



Portfolio Construction & Risk Management Framework

Version 1.1 | Effective 1 January 2026

Introduction

This framework provides Institute standards for portfolio construction and risk management when advising clients on cryptoasset exposure. It applies Modern Portfolio Theory principles to the unique characteristics of crypto assets: extreme volatility, time-varying correlations, and operational risks absent in traditional markets.

Authority: This framework is the authoritative reference for TCCA examination content on Domain 4.2 (Portfolio Construction and Risk Management). All examination marking criteria and model answers are derived from this framework.

1. Strategic Allocation Framework

INSTITUTE POSITION

The Institute's position is that cryptoasset allocations must be determined by client risk profile, not client preference. Allocations are presumptively unsuitable when they exceed the ranges specified in Table 1 unless exceptional circumstances exist and are documented.

Rationale: Cryptoasset volatility (60-80% annualised for Bitcoin) is 3-4× equity volatility. Excessive allocations create disproportionate portfolio risk that cannot be justified by diversification benefits.

Common Misapplication (Exam Risk): Candidates often mistake client enthusiasm for risk tolerance or justify high allocations using 'long-term potential'. This fails suitability standards.

Table 1: Strategic Allocation Bands by Risk Profile

Risk Profile	Allocation Range	Typical Client	Key Considerations
Conservative	0-2%	Retirees, risk-averse, near-term liquidity needs	Minimal exposure. Must tolerate potential total loss.
Moderate	2-5%	Balanced investors, medium time horizon (5-10 years)	Accepts volatility for growth. Emergency fund required.
Aggressive	5-10%	Growth-focused, long horizon (10+ years), high income	High volatility tolerance. Must withstand 80%+ drawdowns.
Speculative	>10%	Sophisticated investors, surplus capital only	Requires explicit documentation of suitability rationale.

Note: These ranges assume Bitcoin/Ethereum exposure. Alt-coins and DeFi protocols require further downward adjustment due to higher risk.

2. Volatility Contribution Logic

Volatility-adjusted allocation uses structured logic, not formulas. Advisers assess whether cryptoasset volatility contribution is proportionate to the client's overall portfolio risk budget.

Structured Decision Logic:

1. Determine cryptoasset volatility relative to equities (typically 3-4×)
2. Assess correlation during stress periods (often approaches +1.0)
3. Calculate volatility contribution: allocation × relative volatility
4. Apply Institute threshold logic (below)

INSTITUTE POSITION: Volatility Contribution Thresholds

At 3× equity volatility (conservative estimate for Bitcoin):

- 5% allocation contributes ~15% to portfolio volatility
- 10% allocation contributes ~30% to portfolio volatility
- 15% allocation contributes ~45% to portfolio volatility

Threshold Logic: When cryptoasset volatility contribution exceeds 30% of total portfolio risk, the allocation is presumptively unsuitable for moderate-risk clients unless exceptional circumstances exist and are documented.

Common Misapplication (Exam Risk): Candidates apply arithmetic without judgement. A 10% allocation that dominates portfolio risk cannot be justified by client preference alone.

3. Time-Varying Correlations and Stress Behaviour

Crypto-traditional asset correlations are unstable and increase sharply during market stress, reducing diversification benefits when most needed.

Observed Patterns:

- Normal markets: Bitcoin-equity correlation ranges 0.2-0.4
- Stress periods: Correlation approaches +0.8 to +1.0
- Liquidation cascades: Crypto declines amplify equity market stress

INSTITUTE POSITION: Stress Correlation Assumption

The Institute's position is that advisers must assume correlations approach +1.0 during stress when assessing portfolio suitability. Historical average correlations are not relevant for risk management purposes.

Minimum Acceptable Standard: Suitability assessments must explicitly address stress-period correlation behaviour and confirm the client can tolerate simultaneous declines in crypto and traditional assets.

When This Becomes Unsuitable: If the client's financial position cannot withstand a 50% combined portfolio decline (e.g., near-term liquidity needs, insufficient emergency reserves), crypto exposure is unsuitable regardless of allocation size.

4. Rebalancing Strategies

Crypto's extreme volatility requires disciplined rebalancing to maintain target allocations and manage risk drift.

Three Approaches:

Calendar Rebalancing: Quarterly or semi-annual. Simple but misses large intra-period moves.

Threshold Rebalancing: Trigger when allocation drifts $\pm 20\text{-}30\%$ from target (e.g., 5% target $\rightarrow$ rebalance at 3.5% or 6.5%). More responsive but requires monitoring.

Hybrid: Quarterly review with threshold override. Recommended by Institute for crypto allocations.

INSTITUTE POSITION: Rebalancing Discipline

The Institute's position is that rebalancing discipline is mandatory, not optional. Failure to rebalance allows winning positions to create unsuitable risk concentrations.

Minimum Acceptable Standard: At minimum, quarterly rebalancing for crypto exposures $>2\%$. Document rebalancing decisions (action taken or deferred) at each review.

5. Within-Crypto Diversification

Diversification within the crypto allocation (Bitcoin-only vs multi-asset) is secondary to overall portfolio risk management.

Bitcoin-Only Approach:

- Simplicity: Single asset, deepest liquidity
- Lower operational risk: Fewer custody/security vectors
- Concentration risk: No diversification within crypto

Multi-Asset Approach (e.g., Bitcoin + Ethereum):

- Potential diversification benefit (Bitcoin-Ethereum correlation $\sim 0.7\text{-}0.8$)
 - Increased operational complexity: Multiple custody arrangements
 - Risk: Marginal benefit may not justify added complexity
-

INSTITUTE POSITION: Within-Crypto Diversification

The Institute's position is that Bitcoin-only allocations are acceptable and often preferable for clients with $<5\%$ crypto exposure. Multi-asset crypto portfolios are not inherently superior and introduce operational risks that may outweigh marginal diversification benefits.

When Diversification Becomes Unsuitable: Alt-coins beyond Bitcoin/Ethereum introduce disproportionate risks (illiquidity, protocol failure, regulatory uncertainty) that cannot be justified for most retail clients.

6. Client Suitability Assessment

Suitability assessment for crypto exposure must evaluate:

1. Risk capacity (financial ability to absorb losses)
2. Risk tolerance (emotional willingness to accept volatility)
3. Time horizon (minimum 5 years for meaningful crypto exposure)
4. Liquidity needs (emergency reserves must be maintained)
5. Understanding of crypto risks (total loss possibility)

Table 2: Client Rejection Decision Grid

Client Characteristic	Decision
Cannot tolerate total loss of crypto allocation	REJECT
Near-term liquidity needs (<5 years)	REJECT
Insufficient emergency fund (<6 months expenses)	REJECT or REDUCE
Requested allocation exceeds risk profile range (Table 1)	REJECT unless exceptional circumstances documented
Does not understand total loss risk	REJECT until education completed
Requests >10% allocation without sophisticated investor status	REJECT unless documented suitability rationale

Key Principle: Client preference does not override suitability obligations. When in doubt, reduce or reject.

INSTITUTE POSITION: Suitability vs Client Preference

The Institute's position is that advisers must refuse unsuitable allocations regardless of client insistence. Professional judgement requires the ability to say 'no'.

Common Misapplication (Exam Risk): Candidates justify unsuitable allocations using client preference, long-term potential, or diversification benefits. This fails professional conduct standards and will lose marks in scenario responses.

TrustCrypto Institute

Portfolio Construction & Risk Management Framework v1.1

Effective: 1 January 2026

(This framework is the authoritative reference for TCCA examination Domain 4.2)