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RBC Wealth Management

Special report

August 19, 2026

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Tokenization connects digital and physical assets

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Atul Bhatia, CFA

Produced: Aug. 19, 2026, 12:55 ET; Disseminated: Aug. 19, 2026, 14:30 ET

All values in U.S. dollars and priced as of market close, Aug. 14, 2026, unless otherwise stated.

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Stablecoins—electronic tokens designed to maintain parity with traditional currencies—have moved front-and-center in the digital asset discussion. This is largely a result of new U.S. legislation that has provided a regulatory framework for the asset type.

Ironically, most of the recent discussion has focused on potential instability arising from the growth of the stablecoin asset class, with some commentators suggesting that stablecoins could eventually lead to hyperspeed, widespread bank runs across the U.S.

Not only do we find these claims hyperbolic, but we also think they miss the forest for the trees. What is revolutionary about stablecoins is not their payment processing speed or efficiency, it's the launch of a tokenized version of a mainstream asset. That, we think, is where investors need to focus their attention, not on the minutiae of interest-paying policy.

Background and history

First, a bit of background.

Stablecoins began as a liquidity and temporary holding vehicle for cryptocurrency investors. The purpose of a stablecoin was merely to be safe, liquid, and hold its value so investors could stay in the crypto ecosystem and not have to return to standard banks. The promise was that a dollar stablecoin would maintain a one-to-one valuation with the real-world dollar, a condition known as parity.

To achieve this, most stablecoin creators have taken one of two approaches: (1) reserve-based stablecoins whose issuers hold real-world securities and deposits to back their coins; or (2) an algorithmic approach that depends on the value of other crypto-related assets.

Reserve-based stablecoins haven't been without problems. Silicon Valley Bank (SVB) held significant stablecoin reserves, and SVB's failure in 2023 led some stablecoins to temporarily fall below parity. But historically, the really significant failures have been in the algorithmic stablecoin universe, where multiple near-total wipeouts have occurred.

Even with these hiccups, stablecoins have seen impressive growth. The value of dollar stablecoins outstanding has increased to nearly $300 billion today from approximately $5 billion in 2019.

Enter the GENIUS

With this much money at stake, it was only a matter of time before regulators became involved. As the SVB incident demonstrated, there are undeniable linkages between the digital and physical worlds, and partial regulation is effectively no regulation for certain types of systemic risks.

To fill the gap, the U.S. passed the Guiding and Establishing National Innovation for U.S. Stablecoins (GENIUS) Act, which built out a regulatory framework for stablecoins. While some details are still being fleshed out by the overseeing agencies, the key components of the law are:

- **Stablecoins only –** The Act regulates digital assets that are redeemable at fixed monetary values; it is not blanket regulation of cryptocurrencies.
- **Issuer preapproval –** Stablecoins may only be issued by entities that have been approved by state, federal, or international authorities.
- **Reserves –** Stablecoins have to be backed one-for-one by high-quality assets like U.S. bank deposits and Treasuries. The proposed rules are particularly strict on liquidity; even collateralized loans cannot be for more than a day, and Treasury obligations must mature within three months.
- **Depositor insurance –** Stablecoins themselves are not insured by the Federal Deposit Insurance Corporation (FDIC) or any other U.S. government entity, but their reserve holdings can benefit from that protection.
- **No interest payments allowed –** Unlike creators of other savings vehicles, stablecoin issuers are prohibited from paying interest.

For the U.S., one intended benefit of the GENIUS Act is to preserve dollar dominance in global finance. Stablecoins are currently almost entirely USD-denominated. Cementing that dominance via regulation makes sense to us, particularly since the European Union is considering the possibility of a digital euro, an electronic asset that would function as a central bank digital currency. A blockchain-based platform may also relieve some participant concerns that the dollar ecosystem leaves holders exposed to U.S. government sanctions and asset seizures.

Interesting arguments

As the GENIUS Act has been implemented, discussion has focused on the prohibition of interest payments. Issuers argue that the limitation is a competitive disadvantage that will keep the asset class from growing or realizing its potential—a straightforward and understandable claim, in our opinion.

The broader financial system, and some regulators, see the prohibition on stablecoin interest as a vital protection for the traditional banking system—an argument that is a bit more complicated, in our view.

The logic of the latter position is that the regulatory limitations on stablecoins make them almost equivalent to the U.S. government obligations in terms of credit risk. Commercial bank deposits have a similar risk level but only up to their FDIC insurance limit. In addition, even though deposit insurance brings credit risk to near-sovereign levels, there are still inconveniences with bank failures. Reconstructing automated payments and direct deposits is a complication, and there can be brief but annoying limits in accessing funds. The result is that stablecoins that comply with regulations can be considered superior in terms of risk and convenience compared to a traditional demand deposit account.

If stablecoins could also pay interest, it would be another strike against traditional bank accounts. In normal times, interest-paying stablecoins would mainly be a bank profit question—with a new competitor, existing banks may need to pay more for deposits. But because banks have more lucrative investment options than just a 90-day T-bill, that's not an existential threat, in our assessment. They could easily compete on price with a stablecoin, even if they'd rather not.

The bigger risk is what happens in times of banking stress.

Banks facing depositor flight typically rely on two factors: interest and time. For accounts holding less than the FDIC insurance limit of $250,000, banks can offer better rates, a tactic that is usually effective. With larger accounts, banks try to take advantage of the inherent delays depositors face when trying to open multiple accounts and shift funds. Delay—coupled with attempts to reassure investors—can be critical to a bank's survival.

Stablecoins could upend this playbook. Regulations require the entire asset class to be backed one-for-one by government-like assets, meaning that each stablecoin is, in theory, nearly as good as an FDIC-insured deposit. In addition, the digital nature of these assets compresses the timeline for transfers, with settlement and processing running 24/7. So, for large and small depositors, stablecoins represent a potentially attractive exit from a troubled bank, and one that can be executed quickly.

Given those facts, even in a mild or limited crisis, mass depositor flight to stablecoins is a theoretical possibility. Prohibiting stablecoin issuers from paying interest at least gives banks a lever to pull—they can offer higher compensation for a longer term and thereby retain depositors. If stablecoins can compete on that vector as well, then there is a greater risk of mass exodus and no realistic means for a bank to counter a run to stablecoins, in our assessment.

In fact, one could even posit malicious action by stablecoin issuers—adjusting rates to unprofitably high levels just to attract deposits and spark a bank run, even in the absence of a crisis.

Stacking up the argument

That's the theory, at least. In practice, our view is that interest payments on stablecoins are innocuous, but should probably be avoided for now anyway.

They're innocuous, we believe, because interest-paying alternatives to bank accounts already abound in the financial system. Money market funds have been around for half a century, and government funds offer

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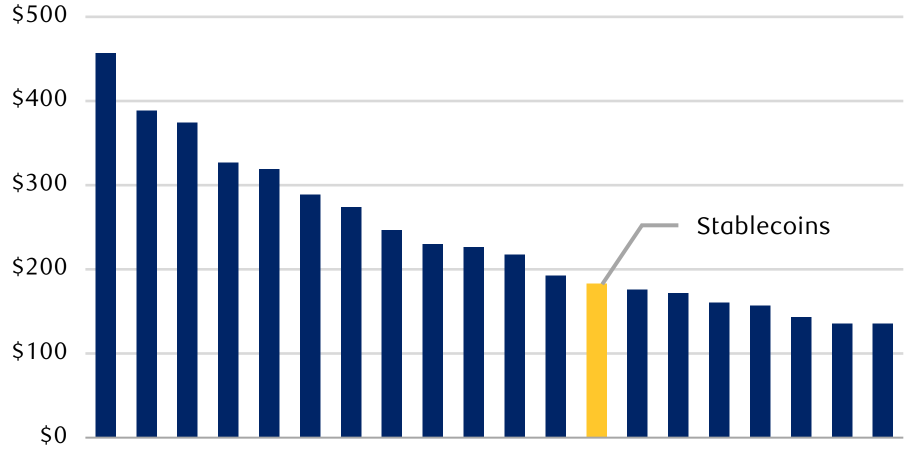
Stablecoins do not create depositor flight risk

Size of largest money market funds (blue bars) show existing alternatives to stablecoins (yellow bar) ($ billions)



Source - RBC Wealth Management, U.S. Securities and Exchange Commission

both interest payments and government-level credit risk. There are some differences between a money market fund and a stablecoin's legal structure, but nothing that we think will change depositor dynamics in a crisis.

In fact, there's really no need for an intermediary at all—if a depositor is truly worried about a bank's health, he or she can easily buy a T-bill directly from the U.S. government.

So in our opinion, the idea that interest-paying stablecoins somehow represent a unique and pressing threat to financial stability is inconsistent with actual depositor behavior through multiple episodes of financial stress.

We can think of several reasons why depositors stay:

- **Contractual obligations –** It's typical for banks to tie business loans to deposit balances. For these corporate borrowers, there is no viable alternative.
- **Inertia –** Anti-money laundering laws require significant documentation that can create annoyances in account opening. Avoiding that known inconvenience could be worth more than the potential inconvenience of dealing with the FDIC in the future.
- **Ignorance –** For small depositors, bank accounts may be the only vehicle they are familiar with, and even large depositors may struggle with the difference in risk profiles between money market funds, government bond funds, and U.S. Treasury exchange-traded funds (ETFs).

In short, we think it's implausible that depositors—who for decades have eschewed the existing interest-paying alternatives to traditional bank accounts—will suddenly flee in droves to stablecoins.

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Timing is everything

Despite the implausibility of threats to the U.S. financial system, we think there are two valid arguments against permitting stablecoins to pay interest.

One is simply the stakes. Even a small probability of financial collapse warrants a go-slow approach, in our assessment. Add in the fact that any potential systemic run would take place quickly and would likely be irreversible, and we believe the arguments in favor of interest payments need to be overwhelming. We just don't see those kinds of benefits.

The second argument against stablecoin interest payments is that interest-bearing stablecoins would function as a short-maturity, low-risk investment option at exactly the time when the world is looking to finance long-lived assets, such as government pension obligations, AI data centers, and a larger, more robust electrical grid.

To the extent that stablecoins pull money from banks, they also make it more complicated to fund the U.S. deficit, for instance. It's true that stablecoins put more money into U.S. government securities, but they are restricted to maturities of three months or less, and we see no signs of funding difficulties at that maturity. Banks, on the other hand, are key buyers of longer-maturity Treasuries—a role that stablecoins cannot legally fill.

Our view is that stablecoins are likely not an existential threat to U.S. finance, but "likely" just isn't good enough. More importantly, we believe stablecoins are poorly suited to the current environment, providing little realistic benefit to their owners, while also complicating the funding for key economic drivers.

Token interest

While much ink is being spilled and lobbying undertaken over the interest issue, it's striking how little discussion there is of what's revolutionary about the asset class: creating a digital representation of a real-world asset, a process known as tokenization.

There are various definitions of tokenization, but the hallmark is the representation of ownership of physical assets in a blockchain or digitally verified form. What this means is that anyone with access to the digital ledger can instantly know who owns what, and that ownership can be securely and nearly instantly transferred between any parties.

Without interest, we think of stablecoins as a tokenized dollar; with interest, we would think of them as a tokenized government money market fund. Strictly speaking, stablecoins are obligations of their issuer, but because of the strict regulations on reserves, they function as tokenized versions of either currency or money markets.

In both cases, stablecoins offer clarity on ownership via the digital ledger and fast, low-cost transfer. And because they are by law redeemable into physical dollars at a fixed rate, stablecoins bridge the physical and digital worlds. Movements in the digital world represent actions in the physical world.

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Tokenization may not sound revolutionary, but it effectively severs the current trade-off between establishing certainty of ownership and the efficiency of transferring assets.

Take real estate, for instance. There, certainty of ownership is prioritized through a central register, scrupulously controlled by county officials with multiple confirmations before any change is registered. It's safe, but it comes at the cost of slow, inefficient, and expensive transfer procedures.

On the other side, we have the market for borrowing against receivables, which operates largely on emailed spreadsheets. It's extremely fast and efficient, but provides no certainty of who owns what. This lack of clarity creates space for abuse, such as repeatedly pledging the same collateral to multiple lenders. It was by exploiting these weaknesses in ownership recording that First Brands, the now-bankrupt auto parts maker, was allegedly able to secure over $2 billion in fraudulent loans.

The strength of tokenization is that it satisfies both requirements: clarity and efficiency. Blockchain ledgers provide certainty of ownership; digital platforms provide an efficient transfer mechanism. Because the register is central and public, malicious actors can't resell the same asset multiple times, but legitimate transactions are processed rapidly.

Divide and conquer

In its early stages, tokenization is likely to be mainly a matter for large banks as they look to reduce timing risks and costs. That process has already begun, and we think it will only accelerate.

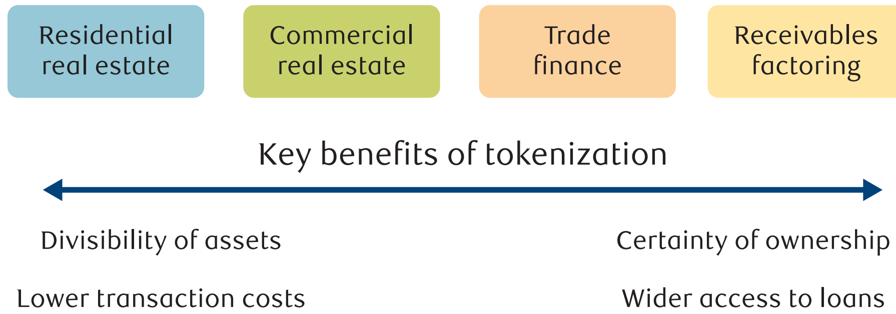
What is more interesting, in our view, is what tokenization offers in terms of collateral expansion and asset divisibility. Right now, receivables factoring and trade finance are largely gated by size. Smaller companies can't manage the documentation, and lenders don't have much incentive to work with them. We believe tokenization removes those barriers.

The potential dollar amounts here are substantial. The Asian Development Bank estimates almost $2.5 trillion in unmet international trade financing demand, and the U.S. Federal Reserve shows nearly $6 trillion in trade receivables held by nonfinancial companies. Unlocking even a small portion of these amounts could have a significant real-world impact.

Tokenization also facilitates divisibility. Consider a person's home. In the physical world, selling a home is generally an all-or-nothing proposition. But tokenization opens the door to a partial sale—a home could be represented by 100 tokens, each worth a one percent stake. For folks approaching retirement and looking to downsize, this could make it easier to slowly liquidate what is often a major asset, instead of just hoping for a strong future real estate market to coincide with a long-planned retirement date.

Divisibility also works in equipment finance markets. Specialized financing companies tend to dominate these fields, since the dollar amounts are large. But tokenization would open the door to a much wider pool of potential lenders. Funding a tractor or other farm implement that can cost hundreds of thousands of dollars—even up to $1,000,000 in the case

Tokenization solves different problems for different sectors



Source - RBC Wealth Management

of today's largest and most advanced machines—is a pretty big bite for a non-agricultural specialist, but spreading that amount among 1,000 investors in $1,000 chunks is an easier ask.

There are limitations to tokenization's uptake and impact. Legal structures need to keep pace. While tokenization can create a known ownership claim in the digital domain, courts in the real world will need to enforce that claim. Current tokens are relatively straightforward contracts, but as more jurisdictions and assets become involved, laws may need to be passed or amended to deal with the new structures. Tokenization also faces limits from the real world. Financing a tractor via tokenization is fine, but someone needs to be able to repossess the vehicle if the loan terms aren't met.

Summary

The focus of the stablecoin discussion on the advisability of paying interest seems to us a bit like merchants in seventeenth-century Amsterdam fixating on what type of sail arrangements the ships of the newly formed Dutch East India Company would use on their voyages. The economic impact of that event wasn't found in the details of the specific transactions, but in the transformational nature of the joint-stock company and secondary market trading.

In a similar vein, stablecoins are a nice-to-have arrow in the quiver of money market investors. If the story stopped there, however, we don't think it would amount to much. Instead, we think the true power of stablecoins will be felt via the broader acceptance of tokenization and the increasingly blurred lines between digital and physical economic assets.

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