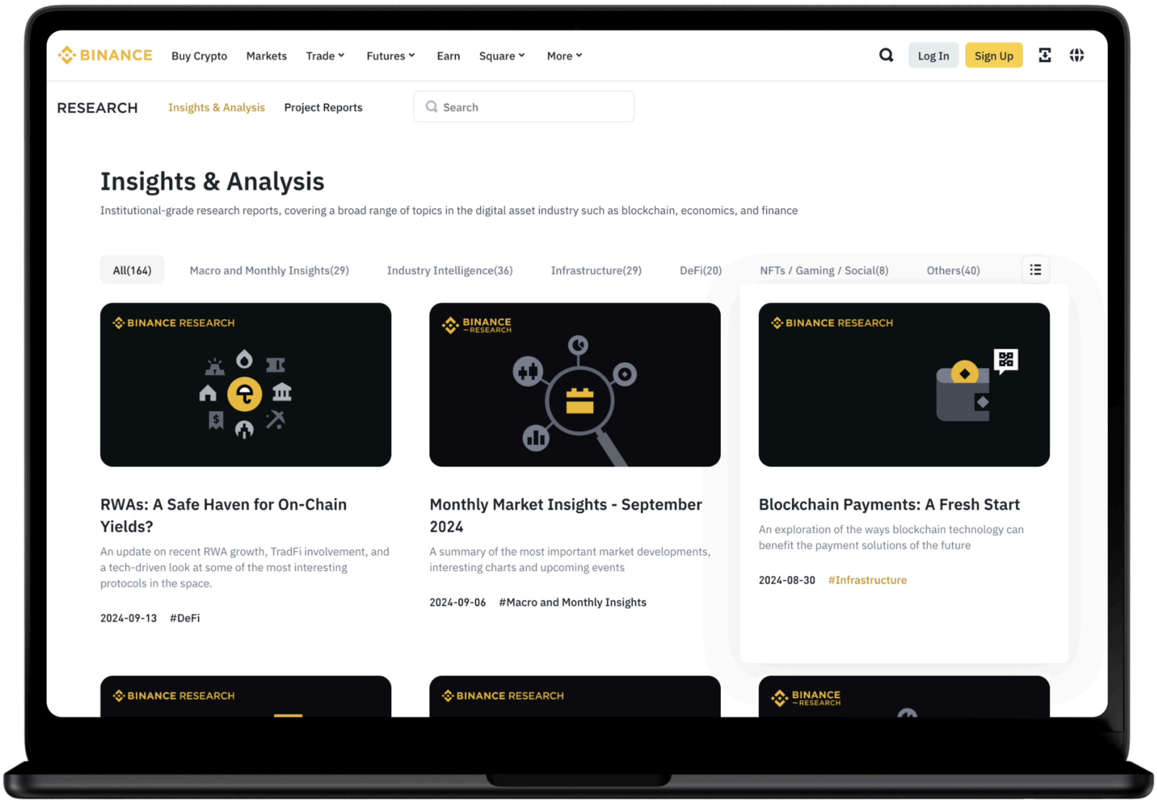

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