| Dimension | Category | Characteristics | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Explicit Incentives* | | | | | | | | |
| (1) | Profit-sharing / cost-reduction | Dividends, token buybacks or burns<br>A (0.4) | Issuer-sanctioned airdrops<br>B (0.3) | Service discounts<br>C (0.3) | Combinations / other<br>D (0 to 1) | None<br>E (0) | | |
| (2) | Rights to CFs | Masternodes<br>A (0.6) | Staking rewards<br>B (0.4) | Combinations / other<br>C (0 to 1) | None<br>D (0) | | | |
| *Implicit Incentives* | | | | | | | | |
| (3) | Marketing claims / investor expectations | | | Quantitative variable: Expectations index<br>(0 to 1) | | | | |
| (4) | Network functionality at time t | | | Quantitative variable: Network functionality index (Inverse)<br>(0 to 1) | | | | |
| (5) | Asset utility at time t | | | Quantitative variable: Asset utility index (Inverse)<br>(0 to 1) | | | | |
| (6) | Initial issuance mechanism | PoW<br>A (0) | Costly PoX e.g Proof-of-Burn<br>B (0.2) | Snapshot / Fork / Airdrop<br>C (0.4) | Costless PoX<br>D (0.55) | Arbitrary Mint / Premine / Instamine<br>E (0.7) | ICO<br>F (0.85) | SAFT/Deferred Distribution<br>G (1) |
| (7) | Ongoing issuance mechanism | PoW<br>A (0) | PoX<br>B (0.25) | Arbitrary Mint (algorithmic / autonomous)<br>C (0.5) | Arbitrary Mint (centrally controlled)<br>D (0.75) | None<br>E (1) | | |
| *Stakeholder Alignment* | | | | | | | | |
| (8) | Balance between network participants | | | Quantitative variable: Alignment index (Inverse)<br>(0 to 1) | | | | |
| *Network Governance* | | | | | | | | |
| (9) | Governance Type | Masternode<br>A (0.6) | Token/ticket<br>B (0.3) | Reputation<br>C (0.2) | Combination / other<br>D (0 to 1) | None / off-chain<br>E (0) | | |
| (10) | Token-Holder voting rights | Upgrade & treasury<br>A (1) | Upgrade<br>B (0.5) | Treasury<br>C (0.5) | Indirect (implicit)<br>D (0.2) | None (explicit)<br>E (0) | | |
| (11) | Treasury / foundation supply control | | | Quantitative variable: Insider supply control index<br>(0 to 1) | | | | |
| (12) | Power asymmetry between issuer and investors | | | Quantitative variable: Asymmetry index<br>(0 to 1) | | | | |
| (13) | Human primacy over codebase / assets | | | Quantitative variable: Mutability index<br>(0 to 1) | | | | |
| *Network Topology / Software Properties* | | | | | | | | |
| (14) | Network centrality / distribution | | | Quantitative variable: Centrality index<br>(0 to 1) | | | | |
| (15) | Permissioned / proprietary elements | | | Quantitative variable: Openness index (Inverse)<br>(0 to 1) | | | | |
| (16) | Ease of node operation / software compatibility | | | Quantitative variable: Network compatibility index (Inverse)<br>(0 to 1) | | | | |

Table 9: Securityness taxonomy (3rd iteration)

| Dimension | Category | Characteristics | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Longevity* | | | | | | | | |
| | | DURABILITY | | | | | | |
| (1) | In/extra-protocol persistence | Quantitative variable: Technical / social antifragility index (0 to 1) | | | | | | |
| (2) | Lindy type time-dependent effects | Quantitative variable in the time domain (0 to 1) | | | | | | |
| | | RESILIENCE | | | | | | |
| (3) | Network & protocol robustness | Quantitative variable: Robustness index (0 to 1) | | | | | | |
| (4) | Key entity risk / Layer N risk / Smart Contract risk / Cryptography risk | Quantitative variable: Externality index (Inverse) (0 to 1) | | | | | | |
| (5) | Balance between network participants | Quantitative variable: Alignment index (Inverse) (0 to 1) | | | | | | |
| *Portability* | | | | | | | | |
| (6) | Transactional friction | Quantitative variable: Friction index (Inverse) (0 to 1) | | | | | | |
| *Pervasiveness* | | | | | | | | |
| (7) | Realness / Materiality Memeticism / Simulacrisation | Quantitative variable: Materiality index (0 to 1) | | | | | | |
| (8) | Protocol breadth at time t | Quantitative variable: Protocol breadth index (0 to 1) | | | | | | |
| (9) | Network maturity at time t | Quantitative variable: Maturity index (0 to 1) | | | | | | |
| (10) | Network legitimacy at time t | Quantitative variable: Legitimacy index (0 to 1) | | | | | | |
| *Fungibility / Privacy* | | | | | | | | |
| (11) | In protocol | Full transparency A (0) | Opt-in privacy B (0.3) | Private with selective audit C (0.65) | Fully private D (1) | | | |
| (12) | Extra protocol | Coin mixing A (0.25) | Sender obfuscation B (0.25) | Node level C (0.25) | L2 / Sidechain D (0.25) | Combinations thereof E (0 to 1) | None F (0) | |
| *Supply Dynamics* | | | | | | | | |
| (13) | Initial issuance mechanism | PoW A (1) | Costly PoX e.g Proof-of-Burn B (0.8) | Snapshot / Fork / Airdrop C (0.6) | Costless PoX D (0.45) | Arbitrary Mint / Premine / Instamine E (0.3) | ICO F (0.15) | SAFT/Deferred Distribution G (0) |
| (14) | Ongoing issuance mechanism | PoW A (1) | PoX B (0.75) | Arbitrary Mint (algorithmic / autonomous) C (0.5) | Arbitrary Mint (centrally controlled) D (0.25) | None E (0) | | |
| (15) | Price elasticity of supply | Quantitative variable: Price Elasticity of Supply / unforgeable costliness (0 to 1) | | | | | | |
| (16) | Inflation | None A (1) | Fixed/known B (0.5) | Adaptive/variable C (0) | | | | |
| (17) | Scarcity | Hard cap (algorithmically enforced) A (1) | Cap (social consensus / implied) B (0.65) | No cap (promised) C (0.3) | No cap (no promise) D (0) | | | |
| (18) | Asset supply concentration | Quantitative variable: Proportion of supply controlled by insiders/foundation (Inverse) (0 to 1) | | | | | | |
| *Demand Dynamics* | | | | | | | | |
| (19) | Acceptability as payment method | Quantitative variable: Acceptability index (0 to 1) | | | | | | |
| (20) | Settlement and value flows | Quantitative variable: Settlement index (0 to 1) | | | | | | |
| (21) | Liquidity depth | Quantitative variable: Liquidity index (0 to 1) | | | | | | |
| (22) | Volatility in price | Quantitative variable: Volatility index (Inverse) (0 to 1) | | | | | | |

Table 10: Moneyness taxonomy (3rd iteration)

| Dimension | Category | Characteristics | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Longevity* | | | | | | | | |
| | | DURABILITY | | | | | | |
| (1) | In/extra-protocol persistence | Quantitative variable: Technical / social antifragility index (0 to 1) | | | | | | |
| (2) | Lindy type time-dependent effects | Quantitative variable in the time domain (0 to 1) | | | | | | |
| | | RESILIENCE | | | | | | |
| (3) | Network & protocol robustness | Quantitative variable: Robustness index (0 to 1) | | | | | | |
| (4) | Key entity risk / Layer N risk / Smart Contract risk / Cryptography risk | Quantitative variable: Externality index (Inverse) (0 to 1) | | | | | | |
| (5) | Balance between network participants | Quantitative variable: Alignment index (Inverse) (0 to 1) | | | | | | |
| *Portability* | | | | | | | | |
| (6) | Transactional friction | Quantitative variable: Friction index (Inverse) (0 to 1) | | | | | | |
| *Pervasiveness* | | | | | | | | |
| (7) | Realness / Materiality Memeticism / Simulacrisation | Quantitative variable: Materiality index (0 to 1) | | | | | | |
| (8) | Protocol breadth at time t | Quantitative variable: Protocol breadth index (0 to 1) | | | | | | |
| (9) | Liquidity depth | Quantitative variable: Liquidity index (0 to 1) | | | | | | |
| (10) | Network maturity at time t | Quantitative variable: Maturity index (0 to 1) | | | | | | |
| (11) | Network legitimacy at time t | Quantitative variable: Legitimacy index (0 to 1) | | | | | | |
| *Fungibility / Privacy* | | | | | | | | |
| (12) | In protocol | Full transparency A (0) | Opt-in privacy B (0.3) | Private with selective audit C (0.65) | Fully private D (1) | | | |
| (13) | Extra protocol | Coin mixing A (0.25) | Sender obfuscation B (0.25) | Node level C (0.25) | L2 / Sidechain D (0.25) | Combinations thereof E (0 to 1) | None F (0) | |
| *Supply Dynamics* | | | | | | | | |
| (14) | Initial issuance mechanism | PoW A (1) | Costly PoX e.g Proof-of-Burn B (0.8) | Snapshot / Fork / Airdrop C (0.6) | Costless PoX D (0.45) | Arbitrary Mint / Premine / Instamine E (0.3) | ICO F (0.15) | SAFT/Deferred Distribution G (0) |
| (15) | Ongoing issuance mechanism | PoW A (1) | PoX B (0.75) | Arbitrary Mint (algorithmic / autonomous) C (0.5) | Arbitrary Mint (centrally controlled) D (0.25) | None E (0) | | |
| (16) | Price elasticity of supply | Quantitative variable: Price Elasticity of Supply / unforgeable costliness (0 to 1) | | | | | | |
| (17) | Inflation | None A (1) | Fixed/known B (0.5) | Adaptive/variable C (0) | | | | |
| (18) | Scarcity | Hard cap (algorithmically enforced) A (1) | Cap (social consensus / implied) B (0.65) | No cap (promised) C (0.3) | No cap (no promise) D (0) | | | |
| (19) | Asset supply concentration | Quantitative variable: Proportion of supply controlled by insiders/foundation (Inverse) (0 to 1) | | | | | | |
| *Demand Dynamics / Usefulness* | | | | | | | | |
| (20) | Asset purpose | Access to service A (0.15) | Rights to CFs B (0.15) | Reward potential / spec. C (0.15) | Volatility hedge D (0.15) | SoV E (0.15) | Issuer-mandated airdrops F (0.15) | Payment / MoE G (0.15) | Combination / none H (0 to 1) |
| (21) | Asset utility at time t | Quantitative variable: Utility index (0 to 1) | | | | | | |
| (22) | Settlement and value flows | Quantitative variable: Settlement index (0 to 1) | | | | | | |

Table 11: Commodityness taxonomy (3rd iteration)

| | wt / | BTC | ETH | XRP | EOS | LTC | BCH | USDT | XLM | TRX | BNB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Profit share / cost red | 0.025 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0.3 | 0.3 | 0.3 |
| 2 Rights to CFs | 0.025 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0.4 | 0 |
| 3 Marketing Claims / Investor Expectations | 0.05 | 0 | 0.7 | 0.85 | 1 | 0.2 | 0.3 | 0.3 | 0.7 | 1 | 0.8 |
| 4 Network Function | 0.15 | 0.1 | 0.5 | 0.8 | 0.9 | 0.3 | 0.15 | 0.2 | 0.8 | 0.6 | 0.8 |
| 5 Asset Utility | 0.1 | 0.3 | 0.45 | 0.8 | 0.9 | 0.4 | 0.5 | 0.2 | 0.7 | 0.85 | 0.85 |
| 6 Initial Issuance Mech | 0.1 | 0 | 0.85 | 0.7 | 0.85 | 0 | 0.4 | 0.2 | 0.7 | 0.85 | 0.85 |
| 7 Ongoing Issuance Mech | 0.05 | 0 | 0 | 1 | 0.55 | 0 | 0 | 0.75 | 1 | 0.25 | 1 |
| 8 Stakeholder Balance | 0.1 | 0.2 | 0.65 | 0.9 | 0.8 | 0.5 | 0.6 | 0.7 | 0.9 | 1 | 1 |
| 9 Governance Type | 0.025 | 0 | 0.2 | 0.2 | 0.6 | 0 | 0.2 | 0.2 | 0.2 | 0.6 | 0.3 |
| 10 Token-Holder Vote Rights | 0.025 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0.5 | 0.2 |
| 11 Treasury Supply Control | 0.05 | 0 | 0.4 | 0.85 | 0.5 | 0.2 | 0 | 1 | 0.9 | 0.9 | 0.9 |
| 12 Power Asymm | 0.1 | 0.2 | 0.6 | 0.9 | 1 | 0.3 | 0.4 | 0.8 | 0.9 | 0.9 | 0.9 |
| 13 Primacy Algo/Human Code & Assets | 0.1 | 0 | 0.75 | 0.9 | 1 | 0.3 | 0.3 | 1 | 0.9 | 0.9 | 0.9 |
| 14 Network Centrality / Distn | 0.05 | 0 | 0.2 | 0.7 | 0.8 | 0.4 | 0.3 | 1 | 0.9 | 0.9 | 0.9 |
| 15 Permissioned/Propietary Elements | 0.025 | 0 | 0 | 0.6 | 0 | 0 | 0 | 1 | 0.6 | 0 | 0.6 |
| 16 Ease of Node Operation / Compatability | 0.025 | 0.1 | 0.3 | 0.6 | 0.9 | 0.1 | 0.2 | 1 | 0.6 | 0.9 | 1 |
| TS10 SCORE | | 0.09 | 0.48 | 0.75 | 0.80 | 0.24 | 0.28 | 0.53 | 0.75 | 0.76 | 0.81 |

Table 12: Securityness category assignments and scores as of April 2019

| | wt / | BTC | ETH | XRP | EOS | LTC | BCH | USDT | XLM | TRX | BNB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 In/extra-protocol persistence | 0.025 | 0.6 | 0.1 | 0.05 | 0.1 | 0.25 | 0.2 | 0.3 | 0.05 | 0.05 | 0.05 |
| 2 Lindy type time-dependent effects | 0.025 | 0.3 | 0.15 | 0.05 | 0 | 0.2 | 0.05 | 0.1 | 0.05 | 0 | 0 |
| 3 Network robustness | 0.05 | 0.4 | 0.2 | 0 | 0 | 0.15 | 0.05 | 0.05 | 0 | 0 | 0 |
| 4 Externality risk | 0.05 | 0.3 | 0.1 | 0.05 | 0.025 | 0.15 | 0.05 | 0 | 0.05 | 0 | 0 |
| 5 Stakeholder alignment | 0.05 | 0.65 | 0.8 | 0.1 | 0.1 | 0.3 | 0.1 | 0 | 0.05 | 0.025 | 0.025 |
| 6 Transactional friction | 0.025 | 0.3 | 0.3 | 0.05 | 0.05 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.025 |
| 7 Realness / materiality | 0.05 | 0.75 | 0.15 | 0.05 | 0.05 | 0.025 | 0.05 | 0.1 | 0.05 | 0.05 | 0 |
| 8 Protocol breadth | 0.1 | 0.2 | 0.1 | 0.05 | 0.025 | 0.075 | 0.05 | 0.1 | 0.05 | 0.025 | 0 |
| 9 Network maturity | 0.05 | 0.3 | 0.1 | 0.1 | 0.025 | 0.15 | 0.05 | 0.1 | 0.1 | 0.05 | 0.025 |
| 10 Network legit | 0.025 | 0.6 | 0.4 | 0.1 | 0.2 | 0.05 | 0.1 | 0.1 | 0.1 | 0.05 | 0.025 |
| 11 Fung/priv in-prot | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 Fung/priv extra-prot | 0.025 | 0.6 | 0.2 | 0 | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 0 |
| 13 Initial issuance | 0.025 | 1 | 1 | 0.3 | 0.15 | 1 | 1 | 0.8 | 0.3 | 0.15 | 0.15 |
| 14 Ongoing issuance | 0.025 | 1 | 1 | 0 | 0.75 | 1 | 1 | 0.25 | 0 | 0.75 | 0.75 |
| 15 Price inelasticity | 0.025 | 0.8 | 0.5 | 0.1 | 0.1 | 0.35 | 0.8 | 1 | 0.1 | 0.1 | 0.1 |
| 16 Inflation | 0.025 | 0.5 | 0 | 1 | 0 | 0.5 | 0.5 | 0 | 1 | 0.5 | 0.5 |
| 17 Scarcity | 0.025 | 1 | 0.3 | 1 | 0 | 1 | 1 | 0 | 1 | 0.3 | 0.3 |
| 18 Asset supply conc | 0.05 | 0.5 | 0.3 | 0.1 | 0.15 | 0.2 | 0.2 | 0.2 | 0.05 | 0.05 | 0.05 |
| 19 Acceptability paym | 0.1 | 0.3 | 0.15 | 0.05 | 0.05 | 0.1 | 0.1 | 0.1 | 0.05 | 0.025 | 0.025 |
| 20 Settlement/valflows | 0.05 | 0.4 | 0.1 | 0.05 | 0.025 | 0.01 | 0.05 | 0.15 | 0.05 | 0.025 | 0.025 |
| 21 Liquidity depth | 0.05 | 0.25 | 0.1 | 0.025 | 0.01 | 0.01 | 0.025 | 0.5 | 0.025 | 0.025 | 0.025 |
| 22 Volatility | 0.05 | 0.3 | 0.1 | 0.05 | 0.05 | 0.05 | 0.05 | 1 | 0.05 | 0.05 | 0.05 |
| TS10 SCORE | | 0.41 | 0.22 | 0.10 | 0.06 | 0.19 | 0.17 | 0.19 | 0.10 | 0.07 | 0.06 |

Table 13: Moneyness category assignments and scores as of April 2019

| | wt / | BTC | ETH | XRP | EOS | LTC | BCH | USDT | XLM | TRX | BNB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 In/extra-protocol persistence | 0.025 | 0.6 | 0.1 | 0.05 | 0.1 | 0.25 | 0.2 | 0.3 | 0.05 | 0.05 | 0.05 |
| 2 Lindy type time-dependent effects | 0.025 | 0.3 | 0.15 | 0.05 | 0 | 0.2 | 0.05 | 0.1 | 0.05 | 0 | 0 |
| 3 Network robustness | 0.025 | 0.4 | 0.2 | 0 | 0 | 0.15 | 0.05 | 0.05 | 0 | 0 | 0 |
| 4 Externality risk | 0.025 | 0.3 | 0.1 | 0.05 | 0.025 | 0.15 | 0.05 | 0 | 0.05 | 0 | 0 |
| 5 Stakeholder alignment | 0.025 | 0.8 | 0.25 | 0.1 | 0.1 | 0.3 | 0.1 | 0 | 0.05 | 0.025 | 0.025 |
| 6 Transactional friction | 0.025 | 0.3 | 0.3 | 0.05 | 0.05 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.025 |
| 7 Realness / materiality | 0.05 | 0.75 | 0.15 | 0.05 | 0.05 | 0.025 | 0.05 | 0.1 | 0.05 | 0.05 | 0 |
| 8 Protocol breadth | 0.025 | 0.2 | 0.1 | 0.05 | 0.025 | 0.075 | 0.05 | 0.1 | 0.05 | 0.025 | 0 |
| 9 Liquidity depth | 0.025 | 0.25 | 0.1 | 0.025 | 0.01 | 0.01 | 0.025 | 0.5 | 0.025 | 0.025 | 0.025 |
| 10 Network maturity | 0.025 | 0.3 | 0.1 | 0.1 | 0.025 | 0.15 | 0.05 | 0.1 | 0.1 | 0.05 | 0.025 |
| 11 Network legit | 0.025 | 0.6 | 0.4 | 0.1 | 0.2 | 0.05 | 0.1 | 0.1 | 0.1 | 0.05 | 0.025 |
| 12 Fung/priv in-prot | 0.025 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 Fung/priv extra-prot | 0.025 | 0.6 | 0.2 | 0 | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 0 |
| 14 Initial issuance | 0.025 | 1 | 1 | 0.3 | 0.15 | 1 | 1 | 0.8 | 0.3 | 0.15 | 0.15 |
| 15 Ongoing issuance | 0.025 | 1 | 1 | 0 | 0.75 | 1 | 1 | 0.25 | 0 | 0.75 | 0.75 |
| 16 Price inelasticity | 0.05 | 0.8 | 0.5 | 0.1 | 0.1 | 0.35 | 0.8 | 1 | 0.1 | 0.1 | 0.1 |
| 17 Inflation | 0.025 | 0.5 | 0 | 1 | 0 | 0.5 | 0.5 | 0 | 1 | 0.5 | 0.5 |
| 18 Scarcity | 0.025 | 1 | 0.3 | 1 | 0 | 1 | 1 | 0 | 1 | 0.3 | 0.3 |
| 19 Asset supply conc | 0.025 | 0.5 | 0.3 | 0.1 | 0.15 | 0.2 | 0.2 | 0.2 | 0.05 | 0.05 | 0.05 |
| 20 Asset purpose | 0.05 | 0.6 | 0.75 | 0.45 | 0.6 | 0.6 | 0.6 | 0.45 | 0.6 | 0.6 | 0.6 |
| 21 Asset utility | 0.375 | 0.9 | 0.6 | 0.2 | 0.1 | 0.4 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 |
| 22 Settlement/val flows | 0.05 | 0.4 | 0.1 | 0.05 | 0.025 | 0.01 | 0.05 | 0.15 | 0.05 | 0.025 | 0.025 |
| TS10 SCORE | | 0.68 | 0.42 | 0.18 | 0.12 | 0.34 | 0.31 | 0.27 | 0.23 | 0.13 | 0.12 |

Table 14: Commodityness category assignments and scores as of April 2019