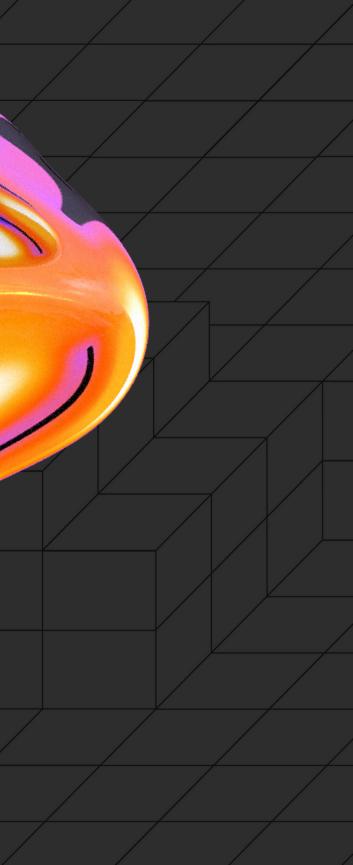
# MAPLE

## MARKET OUTLOOK

This report shares our collective learnings from 2022, predicts what 2023 will bring for the industry and Maple, and introduces our team. We also provide thoughts on how we as an industry can evolve and expand.



## **OPENING REMARKS FROM MAPLE'S FOUNDERS**

In crypto, we have the opportunity to construct monetary, finance, and technology systems that provide accessible, efficient, fair, and sustainable alternatives to legacy markets.

The events of 2022-driven by excessive risk-taking, greed, and fraud-has surpassed anything experienced in prior crypto cycles and has caused many ecosystem participants to be burnt or bankrupted.

We are confident that the departure of bad actors, significant market restructuring and deleveraging, and shift towards fundamentals and decentralization can recalibrate the industry back to its original intent and technical capabilities.

Our collective mission should be to rebuild trust in the ecosystem by demonstrating the broad use-cases of blockchainbuilt products. Blockchain and distributed ledger technologies have all the right ingredients to transform how we transact, communicate, and operate globally, solving for inefficiencies and creating new novel solutions to problems.

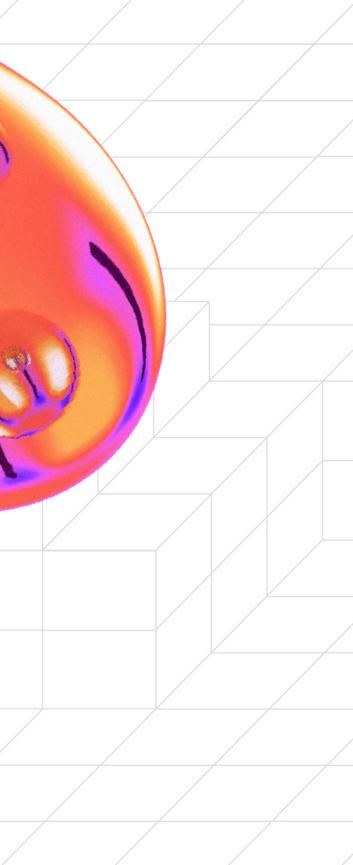
At the same time, we will have to accommodate the macro market-cycle. Rough market conditions became the standard through 2022, but that didn't stop crypto from incredible technological achievements. If crypto has proven anything through its existence, it is that it can survive unfavorable times. We move into 2022 with greater strength and resilience.

Our vision when we started Maple was to improve legacy debt-capital markets with technology, so that innovative companies can access finance to expand, grow, and push society forward. We continue to solve hard problems with technology, and we are beginning to transfer the value of capital markets on-chain and establish completely new lending markets. We are grateful for our community and stakeholders that move into the new year with us and hope you enjoy reading our first market outlook report.

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## MARKET OUTLOOK: OUR INDUSTRY IN 2022 AND 2023



## LOOKING BACK

It was an unprecedented year. Whilst it can be easy to dwell on setbacks, there were a number of wins for the industry along the way.

Ethereum successfully completed the move to proof-of-stake - representing one of the most substantial upgrades in crypto history; the number of identity-verified crypto asset users grew to 402 million; and firms such as Metamask and Blockchain.com published significant MAU milestones. Financial institutions such as JPMorgan, Blackrock, and KKR entered the space to lend, borrow and pilot programmes, and retailers joined in the fun with NFTs and brand partnerships. Venture funding raised by blockchain and crypto companies almost reached \$30 billion in 2022, and most of the G20 countries have progressed to understand the space with Singapore, South Korea, and the UK showing they want to be big players.

Nevertheless, this is the first cycle where crypto has tracked the downtrend in macro, but with a higher beta given the high-profile bankruptcies and contagion. In 2022, we witnessed stocks fall throughout the year, some legacy credit funds struggling to raise, mass layoffs, and investors choosing to sit in cash. So, in addition to the several crypto catastrophes faced in 2022, the economic environment was not doing us any favors.

In 2022 we learned that genuine risk management matters. That counterparty risk is always real, no matter how credible the institution. Nic Carter, Castle Island Ventures.



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## LOOKING BACK

In 2022, we collectively learned of the need to manage macro and micro risks better, and it's important that our weaknesses become our strengths.

#### Higher standards are required to strengthen crypto

Much of the issues in 2022 were caused by centralized entities 'swimming naked'.

Traditional finance has managed itself through these types of crises regularly over the past century, often with the departure of bad actors. bailouts and more regulation. We've seen bad actors depart, but we're still without regulation.

We have a choice to mature, selfregulate and hold ourselves to higher standards or exist as a niche technology that doesn't reach the masses and integrate with the real world.

Diversification is needed to manage risks

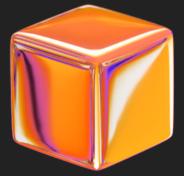
Due to its nascent stage, crypto's credit crisis was underpinned by a lack of diversity in counterparties, which increased concentration risk.

In a mature system there are more counterparties and less concentration risk as a result.

With more attractive and sustainable use cases of decentralized financial products we would welcome more players into the space and expect to see risk and volatility decrease with increased volumes.

The time is now for decentralized finance

Greater adoption of decentralized financial products will enable customers to carry out the appropriate due diligence, and help to avoid risks associated with centralized parties and incumbents in traditional markets.



## LOOKING AHEAD

Within crypto, this year we will see Ethereum enable withdrawals of staked Ethereum from the Beacon Chain as part of the Shanghai update and zkRollups add privacy protection features.

The macro economy remains uncertain and investors are more cautiously deploying capital. Still, financial institutions remain engaged in the digital asset space to tap new liquidity, operate more efficiently, tokenize their activities, or gain exposure to digital assets. Conviction hasn't waned, but the time of entry is either pushed back, or refocused on sandbox pilots on private blockchains.

**Put simply, DeFi will make a big comeback. Lessons have been learned and we're finally ready to see more, understand and appreciate how powerful DeFi is.** DeFi Dad, 4RC (Fourth Revolution Capital).

Looking amongst peers at a protocol level, we see firms reassessing and pivoting to find market fit, but many more teams upbeat and committed to rebuilding, working on business fundamentals, and providing real utility.

**This year, Avantgarde will accelerate DeFi adoption and rectify the damage that CeFi has done to the industry.** Mona El Isa, Avantgarde Finance.

Venture investors have never been more convinced.

**2022 reinforces our philosophy and convictions, there's not much material change in how we'll do business.** Michael Anderson, Framework Ventures. 00



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## MAPLE'S 2023 PREDICTIONS

#### Debt-capital comes back into vogue

Now that rates are higher, lending to profitable businesses is potentially poised to deliver performance that can help investors meet their return targets without having to make riskier bets on growth to achieve their goals.

Venture investments from seed to Series-A have slowed. This extends to IPOs, with many expected to be on hold through the year. Companies will avoid bridge rounds and selling equity cheap, making credit cool again.

#### 2023 will be tokenized

Tokens are representations of real world assets. Through tokenization, real world assets will be unlocked on-chain and their productive value redistributed. BCG predicts that \$16.1 trillion of illiquid assets will be tokenized by 2030. VanEck predicts that financial institutions will tokenize more than \$10B in 2023. KKR were a first mover and tokenized an interest in their Health Care Strategic Growth Fund II on Avalanche. Anything can be tokenized.

#### A Fortune 500 borrows digital assets on-chain

High TradFi borrowing costs, combined with lack of strong borrowers inside crypto means that on-chain cost of capital is lower. An investment grade company is therefore able to borrow I-2% lower on-chain than from traditional sources.

#### Venture will be less adventurous

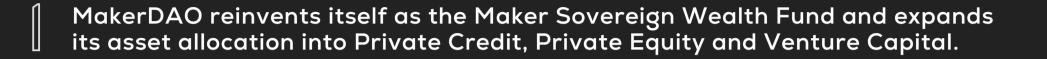
Crypto VC investment will pick up over the summer, especially because many crypto funds are under obligation to deploy. In 2023, valuations will be sensible and projects will need to prove their utility to secure funding. There will be increased interest in projects that offer operational efficiency and real-world value.

#### Fundamentals drive the narrative, not the other way around

To date, markets have been whipsawed by many crypto participants hopping from short-term trend to short-term trend, often following the hype generated by the most viral tweet of the day. We have been existing in an attention economy, but in 2023 will evolve into a more rational and mature market that sees the realization of value-creating protocols.



## SID'S JUST FOR FUN PREDICTIONS





 $\bigcirc$  Microstrategy wraps its BTC and borrows against it from DeFi to buy the dip, Saylor cites lack of CeFi lenders.



A major insurer adds the equivalent of FDIC for up to \$10k in deposits by retail users of US based crypto exchanges.



A major US Bank accepts USDC, Visa enables USDC settlement at POS terminals.

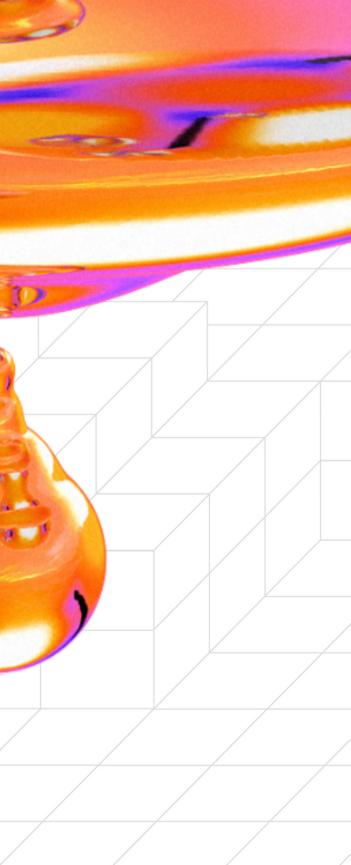


Jamie Dimon admits that crypto tokens are more than pet rocks.





## MARKET OUTLOOK: MAPLE IN 2022 AND 2023



2022 offered plenty of opportunities to learn, but there were a number of wins for Maple along the way.

#### Became the largest on-chain institutional lending protocol

In the first half of the year, Maple became the largest on-chain protocol facilitating institutional lending when TVL reached a high of \$965 million and loan origination volume exceeded \$1.6BN. The drop in TVL since then drives our diversification efforts.



#### Pushed into real-world applications and assets with new pools

Icebreaker Finance joined to leverage Maple technology to issue loans secured by business-critical digital and physical assets. The team has 60 years of structured asset finance and credit experience and shares our vision to leverage blockchain technology to transform how things are done. 2023 already sees a trade receivables pool launch on Maple managed by AQRU.



#### Launched Maple 2.0 - an overhaul of the smart contract architecture

Maple 2.0 is a complete overhaul of our smart contract architecture and our largest engineering project to date. The new contracts are modular and robust and will facilitate Maple scaling into the tens of billions and beyond. I2 months in the making, Maple 2.0 is evidence of our commitment to continuous improvement and being a long-standing, credible ecosystem player. Our code repositories are open source and available on GitHub.











#### Proved the strength of Maple's legal enforcement framework

The Maple Foundation was formed solely to serve as the enforcer in the case of a borrower default and it successfully petitioned to appoint liquidators to preserve assets in the Orthogonal Trading default. In 2022, the enforceability of the terms of the Master Loan Agreement were successfully tested. As we move to provide our bundled services to a broader range of Delegates and institutional borrowers, we will continue to review and strengthen our legal protections.



#### Built a strong, collaborative team

The team of bankers and technologists is small but impactful. They showed resilience in the face of great challenges and worked incredibly hard. This year Maple won the title of best place to work by Harrington Star; was celebrated for open communications by the community and stand-out code by auditors and integration partners; and was nominated for 'Newcomer of The Year' by Private Debt Investor.







We are full-steam ahead executing against our 2023 plan to "build on-chain capital markets infrastructure that provides a diversified set of lending opportunities through strong and reputable Delegates".

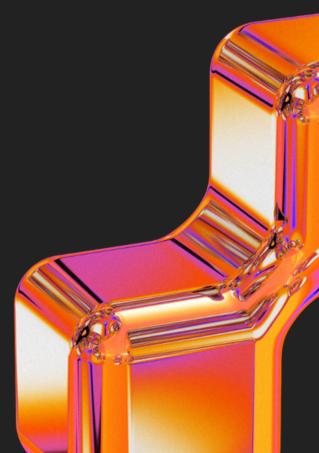
In the short term, we are focused on returning the platform to growth by diversifying the number of lending opportunities on Maple to meet the needs of a market that is prioritizing risk management and short term liquidity.

#### **Diversify Lending Opportunities**

Maple can be the marketplace where Lenders explore and choose from a variety of lending options that suit their risk appetite, term-preferences, and chosen industry vertical. Within the nascent industry of crypto there are a limited number of lending opportunities. Outside of crypto, the lending opportunities are abundant.

- Diversification within crypto. In 2023, we will continue our plans to help facilitate ecosystem growth. First on the 'intra-crypto lending pool' list are web3 infrastructure providers and node validators. These mid-sized firms have predictable cash flows, strong balance sheets and operations stress tested through multiple crypto cycles.
- Diversification into the real-world. Maple will soon bring real-world lending opportunities on-chain. Treasury, insurance and trade receivables products are opportunities that present lower-risk lending alternatives in an uncertain economic environment.





#### Attract new and reputable Delegates

The catalyst to Maple's scalability is in onboarding more high-quality Delegates to the platform to underwrite different credit strategies. Maple will attract more Delegates by making it easy to onboard, add real value by lowering the cost of operations and by improving risk management. In 2023, we will build a full-suite of loan products so any and all Delegates can launch a lending pool, unique to their strategy on Maple. Attract new and reputable Delegates

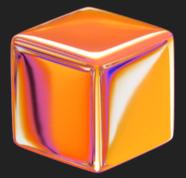
#### **Build Cutting Edge Technology on Ethereum**

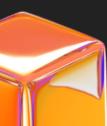
Maple does not aim to ever be the lender itself - we wish instead to provide cutting edge technology and supporting services. The analogy we always come back to is Shopify - who provides tools to operate an ecommerce business without being the merchant themselves.

In 2023 we will roll-out the Maple SDK leveraging the new smart contract infrastructure. Custodians, exchanges and other institutional service providers will be able to integrate directly with Maple and introduce the diversified lending opportunities of pools on Maple to their customers.











## MARKET OUTLOOK: WHY DEBT-CAPITAL MARKETS WILL BE ON-CHAIN





We believe that debt-capital markets will exist on-chain, interoperate with the traditional financial markets, and blockchain technologies will be adopted slowly, then all at once.

The silver lining of the 2008 financial crisis was the FinTech revolution. Stripe, Revolut, Plaid, emerged to offer customer-centered financial products that challenged banks' dominance. Digital payments, mobile banking, digital lending and wealth management put control in customers' hands for the first time. FinTech solved for consumer accessibility.

Commercial financing is experiencing similar disruption with the emergence of blockchain technology. Blockchain is being taken seriously by the financial sector. Taken seriously because distributed ledger technology and smart contracts solve issues with electronic systems through data coordination and composability, which lowers transaction costs and improves execution times.

The consumer benefits of on-chain lending are transparency, accessibility and ownership. Whereas the commercial benefit is operating efficiency.

On-chain lending puts control into lenders hands for the first time

On-chain lending provides the information needed to make investment decisions

On-chain lending provides access to credit opportunities

By replacing intermediaries with blockchain tech, on-chain lending drives down the cost of capital and unlocks greater value



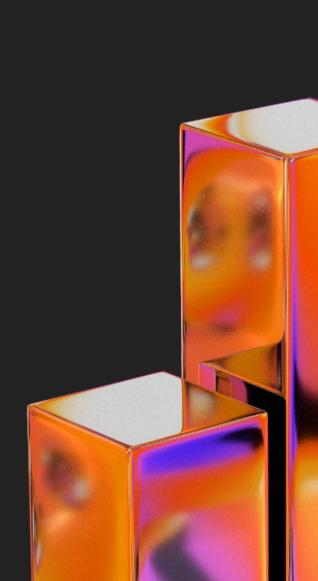
#### On-chain lending puts control into lenders hands

One lesson that's immediately clear post-FTX is that proper custody of digital assets is paramount, and a first principle of crypto. Currently investors have three choices: self-custody using their own hardwares and software, an institutional custody solution that relies upon a third-party to securely store access keys, or defacto custody with an exchange in a commingled wallet.

I do suspect on-chain lending will offer more competitive rates for borrowers over the long term but for now it's more about the empowerment/freedom we gain to transact with our own crypto assets, using trustless automated money legos. DeFi Dad, 4RC (Fourth Revolution Capital).

For the firms legally required to delegate custody and that will always rely on third parties to securely store their assets, strong institutional custodians are needed.

There is a huge opportunity to illustrate the importance of self-custody. The problem is that self-custody still remains out of reach for many market participants. Anthony Foy, Qredo.



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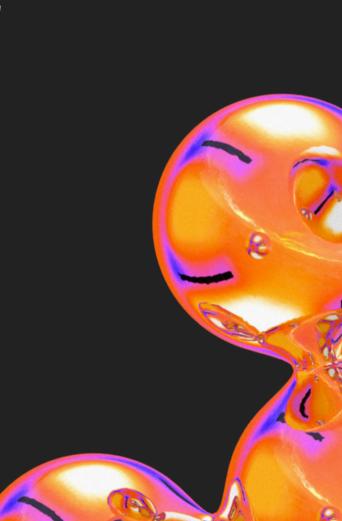
## ${igwedge}$ On-chain lending provides the information needed to make investment decisions

The downfall of CeFi institutions last year reminds us why on-chain lending protocols are valuabletransparency is implicit, auditable 24/7, and funds are non-custodially held in smart contracts. Combining institutional-level risk management capabilities with code-enforced transparency is the north-star.

The market may be somewhat efficient in terms of difficult to beat, but we've seen how wildly inefficient institutional and TradFi allocation can be with sovereign debt collapsing 80% in many spots, and the institutional footprint in crypto flowing to things like BlockFi and FTX. Ari Paul, BlockTower

Over time markets are efficient and capital will flow where it is deployed with care. CeFi firms should be using Maple technology and infrastructure to create silos for credit risk management. For example, a CeFi Earn program could launch a pool on Maple to issue loans to approved borrowers. These loans would be issued by a separate entity and wallet to prove funds are not commingled, loan health would always be visible, and collateralization ratios would be enforced.

This appeals to changing consumer preferences where transparency is becoming a must have, not a nice to have. Combining the best parts of institutional risk management with the transformative power of blockchain technology solves a problem for the end user. That's the Maple model.





#### On-chain lending provides access to credit opportunities

Monetary policy is designed to enrich those who are 'creditworthy'. In contrast, transparent, technologyenabled markets allow for democratization of monetary supply and meritocratic allocation of debt.

Protocols operating in the crypto space often struggle with their capital requirements. Equity deals are expensive, working capital is volatile, and debt-capital is difficult to access from incumbents due to associated risk; difficulty to underwrite, or being either too big or small to match fund strategies. As the space evolves from ICOs and equity deals, debt-capital will become more popular.

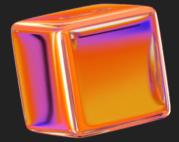
#### **On-chain lending wins by providing private and capital efficient lending, which is likely to come in the form of under-collateralized loans.** Anthony Foy, QREDO

We are taking the appropriate measures to onboard skilled delegates that have the conviction to provide capital over the long-term to creditworthy crypto firms and plan to excel in this large but underserved market. Focusing on the middle-market - where firms are too niche for commercial or regional banks, and not large enough for public markets - our mission is to fulfill their capital requirements.

### On-chain lending wins first via niches that are radically underserved by TradFi, like Amazon first selling antique rare books. Ari Paul, Blocktower

On the lender side, with Maple, private credit markets are democratized and accessible, without a waitlist, often without a minimum ticket size. Let's not forget that the internet expanded beyond institutions as its initial users to reach every corner of the globe.

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#### On-chain lending unlocks greater value by removing intermediaries

Driving down the cost of capital has long been the financial market's north star. Yet, traditional finance systems are fragmented, opaque, and inefficient. On top of that there are large teams and countless intermediaries extracting value and clipping fees running, controlling and validating untrustable systems.

Institutional DeFi has the potential to revolutionize the world of finance. Distributed ledger and blockchain technologies are efficient by nature; disintermediated, built on logic, deterministic, coordinated. Back and middle office services become programmable via smart contracts and immutable so that validation and authentication happens on-chain.

Financial infrastructure and enterprise software might not be as exciting to some, but its marginal efficiencies will eventually bring crypto to every household in the world.

Financial service providers that leverage programmable money will have a major edge. JPMorgan demonstrated how DeFi can be used to improve cross-border transactions, this came shortly after America's oldest bank BNY Mellon announced the launch of its Digital Asset Custody Platform, Fidelity launched a crypto service for investors, BlackRock partnered with Coinbase to bring its institutional clients crypto access, and Goldman Sachs is creating a new crypto data service.

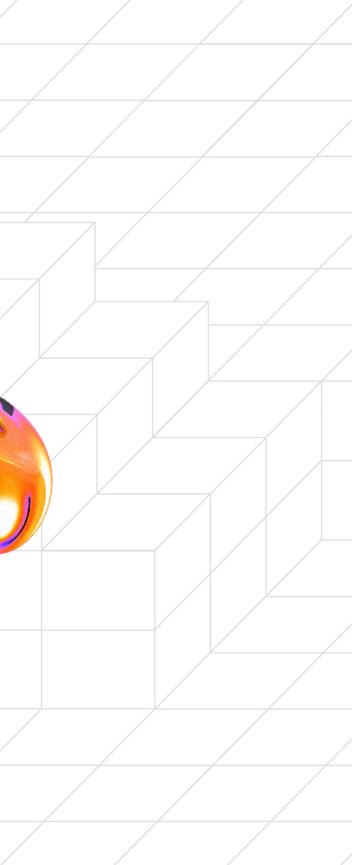
**V** AQRU is a company on a mission to remove financial intermediaries and offer more efficient and secure ways of providing financial services. With Maple's lending technology and the added benefit of its marketplace we cut intermediaries and overheads, and provide a leading player in the receivables space with a loan facility. Philip Blows, Chief Executive, AQRU

Phil and his team operate as a Pool Delegate on Maple, their strategy is to provide receivables financing to a single-borrower, and offer lenders access to a lending opportunity uncorrelated with the markets.





## MARKET OUTLOOK: IT'S DEFI'S TIME TO SHINE



### **IT'S DEFI'S TIME TO SHINE**

The value of smart contracts, blockchains, programmable money, distributed ledger technology and tokenization is clear. The road to adoption is fragmented.

The utopian idea that trustworthy code replaces untrustworthy people is not realistic at scale. As technology providers we must look to provide solutions that integrate and compliment existing systems and human preferences - then move to replace them. Whilst it's DeFi's time to shine, disrupting the system takes time. Our collective focus now should be on bridging the gap between our revolutionary technology and international capital markets. We need two things for that to happen.

#### Build a friction-free DeFi ecosystem

CeFi lenders and exchanges grew to dominate activity in the space, demonstrating that many institutional allocators and retail users have preferred to engage with crypto via centralized platforms. When asking why it becomes clear that the current infrastructure is immature. People need to be able to access the new financial system with greater ability, ease and flexibility. Collaboration here is crucial.

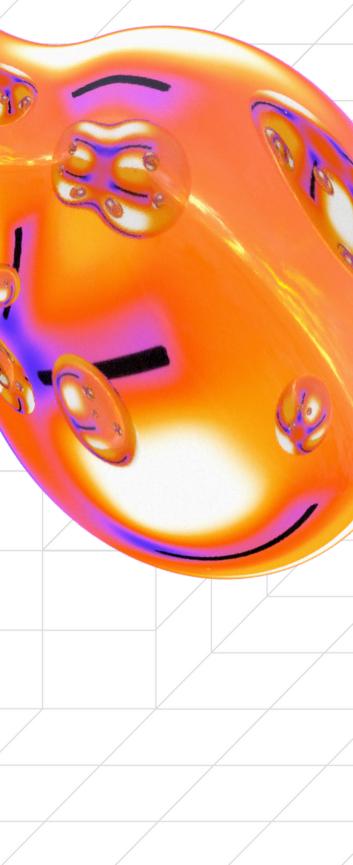
By strengthening the DeFi ecosystem with improved UX, KYC/AML/Privacy solutions, on-ramps, custodians, bankable digital assets, and compliant protocols and services people can move money in and out easily and safely. That's how we onboard the next generation of crypto users and transfer the value in traditional markets on-chain.

#### Build valuable products and services

The purpose of capital markets is to direct scarce resources to their highest uses. The scarcity in DeFi has so far been the use cases. We don't need more money. We need better things to do with it. Valuable products and services are those that serve the central tenants of crypto and which have real value.

- Financial infrastructure that improves on the existing tech stack and electronic systems.
- Novel ideas and solutions that directly compete with mainstream financial products and services.
- Full-suite of lending products fixed-instruments, tokenized and synthetic assets, uncollateralized - so DeFi can provide the same services as incumbents and scale into a TradFi alternative.
- Standardization of token standards and ledgers enabling composability and programmable money.

## MARKET OUTLOOK: MEET THE TEAM



## MEET MAPLE

Maple was created out of necessity. Sid Powell and Joe Flanagan met working together at a commercial lending FinTech firm. It was here they encountered the problem that Maple solves.

In trying to raise debt through banks and investors, there was a lack of credit lines and the process was arduous and inefficient. Solving for accessibility inspired them to look to successful technology platforms like Amazon and Shopify. What interested them about the platform-as-a-service model was the scalability and ease of business - where anyone can set up a business, and operate it using the tech provided.

They soon learnt that smart contracts and blockchain technology and can improve existing electronic systems in finance. It was then that Sid and Joe founded Maple.

Building a robust, intuitive and flexible product is the key to scalability, so we keep roughly a 50-50 split between commercial and engineering departments. Every new hire raises the bar and shows up to put users first and innovate.

The leadership team comprises: Quinn Thompson, Head of Capital Markets and Growth, is ex. Abra, Guggenheim, BNP. Matt Collum, Head of Engineering, is ex. Wave, Cisco. Katherine Kirkpatrick Bos, General Counsel, is ex. Partner at King & Spalding. Graeme Barnes, Head of Product, is ex. Gnosis Safe, Tencent. Ryan o'Shea, Head of Operations, is ex. Kraken, EY. Charlotte Dodds, Head of Marketing is ex. TikTok, Meta.



## MEET KATHERINE, GENERAL COUNSEL

2022 – what a ride! When I joined Maple from the private sector in January, half of my colleagues thought I was insane to leave "big law" partnership to join Maple, and the other half were jealous and/or thrilled for me. What a learning experience. I would be a legal pioneer! And despite the road in crypto, I have no regrets.

Lawyers are not often seen as "innovators" – we look to the law for guidance, and when legislation is absent or unclear, we look to precedent. In crypto, however, often there is neither law nor precedent directly addressing the issue at hand. So I, and other lawyers in the space, must continually think creatively about navigating the regulatory morass while staying highly conscious of risk.

In recent months, we've seen a number of milestones (or setbacks), including the SEC's win in the LBRY case; the Polkadot "morph"; the passage of MiCA; and the stagnation of SBF's pet bill, the DCCPA. Many are awaiting potential reactive legislation from global regulators. But while we wait, crypto market participants continue to pave the path forward through proactive advocacy and innovation.

At Maple, we strive to be a good citizen of the space through transparency, best practices, and risk management. Some of what we do or what we expect from users of the protocol may exceed "market standard" – but that is by design. We want to be thoughtful—and sometimes, conservative—when the scenario demands it. We also invest significant effort in monitoring the ever-changing global regulatory landscape, and ensuring that we have a proactive, justifiable, common-sense position with regards to unclear regulation.

I welcome the day when there is a clear set of regulatory guidance for crypto. For now, as an infrastructure provider, we often play on the sidelines. But we are a part of the game, and we see a bright future ahead for decentralized tech.



## MEET QUINN, HEAD OF CAPITAL MARKETS

Despite overall DeFi TVL being down 90%+, stablecoin supply has remained strong - USDC in circulation was actually up by about \$IB over the course of 2022. To me this highlights the resilience of the industry relative to past cycles. In a year where treasury bonds lost you 20% and the technology indices of the stock market down significantly more than that, the digital asset ecosystem has performed exactly how you'd expect.

While still in its infancy, the technology has proven its might and continues to develop at a rapid clip. Alongside that growth, efficient access to capital and financing will continue to be an integral part. As the industry ages, more parts of the ecosystem will scale to a run-rate state, profitable and mature business models. It is here where the true underlying value of Maple's infrastructure will really shine bright. As we've seen recently, the legacy financial system and traditional banks are quick to ditch the budding sector at every opportunity.

However, the need for growth capital will persist and Maple is excited to be a bridge for that investment into the space. Looking back to the start of 2022, the pace and quality of institutional investor conversations continues to increase.

Further adoption will only legitimize the space even more as reputable corporations from various industries push into these new frontiers and asset managers ramp up investments. I think a good line to remember is: "People tend to overestimate what can be done in one year and underestimate what can be done in five or ten years".

Prior to joining Maple, Quinn was Director of Institutional Credit and Lending at Abra. Quinn managed the \$IB+ digital asset loan book and alternative yield strategies. Before his full-time foray into crypto, Quinn spent 5 years in investment banking and debt capital markets, arranging and underwriting over \$5B+ in loan and bond debt financings for public corporations and private equity portfolio companies.



## FINAL REMARKS FROM MAPLE'S FOUNDERS

In 5 years time we hope to be part of a mature ecosystem that is accessible, trusted and a sustainable alternative to legacy markets and systems.

Finance for great businesses comes from equity or debt. With Maple, we did not want to create just another lender, but instead, to create a protocol on which all lending business could move to over time. In doing so, we hope to reshape how capital markets work—not so that the world is awash in debt, but so that the barriers preventing innovative companies from accessing it are removed.

We strive to be a good citizen and are aware of our responsibilities as a leading protocol. We will continue to hold ourselves and our partners to the highest standards, build with the best technologies and teams, and stay true to our values to put users first as we solve hard problems. Building capital markets on-chain takes time, and moving into 2023 after a year of ups and downs, we have never been more convinced by our mission and certain of the steps to get there.

SID & JOE



# JOIN OUR JOURNEY



Disclaimer: The data and information in this report are intended for informational purposes only, and is subject to change. Maple is a technology services provider. Use of the Maple Protocol involves risks, including but not limited to the potential loss of digital assets.

