

Pre-Class Discovery Handout: DeFi Business Models — Tokenomics-as-BM

Activity 1: The Four-Roles Canvas Detective

Scenario: Pick ONE DeFi protocol with a governance token — a decentralised exchange, a money-market protocol, a synthetic-asset platform, or a stablecoin issuer. Investigate how its token simultaneously plays the four canvas roles below. Think beyond marketing material; focus on what the token actually does inside the protocol.

Token Role	Your Analysis
Equity role <i>What right or claim does the token grant on protocol cash flows or governance?</i>	
Product role <i>What features (votes, fee rebates, premium tiers) does holding the token unlock?</i>	
Revenue role <i>How do protocol fees route back to the token (buy-backs, burns, direct distribution)?</i>	
Customer role <i>Are the most active users typically also the largest holders? How do you know?</i>	
Cap-table identity <i>Who would be harmed first if the token price collapsed?</i>	

- Q1:** Which of the four roles is the token most clearly fulfilling, and which is the weakest? What does that imbalance suggest about the protocol's resilience?
- Q2:** If governance voting were taken away from the token tomorrow, would the other three roles still hold together? Why or why not?
- Q3:** Identify one event (a price drop, a sanctions designation, a competing fork) that would damage all four roles at once. Describe the cascade in two or three sentences.

Activity 2: The Rebundling Map

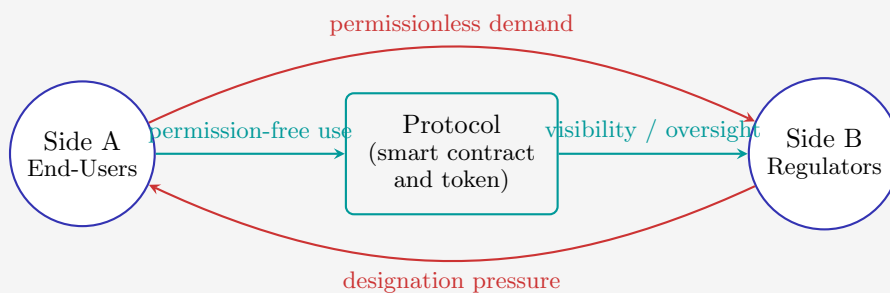
Scenario: The five DeFi protocols below all entered with a single-product wedge and have since added adjacent functions on top of the same token. Match each protocol to its original wedge, then list one or two adjacent functions it has rebundled.

Protocol	Original Wedge / Adjacent Rebundling
Uniswap	Constant-product swap pool
MakerDAO	Collateralised vault minting a synthetic dollar
Synthetix	Synthetic-asset minting from a single staking pool
dYdX	Perpetual-futures matching engine
Tornado Cash	Privacy-mixing contract for transfers

- Q1:** For each pair, describe in one sentence what additional function (beyond the original wedge) the protocol has rebundled on top of the same token.
- Q2:** Which of these protocols has rebundled the most aggressively? Which has stayed closest to its original wedge? Why might the second strategy still be viable?
- Q3:** Why does rebundling on the same token amplify both upside (network effects) and downside (correlated failure) compared with rebundling via a separate token per product?

Activity 3: The End-User vs Regulator Puzzle

Scenario: A DeFi protocol connects two sides whose interests do not naturally align: end-users who value permissionlessness, and regulators who value identifiability. Neither side finds the protocol useful without the other — end-users need rails; regulators need oversight points.



- Q1:** Why is the end-user / regulator dynamic NOT a classical two-sided platform? What does the protocol gain — and lose — from each side?
- Q2:** “Cap table inherits the legal status of the token.” Restate that claim in your own words and explain what it means for end-users who hold a token whose contract has been designated.
- Q3:** Which side gains the most when the protocol is removed from the regulatory perimeter? Which side gains the most when it is brought inside? Are these the same actors who launched the protocol?

Solutions

Activity 1: The Four-Roles Canvas Detective

- A1: Model answer for Uniswap:** The equity role and the customer role are the strongest — governance-token holders are also typically the largest liquidity providers, so the cap table and the user base overlap heavily. The revenue role is the weakest in plain economic terms because the protocol's fee switch is governance-controlled and does not always route fees to the token; the product role (governance voting) is also relatively narrow. The imbalance suggests the protocol's resilience depends on holders continuing to value the right to vote on a fee switch even before that switch is on, which is itself a fragile assumption.
- A2:** Most of the four roles would survive on their own — liquidity provision earns swap fees regardless of governance — but the equity role would collapse, and with it the value of the token. Because the token also defines the customer base, removing the equity role detaches the cap table from any economic claim, leaving holders without a reason to hold.
- A3:** A sanctions designation against the contract address triggers all four roles at once: equity becomes unsellable at regulated venues, product access (governance voting) becomes legally hazardous, revenue (any fee accrual) becomes impossible to receive, and the customer base disperses to forks. The cascade illustrates the tokenomics-as-BM fragility — correlated failure across canvas blocks.

Canvas elements (Uniswap, four-roles view):

- **Equity role:** governance token grants voting weight on protocol parameters, including the fee switch.
- **Product role:** holding qualifies for proposal rights, signals alignment, occasionally unlocks airdrops.
- **Revenue role:** when the fee switch is enabled, a portion of pool fees accrues to token-holder voting weight.
- **Customer role:** the most active liquidity providers and the most active voters are largely the same wallets.
- **Cap-table identity:** the token IS the cap table; the customer list IS the token-holder list.

Activity 2: The Rebundling Map

- A1:** Uniswap → rebundled with concentrated-liquidity pools, fee-tier customisation, and cross-chain deployments on the same token. MakerDAO → rebundled with peg-stability modules, savings rates, and real-world-asset collateral on the same governance token. Synthetix → rebundled with multi-collateral staking, perpetual-futures markets, and on-chain options on the same staking pool. dYdX → rebundled by migrating to its own application-specific chain so validator fees accrue to its own token holders. Tornado Cash → stayed close to its original mixing wedge until sanctions designation arrested any further rebundling.
- A2:** MakerDAO has rebundled most aggressively — from a single vault product to a sovereign-grade currency aspiration. Tornado Cash stayed closest to its wedge by both choice and constraint. The narrow strategy can still be viable when the wedge itself is too small to attract rebundling competitors, or when regulatory exposure makes adjacent products more dangerous than valuable.
- A3:** Single-token rebundling means each new product strengthens the same instrument's network effects: more uses for the token attract more holders, who in turn attract more product launches. The downside is the same channel: a price collapse propagates across all rebundled products simultaneously, because each product's incentive design references the same token.

Activity 3: The End-User vs Regulator Puzzle

- A1:** This is not a classical two-sided platform because the two sides do not exchange value with each other; instead, they exchange opposing claims on the protocol itself. End-users want the protocol to remain permissionless; regulators want it to become identifiable. The protocol gains user demand from one side and legitimacy from the other — and loses on either dimension when it concedes to the opposing side.
- A2:** The claim means that whatever legal classification the regulator assigns to the token carries through to every wallet that holds it. If the token is designated as sanctioned, holders inherit the sanction. If the token is reclassified as a security, holders inherit securities-law obligations. Because the token is also the equity claim, the customer claim, the revenue claim and the access right, the legal status of the instrument is the legal status of the entire user base.
- A3:** The end-user side gains the most when the protocol is outside the perimeter — their use cases expand and their costs fall. The regulator side gains the most when the protocol is inside — oversight, dispute resolution and policy levers all work better. Critically, these are not the same actors who launched the protocol: the launchers typically benefit from arbitrage at launch, then face increasing pressure to either relinquish governance to the cap table or seek an explicit licence, which often means a different organisational form altogether.