

# Tokenization of Financial Assets.



## Introduction

Tokenization refers to the process of creating a token on a blockchain that represents the underlying real world assets, including financial assets. These tokens can be representations of

- Traditional tangible assets (such as real estate, agricultural or mining commodities, analog artworks)
- Financial assets (equities, bonds, treasuries, fund units, limited partnerships), or
- Nontangible assets such as digital art and other intellectual property

### Emerging trends

- Strong business fundamentals and structural changes supporting tokenization programs
- Stakeholder alignment on back of clear line of sight to benefits & liabilities
- \$ 4 to \$5 trillion of tokenized assets could be issued by 2030 (Citigroup, March 2023)
- Asset Management & Private Equity industries accelerating adoption, with potential benefits of quasi-banking

### Rubix : Go To Platform for Asset Tokenization

- Success of asset tokenization requires ability to run permissioned networks on a ultra-scalable, interoperable public chain platform.
- Rubix is the ideal L1 with its object oriented, parallelized subnet architecture

# Benefits of Tokenisation



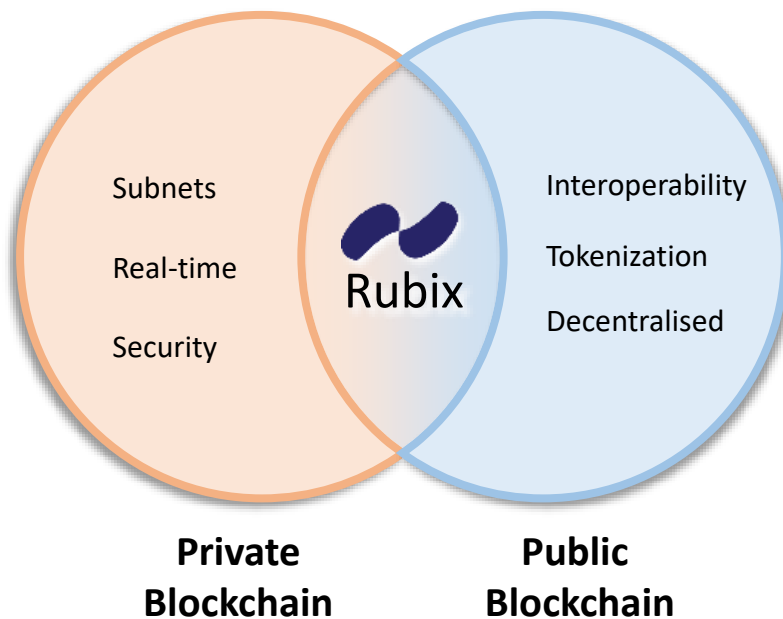
S.No.	Key Consideration	Current mechanisms	Tokenization
1.	Capital Efficiency	Low Case in point : T+2 settlement of Tri party repurchase agreements or money market fund redemptions	High <b>Shorter settlement times</b> generate significant capital savings
2.	Reach for asset owners	Restricted due to distribution constraints and ticket size floors.	<b>Fractionalization opens up market</b> Wide access to new pools of capital with lower minimum investment required
3.	Market Access for Investors	Paperwork /Processes involving intermediaries lead to 'pools of illiquidity'	Direct access to new secondary markets leads to <b>greater liquidity</b>
4.	New asset classes	Real estate and commodities don't attract retail capital as the ticket sizes tend to be large with no secondary market	Tokenization makes <b>fractional ownership</b> possible, when coupled with secondary market for tokens would attract more investors
5.	Margin Management	Margin management is a clunky, dynamic process involving multiple parties invariably leading to systemic risk	<b>Trustless, automated collaboration</b> with <b>mult-sig</b> enabled smart contracts. Associated costs/risks sharply lowered
6.	Automated authorization and settlement	AMC & PE companies may require approval of Limited Partners before initiating market action which can lead to inefficient decision making/slippages.	Dynamic and complex decision rules can be <b>automated into the Smart contracts</b> which can speed up in market decision making process.
		Dividend distribution with multiple parties involved is a cumbersome yet an essential /repetitive process	Audited smart contracts on tamper proof ledger would free up significant bandwidth for the client facing operations teams.
7.	Operational cost savings	Highly manual, error prone issuing/servicing processes involving multiple intermediaries impacts ability of business to offer personalized products in micro segments	Automation built using Programmability of Smart Contracts would not only enable significant cost savings but also provides flexibility to offer products literally to <b>Segment of One.</b>
8.	Compliance and Transparency	Highly Cumbersome, Time Consuming and mostly retroactive due to delays in data reconciliation across value chain.	Specific Compliance checks and flags can be built into tokens via smart contracts 24/7 data availability means streamlined consolidated reporting, immutable record keeping, and <b>real-time, auditable accounting</b>

# Rubix v Private Chains v Public Chains

S.No	Dimension	Private Block chains (Hyperledger/ Corda)	Public Block chains (Ethereum/Avalanche/ L2)	Rubix
1.	Interoperability	Not automatic. Expensive, customized process	Available through bridges	<b>Native support</b> at L1. Other public chains can be run as Rubix subnets.
2.	Permissioned Subnets	Possible	Not Possible	<b>Unlimited permissioned subnets</b> without oracles or intermediate layers
3.	Transaction finality	Real time	No assured transaction finality due to monolithic nature (Ethereum /Solana /Polygon). Transactions may not get validated for long time in busy periods	Real time with cryptographic <b>finality in under 15 seconds</b> . With subnets, Blockspace can be expanded to meet the scale needs, assuring real time finality & low costs
4.	Provenance/ Identity	Not Portable	Require integration with L2 ID solution entity (like Polygon ID)	Portability is native at L1. <b>Only chain which is based on DID</b>
5.	Data Security	High	Low. All transaction data available on the globally shared ledger, which could lead to Doxing and loss of privacy. May not pass regulatory compliance.	<b>High.</b> Private data and transactions in enterprise subnet not visible to entities outside and within the subnet. Architecture supports <ul style="list-style-type: none"> <li>Identity based data encryption</li> <li>Selective disclosure</li> <li>Zero Knowledge Proofs.</li> </ul>
6.	TCO	Typical IT project with attendant CAPEX & OPEX. High cost of customizations with little benefits of open source.	<ul style="list-style-type: none"> <li>High and unpredictable GAS fee of L1.</li> <li>Transaction costs charged by L2/L3 providers. Gas fee surged to \$0.10/txn even on L2 recently.</li> </ul>	<ul style="list-style-type: none"> <li><b>No GAS fees</b></li> <li><b>No Transaction fees</b></li> <li>Open Source SDKs</li> <li>Leveraging existing compute &amp; storage infrastructure for subnet block space</li> <li>Investment in native Rubix Digital Utility tools linked to growth in transaction volumes</li> </ul>

# Rubix v Private Chains v Public Chains

Tokenisation and Interoperability ***combined with***  
Subnet architecture for Scalability and Security



Learn site - <https://learn.rubix.net/>

github - <https://github.com/rubixchain/rubixgoplatform>

