

## **How Digital Asset Risk Impacts a Global Portfolio**

### **Correlation, liquidity and regime sensitivity in institutional portfolios**

#### **Executive Summary**

For institutional allocators, the question is no longer whether digital assets belong in a portfolio, but how their risk characteristics interact with existing exposures across equities, private markets and macro factors. This analysis examines historical correlation regimes, liquidity compression during risk-off events, and the governance implications for investment committees. Understanding these dynamics is essential for constructing resilient portfolios that can absorb volatility without compromising long term objectives.

#### **Historical Correlation Regimes**

Digital assets have displayed non static correlation patterns with traditional asset classes. During periods of low stress, correlations with equities have been modest, offering diversification potential. However, in extreme market dislocations, correlations have risen sharply, reducing the expected diversification benefit. This regime sensitivity means that static assumptions about correlation are insufficient. Allocators must model correlation as a function of market state rather than a fixed parameter.

#### **Liquidity Compression in Risk-Off Environments**

Liquidity in digital asset markets can evaporate rapidly during periods of heightened volatility. Unlike equities or government bonds, where central bank interventions or market maker commitments provide a backstop, digital asset liquidity is largely dependent on exchange order books and algorithmic trading activity. In stress scenarios, bid ask spreads widen, execution costs rise, and large positions become difficult to unwind without significant market impact. This liquidity compression can amplify losses and create forced selling dynamics that feed back into broader portfolio stress.

#### **Volatility Transmission into Multi-Asset Portfolios**

Digital asset volatility is not contained within its own asset class. Sharp moves in digital assets can trigger margin calls, reduce risk budgets, and force rebalancing across other portfolio components. For institutions using risk parity or volatility targeting frameworks, a spike in digital asset volatility can mechanically reduce exposure to other risk assets, creating unintended portfolio tilts. Understanding these transmission channels is critical for setting position sizes and risk limits.

#### **Drawdown Asymmetry and Recovery Cycles**

Digital assets have historically experienced deeper and faster drawdowns than traditional risk assets, but also faster recovery cycles. This asymmetry has implications for portfolio construction. A 50% drawdown in a 2% allocation has a modest impact on total portfolio value, but the psychological and governance challenges can be disproportionate. Investment committees must be prepared for the volatility of individual components, even when the total portfolio impact is contained.

#### **Interaction with Equities, Private Markets and Macro Risk**

The interaction between digital assets and other portfolio components depends on the macro environment. In regimes of easy monetary policy and low real yields, digital assets have behaved as risk on assets, correlating with equities. In regimes of tightening or rising real yields, correlations have broken down. For portfolios with significant private market exposure, the illiquidity premium trade off becomes more complex. Digital assets offer daily liquidity

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in normal conditions but can become effectively illiquid during stress, creating a mismatch with private market valuations that are updated quarterly.

### **Governance Implications for Investment Committees**

Integrating digital assets into a global portfolio requires governance structures that can handle fast moving risk dynamics. Traditional investment committees meet monthly or quarterly, which is too slow for a market that can move 20% in a day. Clear escalation protocols, pre defined rebalancing triggers, and real time risk monitoring are essential. Committees must also address custody, counterparty and operational risks that differ materially from those in traditional asset classes.

### **The Ledgerstone Approach**

Ledgerstone approaches digital asset risk from an institutional portfolio perspective, not as crypto commentators. We frame analysis through the lens of correlation regimes, liquidity dynamics and volatility transmission into multi asset portfolios. Our focus is on governance, risk budgeting and the interaction with existing capital allocation logic. For allocators seeking to understand how digital assets fit within a broader portfolio framework, the Ledgerstone approach to due diligence provides the analytical rigor needed for informed decision making.

*If your investment committee is evaluating digital asset exposure within a global portfolio context, we welcome the opportunity to discuss how our risk gated analysis can support your due diligence process. Connect with Ledgerstone to explore the portfolio implications for your specific mandate.*