DeAsset
MANAGEMENT

RESEARCH REPORT

The On-Chain Credit Machine

How Aave, Morpho and Spark rebuilt a $50 billion lending market after its worst crisis — and what the arrival of institutional credit means for investors.

August 2026

deasset.io

CONTENTS

Inside this report

An assessment of the on-chain lending market as of August 2026: its scale, its business models, and the institutional capital now flowing through it.

01 Executive Summary

02 The State of On-Chain Credit

03 Aave: The Incumbent's Moat — and Its April Test

04 Morpho: The Modular Challenger

05 Spark and the Sky Banking Model

06 The Institutional Turn: RWA Collateral and Curated Vaults

07 Key Risks

08 Conclusion: What It Means for Investors

About DeAsset Management. DeAsset Management is a decentralized asset management firm providing global investors with access to real, diverse and sustainable value across digital and tokenized markets. This report is published for informational purposes. See the disclaimer at the end of this document.

01 · EXECUTIVE SUMMARY

Lending survived its stress test. Now it is being rebuilt by professionals.

In April 2026, on-chain lending faced the worst crisis in its history: a $292 million bridge exploit at KelpDAO left Aave — the sector's largest protocol — holding an estimated $196–230 million of bad debt, and $8.5–10 billion of deposits fled within 48 hours. Four months later, the loan book is growing again: Aave's active loans averaged $11.7 billion in August 2026, a 12.9% monthly gain, and the tracked sector's outstanding loans reached $24.4 billion.

Three architectures now compete for the business of credit. **Aave** remains the monolithic incumbent — roughly half of all on-chain loans — and the only major venue that converts borrow interest into protocol revenue (about a 13% take rate). **Morpho** has halved Aave's lead with a modular design: permissionless isolated markets plus professional curators, growing loans to a record $5 billion while charging tokenholders nothing yet. **Spark**, inside the Sky (ex-MakerDAO) ecosystem, runs the largest on-chain capital allocator at $2.54 billion, blending DeFi yield with BlackRock-grade real-world assets.

$50.4B
DeFi lending TVL; Aave + Morpho hold 53%

$11.7B
Aave active loans, Aug 2026 (47.8% share)

$5.0B
Morpho loans record — at a 0% take rate

DeAsset view: On-chain credit is one of the few crypto businesses with genuine, recurring, borrower-paid cash flows — the closest thing DeFi has to a bank's net interest margin. The April cascade proved the collateral graph is reflexive and that safety nets were undersized; the institutional turn (Apollo on Morpho, tokenized private credit as collateral) is the attempt to price that risk professionally. We would rather own the spread than the governance token: cash-generating lenders at single-digit multiples beat modular growth stories at triple-digit ones.

Figures as of August 2026 unless noted. Sources: DefiLlama via CoinLaw; Token Terminal August 2026 Aave report; Messari via Edgen; CryptoRank.

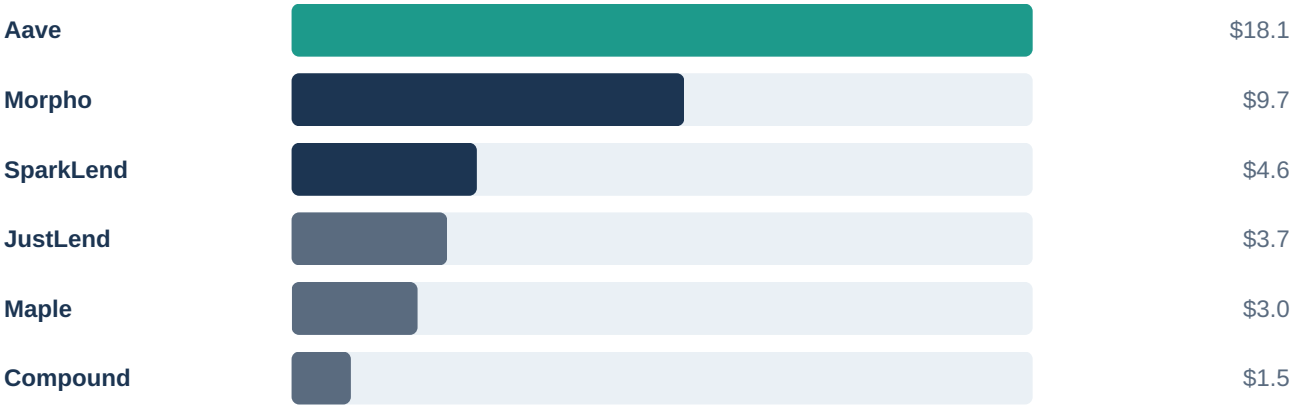
02

The State of On-Chain Credit

On-chain lending is a simple business wearing complex clothes. Depositors supply assets; borrowers post over-collateralized positions and pay interest; the protocol keeps a slice. In August 2026 the category held **$50.4 billion in total value locked** across tracked venues (DefiLlama, September snapshot), with **$24.4 billion of outstanding loans** — the actual credit extended (Token Terminal, August 2026). The gap between deposits and loans is the utilization story: the sector lends out roughly half of what it holds, and the spread between borrow and supply rates is the industry's gross margin.

Concentration is extreme. Five venues — Aave, Morpho, SparkLend, JustLend and Maple — hold **77.6% of all deposits**, and Aave alone accounts for 36% of category TVL. The loan book is even more top-heavy: Aave's $11.7 billion of active loans was 47.8% of the tracked total in August, up 1.2 percentage points from July and a second consecutive monthly gain. When one protocol is half the market, sector analysis *is* Aave analysis — with Morpho as the only challenger that matters.

DeFi lending TVL by protocol ($B, September 2026 snapshot)



DefiLlama Lending category via CoinLaw, September 2026.

THE YIELD BACKDROP

Borrower-paid yields in August 2026 ran 3.6% (Aave Base USDC) to 4.5–6.5% (Morpho curated USDC vaults), with isolated markets like Euler's reaching ~10% (AlphaGrowth, August 2026). The leveraged ETH-staking trade that dominated 2024–25 has flipped to **negative carry**: borrow rates near 3.40% now exceed liquid-staking yields, killing the loop trade and forcing borrowers toward genuine credit demand — a healthier, if smaller, base.

Two structural facts define the current moment. First, the market is still rebuilding from April: Aave's August TVL averaged $27.4 billion — the highest monthly reading since April, but down 57.6% year-on-year. Second, the composition of yield is changing: a meaningful share of headline APY now comes from token

incentives and curator strategies rather than pure borrower demand (CoinLaw). The credit machine works again; whether it works *profitably for depositors* depends on where the yield comes from.

Token Terminal, August 2026 Aave report (published Sep 15, 2026); satoshisbrain.com.

03

Aave: The Incumbent's Moat — and Its April Test

Aave is the closest thing on-chain credit has to a systemically important bank. V3 holds **$17.19 billion of the $17.92 billion** locked across Aave versions (August 26, 2026); V2 is winding down at $110 million; V4 sits at $352 million and the RWA-focused **Horizon** market at $259 million (CoinLaw, via DefiLlama). The moat is not technology alone — it is 21 chains of integrated liquidity, the deepest stablecoin pools in DeFi, and a governance apparatus that survived a genuine solvency scare.

The business model is the spread. Aave charges borrowers roughly **$29 million in a representative month** and retains about **$3.9 million — a 13.3% take rate** — with the rest flowing to suppliers (cleansky.io, August 12 snapshot). In August 2026 the protocol collected $33.9 million in fees, up 15.2% month-on-month, with $4.9 million reaching the DAO. "Aavenomics" routes part of that revenue into automated AAVE buybacks and rewards for stakers and GHO holders — the only major lending token with a functioning value-accrual loop today.

> **APRIL 2026: THE KELPDAO CASCADE**
>
> On April 18–23, 2026, an attacker (attributed to North Korea's Lazarus Group) exploited KelpDAO's LayerZero bridge to mint 116,500 unbacked rsETH, deposited ~90,000 of them on Aave as collateral, and borrowed roughly $190 million in real assets. Aave's own code was never breached — but the collateral was worthless. An estimated **$196–230 million of bad debt** accumulated; **$8.45–10 billion of deposits fled in 48 hours**; total DeFi TVL bled $13.2 billion. The Umbrella safety reserve held only $80–100 million against the hole, and the "DeFi United" bailout — Mantle and the Aave DAO pledging 55,000 ETH (~$127 million) — raised $160 million of the ~$200 million needed (AInvest, April 2026).

The episode is the report's central exhibit for both sides of the Aave thesis. Bear case: shared-collateral, cross-chain lending is reflexive — one asset's failure became a system-wide withdrawal run, and the backstop was undersized. Bull case: the protocol *survived* it. AAVE fell only ~16–25%, the loan book rebuilt to record August levels, and governance responded by accelerating V4's Hub-and-Spoke architecture (a unified cross-chain liquidity hub with bespoke risk-parameterized markets) and the Horizon RWA market, targeting over $1 billion in deposits with partners including Circle, Franklin Templeton and VanEck.

CoinLaw Aave statistics (26 Aug 2026); Token Terminal August 2026 report; AInvest flow analyses, April 2026; bloomingbit.io (2026 masterplan).

04

Morpho: The Modular Challenger

Morpho is the anti-Aave: where Aave runs one giant shared pool governed by DAO vote, Morpho Blue is a minimal base layer on which **anyone can permissionlessly deploy an isolated lending market** — its own collateral, oracle and risk parameters. Professional **curators** (Gauntlet, Steakhouse Financial, MEV Capital, Block Analitica, Apostro, Bitwise) then aggregate depositor funds into vaults and allocate across those markets, charging 5–15% performance fees. The architecture outsources risk management to a competitive market instead of a single governance body.

It is working. Morpho's outstanding loans hit a **record $5 billion in early September 2026** (Messari), roughly halving Aave's lead from earlier in the year, with TVL near $9.6 billion across 42 chains. On Base — Coinbase's L2, now a $2.75 billion lending market — Morpho holds $3.94 billion of TVL against Aave V3's $513 million: the modular design is winning the newest distribution channel outright (Artemis, September 2026).

Protocol	Monthly fees charged	Retained by protocol	Take rate
Aave V3	$29.07M	$3.86M	13.3%
Morpho Blue	$17.43M	$0.00M	0.0%
Compound V3	$1.77M	$0.14M	7.6%

cleansky.io, August 12, 2026 snapshot (daily fees/revenue, annualized context).

The table is the whole investment debate in miniature. Morpho charges borrowers nearly $17.5 million a month — real economic activity — and retains **nothing**. CEO Paul Frambot has said the protocol is choosing scale over distributions; the fee switch is a future option, not a present cash flow. At a hypothetical 10% take rate, borrower interest of ~$170 million per year implies ~$17 million of annual DAO revenue against a ~$1.7 billion valuation — a ~100x multiple. Aave, by contrast, generates ~$100–140 million of annualized protocol revenue against ~$1.5 billion of valuation: roughly 10x (Token Terminal, April–August 2026).

THE APOLLO ENDORSEMENT

The strongest validation of the modular thesis came from traditional finance: **Apollo Global Management ($940 billion AUM) signed a formal cooperation agreement with Morpho**, with rights to acquire up to 90 million MORPHO tokens (9% of supply) over 48 months; MORPHO rose 17.8% on the announcement. Apollo's stated reason was architectural — permissionless, isolated markets let an institution spin up bespoke, curator-managed pools for tokenized private credit without waiting for DAO

> approval. Morpho also launched as the credit infrastructure on Arc in September 2026 with $220 million of day-one vault deposits curated by Steakhouse, Bitwise, Gauntlet and Galaxy.

DeAsset view: Morpho is the better *protocol design*; Aave is the better *business* today. The market pays near-par valuations for both — Aave at ~$1.9B market cap on $12.5B of loans with real holder revenue, Morpho at ~$1.7B on $5B of loans with none — which means Morpho's price embeds a flawless future fee-switch execution. We prefer to be paid while we wait.

edgen.tech (Messari, Sep 1 2026); ainvest.com (Sep 2026); sentora/medium; tradingview.com (Arc launch, Sep 16 2026); bitrss.com (Token Terminal).

05

Spark and the Sky Banking Model

If Aave is a commercial bank and Morpho is a credit marketplace, Sky (the former MakerDAO) is a **central bank** — and Spark is its commercial-banking arm. Standard Chartered's Geoffrey Kendrick framed it memorably in 2026: Sky issues the currency (USDS and DAI, combined circulation above $12 billion), sets the base rate, and three "Agent" banks — **Spark** (crypto lending), **Grove** (real-world assets), **Obex** (professional allocators) — borrow roughly **$5.9 billion of USDS** against a $17.5 billion ceiling at a base rate near **3.8%**, then earn the spread. Sky prints the money; the Agents earn the margin; Sky takes its cut.

Spark's three products each attack a different layer of the credit stack. **SparkLend** (an Aave-V3-fork money market, ~$4.6 billion TVL) competes directly in vanilla crypto lending. **Savings** offers sUSDS — about **$5.5 billion, the largest yield-bearing stablecoin on-chain**. And the **Spark Liquidity Layer (SLL)**, launched November 2024, is the quiet overachiever: **$2.54 billion TVL as of mid-September 2026**, the single largest on-chain capital allocator tracked by DefiLlama (over 25% of its category), routing USDS, USDC and PYUSD across Morpho vaults, Aave markets and institutional counterparties including BlackRock and Anchorage — at a net spread of about 0.27%, generating $6.67 million in fees over the prior 30 days.

Grove is the RWA leg: ~$2.6 billion in TVL including **$1 billion of AAA-rated CLOs** assembled with BlackRock, Janus Henderson and Apollo — traditional credit risk, on-chain rails. The Sky model's edge is its liability franchise: a $12 billion stablecoin base borrowed at wholesale rates is structurally cheaper funding than any deposit-chasing competitor can access. Its vulnerability is concentration — governance, oracles and collateral all ultimately answer to the same Sky system, as Yearn's risk reports on the sUSDS-centered vault complex document in detail.

cryptobriefing.com (SLL, mid-Sep 2026); HTX/Standard Chartered (Sky model); github.com/yearn/risk-score; github.com/charleshoskinson/defiformal (sUSDS, Aug 4 2026).

06

The Institutional Turn: RWA Collateral and Curated Vaults

The most consequential shift in on-chain credit is who is supplying the capital — and what backs it. Tokenized private credit on public blockchains has crossed **~$19 billion** (BlockEden, March 2026), growing ~180% year-on-year, and it now dominates tokenized RWAs by value. The economics explain why: tokenized Treasuries clear at **4–5% APY**, tracking the Fed funds rate; tokenized private credit clears at **8–12% for senior tranches and up to 15%** for higher-risk strategies — a spread wide enough for protocols to take fees, route through curated vaults, and still deliver alpha.

Three infrastructure pieces had to land before nine-figure checks could be written: **bankruptcy-remote SPVs and KYC'd issuance** (Securitize alone has tokenized $3B+, serving as issuance partner for BlackRock's BUIDL, Apollo's ACRED, KKR and Hamilton Lane); **NAV oracles auditors can sign off on** (RedStone became the primary oracle for BUIDL, ACRED and the KKR/Hamilton Lane funds, publishing daily NAV that lending protocols consume natively); and **DeFi distribution rails** — Morpho's isolated markets, Aave's Horizon, Kamino — where tokenized credit can actually be *used* as collateral rather than sit in a wallet.

> **THE CURATOR ECONOMY**
>
> Twenty-six independent curators manage ~$4.4 billion on Morpho alone (Caladan, January 2026), with Steakhouse Financial ($1.26B across 48 vaults) and Gauntlet ($1.13B) the largest. The pitch to institutions is simple: a Bitwise-style vault targeting ~6% APY through overcollateralized lending lets an allocator earn DeFi yield without touching DeFi directly. Chaos Labs and Sentora already curate the vaults behind Kraken's DeFi Earn product. The curator — not the protocol — is becoming the asset manager; the protocol is the exchange.

BlackRock's **$2.4 billion BUIDL** fund connected to UniswapX for compliant BUIDL↔USDC trading via Securitize (Satoshis Brain, February 2026). On the lending side, Apollo's Morpho agreement is the template: isolated, curator-managed pools for tokenized private credit, with risk parameters — collateral ratios, rate curves — tailored to institutional compliance frameworks rather than DAO governance. **DeAsset view:** this is the credit cycle's professionalization. Yields compress as institutional supply arrives (Base USDC already shows the gradient: 3.6% pooled vs. 4.5–6.5% curated vs. 10% isolated), and the durable edge moves from *access* to *underwriting* — exactly where curators live.

blockeden.xyz (Mar 2026); satoshisbrain.com; medium.com/sentora; defiprime/defiprime1 (vaults guide); caladan.xyz (Jan 2026); alphagrowth/medium (Aug 2026).

07

Key Risks

- **Collateral contagion.** April 2026 proved the lending graph is reflexive: a $292M bridge exploit three steps removed from Aave became $196–230M of bad debt and a $10B withdrawal run. Shared collateral and cross-chain deployments mean one asset's failure is the system's liquidity event.
- **Undersized backstops.** Aave's Umbrella reserve held $80–100M against a ~$200M hole; the DeFi United bailout ($160M raised, led by Mantle and the Aave DAO) was discretionary, not contractual. Insurance funds remain small relative to loan books across all venues.
- **Oracle and configuration risk.** A 2.85% wstETH mispricing from a stale CAPO risk-oracle configuration triggered $27M of wrongful liquidations on Aave (Chaos Labs disclosure, via Cointelegraph) — liquidators extracted ~499 ETH from a parameter error, not a market move. RWA collateral adds NAV-oracle dependency on top.
- **Curator risk.** Curated vaults concentrate discretion in a handful of firms; timelocks (days, not hours) give depositors notice but not instant exit. A curator's misallocation or fee extraction is a principal-agent risk the base layer cannot fix.
- **RWA collateral opacity.** Tokenized private credit brings TradFi risks on-chain: valuation opacity, double-pledging (flagged by the FSB's May 2026 report), and legal enforceability of collateral in a default. On-chain transparency ends where the SPV begins.
- **Rate and utilization risk.** With the leverage-loop trade dead (negative carry at ~3.40% borrow vs. staking yields), loan growth depends on genuine credit demand. A rate shock or utilization spike can push borrow APYs into double digits within blocks, forcing liquidations before borrowers can react.

08

Conclusion: What It Means for Investors

"April 2026 was the first real stress test of on-chain credit — and the system passed the solvency exam while failing the liquidity one. The rebuild is being led by professionals."

For DeAsset's **on-chain yield** pillar, lending is the foundational allocation: it is where idle stablecoins become productive, where the spread between borrow and supply rates is the most bank-like cash flow in crypto, and where institutional capital is now arriving with its own risk frameworks. Three positions follow from this report:

- **Prefer cash flow over optionality.** Aave's ~13% take rate and functioning buyback loop justify a single-digit earnings multiple; Morpho's 100× multiple prices in a fee switch that does not yet exist. Own the spread, not the promise of one.
- **Treat curators as the new asset managers.** As vaults professionalize, diligence shifts from protocol audits to curator track records — allocation discipline, fee fairness, timelock terms. The best risk-adjusted yield in August 2026 sat in curated vaults, not in the deepest pools.
- **Size for the cascade.** The April run showed withdrawals can exceed $8B in 48 hours. Lending allocations should assume gated exits and oracle failures: diversified venues, no single-collateral concentration, and a liquidity buffer outside the lending graph entirely.

We will revisit this assessment quarterly — watching Aave V4's Hub-and-Spoke rollout, Horizon's path to $1B in RWA deposits, Morpho's fee-switch decision, and whether tokenized private credit collateral performs through its first default cycle.

Next scheduled review: Q1 2027.

DISCLAIMER

Important disclosures

This report is published by DeAsset Management for informational and educational purposes only. It does not constitute investment advice, an offer to buy or sell any security or financial instrument, or a recommendation regarding any asset, protocol or strategy discussed herein.

Digital assets are volatile and involve a high degree of risk, including the possible loss of principal. Past performance is not indicative of future results. Market data cited in this report is sourced from public sources believed to be reliable, but DeAsset Management makes no representation as to its accuracy or completeness and accepts no liability for errors or omissions.

Forward-looking statements, estimates and projections are based on assumptions and are subject to uncertainty; actual outcomes may differ materially. Readers should conduct their own research and consult a qualified financial adviser before making any investment decision.

© 2024 DeAsset Management. All rights reserved.

DeAsset Management

Beyond Borders, Real Value. · deasset.io · won@deasset.io