From Rails to Returns:

The New Economics of Payments

Executive Summary

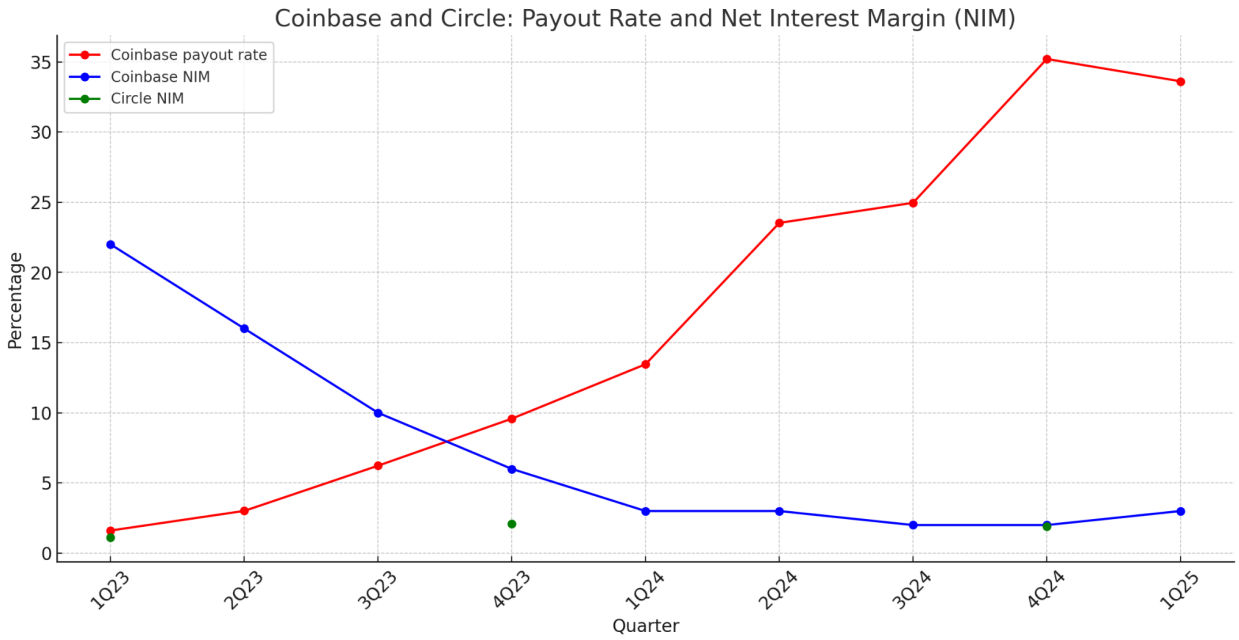
The most popular stablecoins are tokenized stable-value funds supported by an ecosystem intending to maintain the underlying currency peg across as many networks as possible. Circle is positioning itself to disrupt the global payments and asset transfer infrastructure by tokenizing assets on a combination of “network of networks” and “platform” strategies. Circle wants to be the trusted operating system for the future financial infrastructure. The two critical functions of this OS are:

- representing an asset across the global financial system
- interacting with an asset across the global financial network

The network strategy is primarily made up of regulated finance (banks, exchanges), on-off ramps and liquidity providers, and public/private blockchains. The platform strategy consists of a trusted brand built on transparency and developer and user services that improve the blockchain experience, including novel fiat-asset interactions. Combined, Circle is positioning itself to be a full-service offering for institutions and start-ups to build blockchain services upon. In our opinion, Circle represents the first step towards the merging of asset and payments infrastructure. In the future, a combination of blockchain technology and regulatory advances will enable us to effectively pay for coffee with yielding assets.

In this new payment architecture, we see the stablecoin business compressing into a fee-based business similar to asset managers (base case) or custody (bear case) collecting 5bps to 15bps on AUM. We estimate the long-term AUM potential at ~5% of global asset value which equates to $18 trillion AUM and a revenue range of $32B to $160B. We think the stablecoin business can develop transaction-based and data products that will significantly contribute to long-term value.

The main driver behind the shift to a fee-based business model is already underway as more end users are seeking to capture the underlying asset yield. End-user yield claim is fundamentally different than a distribution business cost because the incremented value is captured by the client, not another business in the supply chain.



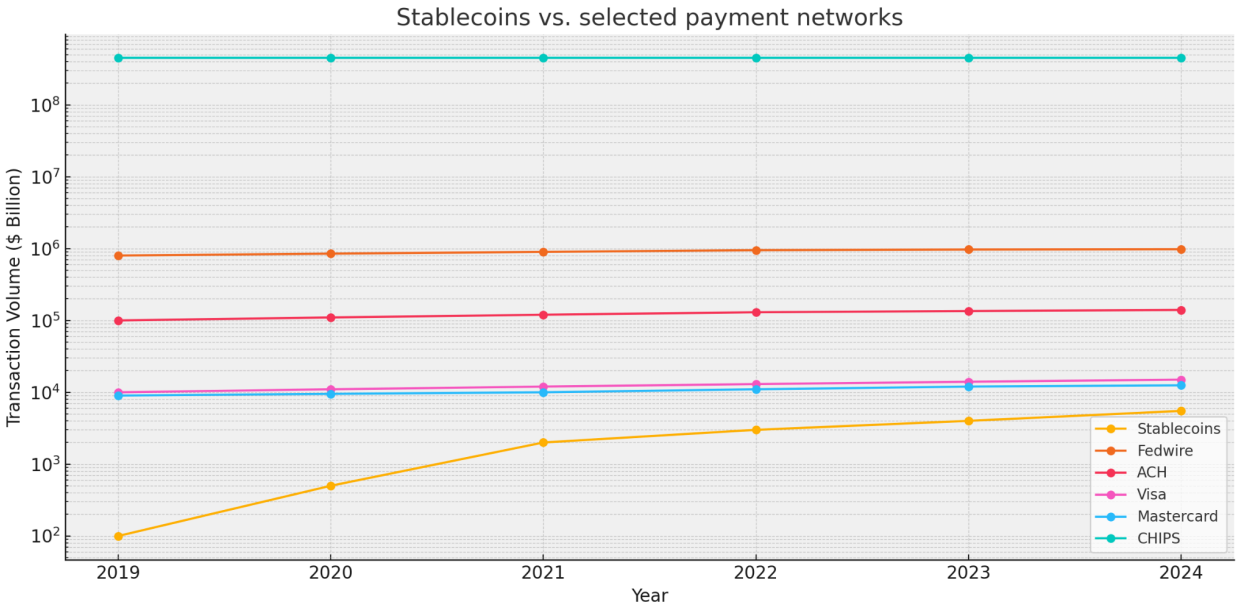
Since Coinbase began offering to pass yield to users, the % of revenues passed along has increased every quarter until the most recent to about ⅓ of stablecoin interest revenue. This translates to about 30% of the USDC asset base at Coinbase collecting the underlying revenue.

Another way to view the shift to yield-bearing dollars is to monitor the increasing penetration of yielding assets as collateral into services that previously only accepted fiat. Exchanges are the first venues that are undergoing this transition but there are numerous areas in the capital markets infrastructure in which float revenue is a loss for the client and a gain for the provider. Blockchain facilitates interoperability between assets, providers and clients so Circle advancing the distribution of the technology is simultaneously hastening the compression of its float revenue. Circle acquired a company, Hashnote, that issues a Treasury Money Market Fund to prepare for this future. In this future, capital efficiency, security and interoperability are the competitive advantages providers will aim to build.

Stablecoins are competing directly with banks and existing payment networks (e.g. ACH, Visa/Mastercard) and are positioned to take revenues away from banks, networks and processors. Unlike traditional financial networks such as Fedwire, ACH, Visa, and Mastercard, public blockchains are open, permissionless, and programmable. Circle leverages these unique characteristics to offer legally-backed digital representations of value and interoperability across open networks. We assert that open-loop payment systems (Visa, Mastercard) won because the open model scales faster via more participants (networks, issuers, acquirers). We assert that blockchains (and stablecoins) are more open than existing open-loop systems because anyone can grow them, not just networks, issuers and acquirers and blockchain smart contracts are fully customizable (and standardizable) for anyone in any jurisdiction to participate.

1. The Blockchain as a Messaging and Money Transmission Network

Public, permissionless blockchains are protocols that enable any number of counterparties to interact without having to trust any other counterparty. Participants must trust the protocol which is open-source and the results of which are public. Public, permissionless blockchains scale trust through math and the world has never had global access to scalable trust systems before. This is why blockchain is a gamechanger whose currencies, like Bitcoin, and processes (settlement layer), like Ethereum and Solana, are growing.



The value drivers of blockchains:

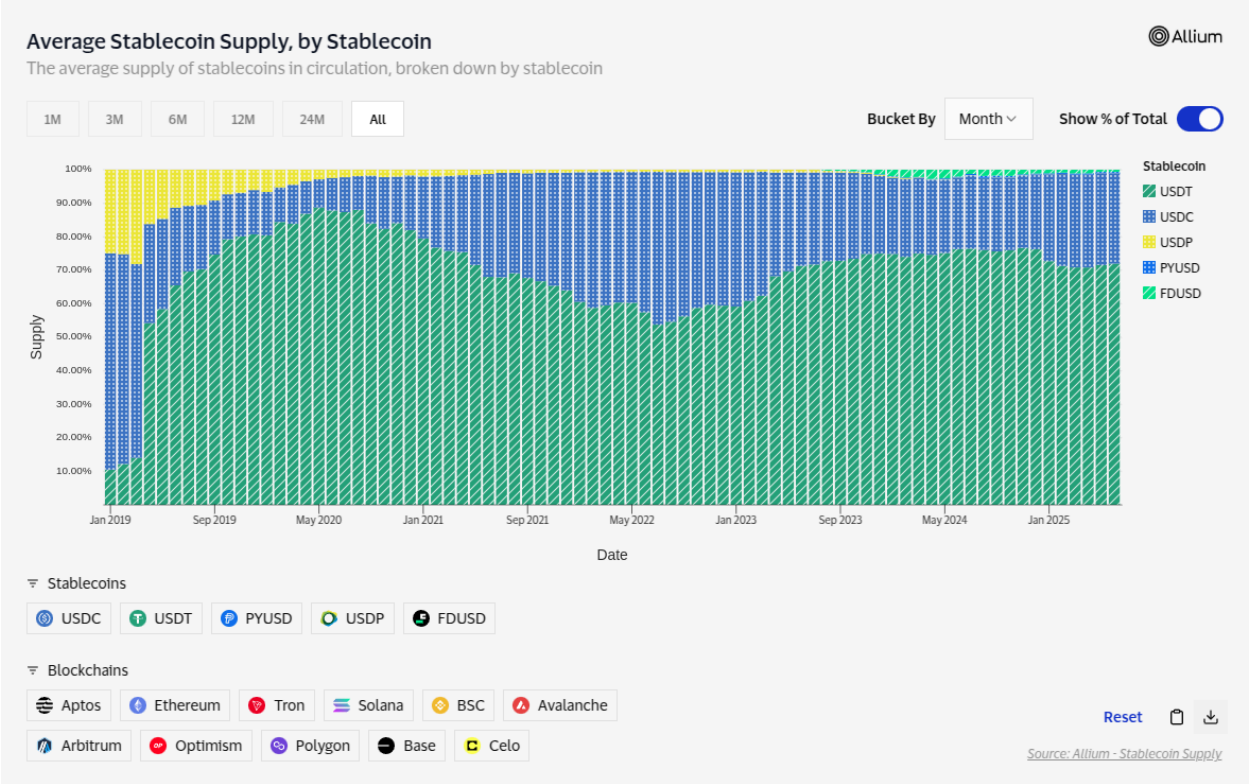
- Commoditized trust: settlement fees are a function of compute resources, not value transferred which translates to cheap transaction fees (e.g 1c or less on leading chains like Solana, Sui, Aptos)

- Globally shared infrastructure: breaking down silos translates to minimizing the economic capture by network effects
- Global standards: everyone can plug-in and speak the same language
- Programmable: intermediaries are encoded in smart contracts without loss of functionality, further reducing the cost of trust
- Portable data: the user owns its data by design which lays a foundation for alignment and control to open up more use cases like SuperApps

Why now?

Step 1: Dollar demand

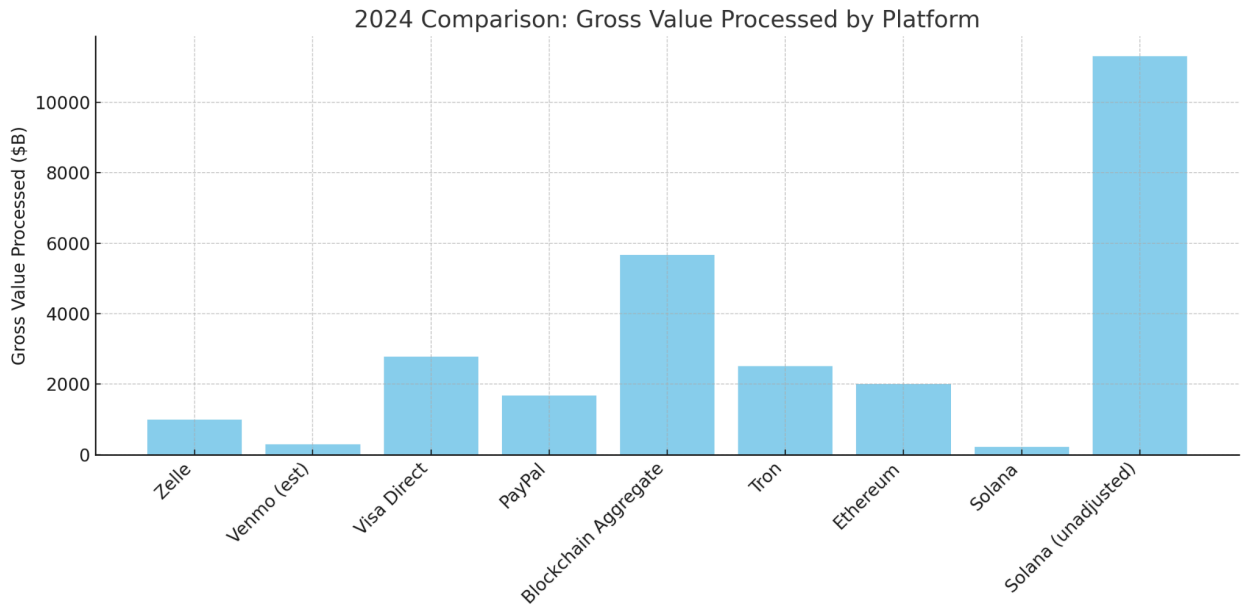
Tether proved the world wanted dollars and would forego interest in order to hold them. When rates increased, Tether became one of the most profitable companies in history.



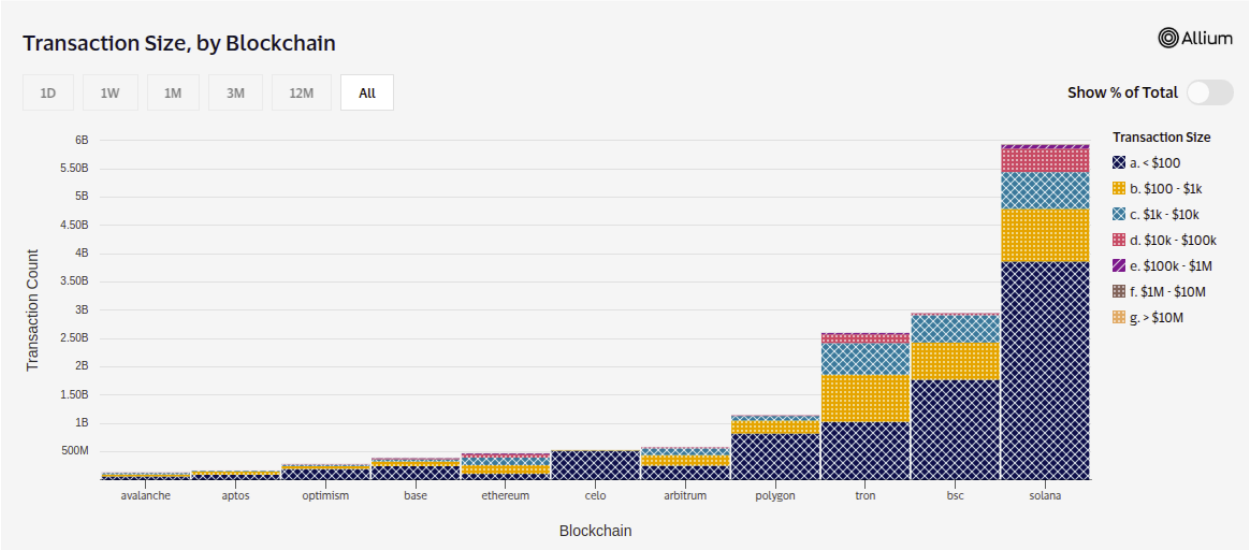
Step 2: Cheap and fast, finally

Solana is proving that fast, cheap transactions are a significant opportunity for blockchain. Before Solana, the cost to send stablecoins exceeded $10c and required at least 6 seconds.

Leaders like Solana, Sui and Aptos are moving any $ amount for less than a penny, on average, and in under 5 seconds. As Visa and MasterCard have increasingly focused on real-time payments via Visa Direct and MasterCard Send, these companies have also taken notice of stablecoin's meteoric rise. Visa has worked diligently to improve settlement times on Visa Direct, reducing U.S settlement from "under an hour" to "under a minute" since inception.



Sources: visaonchainanalytics.com, Visa 10-k, PayPal 10-k



Sources: visaonchainanalytics.com

Both Visa and MasterCard are working to incorporate blockchain as a money transmission network in their "network of networks" and platform strategies. It is worth noting that Visa Direct

transaction counts have grown an average of 164% per year since 2018 as digital wallets and real-time payments are increasingly used by merchants and consumers.

Stablecoins within the existing payments ecosystem

Stablecoins ⇔ tokenization

Tokenization is a developing area of disruption for blockchains and stablecoins are the first breakthrough product in this field. Stablecoins are tokenized representations of currencies designed to remain pegged to the target currency. The most popular stablecoins are built upon blockchain technology combined with legal structures and ecosystems that drive the asset peg, liquidity and interoperability. The result is a cash-like experience in a digital world that is enhanced by the speed, security and network effects of blockchain.

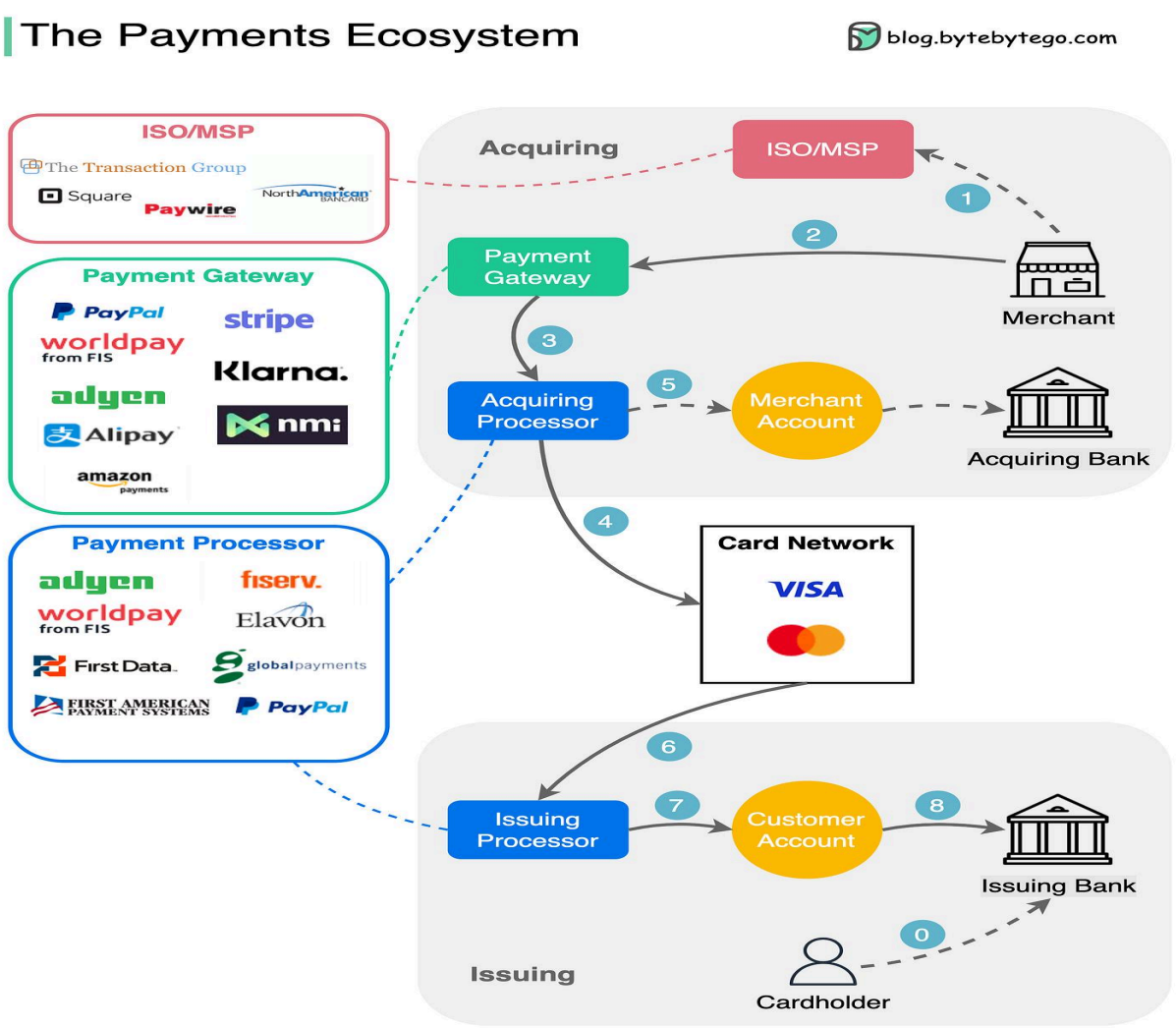
Payment networks are siloed by design

Traditional financial systems (e.g. Fedwire, ACH, Mastercard, Visa) are closed, permissioned, and siloed by design because 1) the largest are critical assets closely guarded by sovereigns and 2) networks built before the internet sought competitive advantage and scale in specific problems and regions. In contrast, blockchains enable the universal programmable transmission of value across jurisdictions without requiring central gatekeepers.

Payment providers are as large as the payments TAM

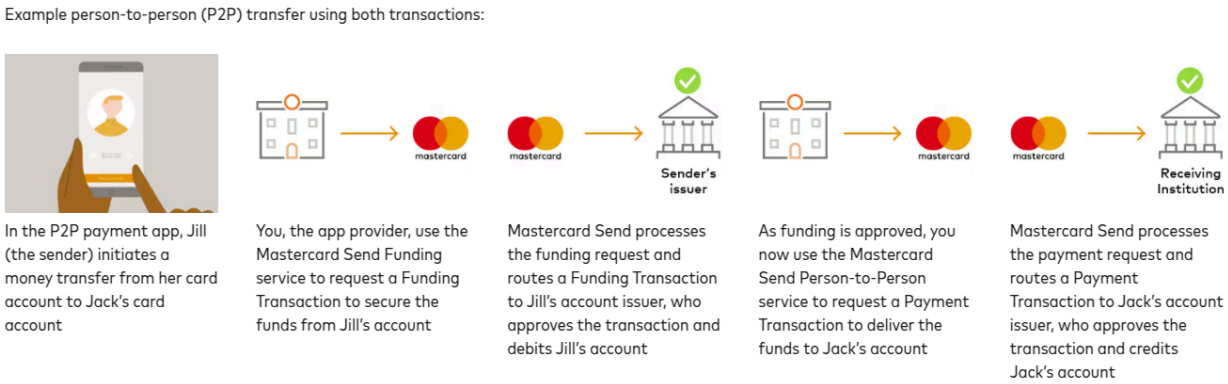
The image below outlines the payments ecosystem. The payments landscape is a mirror of consumer behavior, shaped by a competitive interplay between physical and digital realms that merchants must seamlessly bridge to serve evolving customer expectations. The network is large for a number of key reasons:

- payments is a massive TAM which enables niche entrants
- Visa and Mastercard built around the open-loop system which provided value for others to capture by growing the network
- memberships, certifications and client guarantees (e.g. encryption, settlement) have created specialization
- aspects of financial regulation prevent business combinations



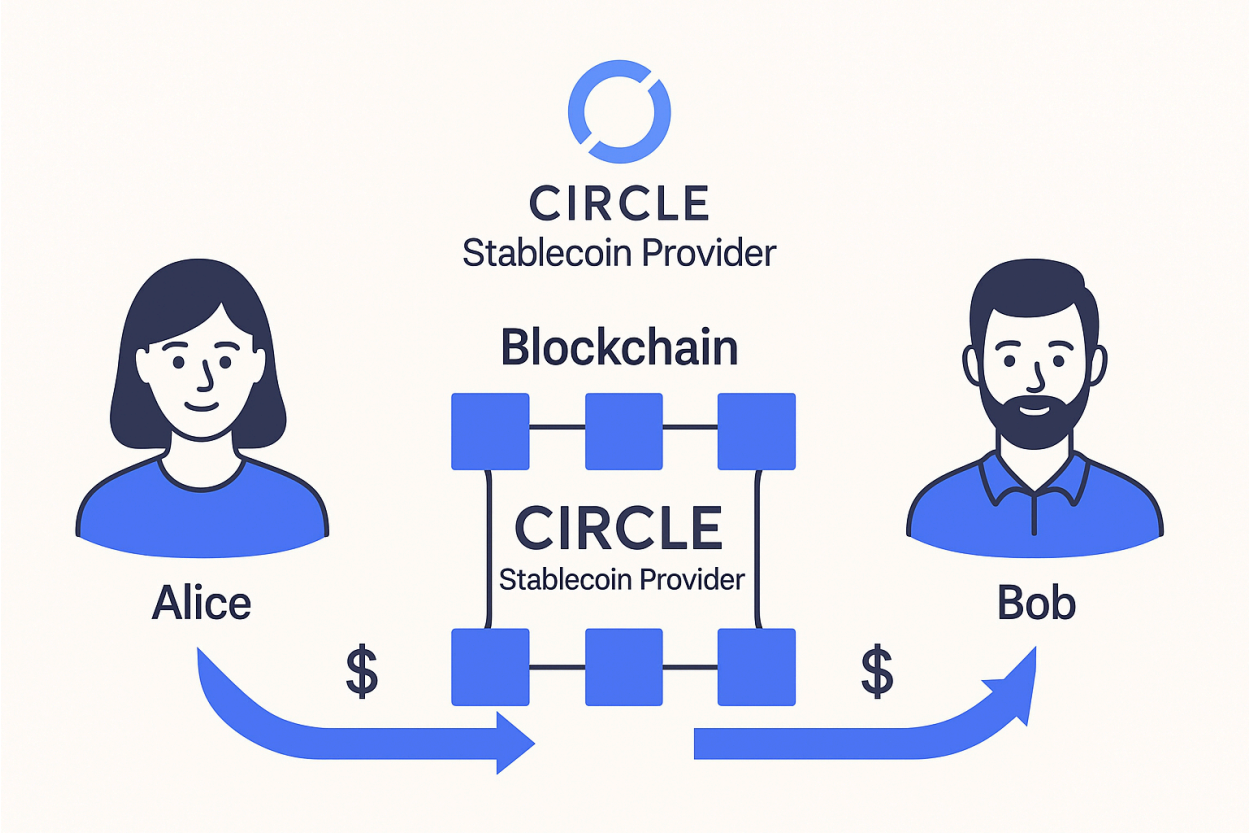
Blockchain, as a permissionless rail, has the ability to flip the model on its head. The traditional payment workflow is for a merchant or consumer to request permission from a regulated entity to move funds across a network to another regulated entity. Blockchains, on the other hand, enable users to hold value themselves and send it to others without requiring a financial institution in between. This resembles a cash transaction, logistically, but it is entirely digital. The responsibility would be on the user to report value transfers to the government unless the government is monitoring the public blockchain. This is part of the reason governments have resisted blockchain adoption - the government model has surveillance and enforcement (e.g. FINCEN, tax witholding) embedded in the system because the individual never had a way to enforce transparency on intermediaries or any counterparty … until blockchain. This is exactly where we believe the world is headed. Trusted messaging and payment networks that supersede sovereign control and boundaries but allow for government surveillance.

MasterCard and Visa “P2P”



Source: https://developer.mastercard.com/product/mastercard-send/

Blockchain P2P Stablecoin



One can adapt this image to include the banks and financial institutions (e.g. Blackrock, Visa, Processors, etc) and many users will elect to take this path BUT it will not change the fact that the payment workflow is radically different. We believe that payment workflows need to be

radically different in order to supplant the existing bank-controlled workflow. There is a scenario where blockchain stablecoin transactions resemble the existing banking and payment systems if users do not value the novel applications provided by blockchain's increased user control.

The existing financial system is built upon leverage and payments is no exception but it goes by a different name: netting. ACH and CHIPS, the 2nd and 3rd largest payment networks in the U.S. use netting (as opposed to real-time gross settlement) because it saves banks money and that savings is greater than the estimated cost of counterparty risk assumed for using netting.

Open-Loop Networks Won

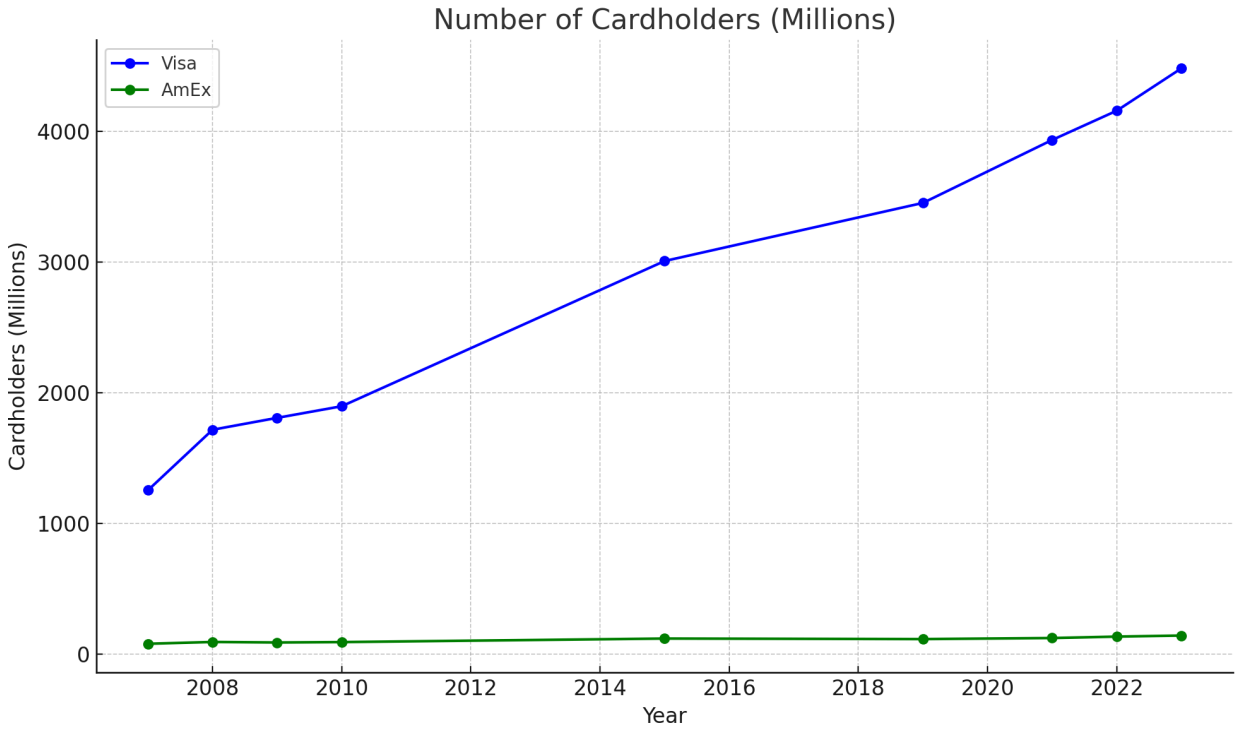
The outline of the payments ecosystem below is from Visa's S1 filing in 2007 and has held up well.

General purpose and limited-purpose payments networks primarily operate under two different business models.
Open-loop payments networks, such as Visa and MasterCard, are multi-party and operate through a system that connects two financial institutions—one that issues the card to the cardholder, known as the issuing financial institution or issuer, and one that has the banking relationship with the merchant, known as the acquiring financial institution or acquirer—and manages information and the flow of value between them.
In a typical closed-loop payments network, the payment services are provided directly to merchants and cardholders by the owner of the network without involving third-party financial institution intermediaries. Closed-loop networks can range in size from networks such as American Express and Discover, which issue cards directly to consumers and serve merchants directly, to an individual merchant that issues limited-purpose private-label credit cards to its customers for use only in that merchant's stores.
In recent years, the major closed-loop networks have begun to develop relationships with financial institution issuers and acquirers, thereby emulating certain aspects of the open-loop networks.
Operators of open-loop networks such as Visa generally do not issue cards, set fees or determine interest rates that cardholders are charged for use of their cards. Issuers have the responsibility for determining these and many other card features. In addition, such networks generally do not solicit merchants directly or establish the fees that merchants are charged for card acceptance, including the merchant discount rate. Both of these functions are generally the responsibility of acquirers.

Comparison Table of Major Participants in the Payments Network

Issuer (Cardholder's Financial Institution)	Payments Network (e.g., Visa)	Acquirer (Merchant's Financial Institution)
Primary Customers: Cardholders	Issuers and acquirers	Merchants
Issues cards based on product platforms	Offers credit/debit platforms	Establishes merchant accounts
Maintains cardholder accounts	Transfers data and manages flows	Acquires receivables and guarantees payment
Brands cards with own + network brand	Maintains payment network brand	Offers network acceptance services

While there are caveats to this comparison, it is clear the open model has outperformed the closed model.



Visa and MasterCard love public permissionless blockchains and stablecoins

Visa's LTV/CAC has declined when accounting for acquisitions. CAC has grown faster than LTV and a significant portion is driven by acquisitions. Acquisition costs are not usually included in CAC equations but because Visa is acquiring networks under the "network of networks" strategy, we think this is the correct adjustment.

Year	CAC incl. acq	LTV	LTV/CAC	CAC CAGR	LTV CAGR
2023	$7.12	$94.06	13	33%	18%
2007	$1.25	$30.85	25		

The CAC CAGR shown above should decline if Visa and MasterCard can leverage blockchain as the payment network because any user can join and identify themselves for near $0.

Blockchain and stablecoins are built to appeal to “the last mile” because they can be accessed with just a phone by anyone, anywhere with internet access. It should translate to some of the fastest network and activity growth we have ever seen. And it has.

Visa and Mastercard also have the potential to grow revenues on blockchain at the expense of the banks. Banks earn the majority of transaction fees when we use credit and debit cards. Blockchain does not have interchange fees. The Fiserv-Circle agreement is already indicating this behavior with Fiserv stating it will charge a % fee per transaction.

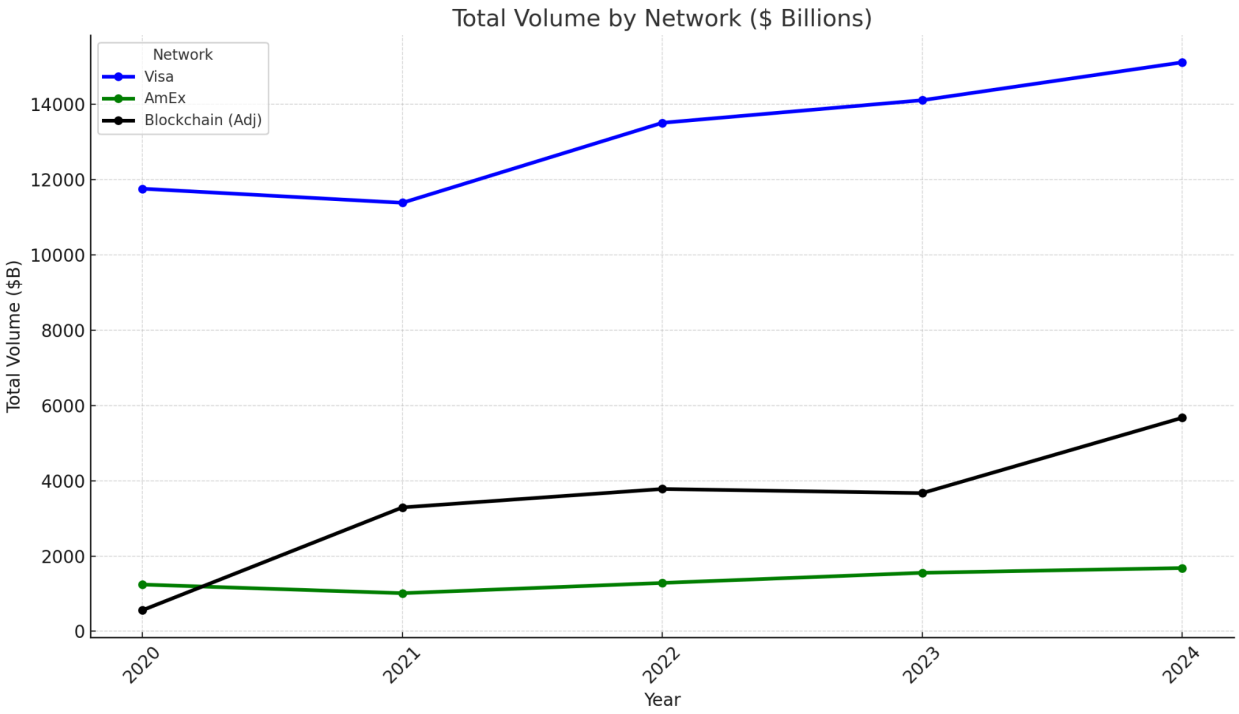
Why do real-time payments matter?

- Reduction of counterparty risk
- Reduced fees (generally)
- Increased capital efficiency for users via float capture
    - A Forrester Consulting report concluded that the use of Visa Direct real-time payments resulted in a 207% ROI relative to traditional payment methods. This translates into a positive net present value for merchants and consumers by switching.
    - 75% of respondents in a Visa survey stated they want all digital payments to be real-time

Stablecoin Growth

Visa created a website to track stablecoin activity[1]. The company made adjustments to the data because it claims there is activity that does not constitute payments. Using Visa’s adjusted data, stablecoin volume is already a significant player in global payments.

[1] https://visaonchainanalytics.com



Who is using stablecoins?

Source: https://www.stablecoin.fyi

B2B payment volumes are growing 375% y/y. From our portfolio companies, we know cross-border B2B payments are a material percentage of this growth particularly in places like Latin America.

Banks are the biggest losers

Blockchain stablecoins are settlement networks and will compete directly and indirectly with Visa/Mastercard, ACH, SWIFT and other settlement networks. They have already begun to take business from these networks. The net impact should be compression of network fees (e.g. interchange) towards zero. Cards are physical and digital identity which benefits the end user via convenience and the merchant via risk management. This gives cards staying power while users transition to more economic identifiers. We expect merchants to leverage blockchain to create new and improved loyalty programs[2] that drive behavior and capture data. Blockchains provide cheap, scalable loyalty program primitives that will enable cornerstores and start-ups to better understand value-add and churn. Stablecoins and tokenized assets are the entities through which end users will express behavior in the increasingly digital world. Tokenization represents an opportunity for asset managers and custody providers to reduce cost and increase sales[3]. Savings will flow back to end users in these competitive environments as intermediaries like transfer agents are placed in smart contracts[4].

Payment gateways (e.g. Stripe) and payment processors must also adapt or be replaced. Circle developer services allows anyone to create:

- A virtual bank account to convert fiat to USDC (Circle uses a company called Bridge)
    - Send to Bridge's bank account, TradFi banking rails means trusting Bridge is required
        - *Once we receive the deposit for your transfer, we will move the funds to the destination. You can use the Transfers API to check the state of the transfer or listen to webhooks.*
- Programmable wallet for custody and route optimization

Stripe acquired Bridge (bridge.xyz) in 4Q2024 to position itself for stablecoin rails. It was the largest acquisition, at $1.1B, in Stripe's history. In the payment flow above there is no payment processor or bank once a user is holding the stablecoin. The payment processor and bank are required to get users to blockchain stablecoins.

And this is the first hurdle for blockchain. All assets have to be ported from the existing financial system on to the blockchain. The banks and asset managers will have to be involved in this transition.

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[2] https://www.bridge.xyz/product/issuance

[3] https://www.cnbc.com/2025/04/12/tokenization-stock-bond-real-estate-trading-market-coming-blackrock.html

[4] https://www.franklintempleton.com/press-releases/news-room/2024/franklin-templeton-announces-availability-of-peer-to-peer-transfers-for-franklin-onchain-u.s.-government-money-fund

The second hurdle is identity. The pillars of financial identity are a bank account and a credit/debit card. Stablecoins generally operate as a real-time gross payment systems as does the vast majority of blockchain and crypto. This is because leverage generally requires persistent identity to track participants who don't keep their side of the deal. Blockchain lacks persistent identity because anyone can create a new address to "identify" themselves. Persistent identity is a voluntary action and, similar to the existing financial world, may only capture a partial view of a potential client.

Stablecoin providers are:

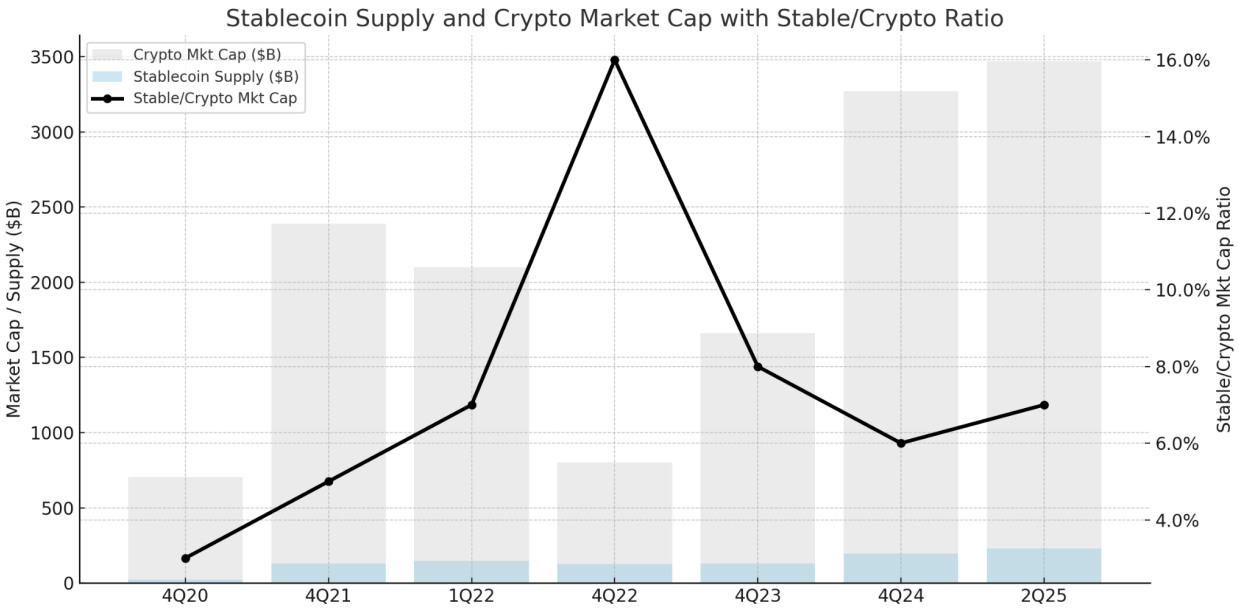
- Building capital markets liquidity networks
    - Replace: banks
- Building developer APIs
    - Replace: payment gateways because devs connect directly to blockchains
        - Optimization of route is a service to be provided
    - Replace: processors because they speak to networks

The biggest losers are the banks who are not necessary in this transaction flow.

The biggest risk to payments passing the stablecoin savings back to users is regulation. Payments is directly or indirectly regulated from the payment service providers to the processors through the networks to the banks. The clearest route to value capture is via self-custody but self-custody represents a minority of assets today. The more likely path revolves around yield capture and loyalty programs.

Stablecoin AUM has not achieved escape velocity

Stablecoins have yet to prove they are being used in material AUM beyond the crypto community. We expect stablecoin supply as a percentage of crypto market capitalization to increase as a function of network participants accepting payment (settlement) in stablecoins. This would mean merchants and users are leaving assets on the blockchain in anticipation of future payments or asset holdings and lowering dependence on traditional banking.



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2. The Future of Payments with Stablecoins

The convergence of asset management and payments

A core value proposition of public, permissionless blockchains is the best interoperability the world has ever seen. We expect this interoperability to include assets and currencies. We see the world moving towards increased capital efficiency which means users holding assets until a payment needs to be made - at that time, the asset is swapped for a commonly accepted store of value, the transport asset (e.g. USD), and payment sent. The recipient instantly swaps the fiat for an asset of their choosing. We expect portfolio, transport asset, identity/compliance and route optimization for payment to be handled by AI/ML algorithms.

P2P security transfers

The transfer agent

One method for P2P transfers is to send a security from one entity to another, directly. First, all the regulatory requirements must be satisfied so this would be limited to a subset of users that have volunteered to go through this process though this subset represents the majority of people. Then, the hurdle is updating the intermediaries that have regulatory requirements to safeguard assets on a client's behalf as to who is involved, how much was transferred, price, etc. The logistics of navigating this web today prevents P2P, or A2A, transfers at the consumer level. At the institutional level, it is possible but licensed market participants pay clearing houses to handle transfer details as part of their more important duty to provide netting (leverage).

With blockchain technology, the transfer agent is embedded in code in the smart contract which makes P2P or A2A transfers logistically possible because all of the required information is available to each participant.

The common denominator

The alternative method is to use a common denominator, like the fiat U.S. dollar, to transfer value instead of sending a security. With blockchain technology, this could be the economic equivalent of a P2P security transfer, less intermediary fees. Intermediary fees today amount to ~15 basis points, a relatively low fee. The added savings from blockchain technology would come from higher frequency ownership rights and holding the security right up until the moment payment is required. For example, this would mean earning interest on a bond up until the minute or second that the bond is exchanged for fiat. This is more capital efficient because holders are holding more assets for longer.

The race to the bottom for payments and stablecoins

Asset management, including custody, is a fee-based business. We expect stablecoin infrastructure providers (e.g. Circle) to mirror market share of asset management and custody providers - relatively concentrated market share and low fees. There is little competitive moat to tokenization and stablecoin supply which supports a low fee business intended to keep new market entrants out. Stablecoin market share has reflected a concentrated market composition thus far.

Asset management fees

Mature products (ETFs)	10 - 25bps, on average
Custody	1 - 15bps, on average
Mid-cycle products (Alts)	50 - 200bps, on average

Payments take-rates

P2P (Zelle, Venmo)	0
B2C (Paypal, MercadoLibre)	100 - 500bps, on average
B2B (Networks, Acquirers, Processors)	15 - 50bps, on average
Remittances	25-1000bps
Specialty PSP (e.g. last mile, DLocal)	100 - 200bps

Tech is not enough

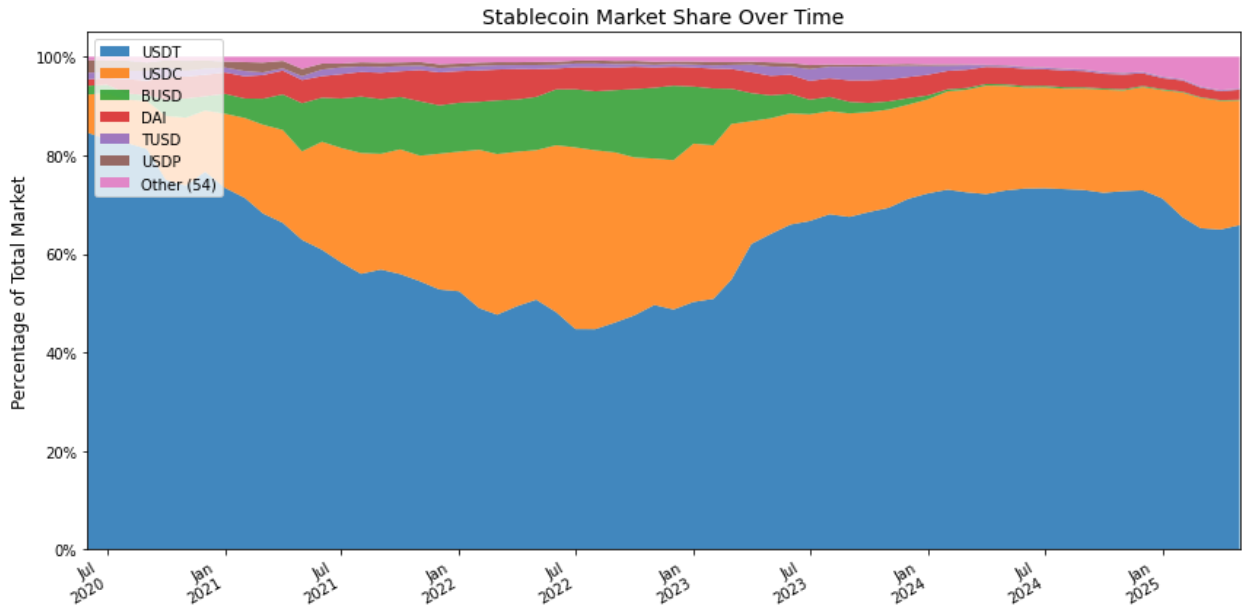
Payment apps (e.g., Venmo, Zelle, Cash App): All offered near-identical functionality with little differentiation, resulting in a race to zero on fees. Robo-advisors (e.g., Wealthfront, Betterment): Automated portfolios commoditized wealth management, and even with solid UX, were forced to drop fees to 0.25% or lower to compete. BNPL (e.g., Affirm, Afterpay): Lacked defensible tech and faced margin compression as larger players like Apple, PayPal, and banks entered the space. And while fees decline, cost to acquire customers rises.

Regulatory moat

This does provide some defense particularly for institutional clients optimizing for safety. Transparency combined with sufficient legal structures, charters and processes, at scale, is sufficient. The majority of banks outsource technology because it does not make financial sense to spend on R&D but the provider must be trusted.

Network effect

The strength of a start-up stablecoin company's network effect lies in the speed and depth of disruption that blockchain causes. Fast and consequential disruption should result in blockchain start-ups becoming dominant financial entities, replacing existing players.Tether and Circle have built the digital asset side of the network to be best-in-class via digital asset exchanges and digital asset liquidity providers and on-off ramps. The traditional side of the network is just that, a plug into existing bank and sovereign communication systems and card networks. Many financial institutions have global networks including unique infrastructure like Wise who has a system of global checking accounts. Stablecoin market share will play a significant role because it will be correlated with network, interoperability, liquidity and fees.



How much are stablecoin companies worth?

Estimating stablecoin potential long run AUM

Category	Market Value ($B)	% of US assets
M0	5,648	4.2%
M1	18,668	13.7%
M2	21,862	16.1%
Eurodollars & % of non-US assets	15,541	8.0%
Median		10.9%

Fiat demand as a function of asset size range: 4-16%, median of 10.9%
Typical portfolio management guidelines suggest a cash position of 2-10%[5]

Global Public Equity ($T)	115
Global Public Fixed Income ($T)	140
Global Private Assets ($T)	75
Global Total Assets ($T)	330
Cash, held %	10.9%
Cash, held $ ($T)	35.9

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https://www.usbank.com/investing/financial-perspectives/investing-insights/percentage-of-cash-in-my-portfolio.html

End user optimization rate	50%
Cash after optimization reduction ($T)	17.9

This is how we arrive at a long-term potential AUM opportunity of $17.9T for fiat stablecoin providers. In this world, demand for fiat declines by 50% and is replaced by yielding assets. Fiat is held for payment purposes under the assumption that fiat remains the easiest mechanism to transfer value between two counterparties that are sharing limited identity information. There are risks to this assumption because assets are transferred “peer-to-peer” but the web of transfer agents, brokers, custodians and CSDs must be updated at transfer. While this ownership update is virtually impossible for consumers in today’s siloed capital markets, blockchain makes this possible and some are already enabling it[6].

	Bear	Base	Bull
Float % of AUM	12%	21%	30%
Float Rev take rate	35%	63%	90%
LT Rates	3%	3%	3%
Float Rev ($B)	$23	$71	$145
Fee-base AUM %	88%	79%	70%
Fee Rate (bps)	6	10	15
Fee Rev ($B)	$9.5	$14	$19
Total Rev ($B)	$32	$85	$164

3. Circle’s Strategy: The Future Financial Operating System

Circle’s strategy is to serve as the unifying operating system across capital markets, payments and blockchain ecosystems by offering two core services:

Network of Networks

Digitally-Native, Legally-Compliant Asset Representations

To leverage blockchain technology, blockchain representations must be created.

Circle offers digital assets like USDC, which are:

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6 https://www.franklintempleton.com/press-releases/news-room/2024/franklin-templeton-announces-availability-of-peer-to-peer-transfers-for-franklin-onchain-u.s.-government-money-fund

- Legally backed 1:1 by fiat reserves
- Audited and regulated
- Instantly transferable on-chain

Circle's key product is USDC, a branded stablecoin. We believe Circle is agnostic to the underlying asset and will tokenize whatever it believes there is demand for. While Circle is focused on a branded asset and operating system because this will command the greatest value capture, Circle already offers tokenization-as-a-service and we believe this product will grow alongside stablecoins to service adjacent businesses with large user bases, such as Amazon or Wal-Mart.

Tokenization is most valuable when it offers interoperability and lower fees.

Interoperability

Circle's "network of networks" includes liquidity providers for distribution and exchange between venues, stores of value and blockchain networks. Circle has built the blockchain interoperability and this makes sense because when the issuer of the asset (e.g. USDC) provides the interoperability and representations on all destinations, counterparty risk is minimized. Circle has partnered for liquidity, exchange and distribution as it focuses on building the infrastructure. This strategy mirrors the Visa and MasterCard of focusing on B2B up until the past few years. Circle acquired Hashnote so that it can build out its own proprietary network of interoperability with capital markets infrastructure using the Money Market Fund as the entry product.

Interoperability Strategy Economics

There are two primary strategies for enabling interoperability in stablecoins:

1. Technical Interoperability (Native Issuer-Based):

In this model, the issuer of the stablecoin offers a native tokenized representation of the underlying funds across multiple blockchains. This approach is both the most cost-efficient and the most secure. Because the token is issued directly by the entity holding the underlying assets, there is no additional counterparty risk. The primary cost of this interoperability lies in the initial development of the software, and the marginal costs associated with minting and redeeming tokens across blockchains. These costs are expected to converge toward zero over time as infrastructure matures.

2. Market-Based Interoperability (Liquidity Provider-Mediated):

This strategy is borrowed from traditional capital markets. Instead of a native token issued across chains by the stablecoin issuer, a third-party liquidity provider creates a synthetic or mirrored representation of the stablecoin on a target blockchain or value transfer system. While

this model may enable broader access, it introduces an additional layer of counterparty risk and costs, since the synthetic token is not backed directly by the issuer. These costs include not only the underlying technical infrastructure but also risk premiums and spread margins required by the liquidity provider. While these costs may decline over time toward the cost of software provisioning, they are likely to remain higher than native interoperability due to the dual overhead of infrastructure and profit margins.

Circle's interoperability via USDC and strategy #1 (technical interoperability), provides them a competitive advantage by reducing counterparty risk and fees when moving between blockchain networks. Cross-Chain Transfer Protocol, or CCTP, and Circle Gas Station/Paymaster are the key products providing interoperability.

This strategy mirrors multi-rail payments infrastructure, where Circle becomes the unifying layer, similar to what Visa (VisaNet + VisaDirect, etc) is for merchants or SWIFT is for global interbank messaging.

The Platform

Circle wants businesses to build services on top of its tokenization and interoperability offerings. To incentivize this behavior, Circle has built out a suite of API products (including CCTP) which offer developers improvements in user experience (Wallets), capital efficiency (Paymaster) and safety (Contracts, CCTP). This enables developers to focus on their business instead of learning blockchain programming languages and mechanics. Programming errors in the blockchain ecosystem can be punitive because of the bearer-features of the technology - once a store of value is transferred to another address, the technology has no mechanism to retrieve it.

In this strategy, Circle is pursuing a world where their branded products and/or developer services are the trusted mechanisms that institutions and others use to build communications and services across the entire financial system.

4. Circle Business Model & Valuation

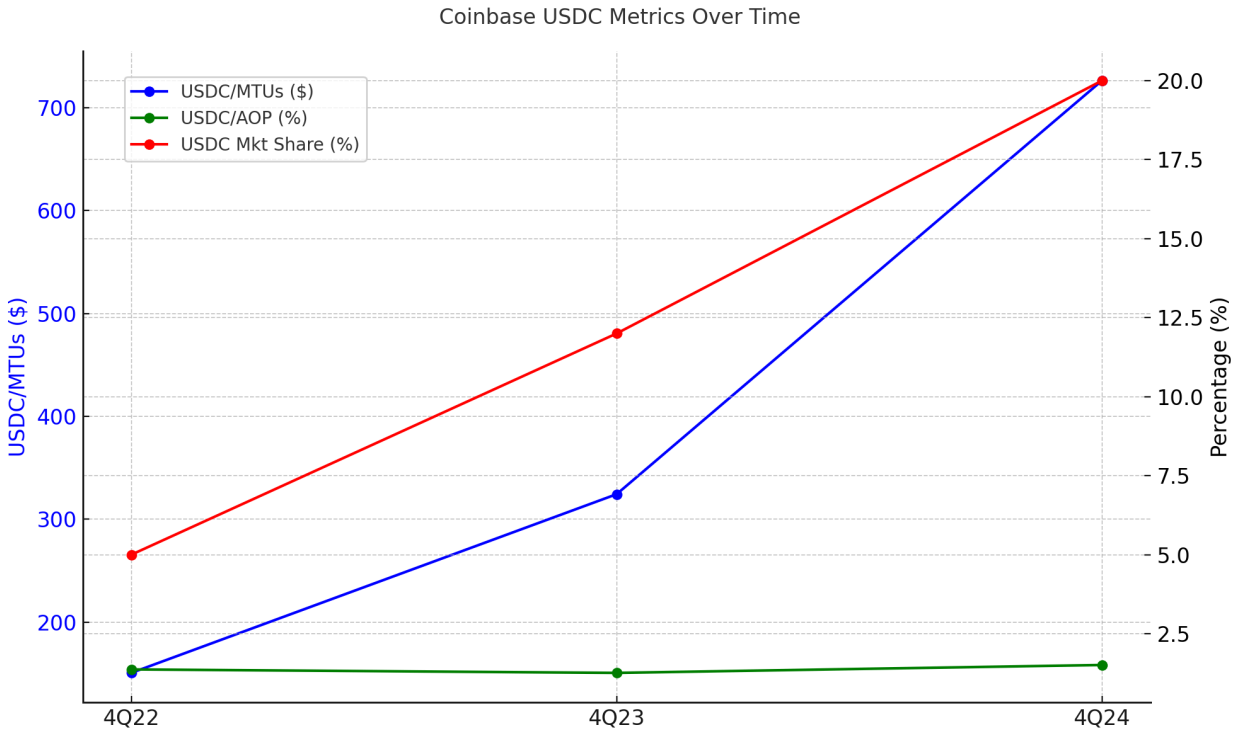
Circle's model combines asset management (AUM) with transaction-based revenue:

AUM/Float Revenue

Circle currently earns from the yield on reserves, such as U.S. Treasuries backing USDC. The company states it has no intention of launching transaction fee products in the near term. This makes sense if the expected outcome is to be a top 3 market share of a stablecoin industry with only a few participants. Even with fee compression, if AUM is in the trillions of dollars, Circle market cap would be expected to be greater than $100B. As an infrastructure provider, I do think this outcome is the most likely. Payment networks are large utilities where a few large providers charging minimal fees makes economic sense. In line with this view, we expect

stablecoin fee-based revenue to compress toward ETF-like margins (3–10 bps) as yields flow to end users and competition increases. This race to the bottom is independent of who owns the end user because it is a function of payments and asset management advancing through the product life cycle which is driven by the extreme interoperability that public, permissionless blockchains and global connectivity offer. The image below shows Coinbase net revenue has declined alongside Circle's.

The market is already aware of Circle's revenue splits with Coinbase. Coinbase has been particularly important to USDC distribution and Circle has shared revenue with Coinbase that reflected the partnership. In the updated agreement as of August 2023, Coinbase switched its split from a pro rata based on market share to a fixed percentage after Circle covers expenses. This gave Circle the flexibility to sign additional revenue sharing agreements and in 3Q24, Circle agreed to pay Binance seemingly similar terms as the old Coinbase deal. Binance has similar USDC market share to Coinbase, 18% vs 20%, respectively. So a deal similar to Coinbase makes sense as Binance may be preparing to offer USDC yield to end users as well. Circle will pay out "annualized mid-double digit to high double-digit percentage of a fixed rate" on Binance platform and treasury USDC. USDC agreed to keep $1.5-$3B of USDC in its treasury and run a marketing campaign with Circle. We interpret the net impact as a continuation of Circle's existing net revenue margin, 39% in 2024, staying well below the 50% threshold and continuing to decline.

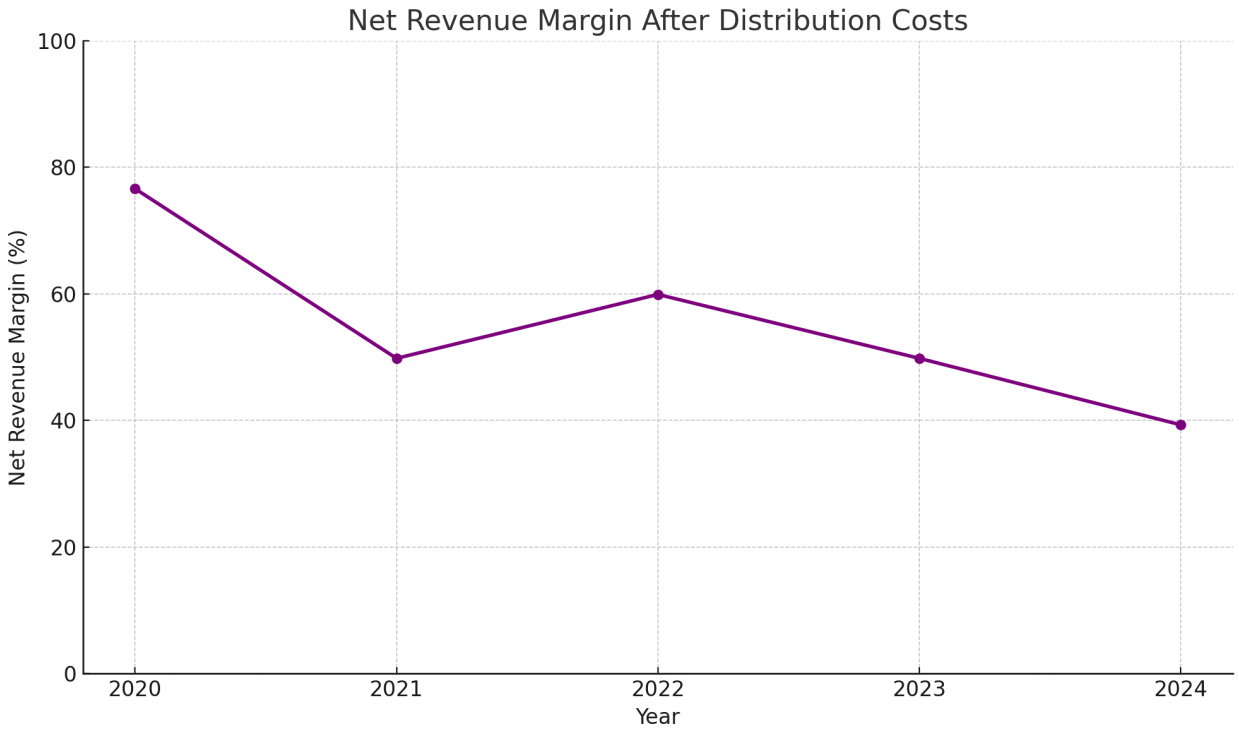


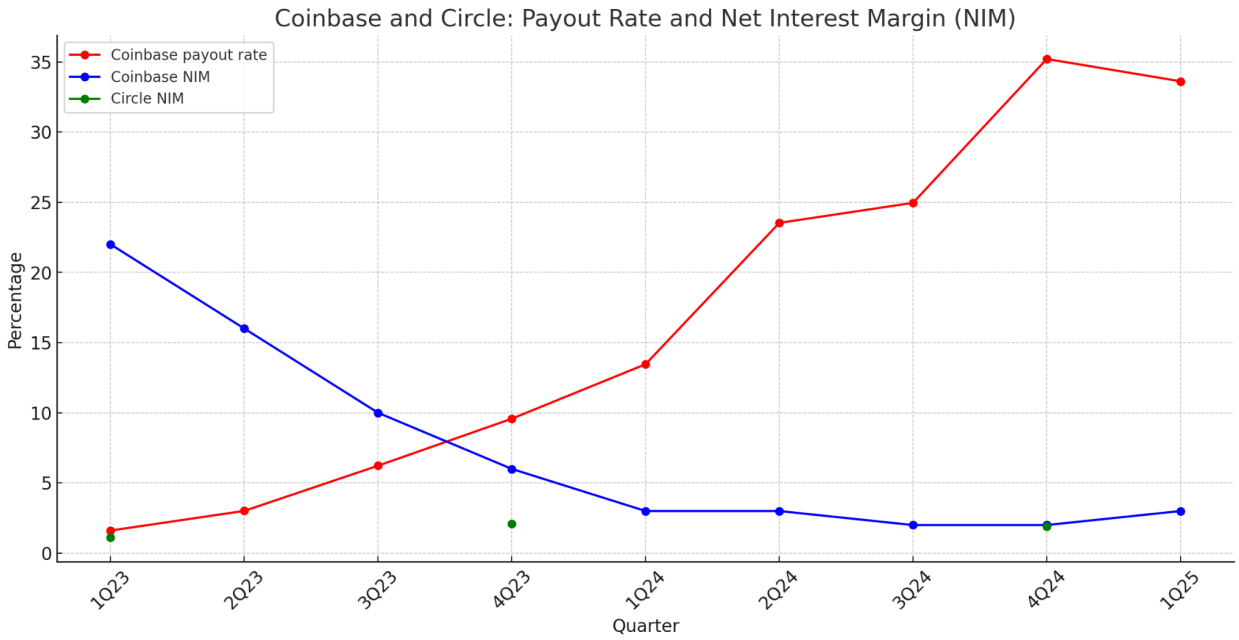
Taken from Coinbase and Circle public releases.

MTUs: Monthly Transacting Users (Coinbase metric)

AOP: Assets On Platform (Coinbase metric)

Binance has 18% USDC market share and its deal with Circle reflects this.





At the same time, the risks to network moat Circle is pursuing will be continuously lowered by blockchain which is public and permissionless. Scaling networks will become progressively easier as more message passing infrastructure (e.g. capital markets, payments, social) integrates with blockchain. In the long run, we believe stablecoins will lead the way in a new form of user data capture which successful companies will build transaction and SAAS models on top of.

Transaction | SAAS Revenue

Circle Mint and Circle Developer Services are the transaction-based businesses of Circle. Transaction revenue is less than 1% of revenues today but it will provide long-term growth as blockchain adoption accelerates.

Circle Mint charges 3-10bps to instantaneously exit the Circle ecosystem and charges 0 to exit at traditional finance speed (1-5 business days).

Developer services are currently free. It offers developers plug-and-play access to reliable and secure user experience infrastructure including wallets, smart contracts, paymasters and cross-chain interoperability (CCTP).

These products offer Circle the best opportunities to create transaction-based business models which will likely be valued at a higher multiple than the eventual fee-based business. We expect these offerings to expand to include:

- regulatory mapping (e.g. safely pay anyone without violating applicable KYC or tax code)

- tokenization-as-a-service
- stablecoin-as-a-service (white label)
- risk management
- treasury/asset management
- custody
- data services

As a reminder, Circle does not make money when USDC is transferred, only the underlying blockchain and infrastructure providers (Dapp, validator, etc) retain a fee. Only when certain Circle developer services are used to move the USDC or other activities does Circle earn a transaction fee.

We expect Circle to create a SAAS business around data services for merchants but this is still many years out. This is supported by our thesis that stablecoins will derive a material portion of value from the user data they create in the long run.

We find B2B payments the most likely source of transaction and service revenue for Circle because it is growing faster than other categories and represents a source of dual upside for Circle via direct distribution in the near-term. For our model, we look at Ramp and Stripe growth and likely net revenue profiles to add B2B transaction and services revenue to Circle Income statement starting in 2027. This incremental revenue applies only to Base and Bull case models because Circle has gone out of its way to say it will not pursue these types of businesses but we expect a pivot as net revenue margins decline and the company needs to give analysts more.

Valuation

Summary

Shares	217,340,115			DCF Mkt Cap	2027 EV/EBITDA	2028 EV/EBITDA	DCF %	DCF Per Share	Reward-Risk
Fully Diluted Shares	264,481,423		Bear	$2,431	156	158	-94.93%	$9	0.66
Price	$185.00		Base	$12,295	92	77	-74.35%	$46	0.85
Market Cap ($M)	$48,929		Bull	$78,141	28	18	63.04%	$295	
Net Cash ($M)	$1,000								
EV	$47,929								
IPO	$30.00								
IPO Market Cap ($M)	$7,934								
Since IPO	517%								

Our base DCF results in a 25x EV/EBITDA multiple on 2026. We think a 20x EV/EBITDA multiple is a better reflection of reward from scale relative to risk from margins and onboarding growth.

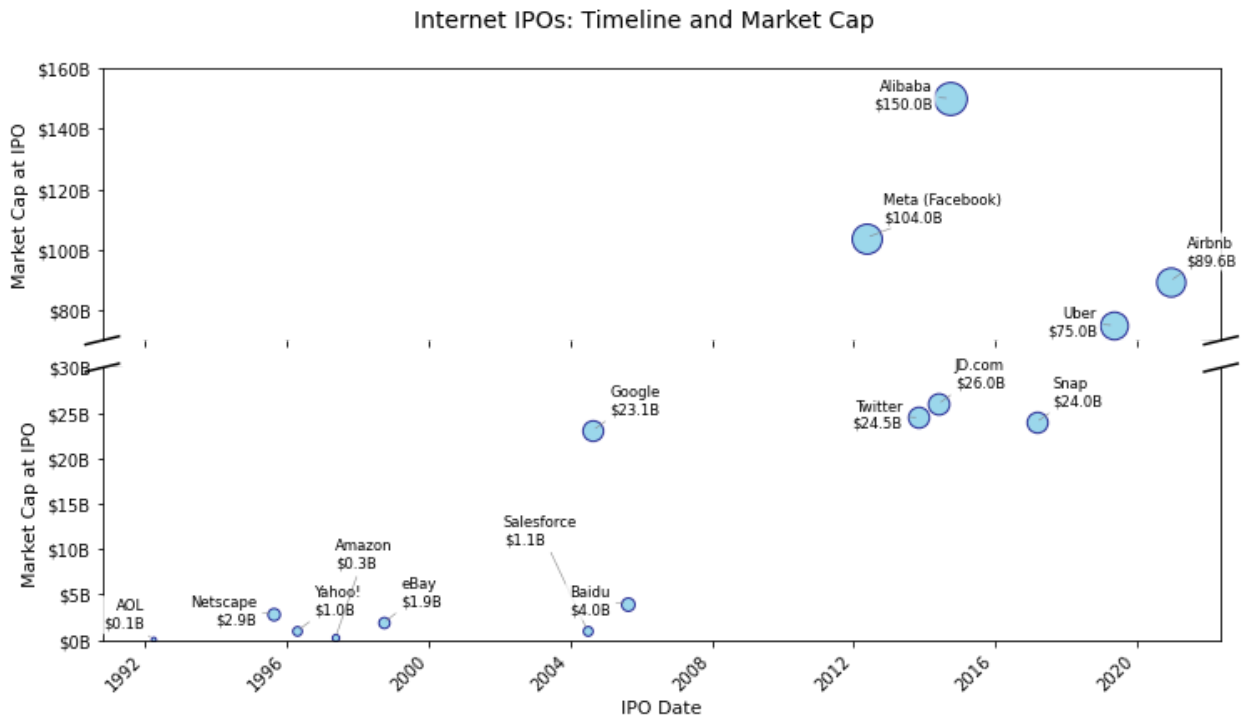
Base Case Income Statement

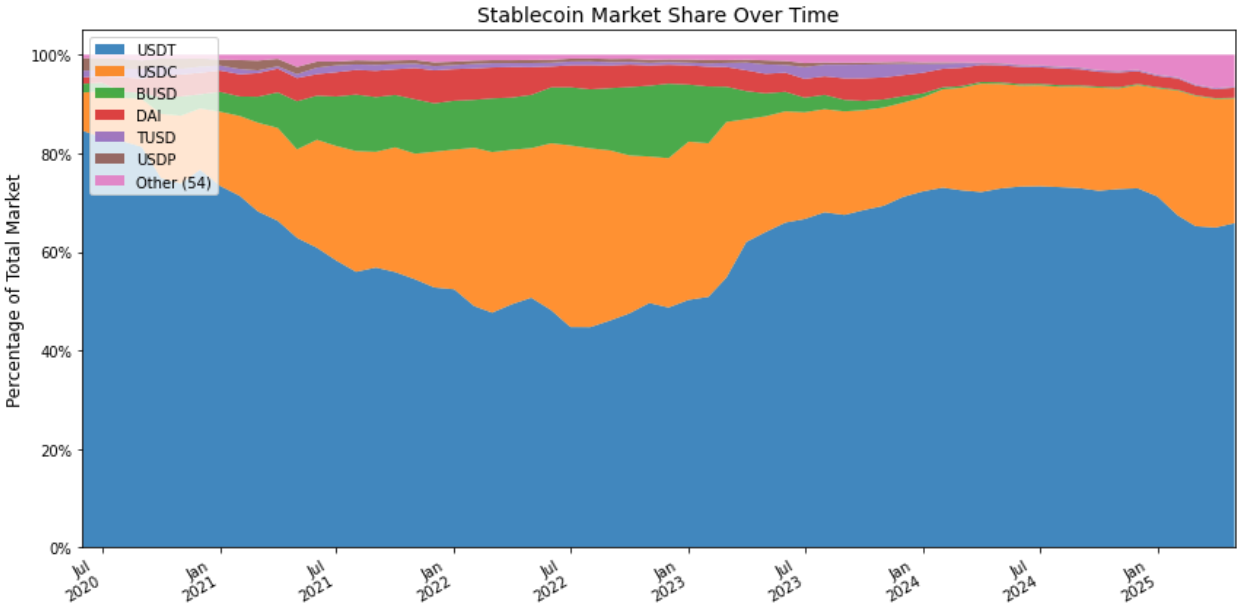
BASE CASE	2025	2026	2027	2028	2029
UST ST Avg Rate (FOMC)	0.04	0.034	0.031	0.03	0.03
IA+Admin Fees	0.160%	0.160%	0.160%	0.160%	0.160%
MeWs	6,321	9,370	13,889	19,919	27,701
Avg Account Balance	$9,587	$8,084	$6,816	$5,940	$5,232
USDC Outstanding	$60,600	$75,741	$94,666	$118,318	$144,925
USDC Growth	38%	25%	25%	25%	22%
USDC Mkt Share	28%	31%	35%	38%	42%
Revenue	$2,327	$2,454	$2,783	$3,360	$4,116
Net Revenue - Float	$1,043	$1,045	$1,126	$1,291	$1,550
OpEx	$628	$681	$739	$802	$870
EBITDA	$489	$493	$516	$619	$809
FCF	$373	$374	$403	$462	$555
NI	$294	$291	$309	$392	$544
Net Rev Mgn	44.83%	42.58%	40.46%	38.43%	37.66%
OpEx Mgn	60.19%	65.19%	65.65%	62.10%	56.13%
EBITDA Mgn	46.91%	47.18%	45.83%	47.91%	52.21%
NI Mgn	28.20%	27.85%	27.48%	30.32%	35.10%
Net Rev / AUM	1.72%	1.38%	1.19%	1.09%	1.07%
Tx-based model					
B2B Mkt Share	0	0	0.0002	0.0003	0.00045
B2B TPV ($B)	0	0	29	44	65
B2B Take Rate w/services	0.00075	0.00075	0.00075	0.00075	0.00075
B2B Revenue ($M)	$0	$0	$22	$33	$49
B2B EBITDA Mgn	0.2	0.2	0.2	0.2	0.2
B2B NI Mgn	0.125	0.125	0.125	0.125	0.125
EBITDA	$0	$0	$4	$7	$10
NI	$0	$0	$3	$4	$6

Bull Case Income Statement

BULL CASE	2025	2026	2027	2028	2029
UST ST Avg Rate (FOMC)	0.04	0.034	0.031	0.03	0.03
IA+Admin Fees	0.160%	0.160%	0.160%	0.160%	0.160%
MeWs	6,321	9,370	13,889	19,919	27,701
Avg Account Balance	$10,285	$10,800	$11,340	$11,907	$12,323
USDC Outstanding	$65,012	$101,190	$157,499	$237,168	$341,376
USDC Growth	48%	56%	56%	51%	44%
USDC Mkt Share	30%	34%	39%	43%	46%
Revenue	$2,496	$3,279	$4,630	$6,736	$9,695
Net Revenue	$1,119	$1,543	$2,288	$3,329	$5,031
OpEx	$628	$681	$739	$802	$870
EBITDA	$565	$991	$1,679	$2,656	$4,290
FCF	$401	$552	$819	$1,192	$1,801
NI	$370	$689	$1,239	$2,021	$3,329
Net Rev Mgn	44.83%	47.07%	49.42%	49.42%	51.89%
OpEx Mgn	56.11%	44.15%	32.30%	24.09%	17.30%
EBITDA Mgn	50.52%	64.23%	73.35%	79.79%	85.27%
NI Mgn	33.08%	44.68%	54.16%	60.73%	66.16%
Net Rev / AUM	1.72%	1.52%	1.45%	1.40%	1.47%
Tx-based model					
B2B Mkt Share	0	0	0.0002	0.0003	0.00045
B2B TPV ($B)	0	0	29	44	65
B2B Take Rate w/services e	0.005	0.005	0.005	0.005	0.005
B2B Revenue ($M)	$0	$0	$145	$218	$326
B2B EBITDA Mgn	0.2	0.2	0.2	0.2	0.2
B2B NI Mgn	0.125	0.125	0.125	0.125	0.125
EBITDA	$0	$0	$29	$44	$65
NI	$0	$0	$18	$27	$41

If we use the internet IPOs as a guide, it is still early for blockchain companies intending to go public and we would expect blockchain IPO valuations to increase over time.
If we use the COIN IPO as a guide, CRCL shareholders should be selling early strength in anticipation of a pullback. COIN share price peaked on the first day of trading and has yet to reach that price again. CRCL is +484% from the IPO price and well above our buy price. USDC has gained market share on a 5 year basis but has lost market share since the last crypto bull market peaked.




Stablecoin Market Share Over Time
USDT
USDC
BUSD
DAI
TUSD
USDP
Other (54)
Percentage of Total Market
100%
80%
60%
40%
20%
0%
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Jan 2023
Jul 2023
Jan 2024
Jul 2024
Jan 2025