

Under Control: A Framework for Applying the Federal Securities Laws to Crypto Vaults

Under Control: A Framework for Applying the Federal Securities Laws to Crypto Vaults

Full Report

Authors

Crypto Council for Innovation (CCI) is the premier global alliance advancing crypto innovation. Our mission is to unlock the transformative power of digital assets and blockchain technologies by advocating for thoughtful regulation, protecting consumers, and promoting responsible innovation. We operate across the U.S. on federal and state levels, the European Union, United Kingdom, and Asia Pacific region.

This paper was developed by CCI's Vault Coalition, composed of members from leading industry organizations and anchored by representatives from Bitwise, Galaxy, and Morpho, and legal advisers from Chapman and Cutler, LLP.

CCI thanks the Chapman and Cutler LLP attorneys who contributed to the preparation of this report, including Morrison C. Warren, Christian Brockman, James M. Audette, Richard J. Coyle, Peter M. Hong, Felice R. Foundos, Jonathan A. Koff, Paul D. Carman, Collin Beavan, and Brian T. Coughlin.

October 2026

CCI | Crypto
Council for
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VAULTS

VOLUME I: INTRODUCTION

Introduction: Vault Architecture and the Regulatory Question

Architecture over labels. Vaults are programmable financial architecture, not a product category. The word “vault” does not answer any legal question; the relevant inquiry is what the code does, what rights the depositor receives, and what control any non-depositor role retains.

Advantages of vaults. Vault code can deliver structural improvements to traditional markets, including capital efficiency, broader access to financial opportunities, and depositor protections.

Code as constraint. Smart contracts can make certain actions impossible, not merely prohibited, and can make role authority visible, bounded, delayed, and revocable.

Depositor agency. A vault can preserve depositor agency where the architecture makes the arrangement comprehensible, verifiable, observable, predictable, noticed, and actionable.

I. The Promise of Vault Architecture

Vault products represent one of the most significant innovations in financial infrastructure to emerge from blockchain technology. At their most fundamental level, vaults are smart contract systems that enable holders of digital assets to deploy those assets productively through programmable, transparent, and in many cases fully auditable on-chain mechanisms. As Commissioner Peirce observed in her July 2026 statement on crypto vaults and lending strategies, these “new approaches to the deployment of assets hold great promise” because “[d]epending on their design, they can enable people to use the assets they own to generate income efficiently and cheaply.”¹ CCI shares that view. The vault is not merely another decentralized finance product; it is an architecture for democratizing access to financial services, such as lending, credit provision, and the programmatic deployment of digital assets, which have historically been available only through institutional intermediaries.

¹ Hester M. Peirce, Comm’r, U.S. Sec. & Exch. Comm’n, *Headstands and Summervaults: A Statement on Crypto Vaults and Lending Strategies* (July 22, 2026), <https://www.sec.gov/newsroom/speeches-statements/peirce-statement-crypto-vaults-lending-strategies-072226>.

The promise of vaults extends well beyond the crypto-native ecosystem. Traditional financial intermediation has long been characterized by opacity, high fees, settlement delays, and restricted access. The bank depositor earns only a portion of the rate her capital generates. The average person in a managed fund bears layers of intermediary cost, such as management fees, custodial charges, brokerage commissions, and transfer agent expenses, which compound to erode returns over time. The small business seeking operational liquidity confronts underwriting processes designed for institutional scale. These are inherent, structural features of a system built on bilateral trust relationships intermediated by centralized institutions. Vault architecture offers a credible alternative by encoding the terms of capital deployment in publicly verifiable smart contracts, replacing intermediary discretion with programmatic certainty where the code is designed to do so.

The opportunity this presents is twofold. First, vault architecture can materially improve the capital efficiency of credit and collateral markets by compressing settlement, automating enforcement, reducing manual reconciliation, and making digital assets more financeable and operationally reusable. Second, those efficiency gains can translate directly into broader access. A retail saver in North Platte, Nebraska, and a treasury manager in New York, New York can access the same overcollateralized lending markets, the same transparent risk parameters, and the same code-enforced rules — opportunities that historically depended on institutional relationships, balance-sheet access, or prime brokerage infrastructure. This is the kind of broadly accessible financial innovation that Chairman Atkins has championed: an architecture that expands participation rather than restricting it, and that rewards the Commission’s commitment to advancing, clarifying, and transforming its regulatory framework to keep pace with how markets actually operate.² Commissioner Uyeda has likewise underscored that the Commission’s role is not to “stand between Americans and their economic aspirations in the name of protecting them from themselves,” but to ensure that markets are honest, transparent, and accessible.³ Certain vault architectures can advance that vision.

II. How Code Delivers on the Promise

That promise depends on architecture. A vault is not safer, more transparent, or more efficient because it is called a “vault.” A vault is code, and code can be written to do many things. It can hard-code a single lending market with immutable parameters. It can permit a

² Paul S. Atkins, Chairman, U.S. Sec. & Exch. Comm’n, *Prepared Remarks Before SEC Speaks* (Mar. 19, 2026), <https://www.sec.gov/newsroom/speeches-statements/atkins-remarks-sec-speaks-031926-prepared-remarks-sec-speaks>.

³ Mark T. Uyeda, Comm’r, U.S. Sec. & Exch. Comm’n, *Capital, Choice, and the Pursuit of Happiness: Remarks at SEC Speaks* in 2026 (Mar. 19, 2026), <https://www.sec.gov/newsroom/speeches-statements/uyeda-remarks-sec-speaks-031926>.

curator to add or deprecate markets subject to timelocks, allowlists, caps, and vetoes by an independent protective role acting only upon preset, objective triggers. It can route capital according to a deterministic rule, such as deploying to the highest-rate approved market at any given time. It can also permit leverage, off-chain credit exposure, discretionary allocation, or operator-gated withdrawal. The regulatory question therefore cannot turn on the word “vault.” It must turn on what the code does, what it permits others to do, what it prevents others from doing, what the depositor receives, and what the depositor can understand, verify, monitor, and reject.

The sections that follow explain what code can do. Section A explains how code differs fundamentally from contract. Section B shows how programmable execution can unlock business efficiencies unavailable in traditional structures. Section C addresses what code can and cannot make verifiable. Section D explains how composability creates both opportunity and interconnection risk. Section E describes how code can define the terms of exit.

A. Code as Architecture, Not Covenant

The foundational distinction is that code is fundamentally, structurally different from contract. A traditional contractual covenant makes promises about future conduct and creates structures to both incentivize performance and to address deviations. In code, a smart contract permission boundary can make conduct architecturally impossible. If code does not permit a role-holder to transfer assets outside approved destinations, the role-holder cannot do so merely because incentives change. If an administrative or ministerial key has been irrevocably renounced, no person can later recover the authority it once conferred. If a parameter change is subject to a mandatory timelock, the change cannot take effect until the delay expires. Code can thus enable protections that a traditional contract never could.

B. Programmable Execution

Code also permits programmable execution — and with it, business efficiencies that legacy intermediation cannot match. In an on-chain lending market, overcollateralization requirements can be enforced mechanically, liquidation thresholds can be executed by any eligible liquidator, and interest rates can be determined by autonomous utilization-based models rather than by a lending desk. Settlement can be near-instantaneous. Reconciliation can be eliminated. Collateral can be seized and liquidated without judicial process, because the smart contract enforces the borrower’s pre-commitment. In an options-writing vault, collateral can be committed to a weekly cycle, options can be minted or auctioned through

a derivatives venue, and settlement can occur according to predefined parameters — all without the operational overhead of traditional prime brokerage or clearing infrastructure. In a fixed-basket holding vault, the code can define the asset set and redemption mechanics at inception, limiting or eliminating ongoing management cost after deployment. These efficiencies are not incidental. They are why vault architecture has attracted billions of dollars in deposits and why traditional financial institutions are exploring how to integrate it into their own infrastructure.

C. Recordkeeping, Verifiability, and Their Limits

Code can create a persistent public record. Transactions, positions, parameters, rate calculations, and pending role actions can be recorded on a public ledger, allowing depositors, regulators, researchers, and market participants to observe the vault's state without requesting information from an intermediary. Code can also support verifiability, particularly where the smart contracts are open-source and independently auditable before a deposit is made. But this point requires precision. The on-chain record reflects what the code records; it does not independently verify facts that exist only off-chain. A vault that deploys capital into off-chain credit obligations cannot make the borrower's covenant compliance, collateral perfection, or creditworthiness observable merely by writing a value to a blockchain. In those structures, the on-chain record may show only a value reported by an issuer, servicer, or oracle, and the legal analysis must account for that difference.

D. Composability

Code enables composability, which is the ability for vault receipt tokens and positions to interact with other smart contracts, allowing them to be displayed in wallets, used as collateral, integrated into other protocols, or incorporated into more complex strategies. This capability is central to the capital-efficiency promise of vaults because it turns tokenized exposures into assets that can be financed, collateralized, transferred, and reused inside digital financial infrastructure. Composability is not an unalloyed good. A vault receipt token posted as collateral in another lending market can create recursive exposure, and a chain of such positions can amplify losses when valuation, liquidity, or oracle assumptions fail. The same architecture that creates efficiency can also create interconnection risk, leverage, and dependency on other protocols. A sound regulatory framework should preserve the efficiency benefits of composability while ensuring that the resulting interconnections are transparent and that participants can assess the risks they are assuming.

E. Programmable Exit

Code can define exit. Some vaults permit instantaneous, permissionless withdrawal, limited only by available liquidity in the vault or the underlying market. Some employ asynchronous or queue-based mechanics, under which a depositor requests withdrawal and the vault processes that request later according to pre-disclosed rules, such as redemption queues, epoch-based settlement, or net-asset-value-cycle pricing. Some depend on off-chain settlement, such as liquidation of off-chain positions, borrower repayment, or processing by a platform intermediary. And some permit an operator or other role-holder to pause, delay, or condition withdrawal. The distinction between pre-disclosed mechanical constraints on exit and discretionary gating by an operator is factually significant because it affects whether information can be acted upon before a depositor's position changes.

III. The Factual Landscape: Archetypes, Dimensions, and Receipts

Vault Function. Vaults can first be understood by economic function: lending, holding or portfolio exposure, and derivatives or structured-position construction. But true understanding requires understanding implementations across mandates: on-chain or off-chain activity, leverage, liquidity, strategy composition, and return and loss mechanics.

Vault Receipts. While a vault receipt token may be technically similar across many implementations, its economic meaning will depend on the vault's activity and rights structure.

A. Primary Vault Archetypes

Against that technological background, the vault landscape is best understood by economic function, not label. Three primary categories describe the principal ways vaults are used:

- lending,
- holding or portfolio exposure, and
- derivatives or structured-position construction.

These are not regulatory classifications. They do not answer whether a vault receipt token is a security, whether a vault is an investment company, or whether a curator is an

investment adviser. They identify the economic activity the vault performs. The legal analysis turns on the specific implementation, not the category name.

Archetype	Economic Function	Return Source
Lending	Accepts deposits and makes those deposits available to borrowers through one or more lending markets or credit arrangements.	Borrower-paid interest, whether utilization-based, blended across funded markets, fixed in advance, or produced through carry and looping structures.
Holding / Portfolio	Acquires, holds, or maintains exposure to digital assets, tokenized instruments, liquidity positions, staking claims, or other asset baskets.	Asset appreciation, trading fees, staking rewards, or other cash flows associated with the held assets or positions.
Derivatives; Structured Positions	Uses deposited assets as collateral or inputs for options-writing, basis trades, delta-neutral strategies, tranching, or other structured exposures.	Premium income, funding-rate carry, trading profit and loss, or tranche-specific cash flows.

B. Cross-Cutting Implementation Dimensions

These categories overlap. A lending vault may use leverage. A holding vault may hold tokenized securities. A derivatives vault may be tranching. A multi-strategy vault may combine lending, liquidity provision, staking, and hedging. The chart therefore provides only the first map. The more important question is how the particular vault is built.

Vault implementations vary along several dimensions that recur throughout the legal analysis.

1. **Scope of the mandate.** A narrow mandate may authorize only one asset, one market, one collateral type, one liquidation threshold, and one interest-rate model. A broader mandate may permit capital to be routed across multiple venues, strategies, asset types, or counterparties. An immutable mandate may be fully knowable at deployment. An expandable mandate may permit a role-holder to add venues, adjust limits, or reconfigure eligible assets over time. The mandate determines how much of

the vault's economic character is knowable at any given moment and how much is left to future action.

2. **Location of the underlying activity.** Some vaults operate entirely on-chain, so that positions, collateral ratios, utilization rates, allocations, and pending changes are publicly observable and independently verifiable. Other vaults extend into off-chain markets, such as private credit, trade finance, receivables, equipment finance, centralized-exchange positions, or real-world asset structures. Those vaults may still use smart contracts for issuance, accounting, or distribution, but the code cannot itself verify off-chain borrower performance, lien perfection, collateral value, or covenant compliance. This on-chain-off-chain distinction defines the “transparency boundary”, that is, the point beyond which a depositor must rely on reporting, attestations, documents, or service providers rather than public blockchain state.
3. **Leverage.** Leverage is an overlay, not an archetype. It can be applied to lending, holding, or structured strategies. In a looped structure, a vault receipt token or other position may be posted as collateral to borrow more assets, which are then redeployed into the same or another strategy. In a derivatives strategy, leverage may arise from margin requirements, funding-rate exposure, or liquidation mechanics. In a cross-venue strategy, leverage may depend on multiple protocols or counterparties operating in sequence. Leverage amplifies the consequences of every other dimension because it increases sensitivity to valuation changes, makes execution decisions more consequential, and can complicate exit when positions must be unwound before withdrawal proceeds are available.
4. **Liquidity and settlement.** Some vaults hold positions that can be valued and redeemed immediately or near-immediately. Others hold positions that settle on cycles, such as weekly options strategies, fixed-rate lending terms, delayed net-asset-value updates, subscription windows, or redemption queues. Still others depend on off-chain settlement or borrower repayment before cash becomes available. These distinctions matter because a depositor's practical ability to exit depends not merely on whether the code exposes a withdrawal function, but on whether the vault's underlying positions can satisfy that withdrawal under the applicable rules and market conditions.
5. **Implementation complexity.** Some vaults implement single-step, single-venue operations, such as supplying one asset to one lending market. Others implement multi-step, multi-venue operations involving lending, borrowing, hedging, rebalancing, bridge activity, oracle-conditioned execution, or off-chain computation. But how a particular vault is implemented remains important. For example, a

deterministic rule that routes assets to the highest-rate approved lending market differs from a human allocation decision made each period, but both still require the depositor to understand the rule or decision process, the approved market set, and the risks embedded in the inputs used.

6. **Return and loss mechanics.** Returns may accrue through borrower-paid interest, trading fees, staking rewards, option premiums, funding-rate carry, token incentives, real-world cash flows, or appreciation in a receipt's exchange rate. Losses may be individualized, as in certain isolated lending markets, or socialized across all depositors through a shared exchange rate, as in multi-market vaults. Tranching can alter this allocation by causing junior classes to absorb losses before senior classes. Fees can also change the economics of the depositor's position: management fees may accrue through share dilution, performance fees may apply above a high-water mark, and platform or curator take-rates may layer additional costs onto the vault. These mechanics affect not only expected return, but also whether depositors share fortunes with one another, whether compensation creates incentives for risk-taking, and whether losses are transparent before they occur.

C. Vault Receipt Tokens

When a depositor supplies assets to a vault, the vault creates a position representation, referred to in this report as a "vault receipt token" and commonly called a vault receipt, vault share, or position token. The technical mechanism for creating vault receipt tokens is substantially uniform across many implementations. On Ethereum and other Ethereum Virtual Machine-compatible chains, two principal standards govern vault receipt tokens:

1. ERC-4626 defines a common interface for deposit, withdrawal, and share-accounting functions, enabling wallets, dashboards, aggregators, and other applications to integrate vaults through a standardized set of operations.
2. ERC-7540 extends this model for asynchronous mechanics, separating the request to deposit or withdraw from the fulfillment of that request and creating a pending state in which pricing, settlement, and risk allocation must be specified.

On Solana, equivalent functionality is achieved through SPL token accounts, share mints, program-derived addresses, and cross-program invocations.

Regardless, the underlying concept is the same: proportional-share accounting that records the depositor's claim on the vault's reported assets.

What can vary, though, even within the same standard, is the economic meaning of the vault receipt token. In a single-market lending vault, the receipt may represent a claim to the depositor's share of the *deposit* asset plus accrued borrower-paid interest, with no fixed maturity and no claim on the borrower's collateral. In a multi-market curated vault, the receipt may represent a pro rata claim on the vault's aggregate positions, with returns and losses shared across all depositors through the exchange rate. In a private-credit or real-world asset vault, the receipt may evidence a repayment obligation with a stated yield and defined maturity, with rights governed in part by off-chain documentation rather than solely by smart contract logic. In a derivatives vault, the receipt may represent a claim on collateral plus net premiums, less settlement losses from options or other derivatives activity. The legal analysis must follow a receipt's economic meaning, not the token label.

Certain receipt mechanics add further variation. Offchain-governed instruments may embed redemption terms, creditor rights, priority, and enforcement procedures in legal documentation rather than in code. A token can be technically visible on-chain while the legal rights it represents are determined by contracts, terms of service, intercreditor arrangements, or collateral documents that the blockchain does not enforce. The factual point is that vault receipt tokens are heterogeneous, and categorical conclusions about them as a class are analytically unsound.

D. Illustrative Application: Simple Overcollateralized Lending

The most commercially significant vault use case today illustrates why a fact-specific approach is necessary. In a simple overcollateralized lending vault, a depositor supplies a digital asset such as USDC to a smart contract lending market. Borrowers post collateral in excess of the loan amount, and collateral adequacy is enforced mechanically by the protocol. If collateral falls below the applicable threshold, an unaffiliated liquidator may execute the liquidation permissionlessly and for its own economic benefit. The depositor does not hold the borrower's collateral; she holds a claim denominated in the asset she supplied. The return she earns is borrower-paid interest, in many structures determined by an autonomous utilization-based model that responds to the relationship between supplied and borrowed capital. She may withdraw subject to the vault's liquidity and mechanics, and she can observe the relevant on-chain parameters in real time.

In that architecture, depositor returns are driven by disclosed, rule-based protocol mechanics rather than discretionary portfolio selection. No manager is necessarily selecting investments on the depositor's behalf. The material parameters of the market are visible on-chain. Discretionary judgment plays little or no role in driving the depositor's return.

That does not mean the depositor faces no risk. She faces smart contract risk, oracle risk, market risk, and liquidity risk. A bug in the code, a manipulated price feed, a sudden collapse in collateral value, or a run on the vault's liquidity could all cause her to lose money. But acknowledging that risk exists does not answer the regulatory question. The question is what kind of risk warrants the compliance burden of the federal securities laws, and whether a particular vault creates that kind of risk or has structured it away.

IV. The Principal-Agent Problem and the Control Framework

The Regulatory Question. The federal securities laws protect investors where they must rely on others. The threshold question for any vault is the degree to which its architecture requires that reliance, or the degree to which it enables the depositor to act for herself.

Control Framework. CCI and Chapman and Cutler propose the Control Framework for analyzing “control” across the Securities Act of 1933, the Investment Company Act of 1940, and the Investment Advisers Act of 1940.

Agent side: the agent side is evaluated through mandate, execution, governance, and disposition.

Depositor side: the depositor side is evaluated through six architectural conditions: comprehensibility, verifiability, observability, predictability, notice, and actionability.

Code as Architecture. Smart contract architecture can sufficiently reduce reliance by making the arrangement's terms bounded, visible, and self-enforcing, so that the depositor can act for herself rather than depending on others.

The federal securities laws, namely, the Securities Act of 1933, the Investment Company Act of 1940, and the Investment Advisers Act of 1940, rest on a singular economic insight: when an investor entrusts capital to a person who possesses superior information and exercises discretion over its deployment, the resulting relationship creates a structural opportunity for self-dealing, misallocation, and concealment. That is the principal-agent problem. And it is the specific problem these statutes were designed to address.

- The disclosure regime of the Securities Act addresses informational asymmetry: the promoter knows things the investor does not, and mandatory disclosure is Congress's chosen instrument for reducing that gap.

- The structural requirements of the Investment Company Act address the misalignment of interests that arises when pooled capital is managed by persons whose incentives may diverge from those of the investors they serve.
- The fiduciary framework of the Investment Advisers Act addresses the discretionary authority that advisers exercise over client assets, imposing duties of loyalty and care to constrain the risks that such authority creates.

This principal-agent rationale explains both the breadth and the limits of the statutory definitions. The Supreme Court has repeatedly emphasized that the definition of “security” must be construed flexibly, in light of the “economic realities” of the arrangement and the “remedial purposes” of the statute.⁴ Yet this flexibility is not unbounded. The Court has likewise cautioned that the federal securities laws are not a catchall for every species of financial transaction; they are directed at the particular informational and incentive failures that arise when persons pool capital under the management of others.

The corollary is equally important: where informational asymmetry is reduced (e.g., where material parameters are publicly observable, verifiable, and constrained against unilateral alteration), the justification for imposing the full disclosure apparatus may be attenuated. This does not eliminate regulatory interest, but it reframes the inquiry from “does this arrangement involve money and expectations of return?” to “does this arrangement create the principal-agent dynamic that securities law is designed to police?”

For vaults, the question is whether the architecture creates that dynamic, and to what degree. Commissioner Peirce has recognized that vaults “fall along a spectrum” and that whether a particular vault falls within the federal securities laws “will come down to the specific facts and circumstances.”⁵ CCI agrees. But we respectfully submit that a single linear spectrum is not sufficiently granular to do the work. A vault may employ immutable core logic while still permitting a human role to add eligible markets, adjust caps, or configure fees. Conversely, an upgradeable implementation may operate within a narrow mandate and impose strict code-enforced limits on execution. Most vaults occupy the middle ground, with some parameters immutable and others adjustable, some information transparent and some opaque, some discretion bounded and some less so. Immutability, upgradeability, and curation are attributes of the architecture, but they are not legal categories. The analysis requires a more structured framework.

⁴ Tcherepnin v. Knight, 389 U.S. 332, 336 (1967); SEC v. Zandford, 535 U.S. 813 (2002).

⁵ Hester M. Peirce, Comm’r, U.S. Sec. & Exch. Comm’n, *Headstands and Summervaults: A Statement on Crypto Vaults and Lending Strategies* (July 22, 2026), <https://www.sec.gov/newsroom/speeches-statements/peirce-statement-crypto-vaults-lending-strategies-072226>.

A. The Two-Sided Control Framework

CCI proposes a Control Framework for evaluating vault structures. The framework asks a single question from two directions: *Has code sufficiently reduced the need for reliance?* The first side examines what control non-depositor roles retain and how the architecture constrains that control. For this purpose, a role is protective—or administrative/ministerial—only if it may act solely on preset, objective triggers specified in code or published rules, such as pausing the vault upon a documented security incident or oracle failure or vetoing a pending action; it may not direct capital or affect returns. Discretionary changes made on market views, including risk-reducing changes such as lowering caps or narrowing allowlists, are curatorial, at the low end of curatorial authority; because they narrow rather than expand depositors’ accepted exposure, they need not be subject to a timelock or exit right. The second side examines whether the architecture gives the depositor the information and exit rights she needs to act for herself. Where both sides align, that is, where role authority is bounded and depositor agency is meaningful, then the depositor’s reliance on others is reduced and the case for securities-law coverage weakens. She is using a system whose terms she can understand, verify, and exit. Stated simply, exposure is strongest where a person retains material discretion after deposit and can extract value or alter outcomes without depositor consent, and weakest where no person can do so, the code is immutable and transparent, and depositors retain an unconditional ability to exit. Transparency and exit do not, by themselves, end the inquiry. The depositor-side conditions reduce reliance and bear on the reasonableness of depositor expectations and on the appropriate regulatory response; they do their principal work where the agent-side analysis shows that role authority is bounded.

The framework also identifies when the answer is yes. Consider a vault in which a curator, compensated by a share of returns, may add any market, set interest rates, select collateral assets, set loan-to-value limits and liquidation thresholds without a timelock, holds upgrade keys, and may pause or condition withdrawals at its discretion. Depositors in that vault depend on the curator’s judgment in precisely the way the federal securities laws address, and CCI would expect the securities laws to apply to it.

B. Agent-Side Control: Mandate, Execution, Governance, and Disposition

On the agent side, the Commission should evaluate each non-depositor role by asking what that role can do and how the architecture constrains the role’s control. We propose that this should be evaluated through four dimensions:

1. **Mandate** asks what assets, venues, strategies, exposures, and risk limits are permitted.
2. **Execution** asks who determines the timing and sizing of allocations within that mandate.
3. **Governance** asks who can change the mandate, replace actors, modify permissions, or alter the implementation.
4. **Disposition** asks whether any actor can transfer assets outside the mandate, direct them to an actor-controlled account, or otherwise appropriate them.

ROLE-HOLDER SIDE : MEGD FRAMEWORK

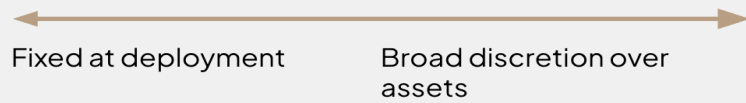
What are the actions a Vault curator or other role-holder can take that a depositor may rely on for “profits”?

LEAST MANAGERIAL

MOST MANAGERIAL

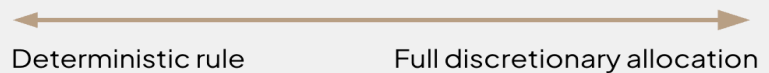
Mandate

What assets and strategies are permitted?



Execution

Who sets the timing and size of allocations?



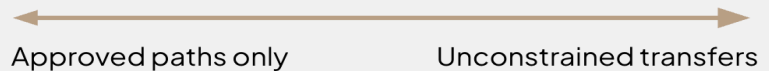
Governance

Who can change the rules or the actors?



Disposition

Can anyone move assets outside the mandate?



These powers create materially different legal and investor-protection risks. A role that can pause the vault only in response to a documented security incident or oracle failure is not the same as a role that can select assets for return-maximizing deployment. A role that can route assets only among code-approved destinations is not the same as a role that can transfer assets to an arbitrary address. A role that can add a market only after a public timelock is not the same as a role that can reallocate capital without notice.

C. Human Roles and Code-Enforced Constraints

The same nominal role may hold materially different authority across implementations. One protocol’s “curator” may select eligible markets and set exposure caps subject to timelocks and allowlists; another protocol’s “strategist” may actively rebalance among venues; a third role-holder may only execute deterministic harvesting functions. A discretionary change made on a market view, including a risk-reducing change such as lowering caps or narrowing allowlists, is curatorial even if it reduces risk and sits at the low end of curatorial authority.

Legal consequences should attach to function, not labels.

The relevant categories of human involvement span a wide range, including, without limitation:

- pre-deployment design, where the role-holder’s involvement ends before any deposit is made;
- protective (or administrative/ministerial) authority that may act solely on preset, objective triggers specified in code or published rules (for example, pausing the vault upon a documented security incident or oracle failure or vetoing a pending action), and that cannot direct capital or affect returns;
- bounded operational authority within code-enforced limits;
- parameter-setting within an otherwise immutable architecture; and
- discretionary allocation or origination, where the role-holder’s judgment materially drives depositor outcomes.

The boundary between parameter-setting and discretionary allocation is often the most important factual boundary in the analysis.

Code-enforced constraints are central to this inquiry. Enumerated permissions define exactly which actions a role can perform. Timelocks and notice periods delay risk-increasing changes and make them visible before they take effect. Allowlists and exposure caps restrict capital movement to approved destinations and impose maximum exposure limits. Independent protective (or administrative/ministerial) roles may pause the vault or veto pending changes only upon preset, objective triggers specified in code or published rules, such as a documented security incident or oracle failure; they cannot direct capital, affect economic returns, or act on market views. Discretionary changes made on market views, including risk-reducing changes such as lowering caps or narrowing allowlists, are curatorial rather than protective. They sit at the low end of curatorial authority and, because they narrow rather than expand depositors’ accepted exposure, need not be subject to a timelock or exit right. Irrevocable renunciation can permanently destroy a role-holder’s authority.

These constraints matter because they may transform a role that appears managerial in name into one that is bounded, observable, and defeasible in operation. The question in each case is whether a constraint actually eliminates managerial discretion or merely channels it.

Consider a timelocked change to an eligible-market list that depositors can observe and reject by withdrawing before it takes effect. That architecture is more analogous to a pre-announced software update than to a portfolio manager exercising unilateral investment discretion. The code has shifted what would otherwise be a trust relationship toward a verification relationship. That shift is the central promise of vault architecture, and it is the reason the Control Framework focuses on what the code permits and prevents, not merely on what roles are named.

D. Non-Operational Participants

The vault ecosystem also includes non-operational participants. Borrowers post collateral and pay interest. Liquidators enforce collateral thresholds permissionlessly and for their own economic benefit. Counterparties may provide leverage, trade against vault positions, or serve as back-leverage providers. Oracle providers supply price feeds, net-asset-value attestations, or other external data that the vault's code uses for execution and accounting. These participants are not operators of the vault merely because they interact with it, but their functions may matter to the legal analysis, particularly where their inputs affect valuation, liquidation, leverage, or the economic character of the depositor's position.

E. Depositor-Side Conditions for Agency

On the depositor side, the question is whether the architecture enables depositor agency. These are not merely things a depositor may do; they are architectural conditions the vault either provides or does not provide. They determine whether the depositor's decision to enter, remain in, or exit the vault is a genuine, informed choice. Six conditions are relevant:

1. Comprehensibility
2. Verifiability
3. Observability
4. Predictability
5. Notice
6. Actionability

Comprehensibility

Comprehensibility asks whether the depositor can understand the vault’s strategy, risks, and mechanics with reasonable sophistication. A single lending market with one deposit asset, one collateral type, one liquidation threshold, and one rate model is comprehensible to a broad range of participants. A multi-step strategy involving looped leverage, cross-protocol composability, derivatives hedging, oracle-conditioned rebalancing, and off-chain computation may be harder to evaluate, even if much of its activity is recorded on-chain. That observation is factual, not dispositive. Complexity alone does not answer any legal question. But an architecture that cannot be understood by its intended users raises different reliance and disclosure questions than an architecture whose material mechanics are simple, stable, and transparent. Nor can published code be assumed to satisfy this condition: many of the retail users vaults hope to reach will not read code, so comprehensibility depends on plain-language documentation and usable interfaces as well as on open-source logic.

Verifiability

Verifiability asks whether the depositor can independently confirm that the vault behaves as described. On-chain state is verifiable because the blockchain is the authoritative record of transactions and balances. Open-source code is verifiable because any person can inspect the vault’s logic and determine what it will do given a particular input. But not all visible information is verifiable. A self-reported net asset value transmitted to a smart contract by an oracle may be observable on-chain, while the off-chain loans, collateral, or covenants that support that value remain outside the depositor’s ability to verify. The distinction matters because the federal securities laws respond to information asymmetry, not merely to the absence of published information. Information that is visible but not independently verifiable may preserve the same reliance on others that disclosure regimes are designed to mitigate.

Observability

Observability asks whether the depositor can see the vault’s current state. On-chain positions, collateral ratios, utilization rates, liquidation activity, role assignments, and pending governance actions can be observable by any person in real time when the vault’s activity occurs fully on-chain. Offchain activity may be reported only periodically and through intermediaries, and even fully on-chain strategies may require usable interfaces, alerts, or standardized data presentation to be practically monitorable. Observability therefore has both a formal and a practical component. The information must exist, and it must be usable by the depositor in a way that makes ongoing monitoring realistic rather than nominal.

Predictability

Predictability asks whether the depositor can know what the vault will do. Immutable code and immutable parameters provide the strongest form of predictability, because the vault's behavior is knowable before deposit and cannot later be changed. Timelocked authority provides a weaker but still important form of predictability, because the vault is predictable within the timelock horizon and any future change must be announced before it becomes effective. Broad discretionary authority reduces predictability, because the depositor cannot know in advance how a role-holder will select markets, rebalance exposures, adjust rates, or manage off-chain credit. Predictability is therefore closely tied to the scope of the mandate and the degree to which future changes are constrained by code.

Notice

Notice asks whether the depositor learns about material changes before they affect her position. Timelocks are the principal architectural mechanism for notice: a pending parameter change is published to the blockchain and cannot take effect for a defined period. Notice transforms information from retrospective to prospective. Without it, the depositor may discover a change only after it has already altered the risk profile of her position. With it, the depositor can evaluate the change before deciding whether to remain in the vault. The sufficiency of notice depends on context: a short timelock may be meaningful for a simple cap reduction but inadequate for a complex, multi-venue strategy change that requires specialized analysis.

Actionability

Actionability asks whether the depositor can act on what she learns before it affects her position. Information without the ability to act on it is informational, not protective. Instantaneous permissionless withdrawal makes information immediately actionable, subject only to available liquidity. Queue-based withdrawal introduces a lag between decision and execution, and the relationship between the notice period and the withdrawal period determines whether the depositor can exit before a change takes effect. Offchain settlement may make exit depend on processes outside the code's control, such as borrower repayment, asset liquidation, or platform processing. Operator-gated withdrawal places the ability to act at another person's discretion, which recreates the dependence the Control Framework is designed to identify.

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These six conditions are mutually reinforcing. The more comprehensible, verifiable, observable, and predictable the arrangement, the more meaningful the depositor's ability to assess and oversee it. The timelier the depositor's notice of changes, the more real her opportunity to respond. And the more actionable her exit, the more consequential all the preceding conditions become, because information without the ability to act is advisory, not protective. Where these conditions are satisfied at a high level, the depositor's participation approaches something genuinely voluntary and informed — she has deployed capital into a system whose terms she can understand, verify, observe, anticipate, and, if dissatisfied, leave. Where the conditions are materially compromised, the depositor's agency is correspondingly diminished, and the relationship begins to resemble the dependence the federal securities laws are designed to address.

Responsible vault operators can reinforce these conditions through clear, accessible documentation, such as explaining what the code does, what parameters users should verify, and what they are observing in real time. Such disclosure is not a regulatory

DEPOSITOR SIDE: CAUSAL CHAIN

What agency does a depositor retain, such that his or her own efforts are responsible for “profits”?

INFORMATIONAL CAPACITY

What can the depositor know?

Comprehensibility: Can the depositor understand the vault's strategy, risks, and mechanics with reasonable sophistication?

Observability: Can the depositor see the vault's current state, or are they dependent on periodic reports from the operator?

Verifiability: Can the depositor independently confirm that the vault behaves as described, or must they trust the promoter's representations?



UNCERTAINTY REDUCTION

What can the depositor anticipate?

Predictability: Can the depositor know what the vault will do within a bounded time horizon, or is future behavior subject to unannounced discretionary changes?



PROTECTIVE CAPACITY

To what extent can the depositor act on what they know?

Notice: Does the depositor learn about material changes before they affect their position, transforming information from retrospective to prospective?

Actionability: Can the depositor act on what they learn? Specifically, can they withdraw before a pending change becomes effective?

mandate in every case, but it supports the architectural transparency the Control Framework identifies and makes depositor agency more meaningful in practice.

Further, the agent side and depositor side of the Control Framework are mutually reinforcing. The more constrained and transparent the non-depositor roles, the more meaningful the depositor's six conditions become. Conversely, the more comprehensible, verifiable, observable, predictable, noticed, and actionable the vault's architecture is for depositors, the less likely it is that any non-depositor role-holder functions as the kind of agent on whose efforts depositors must rely. Even where a curator, governance council, allocator, or other role-holder retains limited ongoing control, the relevant question is whether that control is bounded, visible, and defeasible by the depositor's informed decision to leave. That is the analytical lens CCI urges the Commission to apply.

F. One Set of Objective Conditions

The Volumes that follow refer to a single set of objective, code-verifiable conditions. A vault satisfies them where:

1. no role-holder, alone or with affiliates, can withdraw or transfer depositor assets to any destination outside a code-enforced set of approved destinations;
2. each depositor can redeem her vault receipt tokens through a code-enforced function that does not depend on any role-holder's cooperation, either at any time or on pre-disclosed, code-enforced settlement cycles;
3. vault assets are held at on-chain addresses segregated from any role-holder's proprietary assets, and each depositor's interest is recorded on-chain through vault receipt tokens;
4. all material parameters governing asset deployment are either immutable at deployment or changeable only through code-enforced procedures;
5. except for discretionary changes made on market views that narrow rather than expand depositors' accepted exposure (e.g., lowering caps or narrowing allowlists, which are low-end curatorial authority and need not be subject to a timelock or exit right but must be disclosed), any retained upgrade or parameter-modification authority is subject to a mandatory timelock, advance public notice, on-chain disclosure of the pending change, and a depositor exit window before the change takes effect;
6. no role-holder may exercise discretionary allocation or reallocation among approved markets or strategies after deposit, and any deployment or deallocation must occur only pursuant to immutable code or preset, objective parameters;
7. any protective (or administrative/ministerial) role is held independently of the curator and may act solely on preset, objective triggers specified in code or published

rules, including to pause the vault upon a documented security incident or oracle failure or to veto a pending action, with no ability to direct capital or affect returns, and other administrative functions require multi-party authorization;

8. the code has undergone an independent security audit before deployment and after any material upgrade, the audit is publicly available, and holdings, role assignments, and pending changes are continuously verifiable on-chain;
9. no role-holder directs assets to venues in which it has an undisclosed material economic interest; and
10. any assets or obligations beyond the transparency boundary are held with a qualified custodian and the boundary is disclosed.

V. Transition to Legal Analysis

This report focuses on the federal securities laws because those are the statutes the Commission administers and because the classification questions they present are the most urgent for the vault ecosystem. The question is whether a particular vault architecture triggers the specific registration, disclosure, and compliance obligations of the Securities Act, the Investment Company Act, and the Investment Advisers Act.

CCI does not suggest that vaults operate outside the law if they fall outside the securities-law perimeter. Fraud remains fraud. Federal wire fraud statutes, state fraud laws, and state consumer-protection statutes provide accountability for material misrepresentations, omissions, and deceptive conduct regardless of whether a vault receipt token is classified as a security. Nor does CCI suggest that the federal securities laws lose their reach where accountability is harder to locate. Where a vault position is a security, the antifraud provisions of the Securities Act and the Securities Exchange Act reach identifiable persons who make misstatements or engage in deceptive conduct in connection with it, and Section 206 of the Investment Advisers Act reaches any person who is an investment adviser. Where a person retains control over a vault, CCI supports identifying a designated compliance entity responsible for regulatory engagement and accountability. The proposition that architecture can reduce the need for securities-law reliance does not mean that deception is permissible, or that no one is answerable when something goes wrong. It means that the source and form of accountability may differ.

The analysis that follows applies the Control Framework across three distinct statutory regimes: the Securities Act (Volume II), the Investment Company Act (Volume III), and the Investment Advisers Act (Volume IV). Each regime asks a different legal question, but each turns on function, control, and the actual economic relationship created by the vault. Each Volume first identifies the function the statute regulates and then uses the Control

Framework to determine whether any person performs it. The principal-agent account explains why control is the right line; it does not substitute for the statutory test.

The Securities Act analysis (Volume II) asks whether an instrument connected to a vault is a security.

- Vault receipt tokens are generally analyzed under *Howey*. The decisive question is whether the depositor's expected profits are derived from the essential managerial efforts of others, meaning efforts that are "undeniably significant" to the enterprise. Where a vault's parameters are immutable after deployment and no person exercises control after deposit, CCI argues that the analysis supports a non-security result. For vaults with retained authority, CCI recommends a criterion the Commission can apply from the code: authority confined to a range fixed in code, subject to a timelock, with depositor exit before any change takes effect, is not an "undeniably significant" effort.
- Lending positions, and vault receipt tokens structured as debt, are analyzed under *Reves*. The most significant factor is the fourth: whether features of the instrument reduce risk enough to reduce the need for the securities laws. In a lending vault, overcollateralization, automated liquidation, algorithmic rate-setting, and real-time on-chain transparency do that work, and CCI asks the Commission to confirm that these positions belong to the existing commercial-loan family.

Under both tests, the analysis comes down to *control*. Where depositors rely on the control of others, and nothing else protects them, the instrument is likely a security. Where code limits what any role-holder can do and gives depositors the information and exit rights to act for themselves, the depositor retains control, and the case for securities-law coverage weakens.

The Investment Company Act analysis (Volume III) asks whether the vault is an investment company. The regulated function is the management of an entrusted pool. If the vault pools capital and invests in securities subject to someone's discretionary management, the Act's structural protections may apply. If the architecture makes the vault's operations more mechanical, bounded, and transparent, that is, if discretionary control is constrained or absent, then the case for coverage weakens.

The Investment Advisers Act analysis (Volume IV) asks whether any person is an investment adviser with respect to the vault. The regulated function is judgment exercised over another person's securities for compensation. If someone provides advice about securities for compensation, that is, if the depositor relies on another person's recommendations about what to buy, sell, or hold, the Act's fiduciary framework may apply. If the architecture

operates without that advisory relationship, the predicate for Advisers Act coverage is weakened.

In each case, the analysis proceeds from the same premise: legal consequences should attach to function, control, and actual economic relationships, not to labels, interfaces, or assumptions imported from legacy intermediated structures.

VOLUME II: APPLICATION OF THE SECURITIES ACT OF 1933

Executive Summary

This Volume asks whether positions in certain vault architectures are securities under the Securities Act of 1933 (the “Securities Act”). The Securities Act regulates the offer and sale of securities, and what makes an instrument a security is the relationship it creates. Each governing test identifies that relationship: under *Howey*, reliance on another person’s essential managerial efforts over the function that generates the investor’s return; under *Reves*, whether a note is an investment or a commercial instrument. The Control Framework then asks whether any person in a given vault actually stands in that position.

For the baseline vault, an isolated, overcollateralized lending market whose parameters are immutable after deployment, the analysis supports a non-security result. The depositor’s vault receipt token is analyzed under *Howey* unless its design adds a repayment obligation. The decisive question is whether the depositor’s return is derived from anyone’s essential managerial efforts, and in the baseline vault no person retains control over the return after deposit.

The vault’s lending positions are borrowers’ promises to repay principal plus interest, and they are analyzed under *Reves*. A vault receipt token that passes those positions through to its holders follows them. A token that represents an interest in a pool is analyzed under *Howey*. A token whose repayment an operator, sponsor, or senior tranche promises is a new note with a new obligor, and the baseline vault issues no such token. For the lending positions, the motivations factor is mixed, and the plan-of-distribution factor likely weighs toward security status where the tokens pass the positions through to an open, retail-facing base of depositors. The remaining factors, particularly overcollateralization, automated liquidation, and on-chain transparency, support confirming that these positions belong within the existing commercial-loan family.

Where vault positions are securities, the registration and reporting apparatus maps poorly onto code-driven infrastructure, beginning with the question of who the issuer is. CCI asks the Commission to calibrate its response to the authority actually retained, using its existing interpretive and exemptive authority, and to credit code-enforced protections where they deliver the substantive objectives of the securities laws.

I. Securities Act of 1933

A. The Principal-Agent Problem and the Securities Laws

1. The federal securities laws exist to address a specific economic problem: the agency costs that arise when one person entrusts capital to another who possesses superior information and exercises discretion over its deployment.
2. Mandatory disclosure, registration bonding, and anti-fraud liability each target a distinct component of those agency costs: monitoring costs, bonding costs, and residual losses.
3. The Supreme Court has consistently construed the securities laws with reference to economic substance and investor vulnerability, not transactional form.
4. Smart-contract vault architecture can structurally reduce the informational asymmetry and constrain the discretionary control that give rise to agency costs, potentially altering the predicate for securities-law coverage.
5. CCI's thesis is that each test identifies the relationship the securities laws address, and the Control Framework shows whether any person stands in it. Under *Howey*, that is reliance on another's managerial control over the return-generating function; under *Reves*, it is whether a note is an investment or a commercial instrument. Where certain vault architectures leave no person with control over depositor assets or over the return-generating function, or confine any remaining judgment within code-enforced bounds subject to timelock and depositor exit, no person stands in that relationship and the tests tend to support a non-security result; where a person retains material post-deposit discretion that the code does not bound and that amounts to essential managerial effort over the return, they tend to support a security result. The agency problem that explains why control is the right line includes both control-related risk and information asymmetry.

The federal securities laws rest on a singular economic insight: when an investor entrusts capital to a person with superior information and discretion over its deployment, the resulting agency relationship creates opportunities for self-dealing, misallocation, and concealment. When one person, the *principal*, entrusts capital to another, the *agent*, who possesses those informational and discretionary advantages, three categories of cost arise. First, the principal must spend resources *monitoring* the agent's conduct (i.e., verifying that the agent is acting as promised rather than self-dealing, misallocating, or concealing).

Second, the agent must spend resources *bonding* (i.e., credibly committing to the principal that the agent will constrain its own behavior, through contractual restrictions, guarantees, audited financial reporting, or other mechanisms that make defection costly). Third, *residual losses* persist despite monitoring and bonding, because no system of oversight perfectly aligns the agent's incentives with the principal's.¹ These costs are positive whenever the persons who manage invested capital are not the sole owners of that capital.² The greater the informational asymmetry between agent and principal, and the broader the agent's discretion, the larger these costs become, as does the structural opportunity for misconduct.³

The federal securities laws are Congress' institutional response to this problem. Mandatory disclosure reduces *monitoring costs*: by compelling the production of information about insiders' financial interests and the terms on which capital is raised and deployed, the Securities Act reduces what investors must spend to detect self-dealing.⁴ Registration imposes *bonding costs* on issuers: preparing and filing a registration statement, and accepting the liability regime that attaches to it, is itself a form of credible commitment, because it subjects the issuer and its agents to legal consequences for misrepresentation.⁵ Anti-fraud liability increases the expected cost of the *residual losses* that persist despite monitoring and bonding: the Securities Act's liability provisions make concealment and self-dealing actionable, reducing the residual divergence between agent conduct and principal interests.⁶ The Investment Company Act and the Investment Advisers Act go further by imposing direct structural and fiduciary constraints on persons who manage other people's capital, addressing the agency problem through governance as well as through information.⁷

¹ Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. Fin. Econ. 305, 308 (1976). The separation of ownership and control, and the agency costs it creates, was first systematically described by ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 119–25 (1932). See also Eugene F. Fama & Michael C. Jensen, *Agency Problems and Residual Claims*, 26 J.L. & ECON. 327, 327–29 (1983) (defining agency costs as “includ[ing] the costs of structuring, monitoring, and bonding a set of contracts among agents with conflicting interests”). “Bonding expenditures” are the agent's own costs of credibly committing to the principal that the agent will constrain its behavior. See Jensen & Meckling, *supra* note 1, at 325–28.

² See Jensen & Meckling, *supra* note 1, at 312–13.

³ See John Armour, Henry Hansmann & Reinier Kraakman, *Agency Problems and Legal Strategies*, in *The Anatomy of Corporate Law* 29, 29–31 (Reinier Kraakman et al. eds., 3d ed. 2017); see also Kenneth M. Rosen, *Financial Intermediaries as Principals and Agents*, 48 WAKE FOREST L. REV. 625, 625–28 (2013); Stephen A. Ross, *The Economic Theory of Agency: The Principal's Problem*, 63 AM. ECON. REV. 134 (1973).

⁴ See Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1051 (1995) (“By reducing shareholders' monitoring expenses, therefore, disclosure reduces the total agency cost associated with the corporate form.”).

⁵ Securities Act of 1933 §§ 5, 7, 10, 15 U.S.C. §§ 77e, 77g, 77j (registration and disclosure); *id.* § 11 (imposing liability on issuers, directors, officers, underwriters, and experts for material misstatements or omissions in the registration statement). See Jensen & Meckling, *supra* note 1, at 325–28 (bonding costs).

⁶ Securities Act of 1933 §§ 11, 12, 17(a), 15 U.S.C. §§ 77k, 77l, 77q(a); Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b); 17 C.F.R. § 240.10b-5.

⁷ Investment Company Act of 1940 §§ 10, 15, 17 (structural protections); Investment Advisers Act of 1940 §§ 206, 211 (fiduciary duties). See generally LOUIS LOSS, JOEL SELIGMAN & TROY PAREDES, *SECURITIES REGULATION* ch. 1 (7th ed. 2025).

The Supreme Court has understood the statute in precisely these terms. The purpose of the Securities Act is to protect those who cannot “fend for themselves”: persons who lack the information, sophistication, or access necessary to evaluate the risks that the persons controlling their capital may impose on them.⁸ The definition of “security” must therefore be construed flexibly: “In searching for the meaning and scope of the word ‘security’ in the Act, form should be disregarded for substance and the emphasis should be on the economic reality.”⁹ Yet this flexibility is not unbounded. The federal securities laws are not a catchall for every species of financial transaction.¹⁰

Additionally, the securities laws are not static. From time to time, the Commission and Congress recalibrate the regulatory apparatus to match evolving economic realities. In 1969, Commissioner Francis Wheat’s Disclosure Policy Study found that the static, offering-based registration scheme of the Securities Act duplicated disclosure that seasoned issuers were already providing through periodic reporting under the Exchange Act, and recommended what became the integrated disclosure system, calibrating the Securities Act apparatus to the actual information gap rather than applying it mechanically to every offering.¹¹ The Regulation D reforms created private-placement safe harbors for transactions where investor sophistication reduced the information asymmetry that registration was designed to address.¹² The JOBS Act relaxed restrictions on general solicitation and created new exemption tiers, recognizing that the costs of full registration could be disproportionate for smaller offerings to informed participants.¹³ In each case, the regulatory response was recalibrated to be proportionate to the actual information problem.

CCI respectfully submits that certain crypto vault architectures present another such moment. But the recalibration CCI proposes differs in kind from its predecessors. The Wheat Report, Regulation D, and the JOBS Act each adjusted the *procedural* requirements of the securities laws (who must register, what must be filed, and to whom securities may be sold) while leaving the underlying principal-agent dynamic intact. Under certain circumstances, vault architecture can address the *substantive* problem: it can reduce the informational asymmetry and constrain the discretionary control that give rise to the agency costs the securities laws exist to police. Where it does so, the question is not one of procedural accommodation but whether the conditions that necessitate the application of the securities laws are present in the first place.

⁸ SEC v. *Ralston Purina Co.*, 346 U.S. 119, 125 (1953).

⁹ *Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967).

¹⁰ *Marine Bank v. Weaver*, 455 U.S. 551, 556 (1982).

¹¹ SEC, Disclosure to Investors: A Reappraisal of Federal Administrative Policies Under the ‘33 and ‘34 Acts (1969) [hereinafter Wheat Report]. See also Alfred N. Sacha, *Securities Regulation Reform: Past, Present and Future*, 37 DEPAUL L. REV. 447, 463 (1988).

¹² See 17 C.F.R. §§ 230.501–.508 (Regulation D); *Ralston Purina*, 346 U.S. at 125.

¹³ Jumpstart Our Business Startups Act, Pub. L. No. 112-106, 126 Stat. 306 (2012).

The operative claim follows from the statute rather than from the economics. Each test identifies the relationship the securities laws address, and the Control Framework asks whether any person stands in it. Where no person retains control over depositor assets or over the return-generating function, depositors are not relying on anyone's managerial efforts in the sense the tests require. The agency-cost account explains why that is the right line to draw: where an arrangement structurally reduces the informational asymmetry and architecturally constrains, or prevents, the discretionary control that gives rise to the principal-agent problem, the predicate for applying the securities laws is attenuated, or eliminated altogether. This is not because the depositor faces no risk. Rather, the *specific market failure* that the statute was designed to correct may already be addressed by the architecture itself. A smart-contract permission boundary can make certain conduct *architecturally impossible*, not merely prohibited. If code does not permit a role-holder to transfer assets outside approved destinations, the role-holder cannot do so merely because incentives change. If an administrative key has been irrevocably renounced, no person can later recover the authority it once conferred. If a parameter change is subject to a mandatory timelock, the change cannot take effect until the delay expires, which the depositor can observe and exit before it does. And if a lending market enforces overcollateralization requirements mechanically, so that any eligible participant can execute a liquidation permissionlessly when collateral falls below the coded threshold, the structural protection is not a promise that the operator might break. Rather, it is a condition that the code enforces without human intervention.¹⁴ These constraints map directly to the economic framework. They can reduce *monitoring costs* (because the code is open-source and the blockchain is the authoritative record), *bonding costs* (because the code enforces the commitment rather than requiring a separate guarantee), and *residual losses* (because the code can eliminate entire categories of conduct that would otherwise require oversight).¹⁵

Where such constraints are present and effective, classifying these instruments as securities may not materially improve depositor protection relative to the constraints the architecture already imposes. Instead, it may deny depositors access to financial infrastructure that the architecture has already made transparent, bounded, and self-enforcing. This is not an argument for deregulation. A host of federal and state anti-fraud statutes, wire-fraud laws, and consumer-protection statutes provide accountability for material misrepresentations

¹⁴ The CCI Whitepaper Introduction discusses these architectural features in detail, distinguishing contractual covenants (which promise future conduct) from smart-contract permission boundaries (which make certain conduct architecturally impossible).

¹⁵ See Jensen & Meckling, *supra* note 1, at 308; Fama & Jensen, *supra* note 1, at 328–29.

and deceptive conduct regardless of whether a particular instrument is classified as a security.¹⁶

The counter-case. Further, CCI does not suggest that all vault architectures fall outside the securities laws. The application of these statutes is and should be fact-dependent, and the facts of particular vault designs may well establish the elements of an investment contract or a security note.¹⁷ The same Control Framework identifies vaults that issue securities. The clearest is a vault whose curator holds unbounded control to decide on asset allocation, when to purchase and sell those assets, and otherwise manage those assets. Depositors in that vault rely on the curator’s managerial efforts in exactly the way *Howey* addresses, however transparent the vault may be, and CCI does not contend otherwise. And if those assets are securities, then such a vault also raises the Investment Company Act and Advisers Act questions addressed in Volumes III and IV. Likewise, a lending vault whose curator conducts borrower diligence, sets interest rates and sets and adjusts loan-to-value limits, enters into lend/borrow agreements, perfects collateral, monitors covenants, and liquidates collateral, each on behalf of depositors, moves toward the same result. That curator performs the work of a lender, and the depositor’s return depends on how well she performs it.

Mapping to the past. The Commission’s own enforcement experience shows the counter-case in practice. In the matters involving BlockFi, Celsius, and Genesis, centralized operators took in crypto assets, decided on their own how to deploy them, moved capital into opaque and illiquid positions, and concealed the resulting risks from depositors who could neither see what was happening nor leave in time.¹⁸ Each of those failures depended on a person who could move assets, change terms without notice, or block withdrawal. A vault whose code prevents those things has removed the conditions that made the failures possible.

The case law draws the line in the same place. The “touchstone” of an investment contract is a reasonable expectation of profits “derived from the entrepreneurial or managerial efforts of others,”¹⁹ and *Turner* limits those efforts to “the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.”²⁰ The

¹⁶ See, e.g., 18 U.S.C. § 1343 (wire fraud); see Cal. Bus. & Prof. Code § 17200. The anti-fraud provisions of the federal securities laws apply to conduct “in connection with” the offer, sale, or purchase of a security and thus require that the instrument be a security as a threshold matter. Securities Act of 1933 § 17(a), 15 U.S.C. § 77q(a).

¹⁷ See Commissioner Hester M. Peirce, *Headstands and Summervaults: A Statement on Crypto Vaults and Lending Strategies* (July 22, 2026) (market participants should “analyze whether their activities implicate the federal securities laws”).

¹⁸ See *In re BlockFi Lending LLC*, Sec. Act Release No. 11029, Inv. Co. Act Release No. 34503 (Feb. 14, 2022); *SEC v. Genesis Glob. Cap., LLC*, No. 1:23-cv-00287 (S.D.N.Y. Jan. 12, 2023); *In re Celsius Network LLC*, No. 22-10964 (Bankr. S.D.N.Y. 2022).

¹⁹ *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852 (1975).

²⁰ *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973); see also Application of the Federal Securities Laws to Certain Types of Crypto Assets and Certain Transactions Involving Crypto Assets, 91 Fed. Reg. 13,714, 13,720 (Mar. 23, 2026) [hereinafter, the “2026 Joint Interpretation”].

question is not whether anyone in a vault does *anything*, but whose actions the depositor reasonably relies on to generate her expected return. The Control Framework, developed in the Introduction, is how this Volume answers that question for code. On the agent side, Mandate, Execution, Governance, and Disposition establish what control each role-holder retains and how the code confines it. On the depositor side, the six conditions establish how a depositor can retain control: whether she chooses, on terms she can understand and verify, to commit her assets, and whether she decides, with notice and before any change reaches her, to stay or leave. Where the code confines the first and secures the second, the efforts that drive her return are her own.

Two questions therefore run through this Volume.

The first is doctrinal: does a vault receipt token or lending position satisfy *Howey* or *Reves*?

The second is architectural: does the vault's code solve the problem those tests are designed to identify, by removing the depositor's dependence on a person who controls her return?

Bottom line. Where code solves the principal-agent problem that the securities laws are designed to solve, the reason for securities status weakens, and the doctrinal tests point away from security status. Where it does not, the reasons for securities status strengthens. Most vaults fall between, with some parameters fixed and others adjustable and some roles bounded and others less so, in combinations no single line can capture. Those are the cases on which the Commission's guidance matters most. Section B applies this analysis to vault receipt tokens under *Howey*, Section C to lending positions under *Reves*,²¹ and Section D addresses what follows where a vault position is a security.

The baseline vault. The analysis begins with the baseline architecture described in the Introduction (Section III.D): an isolated, overcollateralized lending market whose parameters (collateral asset, loan asset, liquidation threshold, oracle, and interest-rate model) are set at deployment and immutable thereafter. Its participants are the depositor, who supplies assets and receives vault receipt tokens; the borrower, who posts collateral and draws liquidity; liquidators, any of whom may execute a liquidation when a position falls below the coded threshold; and, in curated vaults, a curator, who selects among markets and sets caps, and who is typically compensated by a fee set as a percentage of assets or of interest earned. Some vaults also assign a separate safety role with only trigger-based authority. Where this Volume refers to an "autonomous" vault, it means the baseline vault. Each later Section first

²¹ *Reves v. Ernst & Young*, 494 U.S. 56 (1990). Vault receipt tokens are economically heterogeneous. A floating-NAV vault receipt token representing a proportional pool claim is analyzed under the *Howey* investment-contract test. A fixed-yield vault receipt token with a repayment obligation is analyzed under the *Reves* family-resemblance test.

analyzes the baseline vault and then tests whether particular added features, such as curator allocation authority, upgradeability, or off-chain collateral, change the result.

B. The Investment-Contract Analysis

Key Points: The Howey Investment-Contract Analysis Applied to Vault Architecture

- 1. For the baseline vault, the decisive Howey element is whether the depositor's return is derived from the essential managerial efforts of others. The common-enterprise element and the character of the return are addressed, but CCI does not rest on them.**
- 2. The MEGD framework (Mandate, Execution, Governance, Disposition) provides the factual vocabulary for the agent-side inquiry; six depositor conditions (comprehensibility, observability, verifiability, predictability, notice, actionability) provide the depositor-side inquiry. Both must be evaluated together.**
- 3. Code-enforced constraints (timelocks, supply caps, allowlists, permissionless exit) can reduce Howey reliance itself (and not merely disclosure obligations), because they make certain conduct architecturally impossible rather than contractually prohibited.**
- 4. The enforcement comparators (Prosper, BlockFi, Genesis, DMM, BarnBridge) each involved centralized discretion, custody, undisclosed deployment, and information asymmetry. Where architecture materially lacks those facts, these cases may be less persuasive.**

Section A identified the agency-cost problem that securities regulation addresses and the Control Framework that organizes CCI's analysis. This Section applies the Howey investment-contract test to vault architecture and shows that the outcome depends on what the code does, what control the depositor retains, and whether the arrangement creates the agency relationship the securities laws target.

The Supreme Court's decision in *SEC v. W.J. Howey Co.* established the foundational test for determining whether a transaction constitutes an "investment contract," a term the statute does not define but that encompasses "a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party."²² Subsequent decisions have consolidated this formulation

²² *SEC v. W.J. Howey Co.*, 328 U.S. 293, 298–99 (1946).

into three elements: (1) an investment of money in (2) a common enterprise, (3) with a reasonable expectation of profits derived from the essential managerial efforts of others.²³ The disjunctive “contract, transaction, or scheme” means no formal agreement is required; the arrangement may be implied from conduct, marketing, and economic substance.²⁴ The March 2026 Joint Interpretation makes clear that the analysis attaches to the *transaction*, meaning the deposit and the terms surrounding it, rather than to the crypto asset itself.²⁵

CCI addresses each element in turn. The first two, investment of money and common enterprise, are necessary predicates but do not, for most vault architectures, determine the outcome. The third element, whether the depositor reasonably expects profits *derived from* the essential managerial efforts of others, is the doctrinal center. The word “derived” supplies the necessary causal link: it is insufficient to show that someone performs significant efforts somewhere in the system; those efforts must *generate* the depositor’s profit expectation.²⁶ The Control Framework introduced in the Introduction provides the factual vocabulary for this inquiry.

B.1. Investment of Money

The first element is generally straightforward. A depositor who deposits crypto assets into a vault smart contract (whether stablecoins, wrapped ether, or other digital tokens) surrenders economic value in exchange for a vault receipt token representing a claim on future returns. The 2026 Joint Interpretation treats deposits of digital assets as satisfying this element without extensive analysis,²⁷ and the economic substance of surrendering capital for a financial return will satisfy the element in the overwhelming majority of vault deposits.²⁸ CCI does not contend that a depositor’s ability to withdraw on demand defeats this element. Bank deposits fall outside the securities laws because of the comprehensive banking regulatory regime, not because depositors may withdraw their funds.²⁹

B.2. Common Enterprise

The common-enterprise element is addressed in four parts. It first surveys the three commonality standards and the unresolved circuit split (Section B.2.a). It then addresses whether the element performs independent doctrinal work (Section B.2.b). Third, it applies

²³ See *Forman*, 421 U.S. at 852; *Int’l Bhd. of Teamsters v. Daniel*, 439 U.S. 551, 561 (1979).. *Turner*, *supra* note 20, at 481–82. CCI follows the three-prong consolidation used by most circuits.

²⁴ See *Howey*, 328 U.S. at 298–99; *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351 (1943).

²⁵ 2026 Joint Interpretation, *supra* note 20, at 13,720.

²⁶ See *Turner*, 474 F.2d at 482.

²⁷ 2026 Joint Interpretation, *supra* note 20, at 13,720.

²⁸ See *id.*

²⁹ *Marine Bank*, 455 U.S. at 558–59.

horizontal commonality to the baseline vault, distinguishing market interdependence from enterprise interdependence (Section B.2.c). Finally, it addresses vertical commonality and the transition to the efforts-of-others inquiry in Section B.3 (Section B.2.d).

B.2.a. The Three Standards and the Circuit Split

The second element of the *Howey* test requires that the investment of money be made “in a common enterprise.” The Supreme Court has never defined this phrase. The federal circuits apply three principal standards, and the Tenth Circuit applies a fourth approach, each understanding “common enterprise” differently. The distinction matters because it can determine whether the same vault deposit is a security in one circuit but not in another.

The first and most demanding standard is *horizontal commonality*. It focuses on the relationship among investors, asking whether multiple investors have pooled their money so that each investor’s economic outcome depends on the performance of the collective pool rather than on the investor’s individual contribution. *Revak v. SEC Realty Corp.* provides the classic formulation: horizontal commonality requires “the tying of each individual investor’s fortunes to the fortunes of the other investors by the pooling of assets, usually combined with the pro-rata distribution of profits.”³⁰ The First, Second, Third, Sixth, and Seventh Circuits require or apply horizontal commonality.³¹

The second standard is *broad vertical commonality*. It focuses not on the relationship among investors but on the relationship between investors and a promoter, asking whether the investors’ success depends on the promoter’s expertise. The Fifth Circuit developed this standard in *Koscot*, holding that “the requisite commonality is evidenced by the fact that the fortunes of all investors are inextricably tied to the efficacy” of the promoter’s efforts.³² The Fifth and Eleventh Circuits follow this approach.³³

The third standard is *strict (narrow) vertical commonality*. Like the broad version, it looks at the investor-promoter relationship, but it demands more: the promoter’s own financial fortunes, and not merely her efforts, must rise and fall with the investor’s. If the promoter earns a flat fee regardless of whether the investment succeeds or fails, strict vertical commonality is not satisfied. The Ninth Circuit applies this standard by examining whether the promoter and investor share the same economic risk.³⁴

³⁰ *Revak v. SEC Realty Corp.*, 18 F.3d 81, 87 (2d Cir. 1994).

³¹ *Id.*; *SEC v. SG Ltd.*, 265 F.3d 42, 49–50 (1st Cir. 2001); *SEC v. Infinity Group Co.*, 212 F.3d 180, 187–89 (3d Cir. 2000); *SEC v. Professional Associates*, 731 F.2d 349, 354 (6th Cir. 1984); *Milnarik v. M-S Commodities, Inc.*, 457 F.2d 274, 276–77 (7th Cir. 1972).

³² *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473, 479 (5th Cir. 1974).

³³ *See id.*; *SEC v. Unique Fin. Concepts, Inc.*, 196 F.3d 1195, 1199 (11th Cir. 1999) (citing *SEC v. Glenn W. Turner Enterprises, Inc.*, 474 F.2d 476 (9th Cir. 1973)).

³⁴ *See SEC v. Rubera*, 350 F.3d 1084, 1090 (9th Cir. 2003).

Finally, the Tenth Circuit has charted its own course, analyzing the economic reality of the underlying transaction without requiring any particular form of commonality as a threshold requirement.³⁵ The Supreme Court has not resolved this circuit split.

B.2.b. Common Enterprise Must Be a Separate Element

Before turning to the vault analysis, CCI addresses a threshold question: does the common-enterprise element have independent content, or is it merely a restatement of other parts of the *Howey* test? The question matters because the broadest formulation, broad vertical commonality, asks whether the investor depends on the promoter's expertise. But the third element of *Howey* independently asks whether the investor's expected profits are "derived from the entrepreneurial or managerial efforts of others." If dependence on the promoter's expertise satisfies both the second element (common enterprise) and the third element (efforts of others), then the common-enterprise requirement is doing no independent work. It is surplusage.

Courts and commentators have recognized this problem. In *Revak*, the Second Circuit warned that under broad vertical commonality, "two separate questions posed by *Howey* — whether a common enterprise exists and whether the investors' profits are to be derived solely from the efforts of others — are effectively merged into a single inquiry."³⁶ Judge Lay's concurrence in *SEC v. ETS Payphones, Inc.* put the point directly: "Proof of horizontal commonality is required because requiring only proof of broad vertical commonality makes *Howey*'s third prong — expectation of profits to be derived from the efforts of others — superfluous."³⁷ The SEC made the same point in its brief to the First Circuit in the *Edwards* litigation, stating that "broad vertical commonality is not an appropriate test because it collapses the second prong of the *Howey* test into the third prong."³⁸

As a matter of statutory construction, every element of a legal test must be given independent meaning; surplusage is disfavored. CCI proceeds from the premise that the common-enterprise element performs independent doctrinal work. The text of *Howey* requires it, *Revak* confirms it, and the SEC's own concession acknowledges it. CCI does not suggest that the common-enterprise and efforts-of-others inquiries can never overlap on the same facts. They can and often do. But the purpose of each element is different: the common-enterprise element tests whether the *structure* of the arrangement creates the kind of collective economic interdependence that characterizes a venture, while the efforts-

³⁵ See *McGill v. Am. Land & Exploration Co.*, 776 F.2d 923, 925 (10th Cir. 1985).

³⁶ *Revak*, 18 F.3d at 88.

³⁷ *SEC v. ETS Payphones, Inc.*, 300 F.3d 1281, 1285 (11th Cir. 2002) (Lay, J., concurring).

³⁸ Ryan Borneman, *Why the Common Enterprise Test Lacks a Common Definition: A Look Into the Supreme Court's Decision of SEC v. Edwards*, 5 U.C. DAVIS BUS. L.J. 16 (2005) (quoting Brief for Appellant at 28 n.11, *SEC v. SG Ltd.*, 265 F.3d 42 (1st Cir. 2001)).

of-others element tests whether a person within that structure exercises essential managerial authority.

B.2.c. Horizontal Commonality and the Baseline Vault

CCI acknowledges that the baseline vault may satisfy horizontal commonality as courts have formally stated it. Vault smart contracts that use proportional-share accounting give each depositor a pro rata claim on the pool, and when bad debt occurs the loss falls on all suppliers pro rata; that resembles the “tying of each individual investor’s fortunes to the fortunes of the other investors” that *Revak* describes.³⁹

The cases nonetheless draw a distinction that the formal statement does not capture: the difference between participants whose fortunes are interdependent and participants whose fortunes are merely correlated. *Market interdependence* arises when participants are exposed to the same external variable, such as a market price or a market-clearing rate; their outcomes move together, but no participant’s outcome depends on the existence or contribution of the others. *Enterprise interdependence* arises when pooling changes outcomes, either by creating access to opportunities individual capital could not reach (see, e.g., *Infinity Group*, *Banner Fund*) or by blending heterogeneous individual results into a collective return (see, e.g., *Howey*, *Hocking*). The cases rejecting horizontal commonality involve management or shared exposure without that kind of pooling (see, e.g., *Deckebach*, *Wals*, *Milnarik*). In *Noa v. Key Futures*, for example, purchasers’ returns on silver bars depended on movements in the silver market, not on any pooling of their investments. A return that depends on others, whether other market participants or a market price, is not for that reason a return from an enterprise.⁴⁰

A single isolated lending market presents market interdependence. Every depositor earns the same algorithmically determined rate from the moment of deposit, and a depositor supplying the market alone would earn the same rate on the same terms. Pro rata loss socialization does not change that result. Bad debt is the pool’s own credit loss rather than an external price, but in an isolated market with immutable parameters each depositor would bear the identical credit risk if she supplied the market alone; pooling divides the loss without blending different individual outcomes, which is the enterprise function *Hocking* identified.

³⁹ *Revak*, 18 F.3d at 87.

⁴⁰ *SEC v. Infinity Group Co.*, 212 F.3d 180, 188–89 (3d Cir. 2000); *SEC v. Banner Fund Int’l*, 211 F.3d 602, 614–15 (D.C. Cir. 2000); *Howey*, 328 U.S. at 298–99; *Hocking v. Dubois*, 885 F.2d 1449, 1459 (9th Cir. 1989) (en banc); *Deckebach v. La Vida Charters, Inc.*, 867 F.2d 278, 282 (6th Cir. 1989); *Wals v. Fox Hills Dev. Corp.*, 24 F.3d 1016, 1018–19 (7th Cir. 1994); *Milnarik v. M-S Commodities, Inc.*, 457 F.2d 274, 277 (7th Cir. 1972); *Noa v. Key Futures, Inc.*, 638 F.2d 77, 79 (9th Cir. 1980).

Even where a court were to conclude that the common component is sufficient to satisfy the common-enterprise element, the analysis would not end there. Whether the depositor's expected profits are derived from essential managerial efforts remains the decisive question, and the code-constrained nature of these architectures is directly relevant to it.

B.2.d. Vertical Commonality

The circuits that accept vertical commonality, whether broad or strict, present the most challenging standard for CCI's position.

Broad vertical commonality, accepted in the Fifth and Eleventh Circuits, requires only that “the fortunes of all investors are inextricably tied to the efficacy” of the promoter's efforts.⁴¹ In *Long v. Shultz Cattle Co.*, the Fifth Circuit elaborated that this “interdependence may be demonstrated by the investors' collective reliance on the promoter's expertise even where the promoter receives only a flat fee or commission.”⁴² Under this standard, any vault where depositors collectively rely on a curator's expertise, including bounded expertise compensated by a flat fee, could satisfy the element.

Strict vertical commonality, applied in the Ninth Circuit, requires more: the promoter's fortunes must be interwoven with the investors' fortunes.⁴³ A curator earning a fixed percentage of assets under management regardless of performance presents a weaker case than one whose compensation is performance-linked. *McGreevy v. Digital Currency Group* illustrates the distinction: Genesis satisfied strict vertical commonality because it adjusted investor rates based on its own relending success, functionally tying its fortunes to investors'. A curator earning a flat fee regardless of vault performance does not present the same structure.⁴⁴

CCI submits three points for consideration:

First, horizontal commonality is the sounder standard. The circuits that accept broad vertical commonality risk collapsing the common-enterprise element into the efforts-of-others inquiry, precisely the merger that Revak warned against and that the SEC itself acknowledged in its First Circuit brief.⁴⁵ The better approach treats commonality and efforts-of-others as distinct inquiries, each performing independent doctrinal work.

⁴¹ *Koscot*, 497 F.2d at 479.

⁴² *Long v. Shultz Cattle Co.*, 881 F.2d 129, 140–41 (5th Cir. 1989).

⁴³ *SEC v. Eurobond Exchange, Ltd.*, 13 F.3d 1334, 1339 (9th Cir. 1994).

⁴⁴ See *McGreevy v. Digital Currency Grp., Inc.*, No. 3:23-cv-00082 (SRU), slip op. at 8 (D. Conn. Feb. 24, 2026).

⁴⁵ Borneman, *supra* note 38 (citing Brief for Appellant at 28 n.11, *SEC v. SG Ltd.*, 265 F.3d 42 (1st Cir. 2001)).

Second, even under broad vertical commonality, permissionless protocols with no identifiable promoter whose efforts generate returns present a weak case. Broad vertical commonality was developed for arrangements where a specific promoter's efforts drive the collective return, as in *Koscot's* "meetings and guidelines on recruiting prospects and consummating a sale."⁴⁶ A permissionless lending protocol with autonomous rate-setting, mechanical liquidation, and algorithmic interest-rate models has no such promoter.

Third, under strict vertical commonality, vaults where the curator or operator earns a flat fee present weaker facts. Where the curator's economic outcome is indifferent to depositor returns, because the code ensures the curator receives the same fee whether the vault appreciates or depreciates, the "interwoven fortunes" that the Ninth Circuit requires are absent.⁴⁷ A curator compensated by a share of interest earned or a performance fee presents a closer case, and the curator's compensation is therefore one of the facts to gather in the MEGD analysis below.

B.3. A Reasonable Expectation of Profits Derived from the Essential Managerial Efforts of Others

This element is the doctrinal center for most vault structures. The analysis proceeds in six parts. First, it addresses, in the alternative, whether the depositor's return in the baseline vault constitutes "profits" at all, and how the form in which rewards accrue bears on that question (Section B.3.a). It then sets out the governing standard for the efforts-of-others inquiry: *Turner's* "undeniably significant" formulation and the ministerial/managerial distinction the case law has developed around it (Section B.3.a continued). Third, on the *agent side*, it applies the MEGD framework to identify what authority the role-holder possesses and whether that authority constitutes essential managerial effort (Section B.3.b). Fourth, on the *depositor side*, it examines the six depositor-side conditions and where they operate (Section B.3.c). Fifth, it addresses when code-enforced constraints go to *Howey* reliance itself (Section B.3.d). Sixth, it addresses how courts should assess the arrangement's character when marketing and code diverge, and who remains accountable (Section B.3.e).

B.3.a. The Character of a Market-Based Return

The character of the return and the source of the effort that produces it are linked. A return that emerges from autonomous supply-and-demand mechanics is not generated by any person's managerial efforts, and that fact bears on both the profits element and the efforts

⁴⁶ *Koscot*, 497 F.2d at 479.

⁴⁷ See *McGreevy*, slip op. at 8; cf. *Rubera*, 350 F.3d at 1090.

element. This Section addresses the profits question as an alternative ground; the efforts-of-others analysis that follows is CCI's principal ground.

The Supreme Court defined the term in *Forman*: “By profits, the Court has meant either capital appreciation resulting from the development of the initial investment, . . . or a participation in earnings resulting from the use of investors’ funds.”⁴⁸ The distinction *Forman* drew was between a purchaser “attracted solely by the prospects of a return on his investment” and one “motivated by a desire to use or consume the item purchased.”⁴⁹ The Court in *Edwards* subsequently clarified that fixed returns can constitute profits, holding that “[t]here is no reason to distinguish between promises of fixed returns and promises of variable returns for purposes of the test.”⁵⁰ But *Edwards* did not erase the *Forman* line. It held that fixed returns *can* be profits; it did not hold that every fixed return is a profit. *Edwards* did not make the character of the return irrelevant. The statutory text reinforces that distinction: *Howey* asks whether the purchaser is led to expect “profits” “to be derived from” the efforts of others, so both “profits” and “derived from” must be satisfied independently. *Edwards* rejects a fixed-versus-variable return distinction, but it does not answer whether a market-clearing rate generated by autonomous supply-and-demand mechanics, untied to enterprise earnings and not generated by managerial efforts, constitutes “profits” in the *Howey* sense. Several pre-*Edwards* decisions support this reading.⁵¹

How Utilization-Based Rates are Determined.

In an autonomous overcollateralized lending market, the interest rate is determined by an immutable smart contract called an interest-rate model (“IRM”). A utilization-based IRM is a purely mathematical function of a single variable: utilization, defined as the ratio of total borrowed assets to total supplied assets in a given market. As utilization rises, indicating that a greater proportion of supplied capital is being borrowed, interest rates increase, incentivizing additional supply and discouraging additional borrowing. As utilization falls, indicating excess supply relative to demand, interest rates decrease, discouraging additional supply and incentivizing borrowing. Implementations vary, but the structural pattern is consistent: the model targets a utilization rate (commonly near 90%) through a continuous adaptive mechanism that adjusts a reference rate upward when utilization exceeds the target and downward when it falls below. All parameters governing the curve (target utilization, steepness, adjustment speed, rate bounds) are immutable constants embedded

⁴⁸ *Forman*, 421 U.S. at 852.

⁴⁹ *Id.* at 852–53.

⁵⁰ *SEC v. Edwards*, 540 U.S. 389, 394 (2004).

⁵¹ See, e.g., *Resolution Trust Corp. v. Stone*, 998 F.2d 1534, 1540 (10th Cir. 1993); *Union Planters Nat’l Bank v. Commercial Credit Bus. Loans, Inc.*, 651 F.2d 1174, 1184–85 (6th Cir. 1981); *American Fletcher Mortgage Co. v. United States Steel Credit Corp.*, 635 F.2d 1247, 1254 (7th Cir. 1980); *Kansas State Bank v. Citizens Bank*, 737 F.2d 1490, 1495 (8th Cir. 1984).

in the deployed code. Academic literature describes these mechanisms as nonlinear proportional-derivative controllers.⁵²

No human actor sets, adjusts, or influences this rate after deployment. There is no committee, no credit analyst, and no portfolio manager exercising judgment over the appropriate interest rate. The rate is not the product of managerial discretion, underwriting analysis, or entrepreneurial effort. It emerges mechanically from the interaction of supply and demand, mediated by deterministic, auditable code that executes identically regardless of the identity or intent of any market participant. The supply rate that a depositor earns is a function of the borrow rate and utilization, less a protocol fee. Every variable in this equation is publicly observable on-chain in real time.

Equally important is what the interest rate is *not* derived from. It is not derived from the investment value or price appreciation of the collateral asset, or the performance or yield of that asset. It is not derived from the judgment, skill, or effort of any curator, manager, or protocol operator. And it is not derived from the profits or revenues of any identifiable enterprise. The collateral serves solely as security for repayment; it does not generate the lender's return.

The point that follows from these mechanics is limited. In the loan-participation cases, interest rates were still set by human actors (originators, lead banks, servicers). In the baseline vault, the rate is set by code responding to market conditions, with no human in the loop. Whether or not that makes the return something other than “profits,” it bears directly on whether the return is “derived from” anyone's managerial efforts.

The Form of Rewards.

The rate model determines what borrowers owe, and their obligations grow with each block at that rate. The pool's balance grows by the same amount, so the depositor's claim on the pool increases as interest accrues, without any person declaring, distributing, or allocating it. CCI calls that return “interest” because that is what it is economically. The remaining question is how the increase is reflected in the vault receipt token the depositor holds.

In one design, the depositor holds a fixed number of vault receipt tokens, each redeemable for a growing amount of the deposit asset; the token's exchange rate rises as interest accrues. In the other, each token remains redeemable for one unit of the deposit asset, and the depositor's token balance increases as interest accrues. The two designs produce the

⁵² See, e.g., Charles Bertucci et al., *Agents' Behavior and Interest Rate Model Optimization in DeFi Lending* (Sept. 8, 2025) (unpublished manuscript), <https://ssrn.com/abstract=4802776>. (modeling utilization-based interest-rate mechanisms as autonomous controllers). Several major lending protocols deploy immutable IRMs of this general design, with parameters that cannot be changed after deployment.

same economic position. A depositor who supplies 1,000 units and earns 5% holds a claim on 1,050 units at year end under either design, whether as 1,000 tokens worth 1.05 units each or as 1,050 tokens worth one unit each. The choice between them is an accounting convention and is often made for reasons of wallet display or integration with other protocols.

The form of rewards therefore should not be confused with the categories of profit the case law identifies. The “capital appreciation” *Forman* describes is an increase in value “resulting from the development of the initial investment,” that is, growth in what the investment itself is worth because someone has built or managed something. A rising exchange rate on a vault receipt token reflects no such development; it records interest that borrowers have already paid or accrued into the pool. Equally, whether a return is a “participation in earnings” or interest at an above-market rate depends on what generates it and how the rate is set, not on how it is credited. Those are the questions addressed by the rate-model discussion above and by the efforts-of-others analysis that follows. The form of rewards answers neither.

The Limiting Principle.

CCI does not suggest that *all* returns earned through DeFi lending protocols fall outside the “profits” definition. The line runs between two economic realities. On one side, a depositor supplying capital to a single autonomous lending market earns a rate set by the mechanical interaction of supply and demand: a market-clearing price for capital. On the other, a depositor entrusting capital to a curator who controls its allocation across markets of materially different risk, selects yield-maximizing strategies, and rebalances on her own judgment, without code-enforced bounds, timelock, or exit, earns a blended rate that is the product of the curator’s decisions. That return resembles a participation in earnings resulting from the curator’s skill, and the Edwards principle applies: returns generated by an enterprise under managerial control are profits, fixed or not, because the enterprise is their source. A curated vault in which the curator’s authority is bounded in code, timelocked, and subject to exit sits closer to the first reality, as Section B.3.b explains.

Derived from Whose Efforts?

The profits element asks what the depositor’s return is. The efforts element asks where it comes from. The two are distinct, and either can be dispositive, because an investment contract requires both. A return can be profits without being derived from anyone’s managerial efforts. A vault that held silver and did nothing else would offer its depositors the

prospect of appreciation, but that appreciation would come from the silver market, not from any person's work (as the Ninth Circuit found in *Noa*).⁵³

The efforts element therefore asks its own question, whatever the answer to the first: whether the depositor's return depends on the efforts of an identifiable person, or on market forces no person controls.

Turner supplies the standard for answering it. It asks whether the efforts of others are “the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.”⁵⁴ The 2026 Joint Interpretation collects case law establishing that administrative and ministerial activities do not meet that standard,⁵⁵ and as one court recently put it, “[m]inisterial, technical, and clerical tasks often are ‘necessary’ for an investment scheme to operate and thereby generate a profit, but courts have long found such efforts to be insufficient under *Howey*’s third prong.”⁵⁶ The case law thus distinguishes three categories, not two: (i) ministerial, administrative, or clerical tasks; (ii) efforts that involve real judgment and may influence returns but are not the undeniably significant efforts that generate them; and (iii) essential managerial efforts. Efforts that are not ministerial are not, for that reason, essential. *Turner*’s limiting term is “undeniably significant”: the question is not whether someone exercises judgment, or whether that judgment touches returns, but whether the enterprise’s success depends on it.⁵⁷

The MEGD framework that follows organizes the facts to which that standard is applied. The inquiry has two sides that work together. On the *agent side*, the MEGD framework identifies what the role-holder can do. On the *depositor side*, six conditions test whether the depositor is *dependent* on what the role-holder does. A role-holder with broad execution discretion whose every action is observable, verifiable, timelocked, and subject to depositor exit presents a different case from one whose identical authority operates behind informational opacity, and the outcome depends on the combination.

B.3.b. The Agent Side: MEGD as Analytical Framework

Section A concluded that the securities-law question in a vault turns on whose decisions determine the depositor's return. The agent-side inquiry asks the first half of that question:

⁵³ *Noa*, *supra* note 40.

⁵⁴ *Turner*, 474 F.2d at 482.

⁵⁵ 2026 Joint Interpretation, *supra* note 20, at 13,720 n.42 (collecting *First Fin. Fed. Sav. & Loan v. E.F. Hutton Mortgage Corp.*, 834 F.2d 685, 689 (8th Cir. 1987) (activities “merely administrative and ministerial in nature”); *Union Planters Nat. Bank of Memphis v. Com. Credit Bus. Loans, Inc.*, 651 F.2d 1174, 1185 (administrative tasks “are not managerial or entrepreneurial within the meaning of the *Howey*-Forman test.”)).

⁵⁶ *Donovan v. GMO-Z.com Tr. Co., Inc.*, 779 F. Supp. 3d 372, 388 (S.D.N.Y. 2025)).

⁵⁷ *Turner*, 474 F.2d at 482.

what control each non-depositor role has to affect depositor returns, and how far the code confines it. The Introduction proposed four dimensions for answering it: Mandate, Execution, Governance, and Disposition (“MEGD”). MEGD is CCI’s analytical vocabulary, drawn from the questions asked in diligencing vault architectures; it is not a legal standard. The standard remains *Turner’s*, and MEGD organizes the facts to which it is applied. For each role, it asks whether the role’s post-deposit authority amounts to the “undeniably significant” managerial efforts *Turner* requires, or is confined in a way that does not significantly drive depositor profits, as discussed below. Each dimension asks a distinct question, and each admits a range of answers. No dimension is dispositive alone. A vault’s position depends on how the four combine, and on whether, taken together, they leave any person other than the depositor in control of her return.

The following framework presents each dimension as a spectrum running from the least to the most managerial authority, with the key factual questions each raises:

MEGD	Core Question	Spectrum: Least – Most Managerial	Key Facts to Gather
Mandate	What assets, venues, and strategies are permitted?	Immutable at deployment → Narrow allowlist with caps → Expandable allowlist with timelock → Broad discretion over asset universe	Is the market set immutable or expandable? Is it subject to allowlists and caps? Can the mandate expand without notice? Which collateral types, LTVs, and IRMs are permitted? How is the role-holder compensated?
Execution	Who determines timing and sizing of allocations within the mandate?	Deterministic algorithmic rule → Bot-operated within preset bounds → Human judgment within code-enforced limits → Full discretionary allocation among approved markets	Is execution rule-based or discretionary? Is it automated or human? Can the timing or sizing of allocations materially affect returns?

MEGD	Core Question	Spectrum: Least – Most Managerial	Key Facts to Gather
Governance	Who can change the mandate, replace actors, or alter implementation?	Fully immutable / renounced → Timelocked changes with depositor exit → Constrained DAO governance → Unilateral upgradeability	Who decides changes (curator, governance token holders, a multisig)? Is the code immutable or upgradeable? Are changes timelocked, and for how long? Can depositors exit first? Is governance renounced, constrained, or open-ended?
Disposition	Can anyone transfer assets outside the mandate?	Code-constrained to approved paths only → Trigger-based safety-role veto → Multisig with limited signers → Unconstrained transfer authority	Can assets move outside approved destinations? Is movement code-constrained? Can a multisig or collusion produce unauthorized transfers?

These four dimensions, taken together, define a vault's **MEGD profile**.⁵⁸ a composite picture of non-depositor authority that cannot be reduced to a single axis. A vault with a narrow, immutable mandate but broad execution discretion within that mandate presents a different profile from one with an expandable mandate but deterministic, algorithmic execution. The securities-law significance of each profile depends on how the four dimensions interact, and cannot be captured by a single score on a linear scale.

These profiles are best read as points along a single spectrum rather than as four separate categories; several are opposite ends of the same dimension. To illustrate the range, consider the following characteristic profiles that recur across vault implementations:

⁵⁸ The MEGD profile describes what the code permits, not what a vault's sponsors, curators, or interfaces say about it. Howey also asks what the depositor is reasonably led to expect, and in most arrangements statements carry great weight because the investor's protection is a promise that can be broken or revised. Code is different in kind: an immutable rule cannot be changed after deposit, and a timelocked rule cannot be changed without notice and an opportunity to exit. Where statements and code diverge, the code is the better evidence of the arrangement's economic reality, and the divergence is a matter for the antifraud provisions. See *infra* Section B.3.e.

Immutable / Pre-Configured.

All four dimensions are set at deployment and immutable thereafter. Mandate is closed; execution is algorithmic; governance is renounced or immutable; disposition is code-constrained to approved paths. No post-deposit human authority exists. *Life Partners* supports the position that where critical entrepreneurial efforts are completed before the investor's purchase, the efforts prong is not satisfied.⁵⁹

Protective / Administrative.

The role-holder may act only on preset, objective triggers specified in code or published rules (for example, pausing the vault on a documented security incident or oracle failure, or vetoing a pending action), and none of its actions can direct capital or generate returns. Discretionary changes made on the basis of market views, including risk-reducing changes such as lowering caps or narrowing an allowlist, fall outside this category and belong in the bounded operational profile. Classifying a role as non-protective goes to characterization and disclosure; it does not itself establish essential managerial efforts. *McConathy v. Dal Mac* supports the proposition that duties limited to “insuring the property, paying the taxes and the like. . . solely to protect and preserve the investment” do not constitute managerial efforts.⁶⁰

Bounded Operational.

The role-holder executes within code-enforced limits on all four dimensions. She may, for example, add markets only from a pre-approved allowlist (narrow Mandate), subject to timelocks and supply caps (constrained Governance), with no ability to transfer assets outside approved destinations (constrained Disposition). The Execution dimension may involve human judgment, but that judgment operates within parameters set by the architecture.

Discretionary Allocation.

The role-holder makes routing decisions that materially drive depositor returns, choosing where capital goes and in what proportions. The Execution dimension involves ongoing market judgment; the Mandate may be broad enough to encompass a meaningful range of alternatives. This is the profile where the *Turner* “undeniably significant” standard is most likely satisfied, because the role-holder’s specific choices generate the depositor’s specific return.

⁵⁹ SEC v. *Life Partners, Inc.*, 87 F.3d 536, 545–49 (1996).

⁶⁰ See *McConathy v. Dal Mac Commercial, Inc.*, 545 S.W.2d 871, 875 (Tex. Civ. App. 1976).

Unbounded Discretionary Management.

Full judgment over capital deployment, credit origination, or underwriting across all four dimensions, functionally equivalent to a traditional fund manager.

Analyzing Essential Managerial Efforts in Vaults.

We agree with Commissioner Peirce that those who perform vault-related activities, such as “setting interest rates, deciding which assets to accommodate, setting loan-to-value limits, and establishing liquidation thresholds” “may want to analyze whether their activities implicate the federal securities laws.”⁶¹ The boundary between bounded operational authority and discretionary allocation is fine and warrants careful exposition. It is also where we believe the Control Framework can help guide that analysis.

In a bounded operational profile, the role-holder selects values within a system whose architecture is immutable. Consider a curator who sets a collateral ratio at 94.5% within an interest-rate model that is immutable and publicly deployed. She exercises judgment; 94.5% is not 90% or 98%. The *Howey* question is whether the depositor’s return is derived from that judgment, and in a bounded vault it is not. Where the parameter is selected under preset, objective criteria fixed in the code, the function is ministerial. Where it reflects the curator’s judgment about market conditions, it is judgment-bearing, and the question becomes whether that judgment is the undeniably significant effort that generates the return. The permissible range is fixed in code; the consequences of any value within it are fully specified and observable; the change cannot take effect until a timelock expires; and the depositor can exit before it does. The autonomous market mechanics generate the return. The parameter is an input that the depositor accepts, with notice and the ability to exit, not an essential managerial effort that generates the depositor’s profit. Where any of those conditions is missing, such as an open-ended range, no timelock, or no practical exit, the analysis moves toward discretionary management.

Discretionary allocation is different. Here the role-holder makes routing decisions that *directly determine* where depositor capital goes and what returns the depositor earns. The relevant distinction is one of *causal relationship* to profits. When a curator decides to allocate 60% of vault capital to Market A and 40% to Market B based on her view of relative risk-adjusted return, the depositor’s blended yield is a *product of that allocation decision*. Her profit is “derived from” the curator’s judgment in the way *Turner’s* “undeniably significant” standard requires. The curator’s specific choices generate the specific return.

⁶¹ Peirce Statement, *supra* note 17.

Three factual markers distinguish bounded operational authority from discretionary allocation:

3. whether the role-holder's decision materially affects the magnitude of depositor returns, as distinct from calibrating a system that produces returns autonomously;
4. whether the decision involves *comparative assessment* among alternatives requiring ongoing market judgment, as distinct from selecting a value within a predetermined range; and
5. whether the depositor's return would be *meaningfully different* had a different person occupied the role and made different choices.

Where the answer to all three is yes, the vault's Execution profile reflects discretionary allocation, and the case for "undeniably significant" managerial efforts is strong. No single marker is sufficient. Where the role-holder's choices calibrate a system that would produce substantially similar returns regardless of which specific values were selected within the bounded range, the vault's profile remains bounded operational, and the other MEGD dimensions (Mandate, Governance, Disposition) may further confirm that the role-holder's authority, taken as a whole, does not constitute the essential managerial efforts on which the depositor's return depends. Two clarifications make this analysis administrable from the code. First, under *Howey*, the question is whether essential managerial efforts generate the depositor's return. The Control Framework's role taxonomy (protective, curatorial, discretionary) matters principally under the Investment Advisers Act (Volume IV). Second, that inquiry proceeds in two steps. Step one classifies the function from the code – i.e., where the role holder's action is confined to pre-set objective parameters fixed in the contract, it is ministerial. Where it is exercisable on the role holder's assessment of market conditions, it is judgment-bearing, regardless of how narrow the permitted range. We do not contend that narrow curation is "ministerial" – the classification is that it is judgment-bearing. The second step asks whether that judgment-bearing authority is the undeniably significant efforts that generate the return, the question the three markers above address. Where a judgment bearing parameter is confined to a range fixed in code, subject to a timelock, and escapable before it takes effect, it calibrates the autonomous market mechanics that generate the return rather than being the source of the return. The depositor accepts it as an input, with notice and the ability to exit, not as the source of her profit, and it is therefore not essential managerial effort. Where any of those conditions is absent, an open ended range, no timelock, or no practical exit, the analysis turns on the facts and circumstances inquiry, on whether the remaining unbounded discretion is the undeniably significant effort that generates the return. CCI does not contend that exit alone defeats the efforts element – rather, the narrower point is that in a bounded vault, the range,

timelock, and depositor's ability to exit together explain why the parameter is an input the depositor accepts rather than the source of her profit.

The Immutable Vault.

A vault whose mandate is set at deployment and immutable thereafter (the baseline vault) presents the strongest case against satisfaction of this element. All design decisions are complete before the first deposit, no person holds control over the vault after deployment, and the depositor's return is a function of autonomous market supply and demand. The D.C. Circuit's decision in *SEC v. Life Partners, Inc.* supports that result. The promoter's pre-purchase work there was "undeniably essential to the overall success of the investment," yet the court held that pre-purchase services "cannot by themselves suffice" to satisfy the efforts element, because where "the value of the promoter's efforts has already been impounded into the promoter's fees or into the purchase price of the investment, and . . . neither the promoter nor anyone else is expected to make further efforts that will affect the outcome of the investment, . . . the need for federal securities regulation is greatly diminished."⁶² An immutable vault is the clearest case of impounding: the design is the set of terms the depositor accepts, and nothing anyone does after deposit changes them.

The Eleventh Circuit declined to adopt *Life Partners'* line between pre- and post-purchase efforts in *SEC v. Mutual Benefits Corp.*, holding that pre-purchase managerial activities may also satisfy *Howey*.⁶³ The analysis it applied, though, leads to the same result for an immutable vault. The court found a security because investors "had no ability to assess the accuracy" of the promoter's life-expectancy evaluations, which were "critical to the success of the venture," and "could not, by reference to market trends, independently assess the prospective value of their investments."⁶⁴ The promoter also selected the policies in which investors' money was placed only after they deposited it, and managed premium reserves at its discretion thereafter; the court relied on "both the pre- and postpurchase management activities" of the promoter.⁶⁵ Importantly, the court recognized that where returns depend on market forces, "public information is available to investors by which they can independently evaluate the possible success of the investment."⁶⁶

An immutable vault reverses each of those facts. In *Mutual Benefits*, the return turned on a promoter's private estimate that investors could neither see nor test. In an immutable vault, the return turns on the vault's terms: its interest-rate model, the collateral it accepts, its

⁶² *Life Partners*, 87 F.3d at 545–49.

⁶³ *SEC v. Mutual Benefits Corp.*, 408 F.3d 737, 743 (11th Cir. 2005).

⁶⁴ *Id.* at 743–744.

⁶⁵ *Id.*

⁶⁶ *Id.*

loan-to-value limit, and its liquidation threshold. Those terms are set before the first deposit, published to every depositor in the same form, and enforced by code that can itself be independently audited. A depositor does not have to trust anyone's judgment about them; she can assess them, and by depositing she accepts them. Nor does anyone act on her behalf afterward. No one selects the vault's assets once she has deposited, no one manages its reserves, and no one can change its terms. What remains uncertain is the market those terms define, such as how much borrowers demand and how collateral prices move, and that is the kind of risk *Mutual Benefits* itself recognized investors can evaluate from public information. Under the Eleventh Circuit's analysis, then, the depositor is not relying on anyone's managerial efforts. She is accepting terms that have already been set, which is the impounding *Life Partners* described in different words.

From Immutable to Curated: The Contested Middle Ground.

The poles are clear: immutable vaults present the strongest case against the efforts prong, and unbounded discretionary vaults present the strongest case for satisfying it. The commercially significant middle ground, the bounded operational and discretionary allocation profiles, is where the MEGD framework and the depositor-side conditions do their most important work, *in combination rather than sequentially*. The *Turner* inquiry for these profiles asks whether the role-holder's efforts, viewed across all four MEGD dimensions, are the *undeniably significant ones* that affect the failure or success of the enterprise, or whether they are subsidiary to the autonomous mechanics that actually generate the depositor's return.

CCI fully acknowledges the curator's role. Many curators perform substantial, judgment-intensive work: continuous liquidity monitoring, yield-curve analysis, utilization management, adaptive reallocation, and, for private credit strategies, institutional-grade risk assessment and underwriting.⁶⁷ These activities are genuinely substantive. But substance is not *Turner's* test. As explained above, efforts that involve real judgment are not, for that reason, *essential*; the question is whether they are the *undeniably significant* efforts on which the depositor's return depends.

Role summary. Typical curator and role-holder functions map onto the MEGD dimensions and the three *Turner* categories as follows.

⁶⁷ See Introduction, Section IV.C (describing range of human-role authority across implementations).

Function	MEGD Dimension	Turner Category	Facts That Change the Category
Setting market parameters at deployment (collateral types, loan asset, LTV limits, liquidation thresholds, oracle, interest-rate model)	Mandate, as set before the first deposit	Not post-deposit effort. Its value is impounded in the terms the depositor accepts when she deposits.	Moves toward essential where the depositor cannot assess the design or its inputs and must rely on the designer's judgment for success, as with real-world asset curation.
Adding markets to the allowlist; setting supply caps	Mandate	Judgment-bearing, not essential, where confined to a range fixed in code, timelocked, and subject to exit before the change takes effect	If any condition is absent, the analysis turns on whether the unbounded control is the undeniably significant effort that generates the return. Discretionary risk-reducing changes need not be timelocked but should be disclosed.
Changing LTV limits, liquidation thresholds, or rate parameters after deposit	Mandate, changed through Governance	Judgment-bearing, not essential, on the same three conditions. The 94.5% example illustrates this.	An open-ended range, no timelock, or no practical exit moves the analysis toward discretionary management.

Function	MEGD Dimension	Turner Category	Facts That Change the Category
Allocation by deterministic rule	Execution	Ministerial. The code executes a rule; no one exercises judgment.	The judgment embedded in choosing the market set is analyzed as a Mandate function. It is bounded where the Mandate is narrow, Governance is timelocked with exit, and Disposition is constrained.
Discretionary allocation among approved markets within caps	Execution	No timelock applies to each reallocation, so the criterion does not resolve this function, and the facts-and-circumstances fallback governs. It is judgment-bearing, not essential, where the markets offer similar risk-adjusted rates and allocation makes only marginal differences.	Becomes essential where the markets have materially different risk profiles and allocation is the primary determinant of the depositor's return. All three markers (magnitude, comparative judgment, different person producing a different return) then point the same way.
Unbounded management, credit origination, or off-chain underwriting	All four dimensions	Essential	Moves away only as code confines the authority across the other dimensions. Opaque credit judgment within a narrow, immutable Mandate, timelocked Governance and constrained Disposition is a closer case.

Function	MEGD Dimension	Turner Category	Facts That Change the Category
Proposing or approving upgrades	Governance	Judgment-bearing where timelocked, with exit before changes take effect	Moves toward essential where upgrades can be made unilaterally without notice or exit. Governance can undo every other constraint.
Pause or veto on preset, objective triggers	Governance (safety role over pending changes) and Disposition (trigger-based veto)	Ministerial, where the role-holder acts only on the trigger and has no allocation authority	Moves to judgment-bearing if the role acts on market views, including risk-reducing changes such as lowering caps.

Two notes: 1. The table omits Disposition because authority to move assets outside approved destinations is not an effort that generates the depositor's return; it presents control risk, which bears on accountability and on custody (Volume IV, Section VII), and a vault in which any person holds that authority presents a different case regardless of how the functions above are classified. 2. Curator compensation bears on commonality rather than on efforts, as Section B.2 explains.

A Worked Example: Bounded Active Management.

Consider a curated vault whose MEGD profile has the following characteristics: *Mandate*: the vault may fund only overcollateralized on-chain lending markets denominated in USDC, from a pre-approved allowlist of six markets, with a per-market supply cap of 25% of total vault assets. *Execution*: the curator allocates among approved markets at her discretion, subject to the supply caps. *Governance*: adding a new market to the allowlist requires a 72-hour timelock; during the delay, the pending addition is publicly visible on-chain, and any depositor may withdraw. An independent safety role (a separate key-holder) may veto the pending addition only on a preset, objective trigger specified in code or published rules. *Disposition*: the code does not permit transfers to any address outside the approved market contracts; the curator has no withdrawal authority over depositor assets.

This vault presents a mixed profile. The Execution dimension involves genuine judgment, because the curator decides how much capital to allocate to each of the six approved markets, and those allocation decisions affect the vault's blended return. The other three MEGD dimensions, however, are constrained: the Mandate is narrow and cannot change absent a timelocked governance change; Governance changes are delayed and subject to

veto; Disposition is code-constrained. The depositor-side conditions are substantially satisfied. Comprehensibility is high because the strategy is simple lending. Observability is full because positions are on-chain. Verifiability is strong because all parameters are publicly auditable. Predictability is bounded by the 72-hour timelock. Notice is architecturally available through pending changes visible on-chain. And actionability is preserved through permissionless withdrawal during the timelock. These conditions address information risk. Control risk is addressed separately by the Disposition constraint and the absence of custody; a vault with the same information profile but custodial control of depositor assets would present a different case.

The *Turner* inquiry for this vault asks whether the curator's allocation decisions, the one dimension where genuine judgment operates, are the "undeniably significant" efforts that affect the failure or success of the enterprise. It also asks whether the autonomous market mechanics that set rates, enforce collateral requirements, and execute liquidations are the primary drivers of the depositor's return. The answer depends on how much the curator's allocation choices actually affect the result: if the six approved markets offer similar risk-adjusted rates and the curator's allocation among them produces only marginal differences in the vault's blended return, the efforts are bounded operational. If the curator's choices produce materially different outcomes, because the markets have meaningfully different risk profiles and the allocation decision is the primary determinant of the depositor's return, the profile shifts toward discretionary allocation.

Curators perform valuable services, and the question is whether those services are the *undeniably significant ones* that *Turner* requires or whether the architecture constrains them sufficiently to change the legal characterization. Answering that question requires combining the agent-side MEGD analysis, which identifies what the curator can do, with the depositor-side conditions developed in Section B.3.c below, which identify whether the depositor is *dependent* on what the curator does. Two illustrations sharpen the line.

Algorithmic allocation. A vault programmed to deploy capital to the highest-rate approved market within a pre-configured set is executing a deterministic rule, not exercising judgment. But CCI acknowledges the counterargument: even algorithmic allocation involves an implicit judgment embedded in the *selection* of approved markets. Where a curator selects five markets from a universe of fifty, that selection involves judgment even if the subsequent allocation is mechanical. Whether it is essential managerial effort is a separate question. The MEGD response is that if the Mandate is narrow, Governance changes are timelocked with depositor exit, and Disposition is constrained, the implicit judgment is bounded and verifiable and does not generate the depositor's return. If those dimensions are open-ended, the algorithmic veneer may not save the arrangement.

Real-world asset curation: a hard case. CCI engages this hard case directly: collateral evaluation does not automatically transform a vault into a security. The outcome depends on *what* the curator evaluates, *how* verifiable that evaluation is, and *what* authority the curator retains after the evaluation is complete.

Consider a curator who evaluates an on-chain lending market by assessing the collateral type (for example, a liquid staking token), the liquidation threshold (94.5%), the price oracle, and the interest-rate model, and then adds it to a vault's approved market set. This evaluation is substantial: the curator exercises judgment about collateral quality, liquidation risk, and oracle reliability. But the selected parameters are publicly verifiable. The depositor can confirm every material input: what the collateral is, what the threshold is, what oracle feeds the price, and how the IRM works. The curator's judgment produced a *publicly verifiable output*, not an opaque assessment the depositor must take on trust. Verifiability addresses information risk. Whether the selection is an essential managerial effort depends on whether it is bounded, timelocked, and subject to depositor exit, as Section B.3.b explains.

Now consider a curator who evaluates a private credit facility involving off-chain collateral: tokenized receivables, real-estate-backed instruments, or private loans. The curator reviews legal documentation, assesses borrower creditworthiness, evaluates servicer performance, and underwrites the facility based on information the depositor may not directly access. This is a harder case than on-chain collateral evaluation, but not dispositive. Three considerations temper the comparison to *Prosper*. First, even where underlying documentation is confidential, the curator's *methodology* and *criteria* may be publicly disclosed, third-party auditors may verify compliance, and on-chain reporting may provide ongoing transparency into portfolio composition and performance — partial verifiability that *Prosper*'s lenders lacked entirely. Second, if the smart contract becomes immutable after launch, the collateral evaluation may eventually become “stale,” and depositors remain responsible for assessing whether the LTV ratio is adequate for their own purposes. Third, underwriting criteria is only one of many factors in this analysis. A vault may nonetheless operate within a narrow, immutable Mandate, timelocked Governance, and code-constrained Disposition, which are constraints that limit the *consequences* of the credit judgment even where the judgment itself is opaque.

The 2026 Joint Interpretation's focus on whether efforts are *essential* and *managerial* supports this multi-dimensional inquiry. The question is not whether the curator exercises judgment, but whether that judgment is, considering all architectural constraints, the undeniably significant effort that generates the depositor's return. Many commercial decisions involve substantial judgment without creating *Howey* dependence. A bank loan officer evaluates creditworthiness; a real-estate appraiser assesses property value; an insurance underwriter prices risk. These involve expertise the counterparty cannot

replicate, yet they do not create investment contracts. The distinguishing feature is the combination of factors: the counterparty's ability to evaluate the arrangement's terms at the outset, the constraints on what the decision-maker can do after the relationship begins, and the counterparty's ability to exit if circumstances change. *Howey* dependence arises where the depositor's return turns on judgment she cannot evaluate or on control the code does not confine. For judgment exercised before deposit, information is the decisive variable: where the depositor can evaluate the terms that judgment produced, its value is impounded in what she accepts; where she cannot, she relies on it, as in *Mutual Benefits*. For authority retained after deposit, information is necessary but not sufficient: transparency allows the depositor to see what the role-holder does, and only bounds, timelock, and exit confine it.

* * * * *

In sum, CCI proposes using the MEGD framework to identify where on this spectrum a particular vault sits. Verifiability matters, but does not alone determine the result. A curator evaluating RWA collateral may have a narrow, immutable mandate, constrained governance, and code-constrained disposition, even though the execution dimension involves credit judgment the depositor cannot replicate independently. The analysis is irreducibly multi-dimensional: where the other MEGD dimensions are constrained, the securities-law case is weaker regardless of the opacity of the curator's credit judgment; where they are unconstrained, it strengthens materially.

But the agent-side analysis is only half of the inquiry. The role-holder's MEGD profile identifies the authority she possesses; the depositor-side conditions determine whether the depositor *depends* on that authority in the way the securities laws target. The analysis turns now to the depositor side.

B.3.c. The Depositor Side: Conditions for Reduced Reliance

The efforts-of-others prong asks whether the *depositor depends* on those efforts in the way the securities laws target. The discussion addresses the six depositor conditions and where they operate, the case law supporting and limiting the framework, the distinction between rules-based and discretionary changes, and the mechanics of vault exit.

(i) The Six Conditions and the Causal Chain

The depositor-side conditions test whether the depositor can evaluate, monitor, and respond to what a role-holder does. They do their work where the agent-side analysis already shows bounded authority. For judgment exercised before deposit, they bear on the efforts element itself: where the depositor can evaluate the terms that judgment produced, its value is impounded in what she accepts (Section B.3.b); where she cannot, she relies on

it. For authority retained after deposit, the analysis depends on what the depositor can do. Seeing what a role-holder does and being able to leave do not by themselves confine what the role-holder can do, and so do not by themselves defeat the efforts element. Governance rights that depositors can and do exercise, such as a binding vote on material changes, may bear more directly on that element, as Section B.3.c(ii) discusses. Otherwise, the conditions' force lies in three other questions: whether the depositor's expectations are reasonable under *Joiner*, the risk-reducing factor under *Reves*, and the calibrated regulatory response where a person does hold control. The conditions are also only part of what the Control Framework requires. A vault must be assessed for both information risk and control risk. A fully transparent vault whose depositor can understand, observe, verify, predict, receive notice of, and exit before material changes, but in which a person holds unilateral control over depositor assets, still exposes depositors to misappropriation; Volume IV, Section VII, explains when a person has custody of vault assets. Nor can transparency of code be assumed to meet disclosure needs. The retail users vaults hope to reach will not read code, and comprehensibility depends on plain-language disclosure of the strategy and its risks. With those limits, the six conditions are as follows:

Depositor Condition	Howey Sub-Inquiry	What It Tests
Comprehensibility	Whether reliance is objectively reasonable for the intended user base	Can the depositor understand the vault's strategy, risks, and mechanics with reasonable sophistication?
Observability	Ongoing monitoring capacity	Can the depositor see the vault's current state, including positions, allocations, and pending changes? Or is she dependent on periodic reports from the operator?
Verifiability	Reasonableness of reliance on others' efforts	Can the depositor independently confirm that the vault behaves as described, or must she trust the promoter's representations? This includes distinguishing (a) verifying code execution and parameters (on-chain, auditable), (b) verifying the external facts and judgments that produced those parameters (may be off-chain, opaque), and (c) whether publication, third-party audit, and exit capacity can substitute for direct comprehension.

Depositor Condition	Howey Sub-Inquiry	What It Tests
Predictability	Scope of depositor's uncertainty	Can the depositor know what the vault will do within a bounded time horizon, or is future behavior subject to unannounced discretionary changes?
Notice	Prospective protection	Does the depositor learn about material changes before they affect her position, transforming information from retrospective to prospective?
Actionability	Ability to exit before changes take effect	Can the depositor act on what she learns? Specifically, can she withdraw before a pending change becomes effective?

These conditions are mutually reinforcing, and their doctrinal force comes from their interaction rather than from any single condition in isolation. The six form a causal chain that, when complete, reduces the depositor's dependence on the role-holder's judgment and shifts the arrangement from a trust relationship toward a verification relationship:

Informational capacity (comprehensibility, observability, verifiability):

These three conditions determine whether the depositor *can know* what the vault is doing and whether it behaves as described. A depositor who can understand the strategy, observe current positions in real time, and verify that the code executes as specified has the informational foundation to evaluate risk independently.

Uncertainty Reduction (predictability):

This condition determines whether the depositor's informational capacity extends into the *future*. If the vault's behavior is predictable within a bounded time horizon, because the mandate is immutable, changes are timelocked, and execution follows disclosed rules, the depositor's knowledge is prospective as well as retrospective.

Protective Capacity (notice, actionability):

These conditions determine whether the depositor can *act on what she knows*. Notice transforms information from retrospective to prospective, ensuring that the depositor learns about material changes before they affect her position. Actionability, the ability to withdraw before a pending change takes effect, gives the depositor the practical power to decline to remain under changes she has not accepted (and where depositors also hold a

binding vote, they may be able to prevent the change itself). Notice without actionability is merely informational; actionability without notice forces panic-driven exits rather than informed decision-making.

When the full chain is present, meaning the depositor can understand, observe, verify, predict, receive notice of, and exit before material changes, and the agent-side analysis shows bounded authority, whatever reliance remains on the role-holder's efforts is less likely to be the kind of dependence that creates the agency problem the securities laws target. Whether the chain is in fact complete is fact-dependent: it turns on, among other things, how long a timelock lasts and how comprehensible a proposed change is. A depositor who receives 72 hours' notice of a clearly described market addition and can withdraw in minutes has a real choice whether to accept the change; a depositor given a short timelock on a change she cannot understand does not.

Weakness in *any* part of the chain can undermine the whole. Perfect on-chain observability without an exit mechanism leaves the depositor dependent. Instant exit without notice forces continuous monitoring or acceptance of unknown risks. Notice and exit paired with incomprehensible mechanics give the depositor a right she cannot meaningfully exercise. The framework's power is cumulative, and no single condition is sufficient standing alone.

(ii) Case Law: Genuine Control Versus Illusory Rights

The foundational authority is *Williamson v. Tucker*, where the Fifth Circuit held that “an investor who claims his general partnership or joint venture interest is an investment contract has a difficult burden to overcome,” because “[o]n the face of a partnership agreement, the investor retains substantial control over his investment and an ability to protect himself from the managing partner or hired manager.”⁶⁸ To overcome this presumption, the investor must show that “he was so dependent on the promoter or on a third party that he was in fact unable to exercise meaningful partnership powers.”⁶⁹ The court identified three circumstances in which this showing can be made:

A general partnership or joint venture interest can be designated a security if the investor can establish, for example, that (1) an agreement among the parties leaves so little power in the hands of the partner or venturer that the arrangement in fact distributes power as would a limited partnership; or (2) the partner or venturer is so inexperienced and unknowledgeable in business affairs that he is incapable of intelligently exercising his partnership or venture powers; or (3) the partner or venturer is so dependent on some unique entrepreneurial or

⁶⁸ See *Williamson v. Tucker*, 645 F.2d 404, 424 (5th Cir. 1981).

⁶⁹ *Id.*

managerial ability of the promoter or manager that he cannot replace the manager of the enterprise or otherwise exercise meaningful partnership or venture powers.⁷⁰

Formal rights that exist on paper but cannot be practically exercised do not defeat the efforts-of-others prong.⁷¹

Robinson v. Glynn is instructive, but within limits. The Fourth Circuit held that venture participants need not possess every other participant's specialized knowledge: "Business ventures often find their genesis in the different contributions of diverse individuals — for instance, as here, where one contributes his technical expertise and another his capital and business acumen."⁷² Robinson's control was meaningful despite his complete lack of telecommunications expertise because he had management rights he *actually exercised*: reviewing reports, disapproving disbursements, and hiring outside professionals.⁷³ A vault depositor may or may not hold management rights of that kind. Where depositors hold governance rights they can and do exercise, such as a direct vote on material changes, *Williamson* and *Robinson* apply directly, subject to the limits those cases recognize. Where she holds only monitoring and exit capacity, they support the narrower proposition that rights a participant can and does exercise bear on whether her reliance on others is the kind *Howey* targets; they do not establish that an investor who can see and leave is not relying on the efforts of others.

The adverse side. In *Bailey v. J.W.K. Properties*, the Fourth Circuit found an investment contract where cattle-breeding investors had no formal management rights, no practical capacity, and no ability to act independently.⁷⁴ Exit capacity distinguishes vault depositors from the *Bailey* investors only in part, because exit alone does not give a depositor any say in what the role-holder does while she remains. CCI takes the adverse authority seriously. *Mutual Benefits* establishes that pre-purchase managerial efforts can satisfy *Howey* even absent post-purchase discretion. The enforcement actions (Section B.4 below) establish that centralized operators with discretionary control readily satisfy the element. And no court has yet addressed the specific question of whether code-enforced constraints change the *Howey* analysis for an arrangement that would otherwise satisfy the efforts-of-others prong. This is a question of first impression, and CCI acknowledges that the answer remains uncertain.

⁷⁰ *Id.*

⁷¹ *See id.*

⁷² *Robinson v. Glynn*, 349 F.3d 166, 171–172, 174 (2003).

⁷³ *See id.* at 171–74 (citing *Rivanna Trawlers Unlimited v. Thompson Trawlers, Inc.*, 840 F.2d 236, 241 (4th Cir. 1988)).

⁷⁴ *See Bailey v. J.W.K. Properties, Inc.*, 904 F.2d 918, 923–25 (4th Cir. 1990).

(iii) Which Changes Trigger the Need for Exit: Rules-based versus Discretionary

Not all post-deposit changes carry the same securities-law significance. The operative distinction is whether a change is executed under preset, objective criteria fixed in the code, or on a role-holder's discretionary assessment of market conditions. The direction of a change, whether it increases or decreases the depositor's risk, is a secondary consideration. The same role-holder—ordinarily the curator, or governance where changes require a vote—may make either kind of change, and the analysis should identify who decides.

Risk-increasing changes expand the depositor's exposure beyond what she accepted at the time of deposit, for example by adding new, riskier markets to the allowlist, lowering collateral thresholds, broadening the asset universe, or increasing leverage limits. Such changes alter the risk profile the depositor evaluated when she entered the vault. Because they increase the depositor's reliance on the role-holder's judgment about risks she did not initially accept, they are the changes for which notice and exit capacity matter most. A depositor who can evaluate a proposed risk-increasing change and withdraw before it takes effect retains genuine control over her risk exposure.

Risk-decreasing changes reduce the depositor's exposure by lowering caps, narrowing allowlists, adding protective constraints, or reducing leverage. If executed under preset, objective criteria, they do not require a separate timelock or exit right because the depositor accepted those rules at deposit. If made on a role-holder's discretionary assessment of market conditions, however, they involve judgment, though at the low end of the range: they narrow rather than expand the depositor's accepted exposure and therefore need not always require a timelock or exit right, but the role-holder's authority to make them, and the changes themselves, should be disclosed. That such changes are discretionary goes to characterization and disclosure; it does not itself establish essential managerial efforts. The direction of travel remains secondary to the rules-based versus discretionary distinction: it does not change whether a change involves judgment, only what protection the change requires.

Within-mandate allocations, meaning execution decisions within parameters the depositor has already accepted, present a middle case. Where the mandate is narrow and the execution is bounded, allocations among already-approved markets represent operation within a framework the depositor evaluated at deposit. Where the mandate is broad and allocations among approved alternatives materially affect returns, the analysis moves toward discretionary allocation regardless of whether the mandate itself has changed.

CCI submits that the doctrinal benchmark for actionability should be *meaningful exit capacity in response to discretionary changes that materially expand the depositor's accepted exposure*, not *immediate exit for all changes*. A depositor who receives advance notice of such a discretionary change and can withdraw before it takes effect has the opportunity for the kind of informed decision-making the securities laws protect. Changes executed automatically under preset, objective criteria disclosed at deposit do not require a separate exit right, and discretionary risk-reducing changes that narrow rather than expand the depositor's accepted exposure likewise do not require a timelock or exit right, although they should be disclosed.

(iv) How Exit Works In Practice

As the Introduction describes, vault exit mechanics span a spectrum. Some vaults permit *instantaneous, permissionless withdrawal*, limited only by available liquidity in the vault or the underlying market; others employ *asynchronous or queue-based mechanics*, under which the depositor requests withdrawal and the vault processes that request according to pre-disclosed rules, such as redemption queues, epoch-based settlement, or net-asset-value-cycle pricing; still others depend on *off-chain settlement*, including liquidation of off-chain positions, borrower repayment, or processing by a platform intermediary, before withdrawal proceeds become available; and some permit an *operator or role-holder to pause, delay, or condition withdrawal*.

The distinction between pre-disclosed mechanical constraints on exit and discretionary gating by an operator is factually significant for the *Howey* analysis. A depositor who faces a two-day redemption queue under pre-announced, immutable rules retains meaningful actionability. She can initiate her exit and know exactly when it will complete. A depositor whose withdrawal depends on an operator's discretionary approval faces the kind of dependence the securities laws target, because her ability to act on information is at someone else's sufferance.

Stressed liquidity conditions complicate this analysis, and CCI does not minimize them. Even where withdrawal is permissionless, a depositor may face reduced liquidity if pool utilization is high or if many depositors attempt to exit simultaneously in response to the same change. The vault's exit mechanics may be instantaneous under normal conditions but effectively queue-based under stress. A depositor who misses a timelock window, or who cannot exit within it because liquidity is unavailable, is exposed to the change. The relevant question is whether the depositor's exit capacity is *structurally* available, meaning whether the code permits her to withdraw without any person's cooperation under the applicable liquidity and settlement mechanics, rather than whether *market conditions* at any given moment make withdrawal costless. The securities laws protect against dependence on another person's

judgment, but market risk falls outside that protection. Timelocks should be long enough, relative to expected liquidity, to make exit meaningful, and that is one of the facts the analysis should examine.

CCI acknowledges that the notice condition, while architecturally available, is practically underdeveloped. Vault providers currently deliver notice primarily through websites, requiring depositors to check essentially daily. No standardized, push-based, crypto-native notification mechanism exists, though engineers report that such functionality could be built. CCI respectfully submits that the Commission should encourage developing standardized notification infrastructure, because effective notice is the architectural condition that makes depositor agency meaningful in practice.

Where code constrains what the role-holder can do (MEGD) and the depositor can monitor, verify, and exit the arrangement (depositor conditions), the arrangement has shifted from a trust relationship toward a verification relationship. The final sub-section develops the doctrinal consequences of that shift.

B.3.d. Code-Enforced Constraints Go to Howey Itself

Code constraints bear on the third element only to the extent they eliminate managerial discretion over the return-generating function. The question is always functional: does the code constraint actually eliminate the managerial discretion, or does it merely channel it? That question is read alongside *Turner*: channeled discretion is relevant to the element only if what remains is essential managerial effort. Where discretion is eliminated, code-enforced constraints on non-depositor authority reduce the Howey reliance itself, not only the disclosure needs of an arrangement. Where discretion is channeled rather than eliminated, the constraints go to the element where they meet the criterion in Section B.3.b, and otherwise to the reasonableness of expectations and the calibrated regulatory response. Timelocks, supply caps, bounded destination markets, forced deallocation triggers, and structurally available exit, subject to utilization, can each do one or the other, and the strongest form of the point applies to the baseline vault.

The foundation for this point is Section A's distinction between code and contract. CCI recognizes that the argument requires careful grounding because it is novel in the *Howey* context.

The distinction rests on a fundamental difference in the *kind* of protection the investor receives. A contractual covenant makes promises about future conduct and creates structures to catch deviations: monitoring mechanisms, bonding costs, and enforcement rights. Protection depends on the counterparty's continued compliance, or on the legal

system's ability to compel it. The entire architecture of the securities laws (mandatory disclosure, registration, anti-fraud liability) exists because contractual protections are inherently imperfect. The agent may breach. The investor may not detect the breach. The legal remedy may come too late. The securities laws fill that gap by creating an *ex ante* regulatory apparatus that supplements the contractual one.

A smart-contract permission boundary operates differently. It makes certain conduct *architecturally impossible*. Code that does not permit a role-holder to transfer assets outside approved destinations prevents such transfers regardless of whether incentives change, markets shift, or the role-holder acts in bad faith. An irrevocably renounced administrative key cannot be recovered. A parameter change subject to a mandatory timelock cannot take effect until the delay expires, because the code enforces the delay as a condition of execution.

This architectural distinction has direct doctrinal consequences. When timelocks delay risk-increasing changes, allowlists restrict capital movement, supply caps limit exposure, independent safety roles with trigger-based vetoes can block pending actions, and irrevocable renunciation permanently destroys role-holder authority, the depositor's profit expectation is not "derived from" those constrained efforts in the *Howey* sense. The efforts may exist and even be substantial, but they do not *generate* the depositor's return. The autonomous market mechanics do. The role-holder's constrained contributions are *inputs* to a system, not the *engine* of the depositor's profit. Code shifts what would otherwise be a trust relationship toward a verification relationship, and it is the trust relationship that *Howey* was designed to police.

The doctrinal grounding is *Howey*'s own objective standard. The Supreme Court has consistently held that the investment-contract inquiry looks to "the economic realities underlying a transaction" and asks what a reasonable person would understand the arrangement to be.⁷⁵ Where code makes certain conduct technically impossible, a reasonable person assessing those economic realities should conclude that her profit does not depend on the constrained role-holder's managerial judgment. It flows from the autonomous mechanics the code implements. CCI is not proposing a new test. This is the application of *Howey*'s own economic-reality standard to a new kind of evidence about what the arrangement actually provides.

The principle finds support in the case law's consistent emphasis on *substance over form*. The courts that have found investment contracts (*BlockFi*, *Genesis*, *Prosper*, *Mutual Benefits*) have done so because the substance of the arrangement created genuine dependence on

⁷⁵ See *Howey*, 328 U.S. at 298–99; *Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967); *Forman*, 421 U.S. at 848; see also *Stoiber v. SEC*, 161 F.3d 745, 751 (D.C. Cir. 1998) (marketing shapes reasonable expectations).

managerial judgment, regardless of the formal label the promoter attached. The same principle applies when the substance of the arrangement, as evidenced by the code, substantially reduces dependence on managerial judgment. The mere *label* of a “curator” or “manager” should not, by itself, create *Howey* liability that the economic realities do not support.

But this principle also has limits. Code constraints are meaningful only where they actually constrain the conduct that matters. A timelock on market additions does not constrain a curator’s allocation decisions among already-approved markets. An allowlist on destinations does not constrain the *judgment* exercised in selecting which allowlisted market to favor. Where the curator’s active judgment within those boundaries becomes the undeniably significant effort that generates depositor returns, the arrangement resembles the managed enterprise *Howey* was designed to reach.

B.3.e. The Reasonable-Expectations Standard: Code Defines the Character of the Arrangement

The preceding sub-sections have argued that code-enforced constraints reduce *Howey* reliance as a substantive matter. This sub-section addresses the evidentiary corollary: how courts should assess the “character” of a vault arrangement when marketing and code diverge.

The Supreme Court established the governing principle in *SEC v. C.M. Joiner Leasing Corp.*: “The test rather is what character the instrument is given in commerce by the terms of the offer, the plan of distribution, and the economic inducements held out to the prospect.”⁷⁶ The Court added that “it is not inappropriate that promoters’ offerings be judged as being what they were represented to be.”⁷⁷ This formulation has been “repeatedly” reaffirmed. *Marine Bank v. Weaver* applied the same standard, asking what character the arrangement was “given in commerce” by its terms and distribution.⁷⁸ *Forman* confirmed that the inquiry turns on “the economic realities underlying a transaction, and not on the name appended thereto.”⁷⁹

The *Joiner* standard has two implications for vault architecture, and they operate symmetrically.

⁷⁶ See *Howey*, 328 U.S. at 298–99; *Tcherepnin*, 389 U.S. at 336. The Court’s articulation of the “character in commerce” standard is from *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351–53 (1943).

⁷⁷ *Joiner*, 320 U.S. at 353.

⁷⁸ *Marine Bank*, 455 U.S. at 556 (quoting *Joiner*, 320 U.S. at 352–53).

⁷⁹ *Forman*, 421 U.S. at 849.

First, where code permits broad discretion and marketing understates it, the code governs. The enforcement actions discussed below illustrate this direction: in *BlockFi*, *Nexo*, *Abra*, and *TradeStation*, marketing minimized the actual discretion the platform exercised over depositor assets. The platforms' promotional materials characterized the arrangements as simpler and safer than they were. Under *Joiner*, the "character" of those arrangements was defined by what the platforms actually did with depositor capital, not by the marketing that concealed it. The enforcement actions were well-founded, because the economic reality was that depositors relied on undisclosed managerial judgment.

Second, the same principle applies when marketing *overstates* discretion relative to what the code permits. A vault whose immutable architecture constrains a role-holder to a narrow set of pre-approved actions cannot be transformed into a managed enterprise by promotional materials suggesting otherwise. Under *Joiner*'s "economic realities" standard, the "character the instrument is given in commerce" is established by what the arrangement actually provides, and code that provably prevents certain conduct is the most reliable evidence of what the arrangement actually provides. A depositor cannot *reasonably* expect profits from essential managerial efforts that the architecture makes impossible to perform.⁸⁰ Code is the best evidence of what conduct is possible within the arrangement, but marketing remains relevant to what purchasers were led to expect. Where the code is publicly verifiable and users are on notice that it controls the arrangement's terms, a reasonable purchaser would understand that expectations inconsistent with the code's actual constraints are less reasonable. This formulation preserves the role of marketing while recognizing that demonstrable code constraints limit what the arrangement can deliver.

CCI recognizes that the proposed Regulation Crypto Assets safe harbor is framed differently. It turns on the essential managerial efforts that the issuer "represented or promised it would engage in," a representation-based test. That framing does not displace *Joiner* for purposes of the statutory definition. *Joiner* and its successors ask an objective question about the character the instrument is given in commerce, which encompasses both what was represented and what the arrangement actually provides; a safe harbor keyed to representations establishes when the Commission will treat promised efforts as complete, it does not redefine what an investment contract is. The representation-based framing is nonetheless consistent with the two-way analysis above: marketing can create expectations that the code alone would not, and code can limit expectations that marketing inflates.

This is not a novel principle. It is the application of *Joiner*'s own formulation to a new kind of evidence about the character of the arrangement. The Supreme Court directed courts to

⁸⁰ The distinction from *BlockFi*, *Nexo*, *Abra*, and *TradeStation* is that in those cases, marketing understated actual discretion: code permitted broad deployment and marketing hid it. That is the mirror image of the scenario CCI describes.

look at the “terms of the offer” and the “economic inducements held out to the prospect.” In a vault, the terms of the offer are written in code. The economic inducements are the returns the code’s mechanics produce. Where the code is open-source, deployed on a public blockchain, and independently auditable, it constitutes the most transparent possible statement of what the arrangement provides. Marketing that contradicts the code does not change the economic reality; it merely raises a separate question about whether the marketing itself was misleading, a question the anti-fraud provisions address independently of the investment-contract analysis.

CCI submits that this principle should guide the Commission’s analysis of vault architectures. The *Joiner* standard asks what character the instrument is given in commerce. Code that is immutable, publicly verifiable, and deterministic gives the instrument its character more reliably than any prospectus, pitch deck, or website copy. Where the code and the marketing agree, the analysis is straightforward. Where they diverge, the code is the better evidence of the economic reality, and the marketing is the subject of the anti-fraud inquiry.

Accountability.

None of this leaves a gap in accountability. Where any person makes material misrepresentations about a vault, or uses a vault to defraud depositors, the antifraud provisions reach that person if the vault position is a security, and federal wire-fraud and state consumer-protection laws reach that person if it is not. The role-holders the Control Framework identifies—curators, governance controllers, holders of administrative keys, and front-end operators—are identifiable persons. A holder of an administrative key who may act only on preset, objective triggers and cannot direct capital or generate returns does not, on that account, supply the managerial efforts on which depositors rely; where a curator or other role-holder exercises discretionary authority over depositor assets for compensation, the Investment Advisers Act and its antifraud provision, Section 206, may also apply, as Volume IV explains. CCI’s proposed objective conditions (Introduction, Section IV.F) also contemplate a designated compliance entity responsible for regulatory engagement and accountability. The question this Volume poses is therefore not whether anyone can be held accountable, but whether the registration and disclosure apparatus should apply to arrangements in which no person holds that kind of control, and how it should be calibrated where someone does.⁸¹

⁸¹ Securities Act of 1933 § 17(a), 15 U.S.C. § 77q(a); Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b); Investment Advisers Act of 1940 § 206, 15 U.S.C. § 80b-6; 18 U.S.C. § 1343.

B.4. Enforcement Comparators: What They Establish and What They Do Not

The Commission's enforcement actions involving yield-generating crypto platforms are frequently cited as establishing broad precedent for classifying vault products as securities. CCI addresses each in turn, assessing the actions in light of the Commission's own analytical framework.

B.4.a. Prosper Marketplace

In November 2008, the Commission entered a settled enforcement action against Prosper Marketplace, Inc., finding that the notes offered and sold through Prosper's peer-to-peer lending platform were securities under both *Howey* and *Reves v. Ernst & Young*, 494 U.S. 56 (1990).⁸²

Material Facts.

Prosper operated an online platform connecting individual borrowers with individual lenders. Prosper screened and rated borrower creditworthiness, operated the auction mechanism through which loans were originated, serviced all loans (including payment processing, delinquency management, and collections), and maintained the technology infrastructure through which all transactions occurred. Lenders selected loans based on Prosper's credit ratings and borrower profiles, but they could not originate, service, or collect loans directly. As the Commission found, lenders were "too geographically diverse and diffuse to come together without Prosper," they "lack[ed] the requisite experience to run a loan auction or to create and service a loan package," and they "relie[d] on Prosper's continued operation of the platform in order to transact and to recoup any gain on their investments."⁸³

Legal Basis.

Under *Howey*, the Commission identified pooled lending as the common enterprise, the expectation of financial return as the profits element, and Prosper's credit-screening, origination, servicing, and collection functions as the essential managerial efforts generating returns. Under *Reves*, it emphasized investment motivation on both sides, broad public distribution, reasonable investment expectations, and the absence of a risk-reducing alternative regime.

⁸² *In re Prosper Marketplace, Inc.*, Securities Act Release No. 8984 (2008).

⁸³ *Id.* at 3–4.

Distinction from Vault Architecture.

Prosper is the most instructive comparator because it involved *lending*, not merely the custody-and-deploy pattern of BlockFi and Genesis. The distinction turns on three facts.

First, *credit origination and servicing*. Prosper underwrote borrower creditworthiness, set credit ratings that determined interest rates, serviced payments, and pursued delinquent borrowers. Lenders depended entirely on Prosper for the *quality and administration of the loan*. In an autonomous overcollateralized lending market, there is no credit origination in this sense. Borrowers self-select by posting overcollateral; the protocol enforces the collateral requirement mechanically; liquidation is permissionless. No one evaluates borrower creditworthiness because the collateral, not the borrower's promise, secures the loan.

Second, *information asymmetry*. Prosper possessed credit information about borrowers that lenders could not independently access or verify. Prosper's credit ratings were the lenders' only window into borrower risk. In on-chain lending markets, the material information (collateral posted, current LTV, utilization rate, and liquidation threshold) is publicly observable on-chain by any person.

Third, *coordination dependence*. Prosper lenders could not function without the platform. They could not originate loans, service them, or find borrowers independently. This is the coordination problem Bailey identified. In a vault with permissionless deposit and withdrawal, the depositor can exit without anyone's cooperation.

The Strongest Counterargument and Why It Matters.

The Commission might argue that where a curator, particularly one curating vaults with real-world collateral or private credit, performs credit analysis, collateral evaluation, and risk assessment that depositors cannot replicate, the functional relationship to Prosper is closer than the architectural distinctions suggest. CCI does not dismiss this argument. For curated vaults extending into off-chain credit, where the curator evaluates documentation the depositor cannot access, the Prosper analogy has real force. Its strength diminishes for overcollateralized on-chain lending where all parameters are publicly verifiable, and is greatest for private credit vaults where the transparency boundary has been crossed.

B.4.b. BlockFi Lending LLC

In February 2022, the Commission entered a settled enforcement action against BlockFi, finding that BlockFi Interest Accounts constituted unregistered securities under both *Howey* and *Reves*.⁸⁴

Material Facts.

BlockFi was a centralized corporate entity that raised digital assets from approximately 572,000 retail depositors and deployed them for its own account, lending to institutional counterparties, trading proprietary positions, and investing in digital assets, all with complete and undisclosed discretion. Depositors bore balance-sheet risk: if BlockFi's investments failed, depositors' principal was at risk. Marketing emphasized passive returns while disclosing nothing about deployment. Depositors had no visibility into counterparties, positions, or exposures.⁸⁵

Distinction from Vault Architecture.

Every feature that made BlockFi a security (undisclosed discretion, custody, balance-sheet risk, zero visibility, inability to exit independently) is structurally absent from the vault architectures CCI describes. BlockFi's depositors earned returns because BlockFi chose to lend to Genesis and other counterparties at its discretion. Vault depositors earn returns because autonomous supply-and-demand mechanics set a market-clearing rate in a transparent, overcollateralized credit market. These are different economic realities.⁸⁶

B.4.c. Genesis / Gemini Earn

In January 2023, the Commission filed a complaint alleging that the Gemini Earn program constituted unregistered securities.⁸⁷

Material Facts.

Gemini transferred depositor assets to Genesis, a centralized lending desk that deployed them in *unsecured* lending to counterparties including Three Arrows Capital. Investors had no visibility into counterparty risk. When Three Arrows collapsed, Genesis entered

⁸⁴ BlockFi, *supra* note 18, at 2.

⁸⁵ See *id.* at 3–4.

⁸⁶ See 2026 Joint Interpretation, *supra* note 20, at 13,720–22.

⁸⁷ Genesis, *supra* note 18; see also *McGreevy v. Digital Currency Group, Inc.*, slip op. 7–8 (D. Conn. Feb. 24, 2026) (analyzing commonality and efforts-of-others elements for Genesis Yield program).

bankruptcy, a catastrophic failure caused by the very discretionary risk the securities laws police.

Distinction.

Vault lending is overcollateralized, transparent, and subject to permissionless exit. The inability to withdraw that trapped Gemini Earn depositors is structurally avoided where withdrawal does not depend on an intermediary's solvency.⁸⁸

B.4.d. DeFi Money Market (DMM)

In August 2021, the Commission entered a settled action against DMM's operators, alleging that mTokens were unregistered securities.⁸⁹

Material Facts.

The DMM matter involved fraud: operators claimed that deposits were backed by real-world auto loans, but the collateral was fabricated. Enforcement actions premised on fraud are poor comparators for honest products, because the misrepresentations themselves shaped what investors were led to expect and the operators' undisclosed management of the assets supplied the efforts on which returns depended. DMM establishes that operators who misrepresent their product face securities-law liability, a proposition no one disputes; it does not establish whether transparent, verifiable on-chain markets create the reliance *Howey* targets.⁹⁰

B.4.e. BarnBridge DAO

In December 2023, the Commission entered a consent order against BarnBridge DAO, alleging that its yield-optimization pools were unregistered securities.⁹¹

Material Facts.

BarnBridge offered products involving active tranching, rebalancing, and strategy selection by a DAO under founder control. The matter ended in a consent order that contains little reasoned legal analysis.

⁸⁸ See *id.*

⁸⁹ *In re Blockchain Credit Partners*, Sec. Act Release No. 10961, Sec. Exchange Act Release No. 92588 (Aug. 6, 2021).

⁹⁰ See *id.*

⁹¹ *In re BarnBridge DAO*, Sec. Act Release No. 11262, Inv. Co. Act Release No. 35079 (Dec. 22, 2023).

Distinction.

BarnBridge’s products involved *active structured-product management*, including designing tranches, segmenting risk and return among different classes, and making ongoing rebalancing decisions. This is materially different from a lending vault with a uniform share class and bounded curator authority. As a matter of precedential weight, consent orders generally do not create binding judicial precedent; they represent negotiated resolutions with no reasoned analysis that courts could extend to different facts.⁹²

The Strongest Counterargument.

BarnBridge is the closest analogue to curated vaults, because both involve a party selecting how capital is deployed across DeFi protocols. CCI acknowledges this. BarnBridge actively designed structured products with multiple risk tranches and ongoing rebalancing. A lending vault curator adding markets to an allowlist subject to timelocks, where all depositors share the blended rate through a uniform share-price mechanism, is performing a different function with different securities-law significance.

B.4.f. Synthesis

Each enforcement action involved some combination of centralized discretion, custody, undisclosed deployment, marketing emphasizing passive returns, and information asymmetry. These features present clear principal-agent problems, and CCI does not argue otherwise. The actions *confirm* the framework developed in this Section: where the agency problem is present, the securities laws work as designed.

The question is whether the same response is warranted when architecture has addressed the problem. Recent judicial decisions reinforce the point. In *McGreevy v. Digital Currency Group* (D. Conn. Feb. 2026), the court found investment-contract liability where Genesis commingled investor assets, exercised complete discretion over deployment into unsecured positions, and concealed its insolvency, facts that exemplify the agency problem in its most acute form.⁹³ In the baseline vault, a permissionless, overcollateralized, algorithmically mediated market with no custody, no discretionary deployment, full on-chain transparency, and structurally available exit, the factual predicates supporting liability in *McGreevy* and in the enforcement actions discussed above are absent.⁹⁴

⁹² See, e.g., *SEC v. Citigroup Global Mkts.*, 752 F.3d 285, 295 (2d Cir. 2014).

⁹³ See *McGreevy*, slip op. at 7–8 (D. Conn. Feb. 24, 2026).

⁹⁴ See 2026 Joint Interpretation, *supra* note 20, at 13,716–17.

The *Howey* analysis does not produce binary results for vault architectures. Immutable, pre-configured markets present the strongest case for non-security treatment, whereas actively managed, discretionary-strategy vaults present the strongest case for security treatment. The commercially significant middle ground, curated vaults with bounded and observable retained authority, requires the fact-intensive analysis developed in this Section. The Control Framework provides the vocabulary, and the code provides the evidence. The depositor's practical ability to understand, verify, observe, anticipate, and exit the arrangement determines whether any remaining reliance is the *kind* of reliance the federal securities laws were enacted to address.

C. The Reves Note Analysis

Key Points: The Howey Investment-Contract Analysis Applied to Vault Architecture

1. Reves addresses any vault instrument that is a note. Three instruments could be notes: (A) the vault's lending positions, which are claims against borrowers for principal plus interest; (B) a vault receipt token that passes the borrowers' obligations through to its holders; and (C) a vault receipt token whose repayment an operator, sponsor, or senior tranche promises. A floating-NAV vault receipt token with no repayment obligation is not a note and is analyzed under *Howey*.

2. A vault receipt token is a participation in the vault's lending positions. Under the loan-participation cases, a participation in a specific, identifiable loan follows that loan, while a participation that is pooled, or whose repayment a person promises, must be analyzed on its own terms. A token is a pass-through only if holder rights and losses in fact track identifiable borrower obligations; most vault receipt tokens are instead pool interests.

3. Vault lending positions in the baseline vault resemble commercial loans, and CCI asks the Commission to confirm that they belong to the existing commercial-loan family. While Two of Kirschner's supports are absent, the nature of the lending business (borrowers draw liquidity against their own collateral rather than issuing notes to finance a business enterprise), and other protective factors (e.g., overcollateralization, automated liquidation, and on-chain transparency) supply the risk-reducing factor that weighed heavily in Kirschner.

Section B asked whether a vault receipt token is an investment contract. This Section asks whether any instrument in a vault arrangement is a note and, if so, whether that note is an investment or a commercial instrument.⁹⁵ Three instruments could qualify: the vault's lending positions, which are claims against borrowers for principal plus interest; a vault receipt token that carries those borrowers' obligations through to its holders; and a vault receipt token whose repayment a person, rather than the borrowers, promises.

The statutory definition of "security" includes "any note."⁹⁶ Yet the Supreme Court in *Reves v. Ernst & Young* recognized that Congress aimed to regulate investments, "not ... creat[e] a general federal cause of action for fraud."⁹⁷ The Court accordingly adopted the "family resemblance" test. It presumes every note to be a security, but the presumption is rebutted where the note bears a "strong resemblance" to one of several judicially recognized categories of non-security notes. The resemblance is assessed through four factors: (1) the motivations of the seller and buyer (raising capital and seeking a return, or a commercial or consumer purpose); (2) the plan of distribution (broad trading among the public, or a limited class of participants); (3) the reasonable expectations of the investing public (whether the public would regard the instrument as an investment); and (4) whether some risk-reducing factor, such as collateral or another regulatory scheme, makes application of the securities laws unnecessary.⁹⁸ The test asks, in substance, whether the note is an investment or a commercial instrument.

Lending vaults involve a layered credit structure, and the law of loan participations supplies the framework for it. *First Citizens Federal Savings & Loan Association v. Worthen Bank & Trust Co.* held that a loan participation "may be a security if the note underlying the loan participation is a security or if the loan participation agreement itself is a security,"⁹⁹ and the

⁹⁵ Like Section B, this Section assumes that an issuer can be identified. Who the issuer is, and whether one exists, remains unsettled, although the statutory definition is broad. See Securities Act § 2(a)(4), 15 U.S.C. § 77b(a)(4); Exchange Act § 3(a)(8), 15 U.S.C. § 78c(a)(8). The Introduction and Section D address the question. The question concerns the vault receipt token; the vault's lending positions have identifiable obligors in the borrowers.

⁹⁶ Securities Act § 2(a)(1), 15 U.S.C. § 77b(a)(1); Exchange Act § 3(a)(10), 15 U.S.C. § 78c(a)(10).

⁹⁷ *Reves v. Ernst & Young*, 494 U.S. 56, 61 (1990). The phrase "any note" "must be understood against the backdrop of what Congress was attempting to accomplish in enacting the Securities Acts." *Id.* at 63.

⁹⁸ *Id.* at 65–67. The enumerated non-security categories are: (1) notes delivered in consumer financing; (2) notes secured by a mortgage on a home; (3) short-term notes secured by a lien on a small business or some of its assets; (4) notes evidencing a "character" loan to a bank customer; (5) short-term notes secured by an assignment of accounts receivable; (6) notes formalizing an open-account debt incurred in the ordinary course of business; and (7) notes evidencing loans by commercial banks for current operations. *Id.* at 65.

⁹⁹ *First Citizens Fed. Sav. & Loan Ass'n v. Worthen Bank & Tr. Co.*, 919 F.2d 510, 515–16 (9th Cir. 1990) (applying Arizona law, construed by reference to federal law). The court found that the underlying note resembled a commercial loan and that the participation was not an investment contract, because the participant was a secured lender receiving a set rate whose return did not depend on the managerial efforts of the lead bank. *Id.* at 516 & n.6. A participation in a note that is itself a security is a security. Securities Act § 2(a)(1), 15 U.S.C. § 77b(a)(1) (defining "security" to include "any certificate of interest or participation in" any of the enumerated instruments).

Second Circuit applied the same two routes in *Banco Español*.¹⁰⁰ Courts applying that framework have consistently held that participations in commercial loans are not securities.¹⁰¹

Whether a participation follows its underlying loan depends on what the participation is. A participation in “a specific, identifiable” loan, rather than “an undivided interest in a pool of loans,” has no “identity separate from the underlying loan,” and if the loan is not a security, neither is the participation.¹⁰² But “the manner in which participations in that instrument are used, pooled, or marketed might establish that such participations are securities” even where the underlying instrument is not.¹⁰³ A managed pool is the clearest example: its interests may be securities “because any profits realized are derived from the managerial efforts of those who run the pool and make such decisions as determining which [notes] shall be in the pool.”¹⁰⁴

A lending vault presents the same layers. The vault’s lending positions are claims against borrowers at a rate set by an algorithm in response to utilization. The vault receipt token is the depositor’s participation in those positions. Depending on its design, the token passes the borrowers’ obligations through to its holders, represents an interest in a pool that holds them, or carries a repayment promise a person adds (Section C.1). Each layer must be classified on its own terms. Collapsing them into a single instrument conflates equity-like and debt-like structures and produces inaccurate conclusions under both *Howey* and *Reves*.

The Commission’s 2022 order against BlockFi Lending LLC, the most prominent regulatory treatment of crypto lending to date, found that BlockFi’s interest-bearing accounts were securities because BlockFi pooled deposited crypto assets, controlled their deployment, and paid interest funded by its own lending and trading. The order’s *Reves* analysis was brief, and it does not establish that every crypto-lending arrangement is a security. Vault lending positions differ materially from BlockFi’s centralized, custodial model and deserve individualized analysis under the four factors rather than categorical treatment based on their association with crypto assets.¹⁰⁵

¹⁰⁰ *Banco Español de Crédito v. Sec. Pac. Nat’l Bank*, 973 F.2d 51, 54–56 (2d Cir. 1992).

¹⁰¹ *Banco Español de Crédito v. Sec. Pac. Nat’l Bank*, 763 F. Supp. 36, 41 (S.D.N.Y. 1991) (“Every circuit court that has ever considered the question has concluded that loan participations are not securities.”), *aff’d*, 973 F.2d 51 (2d Cir. 1992); *see, e.g.,* *McVay v. W. Plains Serv. Corp.*, 823 F.2d 1395, 1398–1400 (10th Cir. 1987); *Union Nat’l Bank of Little Rock v. Farmers Bank*, 786 F.2d 881, 884–85 (8th Cir. 1986); *Union Planters Nat’l Bank of Memphis v. Com. Credit Bus. Loans, Inc.*, 651 F.2d 1174, 1180–85 (6th Cir. 1981); *Am. Fletcher Mortg. Co. v. U.S. Steel Credit Corp.*, 635 F.2d 1247, 1253–55 (7th Cir. 1980).

¹⁰² *Banco Español*, 763 F. Supp. at 42.

¹⁰³ *Banco Español*, 973 F.2d at 56.

¹⁰⁴ *Zolfaghari v. Sheikholeslami*, 943 F.2d 451, 455 (4th Cir. 1991).

¹⁰⁵ *In re BlockFi Lending LLC*, Securities Act Release No. 11029, at 3 (Feb. 14, 2022) (“BlockFi pooled the loaned assets, and exercised full discretion over how much to hold, lend, and invest.”). Commissioner Peirce has observed that vaults “fall along a spectrum” and that “on-chain loans, depending on the parties’ motivations, the plan of distribution, and other

The analysis proceeds in four parts. Section C.1 addresses which vault instruments are notes and the route each takes under the participation framework. Section C.2 applies the four *Reves* factors, drawing on *Kirschner v. JP Morgan Chase Bank, N.A.*, to the lending positions where a pool holds them, to the lending positions where a token in fact passes them through, and to the token whose repayment a person promises. Section C.3 distinguishes *BarnBridge*. Section C.4 asks the Commission to confirm that vault lending positions in the baseline vault fall within the existing commercial-loan family. Unless otherwise noted, the features described apply to the baseline vault; curated vaults present them to the extent the curator's authority is bounded as Section B.3 describes.

C.1. Threshold: Which Vault Instruments Are Notes?

Before applying the four-factor test, it is necessary to determine whether the instrument at issue qualifies as a “note.” *Reves* governs notes, meaning instruments that involve a promise to repay a sum of money, typically with interest. Not every vault receipt token qualifies as a note, and applying the wrong analytical framework produces unreliable results. Four designs recur.

Floating-NAV vault receipt tokens. The most common vault receipt token, exemplified by the ERC-4626 standard, represents a pro rata share of a pool whose net asset value fluctuates.¹⁰⁶ The depositor has no right to repayment of a fixed sum. There is no maturity date, no coupon, and no promise of principal return. The depositor's return depends on the performance of the pool's assets, and if the pool loses value, the depositor bears that loss pro rata. The instrument is an interest in a pool, not a debt obligation, and lacks the hallmarks of a “note” described in *Reves*. Under the participation framework, it is an undivided interest in a pool, not a participation in a specific, identifiable loan, so it does not simply follow the underlying positions. It is analyzed under *Howey*, and the question is whether anyone manages the pool (Section B).

A principle the Commission has already applied supports this result, though only in part. The 2026 Joint Interpretation concluded that staking receipt tokens and redeemable wrapped tokens are not securities where they convey beneficial ownership of deposited non-security assets.¹⁰⁷ The analogy is limited. A staking or wrapped receipt represents assets that remain as deposited; a lending vault's pool holds borrower obligations in place of some of those

relevant factors, can bear the hallmarks of notes that are securities.” Peirce Statement, *supra* note 17. See also 2026 Joint Interpretation, *supra* note 20; Proposed Regulation Crypto Assets, Securities Act Release No. 33-11434, Exchange Act Release No. 34-106150 (Aug. 18, 2026), 91 Fed. Reg. 54,510 (Aug. 21, 2026).

¹⁰⁶ ERC-4626 is a standardized interface for tokenized vault shares on the Ethereum blockchain. Each vault token represents a pro rata claim on the vault's total assets, and its value fluctuates as the vault's net asset value changes. See Joey Santoro et al., ERC-4626: Tokenized Vaults (Ethereum Improvement Proposals) (Dec. 22, 2021).

¹⁰⁷ 2026 Joint Interpretation, *supra* note 20.

assets. The Joint Interpretation also confirms that an instrument that is a security remains one whatever its on-chain format. The analogy supports only the narrower point that tokenization does not itself create a security. Whether the pool interest is one turns on the *Howey* analysis in Section B, and where a vault pools depositor funds for a controlling person to deploy at discretion, the risks *Howey* and *Reves* address may well be present.

Hybrid vault receipt tokens. Certain vault structures occupy a middle ground. When a lending vault generates interest income and passes it through to depositors via a floating-NAV share, the token shares characteristics with both equity, including floating value and no fixed repayment, and debt, because the underlying return consists of interest on loans. The governing framework depends on the instrument's design: the token is treated as a floating-NAV token unless its design adds a repayment obligation. The form in which rewards accrue bears on that design question, but neither form is dispositive (Section B.3.a).

Fixed-yield pass-through tokens. Where a token carries the borrowers' repayment obligations through to its holders, and no person adds an obligation of its own, the token is a participation in the underlying notes. It has no identity separate from them, and its status follows the *Reves* analysis of the lending positions in Section C.2. A label does not make a token a pass-through. The participation rule is confined to a specific, identifiable loan, and a token qualifies only where a mapping of holder rights and losses shows (i) identifiable underlying borrower obligations; (ii) that each payment and default passes proportionately to the holder; (iii) that the positions are not substituted or rebalanced; and (iv) that no person makes a fixed-yield holder whole when rates float or borrowers default. A token that fails any of the first three is a pool interest. A token that fails the fourth is a promised token. In a baseline lending market, each depositor holds a pro rata share of a changing set of borrower positions and losses are socialized across lenders, so most vault receipt tokens are pool interests rather than pass-throughs.

Fixed-yield tokens whose repayment a person promises. When a vault structure involves a promise by a person to repay a fixed or deterministic amount, the instrument is a new note with a new obligor and triggers the *Reves* presumption as to that obligor's promise. For example, a structured product with a senior tranche may guarantee principal return, or a vault receipt token may constitute a debt claim against the vault operator. The question is then whether the four-factor test rebuts the presumption. The Commission's prior actions treated instruments of this kind as the notes: the mTokens in DeFi Money Market and the interest accounts in BlockFi were depositor-facing claims whose repayment the platform promised from its own balance sheet.¹⁰⁸ The baseline vault issues no such token.

¹⁰⁸ See *In re Blockchain Credit Partners* (DeFi Money Market), Securities Act Release No. 10961 (Aug. 6, 2021); *BlockFi*, Securities Act Release No. 11029.

Two consequences follow. First, a vault receipt token that is a pooled interest is analyzed independently of the lending positions the pool holds, even where those positions are commercial loans. The participation cases explain why: interests in a pool may be securities because profits derive from those who decide “which [notes] shall be in the pool.” In an immutable single market, no person makes that decision; borrowers self-select against coded parameters. That is pooling without management, and it places the decisive question on essential managerial efforts, as Section B addresses. Because the Commission may also analyze a pooled structure by reference to the depositors behind it, Section C.2 applies each factor under both structures. Whether the lending positions are held by a pool or for pass-through holders is a feature of the token’s design, not a position CCI takes on what a vault is.

Second, whether the lending positions are notes at all is itself open. On-chain borrowing is typically non-recourse: the code enforces repayment only through the collateral, and the borrower may forfeit the collateral rather than repay. This Section nonetheless assumes that the positions are notes, because that assumption triggers the *Reves* presumption and is the more demanding analysis. The borrower is the obligor: often a pseudonymous wallet, sometimes an individual, a trading firm, or another protocol, borrowing against collateral it posts. Borrower purposes vary (Section C.2.a), and no lender relies on any borrower’s creditworthiness, because the collateral and the liquidation mechanism, not the borrower’s identity, secure repayment.

C.2. The Four *Reves* Factors

The four factors are applied in turn. Throughout this Section, two instruments should be kept apart: the lending positions (the borrowers’ obligations to repay the vault) and the vault receipt token (the instrument the vault issues to depositors). Each factor is applied in three parts: to the lending positions where the vault receipt token passes them through to depositors (the *pass-through structure*); to the lending positions where a pool holds them (the *pool structure*); and to a fixed-yield token whose repayment a person promises (the *promised token*). The first two parts therefore classify the lending positions; only the third classifies a vault receipt token directly. Because a fixed-yield pass-through token follows the positions, the pass-through analysis also decides that token’s status. Because pool interests are the common case, the pool structure is the principal analysis of the lending positions; the pass-through analysis applies only where the mapping test in Section C.1 is met. Under the pool structure, the status of the vault receipt token itself is a *Howey* question addressed in Section B, not a *Reves* question. A table at the end of this Section summarizes the results.

C.2.a. Motivations of the Parties

The first factor asks whether the motivations of the parties are investment-oriented or commercial. When the seller seeks to raise money for general use in a business enterprise or to finance substantial investments, and the buyer primarily seeks an expected return, the note more likely qualifies as a security. Conversely, when the parties exchange the note to facilitate a commercial transaction, to correct for cash-flow difficulties, or to advance some other commercial or consumer purpose, the note is less likely to be one.¹⁰⁹ Courts weigh the motivations of each party to the transaction, including the borrower, any originating or lead lender, and the participants.¹¹⁰

In *Kirschner*, the Second Circuit applied the motivations factor to syndicated term loans made to Millennium Health, a clinical laboratory company. The lenders were institutional investors, including banks and hedge funds, that participated in a \$1.775 billion syndicated credit facility, and the borrower sought to refinance existing debt and fund a leveraged acquisition. The court characterized this factor as mixed, because the lenders sought a return on their investment and the borrower sought capital for general corporate purposes rather than to facilitate a specific commercial transaction. The court did not treat this factor as dispositive, and the remaining three factors favored non-security treatment.¹¹¹

Pass-through structure. The motivations analysis is mixed for vault lending positions, as it was in *Kirschner*. On the supply side, a depositor provides liquidity to a lending market in exchange for a utilization-based market rate. She plainly seeks a return, which points toward an investment motivation. But she does so by extending overcollateralized credit to borrowers, not by financing a business enterprise; her return is interest fixed by the rate model rather than a return on any borrower's business. No promoter promises the interest rate. Instead, an autonomous interest-rate model determines the rate through the interaction of supply and demand in the lending market, responding to pool utilization. Suppliers also range widely, from institutions managing treasury liquidity to individuals seeking yield on idle assets. Some depositors supply liquidity for reasons other than yield, such as qualifying for governance participation, token distributions, or liquidity-mining incentives; those functional motivations are not investment motivations in the *Reves* sense, although incentives a protocol offers may bear on the reasonable-expectations analysis under the third factor.

¹⁰⁹ *Reves*, 494 U.S. at 66.

¹¹⁰ See *Banco Español*, 763 F. Supp. at 42–43, *aff'd*, 973 F.2d at 55.

¹¹¹ *Kirschner v. JP Morgan Chase Bank, N.A.*, 79 F.4th 290, 305–06 (2d Cir. 2023), *cert. denied*, 144 S. Ct. 818 (2024).

On the demand side, borrower purposes fall along a spectrum. Some borrowers draw liquidity for trading, treasury management, or other operating needs. Many others borrow against an asset they wish to keep, such as bitcoin, in order to invest the proceeds elsewhere without disposing of the collateral. CCI does not contend that these borrowers are uniformly commercial borrowers. The fungibility of money makes it difficult to draw sharp distinctions based on subjective borrower intent, and a borrower that posts collateral and draws liquidity may use those funds for any purpose, just as a traditional bank borrower might use loan proceeds to purchase equipment while freeing up equivalent cash for other uses. What the borrower does not do is issue a note to finance a business enterprise; it draws liquidity against its own collateral. The structural features of the transaction are addressed under the fourth factor, and CCI does not rely on them here.

The contrast with the Commission’s crypto-lending enforcement actions is instructive. In BlockFi, depositors transferred crypto assets to BlockFi, which pooled and deployed those assets at its sole discretion, including into unsecured institutional loans and proprietary trading, to generate yield. Similarly, in matters involving Celsius, Voyager, and Genesis/Gemini Earn, depositors transferred custody of their assets to centralized platforms that exercised undisclosed discretion over deployment.¹¹² In each case, the depositor’s motivation was strongly investment-oriented: the depositor entrusted assets to a professional money manager and expected that manager to generate returns. The vault depositor does not entrust assets to a discretionary manager. Instead, she supplies liquidity to a transparent, overcollateralized lending market in which (i) the borrower, collateral, and loan-to-value ratio remain visible on-chain in real time; (ii) an autonomous algorithm, rather than a person, sets the interest rate; and (iii) she can initiate a direct withdrawal without a secondary-market buyer, subject to pool utilization and the liquidity and timelock limits discussed in Section B.3.c.

Pool structure. The analysis is the same, except that the lender of record is the pool, whose capital seeks a return. The borrower side is unchanged. The factor remains mixed.

Promised token. Here the instrument being classified is the vault receipt token itself, not the underlying lending positions. The promisor raises money from depositors for its own use, including its own lending or trading, and the depositor seeks a return on the promisor’s obligation. Both motivations point toward investment, as they did in BlockFi.

¹¹² See *BlockFi*, Securities Act Release No. 11029, at 3; *In re Celsius Network LLC*, No. 22-10964 (Bankr. S.D.N.Y. 2022); *In re Voyager Digital Holdings, Inc.*, No. 22-10943 (Bankr. S.D.N.Y. 2022); *SEC v. Genesis Glob. Cap., LLC*, No. 1:23-cv-00287 (S.D.N.Y. Jan. 12, 2023).

C.2.b. Plan of Distribution

The second factor asks whether the instrument is one in which there is “common trading for speculation or investment,” including whether it is “offered and sold to a broad segment of the public.”¹¹³ Broad distribution to the general public makes securities treatment more likely; distribution through restricted channels to knowledgeable lenders makes non-security treatment more likely.

Purpose. The concern underlying this factor is informational. Distribution to the public matters because members of the public may lack access to the kind of information registration would disclose and therefore may be unable to fend for themselves. The Supreme Court in *SEC v. Ralston Purina Co.* read the private-offering exemption in light of that purpose.¹¹⁴ Courts have used sophistication and restricted channels as a proxy for that access.¹¹⁵

Pass-through structure. The borrowers’ notes reach depositors through the vault receipt tokens, so the distribution of the tokens is the distribution of the notes. Here, and only here, a conclusion about the lending positions is also a conclusion about the token. The current case law points in different directions depending on the distribution channel. For open, retail-facing vaults accessible to anyone over the internet with no gating, the factor likely weighs toward security status for the lending positions, and therefore for the pass-through token. For gated or institutional-channel vaults, the factor may weigh the other way: *Kirschner* and *Banco Español* treated restricted distribution to institutional lenders as weighing against security status, while *Pollack* treated broad distribution to unsophisticated retail purchasers as weighing toward it.¹¹⁶ In *Banco Español*, the Commission argued as amicus, and the dissent agreed, that a broad program of loan participations offered to hundreds of purchasers was a distribution of securities, in part because purchasers could not examine the hundred or more borrowers in the program.¹¹⁷

¹¹³ *Reves*, 494 U.S. at 66, 68 (quoting *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351 (1943)).

¹¹⁴ *SEC v. Ralston Purina Co.*, 346 U.S. 119, 124–25 (1953).

¹¹⁵ The cases describe the concern in terms of information rather than sophistication as such. In *Banco Español*, the Second Circuit relied on a resale restriction because it “worked to prevent the loan participations from being sold to the general public, thus limiting eligible buyers to those with the capacity to acquire information about the debtor.” 973 F.2d at 55. *Pollack v. Laidlaw Holdings, Inc.*, 27 F.3d 808, 813–14 (2d Cir. 1994), likewise focused on sales to purchasers who lacked “the capacity to acquire information about the debtor.” Judge Wright’s concurrence in *Great Western Bank & Trust v. Kotz*, 532 F.2d 1252, 1261–62 (9th Cir. 1976), cited in *Marine Bank v. Weaver*, 455 U.S. 551, 560 n.10 (1982), distinguished bank lenders by their “ability to verify representations” from investors relying on “semi-anonymous and secondhand market information.” See also *Randall v. Loftsgaarden*, 478 U.S. 647, 659 (1986). Sophistication is a proxy for the capacity to acquire information about the obligor. On-chain, every lender can observe every borrower’s collateral, loan-to-value ratio, and liquidation threshold continuously and verify them independently.

¹¹⁶ *Kirschner*, 79 F.4th at 306–07; *Banco Español*, 973 F.2d at 55; *Pollack*, 27 F.3d at 812–14.

¹¹⁷ 973 F.2d at 56–60 (Oakes, C.J., dissenting).

Vault lending markets reverse that premise. Every material parameter is available to every lender continuously and can be independently verified, which addresses the concern underlying the factor though not the proxy. Availability is not comprehension, and many retail participants will not interpret on-chain data without tools or plain-language disclosure. CCI therefore offers this not as a reason to reach a non-security result for open vaults, but as a reason for the Commission to calibrate its response, for example through plain-language disclosure or tooling standards (Section D.2).

Two further features bear on the factor. *Mitigation*. Direct withdrawal from the pool (Section C.2.d) reduces, but does not eliminate, the concerns the factor addresses. *Gating*. Designs can address the factor through front-end verification, deposit thresholds, or institutional channels.

Pool structure. The lending positions themselves are not offered or traded. Each arises between the pool and a borrower when the borrower draws liquidity against posted collateral, and none is sold to the public. On this structure the factor favors non-security treatment of the positions, or at worst is neutral. How the pool interest is distributed is a question about the vault receipt token, which Section B addresses under *Howey*.

Promised token. The promised token is the instrument offered to depositors. Where it is offered to the public without gating, the factor weighs toward security status.

C.2.c. Reasonable Expectations of the Investing Public

The third factor examines the reasonable expectations of participants. Do they regard the instrument as an “investment” to which the securities laws apply, or as something else, such as a commercial loan, a deposit, or a credit facility?¹¹⁸ In *Kirschner*, the Second Circuit found that sophisticated lenders did not regard syndicated term loans as securities. The loan documents consistently described participants as “lenders,” not “investors,” and required each lender to certify that it had made its own independent credit decision.¹¹⁹ The court emphasized both the transactional documents and the broader market understanding. In *Banco Español*, purchasers “were given ample notice that the instruments were participations in loans and not investments in a business enterprise.”¹²⁰ The dissent there reached the opposite conclusion largely because the program’s promotional literature “repeatedly referred to ‘investors’ and ‘investments.’”¹²¹ Marketing is therefore relevant to this factor as evidence of whether the instrument is presented as a loan or as an investment.

¹¹⁸ *Reves*, 494 U.S. at 66.

¹¹⁹ *Kirschner*, 79 F.4th at 307–08.

¹²⁰ 973 F.2d at 55; see also 763 F. Supp. at 43.

¹²¹ 973 F.2d at 60 (Oakes, C.J., dissenting).

Pass-through structure. The reasonable-expectations analysis favors non-security treatment, though it requires careful attention to how vaults present themselves to users. Several considerations support that conclusion.

The transaction uses a lending structure and the parties describe it as lending. Vault interfaces and documentation present the activity as “supplying” or “lending” assets to a market, describing it through lending terminology rather than investment-fund language. Users interact with transparent lending parameters rather than an investment prospectus. Code governs over marketing: where presentation and code diverge, the code controls (Section B.3.e).

No promoter promises or projections. BlockFi marketed its interest accounts as yield-bearing investment products with promised return rates,¹²² and BarnBridge promoted structured, tranching tokens with differentiated risk-return profiles to retail investors.¹²³ By contrast, rates in autonomous lending markets emerge from market dynamics. No person promises, projects, or guarantees them.

Participants generally understand the lending relationship. Participants in on-chain lending markets generally understand that they are supplying credit to borrowers who have posted excess collateral, and that their return is interest on that credit rather than a share of entrepreneurial profits. That understanding may be less developed among retail participants, which is why accurate front-end presentation matters.

This factor remains sensitive to marketing and presentation, and code does not displace it. If a vault front end or associated marketing presents the transaction as an investment in any person’s enterprise or skill, projects returns, or fails to describe the underlying lending mechanics, the reasonable-expectations analysis could shift, and it could shift even where the code itself is bounded, because marketing can create expectations that the code alone would not. How presentation bears on the separate *Howey* question is addressed in Section B.3.e. The Celsius and Voyager matters illustrate the risk: both platforms marketed their products as investment-like yield opportunities while obscuring the lending relationship, if any, underlying the returns.¹²⁴ Vault protocols and their associated front ends should therefore describe the activity accurately as lending.

Pool structure. The borrowers and the market treat the positions as loans: they are drawn against collateral, priced as interest, and repaid or liquidated as loans are. The factor favors

¹²² BlockFi, Securities Act Release No. 11029, at 3.

¹²³ *In re BarnBridge DAO*, Securities Act Release No. 11262, Investment Company Act Release No. 35079 (Dec. 22, 2023).

¹²⁴ See *In re Voyager Digital Holdings, Inc.*, No. 22-10943 (Bankr. S.D.N.Y. 2022) (Voyager marketed its program as a simple way to earn yield on crypto while deploying customer assets in opaque ways, including a substantial unsecured loan to Three Arrows Capital); *In re Celsius Network LLC*, No. 22-10964 (Bankr. S.D.N.Y. 2022).

non-security treatment of the positions. How the pool interest is presented to depositors is again a question for Section B.

Promised token. The factor turns on how the promisor presents the product. A promisor that offers a fixed or projected yield on its own obligation presents the token as an investment, and the factor weighs toward security status.

C.2.d. Risk-Reducing Features and Alternative Regulatory Scheme

The fourth factor asks whether some feature, such as collateralization, insurance, or regulatory oversight, reduces the risk of the instrument and renders the securities laws' protections unnecessary.¹²⁵ When an alternative regulatory scheme or structural protections adequately address the risks that the securities laws seek to mitigate, that weighs strongly against security classification. This factor is the strongest in the analysis of vault lending positions. The features described below are mechanics; standing alone, they could equally describe a note that is a security. Their significance under this factor is that they reduce the risks that would otherwise make the securities laws' protections necessary.

Pass-through structure. Five features apply.

Overcollateralization. Borrowers must post collateral worth substantially more than the loan amount, typically 120% to 150% or more of the borrowed value. This structural protection directly reduces credit risk in a manner analogous to the collateralization of traditional secured commercial loans and, in many cases, provides greater protection.

Permissionless liquidation. The smart contract continuously monitors each borrower's collateral ratio and enforces the loan terms without human intervention. Three scenarios illustrate the mechanics. First, if the borrower's collateral value remains above the required threshold, the borrower may continue to hold the position indefinitely, repay principal and accrued interest at any time to reclaim collateral, or post additional collateral to increase the buffer; the lender has no ability to call the loan or accelerate repayment. Second, if the collateral value falls below the liquidation threshold but remains above the loan amount, any market participant may call the liquidation function, which verifies that the position is undercollateralized, transfers a portion of the borrower's collateral to the liquidator at a discount (typically 5% to 15%), and uses the proceeds to repay the corresponding portion of the loan. Liquidators monitor collateral ratios continuously, often using automated bots, and compete to execute these partial liquidations. The borrower loses a portion of collateral but retains the remainder, and lenders are repaid in full. Third, if the collateral value falls below the outstanding loan amount before liquidators can act (a rare scenario called "bad debt"),

¹²⁵ *Reves*, 494 U.S. at 67; *Kirschner*, 79 F.4th at 309–10 (identifying collateral as a risk-reducing feature).

the protocol may socialize the shortfall across lenders in that market or draw on protocol reserves. In no scenario must a human decision-maker intervene. This automated enforcement substantially reduces the counterparty and execution risk inherent in traditional secured lending, where the lender must affirmatively pursue foreclosure through judicial or contractual processes that can take months or years.

On-chain transparency. The blockchain records all positions, rates, collateral ratios, and liquidation events and makes them visible in real time. This level of transparency has no close analogue in traditional lending markets. Every lender can access the same information simultaneously, which may reduce the informational asymmetry that lies at the center of the federal securities laws.

Algorithmic, non-discretionary rate determination. An interest-rate model sets the borrow rate from pool utilization, and the supply rate depositors earn derives from the borrow rate and utilization, net of any protocol fee (Section B.3.a). No person sets, adjusts, or guarantees the rate, so the depositor need not rely on a manager's judgment, skill, or honesty to set return levels.

Permissionless exit. On the pass-through structure, where the depositor's token is her share of the lending positions, the depositor may withdraw directly by calling the withdrawal function, without the consent of any counterparty, administrator, or custodian, in a single atomic transaction, subject only to available liquidity (Section B.3.c). No person can gate, delay, or deny the withdrawal. Some multi-market vaults also include a force-reallocation function that allows the depositor to trigger withdrawal from underlying markets, further reducing lock-up risk.¹²⁶ This mechanism distinguishes vault lending positions from traditional note investments, where redemption often requires counterparty cooperation, notice periods, or judicial enforcement.

Pool structure. The first four features apply unchanged. Withdrawal is a feature of the vault receipt token rather than of the lending positions and is addressed in Section B.3.c.

Promised token. The promised token's risk turns on the promisor's balance sheet. Collateral posted in the underlying markets does not protect the holder against the promisor's default, so these features do not reduce the risk of the promisor's note in the same way. This is the BlockFi pattern.

Alternative regulatory framework. In *Kirschner*, the Second Circuit treated federal banking guidance on syndicated lending as a risk-reducing factor weighing against security

¹²⁶ See, e.g., publicly available technical documentation for multi-market lending vaults (describing a force-reallocation function that allows depositors to trigger reallocation from underlying markets to satisfy withdrawal requests).

classification.¹²⁷ No comprehensive federal regulatory regime currently governs on-chain lending, and CCI does not contend that one exists. The GENIUS Act established a framework for payment stablecoins, which make up most of the assets supplied to and borrowed from these markets, but it does not regulate the lending positions themselves.¹²⁸ Other regimes, including the antifraud laws and state money-transmission laws, apply to particular participants or conduct but are not a substitute for the securities laws in the sense *Reves* contemplates. On this factor CCI therefore relies on the structural risk-reducing features rather than on an alternative regulatory scheme. The inquiry, as *Kirschner* framed it, is whether the risk of the instrument is reduced.¹²⁹

The contrast with centralized crypto-lending platforms is again stark. BlockFi offered no overcollateralization of its lending activities; it made unsecured institutional loans, exercised discretionary control over rate-setting and asset deployment, and provided no real-time transparency into its lending portfolio.¹³⁰ The D.C. Circuit’s decision in *Stoiber v. SEC* reinforces the contrast. There, a broker issued unsecured promissory notes to customers to fund personal commodities trading. The court found the notes were securities under *Reves*, and the fourth factor was decisive: the notes carried no collateral, no insurance, and no alternative regulatory oversight, and the customers “had no such expertise or access” to evaluate the borrower.¹³¹ Vault lending positions present the inverse of those facts. Borrowers overcollateralize, the protocol enforces collateral adequacy and executes liquidations mechanically, every material parameter is visible on-chain, and the lender need not rely on personal trust or the borrower’s representations to assess risk.

Summary

Factor	Pool structure (lending positions)	Pass-through (where the mapping test is met)	Promised token
Motivations	Motivations	Motivations	Motivations
Plan of distribution	Plan of distribution	Plan of distribution	Plan of distribution
Reasonable expectations	Reasonable expectations	Reasonable expectations	Reasonable expectations

¹²⁷ *Kirschner*, 79 F.4th at 309–10 (noting that the OCC, the Federal Reserve, and the FDIC issued “specific policy guidelines” addressing syndicated term loans).

¹²⁸ GENIUS Act, Pub. L. No. 119–27 (2025).

¹²⁹ *Kirschner*, 79 F.4th at 310.

¹³⁰ BlockFi, Securities Act Release No. 11029, at 3–5.

¹³¹ *Stoiber v. SEC*, 161 F.3d 745, 751–52 (D.C. Cir. 1998).

Factor	Pool structure (lending positions)	Pass-through (where the mapping test is met)	Promised token
Risk-reducing features	Risk-reducing features	Risk-reducing features	Risk-reducing features

C.3. Distinguishing BarnBridge

The Commission's action against BarnBridge DAO illustrates a materially different fact pattern from the autonomous lending vaults this Volume addresses.¹³² BarnBridge operated structured pools that pooled investor assets, allocated them across third-party lending protocols, and issued tranching products with differentiated risk and return. DAO participants exercised ongoing discretion over the pools' composition, risk allocation, and rebalancing. The Commission treated each of BarnBridge's twelve pools as a separate investment company issuing unregistered securities. BarnBridge's loans were not made for any commercial objective; they were investment vehicles designed to generate returns through active strategy execution, which bears on the motivations factor. BarnBridge is also the pooled case in its clearest form: in the language of the participation cases, its products were interests in a managed pool whose returns depended on decisions about which positions the pool held. These distinctions explain why that treatment should not, by itself, control the analysis of autonomous lending vaults.

Nature of management discretion. BarnBridge's DAO exercised active, ongoing discretion over pool composition, risk allocation among tranches, and rebalancing strategy. The DAO voted on which protocols would receive allocations, how to weight those allocations, and when to rebalance. Depositors depended on DAO judgments about where and when to deploy capital. By contrast, single-market vaults use parameters set by the deployer and immutable after deployment, and curated vaults operate within code-enforced bounds, with changes subject to timelocks. In the baseline vault, no ongoing human judgment about capital deployment operates after deposit.

Discretionary tranching. BarnBridge's core design involved structured tranching that created senior and junior positions with different risk-return profiles from the same underlying assets, with the terms and allocations set and adjusted by the DAO. A senior tranche whose return a structure promises is the kind of promised token Section C.1 describes. CCI acknowledges that tranching can also be implemented in code. Where it is, the analysis turns on the same questions as elsewhere in this Volume: whether any person retains discretion

¹³² BarnBridge, Securities Act Release No. 11262.

over the tranche terms or allocations after deposit. The baseline vault involves no tranching. Every depositor in a single lending market bears the same proportional risk and earns the same utilization-based rate.

Active rebalancing across multiple protocols. BarnBridge moved assets between protocols based on DAO votes, which created cross-protocol execution risk and strategy opacity that depositors could not independently verify or predict. Autonomous lending vaults instead deploy capital into a single market or a defined set of markets with transparent, on-chain parameters.

Marketing and distribution. BarnBridge marketed its tranching products to retail investors with explicit yield targets, framing them as investments (Section C.2.c). The *Howey* implications of BarnBridge are addressed in Section B.4, and its investment-company treatment in Volume III.

C.4. Requested Confirmation: Vault Lending Positions Belong to the Commercial-Loan Family

The foregoing analysis supports the conclusion that vault lending positions in the baseline vault bear a strong family resemblance to the commercial credit instruments that courts have excluded from securities regulation, under either the pool or the pass-through structure. The confirmation is a request, not an established result, and it is made against two adverse facts that CCI does not minimize: open vaults are distributed to the public, which can favor security status, and no bank-regulatory scheme applies. Because the family-resemblance categories are judicial, CCI does not ask the Commission to create a new one. CCI asks instead for interpretive guidance confirming that these positions fall within the existing commercial-loan family.

Vault lending positions fit within the existing family. The enumerated categories in *Reves* include “notes evidencing loans by commercial banks for current operations” and “short-term notes secured by a lien on a small business or some of its assets.”¹³³ More broadly, *Kirschner* treated syndicated term loans as commercial loans because they shared the essential characteristics of commercial credit: secured status, distribution to sophisticated participants, commercial purpose, and regulatory oversight.¹³⁴ The loan-participation cases apply the same family to participations in commercial loans.¹³⁵ Vault lending positions share the first of *Kirschner*’s characteristics and, as to borrowers, the third. Two of *Kirschner*’s

¹³³ *Reves*, 494 U.S. at 65.

¹³⁴ *Kirschner*, 79 F.4th at 304–10.

¹³⁵ See *Banco Español*, 973 F.2d at 55–56; *First Citizens*, 919 F.2d at 515–16.

supports are absent: open vaults are not limited to sophisticated lenders, and no bank-regulatory scheme applies. CCI's submission is that the structural features of these markets do the work those supports did in *Kirschner*. Sophistication and bank oversight mattered because they protected lenders against credit risk and against information asymmetry about the borrower. Overcollateralization and mechanical liquidation address the first; continuous, verifiable on-chain disclosure of every borrower's position addresses the second. This is a functional substitution, not an exact fit, and CCI presents it as such.

Interpretive confirmation. The Commission should confirm, through interpretive guidance, that vault lending positions in autonomous, overcollateralized markets fall within the commercial-loan family. The *Reves* Court contemplated that the list of non-security categories is capable of expansion,¹³⁶ and courts may in time recognize a category that captures these instruments more precisely. That is a matter for the courts. The Commission's confirmation that the existing family applies would provide the clarity market participants need now.

CCI uses "autonomous secured lending" only as a description of the positions for which confirmation is sought: positions in an overcollateralized, algorithmically priced, transparently operated lending market, in which the lender extends credit at a market rate, the borrower obtains liquidity against posted collateral, no person issues the position to finance a business enterprise or promotes it as an investment, and the lender has structurally available exit. Those relationship features place the positions within the commercial-loan family, and the structural features discussed under the fourth factor reinforce that conclusion by reducing risk. Where a token meets the mapping test in Section C.1, the same conclusion extends to it. CCI does not seek confirmation for a fixed-yield token whose repayment a person promises; that instrument is a new note and should be analyzed on its own facts. Nor does the confirmation decide the status of the vault receipt token as a pool interest, which Section B addresses under *Howey*. The confirmation also bears on the Investment Company Act analysis in Volume III, which addresses whether the lending positions count as investment securities.

The analysis rests on the function and risk of these instruments, emphasizing structural trust dependencies and information asymmetries, or their absence, rather than formal labels. A vault lending position in the baseline vault functions as a commercial loan, and the Commission should confirm that it is treated as one.

¹³⁶ *Reves*, 494 U.S. at 67.

D. From Classification to Compliance: Securities Law Compliance Challenges

This Section addresses the subset of vault positions that constitute securities under the analysis in Sections B and C, including positions that may transition into security status, and assumes no exemption from registration applies.

Key Points

1. The *Howey* and *Reves* analyses in Sections B and C demonstrate that many vault positions, particularly those at the more autonomous end of the spectrum, may not satisfy the elements for security classification; but positions involving significant discretionary human authority may well constitute investment contracts or debt securities.
2. When a vault position does constitute a security, the full apparatus of federal securities law applies (registration, periodic reporting, broker-dealer regulation), but those frameworks were designed for corporate issuers and do not map cleanly onto autonomous, code-driven infrastructure.
3. The threshold problem is issuer identification: where no natural or legal person can be identified as the “issuer,” the entire compliance architecture lacks an operative anchor.
4. Code-driven vault infrastructure can deliver many of the substantive protections the securities laws seek to achieve (transparency, automated enforcement, structural conflict-avoidance) even where it cannot satisfy their procedural requirements.
5. Section D.3 provides a nine-item gap inventory with possible paths forward under the Commission’s existing exemptive and rulemaking authority and analogous regulatory adaptations.

The preceding Sections of this Volume have analyzed vault positions under the *Howey* and *Reves* frameworks.¹³⁷ That analysis suggests that many vault positions, particularly those at the more autonomous end of the spectrum of post-deposit human authority, may not satisfy the elements necessary for classification as a security under either test.¹³⁸ But the analysis also demonstrates that some vault positions, especially those involving significant discretionary human authority over post-deposit asset management, may well satisfy the

¹³⁷ See *supra* Sections B and C (analyzing vault positions under the *Howey* and *Reves* frameworks, respectively).

¹³⁸ *Howey*, 328 U.S. 293.

efforts-of-others prong and may therefore constitute investment contracts within the meaning of *Howey*.¹³⁹ CCI respectfully submits that the Commission’s regulatory approach must account for both conclusions.

The Commission’s 2026 Joint Interpretation and Proposed Regulation Crypto Assets recognize that security classification is context-dependent and may change as an arrangement’s features evolve, though CCI notes that such transitions are unlikely for most vault architectures absent a deliberate expansion of discretionary human authority.¹⁴⁰

When a vault position does constitute a security, the full apparatus of federal securities law applies. Registration obligations arise under the Securities Act.¹⁴¹ Ongoing reporting requirements attach under the Exchange Act.¹⁴² Broker-dealer regulation, transfer agent requirements, and the Trust Indenture Act, among other statutory frameworks, may also bear on the arrangement. These statutory and regulatory requirements were designed for corporate issuers, centralized intermediaries, and paper-based systems of record-keeping and disclosure. Applying them to autonomous, code-driven vault infrastructure raises a series of compliance challenges that are structurally distinct from the challenges faced by traditional issuers of securities.

CCI wishes to be precise about the nature of the difficulty. The compliance challenges identified below arise from structural mismatch, not from vault infrastructure’s unwillingness to comply with the federal securities laws. Nor do they arise because the substantive protections the securities laws seek to deliver, namely, transparency, accountability, protection against fraud and manipulation, are inapplicable to vault positions. To the contrary, CCI respectfully submits that many of those protections are already embedded, in functional form, in the design of vault infrastructure itself. The difficulty is rather that the *procedural mechanisms* through which the securities laws deliver those protections, such as registration statements, periodic reports filed by identified issuers, broker-dealer intermediation, presuppose organizational structures and intermediary relationships that autonomous code-driven systems may lack.

This Section identifies and catalogs those compliance challenges. It proceeds in three parts. First, it addresses the threshold question of issuer identification: who bears the obligations of an “issuer” when the vault position is created by autonomous code rather than by an

¹³⁹ *Reves*, 494 U.S. 56.

¹⁴⁰ Peirce Statement, *supra* note 17 (acknowledging that vault positions “fall along a spectrum” of human authority and that classification must be assessed on a case-by-case basis). 2026 Joint Interpretation, *supra* note 20. Proposed Regulation Crypto Assets, *supra* note 105.

¹⁴¹ Securities Act of 1933, 15 U.S.C. § 77e (prohibiting the offer or sale of securities unless a registration statement is in effect or an exemption applies).

¹⁴² Securities Exchange Act of 1934, 15 U.S.C. §§ 78l, 78m (imposing registration and periodic reporting obligations on issuers of securities).

identifiable corporate entity. Second, it articulates the general principle that code-driven infrastructure can deliver many of the substantive protections the securities laws seek to achieve, even where it cannot satisfy their procedural requirements. Third, it provides a comprehensive inventory of specific compliance challenges, identifying for each the statutory requirement, the structural difficulty vaults face, and possible paths toward resolution.

CCI emphasizes that this analysis proceeds from this Volume’s own classification framework. Where this Section discusses compliance challenges for vault positions that qualify as securities, it refers specifically to positions where the degree of post-deposit human authority is sufficient to satisfy the efforts-of-others prong under the analysis in Section B.¹⁴³ CCI does not suggest that all vault positions face these challenges, or that the challenges are the same for every vault architecture. Rather, only those where the analysis set forth above indicates that security classification is appropriate face them. Vault positions at the more autonomous end of the spectrum, where post-deposit human discretion is minimal or absent, would not trigger these compliance obligations in the first instance.¹⁴⁴

The Commission may need to clarify how compliance obligations attach when a vault’s governance architecture materially expands discretionary authority, but CCI does not treat that possibility as the central compliance issue.¹⁴⁵

In the Sections that follow, CCI attempts to provide a constructive and detailed account of each compliance challenge. The aim is to identify, with specificity, the points at which the existing statutory and regulatory framework may require adaptation, interpretation, or rulemaking to accommodate the structural realities of code-driven vault infrastructure, so that the substantive investor protections Congress intended may be achieved without imposing procedural requirements that may not fit autonomous systems’ structure. CCI does not argue that the securities laws should not apply to vault positions that satisfy the elements of security classification.

¹⁴³ *Howey*, 328 U.S. at 298–301 (requiring that profits be derived from the “efforts of others” for an instrument to constitute an investment contract).

¹⁴⁴ See *supra* Section B (describing the spectrum of post-deposit human authority and its relevance to the efforts-of-others analysis under *Howey*).

¹⁴⁵ 2026 Joint Interpretation, *supra* note 20, at 13,720–21 (emphasizing that the security classification of a crypto asset “depends on the specific facts and circumstances” and may change over time as features of the arrangement evolve). Proposed Regulation Crypto Assets, *supra* note 105 (contemplating reporting obligations that account for changes in the classification status of crypto asset positions over time).

D.1 The Threshold Question: Who Is the Issuer?

Most obligations under the federal securities laws (e.g., registration, disclosure, periodic reporting, officer certification) attach to or flow through the “issuer.”¹⁴⁶ Before any specific compliance requirement can be assessed, a threshold question must be addressed: when an autonomous vault creates a position through the execution of immutable or near-immutable smart contract code, who is the “issuer” of that position?

The question carries practical as well as taxonomic significance. The answer determines which person, if any, bears the obligation to register the position, prepare and file disclosure documents, maintain books and records, submit periodic reports, and certify the accuracy of those reports under penalty of criminal sanction. If no issuer can be identified, it is unclear how the existing compliance architecture, which was designed, in its entirety, around an identifiable issuer, can operate as intended.¹⁴⁷

CCI respectfully submits that this threshold question warrants the Commission’s careful attention, because the analysis suggests that for a significant subset of vault infrastructure, the issuer identification problem may be genuinely intractable under current law.¹⁴⁸

D.1.a The Statutory Definition of “Issuer”

Securities Act § 2(a)(4) defines “issuer” as “every person who issues or proposes to issue any security.”¹⁴⁹ The Exchange Act § 3(a)(8) employs substantially similar language.¹⁵⁰ Both definitions assume a natural or legal person (a corporation, partnership, trust, or individual) who makes a volitional decision to create and distribute a security.¹⁵¹ In the traditional

¹⁴⁶ Securities Act of 1933 § 2(a)(4), 15 U.S.C. § 77b(a)(4) (defining “issuer” as “every person who issues or proposes to issue any security”).

¹⁴⁷ Securities Act § 5, 15 U.S.C. § 77e (registration requirements for securities offerings). Because Section 4(a)(1) exempts only “transactions by any person other than an issuer, underwriter, or dealer,” 15 U.S.C. § 77d(a)(1), the registration obligation effectively falls on offerings involving those participants. It therefore requires, at a minimum, identification of the issuer whose securities are being offered.

¹⁴⁸ While ultimately not passed, Section 10301(c) of the Digital Asset Market Clarity Act of 2025, H.R. 3633, 119th Cong. § 10301(c) would have applied existing securities intermediary requirements and Bank Secrecy Act requirements to “non-decentralized finance trading protocols,” defined in proposed § 10301(d)(1) as protocols where a person or group has the authority to control or materially alter the protocol’s functionality, operation, or rules of consensus. The proposal implicitly acknowledged the spectrum of post-deposit human authority this Volume describes: protocols with sufficient centralized control have an identifiable person who can bear issuer-like obligations, while protocols that operate solely on pre-established, transparent rules encoded in source code do not. The proposal thus recognized the structural difficulty of imposing issuer obligations on truly autonomous systems, and it suggests an approach that calibrates regulatory obligations to the degree of human control actually present in a given protocol’s architecture. CCI urges the Commission to consider a similar analysis under its existing authority.

¹⁴⁹ Securities Act § 2(a)(4).

¹⁵⁰ Securities Exchange Act of 1934 § 3(a)(8), 15 U.S.C. § 78c(a)(8).

¹⁵¹ The Securities Act and the Exchange Act both employ the term “person,” which is defined to include natural persons as well as legal entities such as corporations, partnerships, and associations. See Securities Act § 2(a)(2), 15 U.S.C. § 77b(a)(2); Exchange Act § 3(a)(9), 15 U.S.C. § 78c(a)(9).

corporate context, identification of the issuer is straightforward: the corporation that files the registration statement, whose shares are sold to the investing public, is the issuer.

For vault positions, this identification is far less clear. When a depositor interacts with an autonomous smart contract, the position is created by code execution rather than by a person's discretionary act of issuance.¹⁵² The smart contract creates the position, but code falls outside the definition of "person" under the securities laws.¹⁵³ If discretionary human authority exists, for example a non-depositor participant who can reallocate assets across lending markets or adjust risk parameters, that person exercises post-deposit authority but does not create or distribute the position. The person did not decide to issue the position, did not set the terms of its issuance, and may not even be aware that a particular depositor's transaction has occurred.

The analysis suggests, therefore, that the statutory definition of "issuer" maps imperfectly onto vault infrastructure. At one end of the spectrum of post-deposit human authority, where no natural person exercises any discretion over the vault's operations, there may be no person who can plausibly be identified as the issuer. At the other end of the spectrum, where a non-depositor participant exercises broad discretionary control, the case for treating that person as the issuer is considerably stronger. But even there, the fit is imprecise, because the non-depositor participant's authority is typically limited to specific operational parameters rather than the full range of functions traditionally associated with corporate issuers.¹⁵⁴

Section 2(a)(4) also contains a clause the Commission will invoke. For an "unincorporated investment trust not having a board of directors," the issuer is "the person or persons performing the acts and assuming the duties of depositor or manager."¹⁵⁵ That clause confirms the control analysis rather than defeating it. Where a curator or sponsor performs the acts of a manager, that person is the issuer, and issuer obligations should be calibrated to the authority that person actually holds. Where a vault is immutable and no person performs any such act, the clause has no one to designate, and the position has no issuer.

Courts are also likely to look past form in identifying issuers and promoters. Where an identifiable group, a decentralized collective, or a curator markets a vault by promising that its technical or promotional efforts will produce returns, courts may well treat that person or group as the *de facto* issuer or promoter, as the enforcement experience with DAO-

¹⁵² A "position" as used here refers to the tokenized representation of a depositor's interest in the vault, which may entitle the holder to a pro rata share of the vault's assets or to returns generated by the vault's operations.

¹⁵³ *Supra* note 170.

¹⁵⁴ *Cf. Howey*, 328 U.S. at 298–99 (analyzing the "efforts of others" prong in terms of a promoter's or third party's role, thereby presupposing the existence of an identifiable promoter or issuer).

¹⁵⁵ Securities Act of 1933, 15 USC § 77b(a)(4).

governed products suggests. That result is consistent with the Control Framework: the person who holds itself out as performing the return-generating function, and who in fact retains discretion to perform it, is the natural anchor for issuer-like obligations. The harder case is the baseline vault, where no person performs any such act and no person markets the vault as the product of its efforts.¹⁵⁶

Registered pooled vehicles without operating management offer a further point of reference. Commodity-based grantor trusts and similar exchange-traded products register their interests on Form S-1 with a sponsor that performs the issuer's reporting and certification functions even though the trust itself has no operating business. That model suggests one way issuer obligations could be assigned for vaults in which a sponsor or curator performs the acts of a manager, while confirming that the obligations follow the person who performs those acts rather than the code.

D.1.b Cascading Consequences

The issuer identification problem has cascading practical consequences throughout the securities regulatory framework, beyond its theoretical significance. Every compliance obligation examined in the remainder of this Section, from registration and disclosure to broker-dealer requirements and ongoing reporting, depends on identifying an issuer who can fulfill those obligations.¹⁵⁷ Where no such person can be identified, the entire compliance framework loses its operative anchor. The registration requirements of Securities Act § 5 presuppose an issuer whose securities are being offered; the periodic reporting obligations of Exchange Act §§ 13 and 15(d) presuppose an issuer that files reports; the proxy solicitation rules of Exchange Act § 14 presuppose an issuer whose shareholders receive proxy materials. Without an issuer, these provisions have no entity on which to operate.¹⁵⁸

CCI respectfully submits that the Commission should consider this threshold difficulty carefully as it evaluates how the securities laws apply to vault infrastructure. The analysis suggests that for vault positions generated by autonomous code with no identifiable issuer, the compliance framework as currently constructed may not function as designed. The framework's objectives remain vital, but the factual predicate on which the framework rests (the existence of an identifiable issuer) may be absent. The analysis turns next to the related question of whether code-driven infrastructure may nevertheless deliver many of the substantive protections that issuer-based obligations seek to achieve, and to the specific

¹⁵⁶ BarnBridge, *supra* note 92.

¹⁵⁷ See Exchange Act § 13(a), 15 U.S.C. § 78m(a) (periodic reporting obligations); Exchange Act § 14(a), 15 U.S.C. § 78n(a) (proxy solicitation requirements); Exchange Act § 16(a), 15 U.S.C. § 78p(a) (beneficial ownership reporting). Each of these provisions presupposes an identifiable issuer.

¹⁵⁸ See *supra* Sections D.1-D.2 (identifying the issuer-identification and structural-protection principles that inform the compliance analysis).

compliance challenges that arise in the areas of registration, disclosure, and market intermediation.

CCI acknowledges that this analysis may raise an obvious question: if the issuer problem is genuinely intractable for some vaults, why should the Commission invest in adapting issuer-based compliance at all? The answer is that the issuer problem is a problem of existing statutory architecture, not of regulatory impossibility. Many vaults do have identifiable control points: curators who select markets, governance controllers who hold upgrade authority, front-end operators who mediate user access, or persons who retain administrative keys. For those vaults, the question is how to calibrate issuer-based obligations to the authority actually exercised. For fully autonomous deployments where no such control point exists, the Commission retains the ability to regulate adjacent actors and to adopt tailored rules under its existing exemptive authority. Functional equivalence, as developed in Section D.2 below, addresses the mechanics of disclosure and recordkeeping. Accountability and liability, however, still require identifiable persons or new regulatory hooks — a gap that the comprehensive inventory in Section D.3 addresses directly.

D.2 The General Principle: Code-Driven Infrastructure Can Deliver Substantive Protections

Before cataloging the specific compliance challenges that vault infrastructure faces when security classification applies, CCI respectfully submits that it is important to articulate a general principle that informs the entire analysis that follows. The analysis in Sections B and C suggests that, across the spectrum of post-deposit human authority, autonomous vault infrastructure can deliver many of the substantive protections that the federal securities laws seek to achieve, even where it cannot satisfy the procedural and institutional requirements through which those protections are traditionally provided.¹⁵⁹ This principle is not offered as a basis for exemption from regulatory requirements. It is offered as a framework for understanding the nature of the compliance gaps identified, and for evaluating the Commission's options in addressing them.

The federal securities laws pursue a set of core policy objectives that have remained largely consistent since the enactment of the Securities Act of 1933 and the Securities Exchange Act of 1934: ensuring that investors receive material information about the risks and terms of their investments;¹⁶⁰ protecting investors from fraud, conflicts of interest, and

¹⁵⁹ See *supra* Sections B and C (analyzing the spectrum of post-deposit human authority and its implications for security classification under the Howey and Reves frameworks).

¹⁶⁰ Securities Act of 1933 § 5, 15 U.S.C. § 77e (prohibiting the offer or sale of securities unless a registration statement is in effect or an exemption applies).

misappropriation of assets;¹⁶¹ ensuring fair and orderly markets; and providing mechanisms for accountability when those protections fail.¹⁶² These objectives are implemented through a set of procedural requirements (registration statements, periodic reports filed by identified issuers, broker-dealer conduct rules, transfer agent regulations) that assume corporate issuers, human intermediaries, and centralized recordkeeping systems exist.¹⁶³

The Commission's 2026 Joint Interpretation¹⁶⁴ and Proposed Regulation Crypto Assets¹⁶⁵ represent the most significant efforts to date to apply this traditional framework to crypto asset infrastructure. CCI respectfully acknowledges the care and analytical rigor that the Commission has brought to these initiatives. At the same time, the analysis suggests that a threshold question must be confronted: what happens when the substantive objectives of the securities laws are achieved through structural means that do not correspond to the procedural mechanisms the existing framework prescribes?

Vault infrastructure appears to achieve several of the securities laws' core objectives through structural design rather than procedural compliance. On-chain transparency, for example, provides continuous, real-time, permissionless access to the information that registration and periodic reporting seek to deliver on a periodic, institution-mediated basis.¹⁶⁶ Every material parameter of the vault's operation (including asset composition, collateralization ratios, utilization rates, interest rate models, and liquidation thresholds) remains visible and independently verifiable by any person at any time. It appears that this level of transparency may be, in important respects, superior to the periodic disclosure that the Securities Act and Exchange Act require of traditional issuers. Where a traditional issuer files quarterly reports containing backward-looking financial data, a vault's on-chain parameters provide forward-looking, real-time information about the terms and conditions governing the use of deposited assets.

The automated enforcement of contractual terms (overcollateralization requirements, liquidation triggers, withdrawal mechanics) provides structural protections against some of

¹⁶¹ See *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180, 186 (1963) (describing the securities laws as reflecting a congressional intent to "eliminate the abuses" arising from conflicts of interest and to "achiev[e] a high standard of business ethics in the securities industry"). *Id.* at 186.

¹⁶² Securities Exchange Act of 1934 § 13(a), 15 U.S.C. § 78m(a) (requiring issuers of registered securities to file periodic reports disclosing material financial and operational information).

¹⁶³ Securities Exchange Act of 1934 § 15, 15 U.S.C. § 78o (requiring registration of brokers and dealers and subjecting them to conduct and financial responsibility rules).

¹⁶⁴ 2026 Joint Interpretation, *supra* note 20 (articulating the Commission's analytical framework for determining when crypto asset positions constitute securities).

¹⁶⁵ Proposed Regulation Crypto Assets, *supra* note 105 (proposing disclosure and reporting requirements for crypto asset securities).

¹⁶⁶ The Securities Act's registration requirements, 15 U.S.C. § 77e, and the Exchange Act's periodic reporting regime, 15 U.S.C. § 78m, were designed to address information asymmetries between issuers and investors. On-chain systems may achieve comparable or superior transparency through continuous, permissionless access to operational data.

the risks that broker-dealer regulation and fiduciary duties are designed to address.¹⁶⁷ Code executes as written: it does not deviate from its programmed instructions to favor a counterparty or to misappropriate assets it does not permit to be moved. Where the vault's operations are governed entirely by immutable or near-immutable code, these structural protections may offer greater reliability than human compliance with legal obligations. Conflicts of interest and misappropriation risk do not disappear, however; they move to the persons who write, deploy, upgrade, or hold keys to the code, which is why the Control Framework focuses on those persons.

CCI acknowledges that these structural features are an imperfect substitute for the existing regulatory framework. The comparison is imperfect in several respects. On-chain data, while comprehensive, may not be interpretable by ordinary investors without specialized tools or expertise. Automated enforcement protects against deviation from programmed rules, but it does not protect against flaws in the rules themselves. And the absence of human intermediaries, while it may eliminate certain categories of risk, can also limit the human judgment and adaptability that intermediaries provide. CCI raises these points to acknowledge the limitations of the general principle rather than to undermine it.

CCI respectfully submits, however, that structural protections leave room for a regulatory framework. Code can fail, be exploited, or contain latent vulnerabilities that may not be apparent until they are triggered under adverse market conditions.¹⁶⁸ Governance mechanisms, particularly those that permit modification of vault parameters by role-holders or through collective decision-making processes, may be captured by participants whose interests diverge from those of depositors. Certain regulatory objectives, particularly accountability after harm has occurred and the ability to modify contractual terms in response to changed circumstances, require human actors and institutional structures that autonomous code may not provide.¹⁶⁹

The challenge, then, is not whether vault infrastructure should comply with the federal securities laws when the analysis set forth in Sections B and C indicates that security classification is appropriate. CCI respectfully submits that the securities laws should apply.

¹⁶⁷ The broker-dealer conduct rules, see 15 U.S.C. § 78o; 17 C.F.R. § 240.15c1-2, and the fiduciary principles articulated in *Capital Gains Research Bureau*, 375 U.S. at 191-92, are designed in part to address the risk that human intermediaries will act in their own interest rather than the interest of their clients. Autonomous code, by definition, lacks the capacity for self-interested deviation from its programmed instructions.

¹⁶⁸ CCI acknowledges that code-driven systems are not immune from failure. Smart contract vulnerabilities, oracle manipulation, and governance attacks represent categories of risk that differ in kind from, but may be comparable in magnitude to, the risks of human malfeasance that the securities laws traditionally address.

¹⁶⁹ The federal securities laws contemplate that identifiable persons, such as issuers, officers, directors, and controlling persons, bear liability for violations. See, e.g., Securities Act § 11, 15 U.S.C. § 77k (imposing liability on specified persons for material misstatements in registration statements); Securities Act § 15, 15 U.S.C. § 77o (controlling person liability). Autonomous systems that lack identifiable controlling persons present a structural challenge to these accountability mechanisms.

The challenge is rather *how* the federal securities laws should accommodate infrastructure that delivers their substantive objectives through novel structural means. The framework developed in this Volume suggests that the gap inventory below identifies specific areas where the existing regulatory framework’s procedural requirements are structurally difficult or, in certain cases, may be infeasible for some vault infrastructure to satisfy, even where the underlying substantive objective that those requirements serve is achieved or achievable through the vault’s own design.

CCI Position: CCI respectfully submits that the Commission should recognize code-driven transparency and automated enforcement as functionally equivalent to certain traditional compliance mechanisms, and should exercise its existing exemptive and rulemaking authority to develop a compliance framework that credits these structural protections while addressing the genuine gaps that code alone cannot fill.

With this general principle in mind, the analysis proceeds to the comprehensive gap inventory that follows in Section D.3. For each compliance area, the inventory identifies the statutory or regulatory requirement at issue, explains the structural difficulty that vault infrastructure faces in satisfying that requirement, and suggests possible paths toward resolution, whether through the Commission’s existing exemptive authority, through rulemaking under the applicable statutory provisions, or through other regulatory tools.

CCI respectfully submits that the following gap inventory is offered in a constructive spirit. CCI does not contend that the securities laws are inapplicable to vault positions that meet the criteria for security classification. CCI contends, rather, that the Commission has both the authority and the opportunity to develop a regulatory framework that achieves the securities laws’ substantive objectives while accommodating the structural realities of code-driven infrastructure, and that the general principle articulated above provides a useful foundation for that effort.

D.3 Comprehensive Gap Inventory

Where a vault position is a security, specific compliance gaps follow. The table below summarizes nine of them,¹⁷⁰ and the discussion that follows addresses each briefly: the requirement, the structural difficulty, and a possible path forward.

¹⁷⁰ The inventory that follows is necessarily illustrative rather than exhaustive. Additional compliance challenges may arise under state securities laws, the Investment Advisers Act of 1940, and other regulatory frameworks not addressed here.

Compliance Gap	Core Challenge	Possible Path Forward
Registration & Disclosure	No identifiable issuer to file; continuous issuance unclear	Tailored disclosure under existing rulemaking authority; code-audit regime
Exchange & ATS	Autonomous matching may constitute exchange activity	Exemptive relief under Exchange Act § 36; functional classification
Broker-Dealer	No intermediary solicits or handles orders	Exempt or exclude non-intermediated access
Transfer Agent	On-chain settlement replaces transfer agent function	Recognize distributed ledger as functional equivalent
Rule 415 Continuous Offerings	Ongoing vault issuance may be continuous offering	Shelf-like framework for qualifying vaults
Trust Indenture Act	No indenture trustee for code-governed debt	§ 304(d) exemptive authority; code-trustee concept
SOX Certification	No officer to certify; criminal liability concerns	Functional certification by code audit or DAO
Holder Counting (§ 12(g))	Pseudonymous wallets defy record-holder counting	Revised counting methodology for on-chain assets
Regulation S	Permissionless distribution defies offshore safe harbor	Tailored compliance period; reasonable-steps safe harbor

D.3.a Registration and Disclosure

Section 5 requires a registration statement filed by an identifiable issuer. For vault infrastructure, the issuer may be unclear (Section D.1), and even where one can be identified, Form S-1's requirements (Management's Discussion and Analysis, risk factors, financial statements) assume management, operations, and accounting systems a vault may lack. The relevant risks (smart-contract, oracle, governance, and composability risk) are different in kind, and continuous deposits raise the question of how a registration regime built around discrete distributions applies to ongoing position creation. A tailored disclosure regime

could substitute code audits, real-time on-chain data, and standardized risk disclosures for the traditional paradigm¹⁷¹.

D.3.b Exchange and Alternative Trading System Requirements

¹⁷²Rule 3b-16 defines an exchange functionally, to include any organization that uses non-discretionary methods to bring together orders of multiple buyers and sellers, and the Commission's proposals recognize that some DeFi protocols may meet that definition. A vault, however, creates positions on deposit and extinguishes them on withdrawal; it does not match buyers and sellers. A functional classification distinguishing position creation from order matching, supported by exemptive relief where needed, would reflect that difference.

D.3.c Broker-Dealer Requirements

¹⁷³The broker-dealer regime regulates intermediaries that interact with customers and handle their assets. In certain vaults, no person solicits, recommends, routes, handles, or custodies customer assets; depositors interact directly with code. Excluding or exempting non-intermediated, code-based access would be consistent with the regime's purpose. The Division of Trading and Markets' April 2026 staff statement on covered user interface providers addresses an adjacent question for front ends; it is a staff statement rather than a Commission rule or safe harbor, and it does not condition its views on fixed fees. The Commission could address the vault question through interpretive guidance or rulemaking.

D.3.d Transfer Agent Requirements

Section 17A regulates transfer agents, which maintain ownership records and process transfers. A distributed ledger performs those functions natively, with a public, auditable

¹⁷¹ Securities Act of 1933 § 5, 15 U.S.C. § 77e (prohibiting the offer or sale of securities unless a registration statement is in effect or an exemption from registration applies).

¹⁷² 17 C.F.R. § 240.3b-16(a) (2025) (defining "exchange" to include any organization that uses established, non-discretionary methods to bring together orders for securities of multiple buyers and sellers). See also Amendments to Exchange Act Rule 3b-16 Regarding the Definition of "Exchange," and Alternative Trading Systems (ATSs) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities, Release No. 34-94062 (Jan. 26, 2022) (proposing to broaden the functional definition of exchange to encompass certain communication protocol systems); Supplemental Information and Reopening of Comment Period, Release No. 34-97309, 88 Fed. Reg. 29,448 (May 5, 2023), withdrawn by Withdrawal of Proposed Regulatory Actions, Exchange Act Release No. 103247, 90 Fed. Reg. 25,531 (June 17, 2025).

¹⁷³ Securities Exchange Act of 1934 § 15, 15 U.S.C. § 78o (requiring registration of brokers and dealers and imposing conduct and financial responsibility obligations).

record and automatic processing. CCI welcomes the Commission's recent efforts to modernize the transfer agent rules.¹⁷⁴

D.3.e Rule 415 Continuous Offerings

Rule 415 permits continuous or delayed offerings, and for vault positions that are securities, continuous position creation likely is one. But Rule 415 assumes a qualifying registrant, a defined offering, and periodic re-filing, and the Rule 152 integration doctrine does not fit continuous, user-initiated deposits. A shelf-like framework for qualifying vaults could key updates to material changes in the code or parameters rather than calendar deadlines¹⁷⁵.

D.3.f Trust Indenture Act

The Trust Indenture Act requires publicly offered debt securities to be issued under a qualified indenture with an independent trustee. For vault lending positions that are securities, no human trustee exists, but the code enforces collateralization, processes payments, and liquidates collateral automatically. The Commission could use its exemptive authority under Section 304(d) where code demonstrably performs the Act's protective functions, or recognize a "code-trustee" concept subject to auditability, transparency, and resilience criteria^{176, 177}.

D.3.g SOX Certification

Sections 302 and 906 of the Sarbanes-Oxley Act require an issuer's principal executive and financial officers to certify periodic reports. A vault may have no one in those roles (Section D.1). Because Section 906 carries criminal penalties, assigning certification to a participant with limited authority and information would mismatch liability and control. Functional alternatives, such as independent code audits or hybrid automated monitoring with periodic human attestation, could preserve the accountability certification is meant to ensure^{178, 179}.

¹⁷⁴ Securities Exchange Act of 1934 § 17A, 15 U.S.C. § 78q-1 (providing for the registration and regulation of transfer agents and establishing requirements for the prompt and accurate clearance and settlement of securities transactions).

¹⁷⁵ 17 C.F.R. § 230.415 (permitting the registration of securities for offering on a continuous or delayed basis under specified conditions).

¹⁷⁶ Trust Indenture Act of 1939 §§ 310–318, 15 U.S.C. §§ 77jjj–77rrr (establishing requirements for the qualification of indentures and the appointment and duties of independent indenture trustees for publicly offered debt securities exceeding specified thresholds).

¹⁷⁷ Trust Indenture Act of 1939 § 304(d), 15 U.S.C. § 77ddd(d).

¹⁷⁸ Sarbanes-Oxley Act § 302, 15 U.S.C. § 7241 (requiring principal executive and financial officers to certify, in each annual or quarterly report, the accuracy of financial statements and the effectiveness of internal controls); § 906, 18 U.S.C. § 1350 (imposing criminal penalties for knowingly false certifications).

¹⁷⁹ See *supra* Section D.1 (discussing the issuer-identification problem and the absence of identifiable officers in autonomous vault infrastructure).

D.3.h Holder Counting Under § 12(g)

Section 12(g) requires registration of a class of equity securities held of record by 2,000 persons, or 500 non-accredited persons, where the issuer's assets exceed \$10,000,000.¹⁸⁰ To the extent a vault receipt token is an equity security, wallet addresses do not map to persons: one person may control many wallets, and one wallet may represent many persons. The Commission should develop a counting methodology suited to on-chain records.¹⁸¹

D.3.i Regulation S

Regulation S Category 3 imposes offering restrictions, a distribution compliance period, purchaser certifications, legends, and transaction nullification. Vault receipt tokens move freely across permissionless networks, making flowback and nullification difficult to enforce, and continuous deposits leave unclear when an offering “closes” for purposes of the compliance period. Commentators have identified these difficulties. A tailored framework could define a compliance period suited to continuous deposits and treat smart-contract-based restrictions, such as geoblocking or on-chain compliance checks, as reasonable steps to prevent U.S. flowback.¹⁸²

Exemptions.

The private-offering and resale exemptions fit poorly as well. Permissionless deposits are open to the public, which is in tension with Section 4(a)(2) and Rule 506(b)'s ban on general solicitation; Rule 506(c) requires verifying each purchaser's accredited status, which is difficult by wallet address; and Rule 144 depends on holding periods and affiliate volume limits that blockchains do not track. Access-gated front ends and verified-wallet designs may address some of these issues.¹⁸³

¹⁸⁰ Securities Exchange Act of 1934 § 12(g), 15 U.S.C. § 78l(g) (requiring issuers with total assets exceeding \$10,000,000 and a class of equity security held of record by either 2,000 persons, or 500 persons who are not accredited investors, to register such class under the Exchange Act).

¹⁸¹ On-chain wallet addresses are pseudonymous by design. A single natural person may control multiple wallet addresses; conversely, a single wallet address (such as a multisignature wallet or a smart-contract wallet) may represent the interests of multiple natural persons. This many-to-many relationship between wallet addresses and natural persons renders traditional holder-counting methodologies unreliable.

¹⁸² 17 C.F.R. § 230.903(b)(3) (imposing Category 3 conditions for offerings by issuers that are neither reporting companies nor foreign private issuers offering investment-grade debt). Category 3 is the default and most restrictive category, requiring, among other things, offering restrictions, a distribution compliance period, purchaser certifications, and legends.

¹⁸³ Securities Act of 1933 § 4(a)(2), 15 U.S.C. § 77d(a)(2); 17 C.F.R. §§ 230.144(d)–(e), 230.502(c), 230.506(b)–(c) (2025).

E. Conclusion

The securities laws address a specific relationship: an investor who entrusts capital to another person whose control over its deployment she cannot monitor or check. Both governing tests identify that relationship in their own terms. Under *Howey*, the question is whether the depositor's expected profits derive from the essential managerial efforts of others; under *Reves*, whether a note is an investment or a commercial instrument. This Volume has argued that each turns on control, and that code can determine whether anyone holds it.

For the baseline vault, the analysis supports a non-security result. Its parameters are immutable and knowable before deposit, so the deployer's work is impounded in terms the depositor accepts, and no person retains control over the return afterward. For vaults with retained authority, CCI recommends a criterion the Commission can apply from the code: authority confined to a range fixed in code, subject to a timelock, with depositor exit before any change takes effect, is not essential managerial effort. The vault's lending positions, overcollateralized, mechanically liquidated, and fully transparent, bear a strong resemblance to the commercial-loan family, and CCI asks the Commission to confirm that they belong there. That request is made with its limits stated: open retail access and the absence of a bank-regulatory scheme distinguish vaults from *Kirschner*, and the plan-of-distribution factor may weigh toward security status where tokens pass positions through to an open retail base.

The same analysis identifies vaults that are securities. Where a curator controls the allocation of capital among markets of materially different risk, or a person promises repayment from its own resources, the relationship the securities laws address is present, and CCI does not contend otherwise. For those vaults, the existing apparatus, built around identifiable issuers, discrete offerings, and human intermediaries, maps poorly onto code-driven infrastructure. CCI asks the Commission to calibrate its response to the control a person actually retains, to use its interpretive and exemptive authority to credit code-enforced protections that achieve the objectives of the securities laws, and to confirm that the antifraud provisions continue to reach identifiable persons in every case.

VOLUME III: APPLICATION OF THE INVESTMENT COMPANY ACT OF 1940

Introduction: The Entrustment Principle and the Scope of the 1940 Act

The Investment Company Act of 1940 addresses a specific problem, the principal-agent problem that arises when public savings are entrusted to management for investment. The 1940 Act's protections and burdens are calibrated to relationships in which one party, the investor, places capital in the hands of another party, the manager, who exercises discretion over its deployment. Where that relationship exists, the statute's protections are necessary and its regulatory burden is proportionate. Where it is absent, the statute has no subject on which to operate.

The legislative history confirms this understanding. Commissioner Robert E. Healy, who oversaw the Commission's multi-year examination of the investment trust industry, offered the formulation that has since defined the statute's scope:

“Essentially these organizations are large liquid pools of the public's savings entrusted to managements to be invested.”¹

Two elements in that sentence are significant: the existence of a pool of public savings, and the entrustment of that pool to a management. Commissioner Healy did not describe arrangements in which investors deploy capital according to fixed, self-executing rules. He described arrangements in which investors place capital in the hands of persons who make decisions about it.²

Congress codified this understanding in Section 1(b), which declares that the national public interest and the interest of investors are adversely affected under eight enumerated conditions.³ Each condition identifies a species of a single genus: the abuse or mismanagement of pooled public savings by persons to whom those savings have been entrusted.

The conditions address disclosure failures that matter only when investors depend on information an intermediary controls; operation of investment companies in the interest of

¹ Statement of Commissioner Robert E. Healy Before the Subcommittee of the Senate Committee on Banking and Currency on S. 3580, at 1 (Apr. 2, 1940), <https://www.sec.gov/news/speech/1940/040240healy.pdf> [hereinafter Healy Statement].

² *Id.* at 1.

³ 15 U.S.C. § 80a-1(b).

directors, officers, or affiliates rather than investors; inequitable or discriminatory securities provisions; undue concentration of control through pyramiding or management by irresponsible persons; unsound accounting and absence of independent scrutiny; reorganization or transfer of control without shareholder consent; excessive borrowing and senior securities issuance; and operation without adequate assets or reserves. Every condition presupposes persons exercising authority over the pool. None describes a condition that can exist in the absence of such persons.⁴

The Senate Report accompanying the bill reinforces this reading, identifying as “conditions” Congress sought to eliminate those produced by the relationship between investors and persons who manage their capital.⁵ The abuses catalogued in the Report (looting, self-dealing through affiliated transactions, dilution through excessive compensation, and churning of portfolio securities) are each acts that a manager, sponsor, or insider takes or permits.⁶

The 1940 Act’s substantive protections correspond to these enumerated conditions. Section 10 requires that at least forty percent of a registered fund’s board consist of directors who are not interested persons, so that independent directors can monitor management and police its conflicts on behalf of shareholders.⁷ Section 17(f) requires qualified custody to protect against misappropriation.⁸ Sections 17(a) and 17(d) prohibit affiliated transactions to prevent self-dealing.⁹ Valuation requirements, fee limitations, and shareholder-approval provisions make management’s compensation visible and its authority revocable. Each protection assumes an agent exists and constrains that agent’s behavior. None can function in the agent’s absence.

The organizing principle that emerges from statutory text, legislative history, and the structure of the 1940 Act’s substantive protections is that the presence of an entrusting relationship (some person or entity with meaningful ongoing authority over the pool and the outcomes of its investors) makes the statute’s protections coherent and its application proportionate.¹⁰ To identify the issuer under the 1940 Act, one should examine whether the

⁴ 15 U.S.C. § 80a-1(b)(1)–(8).

⁵ S. Rep. No. 76-1775, at 6–7 (1940).

⁶ *Id.* at 6–8; see also Tamar Frankel & Arthur B. Laby, *The Regulation of Money Managers: Mutual Funds and Advisers* § 1.02 (3d ed., Wolters Kluwer 2026) [hereinafter Frankel & Laby].

⁷ 15 U.S.C. § 80a-10 (requiring that at least forty percent of the board of directors of a registered investment company be persons who are not interested persons of the investment company).

⁸ 15 U.S.C. § 80a-17(f) (requiring that securities and similar investments of a registered investment company be maintained in the custody of a bank or a member of a national securities exchange, or in accordance with rules the Commission may prescribe for the protection of investors).

⁹ 15 U.S.C. §§ 80a-17(a), (d) (prohibiting certain affiliated persons of a registered investment company from selling to, purchasing from, or borrowing from the company, and requiring Commission approval for transactions between the company and its affiliates).

¹⁰ See *Prudential Ins. Co. of Am. v. SEC*, 326 F.2d 383, 387–88 (3d Cir. 1964) (identifying the entrustment of public savings to management as the characteristic that renders the 1940 Act’s protections applicable).

securities create the type of relationship the 1940 Act envisions, namely, the relationship of a “contributor to a pool of equity capital managed and invested in securities at his risk.”¹¹

This principle has direct implications for vault structures. Where the entrustment relationship is absent, the 1940 Act’s protections are structurally incapable of operating. No management exists to monitor. No person exists who could misappropriate assets. No affiliated person is positioned to self-deal. No management exists whose compensation must be disclosed or whose authority must be made revocable. The statute’s protections assume an agent. Where no agent exists, the protections have nothing to regulate.

The point is not that regulation is unnecessary or that investor protection can be ignored. The 1940 Act’s regulatory tools address a specific problem and cannot operate where that problem does not exist. Requiring a structure with no management to seat independent directors to watch the management is a category error. It would also undermine investor protection. Directors seated over a pool that code already constrains would themselves become persons with authority over that pool, and their presence would reintroduce the very agency relationship that the 1940 Act exists to police and that certain vault designs eliminate.¹² The statute’s protections are powerful precisely because they are targeted. Applying them where the targeted condition is absent imposes burdens that correspond to no risk.¹³

The unit investment trust confirms this principle rather than contradicting it. A UIT has no board and no investment adviser, yet it is an investment company. The reason is that a UIT still involves persons to whom investors entrust their capital. The sponsor, acting as depositor, selects the portfolio, deposits it with the trustee, distributes the units, and typically maintains a secondary market. The sponsor also retains a limited power to direct the elimination of portfolio securities upon specified adverse events. The trustee holds the trust’s assets and administers the trust. Each of these persons could misappropriate assets, overcharge investors, or abandon the trust.¹⁴ Congress addressed those risks with a different

¹¹ See Frankel & Laby, *supra* note 6, § 5.02 (explaining that the 1940 Act “views investment companies as entities that are both investments for the members of the public and investors of their own assets”).

¹² See 15 U.S.C. §§ 80a-2(a)(19), 80a-10(a), 80a-15(c), 80a-16(a) (providing for directors elected by shareholders who approve the fund’s advisory and underwriting contracts); Frankel & Laby, *supra* note 6, § 1.02. Directors of a registered investment company hold legal authority over the fund. Seating them over a pool whose terms code already fixes would create the very persons with discretionary power over the pool whose conflicts the 1940 Act exists to police.

¹³ See Robert H. Rosenblum & Benjamin D. Rosenblum, *Investment Company Determination Under the 1940 Act: Exemptions and Exceptions* §§ 5.01, 5.8 (3d ed. 2025) [hereinafter Rosenblum] (describing the forty-percent threshold in Section 3(a)(1)(C) as developed from the Commission’s analysis of approximately 1,800 companies in the late 1930s, and observing that the test, while “essentially arbitrary,” has been “remarkably effective” at distinguishing companies that should be regulated under the 1940 Act from those that should not).

¹⁴ See 15 U.S.C. § 80a-4(2); Frankel & Laby, *supra* note 6, § 5.08[B] (describing the UIT as a “storage house” whose investors’ problems concern the integrity of its assets and the possibility of abandonment by the trustee); Investment Company

set of tools. Section 26 requires that the trust indenture designate a bank trustee with possession of the trust's assets and limit the fees that the sponsor and trustee may charge, and Section 26(c) restricts the substitution of portfolio securities.¹⁵ The UIT thus illustrates calibration. Where the agent's discretion narrows, the 1940 Act narrows its protections to match, replacing the board with structural limits enforced through the governing instrument. Section V develops this point and explains why the UIT is the category whose structure most closely resembles a fully programmed vault.

The analysis that follows proceeds from this principle. Section I examines whether an “issuer” exists in vault structures, grounding the analysis in statutory definitions and case law's consistent treatment of control as the organizing fact. Section II addresses the “holding out” test of Section 3(a)(1)(A). Section III addresses the forty-percent asset test of Section 3(a)(1)(C), and the distinction between holding assets as collateral and holding them as investments. Section IV addresses the face-amount certificate classification under Section 3(a)(1)(B). Section V analyzes compliance with the 1940 Act through the management company and unit investment trust frameworks. Section VI examines the private fund exclusions under Sections 3(c)(1) and 3(c)(7). Section VII addresses the commercial financing exclusions under Section 3(c)(5). Section VIII analyzes the structured finance exclusion under Rule 3a-7. Section IX examines the exclusion for underwriters, brokers, and market intermediaries under Section 3(c)(2). Section X examines Section 6(c) exemptive relief and the arc of innovation that produced the exchange-traded fund. This Volume does not address the remaining Section 3(c) exclusions, including Section 3(c)(3) for banks and common trust funds, Section 3(c)(4) for small loan and consumer finance businesses, Section 3(c)(6) for certain financial holding companies, Section 3(c)(9) for oil, gas, and mineral royalty holders, Section 3(c)(10) for charitable organizations and funds, Section 3(c)(11) for qualified plans and bank collective trust funds, and Section 3(c)(14) for church plans, because their eligibility requirements bear little relation to vault architecture.¹⁶

I. The Threshold Question: Does an “Issuer” Exist?

The 1940 Act reaches a vault only if an “issuer” exists at all, and the first clause of Section 3(a)(1) frames that question.

Institute, A Guide to Unit Investment Trusts (describing sponsor functions, including deposit, distribution, and secondary-market maintenance); *infra* Section V.B.

¹⁵ 15 U.S.C. § 80a-26(a) (requiring that the trust indenture designate a bank trustee with possession of all trust property and limit the fees payable to the sponsor and trustee), (c) (restricting substitution of portfolio securities without Commission approval); see *infra* Section V.D-E.

¹⁶ 15 U.S.C. § 80a-3(c)(3), (4), (6), (9), (10), (11), (14); see Rosenblum, *supra* note 13, chs. 11, 12, 14, 16, 18, 19, 20, 21. Section 3(c)(4), for example, reaches only a person “substantially all of whose business is confined to making small loans, industrial banking, or similar businesses,” which the Staff has read to cover only consumer financing agencies that originate personal loans. *Id.* § 14.1.

“When used in this title, ‘investment company’ means any **issuer** which –

(A) is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, or trading in securities; . . .

(C) is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer’s total assets (exclusive of Government securities and cash items) on an unconsolidated basis.”¹⁷

An examination of whether a vault is in the business of investing, reinvesting, owning, holding, or trading in securities follows in a subsequent section, but that analysis is moot in the event that no entity meeting the definition of “issuer” exists in the first place. The presence of an issuer is a necessary condition for the application of the 1940 Act. If no issuer exists, the 1940 Act does not apply.

The analysis of whether an “issuer” exists necessarily begins with the statutory definition, supplied in Section 2(a)(22).

“Issuer” means “every person who issues or proposes to issue any security, or has outstanding any security which it has issued.”¹⁸

The definition has two elements. There must be a person, and there must be a security that the person issues, proposes to issue, or has outstanding. Each element is necessary. If a vault receipt token is not a security, the vault is not an issuer regardless of whether it is a person, and the inquiry into investment company status ends.¹⁹

Section 2(a)(36) defines “security” by enumerating instruments that include any note, stock, bond, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, and investment contract, as well as any interest or instrument commonly known as a “security.”²⁰ The definition tracks Section 2(a)(1) of the Securities Act in most respects, and the two are generally construed together.²¹ A vault receipt token is not stock, a bond, or a note in any conventional sense. It typically conveys no claim against an obligor, carries no fixed return, and confers no governance rights. The token instead records a pro rata entitlement to assets held at a contract address, which the holder may withdraw on demand.

¹⁷ 15 U.S.C. § 80a-3(a)(1)(A), (C) (emphasis added). Section 3(a)(1)(B), which addresses issuers of face-amount certificates of the installment type, is discussed in Section IV.

¹⁸ 15 U.S.C. § 80a-2(a)(22) (emphasis added).

¹⁹ 15 U.S.C. § 80a-2(a)(22).

²⁰ 15 U.S.C. § 80a-2(a)(36).

²¹ Compare 15 U.S.C. § 80a-2(a)(36), with 15 U.S.C. § 77b(a)(1); see *Reves v. Ernst & Young*, 494 U.S. 56, 61 n.1 (1990).

The operative question is therefore whether the token is an investment contract or a certificate of participation in a profit-sharing arrangement.

Volume II analyzes that question in two steps. It first concludes that a floating-NAV vault receipt token carries no repayment obligation, is not a note, and is analyzed under *Howey*.²² Applying *Howey* to the baseline vault, an isolated, overcollateralized lending market whose parameters are immutable after deployment, Volume II concludes that the depositor's return is not derived from the essential managerial efforts of others, because the deployer's work is impounded in terms the depositor accepts and no person retains control over the return after deposit.²³ Volume II extends that result to vaults whose retained authority is confined to a range fixed in code, subject to a timelock, and exercisable only after depositors can exit.²⁴ If that conclusion holds, the token is not a security under Section 2(a)(36), the vault has no outstanding security, and the vault is not an issuer.²⁵ The 1940 Act does not reach it. That result does not depend on how broadly the terms "fund" and "organized group of persons" are read.²⁶ Volume II also acknowledges that a vault whose curator holds discretion the code does not bound may issue a security, and for that vault the person element discussed below becomes decisive.²⁷

The balance of this Section addresses the person element on the alternative assumption that the token is a security. The breadth of the definition of "company" matters only if the Commission or a court rejects the conclusion in Volume II, and the authorities discussed below should be read in that light.²⁸

Section 2(a)(28) provides the 1940 Act's definition of "person."

"Person" means "a natural person or a company."²⁹

The final definition to unpack on the person element, "company," is provided in Section 2(a)(8).

²² Volume II, Section C.1.

²³ Volume II, Sections B.3.b, E (concluding that, for the baseline vault, the deployer's work "is impounded in terms the depositor accepts, and no person retains control over the return afterward"); see *SEC v. Life Partners, Inc.*, 87 F.3d 536, 545-49 (D.C. Cir. 1996).

²⁴ Volume II, Section B.3.b (recommending that "where post-deposit authority is confined to a range fixed in code, its exercise is subject to a timelock, and depositors can exit before it takes effect, that authority is not essential managerial effort"); *id.* Section E.

²⁵ 15 U.S.C. § 80a-2(a)(22), (36).

²⁶ See *infra* notes 30-36 and accompanying text (discussing the breadth of "fund" and "organized group of persons" and the authorities applying those terms).

²⁷ Volume II, Sections A, E (acknowledging that depositors in a vault whose curator "holds unbounded control" over allocation "rely on the curator's managerial efforts in exactly the way *Howey* addresses").

²⁸ See Volume II, Sections B, E; *infra* notes 31-46 and accompanying text.

²⁹ 15 U.S.C. § 80a-2(a)(28) (emphasis added).

“Company” means “a corporation, a partnership, an association, a joint-stock company, a trust, a fund, or any organized group of persons whether incorporated or not.”³⁰

Therefore, for an entity to qualify as an “issuer” it must be: (i) a corporation, (ii) a partnership, (iii) an association, (iv) a joint-stock company, (v) a trust, (vi) a fund, or (vii) any organized group of persons whether incorporated or not.

The inclusion of “any organized group of persons whether incorporated or not” makes clear that this is a *broad* definition covering any number of arrangements. On the person element, this breadth provides the biggest obstacle for those seeking immunity from the 1940 Act on the basis of the “no issuer” defense. The Commission has stretched the definition even further, arguing that even distinct clients comprising an investment adviser’s separately managed account program could constitute an “organized group of persons” and thus an investment company.³¹

The two terms that matter for vaults are “fund,” which requires no organized persons at all, and “any organized group of persons whether incorporated or not.” Either is broad enough to describe a pool of assets sitting at a contract address. The question is whether they were enacted to reach a pool that no person manages. The Commission’s own precedent shows the reach of the term “fund.”

A broad interpretation of the definition is supported by the Congressional record. Commissioner Healy’s testimony articulated the arrangements the 1940 Act sought to regulate:

“Let me try my hand at a general description of investment trusts and investment companies. Essentially these organizations are large liquid pools of the public’s savings entrusted to managements to be invested.”³²

In *Prudential Insurance Co. of America v. SEC*, the Third Circuit considered whether purchasers of variable annuity contracts constituted an investment company when the insurer invested the combined proceeds in securities and credited purchasers with their proportionate share of returns. The court sided with the Commission’s broad interpretation, quoting Justice Brennan’s observation that the 1940 Act’s provisions “are of particular

³⁰ 15 U.S.C. § 80a-2(a)(8).

³¹ See Status of Investment Advisory Programs Under the Investment Company Act of 1940, Investment Company Act Release No. 21,260, 60 Fed. Reg. 39,574 (proposed Aug. 2, 1995) [hereinafter Rule 3a-4 Proposing Release]; 17 C.F.R. § 270.3a-4; Equitable Communications Co., SEC No-Action Letter (Feb. 26, 1975); Rosenblum, *supra* note 13, ch. 1 & n.17, ch. 27.

³² Healy Statement, *supra* note 1.

relevance to situations where the investor is committing his funds to the hands of others on an equity basis, with the view that the funds will be invested in securities and his fortunes will depend on the success of the investment.”³³

The court also referenced Commissioner Healy’s remarks.³⁴ Both supported the notion that Congress intended the 1940 Act to apply broadly where the public entrusts savings to others.

Prudential provided precedential heft for the Commission’s expansive interpretation. The Commission adopted Rule 3a-4 as a safe harbor for investment advisers to provide certainty that the Commission would not infer an investment company from a collection of clients. The Commission has continued this broad application to crypto-native arrangements. The DAO Report concluded that an unincorporated, token-governed organization was an issuer “regardless of the form of organization.”³⁵ Courts have held that a DAO may be sued as an unincorporated association and that DAO participants may be treated as general partners of an implied partnership.³⁶

Parties to a vault structure should not expect success from an argument built on form alone. That a vault is constituted in code rather than under a formal charter will not by itself dissuade the Commission from inferring the existence of a company or a court from agreeing with it.

Nevertheless, the breadth of the definition is not without limit. The Congressional record, the same source that justifies the broad interpretation of the definition, also supplies its limit. Returning to Commissioner Healy’s articulation of the types of arrangements to which the 1940 Act ought to apply, there are two necessary elements.

The 1940 Act is meant to apply to circumstances where the public’s savings have been *entrusted to managements* to be invested. Protecting public savings *that have been entrusted to management* is the goal that the 1940 Act seeks to achieve.

Commissioner Healy’s remarks later in his testimony make this clear. When he outlined the key abuses in the investment industry that the 1940 Act addresses, nearly every abuse he mentioned related to the actions taken by sponsors, management, and other insiders to enrich themselves or otherwise put their interests above those of investors.³⁷

³³ *Prudential*, 326 F.2d at 387 (quoting *SEC v. Variable Annuity Life Ins. Co. of Am.*, 359 U.S. 65, 79 (1959) (Brennan, J., concurring)).

³⁴ *Id.*

³⁵ Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207, at 10 (July 25, 2017) [hereinafter DAO Report].

³⁶ *CFTC v. Ooki DAO*, No. 3:22-cv-05416-WHO (N.D. Cal.) (orders of Dec. 20, 2022, and June 8, 2023); *Sarcuni v. bZx DAO*, 664 F. Supp. 3d 1100 (S.D. Cal. 2023); *Samuels v. Lido DAO*, No. 3:23-cv-06492-VC (N.D. Cal. Nov. 18, 2024).

³⁷ Healy Statement, *supra* note 1.

It is true that the 1940 Act, as enacted, contains provisions relating to concerns beyond self-interested abuse at the hands of management, such as requirements relating to adequate disclosure, excessive borrowing and other structural limitations. However, even those requirements are designed to protect against mismanagement, even if ultimately well-intentioned. The protections that the 1940 Act seeks to provide relate to protecting investors from the abuse or mismanagement of their funds by the individuals and entities to whom they have entrusted their savings.

Congress drafted this understanding into the statute itself. Section 1(b) declares that the national public interest and the interest of investors are adversely affected under eight enumerated circumstances and directs that the 1940 Act be interpreted to mitigate and eliminate those conditions. Each of them relates to the abuse or mismanagement of investment companies by their managers or other insiders.³⁸

Every enumerated condition is a manifestation of a single underlying problem, the principal-agent problem that arises when investors hand their savings to management. Many of the 1940 Act's substantive protections are, correspondingly, controls on an agent, including independent directors to watch the management, custody requirements to ensure protection of assets, affiliated transaction prohibitions to prevent the management from dealing with itself, and valuation, fee, and approval requirements to make the management's compensation and performance visible and revocable.

We submit that the presence of control (meaning some person or group with meaningful ongoing power over an investing pool and the outcomes of its investors) is necessary to the finding of an issuer. In other words, exposure is strongest where a person retains post-deposit discretion and can extract value or alter outcomes without depositor consent, and weakest where no person can, the code is immutable and transparent, and depositors retain an unconditional ability to exit. Security measures held by an independent role and exercisable only upon preset, objective triggers are not “meaningful power” in this sense.³⁹ While the Commission and courts have not explicitly stated this requirement in the existing precedent, they did not need to. Until the very recent advent of decentralized crypto investing structures, all non-personal investing arrangements necessarily involved control by others. Commissioner Healy's remarks and the requirements that the 1940 Act imposes

³⁸ 15 U.S.C. § 80a-1(b).

³⁹ See *supra* notes 1, 2, 3, 4, 5 and accompanying text (discussing the Healy Statement and Section 1(b)); see also Commissioner Hester M. Peirce, *Headstands and Summervaults: A Statement on Crypto Vaults and Lending Strategies* (July 22, 2026) [hereinafter *Peirce Statement*] (describing vaults as falling “along a spectrum from programmatic allocations determined solely by immutable smart contracts, to allocations at the sole discretion of another person or group of persons”). A pause or circuit breaker that an independent role may activate only upon a documented security incident, and that cannot redirect assets or alter returns, illustrates a security measure that confers no meaningful power over the pool.

make clear that Congress designed the statute to address the principal-agent problem that arises when investors trust their savings to others to be invested.

The case law is consistent with this reading. In every instance in which the Commission or a court has located an issuer or a company in an arrangement lacking conventional legal form, identifiable persons in fact held and exercised control over the pool. *Prudential* itself is the leading example. The separate account that the Third Circuit ultimately held to be a “fund” was completely administered and invested by the insurer’s personnel exercising continuous investment discretion.⁴⁰

This reading finds support even in the authority often cited for the breadth of the definition, the Proposing Release to Rule 3a-4. When the Commission explained how separately owned client accounts could amount to an “organized group of persons,” the organizing element it identified was not any relationship among the clients, who were strangers to one another. Instead, it was the discretionary authority that each client conferred on a common manager, a relationship the legislative history quoted by the Commission described as conferring on the management “substantially a power of attorney.”⁴¹

The crypto-era authorities follow the same pattern. The DAO Report grounded its issuer conclusion in the ongoing managerial authority of the promoter and curators.⁴² Ooki DAO was held suable as an unincorporated association based on members’ governance participation in a functioning trading business.⁴³ The partnership holdings in *Sarcuni* and *Samuels* pointed to treasuries, ongoing operations, and active governance. Notably, the sole defendant dismissed in *Samuels* was the investor as to whom active governance participation was not alleged.⁴⁴ In each case, the entity finding attached to demonstrated control, and in no case has any court or the Commission found a company, an issuer, or an association in an arrangement in which no person held meaningful power over outcomes.

The Commission’s BarnBridge order warrants separate attention as the first application of the 1940 Act to a DeFi protocol. BarnBridge DAO offered SMART Yield pools that deployed user deposits⁴⁵ to third-party lending platforms and issued senior and junior tranche positions. The Commission found unregistered investment company violations under Section 7(a). BarnBridge settled, disgorging approximately \$1.5 million and undertaking to

⁴⁰ *Prudential*, 326 F.2d at 384–88.

⁴¹ Rule 3a-4 Proposing Release, *supra* note 31.

⁴² DAO Report, *supra* note 35.

⁴³ Ooki DAO, No. 3:22-cv-05416-WHO.

⁴⁴ *Sarcuni*, 664 F. Supp. 3d at 1117–22; *Samuels*, No. 3:23-cv-06492-VC.

⁴⁵ *In re BarnBridge DAO*, Securities Act Release No. 11,262, Investment Company Act Release No. 35,079, Administrative Proceeding File No. 3-21817 (Dec. 22, 2023) [*hereinafter* BarnBridge Order]. The Commission entered a companion order against the two founders the same day.

wind down the pools. Critically, the order meticulously characterized how the two founders exercised control: they held sufficient voting power to reach quorum on every approved proposal, controlled a multi-signature address for payments, oversaw website operations, and hired programmers to develop the smart contracts. In short, they exercised control over nearly every aspect of the arrangement. The finding of an “issuer” rested on that demonstrated human control.

The presence of this control over the pools, and the existence of the principal-agent dynamic, should be the key takeaway from *BarnBridge*, rather than any broader conclusions regarding the presence of an issuer in vault structures. Had control of that kind been absent, the Commission would have had no respondents to charge, no undertakings to obtain, and no one capable of winding the pools down. Effectuating the order’s own remedies depended on the control it described. The converse also holds. Each risk the order addressed, including the founders’ ability to direct the pools, to control payments from a multi-signature address, and to compensate themselves as de facto executives, flowed from that control. Where a vault is designed so that no person holds control of this kind, the risks that the 1940 Act seeks to mitigate are eliminated along with it, and a vault that achieves that condition warrants a novel regulatory approach rather than the framework built for managed pools.⁴⁶

Authority from outside the securities laws points in the same direction. In *Van Loon v. Department of the Treasury*, the Fifth Circuit held that the immutable smart contracts of the Tornado Cash protocol could not be designated as “property” under the sanctions laws, because no person, including their creators, retained any ability to own, control, or alter them.⁴⁷ While this decision does not relate directly to the 1940 Act, it nonetheless reflects a federal court of appeals attaching legal consequences to code through the persons who control it and declining to do so where control does not exist.

The Commission’s recent recognition that investment contract status is not perpetual, and that arrangements can reach a state in which no person remains positioned to supply essential managerial efforts, reflects the same principle in an additional adjacent setting.⁴⁸ The Commission’s newly proposed Regulation Crypto Assets carries a related principle into rulemaking. The proposal’s investment contract safe harbor is available only where the issuer has “completed or otherwise permanently ceased all essential managerial efforts” that “it

⁴⁶ See *BarnBridge Order*, *supra* note 45, ¶¶ 2–5, 23 (describing the founders’ launch and direction of the DAO, their voting control, and their salaries as de facto executives); *Rosenblum*, *supra* note 13, § 5.9. Section 6(c) authorizes the Commission to tailor relief to structures of this kind. 15 U.S.C. § 80a-6(c); see *infra* Section X.

⁴⁷ *Van Loon v. Dep’t of the Treasury*, 122 F.4th 549, 554 (5th Cir. 2024).

⁴⁸ Application of the Federal Securities Laws to Certain Types of Crypto Assets and Certain Transactions Involving Crypto Assets, 91 Fed. Reg. 13,714 (Mar. 23, 2026); see also SEC Division of Corporation Finance, Statement on Certain Protocol Staking Activities (May 29, 2025); Statement on Certain Liquid Staking Activities (Aug. 5, 2025) (distinguishing administrative and ministerial functions from essential managerial efforts).

represented or promised it would engage in under the covered investment contract.”⁴⁹ That qualifier ties the safe harbor to what the issuer represented rather than to whether control is in fact present, so the proposal does not itself adopt a control test.⁵⁰ Even so, a framework in which the permanent cessation of managerial effort ends securities treatment is difficult to reconcile with one in which a pool that never had a manager is nonetheless deemed an investment company.

For fully immutable vaults especially (the arrangement in which the code is non-upgradeable, the strategy and eligible destinations are fixed at deployment, all administrative roles have been irrevocably renounced, and any fee parameters are locked), the type of principal-agent problem the 1940 Act sought to regulate does not exist. Receipt tokens are created and extinguished mechanically by the contract at an exchange rate computed from public data, and no person takes any act in connection with any issuance after deployment. No governance or coordination exists among depositors, who are strangers sharing nothing beyond parallel use of the same instrument. Most fundamentally, however, the entrustment relationship that the Congressional record identifies as the 1940 Act’s subject is absent, because nothing has been entrusted to any management and no person holds the power the 1940 Act’s protections exist to regulate.

For vaults that lack distinct control and principal-agent mechanisms without being fully immutable, the analysis is graduated rather than binary. Where the only surviving roles are ministerial or purely protective, for example an allocator function confined to executing a fixed policy with no latitude over strategy, or a guardian role capable only of pausing the vault or vetoing changes upon preset, objective triggers, the entrustment relationship remains attenuated. No person in such a structure holds power that could be exercised against depositors’ interests, and the principal-agent problem the 1940 Act seeks to address is correspondingly absent. On the other hand, any power exercisable on the basis of changing market conditions, including a power to lower caps, narrow allowlists, or withdraw funds from a higher-yielding market, is curatorial rather than protective, because its exercise changes what depositors earn.⁵¹ Where, by contrast, a vault features active ongoing curation, with compensated individuals selecting strategies and adjusting exposures, the no-issuer argument in its strongest form is likely not available. Even there, however, the control

⁴⁹ Regulation Crypto Assets, Securities Act Release No. 33-11434 at 164 (proposed Aug. 18, 2026).

⁵⁰ The proposal’s focus on the issuer’s representations parallels the holding-out inquiry under Section 3(a)(1)(A), which likewise turns on what an issuer has said about its *business*. See *infra* Section II.B. CCI therefore relies on the proposal only for the narrower premise that the end of managerial effort ends the regulatory concern, and not for any suggestion that the proposal adopts a control test.

⁵¹ See Peirce Statement, *supra* note 77 (identifying “setting interest rates, deciding which assets to accommodate, setting loan-to-value limits, and establishing liquidation thresholds” as activities that may implicate the federal securities laws). A power to reduce exposure on the role holder’s own assessment of market conditions remains a judgment about those conditions and changes what depositors *earn*. See *supra* note 39 and accompanying text.

analysis retains significance, because the curator's powers in a well-designed vault are confined by code in ways that exclude custody of assets, self-dealing, discretionary valuation, and unannounced changes. Those limitations already address many of the concerns that the 1940 Act seeks to manage.

The definitions comprising “issuer” in the 1940 Act are broad and their breadth defeats any argument that rests on the absence of legal form alone. But the breadth was enacted in service of a specific purpose, the protection of savings entrusted to managements, and the record, the statutory findings, and the uniform facts of the decided cases support the position that some person's or entity's meaningful control over the pool of savings is a necessary predicate to the existence of an issuer. Where technology has produced pools over which no such control exists, the sounder reading of the statute is that they lie outside its definitions, not because they escaped the 1940 Act, but because they were never the thing the 1940 Act was written to reach.

This position does not require a manager in the sense of an investment adviser. A UIT has no adviser, yet its sponsor and trustee hold meaningful authority over the pool, including the selection and deposit of the portfolio, custody of its assets, the collection of fees, and the power to eliminate portfolio securities. That authority is the control the issuer analysis looks for.⁵² The question for a vault is therefore whether any person, whether called a sponsor, deployer, curator, guardian, or trustee, retains comparable power over the pool once depositors commit their capital. Where a vault has a sponsor that seeds or deposits the initial assets, distributes receipts, or retains upgrade or fee authority, that person supplies the control an issuer finding requires, and the analysis proceeds to Sections II through X. The no-issuer position applies only where no such person remains.

II. The Qualitative Test: “Holding Out” Under Section 3(a)(1)(A)

A. The “Is” Clause and the Tonopah Framework

Section 3(a)(1)(A) of the Investment Company Act provides that an “investment company” means any issuer which “is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, or trading in securities.”⁵³ The definition contains three independent clauses. The “is” clause presents a threshold interpretive question.

⁵² See *supra* notes 14, 15 and accompanying text; 15 U.S.C. § 80a-26(a); *infra* Section V.D (discussing the sponsor's retained power to eliminate portfolio securities upon specified adverse events). The Securities Act likewise treats the person “performing the acts and assuming the duties of depositor or manager” as the issuer of an unincorporated trust without a board. 15 U.S.C. § 77b(a)(4).

⁵³ 15 U.S.C. § 80a-3(a)(1)(A).

The “is” clause does not establish an independent test for investment company status.⁵⁴ On this reading, the clause refers to issuers already captured under Section 3(a)(1)(C)’s forty-percent test, and the practical work of Section 3(a)(1)(A) is performed by the “holding out” and “proposes” clauses alone. Three features support this position: (1) the “is” clause lacks specificity (Congress articulated a specific threshold in Section 3(a)(1)(C) but none here); (2) Sections 3(b)(1) and 3(b)(2) would be largely redundant if the “is” clause imposed an independent test coextensive with the Tonopah framework; and (3) the asymmetry between the two Section 3(b) provisions would be pointless if the broader “is” clause swallowed the narrower safety valves.

The “is” clause more likely refers to issuers that are investment companies under Section 3(a)(1)(C). The Commission nonetheless applies a five-factor framework, derived from its decision in *Tonopah Mining* and described in the next paragraph, to determine whether an issuer is engaged primarily in the investment business. That framework rests on administrative convention rather than statutory command.

Regardless, the practical question under Section 3(a)(1)(A) is whether the issuer is “engaged primarily” in the business of investing in securities. The Commission applies the *Tonopah* five-factor test, which considers (1) historical development, (2) public representations of policy, (3) activities of officers and directors, (4) nature of present assets, and (5) sources of present income. As a general rule, if a company has no more than forty-five percent of its assets invested in securities and derives no more than forty-five percent of its income from securities, it will not be regarded as primarily engaged in the investment business.⁵⁵

Applied to lending vaults, each factor weighs against investment company classification. The vault’s historical development is credit infrastructure. Its public representations describe a lending business. In a fully autonomous vault governed by immutable code, no person devotes time to selecting or managing securities. The collateral held is incident to the lending function, securing the borrower’s obligation. The vault’s income derives from interest or fees charged to borrowers, not dividends or trading profits.⁵⁶

⁵⁴ Rosenblum, *supra* note 13, § 3.3.1 (observing that “the ‘is’ clause, if it in fact sets out a specific test, is notable for its lack of specificity and its lack of usefulness, and for its failure to meaningfully differentiate itself from the 40% test in Section 3(a)(1)(C)”). In practice, “the ‘is’ clause ordinarily is not an independent basis for determining that a company is an investment company.” *Id.*

⁵⁵ See *In re Tonopah Mining Co. of Nev.*, 26 S.E.C. 426, 427 (1947) (articulating the five factors); Rosenblum, *supra* note 13, § 3.3.2 (discussing the “engaged primarily” requirement); cf. 17 C.F.R. § 270.3a-1 (45% asset and income tests).

⁵⁶ See *Tonopah*, 26 S.E.C. at 427, 430–31; see also *SEC v. Nat’l Presto Indus.*, 486 F.3d 305, 313–15 (7th Cir. 2007) (applying the factors to determine investment company status).

Holding vaults and derivatives vaults present differently. A holding vault aggregating capital for passive exposure to securities points toward investment company status on the asset and income factors. Both are addressed in Sections III through VIII.

B. The “Holds Itself Out” Clause

Section 3(a)(1)(A) also captures any issuer that “holds itself out as being engaged primarily ... in the business of investing, reinvesting, or trading in securities.” This clause requires neither actual engagement in the investment business nor satisfaction of the forty-percent asset test. Its rationale is a species of estoppel: an issuer that induces the public to invest on the understanding that the issuer will deploy capital in securities should not escape the 1940 Act’s protections by claiming it was never really in that business.⁵⁷ Holding out creates “expectations, an echo of a promise, that then must be fulfilled.”⁵⁸

SEC v. Fifth Avenue Coach Lines, Inc. is the principal case.⁵⁹ Fifth Avenue operated a transit bus system in New York City. After the city acquired its operations by condemnation, the company received \$11.5 million in proceeds and within two months invested \$8 million in securities. Before receiving the cash, a controlling person told the annual stockholders’ meeting: “We will be in a position to put the money to work profitably for you as soon as it is received.”⁶⁰

The district court held these statements were too general in nature to constitute holding out as an investment company. The company could have made investments consistent with its representations and still not been an investment company.⁶¹

Under *Fifth Avenue Coach Lines* and the authorities applying it, the holding-out inquiry involves two questions.⁶² First, are the issuer’s statements sufficiently public to warrant a conclusion that the issuer has held itself out as an investment company? Courts and the Commission have focused on public statements, including annual reports, shareholder

⁵⁷ Rosenblum, *supra* note 13, § 3.2(2); Frankel & Laby, *supra* note 6, § 5.02 (observing that the concept of holding out is conceptually similar to estoppel).

⁵⁸ Frankel & Laby, *supra* note 6, § 5.02 (“Holding out creates expectations, an echo of a promise, that then must be fulfilled.”).

⁵⁹ *SEC v. Fifth Ave. Coach Lines, Inc.*, 289 F. Supp. 3 (S.D.N.Y. 1968), *aff’d*, 435 F.2d 510 (2d Cir. 1970).

⁶⁰ *Id.* at 6 (quoting statements made at the annual stockholders’ meeting).

⁶¹ *Id.*

⁶² Rosenblum, *supra* note 13, § 3.2(2) (synthesizing the inquiry: “in order to determine whether an issuer holds itself out as an investment company, the relevant test presumably is whether the issuer makes public statements about its investment business from which a reasonable person might conclude that the issuer is in the business of investing, reinvesting, or trading in securities”).

materials, prospectuses, and advertising, rather than private communications.⁶³ Second, are the issuer's statements sufficiently specific to cause a reasonable person to conclude that the issuer is in the business of investing, reinvesting, or trading in securities?⁶⁴

The second inquiry is critical. The question is not whether the issuer promises attractive returns, describes passive income, or uses aggressive yield-oriented marketing. The question is whether a reasonable person would conclude from the issuer's public statements that the issuer's business is investing in securities. An issuer can promise high returns from a lending business without holding itself out as an investment company, because lending is not investing in securities. The statutory text is specific, requiring that the issuer hold itself out as engaged primarily in "the business of investing, reinvesting, or trading in securities." Return-oriented marketing does not satisfy this test unless it specifically describes the entity's business as a securities investment business.⁶⁵

A lending vault whose public-facing materials describe the vault's business as facilitating lending does not satisfy either prong of the *Fifth Avenue Coach Lines* inquiry. The statements are public, but they are not sufficiently specific to cause a reasonable person to conclude the vault is in the business of investing in securities. The vault describes a lending business. The code confirms it is one.⁶⁶

The reasonable-person inquiry does not occur in a vacuum. Where a vault's smart contract code is transparent, publicly deployed, and verifiable, the code constitutes the most authoritative public statement the vault makes about its business. A reasonable person evaluating the vault would not limit the inquiry to marketing copy. The code is publicly available and describes, with mathematical precision, what the vault does. It accepts deposits, matches them with borrowers, holds collateral incident to the lending function, and distributes interest income. A reasonable person who can verify that the vault's operations are mechanically constrained to lending would not conclude, on the basis of

⁶³ See *SEC v. Midland Basic, Inc.*, 283 F. Supp. 609, 612–13 (D.S.D. 1968) (company that described its business as an investment business in its prospectus and to its underwriter's sales representatives was an investment company).

⁶⁴ Frankel & Laby, *supra* note 6, § 5.02 ("The relevant test is whether the company makes public pronouncements about its investment business from which a reasonable person might infer that the company is in the business of investing, reinvesting, and trading in securities."). The test "should be objective, not subjective as to particular investors." *Id.*

⁶⁵ See *In re Gen. Sec. Corp.*, IC Release No. 865 (Feb. 26, 1946) (company engaged in small loans and insurance that amended its charter to remove investment language and received a 3(b)(2) order; charter authorization alone does not constitute holding out). Cf. *In re Dunham & Associates Holdings, Inc.*, Release No. IC-27495 (Sep. 22, 2006) (trusts and private funds that were each engaged primarily in the business of investing in securities held to be investment companies under both the "is" and "holding out" clauses).

⁶⁶ Cf. *Gen. Sec. Corp.*, IC Release No. 865 (holding that the nature of the business actually conducted, not the scope of the charter's authorization, determines investment company status). The same principle applies to smart contract architecture. The fact that the code could theoretically be modified or extended to conduct an investment business does not constitute holding out where the code, as deployed, conducts a lending business.

return-oriented marketing alone, that the vault is in the business of investing in securities.⁶⁷ The code is not merely background evidence. It is the definitive public representation of what the vault’s business is.⁶⁸

The holding-out clause captures vaults whose public materials describe the vault’s business as providing exposure to a securities portfolio, investing depositor capital in diversified digital asset securities, or managing a portfolio of tokenized securities on behalf of depositors.⁶⁹ Such descriptions hold the vault out as being engaged primarily in the business of investing in securities. The clause captures them whether or not the vault’s assets independently satisfy the forty-percent threshold in Section 3(a)(1)(C). This concern is relevant to holding and portfolio vaults, addressed in Sections V through VIII.

* * * * *

Section 3(a)(1)(A) does not classify lending vaults as investment companies. The qualitative test, under either the “is” clause or the “holding out” clause, turns on whether the issuer’s primary business is investing in securities. A vault whose business is lending, and whose public materials and code describe a lending business, clears this threshold. The quantitative

⁶⁷ The holding-out clause differs structurally from the economic-reality test *under* SEC v. W.J. Howey Co., 328 U.S. 293 (1946). *Under* Howey, courts assess the reasonable expectations of investors to determine whether an instrument is a security, and marketing can create those expectations regardless of underlying economic substance. The holding-out clause asks a different question: not what investors expect, but what the issuer itself has represented about its business. The clause captures issuers that describe their business as a securities investment business. It does not capture issuers that describe a different business, lending, for example, merely because the description is accompanied by return-oriented marketing. This structural distinction means that the holding-out clause is narrower *than* Howey in one respect: it tracks the issuer’s own business description rather than investor perception. The same vault marketing that might create a reasonable expectation of profits under the Howey framework (relevant to whether the instrument is a security) does not necessarily constitute holding out as an investment company under Section 3(a)(1)(A) (relevant to whether the entity is in the business of investing in securities). The two analyses address different questions and should not be conflated. See Volume II, Section B.3.e (applying the *Joiner* character-in-commerce standard and concluding that, where code and marketing diverge, the code is the better evidence of the arrangement’s economic reality and the marketing is the subject of the anti-fraud inquiry). Whether the code-as-definitive-representation argument translates with equal force to the Securities Act context is addressed there. The more modest point here is that, under the holding-out clause, a reasonable person’s assessment of the vault’s business would account for the code’s publicly verifiable constraints.

⁶⁸ Section 3(b) provides two mechanisms for issuers that are primarily engaged in a non-investment business. Section 3(b)(1) is self-executing. An issuer primarily engaged in a non-investment business is simply excluded from the definition of investment company, with no application required. 15 U.S.C. § 80a-3(b)(1). Section 3(b)(2) requires an affirmative application to the Commission, which, upon a finding that the issuer is primarily engaged in a non-investment business, issues an order so declaring. 15 U.S.C. § 80a-3(b)(2). The filing of a good-faith application under Section 3(b)(2) provides an automatic sixty-day exemption, which the Commission may extend. *Id.* The Staff has taken the position that neither Section 3(b)(1) nor Section 3(b)(2) is available to an issuer that holds itself out as an investment company. This means the holding-out clause operates as an independent capture. An issuer that triggers it cannot cure the classification through the “primarily engaged” escape hatch, regardless of whether its actual business is non-investment in character. For lending vaults, this reinforces the importance of ensuring that public-facing materials accurately describe the vault’s business as lending rather than securities investing.

⁶⁹ See *In re Dunham & Associates Holdings, Inc.*, Release No. IC-27495 (Sep. 22, 2006) (trusts and private funds that described and conducted their business as investing in securities were investment companies under both the “is” and “holding out” clauses of Section 3(a)(1)(A)).

question, whether vault assets constitute “investment securities” exceeding forty percent of total assets under Section 3(a)(1)(C), is addressed in Section III.⁷⁰

III. The 40 Percent Test Under Section 3(a)(1)(C)

A. The Two-Prong Structure of Section 3(a)(1)(C)

Section 3(a)(1)(C) defines as an investment company any issuer that satisfies two conditions. First, the issuer must be “engaged or propose[] to engage in the business of investing, reinvesting, owning, holding, or trading in securities.” Second, the issuer must “own[] or propose[] to acquire investment securities having a value exceeding 40 per centum of the value of such issuer’s total assets (exclusive of Government securities and cash items) on an unconsolidated basis.”⁷¹ Both prongs must be satisfied. An issuer that meets the 40% threshold but is not engaged in the business of investing in securities is not an investment company under Section 3(a)(1)(C). An issuer that is engaged in the business of investing in securities but does not meet the 40% threshold is also not captured.

The 40% threshold derives from the SEC’s 1939 study of approximately 1,800 companies. That study found that holding companies and industrial companies operating through subsidiaries (the type of companies no one proposed to regulate) typically held no more than 40% of their assets in investment securities.⁷² The threshold was designed as a bright-line mechanism by which “companies holding securities could determine easily and quickly whether they were investment companies.”⁷³ The clarity of the test is its primary virtue. It provides a quantitative standard where Section 3(a)(1)(A) provides a qualitative one.

Section 3(a)(2) defines “investment securities” for purposes of the 40% test. The term means all securities except (A) Government securities, (B) securities issued by employees’ securities companies, and (C) securities issued by majority-owned subsidiaries of the owner that are not themselves investment companies and do not rely on the exclusions in Sections 3(c)(1) or 3(c)(7).⁷⁴ The exclusion for majority-owned subsidiary securities reflects the statute’s purpose: a parent company that controls its operating subsidiaries is not investing in those subsidiaries in the sense the 1940 Act regulates. The parent is conducting a business through them.

⁷⁰ 15 U.S.C. §§ 80a-3(a)(1)(C), 80a-3(a)(2).

⁷¹ 15 U.S.C. § 80a-3(a)(1)(C).

⁷² See SEC, *Report on Investment Trusts and Investment Companies*, H.R. Doc. No. 76-476, at 30 (1939); Rosenblum, *supra* note 13, § 5.1 (describing the derivation of the forty-percent threshold from the 1939 study).

⁷³ Rosenblum, *supra* note 13, § 5.1.

⁷⁴ 15 U.S.C. § 80a-3(a)(2).

Two features distinguish Section 3(a)(1)(C) from Section 3(a)(1)(A). First, Section 3(a)(1)(C) does not require that the issuer be “*primarily*” engaged in the investment business. Any engagement in the business of investing in securities, combined with the 40% threshold, suffices. Second, Section 3(a)(1)(C) expressly captures companies that merely “own” or “hold” securities, in addition to those that invest, reinvest, or trade. The first prong’s sweep is therefore broader than Section 3(a)(1)(A)’s “is” clause, but the second prong imposes a quantitative constraint that Section 3(a)(1)(A) lacks.⁷⁵

For issuers that can satisfy both an asset test and an income test, Rule 3a-1 raises the effective threshold. An issuer is not an investment company under Section 3(a)(1)(C) if no more than 45% of its total assets consist of, and no more than 45% of its net income derives from, securities other than Government securities, securities of majority-owned subsidiaries, and securities of companies controlled primarily by the issuer.⁷⁶ Rule 3a-1 provides an additional margin of safety for operating companies whose securities holdings temporarily approach the 40% threshold.

Commissioner Peirce has described vaults as falling “along a spectrum from programmatic allocations determined solely by immutable smart contracts, to allocations at the sole discretion of another person or group of persons,” with the result turning on the “specific facts and circumstances.”⁷⁷ Vaults can also be sorted by what they hold: lending vaults, holding vaults, and derivatives vaults. That taxonomy, which is CCI’s own, cuts across the discretion spectrum Commissioner Peirce described. Holding vaults that simply hold crypto assets without lending or trading present the most straightforward case under the 40% test. If the held assets are not securities, the numerator is zero and the test fails. Derivatives vaults raise a distinct jurisdictional question: whether the Commodity Futures Trading Commission or the SEC has primary authority. Lending vaults are where the 40% test does its real work.

Lending vaults in non-security assets raise a second jurisdictional seam. If the lending positions are not securities, the live federal questions for those vaults arise under the Commodity Exchange Act, including commodity pool operator and commodity trading advisor status and the CFTC’s October 2026 advance notice of proposed rulemaking on Regulation CTX, which asks directly whether access to a vault through an exchange interface

⁷⁵ See Rosenblum, *supra* note 13, § 3.4 (observing that Section 3(a)(1)(C) does not require that investment in securities be the issuer’s primary business, but compensates by imposing a quantitative threshold that Section 3(a)(1)(A) lacks).

⁷⁶ 17 C.F.R. § 270.3a-1; see Certain Prima Facie Investment Companies, Investment Company Act Release No. 10,937, 44 Fed. Reg. 66,611 (Nov. 13, 1979) (proposing Rule 3a-1); Status of Certain Prima Facie Investment Companies, Investment Company Act Release No. 11,551, 46 Fed. Reg. 6,881 (Jan. 14, 1981) (adopting Rule 3a-1 with modifications).

⁷⁷ Peirce Statement, *supra* note 39.

is a “covered offer” of leverage or financing.⁷⁸ The Commission should coordinate any guidance on vaults with the CFTC under the agencies’ harmonization initiative, consistent with Commissioner Peirce’s emphasis on “respect for the limits Congress set on our jurisdiction.”⁷⁹

B. The Zero-Numerator Argument: Lending Positions Are Not Investment Securities

The 40% test turns on the ratio of “investment securities” to total assets. The denominator excludes Government securities and cash items. The numerator consists of “investment securities,” which Section 3(a)(2) defines as all securities other than Government securities, securities of employees’ securities companies, and securities of majority-owned subsidiaries meeting certain conditions.⁸⁰ For a lending vault, the threshold question is whether the loans the vault originates are “securities” at all. If they are not, the numerator is zero, and the 40% test fails regardless of the vault’s total asset composition.⁸¹

The Supreme Court addressed the securities classification of loan instruments in *Reves v. Ernst & Young*.⁸² *Reves* held that not every “note” is a security. The Court adopted a “family resemblance” test under which a note is presumed to be a security, but the presumption is rebutted if the note bears a strong resemblance to one of several categories of instruments that are not securities, including “notes evidencing loans by commercial banks for current operations” and “short-term notes secured by a lien on a small business or some of its assets.”⁸³ The *Reves* framework applies to the Securities Act and the Securities Exchange Act. Volume II addresses whether a lending vault’s loan positions are “securities” under those statutes. The analysis here concerns a different question, namely whether those same positions are “securities” for purposes of the 1940 Act’s 40% test.

⁷⁸ See 7 U.S.C. § 1a(10)–(12) (defining “commodity pool,” “commodity pool operator,” and “commodity trading advisor”); Regulation Crypto Asset Transactions and Regulation Crypto Asset Markets, 91 Fed. Reg. 64,811 (proposed Oct. 13, 2026) (advance notice of proposed rulemaking).

⁷⁹ Peirce Statement, *supra* note 77.

⁸⁰ 15 U.S.C. §§ 80a-3(a)(1)(C), 80a-3(a)(2).

⁸¹ The 40% analysis assumes that the lending vault constitutes an “issuer” for purposes of the 1940 Act. See *supra* Section I. An alternative framing is that the smart contract is merely infrastructure connecting disparate users rather than an entity conducting a lending business. If no entity exists, there is no issuer “holding” assets, and the 40% inquiry does not arise. The two-instrument distinction between loan positions and depositor receipts likewise depends on the entity framing. If the vault is an entity that originates loans and issues receipts, the loan positions and the receipts are distinct instruments with distinct legal characteristics. If the vault is merely a tool, the separation is harder to maintain.

⁸² *Reves v. Ernst & Young*, 494 U.S. 56 (1990).

⁸³ *Id.* at 64–67 (identifying categories of notes that are not securities, including notes delivered in consumer financing, notes secured by a home mortgage, short-term notes secured by a lien on a small business or some of its assets, notes evidencing a character loan to a bank customer, short-term notes secured by an assignment of accounts receivable, and notes formalizing open-account debts in the ordinary course of business).

The 1940 Act's definition of "security" in Section 2(a)(36) is broader than the Securities Act's definition. It includes "any note" without the qualifying language in the Securities Act that limits the term to notes with a maturity exceeding nine months.⁸⁴ This breadth creates a risk that loan instruments excluded from the Securities Act definition might nonetheless fall within the 1940 Act definition. The SEC Staff recognized this risk in *Bank of America Canada*, a no-action letter in which the Staff took the position that certificates of deposit issued by a Canadian bank were not "securities" for purposes of the 1940 Act's 40% test, even though CDs are literal "notes" within the statutory text.⁸⁵ Commentators have criticized the breadth of the 1940 Act's "security" definition as producing anomalous results. A literal reading would treat every commercial loan, trade receivable, and bank deposit as a "security" for purposes of the 40% test, converting ordinary operating companies into investment companies.⁸⁶ The SEC itself has resisted this reading. In its 1979 release proposing Rule 3a-1, the Commission stated that certificates of deposit and bankers' acceptances "should not be deemed to be securities" for purposes of the asset test, because treating them as securities "would produce results inconsistent with the purposes of the Act."⁸⁷

The Commission has consistently applied a purpose-based reading of "security" in the 40% context. The 40% test identifies companies whose primary business is securities investment. Treating every debt instrument as a "security" for numerator purposes would defeat the test's purpose by classifying lending institutions, commercial banks, and ordinary creditors as investment companies. The Commission's treatment of CDs, bankers' acceptances, and similar instruments reflects a functional judgment, namely that instruments incident to a lending or banking business, rather than to a securities investment business, should not count in the numerator.⁸⁸ The question is not merely whether an issuer holds instruments within the literal statutory definition of "security," but whether the issuer holds those instruments as investments. "Ownership" in Section 3(a)(1)(C) should be tested according to whether the company's assets are committed to investment at risk, in the hope of profits,

⁸⁴ 15 U.S.C. § 80a-2(a)(36) (defining "security" to include "any note, stock, treasury stock, security future, bond, debenture" and other instruments, without the nine-month maturity limitation in Section 3 of the Securities Act, 15 U.S.C. § 77c(a)(3)).

⁸⁵ *Bank of America Canada*, SEC No-Action Letter (July 25, 1983) (taking the position that certificates of deposit issued by a Canadian bank to a U.S. investment company were not "securities" for purposes of the 40% test, notwithstanding the breadth of the Section 2(a)(36) definition).

⁸⁶ Rosenblum, *supra* note 13, § 3.3.3 ("A literal application of the definition of the term 'security' to the 40% test would produce absurd results.").

⁸⁷ *Certain Prima Facie Investment Companies*, Investment Company Act Release No. 10937, 44 Fed. Reg. 67,148, 67,150 (Nov. 13, 1979). The Commission observed that "the classification of bankers' acceptances and certificates of deposit as securities for purposes of section 3(a)(1)(C) and rule 3a-1 would produce results that are inconsistent with the purposes of those provisions." *Id.*

⁸⁸ See Rosenblum, *supra* note 13, § 3.3.3; *Bank of America Canada*, SEC No-Action Letter (July 25, 1983) (applying the purpose-based approach to certificates of deposit held by an investment company); Frankel & Laby, *supra* note 6, § 5.03[B] (discussing the distinction between holding securities as investments and holding securities incident to a non-investment business).

since the purpose of the section is to include companies that lay out a substantial part of their assets for investments in securities. A company holding securities in trust or merely controlling securities is not an “owner.”⁸⁹ The distinction between “investment securities” (reflecting a decision to deploy capital for investment return) and “operational securities” (incident to a non-investment business) is longstanding.⁹⁰

A commercial bank’s loan portfolio is composed of “notes” within the literal text of Section 2(a)(36), but no one contends that the portfolio consists of “investment securities” for purposes of the 40% test. The loans are made in the ordinary course of a lending business, not as part of an investment program. A lending vault’s loan positions occupy the same functional category. The vault originates overcollateralized credit through code-enforced terms to counterparties who post collateral. The loan positions the vault holds are not acquired as investments. They are created as incidents of the vault’s lending function. The vault does not purchase debt securities on a secondary market. It does not acquire diversified portfolios of notes issued by third parties. It extends parametrically constrained credit and holds the resulting positions until repayment or liquidation. The functional parallel to a bank’s loan book is the origination-and-hold model, not the bilateral negotiation process. The vault sets terms algorithmically rather than through negotiation, but the economic substance is credit origination, not securities acquisition.⁹¹

The collateral held by a lending vault reinforces this characterization. A vault holding collateral incident to its lending function holds that collateral as security for repayment, not as an investment. The collateral is locked, programmatically managed, and liquidated only upon borrower default. The vault has no discretion to deploy the collateral for investment purposes. Under Article 9 of the Uniform Commercial Code, a secured party’s interest in collateral is limited to a “security interest,” a lien on the debtor’s property.⁹² The secured party does not acquire ownership, beneficial enjoyment, or disposition rights over the

⁸⁹ Frankel & Laby, *supra* note 6, § 5.03[B] (“‘Ownership’ in section 3(a)(1)(C) should be tested according to whether the assets of the company are committed to investment at risk, in the hope of profits, since the purpose of section 3(a)(1)(C) is to include in the definition companies that lay out a substantial part of their assets for investments in securities. Therefore, a company holding securities in trust or merely controlling securities is not an ‘owner.’”); see also *Fifth Ave. Coach Lines*, 289 F. Supp. at 33 (securities held to enable a company to conduct the business of a bus line are not investment securities).

⁹⁰ Frankel & Laby, *supra* note 6, § 5.03[B].

⁹¹ The lending vault’s loan positions are not traded on securities markets and are not acquired as a medium for investment. They are originated in transactions with borrowers and held as part of a lending business. Whether the depositor receipt, the floating-NAV pool share issued to the depositor in exchange for supplying assets, is itself a traded security is a different question addressed in Volume II. The UCC and purpose-based analysis in this subsection applies to the lending positions, not to the receipts. See Volume II, Section B (analyzing the vault receipt token *under Howey*); *id.* Section C.1 (concluding that a floating-NAV vault receipt token is not a note); see also *supra* note 81 (noting that the two-instrument distinction depends on the entity framing).

⁹² U.C.C. § 1-201(b)(35) (2022) (defining “security interest” as “an interest in personal property or fixtures which secures payment or performance of an obligation”). The secured party does not become the “owner” of collateral merely by virtue of perfecting a lien.

collateral unless and until the debtor defaults and the secured party exercises remedies. Even upon default, the secured party's rights are limited to disposition in a commercially reasonable manner, with surplus returned to the debtor.⁹³ A bank that holds a security interest in a borrower's stock portfolio does not "own" that stock for purposes of the 40% test. The lending vault's relationship to borrower collateral is functionally identical. For crypto-native collateral that may not constitute traditional "securities" under Article 8, Article 12 of the UCC (governing controllable electronic records) provides the parallel framework.⁹⁴ Collateral held incident to a lending function under a security interest is not "owned" as an investment.⁹⁵

A related structural feature of the 40% test supports the lending vault's position. The denominator excludes "cash items" from total assets. In *Fifth Avenue Coach Lines*, the court treated intercompany loans and receivables as cash items for purposes of the investment company analysis.⁹⁶ To the extent a lending vault holds stablecoin reserves, undeployed deposit pools, or other liquid instruments incident to its lending operations, those positions may qualify as cash items excluded from the denominator. The effect is to reduce the denominator without increasing the numerator, further distancing the vault from the 40% threshold.

The *Reves* analysis that matters for the numerator is the analysis of the positions the vault itself holds. Volume II applies the four *Reves* factors to the vault's lending positions where the vault holds them as a pool, and it treats that structure as the principal analysis of the lending positions.⁹⁷ On that analysis, the motivations factor is mixed. The borrower draws liquidity against its own collateral rather than issuing a note to finance a business enterprise, while the vault's capital seeks a return. The plan-of-distribution factor favors non-security treatment or is at worst neutral, because each position arises between the vault and a borrower and none is offered to or traded by the public. The reasonable-expectations factor favors non-security treatment, because borrowers and the market treat the positions as loans that are drawn against collateral, priced as interest, and repaid or liquidated as loans are. The risk-reducing factor strongly favors non-security treatment, given

⁹³ U.C.C. § 9-610 (2022) (disposition of collateral after default); U.C.C. § 9-615 (application of proceeds and surplus).

⁹⁴ U.C.C. § 12-102(a)(1) (2022) (defining "controllable electronic record"); U.C.C. § 12-105 (2022) (control of controllable electronic record). Article 12, adopted by thirty-three states and the District of Columbia as of mid-2026, governs a category of records stored in an electronic medium that can be subjected to statutory control. For crypto-native collateral, Article 12 provides a secured-lending framework parallel to Article 9's treatment of traditional collateral.

⁹⁵ Cf. 15 U.S.C. § 80a-3(c)(5)(C) (excluding from the investment company definition issuers primarily engaged in "purchasing or otherwise acquiring mortgages and other liens on and interests in real estate"). This exclusion reflects the statutory judgment that secured lending is a non-investment business, even when the lender holds collateral that could independently qualify as a security.

⁹⁶ *Fifth Ave. Coach Lines*, 289 F. Supp. at 33.

⁹⁷ See Volume II, Sections C.1, C.2 (applying each factor to the lending positions where a pool holds them and treating the pool structure as "the principal analysis of the lending positions").

overcollateralization, permissionless liquidation, on-chain transparency, and an algorithmic rate.⁹⁸ Volume II acknowledges that the plan of distribution may weigh toward security status for open, retail-facing vaults. That acknowledgment concerns the vault receipt token where it passes the positions through to depositors. It does not concern the positions the vault holds, which are the only instruments relevant to the numerator.

Reves construed the Securities Act and the Exchange Act and does not necessarily govern the 1940 Act.⁹⁹ Section 3(c)(5) and the bank exclusion in Section 3(c)(3) also suggest that Congress regarded at least some loans as securities, or potentially securities, under the 1940 Act.¹⁰⁰ Neither concession undermines the zero-numerator argument. The Commission's purpose-based reading of the 40% test asks whether an issuer holds instruments as investments or incident to a non-investment business. *Reves* asks substantially the same question when it distinguishes investment instruments from commercial ones. A position that bears a strong family resemblance to a commercial loan under *Reves* is therefore a position held incident to a lending business under the Commission's 40% analysis. The inference from Sections 3(c)(5) and 3(c)(3) reaches only loans that are securities in the first place. Those exclusions protect lenders whose portfolios might otherwise count toward the numerator. They do not suggest that every commercial loan is an investment security, and where a position is not a security under either framework, no exclusion is needed.

Applying the four factors to a loan made for valid business purposes confirms this result. The first three factors weigh against treating such a loan as a security, because the borrower's motivation is commercial, the loan is not offered broadly to the investing public, and the public would not expect the federal securities laws to apply.¹⁰¹ The *BlockFi* Order, moreover, presents no *Reves* or *Howey* analysis explaining why *BlockFi*'s crypto loans were securities, and facts such as a commercial borrowing purpose and loans that are not widely offered or readily traded could point toward non-security status.¹⁰² The *BlockFi* Order's numerator

⁹⁸ See Volume II, Sections C.2.a–C.2.d (applying the motivations, plan-of-distribution, reasonable-expectations, and risk-reducing factors to the pool structure); *id.* Section C.2 (summarizing the results by structure).

⁹⁹ See Rosenblum, *supra* note 13, § 2.4 (observing that the Supreme Court addressed the status of notes "under the 1933 and 1934 Acts (although not necessarily under the 1940 Act)" in *Reves*); *id.* § 15.1 (concluding that *Reves* "presumably is still at least relevant" to whether instruments are securities for purposes of the 1940 Act).

¹⁰⁰ See Rosenblum, *supra* note 13, § 2.4 (observing that Section 3(c)(5) "suggests that Congress thought at least some loans and similar instruments are or may be securities under the 1940 Act," and that Section 3(c)(3) suggests the same for loans found on bank balance sheets). *But see id.* § 5.6 n.323 (describing the inference that all loans are securities under the 1940 Act as "at best far too broad a conclusion" and observing that Section 3(c)(5) "arguably supports the proposition" that loans in the hands of the entity that made them are not securities); *id.* § 15.1.

¹⁰¹ See Rosenblum, *supra* note 13, § 5.9 (applying the four factors to intercompany loans made for valid business purposes and concluding that such loans "likely are not securities under *Reves*"; *id.* § 5.6 (same)).

¹⁰² See Rosenblum, *supra* note 13, § 5.9 n.394 (observing that the *BlockFi* Order "does not present any analysis under either of those tests as to why the Commission concluded that the crypto loans, cash loans, and intercompany receivables were securities"); *id.* § 5.9 (identifying a commercial borrowing purpose, negotiated terms, and the absence of secondary trading as facts that could weigh against security status).

finding therefore does not establish that crypto loans are investment securities. Vault lending positions are not offered or traded, and unlike BlockFi's unsecured institutional loans, they are overcollateralized and liquidated by code.

A further point supports the zero-numerator result independently of the four factors. On-chain borrowing is typically non-recourse. The code enforces repayment only through the collateral, and the borrower may forfeit the collateral rather than repay. Volume II assumes that the positions are notes because that assumption triggers the *Reves* presumption and is the more demanding analysis.¹⁰³ If a position carries no promise to repay that is enforceable against the borrower, it may not be a “note” or “evidence of indebtedness” under Section 2(a)(36) at all, and the *Reves* analysis would not be required. This confirms that the numerator question does not turn on any single step.

A lending vault that confines its operations to originating overcollateralized loans does not, by the act of origination, purchase securities. Whether the lending positions the vault originates are securities depends on the *Reves* analysis summarized above and developed in Volume II.¹⁰⁴ The zero-numerator argument rests on the conclusion that lending positions originated in the ordinary course of a lending business are not “investment securities” within the meaning of Section 3(a)(2). The argument does not extend to vaults that allocate capital into other vaults whose shares may themselves constitute securities, or to vaults that acquire diversified portfolios of third-party debt instruments. Those architectures (enterprise or curated vaults in the taxonomy developed in Volume I) may not benefit from the zero-numerator position and require separate analysis under the exclusions addressed in Sections V through IX.¹⁰⁵

C. BarnBridge and BlockFi: Acknowledgment and Distinction

Volume II addresses BarnBridge and BlockFi from a securities-law perspective. Neither order establishes that lending vaults are investment companies under Section 3(a)(1)(C).

In *BarnBridge* DAO, the Commission found that SMART Yield pools deploying user deposits to third-party DeFi protocols were unregistered investment companies. BarnBridge is distinguishable on two grounds.

¹⁰³ Volume II, Section C.1 (observing that on-chain borrowing “is typically non-recourse” and assuming that the positions are notes “because that assumption triggers the *Reves* presumption and is the more demanding analysis”).

¹⁰⁴ See Volume II, Sections C.2, C.4 (applying the *Reves* family-resemblance factors to vault lending positions and requesting confirmation that lending positions in the baseline vault fall within the existing commercial-loan family).

¹⁰⁵ See *infra* Sections V–IX (addressing the UIT pathway and the exclusions under Sections 3(c)(1), 3(c)(2), 3(c)(5), 3(c)(7), and Rule 3a-7).

First, BarnBridge *purchased* securities issued by third-party protocols; a lending vault does not purchase securities but originates credit in transactions with borrowers who post collateral. Second, BarnBridge exhibited the centralized control the 1940 Act addresses: founders held sufficient voting power to reach quorum on every proposal, controlled a multi-signature address, selected deployment protocols, and drew salaries as de facto executives. An autonomous lending vault with immutable parameters and no human selecting among investment opportunities lacks this control dynamic entirely. The order resolved by consent without contested adjudication and does not constitute binding precedent.¹⁰⁶

In *In the Matter of BlockFi Lending LLC*, the Commission concluded that BlockFi's interest-bearing accounts were securities under the Securities Act.¹⁰⁷ BlockFi accepted crypto asset deposits, promised interest, and deployed those assets through lending, investing in equities, futures, and other crypto assets. The Commission found that BlockFi was operating as an unregistered investment company because it was "engaged in the business of investing, reinvesting, owning, holding, or trading in securities" and more than 40% of its assets consisted of investment securities.¹⁰⁸

The BlockFi order's analytical gap is significant. BlockFi's business included both lending (originating loans to institutional and retail borrowers) and investing (purchasing equities, futures, and crypto assets for its own account). The Commission's order identified the 40% threshold as satisfied but did not disaggregate the lending book from the investment portfolio.¹⁰⁹ The question of whether a company that only lends, and does not invest, would satisfy the 40% test remains unresolved.¹¹⁰ The distinction matters for lending vaults. BlockFi's investment company status rested on the combination of lending and investing. The Commission found that BlockFi held investment securities exceeding the 40% threshold, but BlockFi's asset base included equity positions, futures, and other instruments acquired as investments, not merely loan positions. A lending vault that confines its operations to originating and holding loans does not replicate BlockFi's asset mix. If the vault's loan positions are not "investment securities" for the reasons discussed in Section B above, the vault's numerator is zero, and the 40% test is not met regardless of how BlockFi's order is read. As with BarnBridge, the BlockFi order resolved by consent and does not constitute binding precedent.

¹⁰⁶ BarnBridge Order, *supra* note 45.

¹⁰⁷ *In re BlockFi Lending LLC*, Securities Act Release No. 11,029, Investment Company Act Release No. 34,503, Administrative Proceeding File No. 3-20758 (Feb. 14, 2022) [hereinafter *BlockFi Order*].

¹⁰⁸ *Id.* at 4–5 (finding that BlockFi was an investment company under Section 3(a)(1)(C) because it "owned and held investment securities that exceeded 40 percent of its total assets, exclusive of Government securities and cash items").

¹⁰⁹ *Id.*

¹¹⁰ Rosenblum, *supra* note 13, § 3.3.3.

* * * * *

Lending vaults should not satisfy the 40% test. Their collateral holdings are held under a security interest incident to the lending function and are not “owned” as investments, their idle reserves are cash items, and, under the *Reves* analysis set out above and in Volume II, their loan positions are not “investment securities” within the meaning of Section 3(a)(2). The zero-numerator argument disposes of the Section 3(a)(1)(C) inquiry for lending vaults. The remaining question is whether the exclusions in Section 3(c) provide independent grounds for non-classification, and whether the Commission’s existing exemptive framework can accommodate vault structures that do not fit neatly within the lending archetype. Sections V through X address those questions.¹¹¹

IV. Face-Amount Certificate Companies Under Section 3(a)(1)(B)

Sections 3(a)(1)(A) and 3(a)(1)(C) of the Investment Company Act raise the two threshold questions that arise for any vault architecture regardless of what it issues: whether the vault holds itself out as being engaged primarily in the business of investing, reinvesting, or trading in securities (the holding-out test under Section 3(a)(1)(A)), and whether the vault’s balance sheet consists predominantly of investment securities (the 40 percent test under Section 3(a)(1)(C)). Section 3(a)(1)(B) raises a categorically different question. It asks whether the vault issues a specific type of instrument, a face-amount certificate of the installment type, that triggers investment-company status automatically, regardless of the vault’s business, assets, or representations. This question becomes relevant when a vault structures its receipt as a fixed-return debt instrument rather than an equity-like participation in the vault’s asset pool.

Section 2(a)(15) defines a face-amount certificate of the installment type as a security representing an obligation to pay a stated or determinable sum at a fixed or determinable date more than twenty-four months after issuance, in consideration of periodic installments of a stated or determinable amount.¹¹² Three elements must be present at issuance: (1) a stated or determinable sum, (2) payment more than twenty-four months out, and (3) periodic installment consideration. The issuer of a “fully paid” certificate (single lump-sum consideration) is not an investment company under Section 3(a)(1)(B).¹¹³

¹¹¹ 15 U.S.C. §§ 80a-3(c)(1), 80a-3(c)(5), 80a-3(c)(7).

¹¹² 15 U.S.C. § 80a-2(a)(15).

¹¹³ *In re J.D. Gillespie*, 13 S.E.C. 470, at 475 (1943) (“Clearly the applicant is not a face-amount certificate company under the definition in Section 4(1), as its securities are not of the installment type.”); see also Rosenblum, *supra* note 13, ch. 4, § 4.1 (discussing the installment-type and fully-paid distinction).

Unlike Sections 3(a)(1)(A) and 3(a)(1)(C), Section 3(a)(1)(B) has no “primarily engaged” qualifier and no 40% threshold. Any issuance triggers the classification, and Section 3(b)(1)’s primary-engagement exclusion is unavailable.¹¹⁴

Vaults can avoid Section 3(a)(1)(B) through three architectural choices. First, single-deposit structures (fully paid certificates) are outside the definition by statute. Second, variable-return structures, where the holder’s claim fluctuates with actual performance rather than constituting a fixed obligation, fail the “stated or determinable sum” requirement. Third, notes maturing within twenty-four months avoid the temporal threshold. The combination of single deposit, variable return, and short duration places a vault outside Section 2(a)(15).

Classification as a face-amount certificate company has cascading consequences: Section 3(c)(5)’s commercial-financing exclusion is unavailable, and Section 28 imposes reserve, custody, and investment requirements mandating that reserves be maintained in investments permitted for District of Columbia life-insurance companies.¹¹⁵ For vaults that cannot satisfy all three safe harbors (particularly those accepting periodic deposits and guaranteeing fixed returns over terms exceeding twenty-four months), the risk is real and should inform design-stage decisions.

V. Compliance with the 1940 Act — Management Companies and Unit Investment Trusts

Sections V through X plead in the alternative. CCI’s position is that a vault receipt token is not a security and that a vault issuing it is therefore not an issuer, for the reasons set out in Section I and Volume II.¹¹⁶ Each of Sections V through X assumes, solely for purposes of analysis, that the token is a security and that the vault is its issuer, and asks what follows under the 1940 Act on that assumption.

In the event that a vault meets the definition of “investment company” under Section 3(a)(1) of the 1940 Act, and cannot qualify for an exclusion under Section 3(c)(1), Section 3(c)(5), Section 3(c)(7), or Rule 3a-7, it will need to register with the Commission and conform its structure and operations to the requirements of the 1940 Act. Those requirements differ substantially depending on the investment company classification. Section 4 of the 1940 Act divides investment companies into three classes: face-amount certificate companies, unit

¹¹⁴ SEC v. *Mount Vernon Mem’l Park*, 664 F.2d 1358, 1363 (9th Cir. 1982) (holding that requiring a face-amount certificate company to be primarily engaged in reinvesting proceeds would render Section 3(a)(1)(B) “superfluous as an independent basis for defining investment companies”), cert. denied, 456 U.S. 961 (1982).

¹¹⁵ 15 U.S.C. § 80a-28 (imposing minimum reserve requirements, requiring reserves to be maintained in investments permitted for District of Columbia life-insurance companies, and prescribing custody requirements and surrender rights of certificate holders).

¹¹⁶ See *supra* notes 19–28 and accompanying text; Volume II, Sections B, C.1, E.

investment trusts, and management companies.¹¹⁷ The face-amount certificate company, addressed in Section IV, is essentially extinct and can be set aside. The meaningful choice is between UITs and management companies.

A. Management Companies: Structural Mismatch

The overwhelming majority of registered investment company assets in the United States are held in management companies, a class that includes every mutual fund, every closed-end fund, and nearly all exchange-traded funds.¹¹⁸ A management company's assets are managed by a registered investment adviser operating under a written advisory contract, approved initially by shareholders and annually by the board, with the adviser registered under the Investment Advisers Act of 1940.¹¹⁹ A management company has a board of directors with a fiduciary duty to look out for the best interest of shareholders. The 1940 Act requires that at least forty percent of the directors be independent, meaning that they are not "interested persons" of the company, its investment adviser, or its principal underwriter.¹²⁰ As a practical matter, based on ancillary rules and governance requirements,¹²¹ the vast majority of management company boards are composed of at least a majority of independent members, and in most cases seventy-five percent or more. Beyond the board and the investment adviser, a management company operates through a web of contracted service providers, including a qualified custodian that holds its assets, a transfer agent that maintains shareholder accounts, and an administrator that keeps its books and prepares its filings.¹²²

This is extremely problematic for vaults. Nearly all the core features imposed upon management companies presuppose an intermediated organization of exactly the kind that vault architecture is designed to eliminate, making it nearly impossible for a vault to comply with the 1940 Act's management company requirements.

¹¹⁷ 15 U.S.C. § 80a-4.

¹¹⁸ As of year-end 2025, U.S. registered investment companies held \$45.1 trillion in total net assets, approximately \$45.06 trillion of which was held by management companies (mutual funds, exchange-traded funds, and closed-end funds combined). Investment Company Institute, 2026 Investment Company Fact Book: Facts at a Glance, at ix (2026).

¹¹⁹ 15 U.S.C. § 80a-15(a), (c); 15 U.S.C. § 80b-3.

¹²⁰ 15 U.S.C. §§ 80a-10(a), 80a-2(a)(19) (defining "interested person").

¹²¹ See 17 C.F.R. § 270.0-1(a)(7) (defining "fund governance standards"); see also, e.g., 17 C.F.R. §§ 270.10f-3, 270.17a-7, 270.17e-1 (exemptive rules conditioning relief on compliance with the fund governance standards).

¹²² On shareholder voting, see 15 U.S.C. §§ 80a-13(a), 80a-16(a); on custody and recordkeeping, see 15 U.S.C. §§ 80a-17(f), 80a-30.

First, a vault has no board of directors.¹²³ There is no governance body to seat independent monitors, and no ongoing fiduciary apparatus to police the relationship between the company and its investment adviser.

Second, for a fully programmed vault there is no ongoing advisory function for a registered investment adviser to perform.¹²⁴ The vault's strategy is fixed at deployment. For a curated vault, the curator would have to register as an adviser and comply with the requirements of the Investment Advisers Act, which are addressed in Volume IV.

Third, the 1940 Act's custody requirements direct that fund assets be maintained with a qualified custodian, typically a bank, under detailed safekeeping rules.¹²⁵ A vault is noncustodial by construction. Its assets sit at contract addresses that no person controls, which is the central investor protection of the design and simultaneously a categorical conflict with a custody regime built on possession by regulated intermediaries.

Fourth, the 1940 Act imposes strict limitations on transactions between the fund and its affiliates, prohibiting principal transactions and tightly restricting joint arrangements.¹²⁶ These provisions may be violated by ordinary features of vault operation, including sponsor seeding of new vaults and fee collection through the minting of shares to sponsor-designated recipients.

Fifth, the mechanics of registered management company status assume the presence of people. Someone must sign the registration statement (the Securities Act requires the signatures of the issuer's principal executive, financial, and accounting officers and a majority of its board of directors),¹²⁷ someone must select and retain the independent auditors,¹²⁸ someone must serve as chief compliance officer,¹²⁹ and someone must engage the transfer agent, administrator, and other service providers, maintain the required books and records, and file the required reports. A vault supplies none of these actors.

The regulatory framework imposed upon management companies presents a complete structural mismatch for vaults, at least in their current form. Conforming a vault to the management company provisions would mean constructing around the code the apparatus of boards, investment advisers, custodians, and other service providers that the code was

¹²³ 15 U.S.C. §§ 80a-10(a), 80a-16(a).

¹²⁴ 15 U.S.C. § 80a-15(a), (c); 15 U.S.C. § 80b-3.

¹²⁵ 15 U.S.C. § 80a-17(f); 17 C.F.R. §§ 270.17f-1 to 270.17f-7.

¹²⁶ 15 U.S.C. § 80a-17(a), (d); 17 C.F.R. § 270.17d-1.

¹²⁷ Securities Act of 1933 § 6(a), 15 U.S.C. § 77f(a).

¹²⁸ 15 U.S.C. § 80a-31 (independent public accountant to be selected by a majority of the independent directors).

¹²⁹ 17 C.F.R. § 270.38a-1.

written to make unnecessary. Even then, it would still likely require significant exemptive relief from the Commission under Section 6(c) of the 1940 Act.¹³⁰

B. Unit Investment Trusts: A Proportionate Compliance Framework

Given the inability of fully programmed vaults to conform to the requirements imposed upon management companies, attention naturally turns to the unit investment trust. This is the vehicle specifically referenced by Commissioner Peirce in her July 2026 remarks on vaults, which observed that some vaults “may function similarly to unit investment trusts.”¹³¹ There are reasons for optimism, as UITs utilize a much simpler structure that forgoes both a board of directors and a registered investment adviser. UITs are a well-established vehicle and still held over \$103 billion in assets at the end of 2025.¹³² The UIT’s ancestor, the “fixed investment trust” of the late 1920s and early 1930s, arose as an investor reaction against the abuses of discretionary management.¹³³ Its promise was an announced list of securities that no manager could change, which is the same bargain a fully programmed vault strikes with code. The structure has also played a major role in financial innovation. The first exchange-traded funds brought to the U.S. market, including the SPDR S&P 500 ETF Trust (SPY) in 1993 and the Nasdaq-100 Trust (QQQ), were organized as UITs. SPY, among the largest pooled vehicles in the world, remains a UIT today.¹³⁴

Section 4(2) defines a unit investment trust as an investment company which “(A) is organized under a trust indenture, contract of custodianship or agency, or similar instrument, (B) does not have a board of directors, and (C) issues only redeemable securities, each of which represents an undivided interest in a unit of specified securities.”¹³⁵ The structure of a UIT and the mechanics of its operation are distinct from those of the management company. A UIT is created by a sponsor, called the depositor, which selects a fixed portfolio of securities and executes a trust indenture with a bank trustee. In the initial deposit transaction, the sponsor deposits the portfolio securities with the trustee and the trustee issues to the sponsor the trust’s units, each representing an undivided fractional interest in the deposited portfolio. The sponsor then offers the units to the public at net asset value (typically plus a sales charge) pursuant to a registration statement under the Securities Act. Thereafter, the sponsor may maintain a secondary market in the units,

¹³⁰ 15 U.S.C. § 80a-6(c).

¹³¹ Peirce Statement, *supra* note 77.

¹³² Investment Company Institute, 2026 Investment Company Fact Book: Facts at a Glance, at ix (2026) (reporting \$103 billion in unit investment trust assets as of year-end 2025).

¹³³ See SEC, *Report on Investment Trusts and Investment Companies* (1938-1942) (surveying fixed and semi-fixed trusts).

¹³⁴ See SPDR S&P 500 ETF Trust, Prospectus (Form S-6) (trust organized as a unit investment trust under New York law); Invesco QQQ Trust, Series 1, Prospectus (same structure).

¹³⁵ 15 U.S.C. § 80a-4(2).

repurchasing at net asset value from investors who wish to exit. Units are also redeemable through the trustee at net asset value. The trust has a specified termination date, at which point the portfolio is liquidated or distributed.¹³⁶

The key defining feature of the UIT is the nearly complete lack of ongoing investment discretion. A UIT's portfolio is assembled once, by the sponsor, before the public invests. From that moment forward, there is no ongoing function of deciding what to buy or sell. This is why UITs do not have investment advisers, which Section 2(a)(20) of the 1940 Act defines, in relevant part, as a person who “regularly furnishes advice . . . with respect to the desirability of investing in, purchasing or selling securities or other property.”¹³⁷ The lack of an investment adviser changes the way the 1940 Act seeks to regulate UITs. For management companies, the investment adviser, with its significant discretionary authority, is at the heart of the principal-agent problem that the 1940 Act seeks to address. The overarching oversight governance structure imposed upon management companies exists in very large part to police the relationship between the investment company and the investment adviser. When the party with that level of discretionary authority is removed from the structure, the need for the oversight governance structure itself also disappears. This is the reason why UITs are not required to have boards of directors.¹³⁸

This is not to say that Congress abdicated its obligation to provide protection to investors in UITs. Congress realized that protection could take a different form. Strict structural requirements, in lieu of an oversight apparatus, could afford investors the protection that the 1940 Act was designed to provide. The indenture carries the regulatory load for UITs by providing the structure that relieves the necessity of the oversight structure imposed upon management companies. Examined element by element, the UIT requirements are not inherently insurmountable for vaults.

C. The “Similar Instrument” Question

Looking to the first requirement, while a vault is not organized under a trust indenture like a traditional UIT, the statute does not require one. Section 4(2)(A) accepts a contract of custodianship, a contract of agency, “or similar instrument.” The question is whether an immutable smart contract ought to qualify as such a “similar instrument.” The indenture fixes all fees and powers in advance. It identifies the trust's property, defines the unitholders'

¹³⁶ UITs register their units under the Securities Act on Form S-6 and register as investment companies on Form N-8B-2. See 15 U.S.C. §§ 80a-2(a)(32), 80a-22, 80a-26.

¹³⁷ 15 U.S.C. § 80a-2(a)(20).

¹³⁸ See 15 U.S.C. § 80a-4(2) (UIT definition omitting board requirement); Frankel & Laby, *supra* note 6, § 5.08[B] (describing the UIT as a “storage house” whose investors' problems concern the integrity of its assets and the possibility of abandonment by the trustee).

interests, fixes the rules by which the property is administered, and establishes the mechanics of issuance and redemption. In a structure with no board of directors and no investment adviser, the indenture is more than an organizational document. It is the primary instrument through which the 1940 Act delivers investor protection, and the statute regulates its contents directly. Section 26(a) makes it unlawful to sell UIT units unless the governing instrument itself contains prescribed protective terms, including the designation of a bank to serve as the custodian of the trust's assets and limitations on the fees that may be charged against the trust.¹³⁹

There is a compelling argument that an immutable smart contract *ought* to qualify as a “similar instrument.” A vault's code performs each of the functions the indenture performs. It identifies the pool's property, defines the unitholders' interests, fixes the rules by which the property is administered, and establishes the mechanics of issuance and redemption. It likewise fixes fees and role permissions in advance, precisely the commitments that Section 26(a) requires the governing instrument to contain. And unlike a trust indenture, which relies on the trustee or sponsor for administration, a vault's code enforces its terms automatically and verifiably. The Commission's own practice confirms the flexibility of the organizational element. Insurance company separate accounts, which are organized under board resolutions and state insurance law rather than trust indentures, have registered as unit investment trusts for decades.¹⁴⁰

That said, a smart contract, alone, does not seem to currently satisfy the “similar instrument” requirement. A smart contract is not a legal instrument executed by identified parties. It does not, by itself, create a trust under any state's law or bind a depositor and trustee to the obligations Section 26(a) imposes. However, a traditional trust agreement establishing the legal entity, identifying the depositor and trustee, and documenting the Section 26(a) protections, combined with smart-contract code implementing the operational mechanics, would together constitute a “similar instrument” within the meaning of Section 4(2)(A). The trust agreement satisfies the legal-person and binding-terms requirements. The smart contract implements the investment parameters, redemption mechanics, and custody operations. The combination is a modern form of the organizational instrument the statute contemplates. It binds the parties to the required protections while using code to execute the trust's operational functions with a precision and transparency that paper instruments cannot achieve.¹⁴¹

¹³⁹ 15 U.S.C. § 80a-26(a).

¹⁴⁰ See, e.g., *Variable Annuity Life Ins. Co.*, Investment Company Act Release No. 4554 (Mar. 11, 1966) (separate account organized under board resolution and state insurance law registering as UIT).

¹⁴¹ The argument is that a combined trust-agreement-and-smart-contract structure satisfies the statute's requirement of a binding instrument establishing the trust and embodying the Section 26(a) protections. The trust agreement establishes the legal entity and binds the depositor and trustee. The smart contract implements the investment parameters,

The second element, the absence of a board of directors, is a precise match for vaults. The third element contains three requirements, namely that (i) the securities must be redeemable, (ii) each must represent an undivided interest, and (iii) the underlying portfolio must be a unit of specified securities. To the extent a vault receipt token were determined to be a security (a conclusion CCI disputes for the reasons described in Volume II), the token would be a redeemable security in the precise statutory sense. Upon presentation to the issuing contract, the holder would be entitled to receive approximately its proportionate share of the vault's current net assets. The undivided-interest requirement is satisfied by the token's pro rata character.¹⁴²

D. The “Specified Securities” Requirement

The “specified securities” requirement is the UIT's defining element from both a structural and regulatory standpoint. It is the reason why there is no investment adviser and thus the reason why the oversight governance structure is not imposed upon UITs. “Specified” requires that the portfolio essentially be fixed from the outset. A UIT is, in substance, a self-executing conduit for a predetermined portfolio. Once the portfolio is set, it generally cannot be altered. UIT sponsors typically retain a narrow supervisory role that allows them to instruct the trustee to eliminate a security upon specified adverse events, such as a security's delisting or the institution of insolvency proceedings, or to take necessary actions on corporate events such as mergers, exchanges, and rights offerings. For fully programmed vaults whose destination registry is locked at launch, the “specified securities” requirement would be satisfied. However, any vault with mechanisms allowing it to add markets, resize exposures, or rotate strategies would face more difficult questions regarding its ability to comply with this element.¹⁴³ A vault whose code permits only the removal of an asset or market upon objective, pre-specified triggers presents a close analogue to the UIT elimination power. Examples include automatic withdrawal from a lending market whose oracle fails, whose utilization exceeds a fixed ceiling, or whose collateral loses eligibility under a published standard. Like a sponsor's instruction to eliminate a security after a default or delisting, such a mechanism reduces exposure without selecting any new investment, and

redemption mechanics, and custody operations. Neither standing alone satisfies Section 4(2)(A): the trust agreement without the code lacks the operational mechanics; the code without the trust agreement lacks the legal capacity to bind identified parties and create a trust under state law. Together they constitute a “similar instrument” within the statutory catchall.

¹⁴² 15 U.S.C. § 80a-2(a)(32) (defining “redeemable security”).

¹⁴³ See 15 U.S.C. § 80a-26(c) (prohibiting substitution of securities in a single-issuer UIT without Commission approval); Frankel & Laby, *supra* note 6, § 5.08[B] (observing that a trust with a fixed portfolio that exercises no investment discretion satisfies the UIT definition, while retained management discretion converts the trust into a management company).

it should not by itself defeat the “specified securities” requirement.¹⁴⁴ The analysis changes if the vault may redeploy released assets into markets not specified at launch, or if a role holder exercises discretion over whether and when a trigger applies.

For vault structures, the immutability requirement means that upgrade authority capable of changing strategy parameters defeats UIT status. Governance votes capable of altering asset allocation defeat UIT status. Curator parameter adjustments that change which markets or assets the vault deploys into defeat UIT status. Genuine immutability is the price of the UIT pathway. The immutability constraint defines the boundary between proportionate regulation and full management-company treatment. A vault whose code is non-upgradeable, whose eligible investment destinations are fixed at deployment, and whose administrative roles (if any) are confined to purely ministerial or protective functions, a guardian capable only of pausing the vault or vetoing changes upon preset, objective triggers, for example, sits on the UIT side of the line. A vault that retains any mechanism for human actors to redirect assets, change strategy, or modify investment parameters sits on the management-company side, regardless of how infrequently the mechanism is exercised.¹⁴⁵

E. Section 26(a): The Bank Custody Requirement

Section 26(a) presents the principal obstacle for all vaults, including those with immutable code and no continuing investment discretion, and likely requires Commission exemptive relief. It prohibits the sale of UIT units unless the governing instrument—the trust indenture or a “similar instrument”—includes specified protections. Among them, the trust must designate a bank as trustee or custodian, and that bank must possess all securities and other property in which the trust has invested. Section 2(a)(5) defines “bank” to include a depository institution under the Federal Deposit Insurance Act, a Federal Reserve member bank, and certain state- or federally chartered banking institutions or trust companies that receive deposits or exercise fiduciary powers comparable to those of national banks and are supervised and examined by a state or federal banking authority.

This possession requirement conflicts directly with noncustodial vault infrastructure and would require exemptive relief. A vault contract holds the assets itself; transferring them to

¹⁴⁴ Cf. 17 C.F.R. § 270.26a-1; Frankel & Laby, *supra* note 6, § 5.08[C] (noting that “the extent of management’s discretion to deal with the contents of the portfolio provides a guide” to the boundary between UITs and management companies). CCI is not aware of Staff guidance addressing code-enforced removal triggers, and CCI would welcome confirmation that such mechanisms are consistent with the “specified securities” requirement.

¹⁴⁵ See 15 U.S.C. § 80a-4(2), (3) (the categories are mutually exclusive; a company that does not satisfy the UIT definition is a management company if it is not a face-amount certificate company); Frankel & Laby, *supra* note 6, § 5.08[C] (noting that “the extent of management’s discretion to deal with the contents of the portfolio provides a guide” to the boundary between UITs and management companies).

a bank would dismantle the design. Yet the architecture can serve the requirement's underlying purpose. Bank custody places trust assets beyond the sponsor's and other participants' reach. An immutable contract can achieve the same result by preventing any role holder from accessing the assets. The blockchain also provides a continuous public record of units and asset movements; issuance and redemption occur algorithmically at net asset value; and hard-coded fee caps make the governing instrument's charge limits self-enforcing.

Vault architecture therefore can provide Section 26(a)'s substantive protections—asset segregation, complete records, redemption at net asset value, and fee controls—through alternative means. That equivalence supports relief under Section 6(c). An application could seek an exemption from the bank-possession requirement subject to defined technical safeguards. Alternatively, it could ask the Commission to permit a bank trustee or qualifying trust company to provide supervision and oversight while treating the trustee's verified confirmation that the contract exclusively controls the assets as satisfying the possession requirement.

For digital-asset vaults, the SEC Division of Investment Management's September 2025 Simpson Thacher no-action letter provided significant relief. Subject to specified conditions, the Division stated that it would not recommend enforcement action against a registered adviser or regulated fund that treats a state trust company as a "bank" for custody of crypto assets and related cash or cash equivalents. Among other requirements, the state trust company must be supervised and examined by a state banking authority. The relief expressly covers both Section 17(f), governing custody for registered investment companies, and Section 26(a), governing UIT trustees. Accordingly, a qualifying state-chartered trust company may serve as trustee for a digital-asset UIT without relief on the "bank" issue. OCC Interpretive Letter 1183, issued in March 2025, likewise confirmed that national banks may provide crypto-asset custody under existing authority. Because national banks clearly qualify as "banks" under Section 2(a)(5), a national bank meeting the capital requirement may serve as trustee without exemptive relief. The \$500,000 minimum capital threshold should not constrain institutions likely to perform that role.

F. Practical Hurdles Beyond the Statute

Beyond compliance with the text of the 1940 Act, several practical hurdles remain for a vault that seeks to register as a UIT.

First, there must be an entity that serves as the sponsor and depositor. A legal entity needs to engage the key service providers (trustee, auditors, legal counsel) and sign the registration statement. The Securities Act, for unincorporated trusts without a board, assigns issuer

responsibility to the person “performing the acts and assuming the duties of depositor or manager.” In the UIT context, that is the sponsor and depositor. In addition, UIT sponsors are registered broker-dealers, because the sponsor distributes the units in a public offering. A vault seeking UIT registration would accordingly require some entity to occupy the sponsor role. Which entity does so is a structuring question, and the role is distinct from code authorship. Writing and deploying code does not by itself make the developer the sponsor.¹⁴⁶

Second, distribution through traditional channels presents real challenges. UIT units are conventionally sold through broker-dealer networks, with prospectus delivery, suitability, and Regulation Best Interest obligations being met at the point of recommendation. A tokenized unit minted permissionlessly and self-custodied in the holder’s wallet does not map cleanly onto those conventions.¹⁴⁷ If the vault receipts are not “stock” of a trust or similar entity, the alternative assumption on which this Section proceeds becomes harder to sustain, and the factors discussed in Volume II weigh against treating the receipts as securities at all.¹⁴⁸

* * * * *

The classification analysis under the 1940 Act resolves into a fork that mirrors the discretion spectrum. For curated vaults that cannot meet the “specified securities” requirement imposed upon UITs by Section 4(2), the only available wrapper is that of a management company, which is unavailable in any practical sense without relief so extensive as to amount to redesign. For fully programmed vaults, the UIT offers a structure whose defining features (no board, no adviser, no discretion, a fixed portfolio held for passive unitholders in redeemable units) match the architecture to a degree unmatched anywhere else in the 1940 Act, with the need for relief concentrated in the custody mechanics of Section 26(a) and the practicalities of sponsorship and distribution.¹⁴⁹

The UIT pathway addresses vaults that are investment companies and require a proportionate compliance framework. Two additional pathways address vaults that seek to avoid investment company status entirely. Sections 3(c)(1) and 3(c)(7) exclude from the definition of “investment company” issuers that limit the number and sophistication of their

¹⁴⁶ Securities Act of 1933 § 2(a)(4), 15 U.S.C. § 77b(a)(4) (assigning issuer responsibility for unincorporated trusts to the person “performing the acts and assuming the duties of depositor or manager”); see Investment Company Institute, A Guide to Unit Investment Trusts (describing sponsor functions, including deposit, distribution, and secondary-market maintenance).

¹⁴⁷ See 17 C.F.R. § 240.151-1 (Regulation Best Interest); Securities Act of 1933 § 5(b), 15 U.S.C. § 77e(b) (prospectus delivery).

¹⁴⁸ See Volume II, Section B (analyzing whether vault receipt tokens are investment contracts); *id.* Section C.1 (identifying which vault instruments are notes).

¹⁴⁹ See 15 U.S.C. §§ 80a-4(2), 80a-8, 80a-26 (UIT definition, registration, and governing instrument requirements).

investors. Section 3(c)(5) and Rule 3a-7 exclude commercial financing and structured finance vehicles.¹⁵⁰

VI. The Private Fund Exclusions Under Sections 3(c)(1) and 3(c)(7)

Sections 3(c)(1) and 3(c)(7) exclude from the definition of “investment company” issuers whose securities are held by a limited number of investors (Section 3(c)(1)) or exclusively by qualified purchasers (Section 3(c)(7)), provided in each case that the issuer “is not making and does not presently propose to make a public offering of its securities.”¹⁵¹ These exclusions are the standard pathway for private investment funds. They depend exclusively on the characteristics of the fund’s security holders and the absence of a public offering, rather than on the issuer’s business activities or the nature of its assets.¹⁵²

For vault structures that hold securities and cannot rely on the zero-numerator argument in Section III or the UIT pathway in Section V, the private fund exclusions represent the most established alternative. The doctrinal framework is well developed. The challenge for vault architectures is structural: most DeFi vaults are by default designed in ways that are incompatible with the prerequisites both exclusions impose.

A. The Statutory Framework

Section 3(c)(1) excludes any issuer whose outstanding securities (other than short-term paper) are beneficially owned by not more than 100 persons and which is not making and does not presently propose to make a public offering.¹⁵³ The 2018 Economic Growth Act increased the limit to 250 for qualifying venture capital funds.¹⁵⁴ Beneficial ownership by a company counts as ownership by one person, except where the company owns 10% or more of voting securities and is (or but for Section 3(c)(1) or 3(c)(7) would be) an investment company; in that case, beneficial ownership is attributed to the company’s shareholders (the “look-through” provision).¹⁵⁵

¹⁵⁰ 15 U.S.C. §§ 80a-3(c)(1), 80a-3(c)(7); 17 C.F.R. § 270.3a-7.

¹⁵¹ 15 U.S.C. §§ 80a-3(c)(1), 80a-3(c)(7)(A).

¹⁵² See Rosenblum, *supra* note 13, ch. 9, § 9.1 (observing that eligibility for both exceptions “depends exclusively upon the characteristics of a fund’s securities holders, and the lack of any public offering by, or contemplated by, the fund”); *id.* ch. 17, § 17.1.

¹⁵³ 15 U.S.C. § 80a-3(c)(1).

¹⁵⁴ Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, § 504, 132 Stat. 1296, 1362 (2018) (amending Section 3(c)(1) to permit qualifying venture capital funds to have up to 250 beneficial owners). A “qualifying venture capital fund” is a venture capital fund that has not more than \$10 million in aggregate capital contributions and uncalled committed capital. 15 U.S.C. § 80a-3(c)(1)(C)(i) (as adjusted by SEC order).

¹⁵⁵ 15 U.S.C. § 80a-3(c)(1)(A). The look-through is triggered only if the company owns 10% or more of the outstanding voting securities of the issuer and is an investment company or would be an investment company but for the exceptions in Sections 3(c)(1) or 3(c)(7). See 17 C.F.R. § 270.3c-1 (implementing the look-through provision and providing a de minimis

Rule 3c-5 permits knowledgeable employees of a Section 3(c)(1) or 3(c)(7) company to acquire securities of the fund without counting toward the beneficial owner limit and without being required to be qualified purchasers.¹⁵⁶ Knowledgeable employees include executive officers, directors, trustees, general partners, advisory board members, persons serving in a similar capacity, and employees who participate in the investment activities of the fund or related funds.¹⁵⁷

Section 3(c)(7) excludes any issuer whose outstanding securities “are owned exclusively by persons who, at the time of acquisition of such securities, are qualified purchasers” and which is not making and does not at that time propose to make a public offering.¹⁵⁸ Unlike Section 3(c)(1), Section 3(c)(7) imposes no numerical limit on qualified purchasers. The constraint is qualitative rather than quantitative. Section 2(a)(51) defines “qualified purchaser” to include natural persons owning at least \$5 million in investments, family companies owning at least \$5 million in investments, qualifying trusts whose trustees and settlors are qualified purchasers, and persons owning and investing on a discretionary basis at least \$25 million in investments.¹⁵⁹

Both exclusions share a common prerequisite, namely that the issuer must not be making and must not propose to make a public offering of its securities. This condition is textually independent from the Securities Act’s private-offering analysis, though the Commission has historically applied similar principles.¹⁶⁰ In practice, reliance on Regulation D (Rule 506(b) or Rule 506(c)) for the securities offering itself provides strong evidence that the ICA’s “no public offering” condition is satisfied, though no formal SEC guidance establishes automatic satisfaction.¹⁶¹

exception where the value of the company’s holdings in all Section 3(c)(1) and 3(c)(7) companies does not exceed 10% of the company’s total assets).

¹⁵⁶ 17 C.F.R. § 270.3c-5(b).

¹⁵⁷ See Rosenblum, *supra* note 13, § 9.2.4 (describing the categories of knowledgeable employees under Rule 3c-5, including the requirement that employees “participate in the investment activities” of the fund or related funds); *id.* § 9.2.4.A (discussing executive officers, directors, and similar senior-level personnel); *id.* § 9.2.4.B (discussing employees who participate in investment activities); NSMIA Rules Adopting Release, Investment Company Act Release No. 22,597, 62 Fed. Reg. 17,512, 17,524 (Apr. 9, 1997).

¹⁵⁸ 15 U.S.C. § 80a-3(c)(7)(A).

¹⁵⁹ 15 U.S.C. § 80a-2(a)(51)(A). The Commission has designated additional classes of qualified purchasers, including companies owned solely by qualified purchasers (Rule 2a51-3(b)), most qualified institutional buyers under Rule 144A of the 1933 Act (Rule 2a51-1(g)(1)), and knowledgeable employees as defined in Rule 3c-5 (Rule 3c-5(b)). See Rosenblum, *supra* note 13, § 17.2.1.

¹⁶⁰ See Rosenblum, *supra* note 13, § 9.2.5 (discussing the “no public offering” requirement and its relationship to Securities Act private-placement analysis).

¹⁶¹ In practice, the market treats Regulation D compliance as satisfying the ICA “no public offering” condition, and the Commission has not objected to this treatment. No formal guidance, however, establishes automatic satisfaction. The statutory text independently imposes the condition. See 15 U.S.C. §§ 80a-3(c)(1), 80a-3(c)(7)(A); 17 C.F.R. §§ 230.506(b), 230.506(c).

B. Three Structural Problems for Permissionless Vaults

The private fund exclusions are structurally incompatible with permissionless vault distribution. Three problems are dispositive.

First, beneficial-owner counting presents a problem. Section 3(c)(1) requires the issuer to know how many persons beneficially own its securities, but permissionless vault tokens sit in pseudonymous wallets with no mechanism to determine actual beneficial owners. By analogy to the bearer-certificate rule under Rule 12g5-1(a)(5), each wallet address could be treated as a separate owner, exceeding the 100-person limit for any vault with hundreds of wallets.¹⁶²

Second, the “no public offering” requirement: a permissionless deposit function accepting assets from any address without restriction is functionally a standing invitation to the public.

Third, qualified-purchaser verification: Section 3(c)(7) requires exclusive qualified-purchaser ownership, but permissionless token transferability makes leakage to non-qualified purchasers a structural rather than incidental risk.

C. The Permissioned Pathway

The private fund exclusions are available to vault architectures that adopt permissioned distribution. The required infrastructure includes (a) KYC-gated deposit functions, (b) on-chain allowlists restricting deposits and transfers to verified participants, (c) smart-contract transfer restrictions, and (d) for Section 3(c)(7) vaults, verification of qualified-purchaser status at each acquisition. Several institutional DeFi platforms have implemented variations of this architecture. For Section 3(c)(7) vaults, Rule 506(c) is the natural securities-law pairing because qualified purchasers necessarily exceed accredited-investor thresholds.¹⁶³

The look-through provision in Section 3(c)(1)(A) creates an additional structural concern for composable vault architectures. If Vault A holds receipt tokens of Vault B, and Vault A owns 10% or more of Vault B’s voting securities and is (or would be) an investment company, then Vault A’s own investors count toward Vault B’s 100-person limit.¹⁶⁴ In a composable ecosystem where vaults routinely deposit into other vaults, cascading look-through could

¹⁶² See 17 C.F.R. § 240.12g5-1(a)(5) (providing that “[e]ach outstanding unregistered or bearer certificate shall be included as held of record by a separate person, except to the extent that the issuer can establish that, if such securities were registered, they would be held of record . . . by a lesser number of persons”).

¹⁶³ See Arca U.S. Treasury Fund, SEC Registration Statement (Form N-2) (2020) (describing the use of ERC-1404 compatible tokens to enforce transfer restrictions); see also 17 C.F.R. § 230.506(c) (permitting general solicitation in offerings limited to verified accredited investors).

¹⁶⁴ 15 U.S.C. § 80a-3(c)(1)(A); 17 C.F.R. § 270.3c-1. The look-through applies when the investing entity owns 10% or more of the voting securities of the Section 3(c)(1) company and is (or would be) an investment company.

rapidly exhaust the 100-person limit. Section 3(c)(7) does not contain a comparable look-through provision for qualified-purchaser funds, which is one reason the 3(c)(7) exclusion is better suited to institutional vault structures that anticipate multi-layer composability.¹⁶⁵

D. Unresolved Questions

Several questions specific to digital-asset architectures remain unresolved. CCI believes the Commission should address (1) whether each wallet address is a separate beneficial owner; (2) whether the bearer-certificate analogy applies to blockchain tokens; (3) whether a permissionless deposit function constitutes a “public offering”; (4) whether restricted-token standards suffice for ICA transfer-restriction purposes; and (5) the consequences of inadvertent transfers to non-qualified purchasers.

CCI respectfully submits that staff guidance on these questions would provide essential clarity.

* * * * *

The private fund exclusions provide a viable pathway for permissioned, institutional vaults. They do not accommodate permissionless, retail-accessible architectures. For vaults that hold fixed pools of assets and seek a structural exclusion rather than an investor-qualification exclusion, Section 3(c)(5) and Rule 3a-7 provide alternatives. Sections VII and VIII address those pathways.¹⁶⁶

VII. The Commercial Financing Exclusions Under Section 3(c)(5)

Section 3(c)(5) excludes from the definition of investment company certain commercial finance companies, factoring companies, and mortgage banking companies.¹⁶⁷ The exclusion imposes three threshold conditions before the asset-type inquiry begins: the issuer must not be engaged in the business of issuing (i) redeemable securities, (ii) face-amount certificates of the installment type, or (iii) periodic payment plan certificates.¹⁶⁸ Only if all three conditions are satisfied does the analysis turn to the issuer’s primary engagement in one of three specified businesses.

¹⁶⁵ See Rosenblum, *supra* note 13, § 17.1 (noting that Section 3(c)(7) does not contain a provision generally comparable to the 10% attribution rule in Section 3(c)(1)(A), and that qualified purchaser funds can own more than 10% of the voting securities of another qualified purchaser fund “with no statutory consequence”).

¹⁶⁶ 17 C.F.R. § 270.3a-7.

¹⁶⁷ 15 U.S.C. § 80a-3(c)(5). See Rosenblum, *supra* note 13, § 15.1 (noting that Section 3(c)(5) “initially was intended to exclude from the 1940 Act issuers engaged in the commercial finance and mortgage banking industries”).

¹⁶⁸ Exclusion from the Definition of Investment Company for Structured Financings, Investment Company Act Release No. 18736, 57 Fed. Reg. 2,728, 2,728 (proposed Jan. 23, 1992) [hereinafter Rule 3a-7 Proposing Release].

The statute provides that the exclusion is available to “[a]ny person who is not engaged in the business of issuing redeemable securities, face-amount certificates of the installment type or periodic payment plan certificates, and who is primarily engaged in one or more of the following businesses: (A) purchasing or otherwise acquiring notes, drafts, acceptances, open accounts receivable, and other obligations representing part or all of the sales price of merchandise, insurance, and services; (B) making loans to manufacturers, wholesalers, and retailers of, and to prospective purchasers of, specified merchandise, insurance, and services; and (C) purchasing or otherwise acquiring mortgages and other liens on and interests in real estate.”¹⁶⁹

The redeemability condition presents the most immediate design challenge for vaults.

Section 2(a)(32) defines “redeemable security” as a security under which the holder, upon presentation to the issuer, is entitled to receive approximately its proportionate share of the issuer’s current net assets.¹⁷⁰ On the alternative assumption that it is a security, the standard vault receipt token (an ERC-4626 share entitling the holder to withdraw pro rata vault assets on demand) would be a redeemable security. A vault issuing such tokens cannot rely on Section 3(c)(5).

The design response is to structure the vault receipt as a non-redeemable instrument: a fixed-term note with no holder-initiated early redemption right, or a token that is transferable on secondary markets but contains no smart-contract redemption function against the issuer. Vault technology offers a particularly clean enforcement mechanism: a smart contract with no redemption function makes it structurally impossible for any holder to redeem against the issuer, while still permitting peer-to-peer transfers. This is stronger than any contractual restriction.¹⁷¹

Paragraph (A) excludes entities primarily engaged in purchasing notes, receivables, and other obligations representing the sales price of merchandise, insurance, or services.¹⁷² This refers to factoring activities. The receivables must relate to identified goods, insurance, or services. Trade-finance vaults that acquire tokenized receivables at a discount are the most natural

¹⁶⁹ 15 U.S.C. § 80a-3(c)(5).

¹⁷⁰ 15 U.S.C. § 80a-2(a)(32); see S. Rep. No. 91-184, at 37 (1969). Section 3(c)(5) as originally enacted in 1940 excluded only issuers of face-amount certificates and periodic payment plan certificates. The 1970 amendment added the prohibition on issuers of redeemable securities. See Rosenblum, *supra* note 13, § 15.1.

¹⁷¹ See S. Rep. No. 91-184, at 37 (1969) (clarifying that the amendment to Section 3(c)(5) “in no way affect[s] companies which issue securities redeemable at the option of the issuer”); Rosenblum, *supra* note 13, § 15.2 (noting that “a security is redeemable only if it is redeemable at the option of the holder. A security is not a redeemable security within the meaning of Section 2(a)(32) if it is redeemable only at the option of the issuer”).

¹⁷² 15 U.S.C. § 80a-3(c)(5)(A).

candidates. The Staff's recent no-action letters appear to require approximately 80% of assets in eligible receivables.¹⁷³

Paragraph (B) excludes entities primarily engaged in making loans to manufacturers, wholesalers, retailers, and prospective purchasers of specified merchandise, insurance, or services.¹⁷⁴ Unlike paragraph (A), this applies to originators who hold their loans. The critical constraint is that the loan must finance the purchase of specified goods or services. The Staff takes the position that Section 3(c)(5)(B) “does not include a loan used for purposes other than purchasing specific goods or services, even if the loan is secured by specific goods or services.”¹⁷⁵ A loan secured by machinery is an eligible loan only if the borrower uses the loan proceeds to purchase the machinery. The purpose of the loan, not its collateral, is determinative.

Vaults that originate credit specifically to finance identified purchases are candidates for paragraph (B): equipment-financing vaults, energy-purchase-agreement financing, and supply-chain lending tied to identified goods. The Staff has granted no-action relief for equipment leases, equipment loans, inventory loans, loans to finance solar power projects, student loans to finance educational services, and loans to finance public works projects.¹⁷⁶ An on-chain lending vault structured to originate loans tied to specific categories of tokenized real-world assets could satisfy paragraph (B) if the loan purpose is verifiably tied to the acquisition of specified merchandise or services. The verification requirement presents a practical challenge for automated protocols: the smart contract must incorporate a mechanism for confirming that loan proceeds fund an eligible purchase rather than general working capital.

Paragraph (C) excludes entities primarily engaged in purchasing mortgages and other liens on and interests in real estate. The Staff's traditional test requires at least 55% of assets in “qualifying interests” (instruments providing direct economic interest in real property) and at least 80% in qualifying interests plus “real-estate-related assets.” Vaults that acquire

¹⁷³ See Rosenblum, *supra* note 13, § 15.1 (observing that “it is likely that, in many cases, the entity that issues a note, or creates an account receivable, in the ordinary course of business is engaged in a commercial activity that would not create a security under *Reves*”).

¹⁷⁴ 15 U.S.C. § 80a-3(c)(5)(B).

¹⁷⁵ Rosenblum, *supra* note 13, § 15.1 (discussing the Staff's position that the loan purpose, not its collateral, is determinative under paragraph (B)).

¹⁷⁶ See Rosenblum, *supra* note 13, § 15.1 (collecting no-action letters); Hannon Armstrong Sustainable Infrastructure Capital, Inc., SEC No-Action Letter (Sept. 13, 2016) (loans for renewable energy infrastructure, including solar panels providing energy to retail and wholesale customers, structured as securitization of leases and power purchase agreements); Royalty Pharma, SEC No-Action Letter (Aug. 13, 2010) (purchased interests obligating others to pay royalties representing part of the sales price of biopharmaceutical products).

tokenized whole mortgage loans or participation interests could rely on paragraph (C) if the tokenization preserves the holder's economic exposure to the underlying real property.¹⁷⁷

Section 3(c)(5) requires that the issuer be “primarily engaged” in the specified business. Under paragraph (C), the Staff traditionally applies the 55%/80% test. Under paragraphs (A) and (B), recent no-action letters appear to require approximately 80% of assets in eligible loans and receivables.¹⁷⁸ The primarily-engaged requirement imposes a concentration discipline: a vault relying on Section 3(c)(5) must ensure that substantially all of its balance sheet consists of eligible assets. A diversified vault allocating across lending, staking, and liquidity-provision strategies cannot satisfy this requirement.

Section 3(c)(5) is a statutory exclusion enacted by Congress. Unlike Rule 3a-7, which the Commission can amend or rescind by rule, Section 3(c)(5) can be modified only by legislative action.¹⁷⁹ For vault operators willing to accept the design constraints (non-redeemable securities, concentration in eligible assets tied to specified goods, services, or real property), Section 3(c)(5) provides the most durable foundation available under the 1940 Act.

Beginning in the 1970s, structured financings backed by pools of mortgages, receivables, and other financial assets sought to rely on Section 3(c)(5). Because only some of these structures could satisfy its requirements, the Commission adopted Rule 3a-7 in 1992 as a dedicated exclusion for securitization vehicles.¹⁸⁰

VIII. The Structured Finance Exclusion Under Rule 3a-7

Rule 3a-7 provides a dedicated exclusion for securitization vehicles. In a typical structured financing, a sponsor transfers a pool of cash-generating assets to a limited-purpose entity that issues non-redeemable fixed-income securities whose payments depend on the cash flows from the underlying assets. The Commission and Staff recognize that such financings cannot operate under the 1940 Act's requirements, because Section 17(a)'s affiliated-transaction prohibitions would block the sponsor's transfer and Section 18's leverage limits would constrain the senior securities issuance that defines securitization.¹⁸¹ Prior to Rule 3a-

¹⁷⁷ 15 U.S.C. § 80a-3(c)(5)(C).

¹⁷⁸ See Rosenblum, *supra* note 13, § 15.1 (noting that the Staff's more recent no-action letters under paragraphs (A) and (B) appear to require approximately 80% of assets in eligible instruments).

¹⁷⁹ 15 U.S.C. § 80a-3(c)(5) (statutory exclusion enacted by Congress in 1940, amendable only by legislative action); cf. 17 C.F.R. § 270.3a-7 (exclusion adopted by the Commission by rule in 1992, amendable by the Commission through notice-and-comment rulemaking under 15 U.S.C. § 80a-38(a)).

¹⁸⁰ See Rule 3a-7 Proposing Release, *supra* note 168, at 2,728 (explaining that Section 3(c)(5) “was intended to exclude from the definition of investment company certain factoring, discounting and mortgage companies, and did not specifically contemplate asset-backed issuers”).

¹⁸¹ See 15 U.S.C. §§ 80a-17(a), 80a-18; Rule 3a-7 Proposing Release, *supra* note 168.

7, the Commission had issued approximately 125 exemptive orders for individual structured financings.¹⁸²

Rule 3a-7 conditions the exclusion on seven structural requirements.

First, the issuer must not issue redeemable securities. The analysis in Section VII applies here. A vault token with no smart-contract redemption function satisfies this condition structurally, while a standard ERC-4626 receipt does not.¹⁸³

Second, the issuer must hold “eligible assets,” meaning financial assets that by their terms convert into cash within a finite time period. Fixed-maturity lending positions satisfy this condition, but open-ended demand-deposit-like positions do not.

Third, the issuer must issue “fixed-income securities” entitling holders to receive payments that depend primarily on the cash flow from eligible assets.

Fourth, Rule 3a-7 restricts purchasers through a tiered framework. Fixed-income securities rated in one of the four highest categories by an NRSRO may be sold without restriction, including to retail investors. Unrated securities may be sold to institutional accredited investors and qualified institutional buyers. This framework creates the critical obstacle for tokenized structures, because NRSRO ratings are practically unavailable for novel on-chain asset classes. No major rating agency has published criteria for rating pools of tokenized promissory notes.¹⁸⁴ The private-placement path remains available but precludes the broad retail distribution many vault operators seek.

Fifth, the issuer may acquire or dispose of eligible assets only in accordance with its transaction documents, without causing a ratings downgrade, and not for the primary purpose of recognizing gains or decreasing losses from market value changes.¹⁸⁵ This prohibits active portfolio management. Immutable lending vaults with parametric origination criteria satisfy this naturally; curated vaults with ongoing discretion to rotate strategies violate it.

Sixth, except for short-term commercial paper programs, the issuer must appoint an independent trustee meeting Section 26(a)(1)’s requirements. A smart contract alone cannot satisfy this; the realistic path is the hybrid model in which a state trust company or national

¹⁸² Rule 3a-7 *Proposing Release*, *supra* note 168.

¹⁸³ 17 C.F.R. § 270.3a-7(a)(1).

¹⁸⁴ See 17 C.F.R. § 270.3a-7(a)(2) (conditioning unrestricted sale on a rating in one of the four highest categories by a nationally recognized statistical rating organization).

¹⁸⁵ 17 C.F.R. § 270.3a-7(a)(3)(iii).

bank serves as institutional trustee while smart contracts execute operational functions under the trustee's oversight.

Seventh, the issuer must deposit cash flows in a segregated account maintained or controlled by the trustee.

Rule 3a-7 becomes the centerpiece exclusion pathway when a vault structures its receipt as debt. The design choice maps onto the statutory architecture: an equity receipt leads to the UIT pathway (Section V), while a debt receipt leads to Rule 3a-7 and Section 3(c)(5). Static-pool RWA credit vaults with fixed-maturity loans, institutional trustees, and non-redeemable tranche tokens can satisfy most Rule 3a-7 requirements with intentional structuring. Single-market immutable lending vaults would require significant restructuring. Curated multi-strategy vaults fail Rule 3a-7 entirely: curatorial discretion constitutes active management, and open redemption violates the non-redeemability requirement if the vault can satisfy the business-type requirements addressed in Section VII. A vault that issues fixed-term, non-redeemable notes backed by a lending book is functionally a securitization vehicle and may be able to comply with Rule 3a-7.

The feasibility of Rule 3a-7 varies sharply across vault archetypes. Static-pool RWA credit vaults (structures with fixed-maturity loans, institutional trustees, and non-redeemable tranche tokens) can satisfy most Rule 3a-7 requirements with intentional structuring.¹⁸⁶ The modifications needed are specific. They include appointment of a state trust company or national bank as independent trustee, limitation of initial distribution to accredited investors and QIBs to avoid the NRSRO rating requirement, and confirmation that the pool is truly static at inception with substitution only for defaulted or impaired assets pursuant to objective criteria. Single-market immutable lending vaults would require more significant restructuring, including conversion to fixed-term lending, appointment of an institutional trustee, and elimination of holder-initiated redemption. The restructuring would fundamentally change the product. Curated multi-strategy vaults fail Rule 3a-7 entirely. The curator's ongoing discretion to add or remove asset categories, rotate between yield sources, and adjust allocation parameters constitutes active management in the clearest sense. The no-active-management condition is incompatible with curatorial discretion, and the redeemable-securities prohibition is incompatible with the open redemption that is central to the curated vault product.¹⁸⁷

The NRSRO rating requirement is the single greatest regulatory obstacle to Rule 3a-7's use by tokenized structures. Section 939A of the Dodd-Frank Act directed the Commission to

¹⁸⁶ See 17 C.F.R. § 270.3a-7(a)(1)-(4); Volume I, Section III.B (describing off-chain credit vaults and the "transparency boundary" beyond which a depositor must rely on reporting, attestations, documents, or service providers).

¹⁸⁷ See 17 C.F.R. § 270.3a-7(a)(1), (a)(3)(iii); *see supra* Section VII (discussing redeemable securities).

remove credit-rating references from its regulations and substitute appropriate creditworthiness standards. The Commission has implemented Section 939A for other 1940 Act rules but not for Rule 3a-7. In practice, many asset-backed securitization vehicles already rely on Section 3(c)(7) rather than Rule 3a-7, selling only to qualified purchasers in private placements. Rule 3a-7 provides a regulatory-arbitrage advantage over Section 3(c)(7): because Rule 3a-7 issuers are excluded from the definition of “investment company” rather than merely excepted as private funds, they fall outside the Volcker Rule’s covered-fund restrictions and the Commission’s private fund adviser rules.¹⁸⁸

A design note applies to Sections VII and VIII together. Both pathways require non-redeemable receipts, and Volumes II and IV treat permissionless exit as the central protection that vault architecture offers depositors. The structural exclusions are therefore a design choice for a different product rather than a compliance path for the vaults those volumes describe. For those vaults, the pathways are, in order, confirmation that no issuer exists (Section I), the unit investment trust framework with Section 26(a) relief (Section V), and Section 6(c) relief (Section X).

The apparent tension dissolves once one recognizes that the 1940 Act does not treat redeemability uniformly. Some vehicles must issue redeemable securities. Section 4(2) defines a unit investment trust as an investment company that issues only redeemable securities, and Section 5(a)(1) defines an open-end company as a management company that is offering for sale or has outstanding any redeemable security of which it is the issuer.¹⁸⁹ Other vehicles need not issue redeemable securities, because Section 5(a)(2) treats any management company other than an open-end company as a closed-end company.¹⁹⁰ Still others must not issue them. Congress amended Section 3(c)(5) in 1970 to deny the exclusion to issuers engaged in the business of issuing redeemable securities, reaching companies that had sought to capitalize on the popularity of open-end companies, and Rule 3a-7 is available only to an issuer that does not issue redeemable securities.¹⁹¹ Redeemability is therefore a structural choice that determines which pathway a vault may use, not a protection that the 1940 Act demands of every pooled vehicle. A vault that preserves on-demand exit fits the

¹⁸⁸ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 939A, 124 Stat. 1376, 1887 (2010) (codified at 15 U.S.C. § 78o-7 note).

¹⁸⁹ 15 U.S.C. § 80a-4(2) (defining “unit investment trust” as an investment company that, among other things, “issues only redeemable securities”); 15 U.S.C. § 80a-5(a)(1) (defining “open-end company” as “a management company which is offering for sale or has outstanding any redeemable security of which it is the issuer”); see 15 U.S.C. § 80a-2(a)(32) (defining “redeemable security”).

¹⁹⁰ 15 U.S.C. § 80a-5(a)(2) (defining “closed-end company” as “any management company other than an open-end company”); see Rosenblum, *supra* note 13, § 42.1 n.2 (explaining that a closed-end investment company “does not issue redeemable securities”).

¹⁹¹ 15 U.S.C. § 80a-3(c)(5); S. Rep. No. 91-184, at 37 (1969); Rosenblum, *supra* note 13, § 15.2 (explaining that the 1970 amendment reached companies that had “attempted to capitalize on the popularity of open end companies by issuing redeemable securities”); 17 C.F.R. § 270.3a-7(a) (excluding an issuer “who does not issue redeemable securities”).

unit investment trust and open-end frameworks, and a vault that forgoes it may fit the structural exclusions.

IX. The Underwriter, Broker, and Market Intermediary Exclusion Under Section 3(c)(2)

Sections VI through VIII addressed exclusions that turn on the identity of an issuer's investors or the composition of its assets. Section 3(c)(2) turns on a different fact. It asks what operating business the issuer conducts. The provision excludes from the definition of investment company "[a]ny person primarily engaged in the business of underwriting and distributing securities issued by other persons, selling securities to customers, acting as broker, and acting as market intermediary, or any one or more of such activities, whose gross income normally is derived principally from such business and related activities."¹⁹² Underwriters, brokers, market makers, and swap dealers buy, sell, and hold securities as an ordinary incident of their businesses. Without Section 3(c)(2), many of them would satisfy Section 3(a)(1)(A) or Section 3(a)(1)(C).¹⁹³

A. Statutory Purpose and the Entrustment Principle

The legislative history explains the exclusion in direct terms. David Schenker, Chief Counsel to the Investment Trust Study, told the House subcommittee that "[a]lthough a broker is engaged in the business of buying and selling securities, he is not an investment company," and that an incorporated brokerage firm with more than one hundred stockholders falls outside the statute "if its business is the brokerage business."¹⁹⁴ Congress originally limited the exclusion to underwriters, brokers, and dealers selling to customers. The National Securities Markets Improvement Act of 1996 added market intermediaries, such as swap dealers, and added Section 3(c)(2)(B) to define that term.¹⁹⁵

The exclusion is consistent with the entrustment principle set out in Volume I. A broker executes transactions that its customers direct with their own capital. A market maker

¹⁹² 15 U.S.C. § 80a-3(c)(2)(A). As originally enacted, Section 3(c)(2) excepted only underwriters, market makers, and brokers. See Rosenblum, *supra* note 13, § 10.1.1 & n.1.

¹⁹³ Rosenblum, *supra* note 13, § 10.1.1 (observing that underwriters, market makers, brokers, and market intermediaries are each "engaged in the business of buying, selling, and holding securities and, therefore, absent Section 3(c)(2), could be deemed to be an investment company"); see 15 U.S.C. § 80a-3(a)(1)(A), (C).

¹⁹⁴ A Bill to Provide for the Registration and Regulation of Investment Companies and Investment Advisers: Hearings on H.R. 10065 Before a Subcomm. of the H. Comm. on Interstate and Foreign Commerce, 76th Cong. 103 (1940) (testimony of David Schenker, Chief Counsel to the Investment Trust Study); see Rosenblum, *supra* note 13, § 10.1.1 & n.4.

¹⁹⁵ National Securities Markets Improvement Act of 1996, Pub. L. No. 104-290, § 209(a)(3), 110 Stat. 3416, 3432 (substituting "acting as broker, and acting as market intermediary," for "and acting as broker," and adding § 3(c)(2)(B)); see Rosenblum, *supra* note 13, § 10.1.1 n.1.

commits its own capital to both sides of the market and profits from the spread, not from a managed portfolio held for others. Neither firm holds a pool of public savings entrusted to it for investment. Congress also subjected these firms to a separate and comprehensive regime of registration and customer protection under the Securities Exchange Act of 1934.¹⁹⁶ Section 3(c)(2) reflects a judgment that the 1940 Act's protections add little where the issuer's securities holdings serve an intermediation business that another statute already regulates.

B. The Primarily Engaged and Derived Principally Conditions

Section 3(c)(2) imposes two cumulative conditions. First, the issuer must be primarily engaged in one or more of the enumerated activities. The Commission and the Staff have offered little interpretive guidance on this condition, but the phrase most likely carries the same meaning it has in Section 3(b)(1) and in Section 3(a)(1)(A).¹⁹⁷ On that reading, the Tonopah factors govern, with the nature of present assets and the sources of present income carrying the most weight. The Staff generally regards a company as primarily engaged in a business if it devotes at least 55 percent of its assets to that business and derives at least 55 percent of its income from it.¹⁹⁸

Second, the issuer's gross income must "normally" derive "principally" from the enumerated activities and related activities. The Commission and the Staff appear to read this condition to require at least 50 percent of gross income from those sources.¹⁹⁹ The Commission granted an order to a registered broker-dealer that derived 50.44, 51.31, and 80.60 percent of its gross income from underwriting over three fiscal years.²⁰⁰ The Staff permitted reliance where an issuer derived approximately 46 percent of its gross income from brokerage in its most recent fiscal year and 65 percent in its most recent quarter, although it described the

¹⁹⁶ See 15 U.S.C. § 78o(a) (broker-dealer registration); 17 C.F.R. §§ 240.15c3-1 (net capital), 240.15c3-3 (customer protection). The 1940 Act separately regulates the relationship between broker-dealers and investment companies. See, e.g., 15 U.S.C. §§ 80a-2(a)(19), 80a-10(b), 80a-10(f), 80a-17(a), (d), (e); Rosenblum, *supra* note 13, § 10.1.1 n.2.

¹⁹⁷ Rosenblum, *supra* note 13, § 10.2 ("It probably is reasonable to assume, however, that the term 'primarily engaged' has the same meaning in Section 3(c)(2) as it does in Section 3(b)(1) and has the same meaning as the term 'engaged primarily' in Section 3(a)(1)(A)."); see *supra* Section II.A (discussing the Tonopah factors).

¹⁹⁸ Rosenblum, *supra* note 13, § 10.2 (noting that, of the five Tonopah factors, "[t]he last two factors are the most important," and that an issuer "presumably should be deemed to be primarily engaged in an underwriting, brokerage, market making, and/or market intermediary business if it devotes at least 55% of its assets to one or more of those businesses and derives at least 55% of its income from one or more of those businesses"); see *In re Tonopah Mining Co. of Nev.*, 26 S.E.C. 426 (1947).

¹⁹⁹ Rosenblum, *supra* note 13, § 10.3. This reading parallels Exchange Act Rule 11a1-1(T)(b), under which an exchange member satisfies the Section 11(a)(1)(G)(i) business mix test "if during its preceding fiscal year more than 50% of its gross revenues was derived from one or more of the sources specified in that section." 17 C.F.R. § 240.11a1-1(T)(b). The Commission has cautioned, however, that its Section 11(a) interpretations do not imply any necessary interpretation of Section 3(c)(2). See Rosenblum, *supra* note 13, § 10.1.2.

²⁰⁰ *In re Paribas Corp.*, Investment Company Act Release No. 6589 (June 23, 1971) (order), and Investment Company Act Release No. 6549 (May 21, 1971) (application); see also *In re Investors Diversified Servs., Inc.*, Investment Company Act Release No. 5616 (Feb. 20, 1969) (order) (issuer derived 60% of its gross income from underwriting).

annual figure as a close question.²⁰¹ The word “normally” likely signals that Congress did not intend a temporary shortfall to defeat the exclusion.²⁰² Income from related activities counts toward the derived principally test, but assets devoted to related activities do not appear to count toward the primarily engaged test.²⁰³

C. The Enumerated Activities

Each enumerated activity draws on a defined term. An underwriter, under Section 2(a)(40), must participate in the distribution of securities, and the Staff has treated a best-efforts private placement agent as an underwriter for at least some 1940 Act purposes.²⁰⁴ A broker, under Section 2(a)(6), must effect securities transactions for the account of others. A person that makes investment decisions but does not execute transactions for others is not a broker, and neither is a futures commission merchant or a real estate broker trading outside the securities markets.²⁰⁵ The Staff reads “selling securities to customers” to mean market making, and it takes the position that a dealer that trades for its own account without making markets cannot rely on the exclusion.²⁰⁶

The market intermediary prong carries the most technical definition. Section 3(c)(2)(B)(i) defines a market intermediary as “any person that regularly holds itself out as being willing contemporaneously to engage in, and that is regularly engaged in, the business of entering into transactions on both sides of the market for a financial contract or one or more such financial contracts.”²⁰⁷ A “financial contract” must satisfy three elements. It must take the form of an individually negotiated contract, agreement, or option to buy, sell, lend, swap, or

²⁰¹ Federated Capital Mgmt. Assocs., SEC No-Action Letter (Aug. 1, 1975); see Rosenblum, *supra* note 13, § 10.3 n.14.

²⁰² Rosenblum, *supra* note 13, § 10.3 (“The use of the word ‘normally’ might have evidenced a congressional belief that temporary economic or other factors that cause an issuer briefly to fail to comply with the derived principally requirement should not prevent an issuer from relying on Section 3(c)(2).”).

²⁰³ Rosenblum, *supra* note 13, § 10.2 (concluding that “the sole relevance of related activities under Section 3(c)(2) is that any income derived from those activities is included in determining whether a company’s gross income is derived principally” from the enumerated businesses and related activities); *id.* § 10.4.5 (noting the absence of significant guidance on “related activities” and suggesting that shareholder, sub-accounting, and transfer agency services may qualify).

²⁰⁴ 15 U.S.C. § 80a-2(a)(40); Rosenblum, *supra* note 13, § 10.4.1 (“The touchstone of the Section 2(a)(40) definition is that an underwriter must be involved in the distribution of securities.”). The Staff has taken the position, at least for purposes of Section 10(f), that a firm that privately places securities on a best-efforts basis is an underwriter. *Id.*

²⁰⁵ 15 U.S.C. § 80a-2(a)(6); Rosenblum, *supra* note 13, § 10.4.2; see *In re Winfield & Co.*, Exchange Act Release No. 9478 (Feb. 9, 1972) (investment adviser that did not execute portfolio transactions could not rely on Section 17(e)(2)); *In re Transit Inv. Corp.*, Investment Company Act Release No. 1190 (June 25, 1948) (real estate broker). The treatise observes that the exclusion of futures commission merchants and real estate brokers carries little consequence, because the same absence of securities trading that keeps them outside the definition of broker generally keeps them outside the definition of investment company. Rosenblum, *supra* note 13, § 10.4.2.

²⁰⁶ M.J. Post, Ltd., SEC No-Action Letter (Dec. 1, 1982); Rosenblum, *supra* note 13, § 10.4.3 (explaining that the Staff’s position “appears to be that a dealer that is not a market maker is in the business of trading for its own account and is not in the business of selling securities to customers”).

²⁰⁷ 15 U.S.C. § 80a-3(c)(2)(B)(i).

repurchase. It must relate to securities, commodities, currencies, rates, or similar financial interests. And the parties must enter into it in response to a counterparty's request for a quotation, or otherwise structure it to accommodate the counterparty's objectives.²⁰⁸ Securities exchanges fall outside this prong because they list securities and host trading but do not themselves enter into transactions on either side of the market.²⁰⁹

Section 3(c)(2) also protects only the intermediary's own status. When a brokerage firm sells interests in an underlying pool of certificates of deposit or similar instruments, the Staff treats the pool, not the broker, as the issuer of those interests, and the exclusion does not reach the pool.²¹⁰ The class of persons that Section 3(c)(2) excludes also does not map exactly onto the class of registered broker-dealers. A dealer that does not make markets may need to register under the Exchange Act yet still fall outside Section 3(c)(2).²¹¹

D. BlockFi and the Market Intermediary Prong

The Commission's most significant digital-asset application of Section 3(c)(2) arose in BlockFi. BlockFi suggested that it relied on the market intermediary exclusion during the period it operated its retail interest accounts.²¹² The Commission rejected that position. It found that BlockFi was not primarily engaged in acting as a market intermediary, that its principal source of gross income did not derive from intermediary business, and that it did not regularly enter into transactions on both sides of the market for a financial contract.²¹³ The Commission also found that BlockFi's borrowing arrangements with customers were not individually negotiated, were not entered into in response to a counterparty's request for a quotation, and were not structured to accommodate the counterparty's objectives. BlockFi's

²⁰⁸ 15 U.S.C. § 80a-3(c)(2)(B)(ii)(I)-(III) (defining "financial contract" as an arrangement that "takes the form of an individually negotiated contract, agreement, or option to buy, sell, lend, swap, or repurchase," is "in respect of securities, commodities, currencies, interest or other rates, other measures of value, or any other financial or economic interest similar in purpose or function," and "is entered into in response to a request from a counter party for a quotation, or is otherwise entered into and structured to accommodate the objectives of the counter party").

²⁰⁹ Rosenblum, *supra* note 13, § 10.4.4 n.70 (explaining that securities exchanges "serve as venues where securities are 'listed,' but . . . do not actually enter into transactions on either or both sides of the market," and that most exchanges would not be investment companies under Section 3(a)(1)(C) and could rely on Section 3(b)(1)).

²¹⁰ See Lawyers Fin. Corp., SEC No-Action Letter (Apr. 14, 1975) (certificates of deposit and short-term U.S. government obligations); Underwood, Neuhaus & Co., SEC No-Action Letter (Feb. 13, 1975) (certificates of deposit); Stock Cross, SEC No-Action Letter (Feb. 7, 1975); Rosenblum, *supra* note 13, § 10.1.1 & n.5. By contrast, where a brokerage firm offered key employees participation interests in returns on investments the firm made for its own account, the Staff treated the firm as the issuer and permitted reliance on Section 3(c)(2). *Id.* § 10.1.1 & n.6.

²¹¹ Rosenblum, *supra* note 13, § 10.4 ("[S]ome entities that might be required to register as broker-dealers under the 1934 Act (such as dealers that are not market makers) are not eligible for the Section 3(c)(2) exception.").

²¹² BlockFi Order, *supra* note 107, ¶ 29 ("Although BlockFi has suggested that it was relying on the exclusion from the definition of 'investment company' provided for 'market intermediaries' by Section 3(c)(2) of the Investment Company Act during this period, it did not satisfy the terms of that exclusion.").

²¹³ *Id.*; Rosenblum, *supra* note 13, § 10.4.4 n.70 (summarizing the Commission's three grounds for rejecting BlockFi's reliance on Section 3(c)(2)).

lending to other market participants only intermittently involved individually negotiated transactions, and BlockFi, not its counterparties, initiated them.²¹⁴ Commissioner Peirce described the market intermediary provision as a “rarely used exclusion” with which the Commission has a “lack of experience.”²¹⁵ As with the orders discussed in Section III, the BlockFi order resolved by consent and does not constitute binding precedent.

E. Application to Vault Structures

Section 3(c)(2) does not offer a vault itself a realistic path out of the definition of investment company. Three features of vault architecture drive this conclusion. First, the issuer analysis forecloses the most natural argument. On the alternative assumption that the receipt tokens are securities, a vault that pools depositor assets and issues those tokens is their issuer. The Staff’s treatment of broker-sponsored pools indicates that an affiliated broker-dealer’s Section 3(c)(2) status does not extend to the pool the broker distributes.²¹⁶

Second, vault activity does not match the enumerated businesses. A vault does not distribute securities for other issuers. It does not effect transactions for the account of others, because depositors interact directly with the code and no intermediary solicits, routes, or executes their deposits.²¹⁷ Volume II relies on precisely that absence of intermediation to argue that broker-dealer regulation should not apply to non-intermediated, code-based access.²¹⁸ A vault sponsor cannot coherently deny intermediary status for broker-dealer purposes and claim it for Section 3(c)(2) purposes.

Third, the market intermediary prong fails on the “financial contract” element. A lending pool or automated market maker may stand ready at all times to transact on both sides of a market, which superficially resembles the requirement that a person regularly hold itself out as willing to transact contemporaneously on both sides. But the statute requires individually negotiated arrangements entered into at a counterparty’s request or structured to accommodate the counterparty’s objectives. Code that offers identical, parametric terms to every address is the opposite of individual negotiation. If BlockFi’s standardized customer

²¹⁴ Rosenblum, *supra* note 13, § 10.4.4 (summarizing the Commission’s findings that BlockFi’s customer borrowing arrangements were not “individually negotiated,” were not entered into in “response to a request from a counter party for a quotation,” and were not “structured to accommodate the objectives of the counter party,” and that its lending to other market participants only “intermittently” involved individually negotiated transactions).

²¹⁵ Commissioner Hester M. Peirce, *Statement on Settlement with BlockFi Lending LLC* (Feb. 14, 2022); see Rosenblum, *supra* note 13, § 10.4.4 n.70.

²¹⁶ See *supra* note 212211 and accompanying text; see also *supra* Section I (analyzing whether a vault constitutes an issuer).

²¹⁷ See Volume II, Section D.3.c (“In certain vaults, no person solicits, recommends, routes, handles, or custodies customer assets; depositors interact directly with code.”).

²¹⁸ Volume II, Section D.3.c (“Excluding or exempting non-intermediated, code-based access would be consistent with the regime’s purpose.”).

accounts failed this element, a vault's uniform smart-contract terms fail it with greater force.²¹⁹

Section 3(c)(2) nonetheless matters to the vault ecosystem at the level of the participants who surround the vault. A registered broker-dealer, OTC derivatives dealer, or request-for-quote desk that holds vault receipts or tokenized securities in inventory as part of a genuine market-making or intermediation business may rely on Section 3(c)(2) for its own status, provided it satisfies the 55 percent and 50 percent thresholds.²²⁰ A firm that quotes tokenized instruments to institutional counterparties on request, and negotiates terms to fit their objectives, presents the strongest market intermediary profile. Asset managers and curators should not rely on Section 3(c)(2) for the vaults they design or curate. They should also evaluate whether an affiliated broker-dealer's proprietary vault positions could push the broker-dealer's own asset and income mix below the required thresholds.²²¹

* * * * *

Section 3(c)(2) excludes intermediaries, not the pools that intermediaries distribute or the code that replaces them. Vaults should look to the issuer analysis in Section I, the asset analysis in Section III, and the exclusions in Sections VI through VIII rather than to Section 3(c)(2). CCI requests that the Staff confirm whether a request-for-quote market maker that intermediates tokenized instruments on-chain may satisfy the “financial contract” element of Section 3(c)(2)(B)(ii), so that regulated intermediaries can support vault markets without uncertainty about their own status.²²² For vault structures that no exclusion reaches, Section X addresses exemptive relief under Section 6(c).

X. Exemptive Relief Under Section 6(c)

Sections II through IX analyzed the statutory provisions and rule-based exemptions available to vault structures under the 1940 Act. Some vault architectures will satisfy one or more of these provisions. A tokenized portfolio vault holding a fixed basket of securities may qualify as a unit investment trust under Section 4(2). A debt-structured vault originating fixed-term

²¹⁹ 15 U.S.C. § 80a-3(c)(2)(B)(ii)(I), (III); see *BlockFi Order*, *supra* note 107; *supra* note 214215 and accompanying text; Volume I, Section III.C (describing vault receipt standards such as ERC-4626, which define a common interface for deposit, withdrawal, and share-accounting functions).

²²⁰ See Rosenblum, *supra* note 13, §§ 10.2, 10.3; *id.* § 10.4.4 (observing that an OTC derivatives dealer registered under Exchange Act Rule 15a-1 that meets the market intermediary provision “is the type of entity that Congress envisioned when it enacted that provision in 1996”); 17 C.F.R. § 240.15a-1.

²²¹ See Rosenblum, *supra* note 13, § 10.4.2 (noting that a broker that fails the 55% thresholds, and whose assets consist more than 45% of investment securities, might be deemed an investment company under Section 3(a)(1)(C) and Rule 3a-1, but might instead rely on Section 3(b)(1) or seek an order under Section 3(b)(2)).

²²² 15 U.S.C. § 80a-3(c)(2)(B)(ii). Commissioner Peirce's observation that the Commission lacks experience with the market intermediary provision underscores the value of Staff guidance. See *supra* note 215.

loans may rely on Section 3(c)(5) or Rule 3a-7. A vault limited to qualified purchasers may rely on Section 3(c)(7). For structures that fall within the definition of “investment company” under Section 3(a)(1) and cannot avail themselves of any exclusion, the 1940 Act provides an additional pathway: Section 6(c) exemptive relief.²²³

Section 6(c) provides:

The Commission, by rules and regulations upon its own motion, or by order upon application, may conditionally or unconditionally exempt any person, security, or transaction, or any class or classes of persons, securities, or transactions, from any provision or provisions of this subchapter or of any rule or regulation thereunder, if and to the extent that such exemption is necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of this subchapter.²²⁴

The breadth of Section 6(c) is extraordinary. The Commission may exempt any person, any security, or any transaction from any provision of the 1940 Act or any rule thereunder.²²⁵ The exemption may be conditional or unconditional. The Commission may act by rule (for an entire class) or by order (for an individual applicant). The Commission may act on its own motion or upon application. The sole constraint is the three-part standard: the exemption must be (i) necessary or appropriate in the public interest, (ii) consistent with the protection of investors, and (iii) consistent with the purposes fairly intended by the policy and provisions of the 1940 Act.²²⁶ Section 6(c) is, in practical terms, the most flexible tool in the Commission’s 1940 Act toolkit, and the Commission has used it to accommodate every significant structural innovation in the investment company space over the past three decades.

The Commission has used Section 6(c) extensively to permit the operation of exchange-traded funds, interval funds, exchange-traded managed funds, and other structures that do not fit within the 1940 Act’s original categories. In each case, the applicant demonstrated that the structure would operate consistently with investor protection through alternative mechanisms.²²⁷

²²³ See *supra* Sections II–IX (analyzing statutory classifications under Sections 3(a)(1)(A) and 3(a)(1)(C); the face-amount certificate condition under Section 3(a)(1)(B); and the exclusion and exemption pathways under Section 4(2), Section 3(c)(1), Section 3(c)(7), Section 3(c)(5), Rule 3a-7, and Section 3(c)(2)).

²²⁴ 15 U.S.C. § 80a-6(c).

²²⁵ *Id.* The statute uses the broadest possible formulation: “any person, security, or transaction, or any class or classes of persons, securities, or transactions.”

²²⁶ 15 U.S.C. § 80a-6(c). See Rosenblum, *supra* note 13, § 6.4 (discussing the three-part standard for Section 6(c) relief and the Commission’s interpretation of each element).

²²⁷ See Rosenblum, *supra* note 13, § 6.4 (cataloguing the Commission’s exercise of Section 6(c) authority for various innovative fund structures, including exchange-traded funds, interval funds, and exchange-traded managed funds).

The ETF regulatory arc is the most instructive precedent for vault-specific relief.

In 1992, the Commission issued the first ETF exemptive order, permitting the SPDR Trust to operate as an exchange-traded UIT.²²⁸ For more than a quarter century, the Commission granted relief case-by-case, and by the time of generic rulemaking it had issued over 300 individualized orders, each separately negotiated.

The Commission proposed a generic rule in 2008, re-proposed it in 2018, and adopted Rule 6c-11 in September 2019, replacing the individualized orders with a “consistent, transparent, and efficient regulatory framework.” The 27-year arc demonstrates three principles. First, the Commission will grant relief for innovative structures providing adequate investor protections through alternative mechanisms. Second, it will progress from individual orders to class relief to rulemaking as operating history accumulates. Third, legislative action can compress the timeline.²²⁹

The structural parallels between ETFs and vaults are significant. ETFs issue and redeem shares through authorized participants in creation-unit aggregations. Vaults permit depositors to mint tokens by depositing assets and redeem by withdrawing their pro rata share. The vault mechanism is analogous but more open, as every depositor is effectively an authorized participant. Rule 6c-11 requires daily portfolio disclosure.²³⁰ Vaults provide continuous, real-time, permissionless transparency on-chain.

ETFs received relief from Rule 22c-1’s forward-pricing requirement because arbitrage keeps market prices close to NAV; vaults provide continuous algorithmic pricing achieving the same objective through a different mechanism.

The specific provisions from which vault structures would require exemptive relief partially overlap with the ETF provisions but extend further. For a vault that registers as a management company under the 1940 Act, the minimum exemptive relief package would address the following categories.²³¹

6. Custody presents the most immediate challenge. Section 17(f) requires assets be maintained by a bank, exchange member, or registered broker-dealer. Smart-

²²⁸ SPDR Trust, Series 1, Investment Company Act Release Nos. 18959 (Sept. 17, 1992) (notice) & 19055 (Oct. 26, 1992) (order granting exemptive relief under Section 6(c) to permit the operation of an exchange-traded unit investment trust).

²²⁹ See Exchange-Traded Funds, Investment Company Act Release No. 33646, 84 Fed. Reg. 57,162, 57,163 (Oct. 24, 2019) [hereinafter ETF Adopting Release] (describing the history of ETF exemptive orders).

²³⁰ 17 C.F.R. § 270.6c-11(c)(1) (requiring ETFs to disclose portfolio holdings on the ETF’s website each business day).

²³¹ The relief package described below assumes registration as a management company. The UIT pathway analyzed in Section V reduces the required relief by eliminating the board and advisory-contract requirements. See *supra* Section V.

contract-based custody does not fit these categories.²³² The Simpson Thacher no-action letter and OCC Interpretive Letter 1183 represent steps toward accommodation.

7. Pricing would require relief from Rule 22c-1 for continuous algorithmic pricing, following the ETF precedent. Relatedly, valuation under Rule 2a-5 would require relief to recognize algorithmic, on-chain pricing as a permissible valuation methodology, with a human designee retaining responsibility for edge cases and pricing failures.²³³
8. Governance under Section 10 presents distinct challenges for smart-contract-encoded structures.
9. Transfer agent functions (minting, burning, recordkeeping) would require relief for blockchain-based performance.²³⁴
10. Shareholder communications present practical challenges that do not arise for traditional investment companies. Proxy delivery, shareholder-report delivery, and beneficial-ownership identification for pseudonymous or semi-pseudonymous holders require guidance from the Commission or Staff.
11. Reporting obligations under Forms N-PORT and N-CEN would need adaptation to accommodate real-time on-chain transparency as a substitute for, or supplement to, periodic filings.²³⁵
12. Affiliated-transaction restrictions under Sections 17(a) and 17(d) present particular difficulty for vault structures that interact with other DeFi protocols. Composability, the ability of one smart contract to interact with another, is a defining feature of decentralized finance; Sections 17(a) and 17(d) would restrict these interactions where the counterparty protocol is an affiliated person of the vault. Comprehensive relief addressing the treatment of DeFi composability interactions would be essential.²³⁶

²³² 15 U.S.C. § 80a-17(f); 17 C.F.R. §§ 270.17f-1 to 270.17f-7; see Simpson Thacher & Bartlett LLP, SEC No-Action Letter, *supra* note 149; OCC Interpretive Letter No. 1183, *supra* note 149.

²³³ 17 C.F.R. § 270.2a-5 (defining “fair value” and establishing requirements for fair value determination by investment companies).

²³⁴ See Securities Exchange Act of 1934 § 17A, 15 U.S.C. § 78q-1 (registration and regulation of transfer agents).

²³⁵ See 17 C.F.R. §§ 270.30b1-1 to 270.30b1-5 (periodic reporting requirements); Form N-PORT; Form N-CEN.

²³⁶ 15 U.S.C. §§ 80a-17(a), 80a-17(d). Section 17(a) prohibits affiliated persons from, among other things, selling to or purchasing from the investment company any security or other property. Section 17(d) prohibits affiliated persons from effecting any transaction in which the investment company is a joint or joint and several participant. Composability interactions between a vault and an affiliated DeFi protocol could implicate both provisions.

By analogy to the conditions the Commission imposed on ETFs through the exemptive-order process and subsequently codified in Rule 6c-11, CCI proposes the following conditions for qualifying vault structures that would support a Section 6(c) application.

First, on-chain transparency, requiring that all vault parameters be continuously, publicly, and independently verifiable on-chain, exceeding Rule 6c-11's daily website disclosure requirement.²³⁷

Second, overcollateralization enforcement through smart-contract-enforced minimum collateralization ratios with automatic liquidation triggers.

Third, permissionless withdrawal, meaning a code-guaranteed right of any depositor to withdraw their pro rata share at any time or within a defined epoch.

Fourth, code-enforced constraints on role authority, requiring that all privileged roles (including any curator, administrator, or guardian function) operate within bounded, on-chain-enforced parameters with timelocks, multisignature thresholds, and user-exit rights.

Fifth, qualified custodian for off-chain assets, requiring that a traditional qualified custodian maintain any assets held off-chain. A smart contract must hold on-chain assets in custody subject to independent audit and formal verification.

Sixth, independent code audit, analogous to the financial audit requirement for registered investment companies, meaning an independent audit of the vault's smart-contract code with results publicly available.

Seventh, a designated compliance entity, meaning a legal entity (including identifiable natural persons) designated as the compliance-responsible party for Commission filings, shareholder communications, and regulatory engagement.²³⁸ These conditions provide the Commission with the assurance that the vault structure achieves the investor-protection objectives of the 1940 Act through alternative mechanisms. The on-chain transparency condition provides disclosure that exceeds any existing registered fund requirement. The overcollateralization and permissionless-withdrawal conditions provide structural protections that are, in some respects, stronger than the protections available to shareholders of traditional open-end funds, where redemption rights depend on fund management's operational capacity rather than code-enforced guarantees.

²³⁷ Cf. 17 C.F.R. § 270.6c-11(c)(1) (requiring daily portfolio website disclosure for ETFs). The proposed on-chain transparency condition would require continuous, real-time disclosure of all material vault parameters, exceeding the ETF disclosure standard.

²³⁸ The designated compliance entity condition is designed to address the Commission's legitimate concern about regulatory accountability. See *BarnBridge Order*, *supra* note 45 (enforcement action against a DAO for operating unregistered investment pools).

CCI proposes a phased approach mirroring the ETF arc. In Phase 1, the Commission would accept individual Section 6(c) applications for qualifying structures. The strongest initial candidates are tokenized portfolio vaults (presenting the clearest structural parallel to existing funds) and immutable lending vaults (presenting the lowest compliance complexity).²³⁹ In Phase 2, once individual orders have produced a consistent set of conditions, the Commission would grant class relief. Class relief here means a Commission order under Section 6(c) that exempts a defined class of persons or transactions, so that qualifying vaults could rely on it without each filing a separate application.²⁴⁰ Unlike a Staff no-action letter, which states only that the Staff would not recommend enforcement action and does not bind the Commission, courts, or private litigants, a Section 6(c) exemption legally relieves the covered persons from the specified provisions of the 1940 Act.²⁴¹ In Phase 3, the Commission would codify those conditions through rulemaking, analogous to Rule 6c-11. Legislation along the lines of Section 10108 of the CLARITY Act, which has not been enacted, could compress this timeline.

CCI specifically requests two forms of engagement from the Commission and Staff. First, CCI requests Staff-level guidance identifying the minimum conditions under which a vault structure could submit a Section 6(c) application (a roadmap for the application process analogous to the Division of Investment Management’s engagement with early ETF sponsors in the 1990s). The original SPDR order was the product of an iterative dialogue between the applicant and the Staff. A similar dialogue for vault structures would enable the development of conditions tailored to the specific investor-protection concerns that vault architectures present.²⁴² Second, CCI requests a preliminary indication that conditions of the type proposed (on-chain transparency, overcollateralization, permissionless withdrawal, code-enforced constraints, independent audit, and a designated compliance entity) could form an appropriate starting point for satisfying the “necessary or appropriate in the public interest and consistent with the protection of investors” standard of Section 6(c) for qualifying vault structures.²⁴³ CCI does not seek a determination that any application will be granted. CCI recognizes that the Staff and the Commission may modify, add, or remove conditions as they

²³⁹ See *supra* Sections III.B, V.B (discussing lending vaults and the UIT pathway for fully programmed vaults123124125).

²⁴⁰ 15 U.S.C. § 80a-6(c) (authorizing exemption of “any class or classes of persons, securities, or transactions”); see ETF Adopting Release, *supra* note **Error! Bookmark not defined.**, at 57,163 (describing the progression from individual exemptive orders to a generic rule).

²⁴¹ A no-action letter expresses only the view of the Staff that it would not recommend enforcement action on the facts presented. It does not bind the Commission, and it provides no defense against private claims. By contrast, an order under Section 6(c) exempts the covered persons, securities, or transactions from the specified provisions of the 1940 Act as a matter of law. 15 U.S.C. § 80a-6(c); see 17 C.F.R. § 202.1(d) (describing the informal and non-binding nature of Staff advice).

²⁴² See SPDR Trust, Series 1, *supra* note **Error! Bookmark not defined.** (illustrating the iterative process between applicant and Staff that produced the first ETF exemptive order).

²⁴³ 15 U.S.C. § 80a-6(c).

review individual applications, as occurred throughout the ETF exemptive order process.²⁴⁴ It requests only an indication that the Commission would consider applications from vault structures that satisfy conditions of this type, so that vault operators have a basis for investing the substantial time and resources required to prepare a Section 6(c) application.

CCI also asks the Commission to consider safe harbors where the 1940 Act imposes requirements that vault structures cannot satisfy and that serve no policy purpose in the vault context, such as provisions premised on the presence of a board, an investment adviser, or a custodian with possession of assets.²⁴⁵ Given the prescriptive character of the 1940 Act, a principles-based rule of general applicability would give the industry a common standard around which to align, whereas exemptive relief requires each sponsor to apply separately. CCI therefore views individual exemptive relief as the near-term path and principles-based rulemaking as the most durable result short of legislation.

Section 6(c) is the 1940 Act's safety valve. It exists precisely for structures that are innovative enough to fall outside the 1940 Act's original categories but that can demonstrate adequate investor protection through alternative mechanisms. The ETF precedent confirms that the Commission will use this authority for genuinely novel structures, and that the regulatory arc from individual orders to generic rulemaking is the established path for structural innovation under the 1940 Act. That arc also shows that relief develops iteratively. CCI expects that any conditions the Commission ultimately imposes on vault structures will differ from those proposed here and will evolve as the Commission gains experience. For vault structures that are investment companies under Section 3(a)(1) and cannot avail themselves of any exclusion, exemption, or exemptive relief, registration is the remaining obligation.

A. Conclusion

Congress enacted the Investment Company Act of 1940 to address the principal-agent problem that arises when members of the public entrust their savings to investment managers. Commissioner Healy's testimony, Section 1(b)'s eight enumerated conditions, and the 1940 Act's entire remedial architecture presuppose a human agent whose discretionary conduct must be constrained through disclosure requirements, fiduciary obligations,

²⁴⁴ See ETF Adopting Release, *supra* note **Error! Bookmark not defined.**, at 57,163 (describing the evolution of conditions across more than 300 ETF exemptive orders before adoption of Rule 6c-11).

²⁴⁵ See 15 U.S.C. § 80a-6(c) (authorizing exemption by rule of "any class or classes of persons, securities, or transactions"); *supra* notes 123124125 and accompanying text (describing the board, adviser, and custody requirements). Section 38(a) separately authorizes the Commission to adopt rules necessary or appropriate to the exercise of its powers under the 1940 Act. 15 U.S.C. § 80a-37(a).

structural prohibitions, and regulatory oversight.²⁴⁶ The unit investment trust shows that this architecture is not uniform. Where the agent’s discretion is narrow, Congress delivered protection through structural limits in the governing instrument rather than through a board and an adviser, and the same calibration should guide the treatment of vaults.²⁴⁷ To the extent vault architecture replaces or constrains discretionary authority through transparent, immutable, code-enforced mechanisms, it reduces or eliminates the agency problem the statute was designed to police. Where a vault structure satisfies a statutory exclusion or exemption, the 1940 Act’s registration requirements do not apply.²⁴⁸ Where a vault falls within Section 3(a)(1) and no exclusion or exemption is available, the Commission possesses ample authority under Section 6(c) to grant exemptive relief calibrated to the structure’s actual risk profile. In every case, the regulatory analysis should calibrate to the degree of residual human control in the arrangement, not to the technological form of the instrument or the platform on which it operates.

Commission or Staff guidance in the following areas would give vault operators the regulatory clarity they need to evaluate their obligations and structure compliant products.

1. **Section 3(a)(1)(C): The 40 Percent Test (Section III).** CCI requests guidance confirming that collateral held under a security interest incident to a lending transaction is not “owned” as an investment security for purposes of the 40 percent test under Section 3(a)(1)(C).²⁴⁹ The distinction between beneficial ownership of investment securities and a secured creditor’s interest in collateral is fundamental to the classification of lending vaults. CCI further requests guidance on the treatment of governance tokens and network tokens received as yield or incentive compensation in the 40 percent calculation.
2. **Section 3(a)(1)(B): Face-Amount Certificates (Section IV).** CCI requests guidance on the boundary between a fixed-term vault note and a face-amount certificate of the installment type, particularly for automated structures with reinvestment features.²⁵⁰ CCI further requests guidance on whether a single lump-sum deposit structure avoids installment characterization, and on the application of the “determinability”

²⁴⁶ See Healy Statement, *supra* note 1 (describing the entrustment problem that motivated the 1940 Act); 15 U.S.C. § 80a-1(b) (enumerating eight conditions adversely affecting the national public interest and the interest of investors).

²⁴⁷ See 15 U.S.C. §§ 80a-4(2), 80a-26; *supra* notes 14, 15 and accompanying text; *supra* Section V.B.

²⁴⁸ See *supra* Sections II–X (analyzing, respectively, Section 3(a)(1)(A) holding-out classification; Section 3(a)(1)(C) and the 40 percent test; Section 3(a)(1)(B) face-amount certificates; Sections 4(2), 3(c)(1), 3(c)(7), 3(c)(5), and Rule 3a-7 exclusion and exemption pathways; the Section 3(c)(2) exclusion; and Section 6(c) exemptive relief).

²⁴⁹ 15 U.S.C. § 80a-3(a)(1)(C). See *supra* Section III (analyzing the 40 percent test and the treatment of collateral held under a security interest).

²⁵⁰ 15 U.S.C. § 80a-3(a)(1)(B). See *supra* Section IV (analyzing the face-amount certificate classification, the installment-type boundary, and the determinability element for variable-return vault instruments).

element to variable-return instruments where the yield formula is transparent and algorithmically fixed but the output depends on market conditions.

3. **Section 4(2): Unit Investment Trust Classification (Section V).** CCI requests recognition that immutable smart-contract code, combined with a traditional trust agreement establishing a legal entity and binding the depositor and trustee, qualifies as a “similar instrument” under Section 4(2)(A) for UIT classification purposes.²⁵¹ The UIT pathway eliminates the board and advisory-contract requirements that would otherwise apply to a management company. This reduces the compliance burden for vault structures that operate under fixed, non-discretionary parameters.
4. **Section 3(c)(5): Commercial Financing Exclusion (Section VII).** CCI requests guidance confirming that code-governed lending instruments with fixed maturity and determinable return qualify as “notes” or “other obligations” for purposes of Section 3(c)(5)(A).²⁵² CCI further requests guidance confirming that smart-contract-enforced non-redeemability satisfies the statutory condition that the issuer not be “engaged in the business of issuing redeemable securities.” CCI also requests guidance on the application of the “primarily engaged” standard to code-governed financing entities whose lending activity is verifiable on-chain.
5. **Rule 3a-7: Structured Finance Exclusion (Section VIII).** CCI requests guidance on whether tokenized lending positions constitute “eligible assets” under Rule 3a-7(a)(1), and recognition that an institutional-trustee-plus-smart-contract operational model satisfies the independent trustee requirement in Rule 3a-7(a)(4).²⁵³ CCI further requests guidance confirming that smart-contract-enforced waterfall distributions, overcollateralization ratios, and reserve accounts satisfy the credit enhancement requirements. CCI separately urges the Commission to modernize Rule 3a-7 by replacing the NRSRO rating condition with alternative creditworthiness standards, completing the mandate of Dodd-Frank Section 939A.
6. **Section 6(c): Exemptive Relief (Section X).** CCI requests Staff-level guidance identifying the minimum conditions under which a vault structure could submit a Section 6(c) application, including a roadmap for the application process analogous

²⁵¹ 15 U.S.C. § 80a-4(2). *See supra* Section V (analyzing the UIT pathway for tokenized portfolio vaults and the “similar instrument” question under Section 4(2)(A)).

²⁵² 15 U.S.C. § 80a-3(c)(5). *See supra* Section VII (analyzing the Section 3(c)(5)(A) commercial financing exclusion, the note-qualification analysis, and the non-redeemability and “primarily engaged” conditions).

²⁵³ 17 C.F.R. § 270.3a-7. *See supra* Section VIII (analyzing Rule 3a-7 eligibility for tokenized credit structures, the independent trustee requirement, credit enhancement conditions, and the NRSRO rating condition under Dodd-Frank Section 939A, 15 U.S.C. § 78o-7 note).

to the Division of Investment Management’s engagement with early ETF sponsors.²⁵⁴ CCI further requests a preliminary, non-binding indication that conditions of the type proposed, on-chain transparency, overcollateralization, permissionless withdrawal, code-enforced constraints, independent audit, and a designated compliance entity, could form an appropriate starting point for satisfying the statutory standard for qualifying vault structures. CCI recognizes that any such indication would remain subject to the facts and circumstances of individual applications and to modification as the Commission’s thinking and conditions evolve during the application process.

CCI is prepared to submit individual Section 6(c) applications for qualifying vault structures, to provide technical assistance to the Division of Investment Management and the Staff on vault architecture, smart-contract mechanics, and on-chain custody, and to support the development of a regulatory framework that achieves the investor-protection objectives of the 1940 Act through means appropriate to the technology. Congress has demonstrated awareness of these issues. The last Senate version of the CLARITY Act included vault-specific modernization language in Section 10108, though the bill did not advance past cloture.²⁵⁵ CCI stands ready to engage with any future legislative process that addresses the treatment of vault structures under the federal securities laws.

The 1940 Act’s protections are essential where the entrustment relationship exists. The task for the Commission is to identify where that relationship exists in vault architecture, where it does not, and where the 1940 Act’s remedial mechanisms can be adapted to serve their original purpose through new technological means.

²⁵⁴ 15 U.S.C. § 80a-6(c). See *supra* Section X (analyzing the ETF precedent, structural parallels, the minimum exemptive relief package, and proposed conditions for qualifying vault structures); ETF Adopting Release, *supra* note **Error! Bookmark not defined.**, at 57,166 (describing the progression from individual orders to generic rulemaking).

²⁵⁵ CLARITY Act of 2025, § 10108 (draft, Sept. 14, 2026). The bill did not advance past cloture and has not been enacted, but it reflects Congressional awareness of the regulatory issues that vaults raise.

VOLUME IV: INVESTMENT ADVISERS ACT ANALYSIS

Executive Summary

This Volume explains that the Act reaches persons, not code. The regulated function is the exercise, for compensation, of judgment over another person's securities or securities investment decisions. The Control Framework then asks whether any person in a given vault architecture actually performs that function. The analysis turns principally on post-deposit control: where code is immutable and no person retains material discretion, the case for adviser status is weak; where a person retains discretion to affect securities-related deployment, risk, or returns, the case grows stronger. Setting loan parameters for positions that are not securities is credit-parameter setting, not advice about securities. Where adviser status may attach, the analysis favors a calibrated response that distinguishes fund-like wrapped vaults from unwrapped, permissionless vaults, treats bounded protective roles narrowly, and addresses compensation and disclosure by reference to the actual authority retained. On custody, this Volume responds to the Commission's proposed custody rules (IA-7023) by urging that custody turn on unilateral control, meaning the ability to move client assets without independent approval or a timelock that lets depositors exit, rather than on possession of any fragment of key materials. On that test, independent guardians and other holders of required but non-controlling key shares are not custodians, and well-designed vaults can meet several of the custody rule's objectives better than traditional arrangements.

I. Introduction and Framing

A. Scope of This Volume

This Volume addresses a different statutory question from Volume II's securities-status analysis: when, and under what circumstances, persons involved in vault design, curation, operation, or distribution fall within the definition of "investment adviser" under Section 202(a)(11) of the Investment Advisers Act of 1940 (the "Act").¹² The regulated function under the Act is not code as such, but the exercise, for compensation, of judgment over another person's securities or securities investment decisions.³

The Control Framework developed in Volume I (Introduction) of the report applies here with full force. Its agent-side dimensions (Mandate, Execution, Governance, and Disposition)

¹ Investment Advisers Act of 1940, § 201, 15 U.S.C. §§ 80b-1 to 80b-21.

² Investment Advisers Act § 202(a)(11), 15 U.S.C. § 80b-2(a)(11).

³ Applicability of the Investment Advisers Act to Financial Planners, Pension Consultants, and Other Persons Who Provide Investment Advisory Services as a Component of Other Financial Services, Investment Advisers Act Release No. 1092, 52 Fed. Reg. 38,400 (Oct. 16, 1987) [hereinafter IA-1092].

show whether any person actually performs that regulated function, and its depositor-side conditions (Comprehensibility, Verifiability, Observability, Predictability, Notice, and Actionability) show whether a depositor remains dependent on that person's judgment.

B. Historical, Policy, and Regulatory Context

The Act's policy focus explains why control is the right line. Capital Gains described the statute as targeting the agency-cost problems that arise when a person's judgment can affect another's assets in the presence of conflicts, informational asymmetry, or both.⁴⁵ The fiduciary character of the advisory relationship follows from that control dynamic, not from the mere existence of software, analytics, or financial infrastructure.

That is why the Act distinguishes between personalized advisory relationships and impersonal publications. The fiduciary duties of loyalty and care attach when a person exercises advisory judgment for a client; they do not attach merely because market participants can observe, study, or use published materials or immutable code.⁶⁷

The Commission's 2019 Fiduciary Interpretation reinforces the same point: the duty under the Act must be analyzed in light of the agreed-upon scope of the relationship.⁸ In vaults, the critical question is therefore not whether code exists, but whether any person retains material discretion after deposit such that the depositor or a wrapped vault is relying on that person's continuing judgment.

Commissioner Peirce's July 2026 statement frames the inquiry well: vaults "fall along a spectrum from programmatic allocations determined solely by immutable smart contracts, to allocations at the sole discretion of another person or group of persons," and the analysis "will come down to the specific facts and circumstances."⁹ That spectrum is best understood as a spectrum of retained human control.

CCI's core thesis is therefore functional. Where no person retains material discretion over securities-related deployment, reallocation, or returns after deposit, the case for adviser

⁴ SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 186 (1963).

⁵ *Id.* at 191-192.

⁶ *Lowe v. SEC*, 472 U.S. 181, 204 (1985) ("The legislative history plainly demonstrates that Congress was primarily interested in regulating the business of rendering personalized investment advice, including publishing activities that are a normal incident thereto", and did not intend to regulate "nonpersonalized publishing activities" through licensing).

⁷ *Id.* at 191.

⁸ Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Investment Advisers Act Release No. IA-5248, 84 Fed. Reg. 33,669 (July 12, 2019) ("[A]n adviser's fiduciary duty is imposed under the Advisers Act in recognition of the nature of the relationship between an adviser and its client—a relationship of trust and confidence.") [hereinafter 2019 Fiduciary Interpretation]

⁹ Hester M. Peirce, Comm'r, U.S. Sec. & Exch. Comm'n, Headstands and Summervaults: A Statement on Crypto Vaults and Lending Strategies (July 22, 2026), <https://www.sec.gov/newsroom/speeches-statements/peirce-statement-crypto-vaults-lending-strategies-072226> [hereinafter Peirce Statement]

status is weak because the regulated function is not being performed. Where a person does retain that discretion, the case for adviser status becomes stronger, and the remaining question is how the Act should apply to a role whose authority may still be bounded by code, disclosure, withdrawal rights, and other structural protections.

C. Roadmap

This Volume proceeds as follows: Section II addresses the statutory test and the characterization and client-identification questions; Section III addresses the “advice about securities” element through the operational spectrum, applying the publisher exclusion, UIT, index-provider, and model-portfolio frameworks, then examines collateral evaluation and credit assessment, architectural constraints, and other vault participants; Section IV addresses the compensation and business elements, including yield-based fee analysis and the “in the business” inquiry; Section V explains how the depositor-side conditions reduce the predicate for Advisers Act coverage; Section VI addresses compliance challenges, including a rule-by-rule analysis, qualified-client issues, a robo-adviser comparison, and cascading AML/CFT obligations; Section VII addresses custody under the Commission’s proposed custody rules, proposing a single test of unilateral control, explaining why non-controlling key shards and vault permissions are not custody, applying that test to DeFi deposits and vault receipt tokens, and identifying where vault architecture can meet the custody rule’s objectives better than traditional arrangements; Section VIII provides an actor-by-actor risk summary table; and Section IX states the conclusions and recommendations.

II. The Statutory Test

A. The Section 202(a)(11) Definition

Section 202(a)(11) of the Investment Advisers Act defines “investment adviser” as:

“any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities.”¹⁰

The SEC distilled from this text a three-part conjunctive test in Release No. IA-1092: a person is an investment adviser if the person (1) provides advice about securities, (2) for

¹⁰ Investment Advisers Act § 202(a)(11), 15 U.S.C. § 80b-2(a)(11).

compensation, and (3) as part of a regular business.¹¹ All three elements must be satisfied such that the absence of any single element defeats the definition. A person who provides securities-related guidance gratuitously fails the compensation element. A person who offers such guidance as an isolated incident fails the business element. And a person whose function does not constitute advice “as to the value of securities or as to the advisability of investing in, purchasing, or selling securities” fails the advice element, regardless of whether that person receives compensation and acts as a regular business.

Once a person satisfies the statutory definition, the Act’s fiduciary obligations attach automatically. The Supreme Court in *Capital Gains* confirmed that investment advisers owe their clients duties of loyalty and care.¹² These duties arise by operation of law from the advisory relationship itself. They are not contractual. The adviser must act in the client’s best interest, disclose all material conflicts of interest, and exercise reasonable care in formulating and delivering advice. The Court held that the Act “reflects a congressional recognition ‘of the delicate fiduciary nature of an investment advisory relationship’” and was “enacted for the purpose of avoiding frauds” and must be “construed” accordingly.¹³ The *Transamerica* Court subsequently confirmed that these federal fiduciary standards arise from the Act itself and do not depend on common-law or contractual undertakings.¹⁴

The fiduciary framework is the Act’s central regulatory mechanism. Registration, recordkeeping, and disclosure requirements serve it. The three-part definitional test is the gateway: it determines which persons fall within the fiduciary regime. The analysis that follows applies that test, element by element, to the persons and roles that vault architecture presents. Section III.E provides the operational-spectrum analysis for those roles.

B. Characterization and the Client Question

The threshold issue is characterization. A curator or strategist may take actions that affect how assets are deployed, but the question is whether those actions are best characterized as advice to others or as operation of a disclosed financial system.

Material control is how that characterization question gets answered. A role confined to preset, objective parameters is less likely to be performing the regulated function; a role that can change exposures, eligible markets, or economic outcomes based on judgment is more

¹¹ IA-1092, *supra* note 3.

¹² *Capital Gains*, 375 U.S. at 191–92.

¹³ *Id.* at 195 (“Congress intended the Investment Advisers Act of 1940 to be construed like other securities legislation ‘enacted for the purpose of avoiding frauds,’ not technically and restrictively, but flexibly to effectuate its remedial purposes.”).

¹⁴ *Transamerica Mortg. Advisors, Inc. v. Lewis*, 444 U.S. 11, 17 (1979) (confirming that the Advisers Act creates federal fiduciary standards for investment advisers).

likely to be doing so. The inquiry remains fact-specific, but it is the presence or absence of post-deposit human control that does the analytical work.

The characterization question leads directly to the client question: if a vault role is advisory, who is the client for purposes of the Act’s fiduciary framework?

That question matters because the Act’s compliance architecture presupposes an identifiable *client*. Fiduciary duties run to the client. Disclosure is delivered to the client. Suitability and best-interest analysis are conducted for the client. And where custody exists, it is custody of client assets.

The best starting point remains *Goldstein v. SEC*, which treated “client” as a functional concept rooted in the fiduciary, person-to-person nature of the advisory relationship.¹⁵ The client is the person or entity to whom advice is directed and to whom the adviser owes duties that can be identified, discharged, and, if necessary, enforced.

For vaults with a legal wrapper,¹⁶ the familiar fund model fits well. The wrapped vault, not each underlying participant, should be treated as the client. Under that model, the adviser’s duties run to the vault/fund, and the operational questions about diligence, suitability, disclosure, and onboarding are addressed through the entity, its governing arrangements, and its designated gatekeepers.

That fund model also answers the practical question of who onboards and gatekeeps. If the vault is organized through a legal wrapper, the adviser or designated compliance entity can perform diligence, make eligibility determinations, deliver disclosures, and maintain the point of contact at the wrapper or front-end level, rather than attempting the impossible task of treating each pseudonymous depositor as a separately advised client.

Treating each depositor as the client is a worse fit. It creates the same conflict Goldstein identified in the hedge fund context—an adviser is focused on the performance of the pooled strategy, not on each participant’s distinct financial condition—and that mismatch is only sharper where depositors may be unidentified wallet addresses.^{17,18}

For vaults without a legal wrapper, however, the current framework leaves a real gap that Commission guidance should address candidly. The Commission should explain whether, and on what theory, an unwrapped vault can itself be the client; how front-end gating,

¹⁵ *Goldstein v. SEC*, 451 F.3d 873, 880 (D.C. Cir. 2006), quoting *Lowe* at 210.

¹⁶ Placing a vault in an entity also has follow-on effects beyond the Act, because choosing an entity and a jurisdiction also brings in other bodies of law, such as the law governing secured transactions (in the United States, the Uniform Commercial Code), tax law, and accounting principles.

¹⁷ See *Goldstein* at 881.

¹⁸ *Id.* at 880.

disclosures, and contact obligations should work; and when a designated compliance entity can serve as the relevant point of responsibility even though the vault remains permissionless at the protocol layer.

An alternative argument remains available for those unwrapped vaults: an individual participant who chooses to use a published, impersonal vault strategy on disclosed terms is not necessarily entering into an advisory relationship at all. Where the strategy is presented generally, operates uniformly, and does not depend on personalized communications or individualized recommendations, the participant may be using a financial product rather than receiving advice.

III. Applying the “Advice About Securities” Element to Vault Roles

A. Introduction

The “advice about securities” element is the analytically central inquiry. Section 202(a)(11) captures persons who advise others “as to the value of securities or as to the advisability of investing in, purchasing, or selling securities.”¹⁹ The statutory text requires a communicative, relational act: a recommendation directed at a person concerning securities. Not every activity that touches a portfolio of securities constitutes “advising others.” A person who configures a system or publishes parameters may be outside the scope the Advisers Act. Harder questions arise where a person operates within code-enforced constraints on its judgment and does not direct a recommendation at any person. The characterization question identified in Section II.B, whether a given activity is properly described as advising others or as something categorically different, is the central question this Section addresses.

Section III proceeds as follows: Section III.B addresses the threshold question whether the activity concerns securities at all. Section III.C frames the advice element, distinguishing discretionary from non-discretionary advice and identifying the statutory exclusions. Section III.D examines the policy context: the harms Congress targeted and how vault architecture changes the analysis. Section III.E applies the operational spectrum from pre-deployment design through full discretionary management, using material discretion as the test for characterization and integrating the Control Framework’s agent-side dimensions and depositor-side conditions. Section III.F addresses collateral evaluation and credit assessment, resting on the statutory text and the rating-agency experience. Section III.G addresses architectural constraints that bear on the regulatory response. Section III.H

¹⁹ Investment Advisors Act of 1940 § 202(a)(11), 15 U.S.C. § 80b-2(a)(11).

synthesizes the doctrinal frameworks for bounded curators. Section III.I examines other participants in the vault ecosystem.

B. The “About Securities” Threshold

In many vault architectures, the threshold question is whether the activity concerns securities at all. The statutory definition of “investment adviser” is defined by reference to advice “as to the value of *securities* or as to the advisability of investing in, purchasing, or selling *securities*.”²⁰ If the instruments at issue are not securities, the definition cannot be satisfied regardless of the person’s function, compensation, or business activity.

Volume II (Securities Act) of the report applies the *Reves* family resemblance test to autonomous overcollateralized lending positions and concludes that such positions bear a strong family resemblance to notes issued in the consumer lending and commercial credit contexts that the *Reves* Court identified as presumptively excluded from securities treatment.²¹ If that analysis is correct, then for vaults whose operations are limited to facilitating such lending, no person can be advising “as to the value of securities” or “as to the advisability of investing in, purchasing, or selling securities,” because no securities are involved. It does not depend on characterizing the role-holder’s function, assessing the degree of discretion, or identifying a client. If the underlying positions are not securities, the Advisers Act does not apply.

The compensation and business elements likewise require a nexus to securities. Compensation for configuring a lending protocol that operates exclusively in non-security instruments is not compensation “for” advice “concerning securities,” regardless of how the fee is structured. The statutory text is specific: the compensation must be “for” the enumerated advisory activities, and those activities are defined by their relationship to securities.

This Section does not re-litigate the securities classification question analyzed at length in Volume II (Securities Act). It observes that the Advisers Act analysis is contingent on it. For vault architectures where Volume II’s analysis supports non-security treatment of the underlying positions, the Advisers Act question does not arise. The sections that follow address the contingent analysis: for vault architectures where the underlying positions may constitute securities, whether because they involve tokenized securities, structured

²⁰ Investment Advisors Act of 1940 § 202(a)(11), 15 U.S.C. § 80b-2(a)(11).

²¹ See *Reves v. Ernst & Young*, 494 U.S. 56, 64–67 (1990) (establishing the “family resemblance” test for determining whether a note is a security); see also Volume II of the report (applying the *Reves* analysis to autonomous overcollateralized lending positions and concluding that such positions bear a strong family resemblance to notes issued in commercial lending contexts excluded from securities treatment).

products, private credit instruments, or other positions that satisfy the *Howey* or *Reves* tests, the three-part statutory test must be applied in full. Sections III through IX address that application.

A separate question arises where a security is posted as collateral. If a human role-holder decides whether, when, or how that collateral will be liquidated, that decision may in some configurations amount to advice about disposing of a security. The counterpoint is architectural: in many vaults liquidation occurs automatically or at the protocol level through any permissionless liquidator, while depositors never hold, direct, or trade the collateral themselves. Here again, the answer turns on design and on whether any person exercises material judgment over the sale of the security.

C. The Advice Element: Discretionary, Non-Discretionary, and Statutory Exclusions

The statutory definition of “investment adviser” does not mention discretion, and a person who recommends specific securities without authority to execute trades or manage assets is an investment adviser under Section 202(a)(11) if the three statutory elements are met. Discretionary advice arises where a role-holder both formulates investment recommendations and executes them on the depositor’s behalf. Non-discretionary advice arises where a role-holder curates, recommends, or publishes investment parameters that depositors then act upon voluntarily. Both satisfy the advice element if the remaining statutory requirements are met. Where the vault holds or allocates among securities, the critical question is one of characterization: whether a role-holder’s curation or parameter-setting is properly characterized as a recommendation directed at depositors, or whether the vault’s architecture makes the activity something the depositor evaluates independently. As Section II.B explains, that question is answered by whether the role-holder retains material discretion after deposit. Subsection E applies that test across the operational spectrum.

The securities nexus also governs how curatorial parameter-setting is analyzed. Section 202(a)(11) reaches advice “as to the value of securities or as to the advisability of investing in, purchasing, or selling securities.” A curator that sets loan-to-value levels, liquidation thresholds, rates, or collateral eligibility for a lending vault is setting credit parameters. Where the collateral is not a security and the lending position is not a security, as Volume II concludes for autonomous overcollateralized lending positions, that activity is credit-parameter setting, not advice about securities, whether or not the role is characterized as curatorial. The curatorial label describes the character of the authority retained; it does not supply the securities nexus the statute requires. The characterization analysis in this Section

and in Section III.E therefore matters only where securities are involved. Section III.F makes the related textual point for collateral evaluation.

Two caveats apply. First, if a vault accepts securities as collateral, the liquidation and disposition analysis in Section III.B applies, and a person exercising material judgment over the sale of that collateral may be advising as to the disposition of a security. Second, this conclusion depends on Volume II. If the vault receipt token or the lending position were a security, the nexus would be present and the analysis would change.

Two statutory exclusions frame the analysis. First, Section 202(a)(11)(B) excludes persons whose advisory performance is “solely incidental” to the practice of enumerated professions, including lawyers, accountants, engineers, and teachers. Protocol developers and system administrators are not among them. The exclusion as written may not reach vault participants whose primary function is technical, though the principle that genuinely ancillary guidance should not trigger adviser status may inform the Commission’s analysis. Second, the publisher’s exclusion under *Lowe v. SEC* protects persons who provide impersonal investment advice through publications of general and regular circulation. To the extent vault protocol documentation, parameter disclosures, or curator communications constitute impersonal publications rather than individualized advice, the publisher’s exclusion may bear on the classification analysis. Both exclusions are developed in the operational-spectrum analysis below.

The subsections that follow first address the harms the Act targets and how code changes the analysis (Section III.D), then apply the operational spectrum analysis role by role (Section III.E).

D. The Relationship the Act Targets and How Code Changes the Analysis

The *Capital Gains* Court catalogued the specific harms Congress targeted through the Advisers Act: scalping, undisclosed conflicts of interest, self-dealing, and the risk that such conflicts might incline [an] investment adviser to render advice that was not disinterested.²² These harms arise from a common dynamic: a person exercises judgment over another’s assets, or influences another’s investment decisions, in circumstances where the adviser’s interests may diverge from the client’s, and where the client cannot independently detect or

²² *Capital Gains*, 375 U.S. at 186–91 (discussing “scalping,” undisclosed conflicts, and self-dealing; quoting the SEC Report’s concern that “advice to a client might in some way be tinged with that pecuniary interest (whether consciously or subconsciously motivated”), 191–92 (stating that the Act reflects “a congressional intent to eliminate, or at least to expose, all conflicts of interest which might incline [an] investment adviser -- consciously or unconsciously -- to render advice which was not disinterested”).

respond to that divergence. The Court held that the Act imposes duties of loyalty and care, rooted in the “delicate fiduciary nature of an investment advisory relationship.”²³ These duties arise from the relationship itself.

These harms are not limited to discretionary authority. Non-discretionary advice can also give rise to the conflicts Congress sought to address. Where the eligible markets involve securities, a curator who curates an eligible-market list may have undisclosed economic interests in the markets selected; a role-holder who publishes strategy parameters for securities may receive compensation tied to the volume of assets those parameters attract. The *Capital Gains* concerns extend to any recommendation that influences securities investment decisions where the adviser has conflicting interests. The *Transamerica* Court confirmed that these federal fiduciary standards arise from the Act itself, not from common-law or contractual undertakings.²⁴

Vault architecture can address each of these dynamics through specific design features. Noncustodial design means no person can abscond with depositor assets, reducing the trust-and-confidence dynamic to a qualitatively different inquiry. On-chain transparency means all actions, fees, and pending parameter changes are permanently and publicly recorded; the information asymmetry that enables scalping and concealed conflicts is reduced or eliminated when every action is observable. Permissionless exit means the depositor can withdraw before any proposed change takes effect, reducing client dependence. And code-enforced constraints (timelocks, caps, sentinel vetoes, irrevocable renunciation) limit the adviser’s ability to influence outcomes unilaterally, bounding the adviser’s influence.

These observations do not establish a categorical rule. The degree to which architecture addresses the Capital Gains dynamics varies across vault configurations. Commissioner Peirce’s observation that vaults “fall along a spectrum from programmatic allocations determined solely by immutable smart contracts, to allocations at the sole discretion of another person or group of persons” and that the analysis “will come down to the specific facts and circumstances” captures the range.²⁵ At one end, the dynamics are absent entirely. At the other, they are present in full. The analytical task is to identify where on that spectrum the dynamics weaken sufficiently that the statutory predicate for an advisory relationship is no longer satisfied.

²³ *Id.* at 191–92 (holding that the Act “reflects a congressional recognition of the ‘delicate fiduciary nature of an investment advisory relationship’”).

²⁴ *Transamerica*, 444 U.S. at 17 (confirming that the Advisers Act creates federal fiduciary standards for investment advisers).

²⁵ Peirce Statement, *supra* note 9

The Control Framework provides the analytical lens for that task. The agent-side dimensions (Mandate, Execution, Governance, Disposition) measure the scope and character of the role-holder's authority. The depositor-side conditions (Comprehensibility, Verifiability, Observability, Predictability, Notice, Actionability) measure the depositor's capacity for independent evaluation. Together, they operationalize the *Capital Gains* inquiry for vault architecture. Section III.E applies them role by role.

CCI's thesis is twofold. First, in many vault configurations, architectural constraints reduce or eliminate the *Capital Gains* dynamics, weakening or eliminating the case for adviser status. Second, where the Commission concludes that an advisory relationship does form, those constraints should inform the regulatory response. The dangers the Act addresses are different and more bounded where code delivers protections that traditional advisory relationships lack. Section VI develops this second point in detail.

E. The Operational Spectrum: From Design to Discretion

Pre-deployment design. A developer who writes, tests, and publishes vault code before any client exists does not, by that act alone, provide advice to anyone. The judgment embedded in the code precedes any advisory relationship and is not yet directed to a client or prospective client as a recommendation.²⁶

If the same person later offers, curates, or operates the strategy for compensation, however, the earlier design becomes part of the advice at that later point, and the ordinary fiduciary, suitability, and disclosure obligations attach when the advisory relationship begins. Registered advisers routinely build strategies before onboarding clients; what matters is when the strategy is later offered or managed for others. Code authorship also implicates First Amendment concerns to the extent it is expressive publication rather than client-specific advice.²⁷

Immutable deployment and the abdication of authority. When a vault deploys with immutable code and no administrative keys, the developer has permanently relinquished the capacity to alter its behavior. No person can change allocations, modify fees, or redirect assets. The vault operates as its code dictates until the blockchain ceases to function. The advisory relationship requires an adviser; where no person retains authority over investment decisions, the relationship that the Act targets cannot form.

²⁶ See *SEC v. Life Partners, Inc.*, 87 F.3d 536, 548 (D.C. Cir. 1996) (distinguishing “pre-purchase” entrepreneurial efforts from “ministerial” post-purchase efforts in the Howey context).

²⁷ See *SEC v. Life Partners, Inc.*, 87 F.3d 536, 548 (D.C. Cir. 1996); see also *Junger v. Daley*, 209 F.3d 481, 484–85 (6th Cir. 2000) (holding that computer source code is protected speech).

This configuration has a close parallel in the Investment Company Act’s treatment of unit investment trusts. A UIT is defined as an investment company that “does not have a board of directors” and “issues only redeemable securities.”²⁸ Congress recognized that a pooled investment vehicle can operate without ongoing advisory supervision. The UIT sponsor selects a fixed portfolio at inception; investors evaluate that portfolio and decide whether to participate. The Advisers Act’s definition of “investment supervisory services” confirms the distinction: it requires “continuous advice as to the investment of funds on the basis of the individual needs of each client.”²⁹ An immutable vault provides no continuous advice; it executes a fixed strategy that each depositor evaluates before committing capital.

The ICA’s own provisions reflect this reality. Section 15(c) requires board approval of advisory contracts for investment companies “having a board of directors.”³⁰ The provision is inapplicable to UITs precisely because no ongoing advisory function exists. An immutable vault occupies the same position. CCI submits that immutable vault deployments fall outside the Advisers Act’s reach because no person exercises, or can exercise, the advisory judgment that the statute regulates.³¹

Bounded operational authority: the curator as publisher of a model.³²

Between immutability and full discretion lies a broad middle range of vault configurations in which a role-holder retains some authority over the vault’s strategy, constrained by code. Two propositions frame the analysis of that range. First, discretion does not decide it. As Section III.C explains, a person may be an investment adviser without any discretionary authority. Second, the publisher exclusion does not decide it either. A curator’s role in allocating capital is not itself a publication, and the on-chain record of an allocation does not make it one. The question is the one *Lowe* identifies: whether the curator renders personalized investment advice to anyone. CCI submits that, in a common configuration of unwrapped vault, it does not. The curator publishes a model in code and revises it on an announced schedule; each depositor decides for herself whether to follow it; and the code carries out the model for those who do. This subsection first distinguishes what the curator

²⁸ Investment Company Act of 1940 § 4(2), 15 U.S.C. § 80a-4(2) (defining a “unit investment trust” as an investment company “organized under a trust indenture” that does not have a board of directors and issues only redeemable securities).

²⁹ Investment Advisers Act § 202(a)(13), 15 U.S.C. § 80b-2(a)(13).

³⁰ See ICA § 15(c), 15 U.S.C. § 80a-15(c) (requiring board approval of advisory contracts for registered investment companies “having a board of directors”). Because a UIT “does not have a board of directors” under ICA § 4(2)(B), this provision is structurally inapplicable to UITs.

³¹ CCI notes that the UIT analogy raises a separate question (outside the scope of this Volume), which is whether the role-holder who structures and offers an immutable vault may be characterized as a broker-dealer.

³² The analysis in this subsection concerns unwrapped vaults. A wrapped vault should generally be analyzed as a fund. Under the fund model described in Section II.B, the wrapped vault is the client, and a curator who exercises judgment for it stands in the ordinary position of a fund adviser. For that curator, the questions are the scope of the advisory relationship and the calibration of the resulting duties, addressed in Section VI, not whether the Act applies.

publishes from what the code does, then explains why that structure falls on the impersonal side of *Lowe*'s line, and then identifies the configurations in which the argument weakens.

The analysis depends on separating the code from the allocation. The curator publishes code: the vault's eligible markets, parameter bounds, and allocation rules. The allocation is what that code does with capital that depositors have chosen to commit to it. Vault configurations differ in how the code changes. In the first configuration, the curator revises the model periodically, for example quarterly upon five days' notice posted to its website and queued on-chain behind a timelock, and the code applies objective rules between revisions. In the second, the published code itself reallocates in response to market conditions between revisions. In the third, the curator can reallocate at will, continuously or without notice. The argument that follows is strongest for the first configuration, requires additional conditions for the second, and does not extend to the third.

Section 202(a)(11)(D) excludes from the definition of "investment adviser" the publisher of "any bona fide newspaper, news magazine or business or financial publication of general and regular circulation."³³ The Supreme Court in *Lowe* construed this exclusion broadly, holding it "plainly broad enough to encompass any investment adviser who publishes and sells either combative or nonpartisan commentary about securities."³⁴ The Court drew a controlling distinction between "entirely impersonal" communications and "the kind of fiduciary, person-to-person relationships" that the Act was designed to regulate.³⁵ The exclusion was drafted with printed publications in mind, but the Court's functional analysis transcends the medium. CCI relies on *Lowe* for that distinction, not for the proposition that a vault is a bona fide publication. The exclusion itself covers a vault's informational outputs, such as strategy descriptions, documentation, and dashboards, and the reports-and-analyses discussion below addresses data presentation. Outside the exclusion, the Act can reach impersonal advice. The impersonality point therefore does its principal work in answering a prior question: whether the curator has entered into an advisory relationship with any depositor at all.

Lingley illustrates how the distinction applies to a digital product. The court held that content-filtering features did not constitute personalization, that continuous real-time publication satisfied the "general and regular circulation" requirement, and that the absence

³³ Investment Advisers Act § 202(a)(11)(D), 15 U.S.C. § 80b-2(a)(11)(D) (excluding from the definition of "investment adviser" the publisher of "any bona fide newspaper, news magazine or business or financial publication of general and regular circulation").

³⁴ *Lowe*, *supra* note 6, at 210–11 (holding that the publisher exclusion "is broad enough to encompass publishers").

³⁵ *Id.* at 210–11 ("As long as the communications between petitioners and their subscribers remain entirely impersonal and do not develop into the kind of fiduciary, person-to-person relationships that were discussed at length in the legislative history of the Act and that are characteristic of investment adviser-client relationships, we believe the publications are, at least presumptively, within the exclusion and thus not subject to registration under the Act.").

of authority over subscriber funds reinforced the publication characterization.³⁶ A curator that publishes code in the first configuration shares each of those features. The model is available to every depositor on identical terms, it is not tailored to any of them, and it is revised on a regular, announced schedule rather than communicated to particular persons. The curator also lacks custody authority over depositor assets: under the test in Section VII, it cannot move them outside the code-defined perimeter. CCI does not contend that the code's execution of an allocation is a publication. The point is that the curator's judgment reaches depositors only in the form of the published model.

Weiss Research marks the boundary from the other side. There, the publisher's auto-trading overlay destroyed the exclusion because the publisher "engaged in personalized communications with its subscribers regarding investment advice and effectively had investment discretion to purchase and sell securities on behalf of its 5 auto-trading subscribers."³⁷ The decisive features were personalized communications and trading in identified subscribers' accounts. A curator in the first configuration presents neither. It communicates nothing to any depositor individually, and it trades in no depositor's account. Each revision is announced in advance, applies identically to everyone, and takes effect only for depositors who choose to remain after notice. A staff reader may ask whether the code is simply an auto-trading overlay by another name. The answer lies in the depositor's election. The *Weiss Research* subscribers delegated execution to the publisher on an ongoing basis. A vault depositor elects the model when she deposits and elects each revision by declining to withdraw before it takes effect.

The index-provider and model-portfolio frameworks describe the same structure. The Commission's 2022 Request for Comment on Certain Information Providers observed that index providers have historically concluded that they may rely on the publisher exclusion, although the request itself reflected staff skepticism about leaving those activities outside the Act, and that model portfolio providers occupy contested territory because their relationship to end investors differs from the bilateral advisory paradigm.³⁸ That request did not result in final rulemaking, and CCI cites it as evidence of industry practice, not as a prediction of the Commission's direction. The relevant point is functional, and IA-1092

³⁶ *Lingley v. Seeking Alpha, Inc.*, No. 1:23-cv-05849 (S.D.N.Y. Aug. 15, 2024).

³⁷ *In re Weiss Research, Inc.*, Investment Advisers Act Release No. 2525, Administrative Proceeding File No. 3-12341 (June 22, 2006) (finding that an auto-trading overlay destroyed the publisher exclusion because the publisher "engaged in personalized communications with its subscribers regarding investment advice and effectively had investment discretion to purchase and sell securities on behalf of its 5 auto-trading subscribers. These factors preclude Weiss Research from relying on the publishers' exclusion found in Section 202(a)(1)(D) of the Advisers Act").

³⁸ IA-1092, *supra* note 3, at 10-11 (applying the three-part statutory test and confirming that coverage depends on the functional nature of the services provided); see also SEC Information Providers RFC, *supra* note 39, at 37,377-78 (observing that model portfolio providers and index providers occupy contested regulatory territory regarding investment adviser status).

confirms that function controls. An index provider publishes a rules-based methodology that others implement. A model portfolio provider publishes a model that others choose to adopt. A curator in the first configuration publishes a model in code that each depositor chooses to adopt, and the code implements it for her, much as a brokerage platform executes a model that each subscriber has elected. CCI does not contend that model portfolio providers are categorically outside the Act. Where a provider advises a sponsor or platform that implements its model, that sponsor may be its client. In an unwrapped vault, no sponsor or platform stands in that position. The only persons who implement the model are depositors, and they implement it for themselves.

Two features of the vault setting make the impersonal character of the curator's judgment more secure than in the traditional model-portfolio context. First, in a pseudonymous vault the curator typically does not know who its depositors are and has no means to learn their financial circumstances or objectives. A model portfolio provider is impersonal because it chooses not to personalize; a vault curator is impersonal because the architecture leaves it no means to do otherwise. Second, the depositor-side conditions described in Section V ensure that the depositor's election is informed and continuing. Where the model is comprehensible, verifiable, observable, and predictable, and each revision is noticed and subject to exit, the depositor is not a client following a recommendation she cannot evaluate. She is choosing, and choosing again at each revision, whether to follow a published model. The curator's work involves investment judgment, and CCI does not suggest otherwise. The question is whether that judgment is advice to her, and in this structure it is not.

Limits: autonomous reallocation. The second configuration is harder. Where the published code itself reallocates between revisions, for example by moving capital among enabled markets according to rates, utilization, or risk signals, the publication theory still reaches the code, but the depositor can evaluate the algorithm and not each reallocation it produces. The code performs on an ongoing basis a function a discretionary manager would otherwise perform, which places it closer to the auto-trading overlay in *Weiss Research* and to the algorithmic management addressed by the robo-adviser framework in Section VI.D, although both involved identified clients. CCI submits that the configuration remains on the impersonal side of the line only if three conditions are met. First, the algorithm is deterministic and fully disclosed, so that its outputs follow from published inputs without subjective factors, the line the staff drew in *Datastream*. Where the algorithm depends on off-chain inputs such as oracle-reported prices, those inputs and their sources should be disclosed and constrained, because, as Section V explains, they are observable but not independently verifiable. Second, the curator cannot intervene in or alter the algorithm except through a noticed revision subject to exit. Third, the depositor-side conditions, particularly predictability, are satisfied at the level of the algorithm. Where those conditions

are met, each reallocation is the operation of a published rule, and the analysis of deterministic, rule-based allocation in Sections IV.B and VI.D applies.

Limits: retained discretion and pooled vehicles. The argument does not extend to the third configuration. A curator that can reallocate continuously or without notice in response to market conditions is not publishing a model that depositors elect. It is managing capital that depositors have committed to its judgment, and the depositor cannot evaluate each change before it binds her. Two further limits apply in any configuration. First, where the curator or an affiliate accepts funds for investment, the relationship moves toward the fiduciary, person-to-person dynamic that *Weiss Research* identified, and the custody analysis in Section VII becomes relevant. Second, if an unwrapped vault were itself treated as a pooled investment vehicle, it would supply the client that the fund model presupposes, and the analysis applicable to wrapped vaults would follow. Section II.B asks the Commission to address that question directly.

These lenses support a narrow conclusion for unwrapped vaults, and it rests on personalization rather than on the absence of discretion. A curator that publishes a model in code, revises it on an announced schedule subject to notice and exit, is confined between revisions to objective rules, communicates no personalized recommendations, and has no custody authority over depositor assets does not render personalized investment advice to anyone. Its judgment reaches depositors only as a published model that each of them elects to follow, and in a pseudonymous vault it cannot be directed to any of them. No entity stands between the curator and the depositors to serve as the client. That conclusion reinforces the impersonal-product argument in Section II.B and supplies the design conditions on which the bounded-curator synthesis in Section III.H relies. CCI does not argue that any single framework is dispositive. The argument is that, where these conditions are met, the case for adviser status is substantially weakened. Wrapped vaults present a different and simpler question: they are funds, and a curator exercising judgment for one is advising the fund.

Full discretionary authority. At the far end of the spectrum, a role-holder with unconstrained discretion over allocation decisions occupies the position the Act was designed to regulate. Where a vault grants a curator broad authority to select assets, determine allocations, and modify strategies without code-enforced constraints, the functional reality resembles traditional discretionary portfolio management. The *Capital Gains* Court's concerns apply with full force: the discretionary manager can scalp, can trade on undisclosed conflicts, can exercise influence over client assets through the very judgment the client has entrusted.³⁹

³⁹ *Capital Gains*, 375 U.S. at 191–92 (stating that the Act “reflects a congressional intent to eliminate, or at least to expose, all conflicts of interest which might incline an investment adviser consciously or unconsciously to render advice which was not disinterested”).

CCI does not argue that full discretionary authority over vault allocations among securities falls outside the Act. It may fall within it, but even if it does, the Commission should consider the scope of the advisory relationship and the nature of the duties that attach. Section VI addresses how the Commission should calibrate those duties where architectural constraints reduce the dangers that motivated the Act’s fiduciary framework. Nor does the analysis suggest that only persons exercising discretionary authority satisfy the statutory definition. As Section III.C explains, non-discretionary advice satisfies the advice element where the remaining statutory requirements are met. The operational spectrum applies to both discretionary and non-discretionary functions. Throughout, where securities are involved, the question is one of characterization, and the presence or absence of material discretion over capital or returns is how that question is answered, whether or not the roleholder also has trading authority.

Reports and analyses. The statutory definition of “investment adviser” captures persons who “issue[] or promulgate[] analyses or reports concerning securities.”⁴⁰ Vault dashboards, analytics interfaces, and portfolio-performance summaries may present factual data about vault operations. The issue is whether factual data presentation constitutes the issuance of “analyses or reports” within the Act’s meaning.

The Commission’s no-action letters in *Missouri Innovation Center* and *Datastream International* provide the relevant framework. In *Missouri Innovation*, the Staff took a no-action position where a newsletter listed securities registered under state law, because (1) the information was publicly available in raw form, (2) the categories were not highly selective, and (3) the output was not organized to suggest the purchase or sale of any security. In *Datastream*, the Staff applied the same framework to linked databases of economic and financial data, confirming that provision of publicly available data through analytic software does not constitute investment advice where the software applies mathematical operations without building in subjective factors.⁴¹ Vault data feeds that report historical allocations, realized returns, and fee accruals satisfy each of these conditions. The underlying data is recorded on a public blockchain. The presentation organizes publicly available information without selectivity designed to recommend action.

CCI acknowledges that the line can be difficult to draw. A dashboard that highlights “top-performing vaults” or ranks strategies by projected returns begins to look more like a

⁴⁰ Investment Advisers Act of 1940 § 202(a)(11), 15 U.S.C. § 80b-2(a)(11) (capturing persons who “issue[] or promulgate[] analyses or reports concerning securities”).

⁴¹ *Missouri Innovation Ctr.*, SEC No-Action Letter (Oct. 17, 1995) (taking no-action position where (1) information was publicly available in raw form, (2) categories were not highly selective, and (3) output was not organized to suggest the purchase or sale of any security); *Datastream Int’l Inc.*, SEC No-Action Letter (Mar. 15, 1993) (applying same framework to linked databases of economic and financial data and confirming that analytic software applying mathematical operations without subjective factors does not constitute investment advice).

recommendation than a factual summary. The Commission should provide guidance on where data presentation ends and analysis begins in the vault context, with particular attention to whether the presentation is organized to suggest action or merely to report facts.

The Control Framework now supplies the structured assessment for the operational spectrum. The agent-side dimensions (Mandate, Execution, Governance, Disposition) characterize what the role-holder can do. The depositor-side conditions (Comprehensibility, Verifiability, Observability, Predictability, Notice, Actionability) characterize whether the depositor can independently evaluate and respond to what the role-holder does. Where both sets of conditions are satisfied, the case for treating the relationship as advisory weakens substantially, because the depositor is not dependent on the role-holder's judgment in the way the Act's fiduciary framework presupposes.

Agent-side dimensions. Mandate measures whether the role-holder's authority is defined by code or delegated by persons. A curator whose authority derives entirely from the vault's smart contract, constrained by parameter ranges, timelocks, and caps, operates under a code-defined mandate. Execution measures whether actions are carried out by the role-holder or by automated processes. A curator who submits parameter changes that the smart contract executes after a timelock exercises judgment over which parameters to propose, but execution remains with the code. Governance measures how the role-holder's authority can be modified. Where governance requires on-chain voting, multisignature approval, or other transparent mechanisms, the role-holder's discretion is further bounded. Disposition measures whether the role-holder can direct the movement of assets. In a noncustodial vault, the answer is no.

Depositor-side conditions. Comprehensibility asks whether the vault's strategy and constraints are understandable to a reasonable depositor. Verifiability asks whether those constraints can be independently confirmed by inspecting the code. Observability asks whether the role-holder's actions are visible in real time. Predictability asks whether the vault's behavior under given conditions is deterministic or at least bounded. Notice asks whether proposed changes are communicated in advance (through timelocks or governance proposals). Actionability asks whether the depositor can respond to proposed changes, including by exiting the vault before the changes take effect.

When the depositor-side conditions are satisfied, the architecture reduces the information asymmetry and client dependence that, on CCI's reading of *Capital Gains*, underlie the advisory relationship. A depositor who can verify constraints, observe actions, predict outcomes, receive notice, and act on that notice is not dependent on the role-holder's good faith in the way a traditional advisory client is dependent on a portfolio manager's good faith.

Independent evaluation thus reduces the need for the fiduciary protection the Act provides. The depositor-side conditions reduce the reliance dynamic; they do not displace the Act where a person exercises material discretion over another's securities investments for compensation. Their role is to inform whether an advisory relationship exists at all where authority is bounded in code, and to calibrate the response where one does.

CCI recognizes that the depositor-side conditions are not uniformly satisfied across vault architectures. A vault whose code is unaudited, whose strategy is opaque, or whose governance permits sudden changes without notice or exit opportunities does not satisfy the conditions. The framework is diagnostic, not exculpatory. It identifies the conditions under which the advisory-relationship predicate weakens. It does not assert that those conditions are universally present.

The framework depends on the code, not merely on disclosures about the code. Off-chain disclosures, such as strategy descriptions on a protocol's website, terms-of-use agreements, or marketing materials, can enhance comprehensibility and provide context that the on-chain code alone may not convey. They cannot substitute for on-chain verifiability. A vault that claims to enforce constraints but does not implement them in code does not satisfy the framework's requirements. The Commission should evaluate vault architectures based on what the code enforces, with off-chain materials serving as a supplement rather than a substitute.

Even where a vault role falls within the Act's reach, the Commission's own interpretive framework provides the basis for a calibrated response. The Commission has confirmed that an adviser's fiduciary duty is "shaped by the agreed-upon scope of the advisory relationship."⁴² Where code constrains that scope, the duty should be shaped accordingly.

F. Collateral Evaluation and Credit Assessment

A distinct question arises for vault roles that apply collateral criteria rather than select investments. Some vault participants determine whether an asset satisfies preset loan-to-value, liquidity, credit, or eligibility thresholds. That function may involve judgment about risk, but it does not necessarily amount to advice about the advisability of investing in a security.

The statutory text matters. Section 202(a)(11) reaches advice "as to the value of securities or as to the advisability of investing in, purchasing, or selling securities." The better reading is

⁴² Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Investment Advisers Act Release No. IA-5248, 84 Fed. Reg. 33,669 (July 12, 2019) (confirming that an adviser's fiduciary duty is "shaped by the agreed-upon scope of the advisory relationship").

that a person applying preset collateral criteria for the vault's own risk-management purposes is not recommending that anyone invest in, purchase, or sell the collateral. The function is evaluative, but it is not necessarily advisory in the statutory sense.

CCI's request is plain and modest. The Commission should issue interpretive guidance confirming that the application of preset, objective collateral criteria, without more, does not constitute advice as to the advisability of investing in, purchasing, or selling securities. This is not a request for a new statutory exclusion; it is a request that the Commission apply the existing text to a recurring vault function.

The rating-agency experience supports that reading. Several rating agencies were registered as investment advisers for years, but the textual basis for that treatment was always thin. In statements to the Commission in the 1990s and 2000s, S&P explained that a credit rating is an opinion about creditworthiness, not a recommendation to buy, sell, or hold a security, and therefore is not advice “as to the advisability of investing in, purchasing, or selling securities.”⁴³ Commissioners at the time appeared to acknowledge the difficulty of fitting ratings within the statutory definition. Congress resolved the question in the Credit Rating Agency Reform Act of 2006 by excluding nationally recognized statistical rating organizations from the definition in Section 202(a)(11)(F), unless they issue recommendations as to purchasing, selling, or holding securities or manage assets, and by replacing Advisers Act registration with a separate regime. The history therefore shows that Congress had to override the Commission's treatment, and that the line Congress drew is the one this Section draws: evaluating credit risk is different from recommending a transaction or managing assets. Collateral screening on preset criteria sits on the evaluation side of that line. Section 202(a)(17), which excludes clerical and ministerial personnel from the definition of associated person, offers general support for the same distinction.^{44,45}

The qualification is important. If a human role-holder uses collateral authority to choose among competing securities opportunities, to liquidate collateral based on discretionary market views, or to alter portfolio exposure through judgment rather than by applying preset criteria, the activity may again look advisory. The requested guidance is limited to criteria-driven screening and administration, not to discretionary allocation in collateral clothing.

This is another place where the Control Framework is useful. If the role-holder is applying disclosed, objective eligibility rules, the case for adviser status is weaker. If the role-holder

⁴³ Standard & Poor's Ratings Services, Statement of Standard & Poor's on Credit Rating Agencies, SEC Public Hearing on the Role and Function of Credit Rating Agencies in the U.S. Securities Markets (Nov. 15, 2002), available at <https://www.sec.gov/news/extra/credrate/standardpoors.htm> [hereinafter S&P Statement].

⁴⁴ Investment Advisers Act § 202(a)(17), 15 U.S.C. § 80b-2(a)(17) (excluding from the definition of “person associated with an investment adviser” any person “whose functions are clerical or ministerial”).

⁴⁵ See IA-1092, *supra* note 3.

can change outcomes materially through discretionary judgments about collateral acceptance, maintenance, or liquidation, the case is stronger.

CCI does not ask for a special carveout modeled on the rating-agency exclusion. The argument is textual and functional: applying preset collateral criteria is different from advising another person whether to invest in or dispose of a security. The rating-agency history confirms how hard it is to fit credit evaluation within the statutory text, and the Commission can recognize that point by interpretation without waiting for Congress to act again.

Commission guidance that recognizes this distinction would improve clarity for vault designers, curators, and investors alike while leaving the Act fully available where collateral functions are actually exercised as investment discretion.

G. Architectural Constraints That Reduce Regulatory Stakes

Three architectural constraints, namely, noncustodial design, permissionless exit, and on-chain transparency, reduce the dangers that motivated the Act's fiduciary framework even where a role-holder's authority is advisory in character. They do not determine whether the statutory test is satisfied, but they bear on the regulatory response.

Noncustodial architecture. In a noncustodial vault, no role-holder can transfer depositor assets to an external address. The smart contract holds the assets, and withdrawals are initiated by the depositor. This constraint eliminates the most severe risk the Act addresses: misappropriation. An adviser who cannot access client funds cannot abscond with them. The trust and confidence that characterize the advisory relationship described in *Capital Gains* rest in part on the client's vulnerability to misappropriation. Noncustodial design removes that vulnerability at the architectural level.

Permissionless exit. When a depositor can withdraw assets at any time, without requiring the role-holder's approval, the client-dependence prerequisite weakens. A traditional advisory client who wishes to terminate the relationship must give notice, wait for the adviser to liquidate positions, and may incur breakage costs. A vault depositor who dislikes a pending parameter change can withdraw before the change takes effect. The timelock mechanism creates a notice period during which the depositor retains the unilateral ability to exit. This reversal of the traditional power dynamic, in which the client depends on the adviser's cooperation to exit, has no close analogue in a traditional advisory relationship.

On-chain transparency. Every action a vault role-holder takes is recorded on a public blockchain: parameter changes, fee accruals, allocation adjustments, pending timelock executions. This transparency is not a disclosure obligation imposed by regulation; it is built

into the technology. The information asymmetry that enables scalping, front-running, and undisclosed conflicts is reduced at the source when every action is observable by every market participant in real time. The *Capital Gains* Court’s concern with “the potentiality of abuse” arising from informational opacity applies with diminished force where the opacity is eliminated by design.

These three constraints matter, but they do not answer every concern. Code can reduce misappropriation risk, increase observability, and preserve withdrawal rights, yet code does not itself resolve curator or affiliate conflicts. Those conflicts remain the domain of disclosure, consent, and the Act’s anti-fraud and fiduciary provisions, including Section 206.

H. The Bounded-Curator Synthesis

The preceding sections point to a narrower and more credible synthesis for bounded curators. The question is not whether any single analogy—publisher, index provider, model portfolio, or product design—wins by itself. The question is whether a role-holder who operates within disclosed, code-enforced constraints retains material discretion over capital or securities-related outcomes.

A bounded curator at the low end of the spectrum may publish the strategy, apply preset collateral criteria, propose changes within preset ranges, and disclose historical performance, while lacking authority to withdraw assets, to route them to undisclosed affiliates, or to give personalized recommendations. In that fact pattern, the published materials look impersonal, the strategy resembles a disclosed methodology, and the absence of custody and personalized communications substantially weakens the case for adviser status.

These facts do not eliminate every regulatory concern. Accepting funds for investment, reallocating capital at will or without notice, or directing judgment to particular depositors can still place the curator within the Act. The bounded-curator synthesis is strongest where the curator publishes a model in code, revises it on an announced schedule subject to notice and exit, and is confined between revisions to objective rules. It requires additional conditions where the published code itself reallocates between revisions, and it does not extend to a curator that retains discretion to change the vault’s strategy outside that structure (Section III.E). The synthesis applies to unwrapped vaults. A wrapped vault is a fund, a curator exercising judgment for it is advising the fund, and the relevant questions are the scope of that relationship and the calibration of the resulting duties under Section VI.

Best practices follow directly. A vault relying on bounded-curator arguments should publish the strategy in plain language, provide advance notice of changes, preserve the ability to

withdraw before risk-increasing changes take effect, disclose conflicts and any affiliate routing, disclose any discretionary authority to lower caps or narrow allowlists, and provide front-end disclosure functionally similar to Form ADV or Form CRS, including an identifiable point of contact or designated compliance entity.

Where those measures are present, the Commission has a more credible basis to treat the curator as operating at the low end of the advisory spectrum or, at minimum, to calibrate the resulting obligations to the actual scope of retained authority.

I. Other Participants in the Vault Ecosystem

The preceding analysis focused on the role-holder whose operational authority most directly implicates the “advice about securities” element: the curator or strategist who selects or adjusts allocation parameters. Vault ecosystems involve additional participants whose functions warrant separate consideration.

Protective and administrative roles. Guardians, sentinels, independent multisignature signers, and similar participants should be treated as protective when their authority is limited to preset, objective triggers—for example, pausing a vault after a documented security incident or oracle failure, or vetoing a pending action during a timelock.⁴⁶ Those roles cannot direct capital, choose markets, or alter expected returns. We do recommend that these roles and their permissions be disclosed.

Governance participants. Some vault architectures permit governance-token holders to vote on parameter changes, fee modifications, or strategy updates. The question whether a governance vote constitutes advisory activity is not easily resolved. A token holder who votes on a specific allocation change may exercise judgment about securities, at least when the vote is outcome-determinative. But a token holder who votes on design parameters, such as the permissible range of allocations or the length of a timelock, is more plausibly engaged in product design than in advisory activity. The Commission should address this question directly. CCI submits that governance voting on code-enforced constraints is more analogous to a mutual fund board’s approval of investment guidelines than to an adviser’s selection of specific securities.

Protocol developers and auditors. Developers who write vault code and auditors who review it perform technical functions that precede the formation of any advisory relationship, as discussed in Section III.E’s pre-deployment analysis. The Commission’s own functional

⁴⁶ Cf. Investment Advisers Act § 202(a)(17), 15 U.S.C. § 80b-2(a)(17) (excluding from the definition of “person associated with an investment adviser” any person “whose functions are clerical or ministerial”).

methodology, as confirmed in IA-1092, supports analyzing each participant's specific contribution rather than attributing advisory status to the ecosystem.

Infrastructure and distribution participants. Providing interface access, documentation, and self-custodial transaction routing does not, by itself, constitute advice. The Division of Trading and Markets' April 2026 staff statement on certain user interfaces focused on the absence of solicitation of specific transactions, the absence of steering of execution, the absence of control or discretion over transactions or market information, and the absence of transaction-based compensation from anyone other than the user. A different question arises when a front end, wallet provider, or distributor recommends a particular vault or strategy to a user. That recommendation may itself be advice, even though operating the vault is a separate question, and the two issues are distinct.⁴⁷

CCI urges the Commission to provide clear guidance on the treatment of non-operational participants. The current framework was designed for bilateral advisory relationships. Vault ecosystems distribute functions across multiple participants, none of whom individually replicates the role of a traditional investment adviser. Applying the statutory test to each participant based on the functional nature of its specific contribution, rather than attributing advisory status to the ecosystem as a whole, would align the Act's application with its functional methodology and avoid the regulatory distortion that results from treating protective, administrative, and technical functions as advisory activity.

IV. Applying the “For Compensation” and “In the Business” Elements

Section III addressed whether any vault role-holder provides “advice about securities.” That is the analytically central inquiry. The remaining two elements of the statutory test, compensation and regularity of business, are independently required.⁴⁸ A person who provides advice gratuitously is not an investment adviser. A person who provides advice as an isolated incident is not in the business of advising. This section addresses each element in turn.

⁴⁷ IA-1092 (confirming that the statutory definition turns on the functional nature of the services provided, not the professional designation of the provider). The user-interface statement referenced in the text is SEC Division of Trading and Markets, Staff Statement Regarding Broker-Dealer Registration of Certain User Interfaces Utilized to Prepare Transactions in Crypto Asset Securities (Apr. 13, 2026).

⁴⁸ Investment Advisers Act § 202(a)(11), 15 U.S.C. § 80b-2(a)(11) (requiring that each of the three statutory elements be independently satisfied).

A. The “For Compensation” Element

The compensation inquiry begins with nexus. If the underlying activity does not concern securities, or if the role-holder is not providing advice within the meaning of the Act, the compensation element is not satisfied merely because a fee exists. But once a person is providing advice about securities, the compensation element is construed broadly.

Under IA-1092, any economic benefit received in connection with advisory services can qualify as compensation, whether paid as a management fee, a spread, dilution, revenue share, or another embedded mechanism.⁴⁹ Code-enforced constraints may bear on whether the activity is advisory, but they do not negate compensation once advice exists.

Section 205 raises a narrower and separate issue. A fee based on current income from lending positions is different, textually, from a fee based on “capital gains” or “capital appreciation,” but whether a vault’s return is current income or appreciation depends on design. Where returns are distributed as net new tokens or other current income, the better argument is that the fee is income-based; where value accrues through appreciation in the vault receipt token or growth in net asset value, the fee looks more like a share of capital appreciation. Multi-strategy designs can mix the two. Volume II, Section B.3.a discusses the same distinction in the securities-law context.⁵⁰

The point should not be overstated. CCI is not arguing that a fee fails the compensation element when advice exists. The point is only that the form of the return matters for Section 205’s performance-fee restriction.

For fee structures that do fall within Section 205(a)(1), including holding vaults, derivatives vaults, or other designs where capital appreciation is part of the return, the structural incompatibility with Rule 205-3 and the case for exemptive relief are addressed in Section VI.C.

⁴⁹ See IA-1092, *supra* note 3, at 10.

⁵⁰ See Capital Gains, *supra* note 4, at 191–92 (describing the incentive structures that motivated Congress to impose fiduciary duties on investment advisers); Investment Advisers Act § 205(a)(1), 15 U.S.C. § 80b-5(a)(1); IA-1092, *supra* note 3, at 38,403 (“any economic benefit” received in connection with advisory services satisfies the compensation element, “whether in the form of an advisory fee, some other fee relating to the total services rendered, commissions, or some combination of the foregoing”); see Welch & Forbes, Inc., SEC No-Action Letter (pub. avail. Jan. 26, 1974) (“We do not disagree with your conclusion that Section 205(1) of the Investment Advisers Act would not prohibit an investment adviser from charging a fee based upon a percentage of the dividend and interest income from the client’s capital under the advisor’s supervision.”).

Indirect compensation should be analyzed the same way. Revenue shares, governance-token rewards, liquidity incentives, and similar arrangements can all constitute compensation if they are connected to advisory activity.⁵¹

Accordingly, the compensation analysis should be framed conservatively. If advice about securities exists, compensation usually will as well. The real limiting work is done by the advice and securities predicates, not by an effort to deny that economic benefits are fees.

The compensation structure may nonetheless inform adjacent questions. Asset-based or performance-linked economics can weaken publication analogies, heighten conflict concerns, and sharpen the relevance of Section 205, even though they do not themselves determine adviser status.

For the same reason, a flat informational fee looks more like payment for publication, while an asset-based or performance-linked fee looks more like compensation for participating in investment results. That distinction can matter at the margins, but it does not displace the core question whether the role-holder is giving advice about securities.

B. The “In the Business” Element

The “in the business” element distinguishes regular advisory activity from isolated conduct. IA-1092 identifies familiar factors such as holding out, a definable advisory charge, and sufficient frequency and regularity.⁵² Some authority suggests the inquiry is not limited to persons whose principal business is investment advice.⁵³ The better point for this Volume is practical: regular design or operation of vault strategies for compensation can satisfy the business element even when any single vault engagement is narrow.

Pre-deployment design. A person who performs advisory functions only at the pre-deployment stage, establishing the vault’s strategy in code and thereafter having no role in its ongoing operation, should not be deemed “in the business” of advising. The regularity requirement is not satisfied by a single act of design, however sophisticated. This conclusion holds even where the pre-deployment design embeds judgment that continues to generate

⁵¹ See IA-1092, *supra* note 3, at 13–14 (confirming that the form of compensation is not dispositive and that the element focuses on the existence of an economic benefit connected to the advisory function); SEC Div. of Inv. Mgmt., *Protecting Investors: A Half Century of Investment Company Regulation*, ch. 6, at 237 n.3 (May 1992) (“Compensation arrangements based on other measures of performance, such as net income, are not prohibited by the Advisers Act.”).

⁵² IA-1092, *supra* note 3, at 14–15 (identifying three non-exclusive factors relevant to the “in the business” inquiry: (1) whether the person holds itself out as an investment adviser; (2) whether the person receives a clearly definable charge for advisory services; and (3) whether the person provides advice with sufficient regularity).

⁵³ *Zinn v. Parrish*, 644 F.2d 360, 364 (7th Cir. 1981).

returns over time. The relevant inquiry is the regularity of the advisory relationship, not the duration of the design's effects.⁵⁴

A harder question arises where a person's regular business is designing vault strategies in code, even though the person provides no ongoing services to any particular vault. A firm that repeatedly designs vault strategies for compensation may satisfy the business element even if each engagement is discrete and the firm retains no continuing operational role in a particular vault. The practical point is regularity and holding out. Marketing strategy-design services to others remains a strong indicator of holding out under IA-1092's factors. CCI asks the Commission to address directly the difference between a one-off design engagement and a business built around repeated vault-strategy design.

Immutable deployment. The same conclusion applies with greater force where the developer has permanently relinquished authority through immutable deployment with no administrative keys. The deployer's relationship to the vault's ongoing operation is analogous to that of a manufacturer whose product continues to function after sale. The ongoing operation does not constitute a continuing advisory business on the manufacturer's part. The permanent termination of authority reinforces the absence of regularity.

Bounded operational authority and frequency. A curator who adjusts allocation parameters on a weekly or monthly basis, revising weights, modifying market approvals, or recalibrating strategy in response to market conditions, exhibits the kind of regularity that brings the role within the business element. The periodic, responsive character of such adjustments resembles the ongoing portfolio management function that the Act's registration and fiduciary framework was designed to address. Conversely, a role-holder whose adjustments are architecturally constrained to rare, predefined intervals presents a weaker case. The intermittent or singular character of the function is inconsistent with being "engaged in the business" of advising, even if the initial design reflected substantive investment judgment.

Automated execution. Where a vault employs a deterministic, rule-based allocation mechanism, such as a rule directing capital to the highest-rate market among a pre-approved set, the automated character of execution bears on the business element. The decision is made once, at the level of rule-design; subsequent operation does not sustain a "regular business" of advising on the deployer's part.⁵⁵ This conclusion is reinforced where the deployer has no mechanism to intervene in day-to-day execution, whether because the code is immutable or because intervention requires timelocked governance action. Even if

⁵⁴ See *Capital Gains*, 375 U.S. *supra* note 4, at 186–91 (describing the advisory relationship as involving ongoing and continuous provision of investment counsel).

⁵⁵ See IA-1092, *supra* note 3, at 15 (distinguishing advisory activity from "ministerial" or "administrative" functions that do not constitute a business of advising).

the initial rule-setting were characterized as advice, the subsequent automated operation does not establish the regularity the business element requires.

Interaction with the Control Framework. The business element analysis maps onto the Control Framework’s agent-side dimensions. A Mandate-holder who revises the vault’s overarching investment strategy on a recurring basis exhibits the kind of ongoing advisory judgment the business element contemplates. An Execution role focused on carrying out allocation decisions within a fixed mandate occupies narrower ground; where execution involves discretionary judgments made with regularity, the element may be satisfied, but where execution is fully automated or rule-based, it is weakened. Governance functions exercised on a recurring basis, such as amending vault parameters or modifying approved-market lists, contribute to regularity; governance functions exercised only in extraordinary circumstances, such as emergency pauses or security responses, are less likely to constitute a regular business of advising. Disposition functions related to wind-down or migration are inherently episodic rather than regular. The broader and more frequently exercised the role, the more likely the business element is satisfied; the narrower and more rarely exercised, the less likely.

Holding out. A role-holder who markets itself as a vault curator, strategist, or adviser is holding out in a way that supports the business element.⁵⁶ A developer who publishes code without holding out as an adviser is not. On-chain role designations, such as a “curator” or “strategist” label in the protocol’s smart contract, should be evaluated functionally. The label in the code is not determinative if the actual function does not involve regular advisory activity. A protocol that designates a role as “curator” for technical purposes, where the role’s actual function is limited to emergency-pause authority, is not thereby holding out the role-holder as an investment adviser.

Satisfaction of the business element, like satisfaction of the compensation element, does not conclude the analysis. All three elements must be independently satisfied. The analytical weight of this section’s inquiry is modest compared to the Section III advice-element analysis. But the compensation and business elements serve an important limiting function. They ensure that the Act reaches only persons who provide advice about securities, for compensation, as a regular business. A person who touches a vault’s parameters on a single occasion, or who receives no economic benefit in connection with that activity, falls outside the statute’s reach regardless of the sophistication of the judgment exercised.

⁵⁶ See IA-1092, *supra* note 3, at 14 (identifying “holding oneself out as an investment adviser” as a factor in the business-element inquiry).

V. Depositor-Side Conditions: Reducing The Predicate For Advisers Act Coverage

The preceding Sections applied the agent-side dimensions of the Control Framework to the three statutory elements of investment adviser status: advice, compensation, and regular business.⁵⁷ That analysis asked whether a given role-holder's function, when examined under each element, satisfies the statutory definition in Section 202(a)(11). This Section addresses a distinct but complementary dimension of the same inquiry: the conditions on the *depositor* side of the vault architecture that determine whether the functional predicate for Advisers Act coverage, an advisory relationship between a role-holder and a client, is present in the first instance.

The distinction matters because the Act regulates a relationship, not software in the abstract. CCI's synthesis of the relationship dynamics described in *Capital Gains*, namely, trust and confidence, information asymmetry, client dependence, and adviser influence, are a way to think about the nature of those relationships.⁵⁸ Where those dynamics are robustly present, the depositor occupies the position of a client who has delegated judgment to a person with superior information and a position of influence. Where they are structurally absent, the depositor's interaction with the vault is better understood as the use of a financial tool than the engagement of a financial adviser.

Six depositor-side conditions, individually and in combination, determine whether the structural prerequisites for an advisory relationship are present: comprehensibility, verifiability, observability, predictability, notice, and actionability. Each condition addresses a specific dimension of the information and control dynamic between the depositor and the role-holder. The analysis below develops each condition in turn, then explains their combined operation.

A. Comprehensibility

Comprehensibility concerns whether the vault's strategy, risk profile, and operational mechanics are presented in a form the depositor can meaningfully evaluate. The condition addresses the informational asymmetry the *Capital Gains* Court placed at the center of the

⁵⁷ The preceding Sections developed the agent-side dimensions of the Control Framework as applied to the three statutory elements of investment adviser status. See *supra* Sections III–IV. This Section addresses the complementary depositor-side inquiry. The framework draws on the harms the Supreme Court identified as motivating the Act's fiduciary regime: scalping, undisclosed conflicts, self-dealing, and the risk of non-disinterested advice. See *Capital Gains* 375 U.S. at 186–91 (1963).

⁵⁸ See *supra* Section III.D (discussing the *Capital Gains* dynamics and Commissioner Peirce's spectrum of advisory characteristics); see also *Capital Gains* *supra* note 4 (discussing the informational asymmetry between adviser and client that Congress sought to address).

advisory relationship.⁵⁹ Where the adviser possesses material information the client cannot access or understand, the client is positioned to rely on the adviser's judgment. Where the architecture renders the relevant information accessible and intelligible, the presupposition that the client lacks the ability to evaluate the investment herself is weakened.

Comprehensibility therefore requires more than publishable code. The strategy, fee logic, withdrawal conditions, and main risks should be explained in plain-language disclosure that a user can read at the front end, together with the identity of an identifiable point of contact, whether that is the curator, the legal wrapper, or a designated compliance entity.

This distinction tracks the broader statutory framework. The Securities Act's disclosure regime does not require every investor to read every prospectus. It requires the issuer to make the information available. The depositor-side comprehensibility condition operates on the same principle: the architecture must make informed evaluation possible, even where individual depositors choose to rely on other signals.

That point should be stated candidly: retail users will not read code, and this Volume should not assume otherwise. Code visibility can supplement disclosure and verification, but it does not replace the need for human-readable explanations and an accountable contact who can answer questions about the strategy or changes to it.

B. Verifiability

Verifiability is the depositor's ability to independently confirm that the vault behaves as described. It is analytically distinct from comprehensibility. Comprehensibility asks whether the depositor can understand what the vault is supposed to do. Verifiability asks whether the depositor can confirm that it actually does so.

On-chain architectures offer a form of verifiability unavailable in traditional advisory relationships. The vault's code is publicly deployed and inspectable. Its state, transaction history, and current holdings are recorded on an immutable ledger. Any technically capable party can audit the vault's behavior against its stated parameters. In a traditional advisory relationship, by contrast, the client must rely on the adviser's representations regarding the adviser's own conduct; independent verification is either impossible or prohibitively costly.

⁵⁹ See *Capital Gains*, 375 U.S. at 191–92 (“[T]he Investment Advisers Act of 1940 thus reflects a congressional recognition of the ‘delicate fiduciary nature of an investment advisory relationship.’”); cf. IA-1092 (analyzing the functional characteristics of investment advice in the context of non-discretionary advisory relationships).

The analysis must, however, distinguish between on-chain state and off-chain inputs.⁶⁰ Off-chain inputs do not automatically convert a vault into advisory activity, but they reduce verifiability and increase dependence on whoever selects, maintains, or interprets them. The concern is especially acute in real-world-asset curation, where the relevant asset quality, valuation, or eligibility information may depend on off-chain judgments that depositors cannot independently confirm.

C. Observability

Observability is the depositor's ability to monitor the vault's current state in real time. It differs from verifiability in focus: verifiability concerns confirming that past or present conditions match their descriptions; observability concerns tracking the vault's ongoing condition as it evolves.

Traditional advisory relationships are characterized by an information dynamic in which the adviser possesses current information the client does not independently access.⁶¹ The adviser knows the portfolio's current composition, its recent trades, and its real-time exposure; the client receives periodic reports, typically after the fact. The interval between the adviser's knowledge and the client's knowledge creates the dependence the Act addresses: the client cannot evaluate the adviser's conduct because the client lacks contemporaneous information about what the adviser is doing.

On-chain vault architectures invert this dynamic. The vault's state is public and continuously accessible. The depositor can observe current holdings, pending transactions, accrued fees, and position changes as they occur. Where observability is robust, the information lag that characterizes the traditional advisory relationship is eliminated. The depositor's position shifts from dependent recipient of periodic reports to contemporaneous observer of the vault's operation.

⁶⁰ The distinction between on-chain state and off-chain data is critical. On-chain state, including code logic, transaction history, and current holdings, is recorded on a public, immutable ledger and can be independently verified by any party with access to the blockchain. Off-chain values, such as oracle-reported prices, are *observable* in the sense that the depositor can see the value the oracle reports, but not *independently verifiable* in the same sense, because the depositor cannot confirm that the reported value accurately reflects the external condition it purports to measure. This distinction preserves a form of informational asymmetry in oracle-dependent vault architectures. See *supra* Section III.E (discussing bounded operational authority and informational asymmetry).

⁶¹ See *Capital Gains*, 375 U.S. at 188–91 (describing the information dynamic in which the adviser possesses material nonpublic information regarding investment decisions that the client does not independently access); see also *supra* Section III.E (discussing Commissioner Peirce's observation that advisory characteristics exist on a spectrum, with on-chain transparency occupying a qualitatively different position from traditional advisory opacity).

D. Predictability

Predictability is the depositor's ability to know in advance how the vault will behave under specified conditions. It is a function of the extent to which the vault's future actions are architecturally determined by immutable code, immutable parameters, or timelocked governance authority, as opposed to dependent on future discretionary judgments by a role-holder.⁶²

The condition targets the temporal dimension of the advisory relationship. An advisory relationship is, by its nature, ongoing and open-ended: the client engages the adviser precisely because the client cannot predict what the adviser will recommend and must therefore rely on the adviser's future judgment. Where the vault's behavior is fully determined by its code and parameters, the depositor does not depend on any role-holder's future judgment. The depositor's decision to participate is a one-time evaluation of a known rule set, not the initiation of an ongoing relationship of trust and reliance.

Predictability, though, is also a matter of degree. A vault governed entirely by immutable code with immutable parameters exhibits maximum predictability. A vault whose parameters can be adjusted through timelocked governance retains substantial predictability, because the depositor can foresee the range of permissible changes and has advance notice of any specific change. A vault in which a role-holder retains discretionary authority to alter strategy or parameters without constraint or notice exhibits minimal predictability, and the depositor's relationship to that role-holder more closely resembles the ongoing advisory relationship the Act was designed to address.

E. Notice

Notice is the depositor's right to advance warning of material changes before they take effect. In on-chain architectures, notice is typically implemented through timelocks: a proposed change to the vault's parameters, strategy, or governance structure must be publicly announced and subject to a mandatory delay before execution.

Notice transforms the information dynamic between the depositor and the role-holder. In a traditional advisory relationship, the adviser acts and reports afterward (or provides limited information about recommendations to the client). The client learns of portfolio changes through periodic statements, often days or weeks after execution. Notice reverses this

⁶² See *supra* Section III.E (identifying the depositor-side conditions as the primary determinants of whether bounded operational authority constitutes advice within the statutory meaning).

sequence: the role-holder must disclose the proposed change before it takes effect, and the depositor receives this disclosure with sufficient lead time to evaluate and respond.⁶³

The structural significance is substantial. The traditional advisory relationship is characterized by a pattern of post-hoc disclosure: the adviser exercises judgment, executes transactions, and then informs the client. The client's remedies are retrospective. Notice replaces post-hoc disclosure with prospective transparency. The depositor knows what will happen before it happens. This shift does not by itself eliminate the advisory relationship, but it materially alters the information dynamic that underlies it.

The analysis above assumes discretionary management, where the adviser acts and reports afterward. For non-discretionary advisory relationships, the dynamic differs: the adviser recommends, and the client decides whether to follow the recommendation. Notice nonetheless matters in the vault context because it transforms the nature of the role-holder's parameter change. A change that is announced in advance and subject to depositor exit before taking effect is closer to a published update than to a personal recommendation. The depositor evaluates the proposed change on its own terms and decides independently whether to remain invested under the new parameters.

F. Actionability

Actionability is the most critical of the six conditions. It is the depositor's practical ability to withdraw assets before a proposed change takes effect. Actionability transforms notice from a formal right into a meaningful protection.

A depositor who receives notice of a material change and can withdraw before that change is implemented is making a genuine investment decision at the moment of exit. She has evaluated the proposed change, determined that it does not align with her investment objectives, and acted on that determination. Her decision is informed, contemporaneous, and volitional. It is the opposite of the passive reliance that characterizes the client's position in a traditional advisory relationship.

The exit right must be more than formally available. Withdrawals must not be blocked, deferred, or penalized during the notice period. A timelock that announces a change but locks depositor assets pending implementation does not satisfy actionability; it converts the depositor from a participant who can leave into a captive who must accept the change. The same is true where a position is fixed-term or otherwise locked through the effective date

⁶³ IA-1092 at 38,402–05 (discussing the functional distinction between discretionary and non-discretionary advisory relationships and the relevance of the client's ability to accept, modify, or reject recommendations).

of the change: if the position matures only after the new terms take effect, the design needs a notice period longer than the lock or else actionability is absent.

Actionability is the condition that gives the other five their practical force. Comprehensibility, verifiability, observability, predictability, and notice collectively ensure that the depositor has the information necessary to make informed decisions. Actionability ensures that the depositor can act on that information. Without actionability, the other conditions are diagnostic but not protective: the depositor can see the problem but cannot respond to it. With actionability, the depositor's informed judgment replaces the adviser's discretion as the operative decision-making authority.

G. The Six Conditions Are Mutually Reinforcing

The six depositor-side conditions are not independent checkboxes. They are mutually reinforcing dimensions of a coherent inquiry into whether the structural prerequisites for an advisory relationship are present.⁶⁴

Comprehensibility without verifiability is disclosure without assurance. Verifiability without observability provides a snapshot but not a continuous picture. Observability without predictability tells the depositor what is happening but not what will happen. Predictability without notice leaves the depositor dependent on her own monitoring. Notice without actionability is a warning the depositor cannot act on. Each condition reinforces the others; each is diminished in the absence of the others.

The combined effect is greater than the sum of the individual conditions. Where all six are robustly satisfied, the depositor's participation in the vault is more analogous to using a financial tool than to engaging a financial adviser. The depositor understands the tool's function, can verify that it operates as described, can observe its real-time state, can predict its behavior under specified conditions, receives advance notice of any proposed change, and can withdraw before the change takes effect. The principal-agent dynamic the Act was designed to address, in which a person with superior information and influence exercises discretionary judgment on behalf of a dependent client, is structurally weakened. The depositor is not delegating judgment; she is exercising it.

Conversely, where one or more conditions are absent or deficient, the analysis shifts. A vault that is comprehensible and verifiable but offers no notice or exit right leaves the depositor in a position of dependence regarding future changes. A vault that provides notice and exit

⁶⁴ See *Capital Gains*, 375 U.S. at 186–91; see also *infra* Section VII (discussing depositor-side conditions in the custody context); Sections VIII–IX (incorporating depositor-side conditions into the summary risk-assessment framework for bounded operational authority).

rights but is opaque in its strategy or unverifiable in its execution preserves the informational asymmetry the Act targets. The conditions operate as a unified framework, and the strength of the depositor's position depends on their collective satisfaction.

The sections that follow apply this framework to the specific compliance challenges that arise when depositor-side conditions are incompletely satisfied, and to the related question of whether role-holders who interact with vault assets exercise custody within the meaning of the Advisers Act.

VI. Compliance Challenges for Registered Vault Advisers

A. General Principle: Regulation Must Be Functional, Not Formal

The preceding sections established when vault role-holders cross the investment-adviser threshold. This section asks the logically subsequent question: for those who do, what does compliance look like? The answer, CCI respectfully submits, reveals a structural mismatch between the existing Advisers Act compliance apparatus and the operational reality of on-chain vault architectures. The mismatch is not one of willingness; it is one of design. The Act's compliance framework presupposes an institutional form, a bilateral advisory relationship with identified clients, and a set of operational capacities (record-keeping, custody, disclosure delivery) that many vault participants cannot replicate without fundamentally altering the architecture that provides their most significant investor protections.

Section 211(a) of the Advisers Act authorizes the Commission to “classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters.”⁶⁵ This is a grant of broad classification authority. The Commission has exercised this authority throughout its history to tailor regulatory requirements to different business models, recognizing that a single compliance template cannot accommodate the full range of advisory activities the Act encompasses. CCI submits that on-chain vault architectures present precisely the kind of novel operational profile for which Section 211(a) classification authority exists.

The Commission's own 2019 Fiduciary Interpretation recognized that fiduciary obligations are not monolithic but scale with the scope of the advisory relationship.⁶⁶ The specific

⁶⁵ Advisers Act § 211(a), 15 U.S.C. § 80b-11(a) (authorizing the Commission to “classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters”).

⁶⁶ Commission Interpretation Regarding Standard of Conduct for Investment Advisers, Investment Advisers Act Release No. IA-5248, 84 Fed. Reg. 33,669, 33,678 (July 12, 2019) (“The specific obligations that flow from the adviser's fiduciary duty depend upon what functions the adviser, as agent, has agreed to assume for the client, its principal”).

obligations flowing from the fiduciary duty depend on “what functions the investment adviser . . . is performing for that client and the circumstances.” This principle of proportionality, applied to the compliance context, supports the conclusion that vault role-holders whose advisory function is structurally bounded should face compliance obligations calibrated to the actual scope and nature of their function. A role-holder whose authority extends only to rebalancing among pre-approved markets within governance-set parameters occupies a fundamentally different position from a traditional investment adviser exercising broad discretion over individualized client portfolios.

Section 202(a)(13) of the Act defines “investment supervisory services” as “the giving of continuous advice as to the investment of funds on the basis of the individual needs of each client.”⁶⁷ Many vault architectures do not involve “individual needs” at all; the strategy applies uniformly to all depositors. A depositor who allocates capital to a vault receives the same allocation, the same risk exposure, and the same return profile as every other depositor. There is no tailoring, no suitability analysis, no intake of personal financial information. This statutory definition underscores the distance between the Act’s paradigmatic advisory relationship and the impersonal, uniform, publicly observable strategy execution that characterizes most vault architectures.

The principle that regulation should track function applies with equal force to the Advisers Act compliance framework: obligations designed for one institutional form should not be imposed without modification on a fundamentally different architecture simply because both fall within the same statutory definition.

The subsections that follow examine this mismatch across four dimensions. Section VI.B provides a rule-by-rule analysis of the Advisers Act’s principal compliance obligations and identifies, for each, the specific point of incompatibility with permissionless vault architecture. Section VI.C addresses the performance-fee prohibition under Section 205, which presents a distinct and acute compliance challenge. Section VI.D compares the vault architecture to the SEC’s robo-adviser framework, demonstrating that the existing template for algorithmic advisory services does not accommodate the structural features of permissionless vaults. Section VI.E examines the cascading AML/CFT compliance burden that may follow from adviser classification.

CCI does not argue that all vault role-holders should be exempt from regulatory oversight. CCI argues that the Commission should exercise its classification authority under Section 211(a) to develop a compliance framework calibrated to the actual operational profile of on-chain vault architectures, one that preserves the investor-protection objectives of the

⁶⁷ Advisers Act § 202(a)(13), 15 U.S.C. § 80b-2(a)(13).

Advisers Act while recognizing that permissionless, noncustodial, transparent vault structures achieve many of those objectives through architectural means rather than through traditional compliance infrastructure. The transparency of on-chain execution, the noncustodial character of depositor assets, and the governance constraints embedded in smart-contract code collectively provide protections that the Act's traditional compliance apparatus was designed to supply through very different institutional mechanisms. A regulatory framework that ignores these architectural protections, demanding instead that vault participants replicate the full compliance infrastructure of a traditional advisory firm, would impose costs without corresponding benefits and, in many cases, would require the dismantling of the very features that protect investors most effectively.

B. Rule-by-Rule Analysis

The Advisers Act's compliance framework comprises a set of interlocking obligations designed to protect clients in bilateral advisory relationships. For each principal obligation, there exists a specific point at which the requirement's underlying assumptions collide with the operational reality of permissionless vault architecture. The table below identifies these collision points. The discussion that follows develops the analysis for each rule.

Rule	What It Protects	How Code Addresses It	Gap
Form ADV (§ 203)	Client receives disclosure about adviser's business, conflicts, fees	Strategy parameters, fee rates, and allocation logic are hard-coded in publicly queryable smart contracts; all pending changes are observable on-chain before they take effect	No mechanism for delivering a narrative brochure to pseudonymous depositors; no bilateral relationship through which to provide supplemental disclosure
Books and Records (Rule 204-2)	Regulators can reconstruct advisory decisions and communications	Every transaction is permanently recorded on the blockchain; allocation decisions are executed by auditable code; the on-chain record is more complete and tamper-resistant than any traditional books-and-records system	Traditional record categories (memoranda of orders, written communications with clients) do not map onto permissionless vault operations; the record exists but in a non-traditional format

Rule	What It Protects	How Code Addresses It	Gap
Compliance Programs (Rule 206(4)-7)	Ongoing monitoring prevents violations	Code-enforced constraints (timelocks, exposure caps, guardian vetoes) structurally prevent categories of misconduct that compliance programs are designed to detect after the fact	No designated CCO; no written policies and procedures in the traditional sense; the “compliance program” is the code itself
Marketing (Rule 206(4)-1)	Clients are protected from misleading performance advertising	On-chain returns are publicly verifiable by any person; past performance is not a representation but a historical fact recorded on an immutable ledger (query about hypothetical performance)	Protocol interfaces may present performance data in ways that constitute “advertisements” under the marketing rule; no clear mechanism for pre-review or approval
Anti-Fraud (§ 206)	Clients are protected from fraudulent practices	Transparency of on-chain operations limits the scope for deceptive conduct; code does what it says; fee structures are publicly verifiable	Section 206 applies to all investment advisers and does not present a compliance “gap” in the traditional sense; the structural transparency of vault architectures may itself serve as the most effective anti-fraud mechanism

Rule	What It Protects	How Code Addresses It	Gap
Custody (Rule 206(4)-2)	Client assets are safeguarded through qualified custodians	Smart contracts hold assets under code-enforced rules; noncustodial design means no single person can unilaterally redirect depositor funds	Custody should turn on unilateral control, not on who or what holds the assets; a noncustodial vault in which no person can move depositor assets without independent approval or an exit-preserving timelock involves no custody (Section VII); the account-statement and verification requirements map poorly onto unwrapped vaults, but on-chain records and vault accounting can serve as substitute compliance

The Advisers Act's compliance framework comprises a set of interlocking obligations designed to protect clients in bilateral advisory relationships. For each principal obligation, there exists a specific point at which the requirement's underlying assumptions collide with the operational reality of permissionless vault architecture. The table below identifies these collision points. The discussion that follows develops the analysis for each rule.

*Form ADV.*⁶⁸ Form ADV presupposes an identified adviser delivering a written disclosure document to an identified client. A vault curator operating pseudonymously, providing no individualized communication, cannot deliver a Part 2A brochure in any conventional sense (although a known and identified curator would be in a better position to comply). Much of the information Form ADV requires is available: strategy parameters, fee rates, and operational risks are either encoded in the smart contract or documented in publicly available protocol documentation. Conflicts are different. Code does not disclose or resolve curator or affiliate conflicts, such as a curator's interest in a market it enables or

⁶⁸ Form ADV, Parts 1A, 2A, & 2B, 17 C.F.R. § 279.1 (requiring registered investment advisers to file and deliver disclosure documents describing, *inter alia*, the adviser's business, fees, conflicts of interest, disciplinary history, and code of ethics).

compensation from a protocol it allocates to, and those conflicts must be disclosed in human-readable form and remain subject to Section 206. For the remaining items, the gap is procedural rather than informational. Including a link to the adviser's Form ADV and, where applicable, Form CRS in protocol documentation and front ends would address much of it, although two questions remain. First, a person can interact with the smart contract address directly, bypassing the protocol documentation entirely. Second, the underlying structural question remains whether the pseudonymous, non-bilateral character of the depositor relationship satisfies the Act's delivery requirements.

*Books and records.*⁶⁹ The blockchain is the most comprehensive books-and-records system ever devised. Every deposit, withdrawal, allocation change, fee accrual, and parameter modification is permanently recorded, timestamped, and publicly queryable. The difficulty is one of format, not substance. Rule 204-2's categories, including memoranda of orders given for execution, written communications with clients, and documentation of investment decisions, were designed for advisory firms that communicate with clients and execute orders through intermediaries. A vault that executes allocations autonomously through code and maintains no bilateral client communications produces records that are more complete than what Rule 204-2 contemplates but in a form the rule does not recognize.

*Compliance programs.*⁷⁰ Rule 206(4)-7 requires a designated chief compliance officer and written policies and procedures. The rule's purpose is to create an institutional mechanism for detecting and preventing violations before they occur. Code-enforced constraints serve an analogous function: timelocks prevent unauthorized parameter changes; exposure caps prevent excessive concentration; guardian roles can veto risk-increasing modifications. These architectural features are more reliable than human-administered compliance programs because they cannot be circumvented, ignored, or overridden by the persons they are designed to constrain. The gap is formal: the architecture achieves the rule's objective but does not satisfy its procedural requirements.

*Marketing.*⁷¹ The marketing rule prohibits misleading advertisements and imposes specific requirements for testimonials, endorsements, and performance presentation. On-chain vault returns are publicly verifiable facts, not representations by an adviser. A protocol

⁶⁹ Advisers Act Rule 204-2, 17 C.F.R. § 275.204-2 (requiring advisers to maintain books and records including memoranda of orders, written communications, client information, and performance advertisements).

⁷⁰ Advisers Act Rule 206(4)-7, 17 C.F.R. § 275.206(4)-7 (requiring registered investment advisers to adopt and implement written policies and procedures reasonably designed to prevent violations of the Advisers Act and to designate a chief compliance officer). See also *Compliance Programs of Investment Companies and Investment Advisers*, Investment Advisers Act Release No. IA-2204, 68 Fed. Reg. 74,714 (Dec. 24, 2003) (adopting the compliance rule).

⁷¹ Advisers Act Rule 206(4)-1, 17 C.F.R. § 275.206(4)-1 (the "marketing rule", prohibiting advertisements that include untrue statements of material fact, unsubstantiated material claims, and material misleading implications, and imposing specific requirements for testimonials, endorsements, and performance advertising). See also *Investment Adviser Marketing*, Investment Advisers Act Release No. IA-5653, 86 Fed. Reg. 13,024 (Mar. 5, 2021).

interface that displays historical returns, however, may constitute an “advertisement” under the rule’s broad definition. The compliance challenge is distinguishing between transparent reporting of on-chain data and promotional activity subject to the marketing rule’s substantive and procedural requirements. On-chain vault performance data is historical and verifiable, but this analysis does not address hypothetical or projected performance presentations, which would remain subject to the marketing rule’s substantive requirements regardless of the medium.

*Anti-fraud.*⁷² Section 206 presents the least acute compliance challenge for transparent vault architectures. The anti-fraud provisions prohibit deceptive practices. Vault architectures whose operations are publicly observable, whose code is open-source, and whose fee structures are hard-coded in immutable contracts operate in an environment where the scope for deception is structurally constrained. The anti-fraud obligation is universal and non-waivable, and CCI does not suggest otherwise. CCI submits that transparent, code-enforced vault architectures are, in practice, among the strongest anti-fraud environments in the advisory industry.

*Custody.*⁷³ The custody rule applies only where the adviser has custody of client funds or securities. In a noncustodial vault, depositor assets are held by a smart contract, and no role-holder can transfer them. The threshold question is therefore whether any person has custody at all. The smart contract is not a custodian, and its existence does not by itself answer that question. As Section VII explains, the answer should turn on unilateral control: whether any person, alone or with its related persons, can move depositor assets, or bring about an equivalent economic transfer, without the independent approval of an unaffiliated party and without a timelock that gives depositors time to exit. Where no person has that control, no one has custody, and holding a required but non-controlling key share or a protective vault permission should not change that result. The Commission’s proposed custody rules take a different approach to key materials, and Section VII responds to them.

C. Section 205: The Performance-Fee Prohibition and Permissionless Architecture

Section 205(a)(1) prohibits registered advisers from entering into advisory contracts providing for compensation “on the basis of a share of capital gains upon or capital

⁷² Advisers Act § 206, 15 U.S.C. § 80b-6 (prohibiting investment advisers from engaging in any transaction, practice, or course of business that operates as a fraud or deceit upon any client or prospective client). *See Capital Gains*, *supra* note 4, at 191–92 (interpreting Section 206 as establishing a federal fiduciary standard for investment advisers).

⁷³ Advisers Act Rule 206(4)-2, 17 C.F.R. § 275.206(4)-2 (the “custody rule”, requiring advisers with custody of client funds or securities to maintain those assets with a qualified custodian, provide account statements, and, in certain cases, obtain a surprise examination by an independent public accountant).

appreciation of the funds or any portion of the funds of the client.”⁷⁴ As discussed in Section IV.A, lending vault fees calculated as a percentage of interest income fall outside this prohibition because they are not computed by reference to capital gains or capital appreciation. This subsection addresses a different question: for vault fee structures that do fall within Section 205(a)(1), including holding vaults, derivatives vaults, and multi-strategy vaults where capital appreciation is a component of return, how does the existing compliance pathway operate, and why is it structurally incompatible with permissionless architecture?

7. **The Qualified-Client Framework and Permissionless Architecture.** For vault fee structures that do fall within Section 205(a)(1), holding vaults, derivatives vaults, and multi-strategy vaults where capital appreciation is a component of return, the existing compliance pathway runs through Rule 205-3.⁷⁵ That rule, adopted in 1985 under the Commission’s Section 205(e) exemptive authority⁷⁶, permits performance-based fees to “qualified clients” satisfying specified financial thresholds.

Effective June 29, 2026, the Commission adjusted those thresholds for inflation.⁷⁷ A qualified client must now satisfy either an assets-under-management test of \$1,400,000 or a net-worth test of \$2,700,000 (excluding primary residence).⁷⁸ The difficulty for permissionless vault architectures is fundamental. Rule 205-3 requires the adviser to “reasonably believe” that the client satisfies the applicable threshold “immediately prior to entering into the advisory contract.” Forming a reasonable belief requires obtaining financial information from the client, which presupposes the ability to identify the client. A vault that accepts deposits from any blockchain address, without identity verification, cannot form a reasonable belief about any depositor’s financial status. In practice, compliance requires an identifiable gatekeeper that can collect, review, and document eligibility information. The most realistic hybrid is a front-end or designated compliance entity that performs

⁷⁴ Advisers Act § 205(a)(1), 15 U.S.C. § 80b-5(a)(1) (prohibiting registered investment advisers from entering into advisory contracts that “provide[] for compensation to the investment adviser on the basis of a share of capital gains upon or capital appreciation of the funds or any portion of the funds, of a client”).

⁷⁵ 17 C.F.R. § 275.205-3 (exempting from the Section 205(a)(1) prohibition advisory contracts with “qualified clients” who satisfy specified financial thresholds).

⁷⁶ Exemption to Allow Registered Investment Advisers to Charge Fees Based Upon a Share of Capital Gains Upon or Capital Appreciation of a Client’s Account, Investment Advisers Act Release No. IA-996, 50 Fed. Reg. 48,556 (Nov. 26, 1985) (adopting original qualified-client exemption).

⁷⁷ Order Approving Adjustment for Inflation of the Dollar Amount Tests in Rule 205-3 Under the Investment Advisers Act of 1940, Investment Advisers Act Release No. IA-6961 (Apr. 28, 2026) (raising the assets-under-management test to \$1,400,000 and the net-worth test to \$2,700,000). The prior thresholds, effective August 16, 2021, were \$1,100,000 (assets-under-management test) and \$2,200,000 (net-worth test). See Investment Advisers Act Release No. IA-5756 (June 17, 2021) [86 Fed. Reg. 32,993 (June 23, 2021)].

⁷⁸ Performance-Based Investment Advisory Fees, Investment Advisers Act Release No. IA-6955, 91 Fed. Reg. 15,930, 15,931 (Mar. 31, 2026) (stating that the qualified-client standards “would limit the availability of the exemption to clients who are financially experienced and able to bear the risks of performance fee arrangements”).

attestation, verification, or gating for access to a Section 205 fee arrangement while the protocol layer remains transparent and code-bound.

8. **The Case for Section 205(e) Exemptive Relief.** Section 205(e) is therefore the more promising relief pathway. It allows the Commission to consider sophistication, relationship factors, and “such other factors” as are consistent with the section.⁷⁹

In the vault context, those other factors should include independently audited code, mandatory notice, withdrawal rights, transparent fee logic, objective caps, and the presence of a designated compliance entity or front-end attestation mechanism that can verify the conditions for access to a performance-fee arrangement.

That does not eliminate the need for an accountable gatekeeper. To the contrary, any Section 205(e) pathway should acknowledge candidly that someone must verify the relevant client or transaction conditions, whether through identified entity-level onboarding, front-end attestations, or another documented mechanism.

The comparison is practical. A traditional opaque fund can satisfy Rule 205-3 through paperwork even when investors lack real-time visibility, while a transparent vault may provide stronger ongoing protections yet lack any actor who can make the required eligibility determination. Section 205(e) exists to address that kind of mismatch.

CCI therefore requests a conditioned Section 205(e) framework for vault architectures that combines structural protections with an identifiable verification layer, whether a legal wrapper, designated compliance entity, or front-end attestation mechanism, rather than arguing that wealth thresholds alone should disappear.

D. The Robo-Adviser Framework: A Structural Comparison

The Commission recognized in 2017 that algorithmic execution of investment strategies is compatible with adviser registration. IM Guidance Update No. 2017-02⁸⁰ addressed “a fast-growing trend within the investment advisory industry”: registered advisers using “innovative technologies to provide discretionary asset management services to their clients through online algorithmic-based programs.” The Guidance identified three areas of

⁷⁹ Advisers Act § 205(e), 15 U.S.C. § 80b-5(e) (authorizing the Commission, by rule or order, to “exempt any advisory contract from the performance fee prohibition if the contract is with persons that the Commission determines do not need the protections of the prohibition, on the basis of certain factors described in that section”).

⁸⁰ U.S. Sec. & Exch. Comm’n, Div. of Inv. Mgmt., IM Guidance Update No. 2017-02, *Robot-Advisers* (Feb. 23, 2017), available at <https://www.sec.gov/investment/im-guidance-2017-02.pdf>.

concern: disclosure, suitability, and compliance programs. The 2021 Risk Alert⁸¹ found deficiencies at nearly all examined electronic advisers. Enforcement actions against Wealthfront⁸² and SoFi Wealth⁸³ confirmed that algorithmic advisers face the same fiduciary standards as traditional advisers.

The robo-adviser framework is a significant regulatory achievement. It demonstrates that the Commission can adapt the Advisers Act to algorithmic advisory services. The framework was designed, however, for a specific architecture: a registered entity with identified operators providing personalized advice through algorithms to individually identified clients, collecting client-specific information through questionnaires, and maintaining bilateral advisory relationships mediated by digital interfaces. Automated vault strategies differ from this architecture in every structural dimension the framework presupposes.

The following table identifies the critical differences:

Feature	SEC-Registered Robo-Adviser	Automated Vault Strategy
Operator Identity	Registered legal entity with identified principals, Form ADV, designated CCO	May be operated by pseudonymous developers, DAOs, or decentralized governance mechanisms without identified legal entity
Personalization	Personalized advice based on individual client data collected through questionnaires	Impersonal: strategy applies uniformly to all depositors without individualization; parameters are publicly observable
Client Relationship	Bilateral advisory relationship with individually identified clients; KYC; fiduciary duty runs to each client	No bilateral relationship; depositors are pseudonymous; depositors interact with published, disclosed protocol logic

⁸¹ U.S. Sec. & Exch. Comm'n, Div. of Exams. *Observations from Examinations of Advisers that Provide Electronic Investment Advice* (Nov. 9, 2021), available at <https://www.sec.gov/files/exams-eia-risk-alert.pdf> (finding deficiencies in compliance programs, portfolio management, and marketing at nearly all examined electronic investment advisers).

⁸² *In re Wealthfront, LLC*, Advisers Act Rel. No. 5086 (Dec. 21, 2018) (settled) (charging robo-adviser with false statements regarding tax-loss harvesting monitoring and selective republication of social media posts omitting material conflicts).

⁸³ *In re SoFi Wealth, LLC*, Advisers Act Rel. No. 5826 (Aug. 19, 2021) (settled) (charging robo-adviser with investing client assets in affiliated securities to the detriment of clients and failing to adopt adequate written policies and procedures).

Feature	SEC-Registered Robo-Adviser	Automated Vault Strategy
Information Asymmetry	Algorithm is proprietary; client cannot independently verify code; client relies on adviser's representations	Strategy parameters are publicly queryable on-chain; depositors can independently verify and audit vault behavior through open-source code
Suitability Mechanism	Questionnaire-based assessment of individual financial situation and investment objectives	No suitability mechanism; vault accepts deposits from any address; depositor self-selects based on disclosed parameters
Exit Rights	Client can terminate; exit is mediated through the adviser and its custodian	Permissionless exit: depositors withdraw at any time, including before proposed parameter changes take effect via mandatory timelocks
Override / Human Intervention	Adviser may override algorithm in stressed markets; clients may request strategy changes	No human override of strategy execution; depositor exercises control through deposit and withdrawal decisions
Custody	Adviser typically has custody or uses qualified custodians	Noncustodial: smart contracts hold assets; no single person can unilaterally access or redirect depositor capital

These are differences of kind, not degree. Each column describes a distinct architecture presenting a distinct regulatory problem, or, in the case of vaults satisfying certain depositor-side conditions, the absence of the regulatory problem the Advisers Act was designed to address.

The robo-adviser compliance obligations were designed for a specific principal-agent dynamic. Each maps to a structural feature: suitability obligations exist because the robo-adviser provides personalized advice that may be inappropriate for an individual client; disclosure obligations exist because the algorithm is proprietary and unverifiable by the client; compliance-program obligations exist because internal operations must be monitored to ensure fiduciary standards; override obligations exist because the adviser retains the ability to intervene. An automated vault strategy satisfying the depositor-side conditions, including comprehensibility, verifiability, observability, predictability, notice, and actionability, structurally eliminates the reliance dynamic each obligation addresses.

The internet adviser exemption, as amended in 2024,⁸⁴ further illustrates the mismatch. The revised rule defines “digital investment advisory services” as advice “generated by the operational interactive website’s software-based models, algorithms, or applications based on personal information each client supplies.” A vault strategy that applies uniformly to all depositors, collects no personal information, and generates no individualized recommendations does not fit this definition.

CCI respectfully requests that the Commission issue guidance confirming four principles. First, deterministic, rule-based allocation mechanisms executing pre-programmed strategies without ongoing human input do not constitute “advice” within the meaning of Section 202(a)(11) where the strategy is publicly observable, applies uniformly, and involves no individualized recommendations. Second, bounded operational roles should be evaluated under a functional analysis accounting for the degree to which code-enforced constraints reduce the advisory character of the role. Third, the depositor-side conditions of comprehensibility, verifiability, observability, predictability, notice, and actionability should be recognized as relevant factors in the adviser analysis. Fourth, on-chain transparency mechanisms should be recognized as satisfying, or substantially addressing, the disclosure objectives underlying the robo-adviser framework.

E. The Cascading AML/CFT Compliance Burden

The investment adviser classification has consequences that extend beyond the Commission’s own regulatory framework. If a vault participant is determined to be an investment adviser, whether as a registered adviser or an exempt reporting adviser, that determination triggers obligations under FinCEN’s anti-money laundering rule that compound the compliance challenges this Section has identified. The Commission should weigh this cascading effect when determining the scope of adviser status for vault participants, and should coordinate with Treasury and FinCEN to ensure that the combined regulatory burden is proportionate to the actual risks the architecture presents. On September 4, 2024, FinCEN published a final rule extending comprehensive AML/CFT program and suspicious activity report filing requirements to registered investment advisers and exempt reporting advisers for the first time.⁸⁵ The rule layers upon the adviser classification a further set of obligations that presuppose identifiable customers, bilateral advisory relationships, and centralized institutional operators.

⁸⁴ Exemption for Certain Investment Advisers Operating Through the Internet, Investment Advisers Act Release No. IA-6578, 89 Fed. Reg. 24,693 (Apr. 9, 2024) (effective July 8, 2024) (adopting amendments to Rule 203A-2(e), defining “digital investment advisory services” and revising conditions for the internet adviser exemption).

⁸⁵ Anti-Money Laundering/Countering the Financing of Terrorism Program and Suspicious Activity Report Filing Requirements for Registered Investment Advisers and Exempt Reporting Advisers, 89 Fed. Reg. 72,156 (Sept. 4, 2024) (Codified at 31 C.F.R. pts. 1010, 1032) [hereinafter FinCEN IA Rule].

1. **Coverage and Obligations.** The rule defines “covered investment advisers” to include registered investment advisers and exempt reporting advisers. The rule imposes a comprehensive suite of BSA obligations: a risk-based AML/CFT program with internal controls, a designated compliance officer, employee training, independent testing, customer due diligence procedures, suspicious activity report filing, currency transaction reports, recordkeeping and Travel Rule requirements, and participation in the Section 314(a) and 314(b) information-sharing framework. The rule does not include a customer identification program requirement; CIP is the subject of a separate joint proposed rule by FinCEN and the SEC, published in May 2024.⁸⁶
2. **The Compliance Timeline.** The rule’s compliance date has been postponed and its scope is under active reconsideration. The original compliance date of January 1, 2026 was deferred when Treasury announced in July 2025 its intention to postpone and revisit the rule’s scope and substance.⁸⁷ FinCEN issued an exemptive relief order in August 2025⁸⁸ formally delaying the effective date. A proposed rule to delay the compliance date followed in September 2025⁸⁹, and the final delay rule, published January 2, 2026⁹⁰, established a new compliance date of January 1, 2028.

Treasury’s announcement stated expressly that the Department intends to “revisit the scope and substance” of the rule. The Department articulated a principle directly relevant to the vault context: the rule must be “effectively tailored to the diverse business models and risk profiles of the investment adviser sector.” This acknowledgment that the advisory sector is far more heterogeneous than banking or broker-dealer sectors provides an institutional opening for the arguments that follow.

3. **Structural Incompatibility with Permissionless Vaults.** Traditional AML/CFT compliance presupposes structural conditions that permissionless vault infrastructure does not, and in many cases cannot, satisfy. The mismatch is one of kind, not degree. The foundational premises of the BSA compliance framework are absent from the permissionless vault architecture.

⁸⁶ Customer Identification Programs for Registered Investment Advisers and Exempt Reporting Advisers, 89 Fed. Reg. 10,738 (proposed May 21, 2024) (joint proposed rule by FinCEN and the SEC).

⁸⁷ U.S. Dep’t of the Treasury, Press Release, Treasury Announces Postponement and Reopening of Investment Adviser Rule (July 21, 2025) (stating Treasury’s intention to “revisit the scope of the IA AML Rule at a future date” of the investment adviser AML/CFT rule).

⁸⁸ FinCEN, Exemptive Relief Order to Delay the Effective Date of the Investment Adviser Rule (Aug. 5, 2025).

⁸⁹ Delaying the Effective Date of the Anti-Money Laundering/Countering the Financing of Terrorism Program and Suspicious Activity Report Filing Requirements for Registered Investment Advisers and Exempt Reporting Advisers, 90 Fed. Reg. 45,361 (proposed Sept. 22, 2025).

⁹⁰ 91 Fed. Reg. 36 (Jan. 2, 2026) (final rule delaying the compliance date to January 1, 2028).

Identifiable customers. The BSA framework is built on customer identification. Every obligation in the FinCEN rule, the AML/CFT program, SAR filing, CTR filing, recordkeeping, the Travel Rule, information sharing, and customer due diligence, presupposes that the covered institution knows or can determine the identity of persons with whom it transacts. A permissionless vault has pseudonymous depositors. A depositor interacts through a blockchain address, a cryptographic public key that does not reveal identity, domicile, or any other identifying information. There is no account opening process and no moment at which the protocol collects a name, address, or identification number.

Bilateral relationships. The BSA framework presupposes bilateral relationships. The adviser knows its clients through engagement letters, advisory agreements, and account documentation. These relationships provide the institutional scaffolding for monitoring. A permissionless vault has no such relationships. The smart contract does not “know” its depositors, does not distinguish between a retail user and a sanctioned entity, and does not monitor transactional patterns. The “relationship” consists entirely of the depositor’s interaction with public smart-contract functions available to any blockchain address on identical terms.

Centralized operators. The framework presupposes a centralized operator capable of administering the compliance program. Someone must be designated as the compliance officer; someone must conduct the risk assessment, file SARs, and respond to Section 314(a) requests. A permissionless vault may have no such actor. The curator role is defined by the smart contract’s permission hierarchy. The curator may be a pseudonymous address, a multisignature wallet controlled by persons who have never met, or may have abdicated all configurable functions. Designating such a participant as a “compliance officer” would assign a legal obligation to an actor that may lack the identity, infrastructure, and capacity to discharge it.

The SAR filing problem. A SAR requires identifying information about persons involved in suspicious activity: name, address, date of birth, Social Security number. For a permissionless vault, the only “identifying” information available is a blockchain address. The vault has no name to report, no address, no date of birth. A SAR filed with only a blockchain address provides limited actionable intelligence to law enforcement.

The Travel Rule problem. The Travel Rule requires that the transmitting institution collect and transmit specified information about the originator and beneficiary of a funds transfer. In a permissionless vault, the depositor’s transfer is a self-custodial wallet interaction with a smart contract. There is no “counterparty” in the Travel Rule sense. The bilateral information-exchange model does not map onto this architecture.

4. **Treasury’s Own Recognition.** CCI does not advance these arguments in isolation. Treasury’s April 2023 DeFi illicit-finance risk assessment acknowledged that “AML/CFT obligations or services that may fall outside current regulations will heighten AML/CFT risks.”⁹¹ That observation is narrower than a categorical conclusion about DeFi, but it supports the need to attach compliance duties to actors that actually provide the relevant service or exercise the relevant control.
5. **The Appropriate Regulatory Response.** The solution is not to declare permissionless infrastructure beyond the reach of AML policy. It is to assign AML/CFT duties to the actors that actually have custody or control over user assets, or control over the relevant customer relationship.

Centralized exchanges that distribute vault products already maintain comprehensive AML/CFT programs, including CIP, CDD, SAR filing, sanctions screening, and transaction monitoring. When a user accesses a vault through an exchange interface, the exchange’s existing compliance infrastructure may serve as the AML/CFT layer for that user’s vault participation.

Custodial wallet providers and similar intermediaries that control private keys may likewise be the actors best positioned to perform AML/CFT functions for the assets or relationships they actually control.

By contrast, this Volume should not assume that front ends with no custody or control, or stablecoin issuers as such, provide a general AML layer for every vault interaction. The GENIUS Act was enacted in July 2025, but that development does not justify expanding AML obligations here to actors that neither custody assets nor control the customer relationship. The more defensible position is that AML/CFT duties attach where custody or control exists, not merely where software, interface, or payment-asset infrastructure is present.

F. CCI Position

The preceding subsections demonstrate that the Advisers Act’s compliance framework, as currently constituted, cannot be applied to permissionless vault architectures without either destroying the architectural features that provide the strongest investor protections or imposing obligations that are operationally impossible to discharge. This is not a deficiency of the vault architecture. It is a consequence of applying a regulatory framework designed

⁹¹ U.S. Dep’t of the Treasury, Illicit Finance Risk Assessment of Decentralized Finance 28–32 (Apr. 2023) [hereinafter Treasury DeFi Risk Assessment] (“AML/CFT obligations or services that may fall outside current regulations will heighten AML/CFT risks.”).

for bilateral advisory relationships to a technology that can structurally eliminate the conditions those relationships presuppose.

CCI respectfully submits that the Commission should use its Section 211(a) classification authority to recognize a distinct compliance pathway for on-chain vault architectures that satisfy defined structural conditions and designate a responsible compliance actor where adviser obligations would otherwise attach.

That pathway should rely on independent audits, attestations, examiner-accessible records, and a designated compliance entity or equivalent accountable counterparty, rather than assuming that Commission staff should itself review code line by line. The relevant regulatory question is whether the architecture's constraints, disclosures, and controls can be demonstrated and monitored through credible third-party evidence.

On that basis, CCI requests that the Commission: (1) recognize that noncustodial architecture and code-enforced constraints can satisfy some safeguarding objectives through structure rather than intermediation; (2) calibrate disclosure obligations to front-end materials, on-chain data, and an identifiable point of contact or designated compliance entity; (3) use Section 205(e) to address performance-fee arrangements where structural protections and client gating or attestation justify relief; and (4) coordinate with Treasury and FinCEN so that AML/CFT duties attach to actors that actually custody assets or control the client relationship.

A framework built around independent verification and designated accountability would preserve investor protection without requiring the Commission to substitute staff code review for auditable market practice. It would also give curators, wrappers, and funds investing in vaults a practical way to demonstrate controls, rather than a theory of bespoke technical supervision.

The alternative, applying the existing framework without adaptation, would force vault architects to choose between regulatory compliance and architectural integrity. That choice would drive innovation to jurisdictions with more accommodating regulatory environments, depriving U.S. investors of access to transparent, constrained, noncustodial investment architectures and depriving U.S. regulators of supervisory authority over a rapidly growing segment of financial technology. CCI submits that the Commission's classification authority, the SEC's exemptive powers, and the forthcoming FinCEN scope revision provide the institutional tools to avoid this outcome.

VII. Custody: Control, Not Key Fragments

A. The Proposal and Why the Line Matters

Section VI.B identified custody as the sharpest compliance question for advisers, funds, and curators interacting with vaults. That question has changed materially because the Commission has now proposed *Adviser and Regulated Fund Custody Rules*; *Crypto Custody Rules*, Investment Advisers Act Release No. IA-7023 (the “proposal”), which would redesignate the current custody rule as Rule 223-1 and add specific crypto-custody pathways.⁹²

The proposal is extensive, and this Section does not respond to all of it. It addresses four of the Commission’s specific requests for comment. First, Request for Comment 13 asks whether the self-custody definition is appropriate “in imputing self-custody to an adviser that possesses any portion (including a non-controlling share) of the key materials,” whether self-custody should instead “be conferred on an adviser only when the adviser holds all or a controlling share of the key materials,” and “[h]ow should a ‘controlling’ private key share be defined.” Second, Request for Comment 172 asks whether, for DeFi deposits, “the analysis [should] turn on whether there has been a change in ownership and control,” on “the extent of the associated protocol’s decentralization,” or more generally on “whether and the extent to which a third party would have control of the crypto assets.” Third, Request for Comment 174 asks how the analysis should apply where a depositor “receives a claim or receipt token that entitles the owner of the crypto asset to the return of the deposited crypto asset,” including for “vault tokens that entitle the holder to a share of assets held in a smart contract.” Fourth, Request for Comment 113 asks whether “on-chain records regarding crypto asset transactions and ownership” could “satisfy the substantive requirements of the proposed self-custody account statement requirement.”

On the first question, the proposal is explicit: “self-custody” would mean, with respect to crypto assets, “possession of any portion of a client crypto asset’s key materials.”⁹³ On that definition, any fragment of a key is custody, whether or not it can move anything.

The proposal applies that definition to “even a non-controlling portion of the key materials,” on two grounds: loss of any share could result in permanent loss of the asset, and a shareholder could coordinate with other key holders to act without authorization. The

⁹² *Adviser and Regulated Fund Custody Rules*; *Crypto Custody Rules*, Investment Advisers Act Release No. IA-7023, Investment Company Act Release No. 36,353, 91 Fed. Reg. 63,870 (Oct. 6, 2026) (to be codified at 17 C.F.R. pts. 270, 274, 275, and 279) [hereinafter IA-7023].

⁹³ IA-7023, proposed rule 223-1(d)(16) (“Self-custody” would mean, with respect to crypto assets, “possession of any portion of a client crypto asset’s key materials.”).

consequences are significant. An adviser holding any share would have self-custody, which is permitted only where no qualified custodian is available; an adviser that intends to keep assets at a qualified custodian could not hold any portion of the key materials; and the key management condition would require the adviser to hold the key materials exclusively, so a shard could not be shared with the client or any other outside party. Taken together, these rules leave no room for an arrangement in which an adviser, a fund director, or another independent party holds a required but non-controlling shard as a check on others.

At the same time, the proposal does not collapse the rest of custody doctrine into key possession alone. It retains the existing custody definition's separate prongs for possession, "any arrangement" under which the adviser is authorized or permitted to withdraw client assets maintained with a custodian, and positions such as general partner or managing member that give access to client funds or securities.⁹⁴⁹⁵ For vaults, the hard question is therefore not just who holds keys, but what other authority a curator, wrapper, or affiliate retains.

CCI's answer to Request for Comment 13 is that self-custody should be conferred only where the adviser holds all or a controlling share of the key materials, and that a share is controlling where its holder, alone or with its related persons, can effect a transfer. Custody should attach to the ability to move assets, not to possession of a fragment that cannot move anything. Subsection B states that principle as a single test of unilateral control; Subsections C and D apply it to key shards and vault permissions; Subsection E applies it to Requests for Comment 172 and 174; and Subsection F explains why vault architecture can satisfy the custody rule's objectives better than traditional arrangements.

For venture investors and funds evaluating vault exposure, the line matters commercially. If any fragment is custody, then every guardian, co-signer, and veto-holder becomes a custodian, and the most protective governance designs become the most expensive to operate. A custody rule that taxes checks and balances will get fewer of them.

B. Custody Means Unilateral Control

1. **The Proposal's Own Principle.** The Commission has long treated contractual promises as insufficient when the adviser still retains the ability to reach assets. The 2003 adopting release explained that the custody definition is designed to encompass

⁹⁴ Custody of Funds or Securities of Clients by Investment Advisers, Investment Advisers Act Release No. IA-2176, 68 Fed. Reg. 56,692-94, 56,701 (Oct. 1, 2003) [hereinafter 2003 Adopting Release] (stating that the definition is "designed to encompass all arrangements under which an adviser or a related person is likely to have access to client assets").

⁹⁵ IA-7023, proposed rule 223-1(d)(6); see also 17 C.F.R. § 275.206(4)-2(d)(2) (retaining custody where the adviser is authorized or permitted to withdraw client funds or securities maintained with a custodian, or holds a position that gives access to client funds or securities).

all arrangements under which an adviser or a related person is likely to have access to client assets, and the 2009 amendments strengthened independent controls after Madoff because formal restrictions can fail when technical or institutional access remains.⁹⁶⁹⁷

The proposal itself states the governing principle: the custody rule applies when an adviser “has the ability to change a client’s ownership and possession of its assets,” because that ability exposes the client to loss, misuse, misappropriation, theft, or the adviser’s financial reverses. The proposal illustrates the point with the familiar check example: an adviser holding a client’s check payable to a third party does not have custody, because it cannot use the check to change ownership of the client’s cash. A non-controlling key share is the digital equivalent of that check. Its holder cannot use it to change ownership of anything.

2. **One Test: Unilateral Control.** CCI proposes a single test: custody should turn on unilateral control. Control is the concept the custody rule has always policed, the organizing concept of the Control Framework, and the concept the proposal itself uses when it asks whether the DeFi analysis should turn on “change in ownership and control” or on whether “a third party would have control.” But control must be defined functionally, by what a person can do with client assets, not by what it holds. CCI therefore defines unilateral control as the ability to extract: a person has custody of client crypto assets, including assets deposited in a vault, only if the keys or permissions it holds, alone or together with its related persons, allow it to move those assets to an address it controls, or to bring about an equivalent economic transfer, without the independent approval of an unaffiliated party and without a timelock that gives depositors time to exit. The same test answers Request for Comment 13 (key shards), the question of vault permissions, and Request for Comment 172 (DeFi deposits).

The test is deliberately incentive-based. The custody rule exists because an adviser that can move client assets alone has both the opportunity and, in a crisis, the incentive to misuse them. Where an adviser cannot move assets without an independent party, that opportunity is gone, and the policy reasons for the custody rule are correspondingly reduced. The test still reaches every case that matters: full key control, controlling key shares, authority to

⁹⁶ Custody of Funds or Securities of Clients by Investment Advisers, Investment Advisers Act Release No. IA-2176, 68 Fed. Reg. 56,692, 56,701 (Oct. 1, 2003) [hereinafter 2003 Adopting Release] (stating that the definition is “designed to encompass all arrangements under which an adviser or a related person is likely to have access to client assets”).

⁹⁷ Custody of Funds or Securities of Clients by Investment Advisers, Investment Advisers Act Release No. IA-2968 (Dec. 30, 2009), 75 Fed. Reg. 1,457-58 (Jan. 11, 2010) [hereinafter 2009 Adopting Release] (stating that the amendments “will provide for a more robust set of controls over client assets designed to prevent those assets from being lost, misused, misappropriated or subject to advisers’ financial reverses”).

instruct a custodian, and, as Subsection D explains, administrative permissions that open an indirect path to extraction.

The test does not depend on labels. A multisignature arrangement that is multisig in name but controlled by one person or affiliated group gives that group unilateral control, and that group has custody. Independence of the parties is therefore an element of the test. The existing presumption of operational independence for related persons, which asks among other things whether advisory personnel have “the opportunity to misappropriate” client assets, offers a ready model for assessing it.

3. **Contractual Limitations Still Do Not Defeat Custody.** The test is not a loophole. If a curator, wrapper, or affiliate can still cause a transfer through key possession, custodian instructions, upgrade authority, or affiliated control, a side letter or policy manual saying it will not do so is not enough. Where contractual documents say one thing and the deployed permissions say another, staff and investors will follow the permissions, and they should.

Code is different. Enumerated permissions, timelocks, immutable withdrawal logic, hard-coded redemption rights, destination allowlists, and multisignature thresholds do not ask an adviser to restrain itself; they remove the capacity the custody rule polices. Throughout this report CCI has argued that code-enforced constraints can be more reliable than procedural ones. The custody rule is where that argument matters most: an adviser who cannot move assets is safer for clients than an adviser who promises not to.

C. Non-Controlling Key Shards Should Not Be Custody

CCI urges the Commission to provide that possession of a non-controlling share of key materials is not self-custody and is not custody. A share is non-controlling where its holder, alone or with its related persons, cannot effect a transfer. The proposal’s two concerns, misappropriation and loss, are real, but neither justifies treating a non-controlling share as possession of the asset.

Misappropriation. A non-controlling share-holder cannot move assets. The proposal’s concern is that it could coordinate with other key holders. But where the other key holders are independent, adding a share-holder makes coordination harder, not easier: one more independent party must agree before anything moves. The Commission recognized exactly this when it considered permitting a client to hold a key share that is “necessary but not sufficient” to move the assets, acknowledging that requiring mutual authorization of each transfer could reduce the risk of unauthorized transfer. Collusion among independent

parties is a risk in every system of checks and balances; it is not a reason to classify each check as a custodian.

Loss. The Commission rejected the client co-signing alternative because of loss risk: spreading key materials to parties outside the adviser's supervision could increase the risk of theft or loss. Loss is a genuine concern, but it is a concern about key reconstruction, not about access. The two can be separated. A well-designed threshold arrangement does not fail when one share is lost; the remaining holders can rotate the lost share out and issue a new one. The proposal itself already treats key backup, recovery, rotation, and geographic separation as distinct key-management practices, and it asks separately how third-party key recovery works and whether recovery could shift control.

CCI therefore proposes a two-part approach. First, holders of non-controlling shares, including required shares that function as a veto, would not have custody, but would be subject to a short key-hygiene condition: written key-management and recovery policies, prompt rotation procedures if a share is lost or compromised, and disclosure of the arrangement to clients. Second, any person able to reconstruct a controlling key set, whether through backup, recovery services, or aggregation of shares, would be treated as having custody, because the ability to reconstruct is authority to obtain possession.

The stakes are practical. Consider two arrangements. In the first, a non-discretionary adviser holds one share of a client's multisignature wallet so that no transaction can occur without the adviser's review, while the client and others hold the remaining shares. In the second, an independent fiduciary, such as a fund director, holds a required share of a vault's administrative multisignature so that no configuration change can take effect until that fiduciary has been consulted; in a four-of-five arrangement, for example, that party is one of the required four but can do nothing without three others. Both arrangements add an independent check, and neither gives the share-holder any ability to move assets. Under the proposal as drafted, both would be custody.

D. Vault Permissions Are Not Key Materials

The keys at issue in most curated vaults are not keys to depositor assets. They are keys to administrative addresses, usually multisignature wallets, that hold defined roles over the vault's configuration. A typical design separates an owner role that appoints other roles, a curator role that sets markets, caps, and fees, an allocator role that moves assets only among markets the curator has already enabled, and a guardian or sentinel role that can only reduce risk, for example by lowering caps, withdrawing allocations, or vetoing pending changes. Risk-increasing changes are typically subject to timelocks that let depositors exit and let the

guardian intervene. In common designs, even a party that triggers a reallocation never takes custody of vault assets.

The proposal defines key materials by reference to the private key needed to access and effectuate transactions in a crypto asset. A role key that can change a vault's configuration, but cannot transact in depositor assets, does not fit that definition, and CCI asks the Commission to confirm as much. Holding a role key should raise a custody question only where the role's permissions create a path to extraction.

That qualification matters, and CCI does not minimize it. The proposal notes that administrative privileges to upgrade, modify, or pause a contract could be abused. The clearest example in a lending vault is collateral listing. A role that can add a new collateral asset, set its oracle and loan-to-value ratio, and then borrow against it could list an asset it controls or can mint, borrow the vault's assets against it, and leave depositors holding worthless collateral. That is functionally a withdrawal. A role with that combination of powers, exercisable alone and without a timelock, has unilateral control and should be treated as having custody.

The answer to that risk is the separation of roles, which is why protective sharding must not itself be custody. If listing a collateral asset requires a timelock, and an independent guardian can veto the listing during that window, no single party can complete the extraction path. The separation works only if the roles are genuinely independent: if the curator and the guardian are affiliates, or share signers, the path is unilateral again. Separately, the retained prongs of the custody definition continue to apply: a curator with no key materials may still have custody if the surrounding arrangement authorizes it, directly or through affiliates, to obtain possession from a custodian or through pooled-vehicle control.⁹⁸

This produces a clear distinction between custody authority and strategy authority. Custody authority is the power, alone or with affiliates, to move client assets or vault receipt tokens outside the authorized perimeter. Strategy authority is the power to deploy assets within a disclosed perimeter: selecting among enabled markets, rebalancing within preset caps, or applying eligibility rules. Strategy authority raises advisory questions addressed elsewhere in this Volume, but it is not custody.

In practice, the following design features move a vault back toward custody:

⁹⁸ 1A-7023, proposed rule 223-1(d)(6); see also 17 C.F.R. § 275.206(4)-2(d)(2) (retaining custody where the adviser is authorized or permitted to withdraw client funds or securities maintained with a custodian, or holds a position that gives access to client funds or securities).

- a single role that can add new collateral assets or new destinations for vault assets on its own;
- authority to upgrade the contract without giving depositors time to exit first;
- the same person or affiliated group holding both the strategy role and the guardian role;
- a multisignature wallet that, in practice, one person or affiliated group controls; and
- timelocks that are too short to act on, or no timelocks at all.

For funds investing in vaults, the diligence question is therefore not what the roles are called but what combinations of powers exist and who holds them. A role that looks innocuous in isolation may create custody risk when paired with upgrade, governance, or wrapper control held elsewhere in the same group.

Where the architecture achieves genuine separation, allocation conflicts remain real, but they are better addressed through disclosure, governance, and Sections 206(1) and 206(2) than through the custody rule.⁹⁹

E. DeFi Deposits and Vault Receipt Tokens

The proposal states that an adviser or permitted custodian would deposit client crypto assets in a smart contract only if the asset continues to be maintained by the adviser in self-custody or by a permitted custodian, or an exception applies. Request for Comment 172 asks how to make that determination: whether “the analysis [should] turn on whether there has been a change in ownership and control,” on “the extent of the associated protocol’s decentralization,” or more generally on “whether and the extent to which a third party would have control of the crypto assets.”¹⁰⁰ The unilateral control test set out in Subsection B answers that question: deposited assets remain maintained by the adviser or permitted custodian where no other person has unilateral control over them.

Decentralization matters, but only for what it signifies. Throughout this report, CCI has argued that what makes a vault different from a managed account is that no person controls it. Decentralization, properly understood, is simply the absence of control by any person or coordinated group. The Commission therefore need not decide how decentralized a

⁹⁹ Advisers Act §§ 206(1), 206(2), 15 U.S.C. §§ 80b-6(1), 80b-6(2) (prohibiting investment advisers from engaging in any transaction, practice, or course of business that operates as a fraud or deceit upon any client or prospective client). Allocation-related conflicts arising from strategy authority are more appropriately addressed through the Act’s fiduciary and disclosure provisions than through the custody rule.

¹⁰⁰ IA-7023 at 63,924.

protocol is in the abstract, a question that is hard to answer and invites debate about thresholds. It can ask the more direct question that decentralization stands in for: does anyone have unilateral control? Vault architecture lets that question be answered from the deployed permissions, the timelocks, and the identity and independence of the role-holders, all of which can be verified on-chain.

Request for Comment 174 asks: “Should the custody rules permit these arrangements if the (i) claim or receipt token, rather than the deposited crypto asset, is held in a wallet exclusively controlled by the permitted custodian or adviser holding the asset in self-custody and (ii) there are no or limited restrictions on the ability to use the claim or receipt token to recover the deposited crypto asset and any restrictions that do exist are enforced by the smart contract’s code and not subject to the discretion of any person or group of persons?”¹⁰¹ CCI’s answer is yes. Where both conditions are met, the vault receipt token is the client’s claim, it sits in a controlled wallet, and the path from token to underlying asset is defined by code that no person can override. That is the Control Framework applied to custody. The same request asks how the analysis “would . . . differ for . . . vault tokens that entitle the holder to a share of assets held in a smart contract as opposed to the specific asset the holder deposited.”¹⁰² CCI submits that it should not differ, provided redemption of the pro rata share is objective and code-enforced.

The proposal’s concerns about smart contract risk, including bugs, exploits, and abuse of administrative privileges, are real. But they are investment and operational risks that a fiduciary must diligence and disclose; they are not custody in the sense of an adviser’s ability to take client assets. The proposal itself contemplates disclosure of DeFi risks, including the risk of third parties gaining access through protocol vulnerabilities. CCI submits that those risks belong in the adviser’s duty of care and disclosure, not in a bar on depositing assets into smart contracts where control is maintained.

F. Where Vault Architecture Does Better

The custody rule is a means, not an end. Each of its requirements serves an identifiable objective: preventing misappropriation, separating client assets from the adviser’s, independently verifying that assets are where they are said to be, keeping clients informed,

¹⁰¹ *Id.*

¹⁰² *Id.*

and protecting assets from the adviser's financial reverses.¹⁰³¹⁰⁴ Traditional custody meets those objectives by placing an intermediary between the adviser and the assets and by checking that intermediary periodically, after the fact. Vault architecture can meet several of the same objectives directly, continuously, and in a form anyone can verify. CCI does not claim that code is better on every dimension, and the table below identifies where it is not. But where it is better, the custody rules should say so.

The following table compares, objective by objective, the traditional mechanism with what a well-designed vault can do.

Custody Objective	Traditional Mechanism	How Vault Architecture Can Do Better
Preventing misappropriation	A qualified custodian holds the assets; the adviser is trusted not to instruct improper transfers, and misconduct is detected after the fact.	Code removes the capacity to misappropriate: no role can move depositor assets outside enumerated functions, and any extraction path requires independent approval or a timelock. Prevention replaces detection.
Joint authorization	Not required by the existing rule, which relies on the custodian. The proposal would require joint authorization by two or more designated persons of the adviser, but only for advisers using the new self-custody pathway. Many advisers and companies adopt dual-approval policies as best practice.	Multisignature thresholds are the on-chain version of a dual-approval policy, but enforced by cryptography rather than by policy. Signers can also be independent of the adviser, such as guardians or fund directors holding a required but non-controlling share, which makes the check stronger, not weaker.

¹⁰³ 2003 Adopting Release, 68 Fed. Reg. at 56,692–95 (Arguing that requiring investment advisers to maintain client assets with qualified custodians, and having a reasonable basis for believing that those qualified custodians are sending account statements to their clients, will significantly decrease the risk that client assets will be “lost, misused, or misappropriated.”).

¹⁰⁴ 17 C.F.R. § 275.206(4)–2(a)(1)–(4) (setting forth the qualified-custodian, notice, account-statement, and surprise-examination requirements). See also Chris Brummer & TuongVy Le, *Vaults as Qualified Custodians: Functionally Equivalent Safeguarding* (Joint White Paper, June 2026) (organizing the custody rule around five tenets, namely safeguarding, segregation, client notifications, account statements, and independent verification, and arguing that a properly conditioned vault paired with continuous verification can perform the protective functions of a qualified custodian).

Custody Objective	Traditional Mechanism	How Vault Architecture Can Do Better
Segregation	Separate accounts on a custodian's books, reconciled periodically.	Vault assets sit at a contract address separate from any adviser address, and each depositor's claim is recorded as a vault receipt token balance on the same public ledger.
Independent verification	Annual surprise examination or internal control report by an independent accountant, testing a sample at a point in time.	Balances, allocations, and permissions can be reconciled against the network by anyone at any time. Auditors verify code and controls once; the ledger verifies positions continuously.
Client information	Quarterly account statements from the custodian, which the client is urged to review.	Real-time on-chain state, including every transaction, pending change, and fee accrual, displayed through front ends and alert tools. Clients see changes before they take effect, not after the quarter ends.
Change management	Changes to account terms or authority are governed by contract and notice, with limited ability for the client to act before they take effect.	Risk-increasing changes are timelocked and publicly visible; independent guardians can veto them; depositors can exit before they take effect.
Protection from the adviser's financial reverses	Assets held by a regulated custodian outside the adviser's estate.	The adviser never holds the assets; redemption runs through the contract and does not depend on the adviser's solvency or cooperation.

Custody Objective	Traditional Mechanism	How Vault Architecture Can Do Better
Recovery and reversibility	Erroneous or fraudulent transfers can often be reversed; insurance and statutory backstops may apply.	Here traditional custody is stronger. On-chain transfers are generally irreversible, so vault architecture must rely on prevention, and on insurance, indemnity, or other arrangements, rather than on reversal.
Security risk	Clients bear counterparty risk: the custodian's internal controls, employees, systems, and solvency, which are opaque to the client and tested only periodically through regulation and control reports.	Counterparty risk is largely replaced by code risk: bugs, exploits, oracle failures, and compromised keys. These risks are real and losses have been significant, but they are visible in advance: the code can be audited and formally verified, dependencies can be mapped and disclosed, and changes can be gated by timelocks. They call for diligence and disclosure, which are investment and operational safeguards rather than custody.

Two consequences follow for how the rules should apply to vaults. The first concerns account statements. Where the vault itself is the client, it is not obvious what delivering an account statement means. The proposal already points toward the answer: it treats the crypto asset address as the account, permits the required information to be transmitted in a human-readable electronic format instead of a consolidated statement, notes commenters' view that on-chain records are reliable and independently verifiable, and excuses audited pooled vehicles from the statement requirement. For wrapped vaults, statements or audited financials can go to beneficial owners. Unwrapped vaults have no general partner, no limited partners, and no audit. In answer to Request for Comment 113, CCI urges the Commission to recognize that a vault's public on-chain state, showing each depositor's share balance, total assets, allocations, and every transaction, satisfies the transmission alternative for each beneficial owner when displayed through a front end, and to recognize standardized vault

accounting as substitute compliance for both the statement requirement and the audit exception.

The second concerns who supplies which safeguard. Several of the strongest safeguards, including protocol audits, protocol-level safety controls, and examiner-accessible verification, sit at the infrastructure level, outside a curator's control; a curator cannot commission an audit of a lending protocol's core contracts. The proposal already supplies a model: under the State trust company rules, the adviser receives and reviews the custodian's internal control report rather than producing it, and the auditor's crypto control objective is reconciliation to the crypto network using unaltered network data. The same allocation should apply to vaults. Curators should answer for what they control, namely their own role keys, the independence of their roles, and disclosure of conflicts, and should be able to rely, with documented diligence, on protocol-level audits and attestations produced once and shared across curators, or furnished through a designated compliance entity or industry attestation framework.

G. Recommendations: A Technology-Recognition Pathway

CCI does not ask the Commission to exempt vaults from the custody rule. It asks the Commission to apply the rule to what custody actually is. Specifically, CCI urges the Commission to confine self-custody and custody to persons with unilateral control, including holders of a controlling key share and anyone able to reconstruct a controlling key set; to confirm that non-controlling key shares, including required veto shares, are not custody, subject to basic key-hygiene conditions; to confirm that vault role keys are not key materials unless the role's permissions give its holder unilateral control; to permit DeFi deposits where vault receipt tokens are held in a controlled wallet and redemption is code-enforced; to recognize on-chain vault accounting as substitute compliance for account statements; and to permit curators to rely, with documented diligence, on infrastructure-level audits and attestations.

At a minimum, those conditions should include the following:

1. No person has unilateral authority to withdraw depositor assets.
2. Redemption rights are preserved in code, either at any time or on code-enforced cycles.
3. Vault assets are segregated cryptographically, and any vault receipt token can be clearly tracked.
4. Risk-increasing changes go through transparent, time-locked governance.

5. Independent safety controls are in place; these may be supplied at the infrastructure level.
6. Independent security audits and examiner-accessible verification are available; curators may rely on them with documented diligence.
7. There is no undisclosed routing of assets to affiliates.
8. A designated compliance entity is identified wherever adviser obligations attach.

These conditions should not pick technologies or vendors, but neither should the rule be indifferent to how a safeguard is delivered. Where a timelock, a cap, a separation of roles, or an independent veto signer protects clients more reliably than a written policy or a periodic check, the rule should give it at least as much credit. The proposal already leans this way when it asks whether limits on recovering deposited assets should be “enforced by the smart contract’s code and not subject to the discretion of any person.” The conditions also work as a package. A vault that meets most of them does not present a slightly smaller version of the same risk; it presents a different risk, and should be evaluated as such.

The conditions are useful well beyond any request for relief. Curators can build to them, and funds investing in vaults can use them as a diligence checklist. The Commission can implement them in stages, starting with staff guidance or conditioned no-action relief and moving to rule amendments as experience accumulates, relying on independent audits and accountable entities rather than on staff review of code.¹⁰⁵ The goal is the one the custody rule has always had: making sure no one can take client assets. Well-designed vaults are built to do exactly that, and the rule should recognize it.

VIII. Conclusion

This Volume examines the Act through a single organizing question: when does any person, for compensation, exercise judgment over another’s securities or securities decisions in a way that the Act treats as advisory?

The following nine principles synthesize this Volume’s analysis.

1. **The predicate is the regulated function, and control shows whether anyone performs it.** The Act is not triggered by code, automation, or financial infrastructure

¹⁰⁵ 2026 MOU, *supra* note 117 (establishing a framework for joint regulatory initiatives in areas of overlapping jurisdiction, trading, and market structure for digital assets).

in the abstract. It is triggered when a person exercises judgment over another's securities or securities decisions for compensation.

2. **Wrapped vaults should generally be analyzed as funds.** Where a vault sits inside a legal wrapper, the wrapped vault should ordinarily be treated as the client, with diligence, disclosure, onboarding, and gatekeeping handled at the vault or designated-compliance-entity level rather than per depositor. A curator exercising judgment for a wrapped vault is advising the fund, and the relevant questions are the scope of that relationship and the calibration of the resulting duties.
3. **Unwrapped vaults require guidance, and an impersonal-product argument remains available.** For permissionless vaults without a wrapper, the Commission should say how client, disclosure, and contact obligations work, including whether an unwrapped vault can itself be treated as a pooled investment vehicle. In the alternative, a participant using a published, impersonal vault strategy may be using a product rather than receiving advice. Section III.E develops that argument for curators that publish a model in code and revise it on notice.
4. **For unwrapped vaults, the line is whether the curator renders personalized advice.** Discretion alone does not decide adviser status, because a person may be an investment adviser without discretionary authority. Where securities are involved, a curator that publishes a model in code, revises it on an announced schedule subject to notice and exit, is confined between revisions to objective rules, and has no custody authority does not render personalized investment advice to anyone; each depositor elects to follow the published model, and the code implements it for her. Code that reallocates on its own between revisions stays on that side of the line only if the algorithm is deterministic and disclosed, cannot be overridden except through a noticed revision, and is predictable. A curator that can reallocate at will or without notice is managing capital, and the case for adviser status is strong. Setting credit parameters for collateral and lending positions that are not securities is not advice about securities, whether or not the role is curatorial.
5. **Protective roles are narrow and objective.** A role is protective only when it is limited to preset, objective triggers and cannot direct capital or affect returns. Discretionary changes, even risk-reducing ones, are curatorial and should at least be disclosed. Curatorial status is not itself adviser status; it bears on the Act only where securities are involved.
6. **Compensation and business follow the advice and securities predicates.** Once advice about securities exists, compensation usually will as well, and repeated

strategy design or operation can satisfy the business element. The harder limiting work is done by the advice, securities, and control inquiries.

7. **The depositor-side conditions reduce reliance but do not replace the Act.** Comprehensibility, verifiability, observability, predictability, notice, and actionability matter because they reduce dependence on a role-holder's judgment. They are strongest when expressed through the canonical objective conditions defined in Introduction Section IV.F.
8. **Custody should turn on unilateral control, not key fragments.** The proposal would treat possession of any portion of key materials as self-custody. A person should have custody only if it can, alone or with its related persons, move client assets or bring about an equivalent economic transfer without independent approval or an exit-preserving timelock. On that test, holders of required but non-controlling key shares, such as independent guardians and fund directors, and holders of protective vault permissions are not custodians, while a role that can list collateral it controls and borrow against it without a check is. The right distinction is between custody authority and strategy authority, tested against the deployed permissions.
9. **The practical path is conditioned modernization, not categorical exemption.** The **Commission** should use classification, exemptive, **and** custody-rule authorities **to** build a conditioned pathway grounded in independent audits, attestations, transparent disclosures, and accountable compliance entities, rather than in assumptions that code alone or labels alone answer the Act. Section 211(a), Section 205(e), Section 206A, and the proposal provide the relevant tools.¹⁰⁶¹⁰⁷¹⁰⁸¹⁰⁹

CCI's Position

CCI's analysis is consistent with the Commission's recognition that the application of existing law to crypto vault structures must be fact-specific and grounded in the economic realities of each architecture.

The Advisers Act's fiduciary protections should be directed where they are needed: at persons who advise a fund or other identifiable client, and at role-holders who retain

¹⁰⁶ IA-7023

¹⁰⁷ Advisers Act § 211(a), 15 U.S.C. § 80b-11(a) (authorizing the Commission to "classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters").

¹⁰⁸ Advisers Act § 205(e), 15 U.S.C. § 80b-5(e) (authorizing the Commission, by rule or order, to "conditionally or unconditionally exempt any person or transaction, or any class or classes of persons or transactions" from the performance-fee prohibition).

¹⁰⁹ Advisers Act § 206A, 15 U.S.C. § 80b-6a (authorizing the Commission to "conditionally or unconditionally exempt any person or transaction . . . from any provision or provisions of this subchapter" by rule, regulation, or order, "if and to the extent that such exemption is necessary or appropriate in the public interest and consistent with the protection of investors").

discretion to change outcomes in ways depositors cannot independently evaluate, anticipate, or avoid.

Applying the Advisers Act categorically to all vault architectures, without regard to the functional distribution of control and the adequacy of depositor agency, would extend its reach beyond the relationships it was designed to regulate. It would also force vault architects to choose between regulatory compliance and architectural integrity, driving innovation to jurisdictions with more accommodating regulatory environments and depriving U.S. investors of access to transparent, constrained, noncustodial investment architectures.

CCI respectfully submits that the Commission and its staff should engage with CCI members on these questions. The Crypto Task Force process provides the venue.¹¹⁰ CCI stands ready to assist.

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¹¹⁰ SEC, Statement on the Establishment of the Crypto Task Force (Jan. 21, 2025). Commissioner Hester M. Peirce serves as the Task Force lead.