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Understanding the Core Logic and Hot Projects of RWA in One Article

Meta Description

- Why is RWA becoming a hot topic in 2024? What sectors have high growth potential?
- This article will analyze the characteristics of various underlying assets and provide a panoramic view of the RWA industry.

Tags：

Blockchain, Altcoins

A Comprehensive Analysis:

Memes and the Secrets to Driving Traffic in the

Crypto Industry

1 Introduction

In 2024, RWA (Real World Assets) has become a major focus in the cryptocurrency market, attracting widespread attention from both governments and enterprises. RWA combines blockchain technology with real-world assets. The concept originated in 2017, but it started gaining significant traction during the 2022-2023 bear market due to the Federal Reserve’s interest rate hikes and market turbulence.

The tokenization model of RWA is a product of technological innovation. By bringing real-world assets onto the blockchain, it makes asset transactions traceable, while also providing a new on-chain financing channel for these assets. In the context of financing for the real economy, a key innovation before tokenization was securitization. Large-scale land development often requires hundreds of millions of dollars, but after the introduction of ABS (Asset-Backed Securities) in the 1970s, the entry threshold for individual and institutional investors was lowered to below $10,000.

Even today, in the highly securitized U.S. market, the proportion of projects using ABS tools for financing is still smaller than those using their own funds for development. However, due to the massive scale of real estate and finance, asset securitization remains a huge market. From a scaling perspective, RWA and ABS share similar logic—they both tap into a portion of the vast real economy. However, unlike ABS, which has been in existence for over 50 years, RWA, a new tool in the crypto world, has once again revolutionized the financing methods of the real economy.

Figure 1: Comparison between ABS and RWA

Comparison Table: ABS vs. RWA

Comparison Item/Tool	ABS	RWA
First Appearance	1970 [1]	2017 [2]
Global Market Scale	$24 trillion [3]	$180 billion (including stablecoins) [4]
Investment Threshold	Lowers the investment threshold, allowing individual and institutional investors to invest in assets/ portfolios. ABS can reduce the initial investment amount to less than $10,000 [5].	Tokenization technology further reduces the investment threshold, allowing individual and institutional investors to invest with a starting amount as low as $100 [6].
Asset Operations	Regarding asset operations, ABS shortens projects' financing period and improves projects' liquidity.	Compared to ABS, tokenization reduces intermediaries such as custodians and underwriters, removing middlemen.
Secondary Market	Creates a sustainable flow of assets in the secondary market. ABS products can circulate in secondary markets.	Based on blockchain technology, secondary market transactions are transparent, and investors can track information about transaction counterparties.

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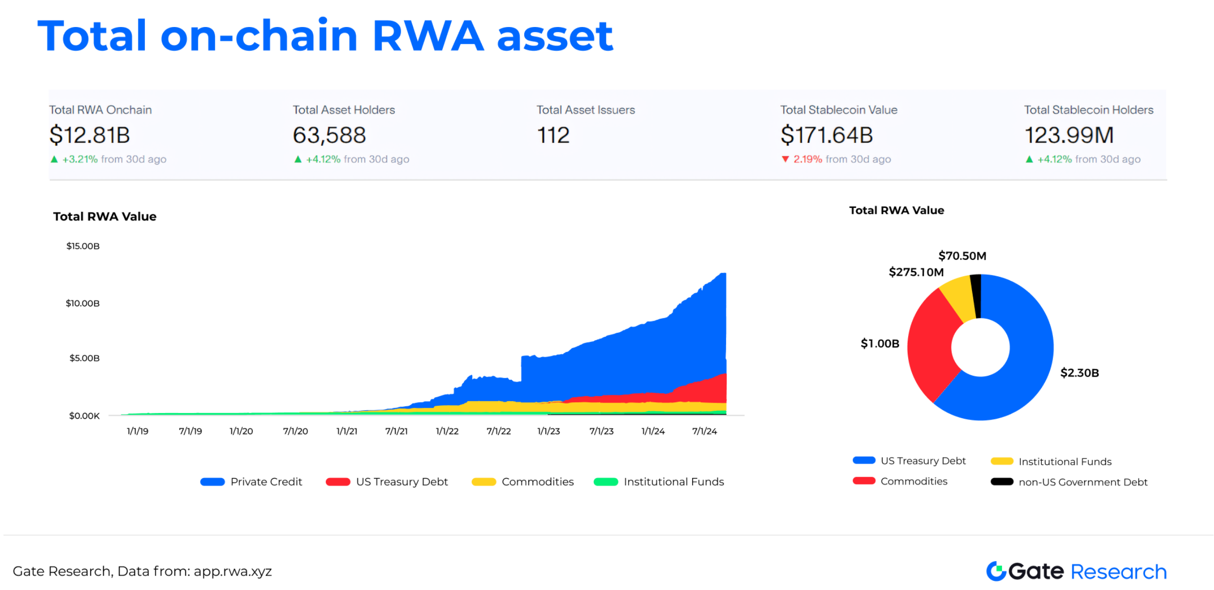
Although RWA is a relatively new concept, in terms of asset types, ABS primarily targets cash-flow-generating assets, while RWA includes both cash-flow assets (such as credit and real estate) and non-cash-flow assets (such as currencies and commodities). In the real world, stocks and futures have already been securitized and do not require secondary securitization through ABS. However, these assets have not yet been tokenized, which means the potential market for RWA is theoretically larger.

2 Q3 2024 Macro Overview of RWA

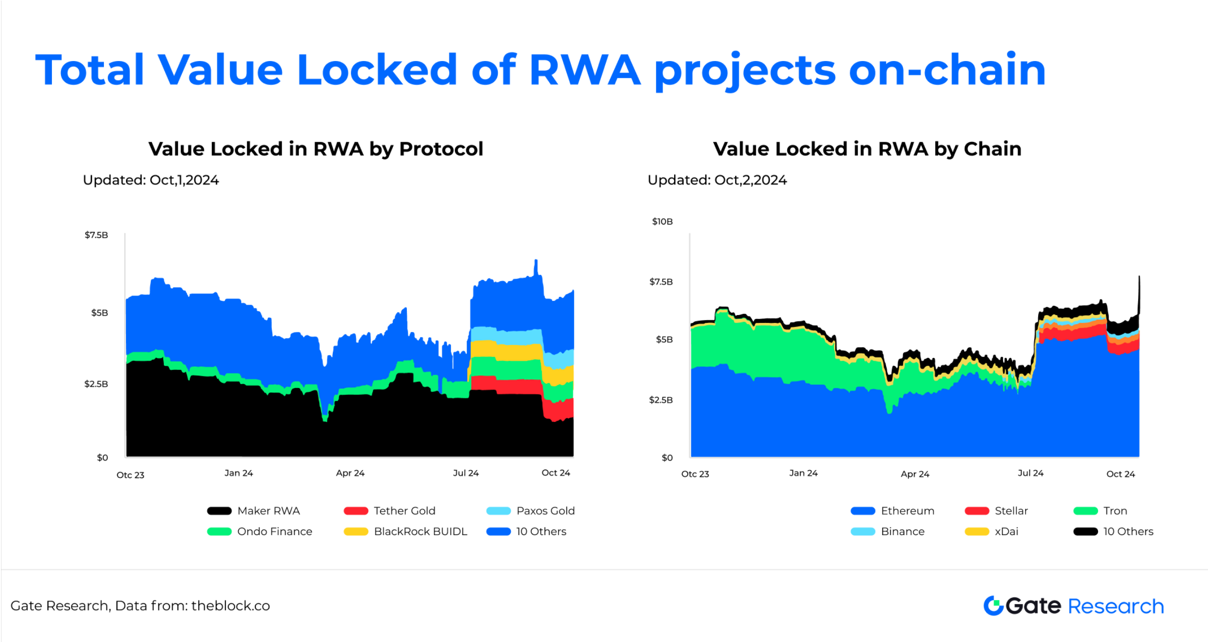
According to RWA.XYZ data, the total on-chain RWA asset value is $12.8 billion (excluding the market size of stablecoins). The largest category of real-world assets is personal credit, with a total value of $9.1 billion, accounting for more than 70% of the total assets. The second and third largest categories are U.S. Treasury bonds and commodities, with asset values of $2.3 billion and $1 billion, respectively. Other asset categories are relatively small in scale.

Figure 2: Total On-Chain RWA Assets



According to data from The Block, the current total value locked (TVL) in RWA projects on-chain is $6.18 billion【7】. Stablecoin giants Tether and Sky have a combined TVL of over $2 billion, nearly a third of the total. When it comes to the blockchain networks used by RWA projects, Ethereum is the clear dominant choice, accounting for nearly 70% of the market share. This is followed by Stellar and Tron. The distribution across public blockchains suggests that RWA tokenized assets are not high-frequency traded assets. Therefore, projects tend to favor Ethereum, which has the strongest user consensus, rather than blockchains like Solana or Sui, which offer performance advantages.

Figure 3: TVL (Total Value Locked) in RWA Projects on Chain



3 Classification of RWA Assets

RWA assets can be classified in multiple ways. When categorized based on the standardization of underlying assets, they can be divided into standardized assets and non-standardized assets. When classified according to the type of asset operator, they can be grouped into Web3 operator assets and non-Web3 operator assets. In this article, the classification is based on cash flow, dividing the assets into cash-flow assets, weak cash-flow assets, and non-cash-flow assets.

Bonds and credit, which provide stable dividends or interest returns annually, are typical cash-flow assets. Stocks and equity, however, are classified as weak cash-flow assets due to their unstable dividends. Fiat currency, precious metals, and artwork are considered non-cash-flow assets, as holding these assets directly does not generate cash flow. Instead, cash flow is generated through mechanisms like staking or collateralization.

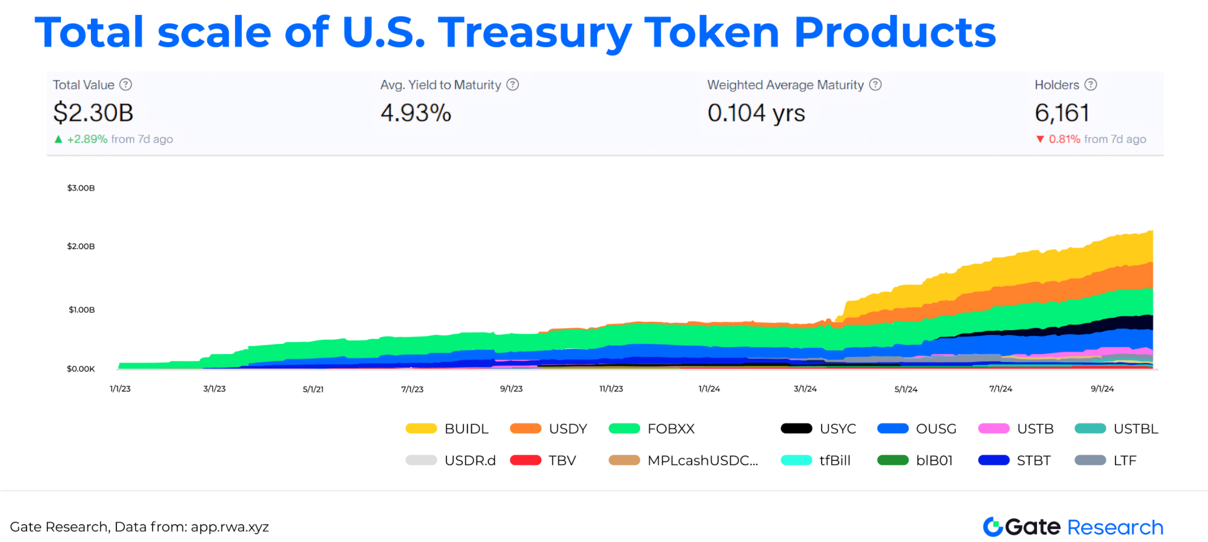
The advantage of classifying assets based on cash flow is that it allows for a perspective from the investor's point of view. Cash-flow assets provide regular dividend returns, making them suitable for investors seeking stable returns. On the other hand, non-cash-flow assets are used for preservation of value, with the primary goal being passive appreciation. Different types of assets can thus cater to different investment needs.

3.1 Cash-Flow Assets

3.1.1 Bonds

The U.S. Federal Reserve's interest rate hikes have been the biggest catalyst for RWA to stand out in the crypto space. However, with the arrival of the 2024 cryptocurrency bull market and the Federal Reserve's decision to lower interest rates, funds previously invested in U.S. Treasury bonds have partially shifted to other higher-risk assets. Bonds are also the most mature segment within the RWA space, with projects pegged to U.S. Treasury bond tokens being the most common. Currently, the total market size of U.S. Treasury bond tokens is $2.3 billion【8】. However, some of the total asset value has been double-counted, as Ondo's OUSG token is backed by the BUIDL asset issued by BlackRock.

Figure 4: Total Market Size of U.S. Treasury Bond Tokens



In traditional finance, bonds are considered a low-yield asset, with core metrics (such as duration and convexity) requiring a certain level of mathematical sophistication, making them a highly institutionalized financial asset. RWA bond tokens inherit this characteristic, with institutional addresses primarily holding these tokens on-chain. Ondo's U.S. yield token USDY is one of the few RWA tokens that can be traded directly on both centralized exchanges (CEX) and decentralized exchanges (DEX). USDY has been listed on Bybit, Jupiter, and Agni Finance, meaning there is a certain number of retail investors holding the token.

Figure 5: Overview of the Market Size of Various U.S. Treasury Bond Tokens

Total scale of U.S. Treasury Token Products

Product Name	Ticker	Networks	Market Cap	Holders	Yield to Maturity
BlackRock USD Institutional Digital Liquidity Fund Securitize	$BUIDL	Ethereum	$523,616,389 ▲	23 ▲	–
Ondo U.S. Dollar Yield Ondo	$USDY		$440,292,714 ▲	4,574 ▲	–
Franklin OnChain U.S. Government Money Fund Franklin Templeton Benji Investments	$FOBXX		$437,434,564 ▲	475 ▲	5.11%
Hashnote Short Duration Yield Coin Hashnote	$USYC		$290,563,235 ▲	44 ▲	4.70%
Ondo Short-Term US Government Bond Fund Ondo	$OUSG		$230,959,551 ▲	60 ▲	4.68%
OpenEden TBILL Vault Open Eden	$TBILL		$116,529,225 ▼	86 ▲	5.30%
Superstate Short Duration US Government Secu... Superstate	$USTB	Ethereum	$99,253,804 ▲	27 ▲	–
Spiko US T-Bills Money Market Fund Spiko	$USTBL		$39,692,685 ▲	55 ▲	–
Anemoy Liquid Treasury Fund 1 Centrifuge	$LTF		$35,628,694	4 ▲	–
Short-term Treasury Bill Token Matrixdock	$STBT	Ethereum	$21,936,780 ▼	54	4.86%

Gate Research, Data from: app.rwa.xyz

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Hot Projects:

1) BlackRock, Issuing the BlackRock U.S. Dollar Institutional Digital Liquidity Fund ($BUIDL)

BlackRock's BUIDL fund, a representative of U.S. Treasury bond RWA, provides a stable investment option for U.S. Treasury bonds. BUIDL functions like a stablecoin within the U.S. Treasury RWA sector. If there is a run on BUIDL, the redemption and interest payments of tokens like OUSG could face a series of issues. BUIDL is fully compliant with SEC regulations and is only available to whitelist investors who have passed KYC (Know Your Customer) checks. The purchasing channel for BUIDL is Securitize Markets, a SEC-registered securities broker.

As of now, the total size of BUIDL is $523 million【9】. The BUIDL token has only 23 holders, with the first and fourth largest holders both being Ondo【10】, holding a combined $224 million.

Figure 6: Major Holders of BUIDL

The main holding addresses of BUIDL

Address	BUIDL	Label
0x72be8c14b7564f7a61ba2f6b7e50d18dc1d4b63d	174.06m	Gnosis_safe: GnosisSafev1.3.0
0x72be8c14b7564f7a61ba2f6b7e50d18dc1d4b63d	174.06m	Safe_test: Safe_v1_3_0
0xed71aa0da4fdb4512ffa398fcff9db8c49a5cf72	51.30m	
0xdc77c1d2a1dc61a31be8184840368dffefac3add	51.27m	
0x2826899983ea36f0622132d019c2ae173eb6a43	50.62m	Ondofinance: OUSGInstantManage
0x1e695a689cf29c8fe0a6848a957e3f84b61fe69	47.29m	
0xbc2cb4bf5510a1cc0863c96196a2361c8462525	30.75m	Safe_test: Safe_v1_3_0
0xbc2cb4bf5510a1cc0863c96196a2361c8462525	30.75m	Gnosis_safe: GnosisSafev1.3.0
0x121c5f97c58f5dee289812f83b98c9612bf1aa91	25.52m	
0xc8abbd5bc34c943c908d99581e77d0a91b104515	20.22m	

Gate Research, Data from: dune

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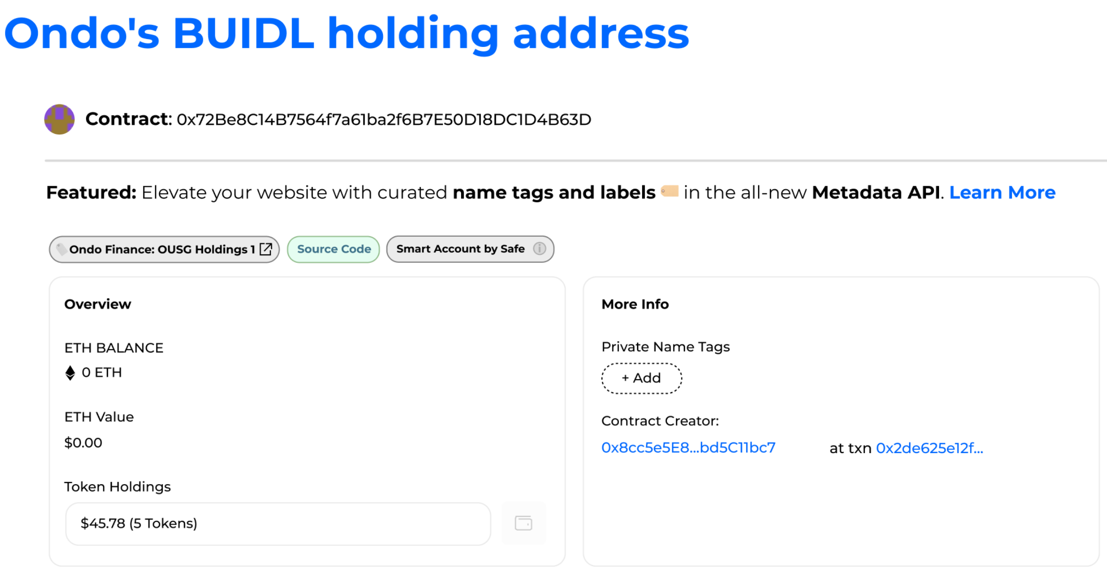
Figure 7: Ondo's BUIDL Holding Addresses



Gate Research, Data from: etherscan

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From BlackRock's perspective, the sales channel Securitize Markets is one of its invested companies, while Ondo Finance plays a deep role in U.S. Treasury tokenization alongside BlackRock. Offline, BlackRock's Bitcoin and Ethereum ETFs are the largest in their respective categories among all index funds released during the same period【11】. It is foreseeable that BlackRock is using RWA as an entry point to gradually expand its influence in traditional finance into the crypto space, aiming to build a vast crypto ecosystem.

Figure 8: Bitcoin ETF Market Size Rankings

Ranking of Bitcoin ETF Scales

Overview | Performance | Extended Hours | Fund Flows | Dividends | NAV Performance | Holdings | Risk | Technicals

Symbol 11		↓ AUM	Price	Change %	Vol * Price	Rel Volume	Expense ratio	Asset class
IBIT	iShares Bitcoin Trust	23.303 B USD	37.57 USD	+4.54%	1.674 B USD	1.70	0.12%	Currency
GBTC	Grayscale Bitcoin Trust (BTC)	13.846 B USD	52.48 USD	+4.40%	211.322 M USD	1.44	1.50%	Currency
FBTC	Fidelity Wise Origin Bitcoin Fund	10.598 B USD	57.68 USD	+4.44%	326.748 M USD	1.40	0.00%	Currency
ARKB	ARK 21Shares Bitcoin ETF	3.013 B USD	65.88 USD	+4.44%	162.852 M USD	2.19	0.21%	Currency
BITB	Bitwise Bitcoin ETF	2.494 B USD	35.95 USD	+4.48%	127.554 M USD	1.86	0.00%	Currency
HODL	VanEck Bitcoin Trust	708.36 M USD	74.65 USD	+4.46%	31.952 M USD	2.35	0.25%	Currency
BRRR	Coinshares Valkyrie Bitcoin Fund	534.352 M USD	18.68 USD	+4.47%	2.431 M USD	0.69	0.00%	Currency

Gate Research, Data from: dune

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2）Ondo Finance, Issuing U.S. Dollar Yield Token ($USDY) and Short-Term U.S. Treasury Token ($OUSG)

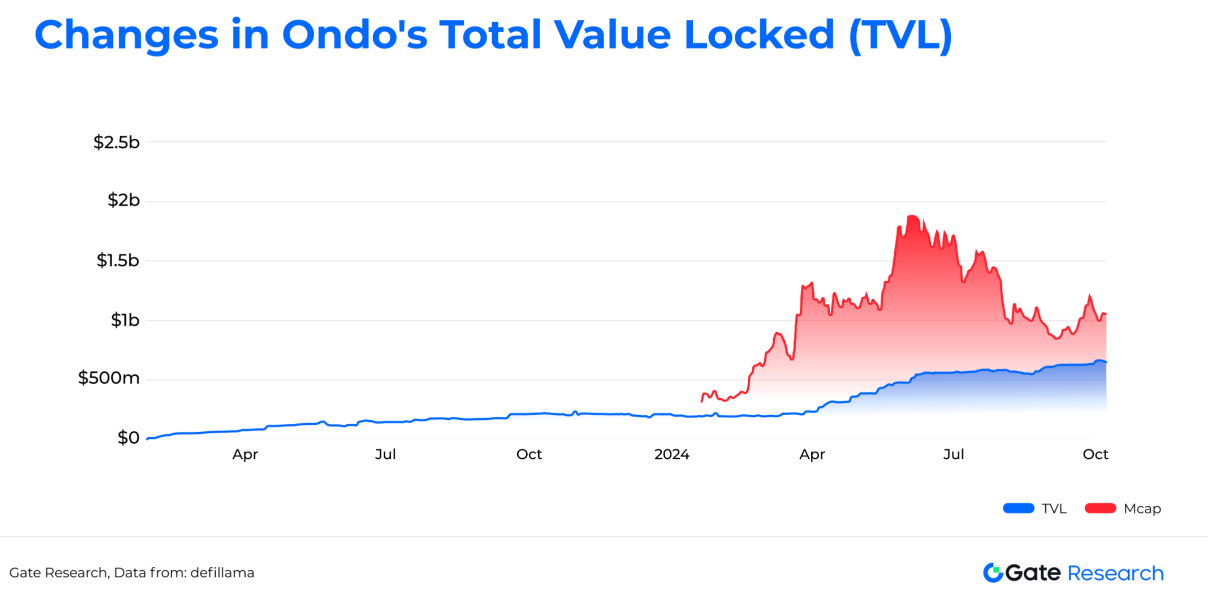
Ondo Finance is a blockchain service company focused on decentralized finance (DeFi), providing institutional-grade financial products and services. Its goal is to create an open, permissionless decentralized investment bank that allows a broader audience to access DeFi yields.

Currently, Ondo has released three RWA tokens: USDY, OUSG, and OMFF. The underlying asset of OUSG is the U.S. Treasury token BUIDL issued by BlackRock, while OMFF is backed by a BlackRock money market fund. Since BlackRock is heavily regulated by government financial authorities, Ondo effectively acts as the on-chain agent for BlackRock's products. DeFi users, who are accustomed to on-chain interaction, buy OUSG, thus indirectly holding BUIDL. It is expected that in the future, Ondo will issue more tokenized products, with their underlying assets pegged to other funds issued by BlackRock. Additionally, Flux Finance, a lending protocol developed by Ondo, allows investors to lend USDC and DAI, but requires OUSG as collateral.

Thanks to the backing of financial giant BlackRock, Ondo has experienced a meteoric rise during the 2024 cryptocurrency bull market. Its TVL grew from $190 million at the beginning of

2024 to $640 million, and its market cap increased from $300 million at its exchange listing to $1 billion【12】.

Figure 9: Changes in Ondo's Total Locked Value (TVL)

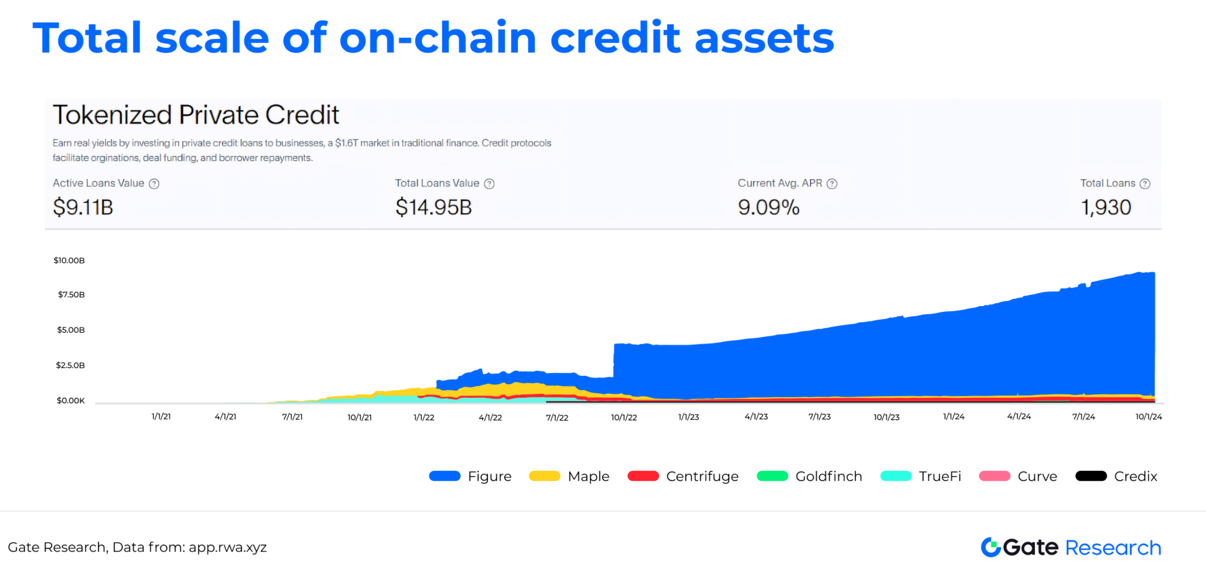


3.1.2 Credit / Bills / Accounts Receivable

Credit and quasi-credit assets currently represent the largest segment in the RWA (Real-World Asset) space. The lenders in these markets are users holding stablecoins on-chain, while the borrowers include individuals and corporate entities. The platforms bridging these two groups are on-chain lending platforms like Maple, Centrifuge, and Figure. Compared to traditional banks, on-chain lending has the advantage of shorter loan processing times. For example, Figure's website claims that the loan process—from application to disbursement—takes just five days. In contrast to the P2P lending model, on-chain lending is decentralized, and the transactions are recorded on a distributed ledger, offering increased transparency and lower trust costs for platforms.

Lending platforms rely on a steady flow of stablecoins. Maple partners with Circle, while Centrifuge collaborates with Sky. Stablecoin issuers have low fundraising costs, and through lending platforms, they can earn high interest rates. Since January 2024, the total value of on-chain credit assets has grown rapidly, from $6.3 billion to $9.1 billion【13】.

Figure 10: Total Value of On-Chain Credit Assets



Currently, the mainstream on-chain lending platforms use the lending pool model. These platforms bundle credit assets with different interest rates and risk levels into structured products. Borrowers place stablecoins into the liquidity pools of these structured products and receive tokens pegged to the product. Lenders can choose either cryptocurrency or real-world assets as collateral and receive stablecoins from the borrower in return.

The risk in this model lies in the fact that investors can only see the risk level of the liquidity asset pool, but not the creditworthiness of the specific assets behind the borrower. This creates a need for lending platforms to manage risk carefully when designing these products. Due to the similarities between RWA credit and on-chain lending models, the sector has been impacted by the overall downturn in the DeFi market. As of October 2024, governance tokens for projects like Maple, Centrifuge, and TrueFi have not shown significant growth compared to the start of the year.

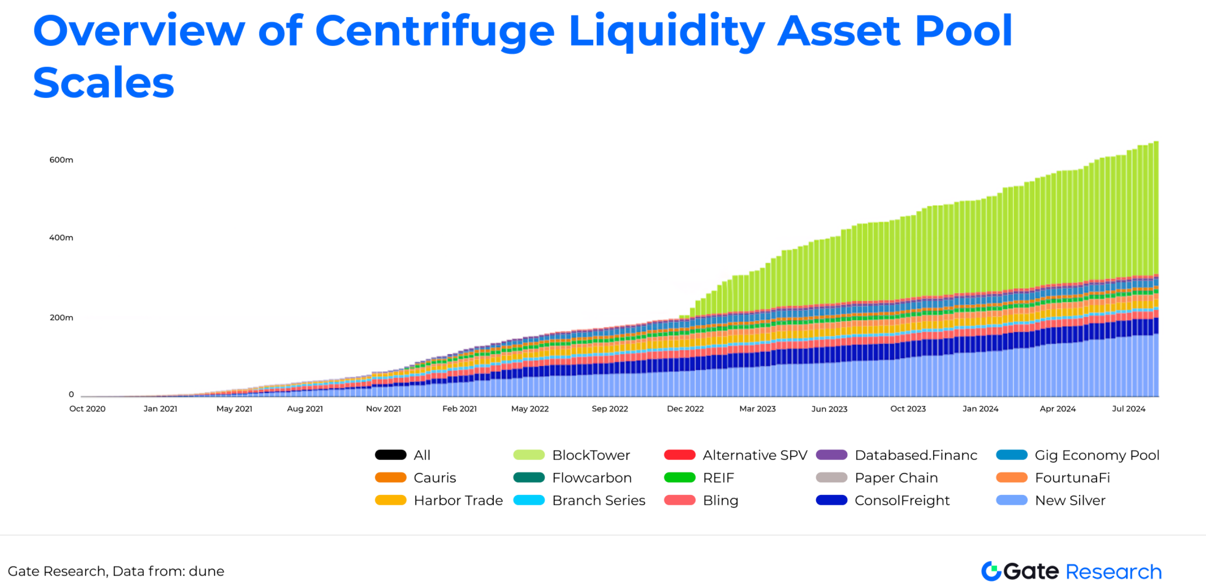
Hot Projects:

1) Centrifuge: Issuing Structured Credit Asset Tokens

Centrifuge is a decentralized on-chain lending platform dedicated to bringing real-world assets (RWAs) onto the blockchain. By leveraging blockchain technology, it addresses the liquidity challenges traditionally faced by financial markets.

Compared to other on-chain lending platforms, Centrifuge utilizes Polkadot's Substrate framework to build the Centrifuge Chain, which helps reduce on-chain transaction gas fees. Centrifuge integrates Ethereum' s Tinlake protocol, which enabled the creation of the world' s first RWA asset pool for Sky. The Centrifuge app showcases six different liquidity asset pools, with underlying assets including U.S. Treasury bonds, digital currencies, bridge loans for real estate, and structured credit products. Users can select liquidity pools that align with their preferred risk profiles for investment. As of October 2024, Centrifuge has issued a total of $640 million【14】in structured products, with the Block Tower series of structured credit liquidity asset pools being the largest asset pool within Centrifuge.

Figure 11: Overview of Centrifuge Liquidity Asset Pool Scales



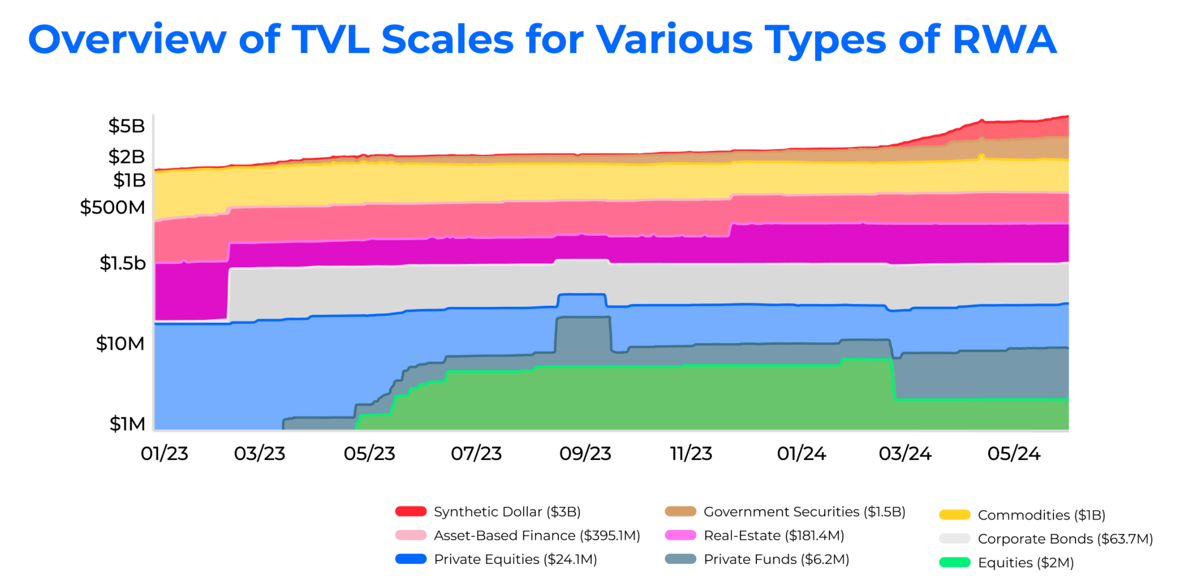
3.1.3 Real Estate

Real estate is one of the most diverse sectors in the RWA space, offering a variety of income-generating mechanisms. Traditional methods in real estate tokenization are represented by Propy and RealT. Propy issues NFTs that serve as ownership certificates for properties, while RealT's tokenized assets represent the rental income rights of properties, allowing users to earn continuous cash flow by holding these tokens. A more recent innovation is represented by Parcl, which issues tokens as derivatives of real estate indices. When the real estate index for a specific region increases, the token price rises, and when the index falls, so does the token price.

Among the three models, the NFT-based property buying model is considered relatively difficult. The main challenge is that real estate investment is a large financial commitment, and even users familiar with crypto may find it hard to fully trust NFTs for property purchases. The model based on rental cash flow distribution, akin to REITs (Real Estate Investment Trusts), is a more mature business model. On the other hand, Propy’ s property index prediction model is more similar to Polymarket and operates as a high-risk, high-reward derivative trading model.

According to a report by Fortunafi in May 2024, the total value locked (TVL) in real estate tokens is $181 million【15】, which is only higher than that of corporate bonds, equities, and private equity funds within various underlying asset classes.

Figure 12: Overview of RWA TVL by Asset Class



Gate Research, Data from: fortunafi

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Hot Projects:

1) RealT: Issuing Rental Cash Flow Tokens for Real Estate

Founded in 2018, RealT is a blockchain startup focused on tokenizing real estate properties in the United States, aiming to make real estate investment more democratic and transparent. For each real estate project, RealT first conducts asset evaluations through third-party assessors, then establishes ownership through contractual agreements and issues ERC-20 tokens representing the property’s income rights. Property management, maintenance, and rent collection are handled by third-party management companies. After deducting expenses, the rental income is distributed to token holders.

RealT’ s website provides detailed information about each property. For example, a property located in San Angelo, Texas, had a total investment of $307,000. RealT issued 6,100 tokens, with each token priced at $50.44. The asset evaluation company estimated the property’ s annual rental income and operating costs, projecting a yearly cash flow of$24,000, which corresponds to an annualized return rate of 8.1%【16】. Token holders of one unit receive $4.04 annually, with a payback period of 12.5 years. Currently, the tokens for this property have sold out.

Figure 13: RealT Website Product Description

Product Description from the RealT Official Website

Token Type	Standard Equity
Expected Income	8.01%
Income Start Date	December 1, 2024
Income Per Token	$4.04/year
Token Price	$50.44
Total Tokens	6,100
Peroperty Type	Single Family
Country	USA
Source	RealT
Construction Year	1950
Bedrooms/Bath	4 Beds/2 Baths
Rental Type	Long Term
Rented	Fully Rented
Rent Subsidy	No

Gate Research, Data from: realt

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3.1.4 Other Assets (Computing Power Centers, Charging Stations, Photovoltaic Modules, etc.)

In today's era of new infrastructure, key technologies like computing power, storage capacity, network bandwidth, and energy are all fundamental to the development of modern technologies. If these assets can be tokenized, investors could potentially earn substantial cash flow. The renewable energy market alone is enormous. From Q3 2021 to Q2 2023, actual investments in photovoltaic, energy storage, and wind power in the U.S. exceeded $100 billion【17】. However, tokenizing these types of real-world assets (RWAs) has been slow, and even in the case of ABS (Asset-Backed Securities), there are few examples of successful implementation in the renewable energy space.

The challenges in tokenizing assets like computing power centers, Bitcoin mining farms, photovoltaic plants, and charging stations are primarily related to the operational complexity of these projects. The biggest hurdle for operators is managing government relations and ongoing operations, rather than raising funds. Once the land permits for constructing these facilities are secured, operators often prefer to use their own funds rather than raise capital from external investors. This limits the potential for tokenization, as the interests of operators and investors are not always aligned.

As a result, the development of tokenized renewable energy and infrastructure assets is still in its early stages. Many of these projects are dispersed and experimental, so there is no comprehensive data available on the overall market size or Total Value Locked (TVL) for these sectors.

Despite the potential for high cash flows and the sheer scale of investments in new energy infrastructure, the design of tokenized products that balance the interests of investors and operators has yet to mature in this space.

Hot Projects:

1) Penomo –Issuing Cash-Flow Tokens for Renewable Energy Assets

Penomo is a renewable energy asset tokenization solution platform, with its primary RWA underlying assets being photovoltaic panels, energy storage batteries, wind farms, and other renewable energy infrastructure. Penomo's token issuance is conducted on the high-performance blockchain Peaq, which is compatible with EVM. Qualified renewable energy asset operators can tokenize their assets on the platform, and accredited investors can purchase cash-flow distribution tokens from the contract pool for these renewable energy assets. In September 2024, Penomo announced that it had completed $2.7 million in renewable energy asset tokenization 【18】. The project is still in its early stages, and Penomo is actively working to form partnerships with renewable energy asset operators to ensure a steady supply of assets.

2) Plural Energy –Issuing Renewable Energy Fund Asset Tokens

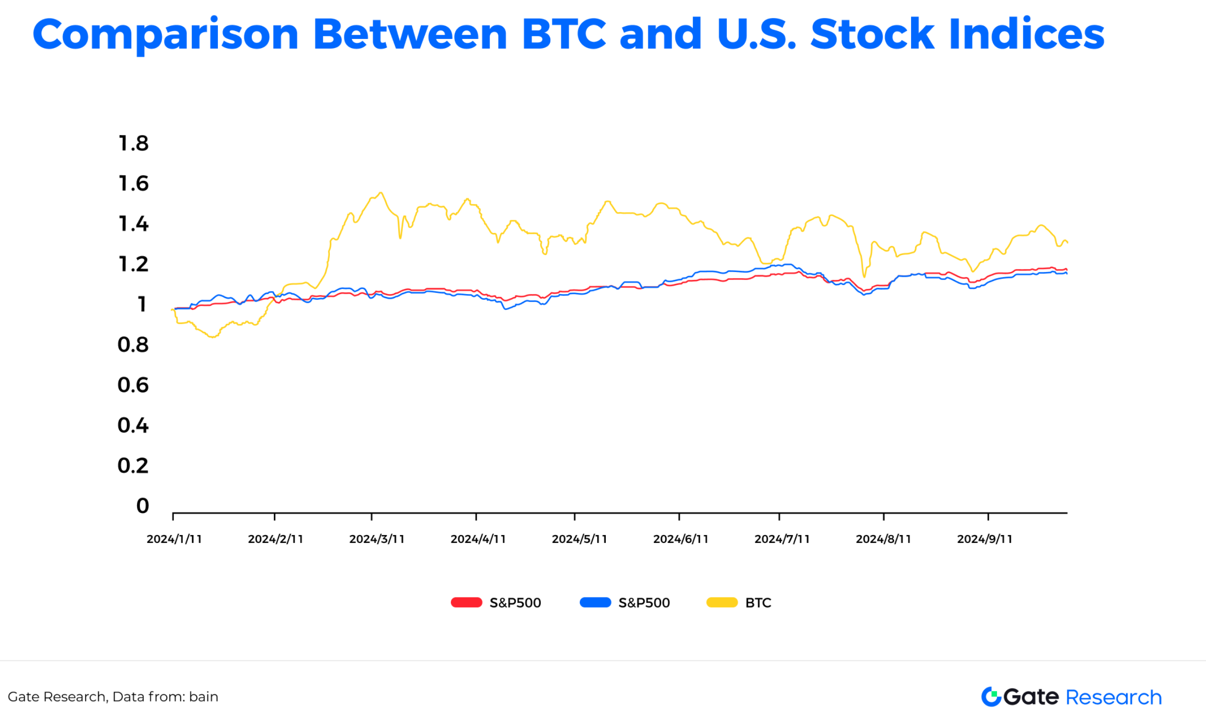
Plural Energy is a company focused on tokenizing the financing process of solar, wind, and other renewable energy projects. They utilize blockchain-based tokenization technology to create a scalable renewable energy investment platform. Unlike other tokens that are directly tied to specific renewable energy assets, Plural Energy introduces an additional layer for compliance purposes. Investors contribute funds to the Solaris Renewable Equity A Fund, which then invests in renewable energy assets. According to the company's website, the annual return rate for investments can reach up to 15%【19】. However, the specific details about the underlying assets are not disclosed to investors on the platform at this stage.

3.2 Poor Cash-Flow Assets

3.2.1 Stocks

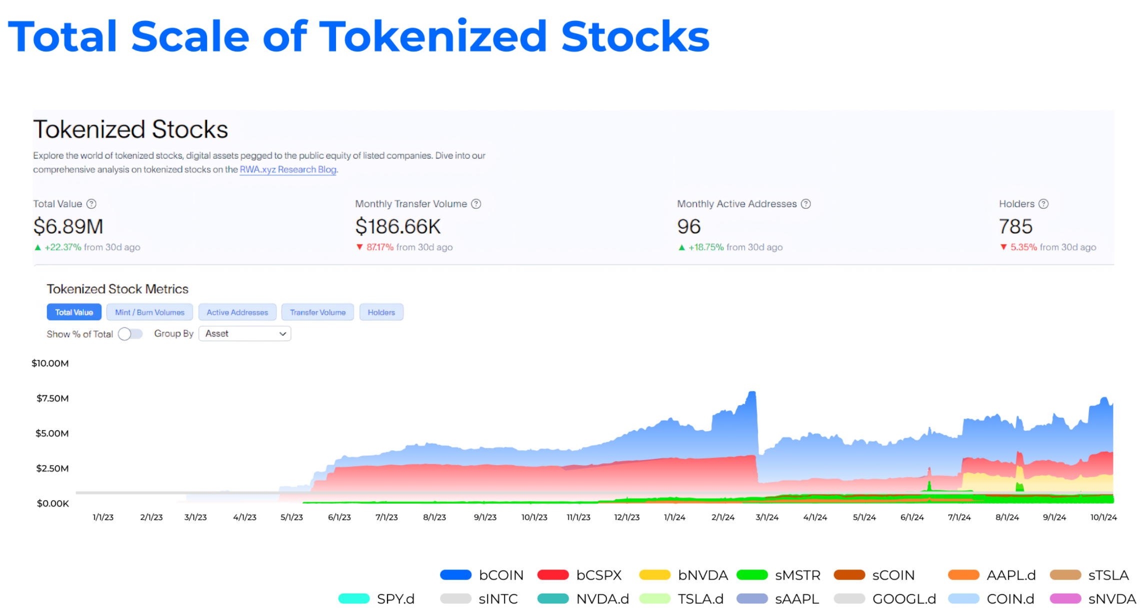
As a highly liquid asset with high alpha (excess returns), the tokenization of stocks in the crypto industry has been slow. This is due to two main factors: regulatory concerns and the market dynamics of both traditional and crypto assets. On one hand, the SEC remains cautious about cryptocurrencies, and on the other, since the approval of the Bitcoin ETF, both Bitcoin and altcoins have been highly correlated with the Federal Reserve's interest rate policies and global economic conditions. U.S. stocks are also strongly tied to economic data, leading to a trend where U.S. stocks and cryptocurrencies move in similar directions, with the key difference being that cryptocurrencies tend to have larger price swings. Below is a comparison of the price movements of Bitcoin, the NASDAQ100, and the S&P index after the launch of the Bitcoin ETF on January 11, 2024【20】.

Figure 14: Comparison of BTC and U.S. Stock Indices



Currently, the total market size for stock tokens is only $6.89 million【21】. Among these, the largest are tokens associated with the cryptocurrency exchange Coinbase Global (NASDAQ: COIN), such as bCOIN (issued by Backed Finance) and sCOIN (issued by Swarm), which together account for $3.6 million of the total market size. Other well-known U.S. tech companies like Apple, Nvidia, and Tesla also have tokens corresponding to their stock. However, these stock tokens cannot yet be traded on cryptocurrency exchanges. In March 2024, Ondo Finance announced plans to issue stock RWA tokens, and with their close collaboration with BlackRock, Ondo is expected to play a significant role in driving the rapid growth of the stock token market in the future.

Figure 15: Total Market Size of Stock Tokens



Gate Research, Data from: app.rwa.xyz

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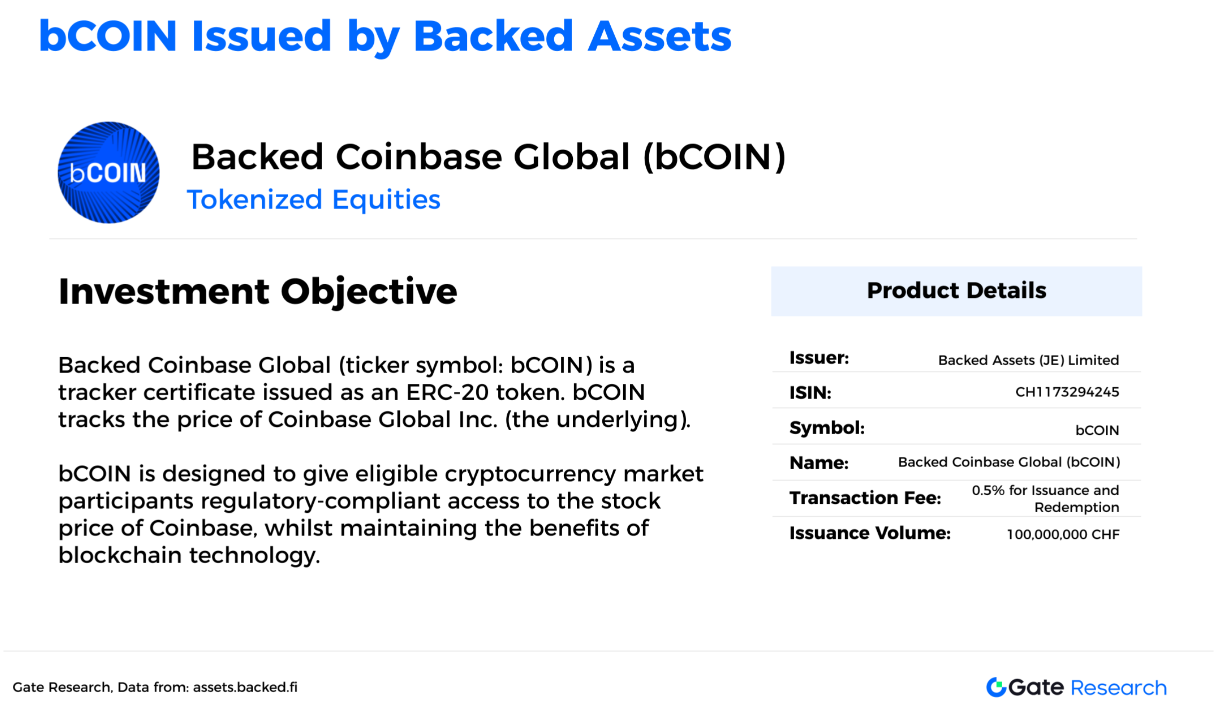
Hot Projects:

Backed Assets –Issuing $bCOIN, $bCSPX, $bNVDA, etc.

Backed Assets is a tokenization platform based in Switzerland. They have issued RWA tokens in both stocks and bonds categories. Due to local regulatory restrictions, their tokens such as $bCOIN are only available to accredited investors. The tokens issued by Backed Finance are ERC-20 tokens that do not correspond to securities but rather a type of derivative called "tracker certificates," which track the price movements of the underlying assets. Although Backed Assets is currently the largest platform for stock RWA tokens in terms of total issued tokens, its stock token market is still relatively small, with a total value of $6 million, showing a slow growth compared to the previous year.

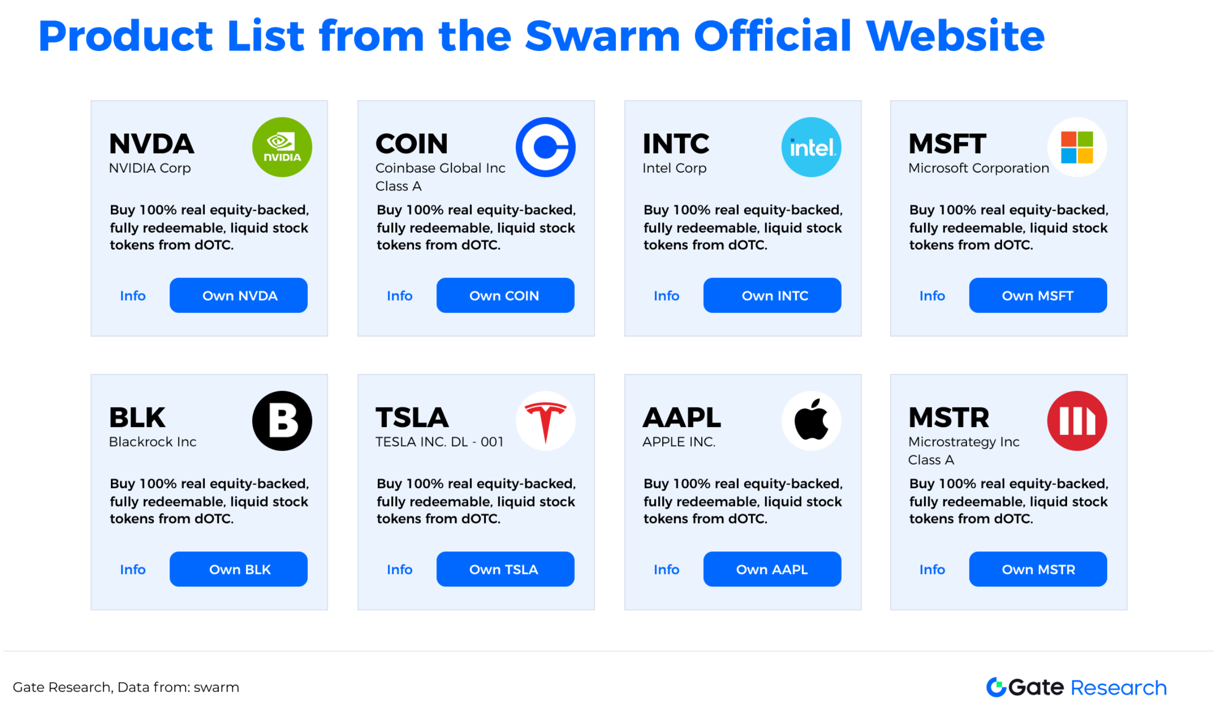
Figure 16: $bCOIN Issued by Backed Assets



2) Swarm –Issuing $sCOIN, $sNVDA, $sINTC, etc.

Swarm is a tokenization platform based in Germany that issues RWA tokens for stocks, bonds, and even gold-backed NFTs. After completing KYC and AML processes, users can trade NFTs on Swarm' s decentralized over-the-counter (dOTC) platform in a peer-to-peer manner. Although Swarm is also subject to government regulation, it operates in a more crypto-native way compared to Backed Assets, requiring users to connect their Web3 wallets before purchasing RWA tokens. According to RWA.XYZ data, Swarm is the second-largest stock token issuer globally in terms of market size.

Figure 17: Swarm’s Product List on Official Website

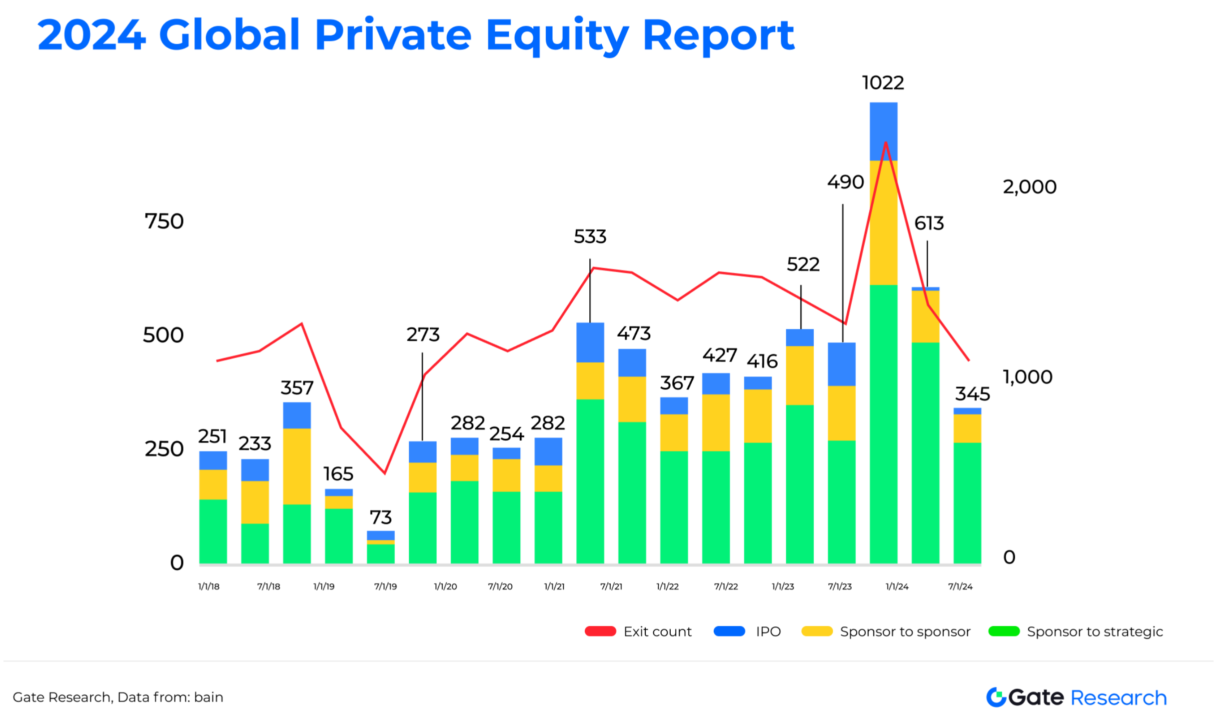


3.2.2 Equity/ Fund Shares

In recent years, the global primary market has been sluggish. Due to challenges in securing high valuations during IPOs, some companies have opted to delay listing, which has reduced liquidity in primary market assets. In response, some venture capitalists have turned to the S fund structure to sell their equity or fund shares. However, S funds do not fundamentally solve the liquidity issue of risk assets. According to Bain & Company’ s 2024 Global Private Equity Report, rapid interest rate hikes have led to significant declines in transactions, exits, and financing, making project exits one of the most challenging aspects for private equity funds.

Tokenization offers a solution to these liquidity challenges. By bringing fund shares or equity onto the blockchain, it enhances transaction transparency while lowering the barriers for individual investors. Platforms like Tokeny, Brickken, and Tassets focus on tokenizing primary market risk assets. In the past two years, some Web3 funds have chosen to directly tokenize their shares rather than raising funds through traditional company shares. According to Fortunafi data, as of May 2024, the total value locked (TVL) for private equity and private fund share RWA tokens stood at $30 million【23】—a relatively small branch of the RWA space.

Figure 18: 2024 Global Private Equity Report



Tokenization is seen as a solution to liquidity issues in the investment world. By bringing fund shares or equity onto the blockchain, tokenization enhances transaction transparency while lowering the barriers for individual investors. Platforms like Tokeny, Brickken, and Tassets have targeted risk assets in the primary market, particularly private equity and real estate. In recent years, Web3 funds have increasingly chosen to directly tokenize their shares rather than issuing traditional company equity to Limited Partners (LPs).

According to Fortunafi data, as of May 2024, the total value locked (TVL) in private equity and private fund share RWA tokens stood at $30 million【23】, a relatively small segment within the broader RWA (Real-World Asset) tokenization space.

Hot Projects:

1) Tokeny –Issuing Customized Tokens for Private Funds, Real Estate, Bonds, and Fund RWA Tokens

Tokeny is a platform that offers tokenization solutions and has developed an open distribution network for ERC-3643 standard tokens. These tokens are designed to embed compliance directly into the security token, allowing institutions to set rules so that only eligible investors can purchase the tokens. In September 2023, Dutch Bank issued $5 million in green bonds using the Tokeny platform【24】. The use of the ERC-3643 standard ensures that compliance is baked into the token itself, making the entire process more secure and regulated.

2) Brickken –Issuing Customized Tokens for Private Funds, Real Estate, Bonds, and Franchise Rights

Brickken is another tokenization platform that converts real-world assets into ERC-20 tokens. One key feature of Brickken is its governance token BKN, which can be traded on both centralized and decentralized exchanges (CEX/DEX). Fund managers who opt for Brickken as their tokenization platform must first purchase $5,000 worth of BKN tokens as a startup fee. Upon successful fundraising, Brickken takes a 3% commission. As of October 2024, BKN has a market cap of $20 million, and Brickken has tokenized $2.3 billion worth of assets across 14 countries 【25】. This highlights the growing adoption of tokenization in the global financial ecosystem, particularly in private equity and real estate markets.

3.3 Non-Cash Assets

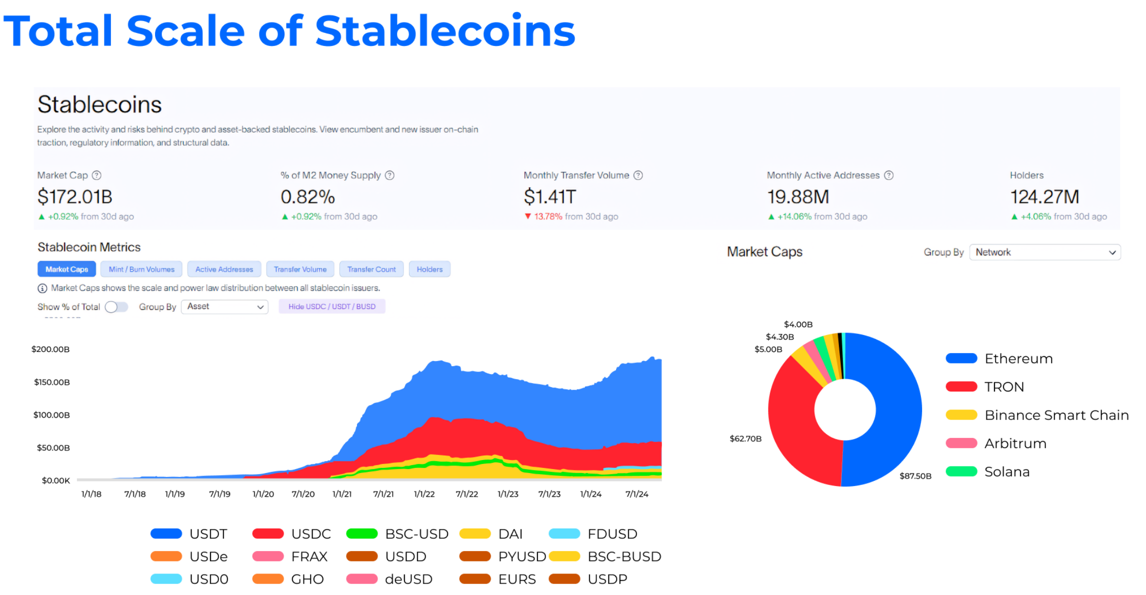
3.3.1 Fiat Currency

Strictly speaking, stablecoins fall under the category of RWA, as USDT and USDC are both tokens pegged 1:1 to the US dollar. However, stablecoins, as one of the cornerstones of cryptocurrency, actually predate the concept of RWA. The first stablecoin, USDT, was launched in July 2014 by Tether. As mentioned earlier, the concept of RWA first emerged in 2017. Stablecoins act as a gateway for cryptocurrency investors: during a bull market, they are used to buy Bitcoin or Ethereum; during market fluctuations, they are staked for interest; and during a bear market, some investors choose to redeem stablecoins for fiat currency and exit the crypto world. The total market size of stablecoins is $172 billion【26】.

USDT is currently the largest stablecoin, with a market capitalization of $119 billion, accounting for 70% of the total market size. Within the stablecoin space, centralized stablecoins dominate the market share. Decentralized stablecoins, such as DAI and USDe, collectively account for less than 10%.

From the perspective of project issuers, stablecoins operate under a business model similar to banks: they acquire USD from users in exchange for stablecoins, and use a portion of the deposited funds for investment and lending. However, unlike banks, stablecoin issuers do not pay interest to users. This business model has enabled high profitability for issuers such as Tether and Circle.

Figure 19: Total Market Size of Stablecoins



Gate Research, Data from: app.rwa.xyz

Gate Research

In addition to the US dollar, other currencies are also attempting to enter the stablecoin space. Although the euro is the second most circulated currency after the US dollar, its stablecoin market size is less than 1% of the US dollar's stablecoin market. Only EURS has surpassed $100 million in market capitalization【27】, while other euro-based stablecoins have a market size of less than $100 million. The Japanese yen, as the third-largest circulating currency, only has GYEN listed on exchanges, with a market size of $10 million【28】. In July 2024, JD.com collaborated with the Hong Kong Monetary Authority's sandbox project to launch a stablecoin pegged 1:1 to the Hong Kong dollar. Currently, stablecoin products from other countries are still far behind US dollar stablecoins in terms of maturity and liquidity.

1) Tether –Issuer of Centralized Stablecoins USDT and EURt

Tether is the world's largest stablecoin issuer, aiming to facilitate the digital use of fiat currencies. USDT is currently the most widely adopted and liquid stablecoin. According to Tether's Q2 audit report, the company achieved a net profit of $5.2 billion in the first half of 2024【29】, setting a historical high. Tether' s massive profits have attracted the attention of regulators. JPMorgan issued a report predicting that the European crypto asset regulatory market (MiCA) will strengthen its oversight of Tether. Due to the legal troubles faced by Ripple, Uniswap, and Binance in lawsuits with the SEC, Tether has increased its lobbying efforts to address potential regulatory challenges.

2）Sky –Issuer of Algorithmic Stablecoin DAI

Sky (formerly known as MakerDAO) is an open-source decentralized autonomous organization created in 2014. It issues the decentralized algorithmic stablecoin DAI on the Ethereum blockchain. DAI is the largest algorithmic stablecoin by market size, though it only accounts for 2% of the total stablecoin market【30】. The collateral for algorithmic stablecoins is typically cryptocurrency assets. Any user holding qualified collateral (such as ETH, USDC, etc.) can use Sky's unique smart contract, CDP (Collateralized Debt Position), to mint the desired amount of DAI. Sky has designed a target price fluctuation feedback mechanism, which is activated when significant market fluctuations occur, ensuring that DAI remains pegged to the US dollar. Additionally, DAI uses trusted oracles to ensure that the collateral assets and DAI price data are updated in real-time【31】.

3.3.2 Commodities

Before the rise of cryptocurrencies, futures were once among the highest-risk assets with the potential for excess returns. The total market size of commodity tokens is $1 billion【32】. The price movements of commodities are primarily driven by supply and demand factors, with gold acting as a safe-haven asset. In the case of a black swan event, gold's price movement typically diverges from other assets, making it a crucial hedge for on-chain capital. Gold is also the largest commodity token by market size, and its value has seen a compound annual growth rate (CAGR) of nearly 30% over the past three years due to the continuous rise in gold prices. Other commodities like oil, cotton, and soybeans lack the safe-haven properties of gold, so the tokenization process for these assets has been slower.

The left image below shows the overall market size of commodity tokens, while the right image illustrates the price trends of BTC and PAXG (the most widely circulated gold-backed token) over the past three years after being standardized【33】.

Figure 20: Total Market Size of Futures Tokens

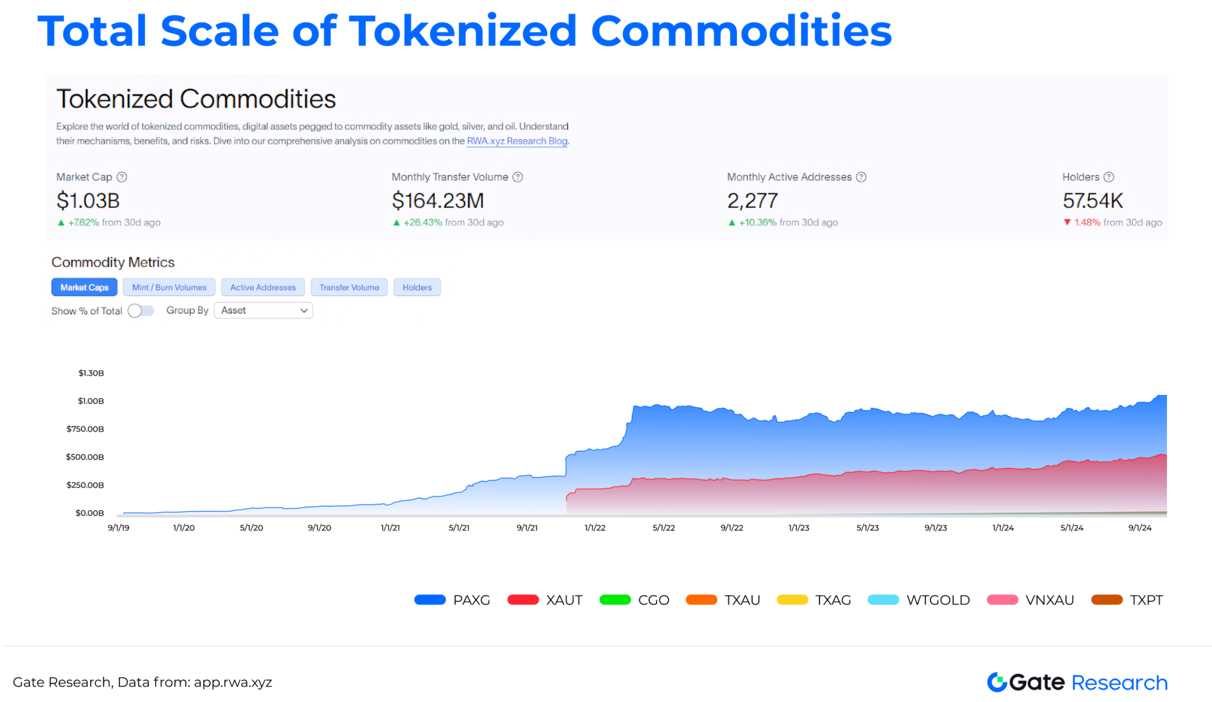
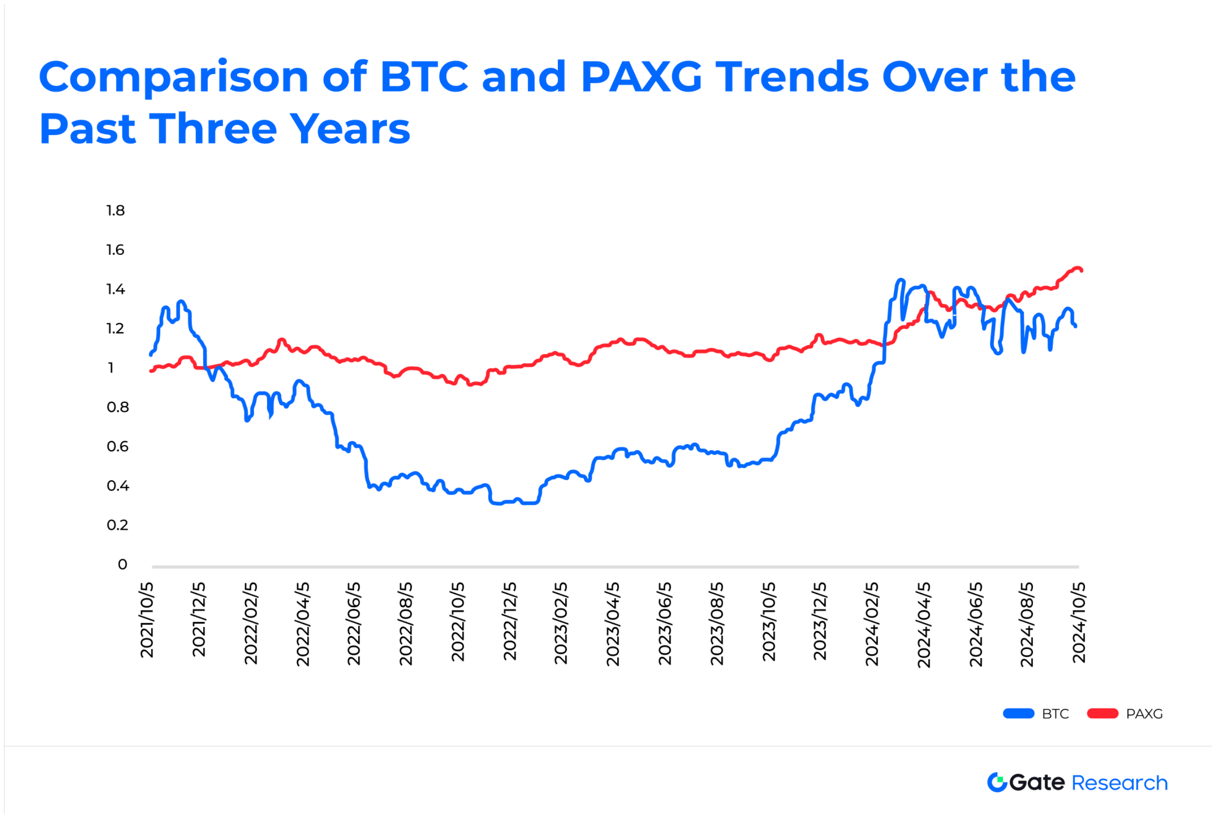


Figure 21: Comparison of BTC and PAXG Price Trends over the Past Three Years



Hot Projects:

1）Paxos –Issuer of $PAXG and $USDP

Paxos is a leading issuer of stablecoins and commodity tokens. In September 2019, the company issued a token pegged to gold assets, marking one of the earliest attempts at commodity tokenization. Although Tether’ s $XAUT, issued in 2022, gained significant market attention, $PAXG initially had the advantage of being first to market. However, its dominance was challenged in April 2024 when $XAUT briefly surpassed$PAXG in market size, becoming the largest gold-backed token in the market. In addition to issuing its own tokens, Paxos has extensive involvement in the ToB (tokenization of businesses) sector, having partnered with major companies like Binance, Huobi, and PayPal to issue stablecoins.

2）Aurus –Issuer of $tGold and $tSilver Aurus is a precious metals token issuer based in Dubai. The company has issued tokens backed by gold, silver, and platinum. The combined market size of the three Aurus-issued tokens is $9.8 million【34】, accounting for less than 1% of the total commodity token market. As a more vertically integrated token issuer, Aurus has partnered with precious metal companies such as SEMPSA and A.G. Metals to ensure the stability of their gold reserves.

3.3.3 Other Assets (Art, Franchise IP, Luxury Goods, etc.)

Tokenization of real-world assets is not limited to fungible tokens; it can also be done through NFTs (Non-Fungible Tokens). These types of assets, such as artwork, franchise rights, and luxury goods, are typically non-standardized and unique in nature. For instance, every piece of art has its own style and value, which makes it suitable for tokenization via NFTs, where each NFT has a unique price. The NFT sector, which initially focused on in-game items and social media avatars, may find its future narrative through integration with real-world assets, helping to address the challenges it faces today.

Since RWA projects based on assets like art, intellectual property rights, and luxury goods are still in the early stages and are relatively decentralized, there is no clear data available on the current scale or Total Value Locked (TVL) in these sectors.

Hot Projects:

1）Artrade –Issuer of Art NFT

Artrade is an NFT platform dedicated to art. The platform has introduced a technical specification that allows real-world objects to be tokenized without compromising their material properties or cultural value. Each physical artwork is linked to a unique, non-replicable NFT digital copy registered on the blockchain. This method not only preserves the artistic integrity of the piece but also brings transparency, decentralized security, and automatic royalty payments on secondary markets. Artrade has partnered with numerous galleries and museums, providing artists and curators with more diverse channels to showcase and monetize their work.

2）XCart –Issuer of Sneaker NFTs

XCart is a streetwear sneaker manufacturer. The project utilizes NFC chip technology integrated with the blockchain network to create a unique proof of authenticity for each physical product. Every real-world asset item, based on the NFC chip, has the ability to interact with on-chain asset storage functions. XCart brings together Web3 intellectual property, NFT licensors, designers, artists, manufacturers, and other participants, positioning itself as the world’s largest digital goods platform for real-world assets.

4 Conclusion

The development of RWA is relatively short, and there are still many challenges on the policy front. Governments in several countries are actively working to integrate RWA into existing legal frameworks. For instance, the Hong Kong Monetary Authority (HKMA) is promoting sandbox projects to encourage tokenization applications, while the Dubai Financial Services Authority (DFSA) has introduced a regulatory framework for digital assets, including tokenized securities. The Japanese Financial Services Agency (FSA) is also working on relevant regulations to support tokenized securities. However, for sectors such as real estate leasing, car leasing, and new energy infrastructure development, existing regulations still impose significant limitations on tokenization, and there is a need for pioneering policy development to explore these areas further.

In theory, all non-short-term consumables can be tokenized and brought onto the blockchain. As of October 7, 2024, the market size of RWA is estimated at $1.8 trillion【35】, and McKinsey forecasts that by 2030, tokenized real-world assets will reach $2 trillion【36】. The core assumption behind this forecast is that cash and deposits will reach $1.1 trillion by 2030. Similar to the rapid adoption of online payments in China, people will increasingly accept tokenized cash as a payment method. Once tokenized payments become the norm, it will also be easier for people to accept tokenization in areas such as funds, bonds, and precious metals, leading to further growth in total asset size.

The rapid rise of RWA as a hot topic in the cryptocurrency market in 2024 may just be the beginning. RWA not only represents a new direction for the cryptocurrency market but also serves as a bridge between the virtual and real worlds. Its development potential is limitless.

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