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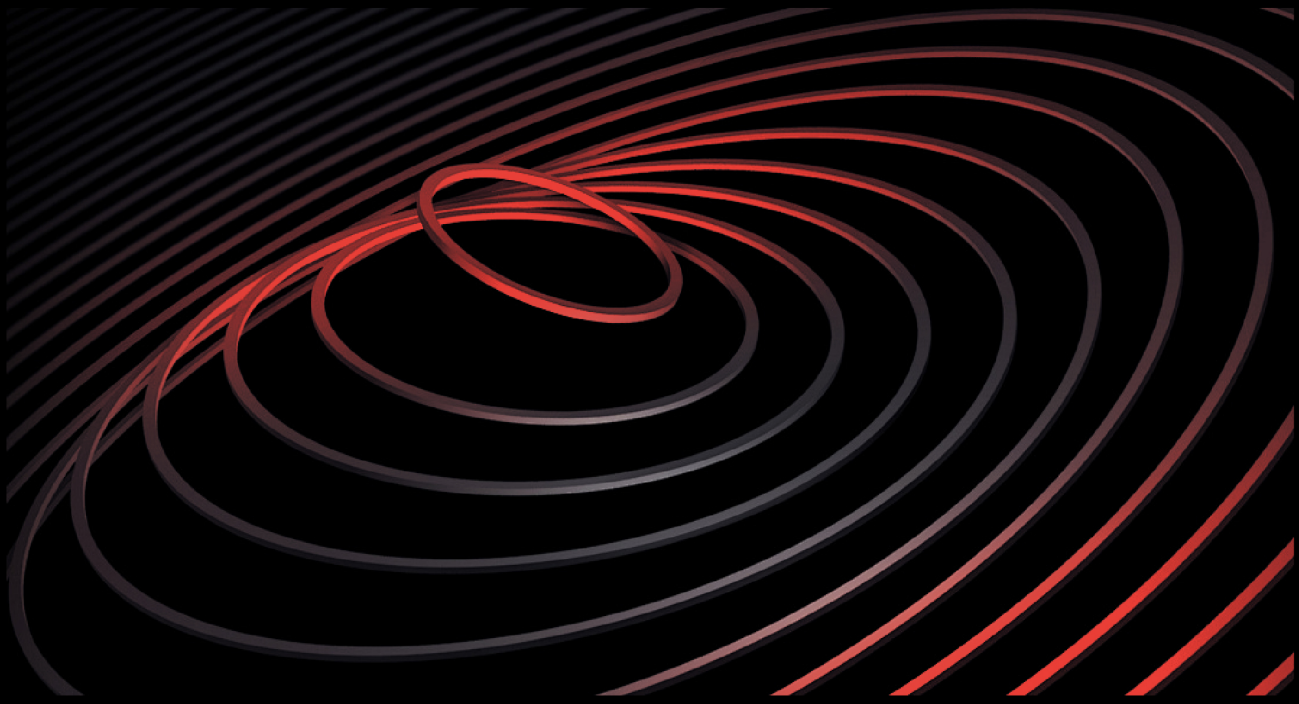
2025 SKYNET RWA SECURITY REPORT

The evolution of finance through Real World Assets introduces a new and complex security landscape.



Executive Summary

The tokenization of Real World Assets (RWAs) represents a significant evolution in financial markets, offering the potential to unlock value by bringing traditional assets on-chain. This convergence of traditional finance (TradFi) and decentralized finance (DeFi) presents opportunities for improved efficiency, transparency, and accessibility. This integration also introduces a complex security paradigm that extends beyond familiar smart contract vulnerabilities.

CertiK's Skynet RWA Framework offers structured criteria to perform due diligence and review the risks associated with RWA protocols highlighted in this report. To illustrate these hybrid threats, this report introduces a five-layer security stack, providing a model for understanding risks from the underlying physical asset to the on-chain smart contract.

RWA Leaderboard

#	Name	Skynet Score	Market Cap	TVL	RWA Type	Asset Type
1	BlackRock BUIDL	93.80 AAA	N/A	$2.36B	Financial Asset	US Treasury
2	Franklin Templeton	93.62 AAA	N/A	$692.27M	Financial Asset	Government Money Market Fund
3	Ondo Finance	93.58 AAA	$3.42B	$1.37B	Financial Asset	Fixed income, US Treasure
4	PAX Gold	93.25 AAA	$954.75M	$954.23M	Tangible Asset	Physical Gold, Commodities
5	Tether Gold	92.36 AA	$829.96M	$1.27B	Tangible Asset	Physical Gold, Commodities
6	RWUSD	91.85 AA	N/A	N/A	Financial Asset	US Treasury
7	USDtb	90.06 AA	$1.47B	$1.47B	Financial Asset	Treasury Bill
8	Centrifuge	89.65 AA	$190.52M	$998.55M	Financial Asset	Loans
9	Usual Labs	89.36 AA	$96.24M	$313.11M	Financial Asset	Treasury Bill
10	Sky (formerly MakerDAO)	89.25 AA	$1.67B	$6.74B	Financial Asset	US Treasury, Real Estate

Figure 1 - Skynet Top 10 RWA projects

Key Takeaways

- RWA Tokenization Introduces Complex, Hybrid Security Risks

Since an RWA token's value is a claim on an off-chain asset, the attack surface expands beyond smart contract code. It includes risks of **oracle manipulation, custodial and counterparty failures**, the unenforceability of legal frameworks, and fraudulent **Proof of Reserve** attestations.

- 2025 Losses Highlight Evolving Threat Landscape

Direct losses from RWA-specific exploits reached **$14.6 million** in H1 2025, following fluctuating annual losses of **$6 million in 2024** and **$17.9 million in 2023**. The evolution of the threat landscape is more significant than the direct monetary losses. While earlier years were defined by off-chain credit defaults, recent incidents show a shift toward on-chain and operational security failures.

- TradFi-Backed Protocols Offer Stronger Security

The highest-rated protocols in the Skynet RWA framework, such as those offered by entities like **BlackRock** and **Franklin Templeton**, exhibit strong security postures by integrating institutional-grade compliance, custody, and transparency. This trend highlights the importance of robust off-chain legal and trust frameworks in securing on-chain value.

- RWA Growth Concentrates Risk on Select Chains and Protocols

The sector's expansion is not evenly distributed and has concentrated both value and risk onto a few dominant blockchains and protocols. The majority of RWA value resides on **select blockchain ecosystems**, and within a handful of leading products. This concentration means the overall health of the RWA market is **highly dependent on the security and operational integrity** of these few key players and their underlying chains.

CertiK's RWA Client Spotlight

The 2025 Skynet RWA Security Report highlights that top-performing platforms have partnered with CertiK for rigorous security audits and reviews. Among these leaders are Ondo Finance, Paxos, and Tether, all of whom rank in the top five on the RWA Leaderboard for their commitment to security and integrity.

- **Ondo Finance**
  - Ranks #3 on the leaderboard with a Security Score of 93.58 (AAA).
  - Positions itself as a bridge for institutional-grade products to DeFi, offering tokens backed by short-term U.S. Treasuries and bank deposits.

- As an early RWA-dedicated platform, its flexible product design and institutional partnerships have attracted significant capital.

- **Paxos (PAX Gold)**
  - Ranks #4 on the leaderboard with a Security Score of 93.25 (AAA).
  - Issues a regulated physical gold token under New York oversight, with each token representing one ounce of vaulted gold.
  - PAXG is a leading example of tokenized gold, offering audited reserves and global liquidity for a high-market-cap safe-haven asset.

- **Tether (Tether Gold)**
  - Ranks #5 on the leaderboard with a Security Score of 92.36 (AA).
  - Issues the XAUt token, with each representing one ounce of vaulted gold.
  - Its robust adoption is fueled by rising demand for assets that can serve as a hedge against inflation and geopolitical risk.

The New RWA Security Paradigm

The security framework for RWAs is defined by the interface between trust-minimized DeFi protocols and trust-based traditional financial systems. Key risks emerge from this interaction because off-chain processes involve human actors, are subject to legal interpretation, and follow operational workflows.
For instance, the value secured by an audited smart contract can be impacted if an off-chain custodian becomes insolvent, a legal agreement is not upheld, or a data oracle transmits inaccurate information. This requires a comprehensive security assessment that evaluates the asset, legal, and operational layers alongside the on-chain code.

The RWA Security Stack: An Illustrative Model

To conceptualize this expanded threat landscape, it is useful to understand RWA security as a five-layer stack. A failure at any single layer can compromise the integrity of the entire structure, leading to financial loss for token holders.

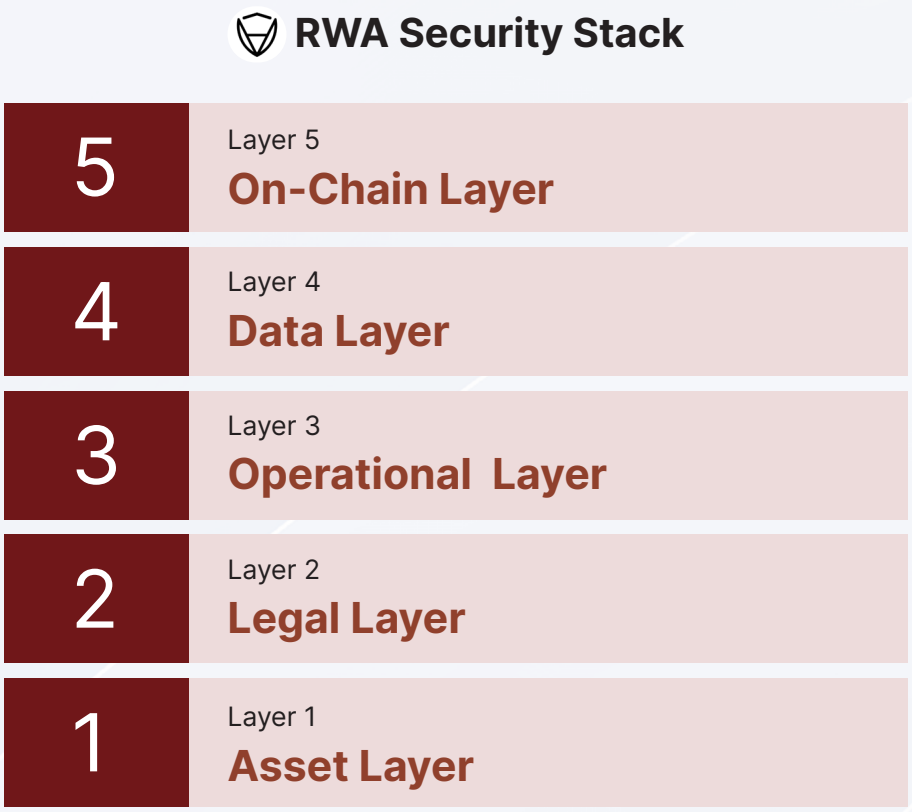


Figure 2 - The RWA Security Stack Framework

- **Layer 1: The Asset Layer.**

  This foundational layer is the physical or financial asset itself. Risks at this layer are fundamental and predate tokenization. They include fraudulent property titles, inaccurate valuation of illiquid assets, or the default of an underlying borrower in a private credit portfolio. The on-chain token is a derivative of this layer.

- **Layer 2: The Legal Layer.**

  This layer comprises the legal contracts, trusts, and corporate structures (like SPVs) that create the token holder's claim on the Asset Layer. A vulnerability here is a legal loophole. For example, a poorly drafted agreement might fail to grant token holders a senior claim on collateral, or a court in a specific jurisdiction may refuse to recognize tokenized ownership, rendering the entire structure unenforceable.

- **Layer 3: The Operational Layer.**

  This layer encompasses the human and process-driven risks associated with the centralized entities such as issuers, custodians, auditors, and administrators that manage the asset and its legal wrapper. This is the realm of counterparty risk. A custodian could become insolvent, an auditor could be negligent or complicit in fraud, or a rogue employee could compromise critical administrative private keys, allowing for the theft of assets or malicious contract upgrades.

- **Layer 4: The Data Layer.**

  This is the informational bridge between the off-chain and on-chain worlds. The primary component is the price oracle, which feeds asset valuation data to the smart contracts. This layer also includes Proof of Reserve attestations and other off-chain data points. Risks include the manipulation of oracle price feeds, the submission of falsified audit reports, or the use of stale data that does not reflect the asset's current state.

- **Layer 5: The On-Chain Layer.**

  This is the top layer of the stack, consisting of the smart contracts that mint, manage, and transfer the tokens. This is the traditional domain of DeFi security, with risks including reentrancy attacks, integer overflows, flawed business logic, and governance exploits that allow malicious proposals to be passed.

An Analysis of the RWA Threat Landscape

An analysis of recent security incidents reveals a clear evolution in the threats facing Real World Asset (RWA) protocols. A review of events from 2023 through the first half of 2025 shows a distinct progression from off-chain, credit-related losses to on-chain technical and operational exploits. This trend indicates that, as the RWA sector matures, security considerations must expand beyond traditional financial risk assessment to address a new class of on-chain vulnerabilities.

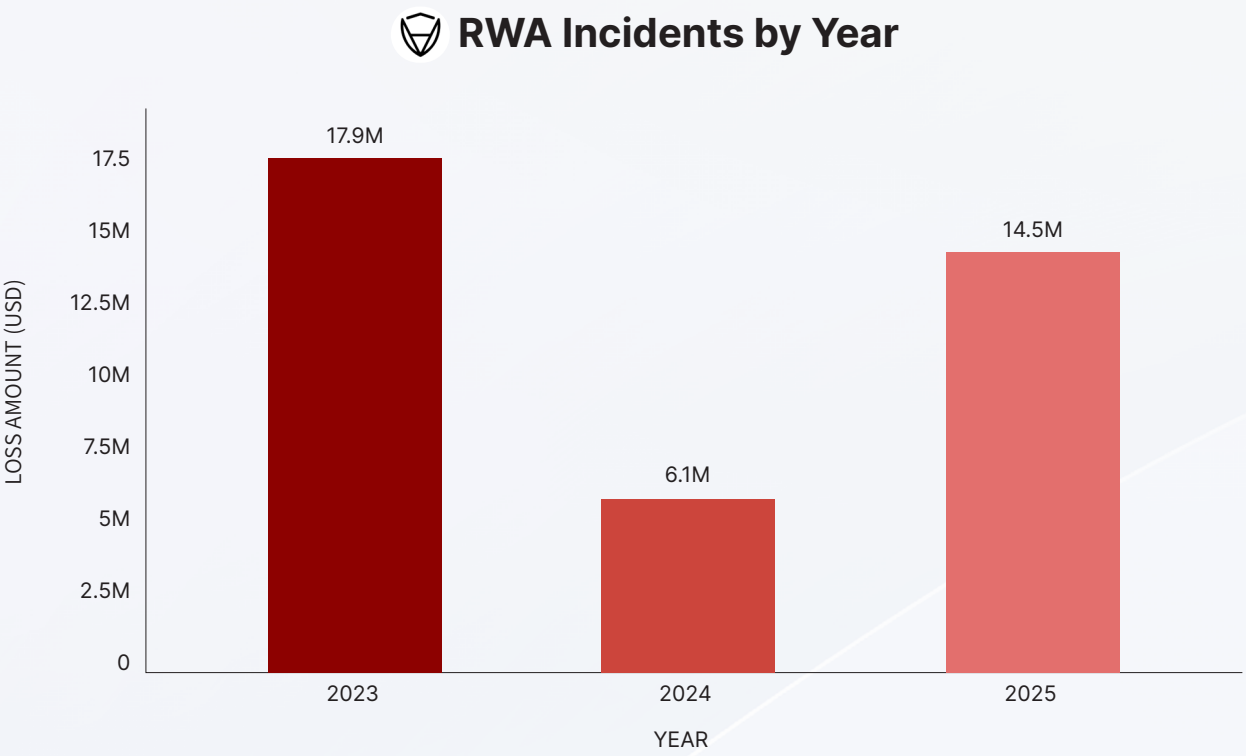


Figure 3 - RWA Incident Amounts by Year

The data supports this conclusion. The landscape in **2023** was characterized by a mix of technical exploits and significant credit events, with losses totaling approximately **$17.9 million**. Major incidents included a **$7 million** loan default loss from Goldfinch's Stratos fund and multiple exploits at Platypus Finance, including an **$8.5 million** loss from a logic error.

In **2024** there were **>$6 million** in losses. The primary loss was a $5.9 million loan default involving a Goldfinch borrower and a notable MakerDAO Curio incident leading to a nominal loss of $16 million, but effectively **$173,000** in value impacted.

In contrast, the first half of **2025** was defined entirely by on-chain and operational failures, with losses amounting to nearly **$14.6 million**. These incidents included a **$5.8 million** oracle manipulation attack on Loopscale and **$8.85 million** in combined losses at Zoth Protocol.

The Shift in Threats

The data highlights a clear transformation in the RWA threat landscape between 2023 and 2025. In 2023, the sector faced a combination of threats, with major losses coming from both off-chain credit defaults ($7 million) and on-chain technical exploits ($8.5 million). In 2024, the primary threat remained off-chain, with a $5.9 million loan default accounting for most of the year's losses. However, the first half of 2025 shows a complete shift: losses jumped to nearly $14.6 million, and were caused **entirely by on-chain and operational failures**, such as oracle manipulation and private key compromises. This shows the threat has evolved from exploiting external financial arrangements to attacking the core technology of the RWA ecosystem itself.

Incident Losses by Chain

The financial impact of RWA security incidents has been highly concentrated on a few key blockchains, with Ethereum bearing the brunt of the losses.

Ethereum has sustained the majority of the financial damage, given its large market share within the sector, with total losses of $21,758,237, representing 56.6% of the total amount lost since 2023. The incidents on Ethereum have included both off-chain credit defaults and on-chain operational failures like private key compromises.

Avalanche is the second most-impacted chain, suffering $10,886,999 in losses, or 28.3% of the total, which stemmed from multiple technical exploits on a single protocol.

Solana accounts for the remaining $5,800,000 (15.1%), a figure attributed entirely to a single, significant oracle manipulation attack.

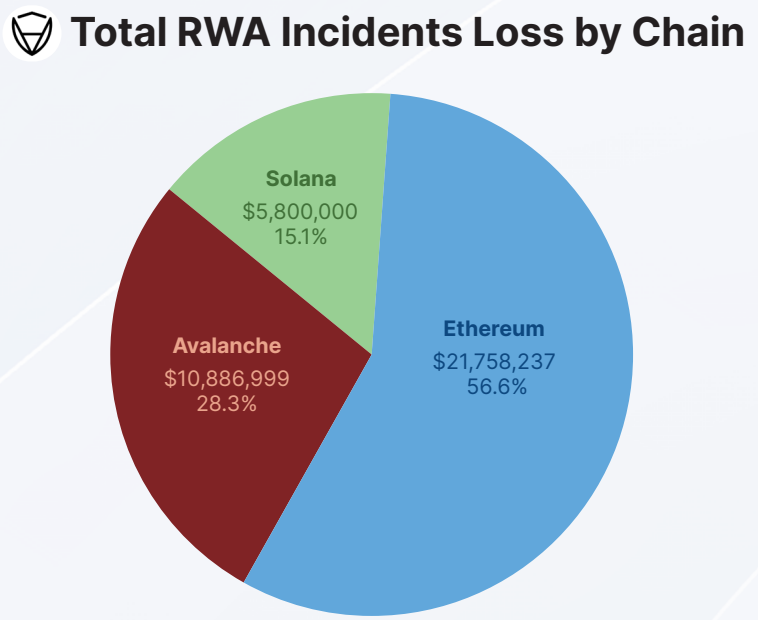


Figure 4 - RWA Security Incidents by Chain

Date	Loss Amount	Protocol	Vulnerability Type
2023	$8,500,000	Platypus Finance	Logic Error Exploit
2023	$157,000	Platypus Finance	Price Imbalance / Arbitrage
2023	$7,000,000	Goldfinch (Stratos)	Loan Default / Credit Risk
2023	$2,230,000	Platypus Finance	Flash Loan / Price Manipulation
2024	$173,000	MakerDAO (Curio Invest)	Governance
2024	$5,900,000	Goldfinch (Lend East)	Loan Default / Credit Risk
2025	$385,000	Zoth Protocol	Smart Contract Logic Flaw
2025	$8,500,000	Zoth Protocol	Private Key Compromise
2025	$5,800,000	Loopscale	Oracle Manipulation

Figure 5 - RWA-Related Security Incidents

Case Study: Zoth Protocol's Operational Failures

The Zoth Protocol incidents in March 2025 serve as a critical case study in modern RWA risk. The protocol suffered two distinct attacks: first, a $385,000 loss from a smart contract logic flaw that allowed an attacker to mint assets without sufficient collateral. The second, more devastating incident was an $8.5 million loss stemming not from a contract vulnerability, but from a classic operational security failure: a compromised private key.

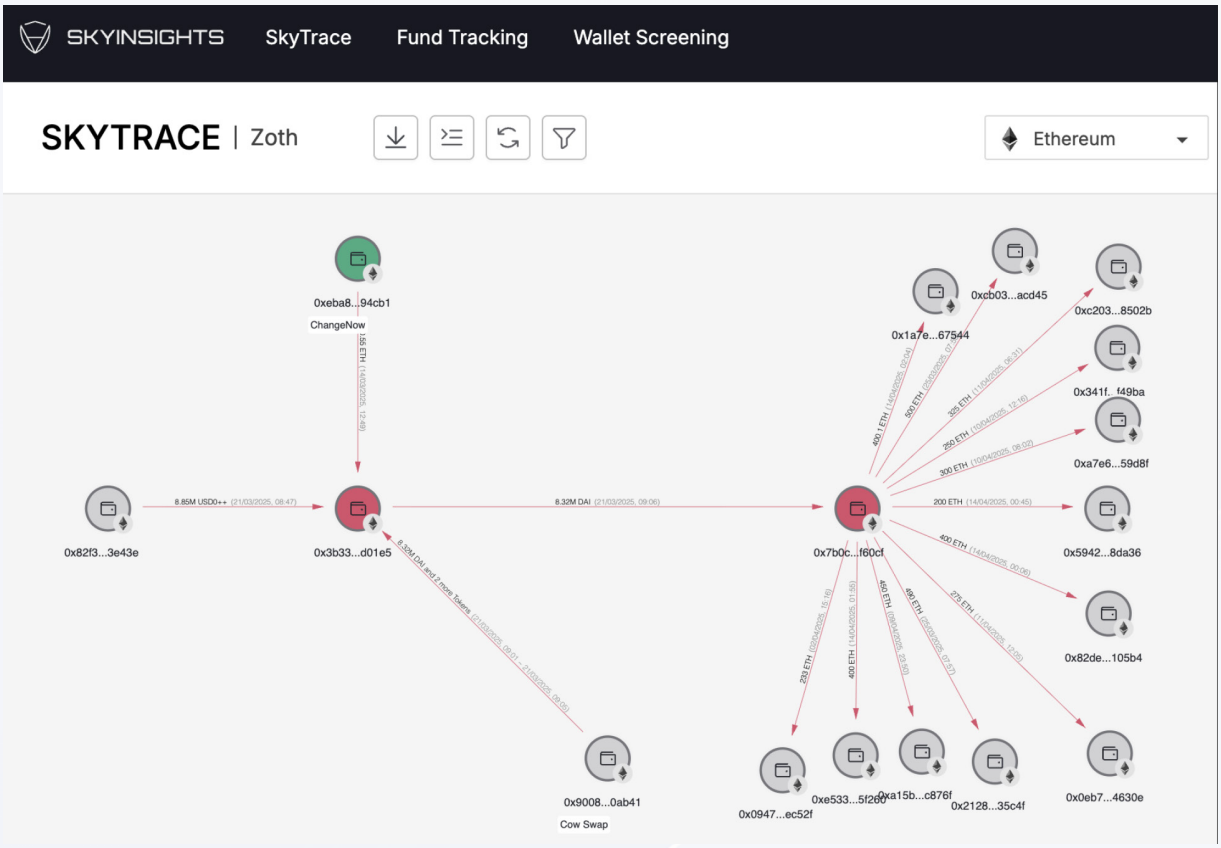


Figure 6 - Visual Flow of Zoth Protocol Exploit

The attacker gained control of the private key for the protocol's proxy contract deployer address. This administrative access allowed them to execute a malicious upgrade, creating a backdoor to drain the funds.

This hack is a stark reminder that an RWA protocol's off-chain infrastructure and key management are as critical as its on-chain code. A single compromised key can negate the security of even the most rigorously audited smart contracts, highlighting the need for institutional-grade security practices like using multisignature (multisig) or Multi-Party Computation (MPC) wallets for privileged addresses.

The Skynet RWA Security Ratings Framework

To address this gap in the RWA security market, CertiK developed the Skynet RWA Security Framework, introduced in this report. The framework is a comprehensive evaluation system designed specifically to assess the complex, hybrid risks inherent in RWA protocols. The Skynet Score framework employs a dynamic, weighted assessment system across six distinct categories. This methodology provides a nuanced, holistic view of a protocol's security posture, enabling investors, regulators, and partners to make informed, risk-adjusted decisions.

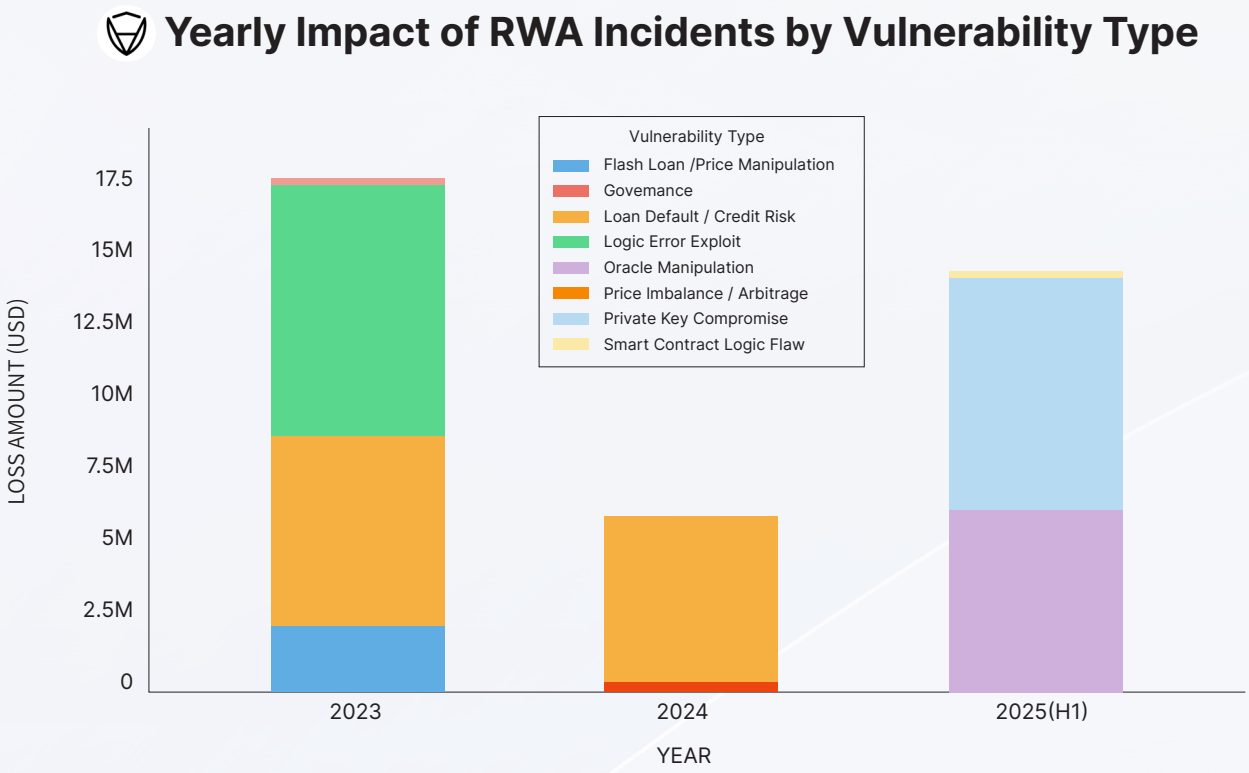


Figure 7 - RWA Losses by Exploit Type

The Skynet security framework is built upon core RWA-focused categories, each corresponding to its potential impact on the overall security and stability of an RWA protocol. This structure ensures that critical off-chain components, which represent the most significant new risk vectors, are appropriately prioritized in the final assessment.

Category	Description
Oracle & Data Feed Security	Oracles link off-chain asset values to on-chain transactions. A compromised oracle can feed false information to smart contracts, causing financial loss.
Asset & Custody Integrity	The token's value depends on the underlying real-world asset and the security of the entity holding it. If the asset's quality or the custodian's integrity fails, the token can become worthless.
Compliance & Legal Structure	The legal framework defines and enforces a token holder's claim. A flawed legal structure can make on-chain rights unenforceable in a real-world court.
Proof of Reserves	PoR ensures that the value of tokens issued on-chain is directly backed by assets held off-chain. This is a key mechanism for maintaining user trust and preventing fraud.
Smart Contract Security	Security of the on-chain code is essential. Vulnerabilities in smart contracts can lead to theft, governance manipulation, or frozen protocol operations, regardless of off-chain security.
Transparency & Governance	Trust in a protocol is built on clear governance and transparency. Users need access to documentation and a clear understanding of how critical decisions are made.

Figure 8 - RWA Security Rating Framework

Category 1: Oracle & Data Feed Security

The oracle is a critical single point of failure in an RWA protocol. It acts as the bridge between the off-chain world, where the asset's value is determined, and the on-chain world, where financial transactions are executed. A compromised or manipulated oracle can lead to significant financial losses by causing smart contracts to operate on false information. This risk is particularly acute for illiquid RWAs like real estate or private credit, whose values are not readily available on high-volume public exchanges, making them more susceptible to manipulation.

Key Evaluation Metrics:

- **Decentralization and Source Quality**: The framework quality of data sources the oracle aggregates. Protocols relying on industry-standard providers, which pull data from multiple reputable sources and use decentralized node networks, score highly.
- **Manipulation Resistance**: The methodology evaluates the oracle's architecture for its resilience against attacks, especially flash loan-based price manipulation. The use of Time-Weighted Average Prices (TWAP) and other smoothing mechanisms is a positive indicator.

- **Reliability and Liveness:** The framework measures the uptime and reliability of data feeds, rewarding protocols that have clear fallback mechanisms to handle oracle failures or discrepancies in the provided data.
- **RWA-Specific Capabilities:** Protocols integrating advanced oracle services tailored for RWAs, which provide on-chain verification of off-chain collateral, demonstrate a mature approach to transparency and security.

Category 2: Asset & Custody Integrity

The digital token is a representation; its value is directly linked to the quality of the underlying real-world asset and the security of the entity that holds it. A failure in either the asset's provenance or the custodian's integrity can render the token worthless, irrespective of the on-chain technology's sophistication.

Key Evaluation Metrics:

- **Underlying Asset Quality:** The framework analyzes the intrinsic value, liquidity, and potential for appreciation of the tokenized asset. This includes due diligence on property titles, creditworthiness of borrowers in private credit pools, and authenticity of collectibles.
- **Custodian Security and Regulation:** The protocol's choice of custodian is heavily scrutinized. Use of regulated, qualified custodians with robust security infrastructure, such as federally chartered crypto banks or firms licensed by reputable authorities, is a critical factor. This includes assessing their internal controls, insurance coverage, and procedures for asset segregation.
- **Bankruptcy Remoteness:** This is a crucial aspect. The legal structure must ensure that the assets held in custody are isolated from the custodian's own balance sheet. In the event of the custodian's or issuer's insolvency, a properly structured, bankruptcy-remote vehicle should protect token holders' assets from being claimed by other creditors.

Category 3: Compliance & Legal Structure

In the RWA ecosystem, the legal wrapper is as important as the smart contract code. It is the legal agreement that defines and enforces a token holder's claim to the underlying asset. An ambiguous, poorly constructed, or noncompliant legal framework can make on-chain ownership rights unenforceable in a real-world court of law, representing a critical point of failure.

Key Evaluation Metrics:

- **Regulatory Compliance:** The framework assesses the protocol's adherence to relevant securities laws in its jurisdictions of operation. This includes proper structuring of offerings under exemptions like Regulation D or Regulation S in the U.S. and compliance with frameworks like MiCA in Europe.
- **Special Purpose Vehicle (SPV) Robustness:** The use of a Special Purpose Vehicle is a cornerstone of sound RWA structuring. The framework evaluates whether the SPV is structured to be truly bankruptcy-remote, legally separating the tokenized assets from the operational and financial risks of the asset originator.
- **Enforceability of Token Holder Rights:** The legal documentation, including the subscription agreement and offering memorandum, is analyzed to determine the clarity and strength of the rights granted to token holders. This includes rights to income streams, claims on collateral in a default, and governance rights.

Category 4: Proof of Reserves (PoR)

Proof of Reserves is the auditable link that ensures the value of tokens issued on-chain corresponds directly to the value of the assets held off-chain. It is the primary mechanism for maintaining user trust and preventing the issuance of unbacked or undercollateralized tokens. Any fraud or negligence in this process can lead to a rapid and complete collapse of the token's value.

Key Evaluation Metrics:

- **Auditor Reputation and Independence:** The credibility of the third-party firm conducting the PoR attestations is critical. The framework favors attestations from reputable, independent accounting firms with expertise in digital assets.
- **Frequency and Transparency:** The cadence of PoR reporting is critical. While monthly attestations have been the standard, the market is moving towards more dynamic verification. Leading protocols are adopting real-time or near-real-time reporting solutions.
- **On-chain Integration:** The most advanced form of PoR involves bringing attestation data on-chain via oracles. This allows smart contracts to programmatically verify reserves before executing critical functions (e.g., minting new tokens) and can even trigger automated "circuit breakers" to halt protocol activity if reserves fall below required thresholds, providing a powerful, automated layer of security.

Category 5: Smart Contract Security

While RWA risks are predominantly off-chain, the security of the on-chain code remains a foundational requirement. Vulnerabilities in smart contracts can lead to the direct theft of funds, manipulation of governance, or freezing of protocol operations, regardless of how well-structured the off-chain components are.

Key Evaluation Metrics:

- **Third-Party Audits:** The framework evaluates the quantity, quality, and recency of smart contract audits from top-tier security firms like CertiK. A history of regular, comprehensive audits for all major code releases is expected.
- **Bug Bounty Program:** The existence of a well-funded and actively managed bug bounty program with a trusted platform demonstrates a mature and proactive approach to security, incentivizing white-hat hackers to responsibly disclose vulnerabilities.
- **Penetration Testing:** The implementation of additional security testing is essential to prevent manipulation and for robust access control for administrative functions.

Category 6: Transparency & Governance

Trust in an RWA protocol is built not only on technical and legal safeguards but also on the issuer's commitment to transparency and clear governance. Investors and users need access to comprehensive documentation and a clear understanding of how both on-chain and off-chain decisions are made.

Key Evaluation Metrics:

- **Public Documentation:** The quality, clarity, and accessibility of all project documentation are evaluated, including technical whitepapers, legal offering documents, and governance procedures.
- **Issuer Transparency:** The framework assesses the transparency of the issuing entity and its leadership team. Publicly known teams with strong track records in finance and technology score higher than anonymous or opaque operations.
- **Governance Processes:** The mechanisms for both on-chain and off-chain governance are analyzed. This includes processes for smart contract upgrades, which should ideally involve a timelock, as well as clear policies for making critical off-chain decisions, such as changing a custodian, auditor, or legal advisor.

The Skynet RWA Leaderboard: Top 10 Protocols of H1 2025

#	Name	Skynet Score	Market Cap	TVL	RWA Type	Asset Type
1	BlackRock BUIDL	93.80 AAA	N/A	$2.36B	Financial Asset	US Treasury
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9	Usual Labs	89.36 AA	$96.24M	$313.11M	Financial Asset	Treasury Bill
10	Sky (formerly MakerDAO)	89.25 AA	$1.67B	$6.74B	Financial Asset	US Treasury, Real Estate

Figure 9 - Skynet Top 10 RWA Projects

1. BUIDL

- **Project Positioning & Core Product:** An on-chain money market fund share (BlackRock USD Inc. Digital Liquidity Fund) issued by BlackRock via Securitize, primarily investing in short-term U.S. Treasuries.
- **Current TVL Data:** The largest RWA project by TVL, with approximately $2.3B locked.
- **RWA Segment:** Government Bonds / Money-Market Fund.
- **Reason for Ranking:** As a product from the world's largest asset manager, BUIDL offers high-liquidity, low-risk, USD-denominated yield. Its sector-leading TVL signals strong market demand, and BlackRock's involvement boosts credibility for the entire RWA space, supporting its high ranking.

2. Franklin Templeton

- **Project Positioning & Core Product:** An on-chain U.S. government money market fund (Benji Investments OnChain U.S. Government Money Fund) that is the first U.S.-registered public fund to use a public blockchain for share recording.
- **Current TVL Data:** Approximately $700 million in AUM.
- **RWA Segment:** Bonds / Money Market Fund.
- **Reason for Ranking:** Franklin Templeton's on-chain fund marks a major TradFi entrant embracing RWAs. It leverages blockchain for operational efficiency while remaining within a traditional regulatory framework, and its significant AUM demonstrates growing institutional acceptance.

3. Ondo Finance

- **Project Positioning & Core Product:** Positions itself as a bridge for institutional-grade products to DeFi, offering tokens like OUSG (short-term U.S. Treasury ETF note) and USDY (high-yield token backed by Treasuries and bank deposits).
- **Current TVL Data:** Approximately $1.37 billion in TVL.
- **RWA Segment:** Bonds / Fixed Income.
- **Reason for Ranking:** As an early RWA-dedicated platform, Ondo built a seamless bridge for fixed-income assets. Its flexible product design, institutional partnerships, and risk controls have attracted significant capital.

4. Paxos Gold (PAXG)

- **Project Positioning & Core Product:** A regulated physical-gold token issued by Paxos under New York oversight, with each token representing one ounce of vaulted gold.
- **Current TVL Data:** A market capitalization of roughly $950 million.
- **RWA Segment:** Commodity (Gold).
- **Reason for Ranking:** As a leading example of tokenized gold, PAXG offers audited reserves and global liquidity, bringing a high-market-cap safe-haven asset into the digital ecosystem. Its scale and user base make it a leader among commodity RWAs.

5. Tether Gold (XAUt)

- **Project Positioning & Core Product:** A gold token issued by Tether, with each XAUt representing one ounce of vaulted gold.

- **Current TVL Data:** A market capitalization above $800 million.
- **RWA Segment:** Commodity (Gold).
- **Reason for Ranking:** XAUt combines gold's store-of-value properties with the benefits of blockchain, such as 24/7, fractional, and borderless transfers. Its robust adoption has been fueled by rising demand for hedges against inflation and geopolitical risk.

6. RWUSD

- **Project Positioning & Core Product:** A principal-protected, yield-bearing product from Binance Earn that benchmarks its returns to RWAs like tokenized U.S. T-Bills. It functions as an internal ledger entry within Binance.
- **Current TVL Data:** Not publicly disclosed.
- **RWA Segment:** Yield Referenced to Government Bonds / Money Markets.
- **Reason for Ranking:** RWUSD provides an accessible entry point for exchange users to gain exposure to RWA-benchmarked yields. However, its centralized nature, lack of on-chain transferability, and platform-set APR mean it has lower transparency and auditability compared to native on-chain RWA tokens.

7. Ethena USDtb

- **Project Positioning & Core Product:** An on-chain stablecoin from Ethena Labs backed primarily by shares in BlackRock's BUIDL fund, allowing holders to capture U.S. Treasury yield.
- **Current TVL Data:** Approximately $1.44 billion in TVL.
- **RWA Segment:** Bonds / Stablecoin.
- **Reason for Ranking:** USDtb combines the utility of an on-chain stablecoin with transparent, interest-bearing Treasury backing. Its rapid growth and novel structure secure its position among the top RWA protocols.

8. Centrifuge

- **Project Positioning & Core Product:** A decentralized asset-financing protocol that converts assets like invoices and mortgages into on-chain securities using a senior/junior tranche structure.
- **Current TVL Data:** Manages $600-700 million across its chain and deployments.

- **RWA Segment:** Receivables / Private Debt.
- **Reason for Ranking:** As an early RWA infrastructure project, Centrifuge pioneered a model for bringing SME financing on-chain. Its rising TVL and mature risk structure make it a key component of the RWA infrastructure.

9. Usual

- **Project Positioning & Core Product:** A decentralized stablecoin protocol issuing USD0, a stablecoin over-collateralized by tokenized U.S. Treasury assets. It redistributes yield from its RWA reserves to the community.
- **TVL Data:** Approximately $300 million in locked collateral.
- **RWA Sector Category:** Government bonds / Money market fund.
- **Reason for Ranking:** Usual introduces an innovative model for a yield-bearing stablecoin backed by a diversified pool of T-bill collateral. Its novel approach and substantial traction place it among the leading RWA projects.

10. SKY (MakerDAO RWA Vaults)

- **Project Positioning & Core Product:** The RWA Vault mechanism of MakerDAO, the protocol that issues the DAI stablecoin, allows various real-world assets to be used as collateral.
- **TVL Data:** Over $1 billion in collateral held in RWA vaults.
- **RWA Segment:** Diversified (mortgages, commercial paper, etc.).
- **Reason for Ranking:** MakerDAO pioneered the large-scale integration of RWAs into a major DeFi protocol. Its vault system, spanning many asset classes, has been a key benchmark for the RWA sector.

Market Analysis: Key Trends and Future Outlook

The past year has seen explosive growth and innovation in the RWA sector, as on-chain financial products backed by traditional assets gained significant traction. Below, we analyze three key trends and consider what they mean for the future of RWA in DeFi and beyond.

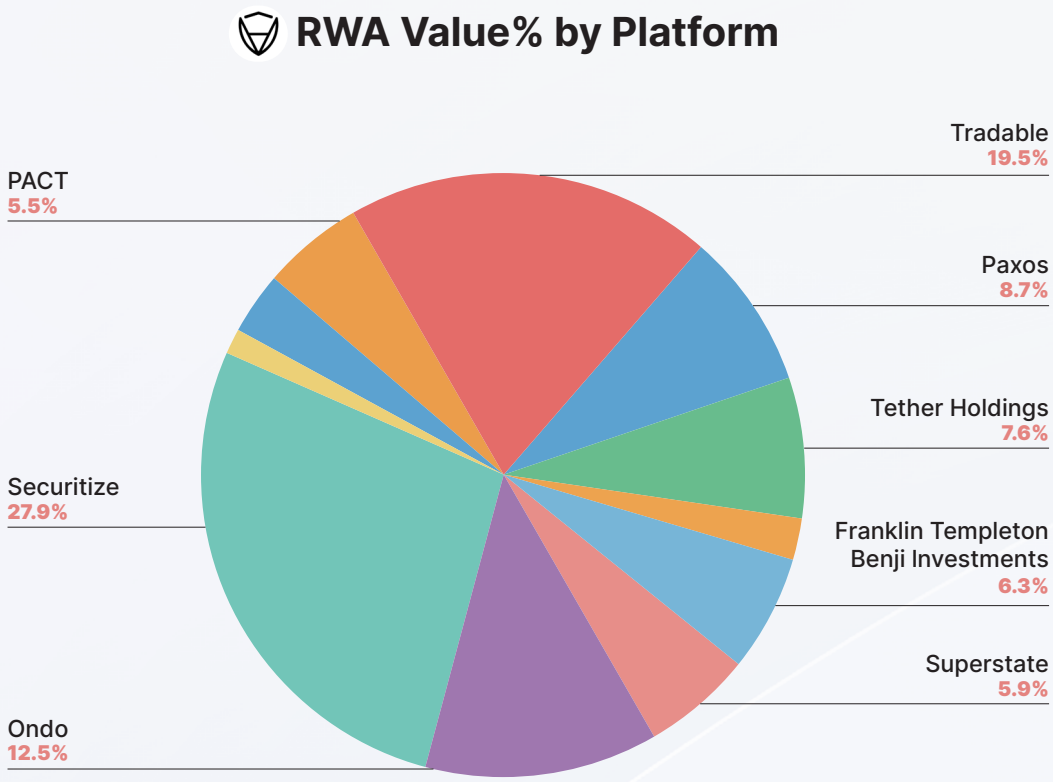

Figure 10 - RWA Value by Protocol

1. U.S. Treasury-Backed RWA Products Dominate the Market

Tokenized U.S. Treasury products have risen to prominence, emerging as the dominant category within RWAs. With U.S. Treasury yields climbing in the past two years, investors flocked to on-chain instruments offering comparable low-risk returns. The combined market cap of tokenized Treasury assets grew roughly 400% year-over-year to over $7 billion by mid-2025.

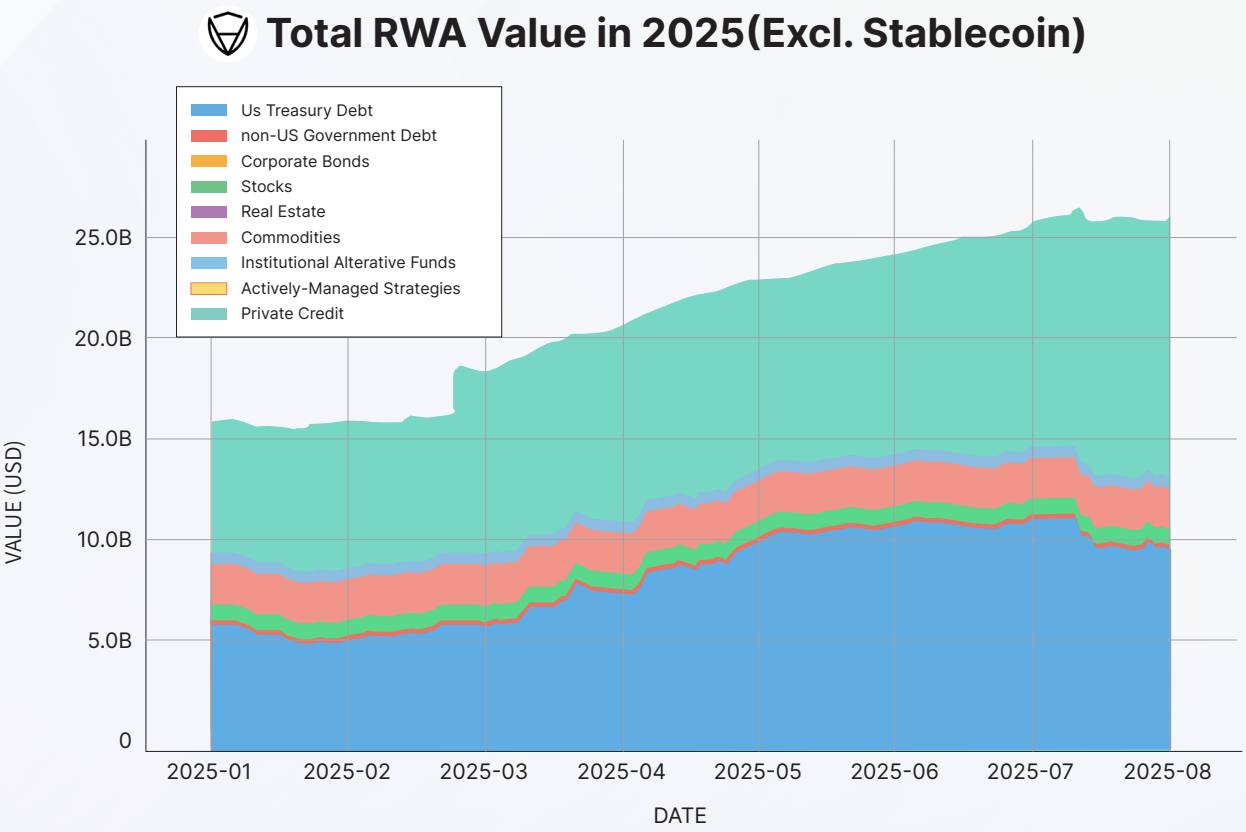

Figure 11 - Total RWA Value Growth in 2025

This surge was led by a few standout products backed by U.S. government debt, which now account for a lion's share of RWA total value locked (TVL), including BlackRock's BUIDL Fund, Franklin Templeton's OnChain U.S. Government Money Fund (FOBXX/BENJI), and Ethena's USDtb Stablecoin.

Overall, U.S. Treasury-backed RWAs have become a dominant force, accounting for a majority of on-chain RWA value. Users from retail to institutions poured into these products to earn ~5% yields on-chain, far outstripping typical DeFi lending returns. As a result, tokenized Treasuries have been dubbed a "gateway to tokenization," attracting even conservative capital on-chain by offering a familiar low-risk profile. This trend also led to RWAs being used increasingly as collateral in DeFi and CeFi, improving capital efficiency.

2. Merging RWA Yield Mechanisms with Stablecoins

Another major development is the fusion of real-world yield generation with stablecoins, resulting in new classes of yield-bearing stable assets. Traditional stablecoins like USDT or USDC are backed by reserves (including T-bills) but pay no interest to holders, with the yield retained by issuers. In 2024, innovators introduced stablecoin-like tokens that pass through treasury yields directly to users, blurring the line between a stablecoin and an investment product. Two notable examples are Usual's USD0 and Binance's RWUSD.

This trend is effectively merging the stablecoin layer with RWA yield generation. It offers a compelling alternative to holding cash: why own a non-yielding stablecoin when one could hold a yield-generating dollar token? Consequently, we're seeing stablecoins evolve into platforms for distributing real-world interest. However, this convergence also raises questions around regulation and risk. If a stablecoin automatically pays yield from securities, it might be deemed a security itself in some jurisdictions.

3. TradFi Institutions Elevate Compliance, Transparency and Trust

The increasing involvement of TradFi giants in the RWA space has been a game-changer. In the past year, firms like BlackRock, Franklin Templeton, JPMorgan, and others made significant forays into tokenized assets, bringing with them high standards for compliance and investor protection. This institutional entry has raised the bar for how RWA projects approach regulation, transparency, and trust.

- **Regulatory Compliance and Quality:** Traditional institutions operate under strict regulatory frameworks, and their RWA offerings reflect that rigor. The presence of BlackRock and Franklin effectively sets higher compliance standards.
- **Transparency and Reporting:** Large asset managers have reputations to uphold, so they bring a culture of transparency. They often involve third-party custodians, trustees, and auditors, giving investors greater confidence that the on-chain tokens truly correspond to real-world assets.
- **Investor Trust and Mainstream Acceptance:** Perhaps most importantly, TradFi involvement brings a stamp of legitimacy that is accelerating institutional adoption of crypto. When the world's largest asset manager (BlackRock) and a $1.5 trillion fund manager (Franklin Templeton) actively tokenize assets, it signals that blockchain finance is not just a niche experiment but a strategic priority.

4. Concentration of RWA Value and Chain-Level Security Implications

The distribution of RWA value across different blockchains is highly concentrated, as shown in the below pie chart. Ethereum remains the undisputed leader, hosting a commanding 55.6% of the total RWA market value. Following Ethereum is the Layer 2 scaling solution Zksync Era, with 19.0%. Together, these two chains account for nearly three-quarters of all tokenized real-world assets, highlighting the critical role of the Ethereum ecosystem in this sector. Other notable chains like Aptos (5.7%), Solana (3.9%), and Polygon (3.0%) hold smaller but significant shares.

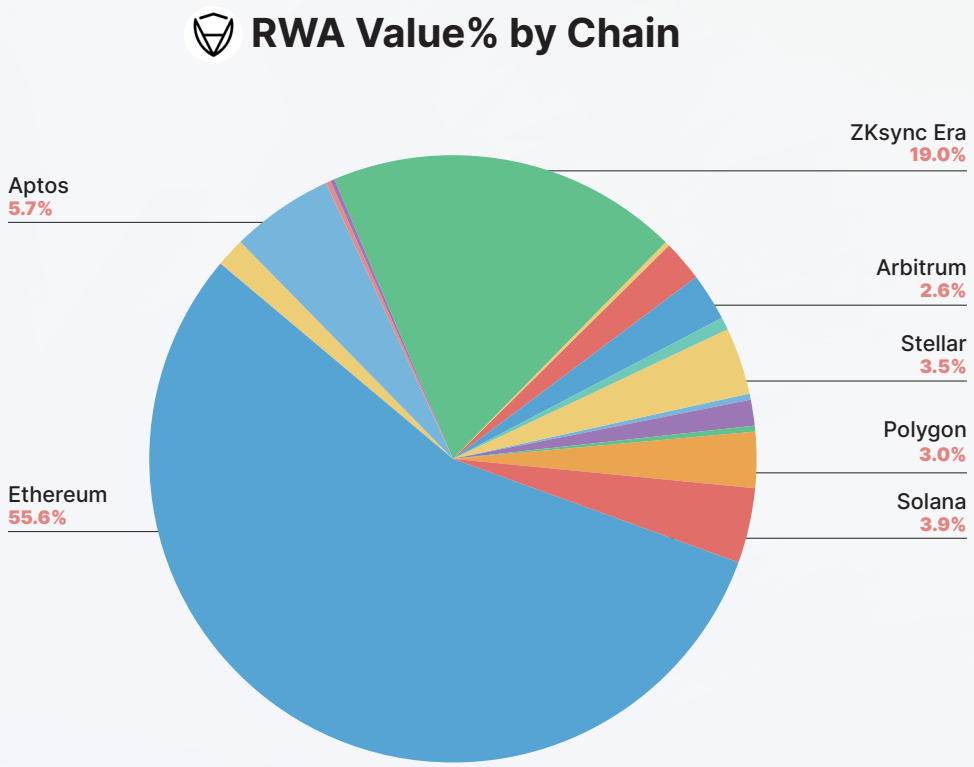

Figure 12 - RWA Value by Chain

This concentration has significant security implications. The integrity of an RWA is intrinsically linked to the security of the underlying blockchain on which it resides. An RWA's value is not only derived from its off-chain backing but also from the guarantee that its on-chain representation cannot be forged, stolen, or duplicated. Therefore, the inherent security risks of a specific chain become a foundational risk layer for all RWAs built upon it. These risks extend beyond typical smart contract bugs and include:

- **Core Protocol Vulnerabilities:** Flaws in the blockchain's own code or consensus mechanism, such as the potential for 51% attacks that could allow for transaction reversals.
- **Bridge Exploits:** As RWAs move between chains (e.g., from Ethereum to Layer 2s like Zksync or Arbitrum), they become exposed to bridge security risks. A compromised bridge could lead to the creation of unbacked RWA tokens, devaluing the legitimate assets.

Consequently, the heavy reliance on the Ethereum ecosystem means that its security, and the robustness of its bridges, are paramount to the stability of the majority of the RWA market.

Forward-Looking Insights

The trajectory of RWA growth suggests a robust outlook for the sector, with several projections emerging from current trends:

- **Continued TVL Growth and Market Expansion:** Real-world asset tokenization is expected to maintain strong momentum. As of mid-2025, on-chain RWA value (excluding major stablecoins) stood around $25 billion, up ~194% from $8.5 B in January 2024. Boston Consulting Group projects up to $16 trillion of assets could be tokenized globally by 2030.
- **Innovation in Yield and Stablecoin Integration:** The merging of RWA yields with stablecoins is expected to evolve and mature. We anticipate more yield-bearing stable assets emerging. A key insight is that crypto users now expect real yield on stable holdings – a trend likely to persist.
- **Deeper Institutional Participation and Standards:** In the coming years, the bar set by BlackRock and Franklin Templeton will beckon more TradFi institutions into RWA tokenization. This will likely bring about standardization in compliance and reporting. The net effect is a virtuous cycle – more trust leads to more capital, which leads to more development and thus even more trust in the ecosystem.

RWA Market Outlook (H2 2025 – 2026)

The RWA sector has transformed into a key pillar of the crypto industry, entering the second half of 2025 with remarkable momentum. The total on-chain RWA market has exploded from approximately $5 billion in 2022 to over $26 billion by mid-2025, fueled by crypto-native demand and increasing institutional participation. This growth trajectory is poised to continue robustly through 2026 and beyond.

A primary driver of this expansion is the tokenization of U.S. Treasuries, which provided a timely product-market fit that unlocked billions in on-chain liquidity. This segment saw an explosive uptake, with firms like BlackRock and Franklin Templeton setting a high bar for institutional-grade products and capturing a significant share of the market. The blending of these reliable, real-world yields with stablecoins has, in turn, reshaped the stablecoin landscape. This is evidenced by the rapid growth of RWA-collateralized stablecoins from projects like Ethena, Usual, and Ripple, which collectively amassed billions in circulation. A key insight from this trend is that crypto users now expect real, sustainable yield on their stable holdings—a preference that is likely to persist.

In parallel, tokenized private credit markets have scaled up to become the largest RWA category, with roughly $14 billion on-chain. As interest rates remain high, the demand for these higher-yield opportunities is expected to grow. Platforms like Centrifuge and Maple Finance are successfully turning real-world loans into DeFi assets. The entry of respected financial institutions has infused the space with credibility and rigorous standards, creating a virtuous cycle where trust attracts capital, which in turn fuels further development and innovation.

Supportive regulation and technological advancements are further catalyzing this trend. The European Union's MiCA framework, effective in 2025, provides clear rules for tokenized assets, while other regions are also moving toward regulatory clarity. Simultaneously, new infrastructure from platforms like Securitize is making RWAs more composable within DeFi, and creative product designs from protocols like Pendle are improving accessibility and flexibility.

Projected Growth by Blockchain

As the RWA ecosystem expands, the choice of the underlying blockchain is becoming a key strategic factor, particularly regarding security, scalability, and compliance.

- **Ethereum** remains the primary settlement layer for RWA tokens due to its unmatched security and deep liquidity. It commands the lion's share of on-chain RWA value, with over $7.7 billion of the $13.5 billion on public networks as of mid-2025. We expect Ethereum's dominance to persist into 2026, especially as its Layer-2 (L2) networks scale.

- **High-Growth L1s and L2s:**
  - **Solana** has emerged as one of the fastest-growing RWA networks. In 2025, Solana's RWA value surged by over 200%, climbing from ~$174 million in January to around $550 million by mid-year. This growth is driven by its high-speed, low-cost infrastructure, attracting tokenized funds and yield-bearing stablecoins like Ondo Finance's Treasury-backed tokens USDY and OUSG.
  - **BNB Chain** has also demonstrated explosive growth in the RWA sector. The platform's RWA value reached $364.88M, marking a significant surge of in H1 2025. This expansion is accompanied by a growing user base and strategic partnerships with larger RWA projects coming on the chain.
  - **Base,** an Ethereum L2, is poised to become a major RWA hub. It offers Ethereum-grade security with much lower transaction costs and benefits from Coinbase's institutional on-ramps. Analysts see Base emerging as a foundational layer for regulated, institutional-grade digital assets.
  - **zkSync Era** quickly became the second-largest RWA chain after Ethereum by mid-2025, hosting over $2.2 billion in tokenized assets, largely from a single institutional credit deal.

- **Niche and Specialized Platforms:** Other blockchains are making significant inroads in specific RWA segments.
  - **Avalanche** has pursued institutional tokenization via its subnets, notably hosting one of the first tokenized private equity funds (KKR's health care fund) in partnership with Securitize.
  - **Polkadot's** ecosystem facilitates RWA lending through dedicated parachains like Centrifuge, which has brought hundreds of millions in real-world loans on-chain.
  - **Tron** stands out for supporting a large portion of the fiat-backed stablecoin supply (primarily USDT), although it has seen limited adoption of other RWA types.

Conclusion and Forward Outlook

Looking forward, the RWA sector is on track to continue its rapid expansion and become an integral pillar of the digital asset ecosystem. The powerful combination of reliable real-world yields with blockchain's native liquidity and composability is drawing in both retail and institutional capital. We anticipate that Ethereum and its scaling layers will maintain a leadership position due to their strong security and network effects, while select alternatives like Solana and Base will achieve higher relative growth rates in specific segments.

Barring any major setbacks, projections suggest the market could reach between $3 trillion and $10 trillion by 2030. This projected growth makes security more critical than ever, requiring transparency for projects like the ratings available on Skynet's RWA Leaderboard.

Check out the Skynet platform today and elevate your Web3 journey by reading more on the CertiK blog hub.

Protect your community and your organization today. Visit CertiK.com or get in touch at bd@certik.com.

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