

Stablecoins and payments innovations



Christopher Waller reflects on stablecoins, and raises the risks and benefits they have, in particular the lack of a regulatory and supervisory framework

tether

The US payment system is experiencing a technology-driven revolution. Shifting consumer preferences and the introduction of new products and services from a wide variety of new entities have led to advancements in payments technology.

This dynamic landscape has also sparked an active policy debate—about the risks these new developments pose, how regulators should address them, and whether the government should offer an alternative of its own.

Earlier this year I spoke about the last of these questions: whether the Fed should offer a general-purpose central bank digital currency (CBDC) to the American public¹. My scepticism about the need for a CBDC, which I still hold, comes in part from the real and rapid innovation taking place in payments.

My argument—simple as it sounds—is that payments innovation, and the competition it brings, is good for consumers. The market and the public are telling us there is room for improvement in the US payment system. We should take that message to heart and provide a safe and sound way for those improvements to occur.

My remarks focus on ‘stablecoins’, the highest-profile example of a new and fast-growing payments technology². Stablecoins are a type of digital asset designed to maintain a stable value relative to a national currency or other reference assets. Stablecoins have piggybacked off the recent increase in cryptoasset activity, and their market capitalisation has increased almost fivefold in just the past year³.

Stablecoins can be thought of in two forms. Some serve as a ‘safe, liquid’ asset in the decentralised finance, or DeFi, world of crypto-trading. Examples include Tether and USD Coin. Alternatively, there are stablecoins that are intended to serve as an instrument for retail payments between consumers and firms.

Although these types of stablecoins have not taken off yet, some firms are working to assess the viability of such stablecoins as a retail payment instrument. This growth in usage of stablecoins and their potential to serve as a retail payment instrument has prompted regulatory attention, including a new report from the President's Working Group on Financial Markets (PWG). This report urges the Congress to limit the issuance of 'payment stablecoins' to banks and other insured depository institutions.

The United States has a long history of developing, refining, and integrating new payment technologies in ways that maintain the integrity of its financial institutions and its payment system

Fostering responsible payments innovation means setting clear and appropriate rules of the road for everyone to follow. We know how to handle that task, and we should tackle it head-on. The PWG report lays out one path to responsible innovation, and I applaud that effort.

However, I also believe there may be others that better promote innovation and competition while still protecting consumers and addressing risks to financial stability. This is the right time to debate such approaches, and it is important to get them right. If we do not, these technologies may move to other jurisdictions—posing risks to US markets that we will be much less able to manage.

Stablecoins: what's old, and what's new

Stablecoin arrangements involve a range of legal and operational structures across a range of distributed ledger networks. They are a genuinely new product, based on genuinely new technology. But despite the jargon surrounding stablecoins, we can also understand them as a new version of something older and more familiar: the bank deposit⁴.

As I have said before, both the government and the private sector play indispensable roles in the US monetary system. The Federal Reserve offers both physical 'central bank money' to the general public in the form of physical currency and digital 'central bank money' to depository institutions in the form of digital accounts.

Commercial banks, in turn, give households and businesses access to 'commercial bank money', crediting checking and savings accounts when a customer deposits cash or takes out a loan. This privately created money serves as a bridge between the central bank and the public.

Commercial bank money is a form of private debt. The bank issuing that debt promises to honour it at a fixed, one-to-one exchange rate with central bank money. The bank itself is responsible for keeping that promise.

However, the bank is supported in that task by a tried-and-true system of public support. That includes regulation and supervision, which ensure banks are safe and sound, not taking imprudent risks in their day-to-day business; the availability of discount window credit, which ensures well-capitalised banks can meet their emergency liquidity needs; and deposit insurance, which protects consumer deposits if the bank fails.

Put together, those programs leave very little residual risk that a depositor in good standing will ever have to leave the teller empty handed. They make a bank's redemption promise credible, and they make commercial bank money a near-perfect substitute for cash. As a result, households and businesses overwhelmingly use commercial bank money for everyday transactions⁵.

This arrangement has many advantages. Small retail customers do not have to spend their time vetting the safety and soundness of their banks—regulators and supervisors do that for them. Consumers have a safe place to keep their savings and a nearly risk-free way to make payments, which are settled in ultrasafe central bank liabilities.

Banks can focus their effort on investments, products, and services from a place of safety and soundness. Communities and customers benefit from those efforts in the form of more efficient capital allocation and higher-quality, lower-cost financial products.

These advantages, however, are not cost free. Regulation ensures that commercial banks issue 'sound money' by making sure those banks are safe and stable, and that they bear the risks of their own investment decisions.

But regulation also imposes costs, from the expense and time required to seek a banking charter to the costs of compliance with an array of regulations.

While regulations are necessary, they also limit free entry into at least some of the markets in which banks operate. As a result, regulatory oversight can insulate banks from some forms of direct competition. The Congress has long recognised the importance of private-sector competition and customer choice, particularly in payments, and the Congress and the Federal Reserve take regular steps to preserve a competitive payments marketplace⁶.

The objective of stablecoins is to mimic the safe-asset features of commercial bank money. They typically offer a fixed exchange rate of one-to-one to a single asset or a basket of assets. Payment stablecoins tend to choose a sovereign currency as their anchor, typically the US dollar.

Stablecoin issuers suggest that one can redeem a stablecoin from the issuer for one US dollar, although redemption rights are not always well defined. Nor is the entity responsible for conducting redemption always clearly specified.

To enhance the credibility of redemption at par, some stablecoin issuers go further, promising to limit the investments they make with the money backing each stablecoin by keeping it in cash or other highly liquid assets. In this respect, stablecoins can resemble a 'narrow bank', a well-known payment-only banking structure that monetary economists have studied for more than half a century⁷.

Constructed this way, stablecoins also resemble currency boards, which peg a foreign currency to the dollar and hold dollar reserves to back up redemption promises.

Although stablecoins try to mimic commercial bank money, they differ dramatically in terms of the payment networks they use. Dollar-denominated commercial bank money is a settlement instrument in a wide range of asset markets, and customers can transfer it using a wide range of payment platforms.

However, commercial bank money is not 'native' to public blockchains, the distributed networks that support trading and other activity involving cryptoassets. Stablecoins help fill that gap as a less volatile anchor for cryptoasset transactions and an 'on-ramp' for digital asset trading.

Promises and risks

This role—as a more stable private asset in digital markets that otherwise lack such assets—has meaningful benefits by itself, helping make those markets deeper and more liquid. A well-designed, well-regulated stablecoin could also have other benefits, which go well beyond digital asset markets.

It might allow for different activity on distributed ledger technology, or DLT, platforms, like a wider range of automated (or 'smart') contracts. It might serve as an 'atomic' settlement asset and thus help bring some of the speed and potential efficiencies of digital asset markets into more traditional ones.

With the right network design, stablecoins might help deliver faster, more efficient retail payments as well, especially in the cross-border context, where transparency can still be low and costs can still be high.

Stablecoins could be a source of healthy competition for existing payments platforms and help the broader payments system reach a wider range of consumers.

And, importantly, while stablecoins and other payment innovations could create new risks, we should not foreclose the possibility that they may help address old ones—for example, by providing greater visibility into the resources and obligations that ultimately support any system of privately issued money.

These benefits are substantial, and even where they are still uncertain, it is important to recognise them. But to capture those benefits, stablecoins must bridge the biggest gap between them and commercial bank money: robust, consistent supervision and regulation and appropriate public backstops.

Strong oversight, combined with deposit insurance and other public support that comes with it, is what makes bank deposits an acceptable and accepted form of money. Today stablecoins lack that oversight, and its absence does create risks. The PWG described several such risks in its report, but I will highlight just three.

The first is the risk of a destabilising run. The United States has a rich history of privately created money, stretching back to promissory notes that merchants and lawyers issued on the early frontier⁸.

Some of these instruments worked well for long periods; others came from unregulated or unscrupulous issuers, who promised safety and stability at a more attractive rate of return.

When these instruments went bad, the consequences could extend well beyond the depositors, investors, or even institutions who put their principal at risk. It is important not to overstate these risks; if the investors that participate in stablecoin arrangements know their money is at risk, then a run on one issuer is less likely to become a run on all of them.

But without transparency into those risks, or with retail users that are less able to monitor them, the possibility of widespread losses is more of a concern. As I mentioned, for commercial bank money, regulation, supervision, deposit insurance, and the discount window make this dynamic more remote by giving a bank's creditors less reason to run.

The second risk is the risk of a payment system failure. Stablecoins share many of the functions of a traditional payment system. If stablecoins' role in payments activity grows—which, again, could be a good development—their exposure to clearing, settlement, and other payment system risks would grow, too.

Stablecoins also present some unique versions of these risks because responsibility for different payment functions is scattered across the network. The United States does not have a national payments regulator, but it does have strong standards for addressing payment system risk, especially where those payment systems are systemically important. Regulators should draw on those standards with care and take a fresh look at what should or should not apply in the stablecoin context.

The third risk is the risk of scale. Stablecoins, like any payment mechanism, can exhibit strong network effects; the more people use a payment instrument, the more useful it is, and the greater the value it delivers to each participant. For this same reason, network effects can be (and usually are) highly beneficial.

As a result, rapid and broad scaling of a payment instrument is socially desirable. In fact, in a perfect world, there would be one payment system and one payment instrument that everyone uses. The problem with this is that, in our imperfect world, this would confer monopoly power over the payment system.

Any entity that has control over a large and widely used payment system has substantial market power and thus the ability to extract rents in exchange for access—which, again, hurts competition and decreases the network benefits to consumers.

Thus, there is a trade-off between the efficiency of having one large network and the cost of monopoly control of that network. I believe that we are a long way from a monopoly in stablecoin issuance; I see a lot of interest in offering this type of payments competition and ensuring that there are relatively few barriers to entry.

In my view, having stablecoins scale rapidly is not a concern as long as there is sufficient competition within the stablecoin industry and from the existing banking system. In this world, some form of interoperability is critical to ensure that competition allows consumers to easily move across stablecoin networks, just as they can move between different commercial bank monies or sovereign currencies.

Looking beyond the banking model

Jurisdictions around the world are grappling with these same risks, trying to foster the potential benefits of stablecoin arrangements while minimising their costs. The PWG report described one approach to that cost-benefit equation: restricting the issuance of ‘payment stablecoins’ to insured depository institutions and imposing strict limits on the behaviour of wallet providers and other nonbank intermediaries.

Given the economic similarities between payment stablecoins and bank deposits, I have no objection to the idea of banks issuing both instruments. The United States has a tried-and-true system for overseeing and supporting the creation of commercial bank money, and there is no reason to suggest it could not be adapted to work in this context.

However, I disagree with the notion that stablecoin issuance can or should only be conducted by banks, simply because of the nature of the liability. I understand the attraction of forcing a new product into an old, familiar structure. But that approach and mindset would eliminate a key benefit of a stablecoin arrangement—that it serves as a viable competitor to banking organisations in their role as payment providers.

The Federal Reserve and the Congress have long recognised the value in a vibrant, diverse payment system, which benefits from private-sector innovation. That innovation can come from outside the banking sector, and we should not be surprised when it crops up in a commercial context, particularly in Silicon Valley.

When it does, we should give those innovations the chance to compete with other systems and providers—including banks—on a clear and level playing field.

To do so, the regulatory and supervisory framework for payment stablecoins should address the specific risks that these arrangements pose—directly, fully, and narrowly. This means establishing safeguards around all of the key functions and activities of a stablecoin arrangement, including measures to ensure the stablecoin ‘reserve’ is maintained as advertised.

But it does not necessarily mean imposing the full banking rulebook, which is geared in part toward lending activities, not payments. If an entity were to issue stablecoin-linked liabilities as its sole activity; if it backed those liabilities only with very safe assets; if it engaged in no maturity transformation and offered its customers no credit; and if it were subject to a full program of ongoing supervisory oversight, covering the full stablecoin arrangement, that might provide enough assurance for these arrangements to work.

There should also be safeguards for other participants in a stablecoin arrangement, like wallet providers and other intermediaries. Again, however, not all of the restrictions that apply to bank relationships might be necessary.

For example, there is no need to apply restrictions on commercial companies from owning or controlling intermediaries in these arrangements. The separation of banking and commerce is grounded in concerns about captive lending—the idea that banks might lend to their owners on too favourable terms, giving the owners an unfair subsidy and putting the bank on shaky ground.

These traditional concerns do not apply to wallet providers and other intermediaries who abstain from lending activities. There are new questions to consider, such as around the use of customers' financial transaction data, but where anticompetitive behaviour happens, existing law (and particularly antitrust law) should still apply.

Policymakers will continue to work through these questions in the coming months, but in the process, we should not let the novelty of stablecoins muddy the waters. The United States has a long history of developing, refining, and integrating new payment technologies in ways that maintain the integrity of its financial institutions and its payment system.

Stablecoins may be new, but their economics are far from it. We know how to make this kind of privately issued money safe and sound, and, in designing a program of regulation and supervision to do so, we have plenty of examples to draw on. In the interest of competition and of the consumers it benefits, we should get to work. ■

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Endnotes

1. See Christopher J Waller (2021), [“CBDC: A Solution in Search of a Problem?”](#) speech delivered at the American Enterprise Institute, Washington (via webcast), August 5.
2. These views are my own and do not represent any position of the Board of Governors or other Federal Reserve policymakers.
3. See President’s Working Group on Financial Markets, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2021), [Report on Stablecoins \(PDF\)](#) (Washington: PWG, FDIC, and OCC, November).
4. This analogy applies to the economics of stablecoins; I make no comment on their legal status.
5. See Waller, “CBDC,” in note 1.
6. See Federal Reserve System (2021), [“Fostering Payment and Settlement System Safety and Efficiency \(PDF\),”](#) in *The Fed Explained: What the Central Bank Does*, 11th ed. (Washington: FRS), pp. 84–111.
7. See, for example, Milton Friedman (1960), *A Program for Monetary Stability* (New York: Fordham University Press).
8. See Justin Simard (2016), “The Birth of a Legal Economy: Lawyers and the Development of American Commerce,” *Buffalo Law Review*, vol. 64, no. 5, pp. 1059–1134.

This article is based on a [speech](#) delivered at Planning for Surprises, Learning from Crises 2021 Financial Stability Conference, co-hosted by the Federal Reserve Bank of Cleveland and the Office of Financial Research, Cleveland, Ohio (via webcast)