Post-Class Summary: DeFi Business Models — Tokenomics-as-BM

Key Frameworks

Business Model Canvas Applied to a Token-Driven Protocol

The Business Model Canvas decomposes any venture into nine interlocking elements — value proposition, customer segments, channels, revenue streams, key resources, key activities, key partners, cost structure, and customer relationships. For a DeFi protocol, the canvas reveals an unusual coupling: a single governance token simultaneously fills four of the nine blocks. Customer Segments equals the holder list; Revenue Streams routes through the same token via fee accrual or buybacks; Key Resources is the token treasury that pays contributors and bootstraps liquidity; and the Value Proposition is denominated in the same token. The canvas still applies, but its blocks are no longer loosely coupled — and that coupling is the entire business model.

Platform Economics in a Token-Compressed World

Many DeFi protocols connect multiple participant groups — liquidity providers and traders, borrowers and lenders, stakers and synthetic-asset users. These platforms exhibit cross-side network effects: each additional participant on one side makes the protocol more valuable to the other. The twist in tokenomics-as-BM is that the same token sits on every side, so cross-side network effects compound through a single instrument. The chicken-and-egg problem is solved through token incentives that bootstrap one side, then attract the other — but the same incentives create correlated failure when the token's value depends on flows that have not yet materialised.

Unbundling-Rebundling on a Single Token

Christensen's disruption framework explains how DeFi protocols enter: they unbundle a single financial primitive (a swap, a vault, a synthetic asset) and deliver it without the intermediaries that off-chain finance requires. The rebundling phase, however, looks different from the FinTech super-app pattern: the rebundled artifact is layered on top of the same governance token, so adding a new product strengthens the token's network effects rather than fragmenting attention across separate brands. MakerDAO's evolution from a vault product to a synthetic monetary system illustrates the pattern — each rebundling step expands the token's role rather than launching a sibling instrument.

Value Chain Deconstruction When Every Link Is Code

Evans and Wurster argued that information-rich value chains are vulnerable to deconstruction when digital alternatives reduce the cost of coordinating across firm boundaries. DeFi takes this argument to its endpoint: every link of the banking value chain — acquisition, onboarding, manufacturing, distribution, servicing, risk management — is now a smart contract or an external coordination layer rather than a department. Protocols specialise in one link (Synthetix in manufacturing, decentralised-exchange routers in distribution, liquidator bots in servicing) and the question of who captures the value reduces to the question of who controls the contract that mediates each link.

Regulatory Arbitrage With a Token-Inheritance Twist

Some DeFi protocols gain an early advantage by operating outside the regulatory perimeters that constrain intermediated finance — no licence requirement, no KYC obligation, no on/off switch once the contract is deployed. The arbitrage is inherently temporary: regulators eventually act on either the entity, the instrument, or the contract address itself. The strategic question is whether the protocol can convert its head start into a durable position before the gap closes. The Tornado Cash episode demonstrated that in tokenomics-as-BM the cap table inherits the legal status of the token — which means an arbitrage that becomes a sanctions designation reaches every canvas block at once, not only the contract that was designated.

Company Cases Summary

Protocol	Value Creation Mechanism	Key Framework	What Makes It Different
Uniswap	Constant-product swap pool with token-controlled fee switch	Platform Economics on a single token	Multi-sided platform where every side runs through the same governance token
MakerDAO	Collateralised vaults that mint a synthetic dollar, rebundled into a sovereign-grade currency stack	Unbundling-Rebundling on monetary functions	Endpoint of disintermediation looks like a central bank without the central
Synthetix	Synthetic-asset manufacturing backed by a single staking pool that is also the cap table	Value Chain Deconstruction	Stakers absorb the tail-risk and earn the manufacturing fee through one token
Tornado Cash	Privacy-mixing contract; permissionlessness as the value proposition	Regulatory Arbitrage → Sanctions Inheritance	Demonstrated that the cap table inherits whatever legal status the token acquires
dYdX	Perpetual-futures matching engine; migrated from a rented host to its own application-specific chain	Infrastructure Test in Tokenomics-as-BM	Same business activity, different value capture once validator fees route to the protocol's own token holders

The Five-Test Framework for Tokenomics

Use these five tests to evaluate any DeFi protocol's tokenomics-as-BM:

1. **Friction test.** Identify the single largest intermediation friction the protocol removes from off-chain finance.
   Application: Uniswap removes the need for an order-book broker to match counterparties; if the broker function disappeared industry-wide, would Uniswap still have a reason to exist?

2. **Platform test.** Determine whether the protocol's network effects are symmetric across the four token roles (equity, product, revenue, customer).
   Application: MakerDAO's stakers, voters, fee payers, and treasury holders are largely the same wallets, so cross-side effects amplify both growth and the speed at which a price drop propagates.

3. **Rebundling test.** Assess whether the protocol can layer adjacent modules onto the same token without diluting any of its four roles.
   Application: Synthetix has rebundled multi-collateral staking, perpetual markets, and on-chain options on top of one staking pool — each new product strengthens the cap table rather than competing for it.

4. **Infrastructure test.** Ask whether the protocol owns its rails or rents them.
   Application: dYdX migrated from a general-purpose host chain to its own application-specific chain so that validator fees would route to its own token holders rather than to a third-party cap table.

5. **Arbitrage test.** Evaluate whether the regulatory perimeter on the token's legal status is widening or contracting.

Application: The Tornado Cash sanctions designation demonstrated how quickly a permissionless wedge can become a sanctioned status, and how the cap table inherits the new legal classification.

Connections to Other Topics

The frameworks above connect directly to several other course themes. The smart-contract business-model lens (Lesson Five) examines who pays for code that cannot be changed — the audit-and-insure economics that sit BENEATH the tokenomics layer and that any DeFi protocol must purchase before launch. The composability business-model lens (also Lesson Five) examines where value accrues in a stack of forkable primitives — the cross-protocol question that complements the within-protocol token-role question studied here. The blockchain business-model lens (Lesson Five again) examines how venues, custody firms, and analytics vendors split value across the protocol-infrastructure-application stack — the off-protocol firms that ultimately interact with the tokens this lens covers. The regulatory-arbitrage test links to Lessons Four and Seven on RegTech, sanctions screening and operational resilience, where we examine how oversight perimeters expand to absorb new instruments and how compliance investment becomes a moat for the firms that get there first.

