CHAPTER 9

Banking on blockchain

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INTRODUCTION

The stablecoin market stands at a pivotal juncture in its evolution. From a modest $6 billion market capitalisation in 2020, the US dollar-denominated stablecoin market exploded to $156 billion by 2022 and has continued its meteoric rise to over $280 billion today. This remarkable growth trajectory, coupled with projections suggesting the total stablecoin market could exceed $1 trillion in the coming years, underscores the profound transformation occurring in digital finance. However, perhaps more significant than the growth in market size is the fundamental shift in regulatory approach that is reshaping the competitive landscape and institutional adoption of stablecoins.

President Trump's Executive Order "Strengthening American Leadership in Digital Financial Technology," issued on 23 January 2025, and the GENIUS Act, which was enacted into law on 18 July 2025, represent a watershed moment for the stablecoin industry. These developments signal a clear departure from the regulatory uncertainty that has historically characterised the digital asset space towards a framework that not only provides clarity but may even encourage institutional participation. The implications of this regulatory evolution extend far beyond compliance requirements, fundamentally altering the competitive dynamics and strategic considerations for existing and prospective stablecoin issuers.

THE REGULATORY PARADIGM SHIFT

The transformation in regulatory stance represents a stark reversal from the cautious, often restrictive approach that characterised previous administrations. The Executive Order explicitly revokes Executive Order 14067 from March 2022, which had established a more sceptical framework for digital assets, and instead established a Presidential Working Group on Digital Asset Markets. The working group's mandate was to find ways to advance US leadership in digital assets, including stablecoins.

1 The author is an advisor to Ubyx. He thanks Kene Ezeji-Okoye, Tony McLaughlin, Maarten van Oordt and seminar participants at the 2025 UCSB FifTech Blockchain Summit and the 2025 CBER Crafting the Cryptoeconomy Conference for helpful comments and suggestions.

The GENIUS Act establishes the first comprehensive regulatory framework for payment stablecoins in the United States. The legislation creates a federal licensing and supervisory framework that provides regulatory clarity while ensuring consumer protection. Importantly, the Act does not merely tolerate stablecoin issuance but actively facilitates it by creating clear pathways for various types of financial institutions to participate in the market.

This regulatory evolution is particularly significant in its approach to institutional participation. Unlike previous frameworks that were largely reactive and restrictive, the new regulatory environment is proactive and enabling. The legislation explicitly contemplates and provides for the participation of traditional financial institutions, including commercial banks, in stablecoin issuance. This represents a fundamental shift from viewing stablecoins as parallel or alternative financial systems to recognising them as components of the broader financial ecosystem.

MARKET DYNAMICS AND COMPETITIVE LANDSCAPE

The current stablecoin market is dominated by a relatively small number of issuers, with Tether (USDT) and USD Coin (USDC) controlling the vast majority of market share.[2] This concentration reflects the first-mover advantages and network effects that have characterised the early development of the stablecoin market. It is still an open question how regulatory changes that are now underway will alter this competitive dynamic.

The entry of traditional financial institutions into the stablecoin market will introduce new competitive pressures and opportunities. Banks and other regulated financial entities bring several advantages to stablecoin issuance, including established regulatory relationships, robust risk management frameworks, and extensive customer bases.[3] These institutions also possess the operational infrastructure and compliance capabilities necessary to navigate the enhanced regulatory requirements that will govern the stablecoin market.

The competitive advantages of traditional financial institutions must be weighed against the expertise and innovative spirit that have characterised existing stablecoin issuers. Companies like Circle and Paxos have built their businesses specifically around digital asset infrastructure and have deep expertise in blockchain technology and cryptocurrency markets. Perhaps more importantly, the customers these entities serve often have different needs and requirements than those of new traditional finance (TradFi) entrants.

2 The discussion in this chapter pertains only to asset-backed stablecoins.

3 The focus of this discussion is on financial institutions from the traditional finance sector. The GENIUS Act includes provisions that restrict certain types of companies from directly issuing stablecoins, particularly large technology companies that are not predominantly engaged in financial activities. This approach reflects concerns about market concentration and the potential for technology giants to leverage their existing platforms to dominate the stablecoin market.

Stablecoins were originally introduced to meet the needs of crypto-native investors who sought refuge from the high price volatility of cryptocurrencies like Bitcoin. Later, stablecoins became commonly used for leveraged trading, decentralised finance (DeFi) yield farming, and liquidity provision. These use cases are not typically demanded by TradFi clients. So, while new legislation opens the door for an entire ecosystem of new entrants it is not clear that they will be competing head-to-head in all areas of the stablecoin market.

TradFi entrants have not built their businesses specifically around digital asset infrastructure, nor do they necessarily have deep expertise in blockchain technology and cryptocurrency markets. Furthermore, they are more limited in terms of who they can serve and what activities they can allow because of regulatory overhang from other aspects of their business.[4] These factors suggest a future where TradFi participants serve their traditional financial clients using public blockchains as new payment rails, while incumbent stablecoin issuers continue to compete for dominance within the crypto ecosystem.

To understand how banks will use stablecoins, it is necessary to first recognise what stablecoins really are: digital cheques. A stablecoin gives the holder a claim on value, denominated in a sovereign unit of account, in the form of commercial bank deposits recorded on traditional ledgers. This, in essence, is what a cheque does. In payments terminology, it is a *pull payment* instruction. Since the claim is on the account of the issuer, stablecoins are more like cashiers' cheques than personal cheques. To be more precise, the closest paper-based analogy would be travellers' cheques, because stablecoins are not made out to a particular recipient. The main difference between the situation where an individual acquires a travellers' cheque and personally presents it to a recipient as payment for a good or service, and the act of sending them a stablecoin, is the rails. In both cases the recipient, at least in principle, can redeem it for commercial bank deposits, at par value, from the issuer.[5]

In fact, many of the problems that we currently see with the current redemption process for stablecoins (redemption frictions, costs and deviations from par value; see Table 1) are similar to what we observed historically with cheque processing before the creation of cheque clearing houses. The post-Civil War period in the United States saw cheques being redeemed at below par value and, in some cases, cheques would be rerouted through several institutions, resulting in significant time delay (Harding 1925). These problems were pervasive, leading Congress to pass the Federal Reserve Act of 1913, which empowered the new central bank to establish a par clearing system. Over time, regional Federal Reserve banks redeemed cheques from their member banks, and eventually most non-member banks, at face value. As a result of the transition to centralised cheque clearing, issuer attributes became less important

4 Banks are subject to strict rules under frameworks like Basel III (capital and liquidity requirements), the Bank Holding Company Act (limits on commercial affiliations), and anti-money laundering and know your customer laws.

5 The fact that people tend to 'reuse' stablecoins (i.e. pass them on to others without redeeming them) does not invalidate their interpretation as cheques. While it is less common, paper cheques can also, in some instances, be signed over to the recipients rather than cashed. When stablecoins liabilities circulate without being redeemed they start to resemble private outside monies: assets issued by the private sector without a corresponding liability within it, such as unbacked cryptocurrencies (e.g. bitcoin). However, stablecoins are not private outside monies. They do not exist in positive net supply. We should therefore not interpret stablecoins as private competing currencies in the sense of Hayek (1976).

TABLE 1 **REDEMPTION FRICTIONS AND COSTS FOR POPULAR STABLECOINS[6]**

	USDT	USDC	DAI
Issuer	Tether Limited	Circle	Sky
Redeem via CEX	Yes	Yes **with swapping fees**	Yes
Redemption mechanism	Direct redemption for verified users	1:1 redemption via Circle's platform	Users must use Maker Vaults or decentralised exchanges.
Minimum redemption amount	$100,000	None for most users	None
Processing time	Several days	Standard users process instantly. Basic users may take up to two business days.	Instant through DeFi platforms.
Fees	$150 verification fee and 0.1% withdrawal fee. Bank processing fees may apply.	For standard users redeeming up to $2M are free.[7] No direct redemption fees for basic users. Bank processing fees may apply.	May incur gas fees on Ethereum. Bank processing fees may apply.
Restrictions	AML, KYC, CTF	AML, KYC	None
Centralised or	Centralised	Centralised	Decentralised **decentralised**

Just as we do not typically favour one issuing bank over another when it comes to cheques, stablecoins could achieve a similar uniformity through the right market structure. Imagine what would happen if stablecoins were cleared and ultimately settled in a manner similar to cheques. When someone receives a stablecoin, they would be able to deposit it at any bank and receive full value, regardless of which bank (or nonbank) issued it. Redemption agreements of this sort could be arranged on a pairwise basis through rules and procedures set up between each issuer and the many potential recipient banks. But that is inefficient, and it favours walled gardens that can lead to low surplus for consumers. This 'many-to-many' network problem is solved in traditional finance through clearing systems.

6 I thank Nir Chemaya for his assistance in compiling this table.

7 See https://help.circle.com/s/article/USDC-redemption-structure?language=en_US&category=Fees_and_Billing

MARKET INFRASTRUCTURE AND ECOSYSTEM DEvELOPMENT

As new entrants from the TradFi sector enter the stablecoin market, we should expect that they will not only serve different clients but also process stablecoin transactions using different systems to meet these requirements. Within the crypto ecosystem stablecoins are often the only viable option for a stable store of value that can also serve as a US dollar-denominated medium of exchange. Issues such as depegging, suspensions of conversion, and costly redemption that are common to existing stablecoins are tolerated due to a lack of alternatives. TradFi users, in contrast, have many options for US dollar-denominated payments and liquidity storage. This includes accounts that are interest-bearing.

So why should TradFi participants be interested in stablecoins? Well, it is not entirely clear they will be in many use cases. The landscape of real-time payments has become increasingly competitive with the launch of FedNow, RTP, same-day ACH, and multiple other faster payment systems such as open loop P2P payments (Zelle), closed loop P2P payments (Venmo), wire transfers, and push-to-card payments. FedNow conveys money almost instantly, finally bringing the world's largest economy in line with payment advances in other countries. These developments represent a significant challenge to stablecoins' value proposition in US domestic payments.

Instant payment systems currently hold a key advantage over stablecoins for TradFi participants: they are regulated by central banks and embedded within established financial ecosystems, offering a level of security and trust that many cryptocurrencies lack due to their decentralised nature. This regulatory oversight and integration with existing banking infrastructure give legacy systems inherent benefits in terms of institutional adoption and consumer confidence. However, platforms like FedNow require both sender and receiver to maintain accounts with participating financial institutions, a constraint that may limit accessibility for unbanked or underbanked populations, as well as for international transactions that rely on correspondent banking networks. In contrast, stablecoins enable global financial access and on-chain transactions without such limitations. Their borderless nature offers distinct advantages for international payments, remittances, and cross-border commerce. While FedNow may excel in domestic person-to-person and business-to-business transactions, stablecoins have clear strengths in global payment scenarios.

The programmability of blockchain systems used to transfer stablecoins also provides unique capabilities that traditional payment systems cannot easily replicate (Garratt and Lee 2025). Smart contracts can automate complex payment flows, enable conditional payments, and integrate with decentralised applications in ways that traditional banking rails cannot easily accommodate. This programmability opens new possibilities for business process automation and financial innovation (Kahn and van Oordt 2022, Aldasoro et al. 2023).

THE CASE FOR CLEARING

In a world with universal stablecoin clearing, stablecoins become just another payment option for customers of financial institutions. They are elastically supplied by banks to meet customer needs and add to payment convenience. Crucially, the ability to offer this convenience should be equal for all institutions. This would level the playing field in competition among banks for depositors, which, according to the theory presented in Garratt et al. (2023), leads to reduced market concentration, a narrower deposit interest rate spread between large and small banks, and, in some cases, higher average deposit rates. Empirical support for the consumer benefits of infrastructures that improve payment convenience is found in Sarkisyan (2024), which shows that following the launch of Pix in Brazil, small banks' deposit rates fell by 14 basis points relative to large banks, and their total deposit increased. Further arguments found in Garratt et al. (2023) suggest that payment infrastructures that foster more competitive deposit markets also improve monetary policy pass-through.

A stablecoin clearing system would allow any participating stablecoin to be deposited into any bank or fintech account at full face value. This would extend the institutional features of the current financial system, particularly the mechanisms that ensure all privately issued commercial bank monies trade at par, a property known as the *singleness of money*, to stablecoins.[8] Monetary singleness depends on institutional arrangements (Garratt et al. 2022), and even a fully backed stablecoin may not always trade at par if a clearing system is absent (Garratt and Shin 2023).

While stablecoins may serve as vehicles for transmitting payment instructions, recipients, at least in the near term, are likely to prefer holding deposits. As a result, stablecoins used as digital cheques and cleared through a clearing system would likely have a short lifecycle. They would be issued, transferred, and redeemed. This means we would not observe the massive build-up in the stock of stablecoins that is often predicted today. Such a dynamic has implications for liquidity usage and helps mitigate financial stability concerns associated with so-called 'runs' on stablecoins.

CONCLUSION

New legislation that permits the entrance of banks into the stablecoin market could be transformative, but not because banks will compete head-to head with current incumbents. Rather, it is because banks will utilise stablecoins to meet the payment needs of their own customers. To understand how they will do this requires recognition that stablecoins are a clearing instrument, not a privately issued money. Ultimately, they point back to value on a traditional ledger.

8 The term singleness of money first appeared in CPSS (2003) and was later used by then-CPSS Chair Tommaso PadoaSchioppa in a speech (Padoa-Schioppa, 2003) at the Bank of Korea's Conference on Payment Systems.

For banks to use stablecoins effectively, they will need a clearing system.[9] Some might ask whether a clearing system is necessary. After all, existing stablecoins have been quite successful despite the limitations raised above, and without being processed through clearing systems. This is because they serve the needs of a different clientele. Stablecoins are rarely used by crypto traders as a settlement leg in traditional market transactions. This means that while these instruments are best understood as digital cheques, their users rarely cash these cheques. Instead, they hold them as a store of value, deploy them for leveraged trading, DeFi yield farming, and liquidity provision, or transfer the liability when making payments to others who are equally comfortable taking on this type of liability. Under these circumstances, redemption frictions and small departures from singleness are not disqualifying factors. In TradFi applications, where value must travel seamlessly between stablecoins and deposit accounts, the full monetary utility that clearing systems provide becomes indispensable.

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