



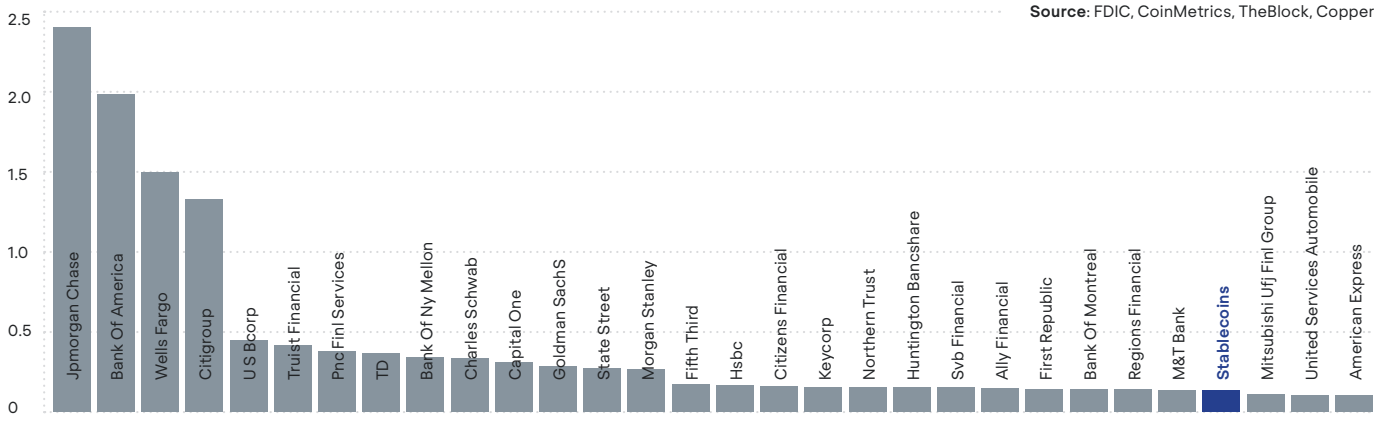
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Big Crypto: Challenge or boon for banking?



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1: Top 30 US banks vs stablecoins by deposits (\$tn)



To quickly answer the question posed in the report title, the answer is that crypto is not challenging 'Big Banks' anytime soon. Then why the research? We'd like to highlight the perspective of growth. When looking at numbers in absolute form, the \$130bn in stablecoins might not seem like very much. But the reality is that 99% of US banks have a smaller deposit portfolio. We go through the numbers in this In-Depth by Copper.

At the growth rate seen this year, stablecoin issuers, combined, might very well sit in the Top 5 of US financial institutions relative to deposit value by next summer. And with new products and easier entry into the ecosystem taking shape, it's clear why regulators have honed in on the potential onboarding of large clients into an ecosystem it has yet to have any significant control over outside of slow litigation.

Short of doing nothing at all, regulators will have two options. Watchdogs can either increase compliance measures in order to find some time to address potential systemic risks of what is akin to 'Shadow Banking', or ban it all together and forgo the competitive advantage US developers have built over the past decade. The latter option seems unlikely.

Many have been bombarded with stablecoin news in recent months and the topic might seem to border on the boring. It's fairly hard to get excited about fiat-backed stablecoins. They are, ultimately, an IOU.

No one though can fault the ingenuity of solving the banking ban cryptocurrency exchanges faced over the past several years as market demand exploded. It was an answer to a problem – which

in turn bought on a set of new problems of its own (primarily, stablecoins losing their dollar peg due to redemption fears).

However, times are changing, transparency has increased and newer products have come of age. And it's no longer of little concern to regulators as billions begin staking up at rapid pace with the allure of better returns. Bear in mind that large saving accounts are now accustomed to 'earning' a negative interest rate in most if not all the developed world.

Combined, the value of the total outstanding stablecoins would place tokenized dollars in the Top 30 US banks by deposits (see chart 1). Circle, the issuer of USDC, would rank in the Top 60, alone, having more outstanding dollar-pegged tokens than the whole crypto space had at the start of this year.

As a note, the FDIC lists nearly 5000 banks in the US. The significance of stablecoin's isn't actually the current size, but it's rapid and steady growth pushing it in the top ranks in a few years.

And while brick-and-mortar banks would have to set up shop in every country one at a time, USDC and other stablecoins are de-facto global.

Now, granted, the comparison is certainly not apples to apples. Stablecoin sponsors are using banks for their deposits. But this could begin to change as regulations are likely to require stablecoin issuers to follow bank-like procedures under a banking charter. Circle, has already announced the plan of spinning up a national digital currency bank under all required supervision and liquidity levels to match financial stress environments.



Playing catch-up

A different perspective is that as far as value is concerned, there are enough dollar deposits shifting across blockchains to rival the majority of traditional financial institutions. And with liquidity available for stablecoin-to-stablecoin pairs, the ecosystem borders on the homogenous (i.e. all stablecoins independent of issuer can off-ramp back into the US-dollar or other currencies globally and instantly).

With little friction to transact, and wider acceptance, the crypto-ecosystem's success might accelerate the tokenization of commercial bank deposits. And should that realm seem far-fetched due to a lack of a regulatory framework, Copper did some back-of-the-envelope calculations. The numbers could be enough to entice regulators to push for fast development of bank monies sooner rather than later.

With \$130bn of tokenized dollars, stablecoins have seen over 300% growth this year alone (see chart 2). On a daily basis, 2021 has averaged a growth rate of 0.5% (see chart 3). Should this growth rate sustain itself, outstanding stablecoins would near the \$450bn mark by mid-2022. This would place the cryptocurrency ecosystem dollar deposits in the Top 5 US banks usurping US Bancorp from that position.

Certainly, this mark can be kicked-forward a little down the line with more stringent regulation requirements, or markets turning for the worse. But for how long? By Bitcoin standards, 4 years has been a maximum time before returning to new all-time-highs.

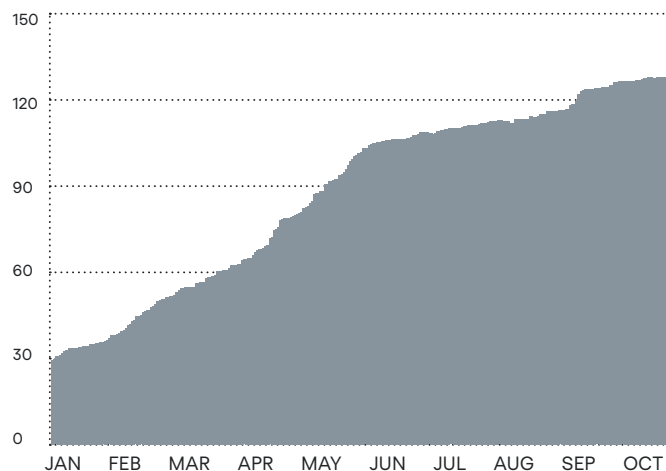
Little time for 'winds of change'

Labels aside, be it a fiat-backed stablecoin, fiat-coins, collateralized-stablecoins, Central Bank Digital Currency (CBDC) - money is being tokenized. The benefits of faster and efficient clearing need little debate. And this was the position by the IMF under then-Managing Director Christine Lagarde in 2018.

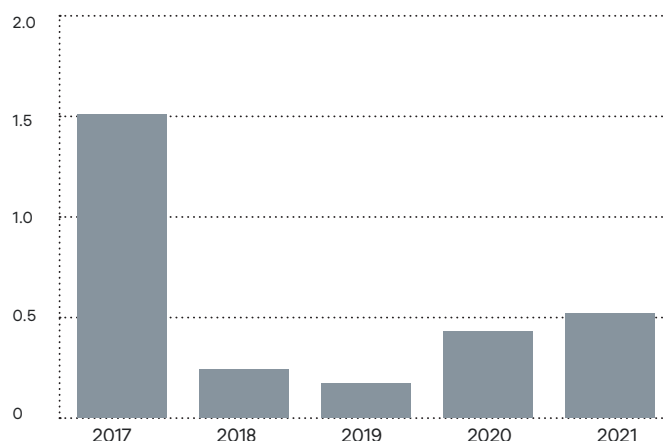
The [argument](#) made by the IMF at the time was that a marriage of private and public would be most beneficial in the case of tokenized money. Lagarde suggested the possibility that "central banks entered a partnership with the private sector—banks and other financial institutions—and said: you interface with the customer, you store their wealth, you offer interest, advice, loans. But when it comes to the time to transact, we take over."

Which places both central banks and financial institutions in an interesting position regarding their future role and participation in open networks.

2: 2021 Outstanding stablecoin value (all issuers \$bn)



3: Average daily growth rate of stablecoins (%)



As it stands, the majority of CBDC remains in the early stages of research with regards to assessing the most advantageous structure to avoid the potential of competing against commercial banks. Whether or not a blockchain would be the most efficient way to execute a CBDC has yet to be viably determined.

Which leaves the Federal Reserve and other central banks in a predicament that could require a temporary stop-gap before cryptocurrency issuers begin to rake in billions from the traditional system. US Treasury Secretary Janet Yellen has already [rung the alarm bells in Washington](#).

Meanwhile, a CBDC isn't likely to come to life anytime soon.

A [speech](#) given only a few months ago by Governor Christopher J. Waller, a member of the Federal Reserve Board, made evident that a CBDC might not be an efficient solution given that commercial bank deposits make up the majority of transactions. The key words being 'commercial bank'.



Opting into risky banking?

How stablecoins will develop within the financial ecosystem is yet to be known fully. What is more important to understand is why anyone would move their funds into tokenized banking in the first place. After all, it's not been smooth sailing on the hacking front and buggy code when looking at Decentralized Finance (DeFi).

For the most part, it's an opportunity to earn a respectable interest rate, and transact a great deal more cheaply and rapidly by taking on a little bit of participation risk.

Of the \$130bn in stablecoins in crypto, \$85bn sit on top of the Ethereum network. Less than 20% of that remain on centralized exchanges according to data from CryptoQuant, a blockchain analytics firm. Interestingly, more stablecoins have been parked in just two of the many DeFi interest-earning protocols, Compound and Aave than on centralized exchanges.

Average interest earned in 2021 on Compound was 4% (see chart 4). Aave was slightly higher. It might not seem like a great deal considering the risks that still remain in the new technology. But it does certainly beat paying on bank deposits.

It's important to keep in mind that the interest rates, which automatically adjust relative to demand and supply, increase fairly dramatically during a cryptocurrency bull market.

Ranked by assets

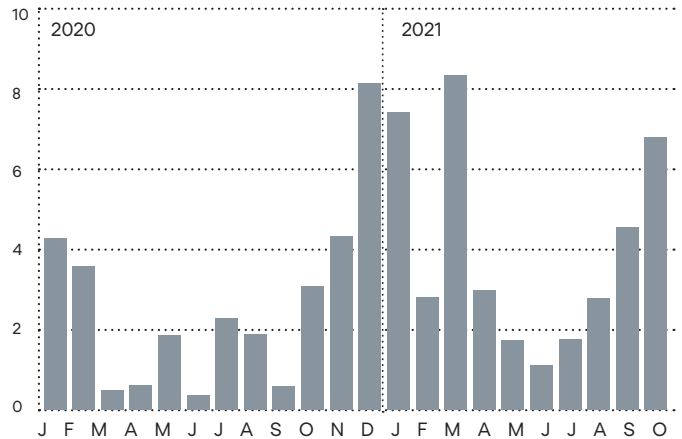
While we concede that ranking stablecoin deposits against banks is fairly nuanced at this point in time, DeFi is a bit of a different story. While USDC and other stablecoins are a conduit to access, the DeFi platforms actually provide the return incentive that traditional banks are unable to.

Ranked by the value of all assets (not deposits) on the top DeFi protocols, Compound, Aave and Maker, combined would rank within the Top 50 of US institutions. The majority of this asset value is indeed from stablecoins, and not cryptoassets.

With this knowledge, it becomes fairly clear why regulators are becoming more concerned. The cryptocurrency space might seem small when comparing the full market size against gold and equities, for example.

But perspective of growth is important. And crypto has managed to lure in fairly large amounts of cash in a few short years with little sign of slow down. Will stablecoins that are redeemable at large financial institutions put regulators at greater ease? Very possibly.

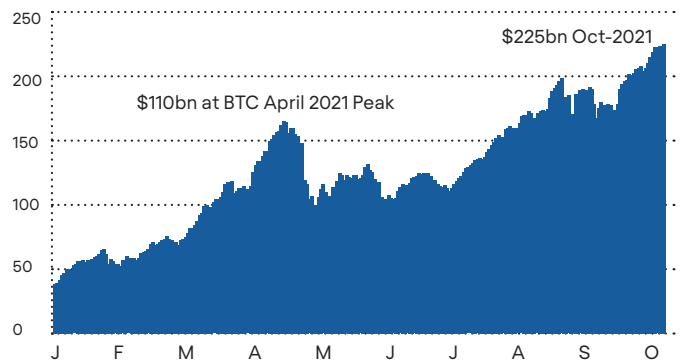
4: Average monthly interest rate earned on Compound (%)



5: Top 30-50 US banks vs Top DeFi Protocols by assets (\$)

Rank	Name	Asset (\$)
30	Discover Financial Services	108,936,256,000
31	Bnp Paribas	99,178,981,000
32	Signature Bank	97,209,737,000
33	Pnc Finl Services Group Inc	95,848,996,000
34	Banco Santander Sa	95,192,570,000
35	Ubs Group Ag	94,957,060,000
36	Comerica Inc	88,331,000,000
37	First Horizon Corp	87,574,096,000
38	Zions Bancorporation, N.A.	87,208,406,000
39	Royal Bank Of Canada	84,955,426,000
40	Synchrony Financial	81,927,000,000
41	Peoples United Financial Inc	63,075,224,000
42	Popular Inc	61,966,000,000
43	East West Bcorp Inc	59,838,864,000
44	Compound, Aave, MakerDao	59,000,000,000
45	New York Community Bcorp Inc	57,444,945,000
46	First Citizens Bancshares Inc	55,098,938,000
47	Synovus Financial Corp	54,872,532,000
48	Western Alliance Bcorp	49,068,916,000
49	Bok Financial Corp	46,909,545,000
50	Cullen Frost Bankers Inc	46,734,243,000

6: All DeFi & blockchains Total Value Locked (TVL) for 2021 (\$bn)

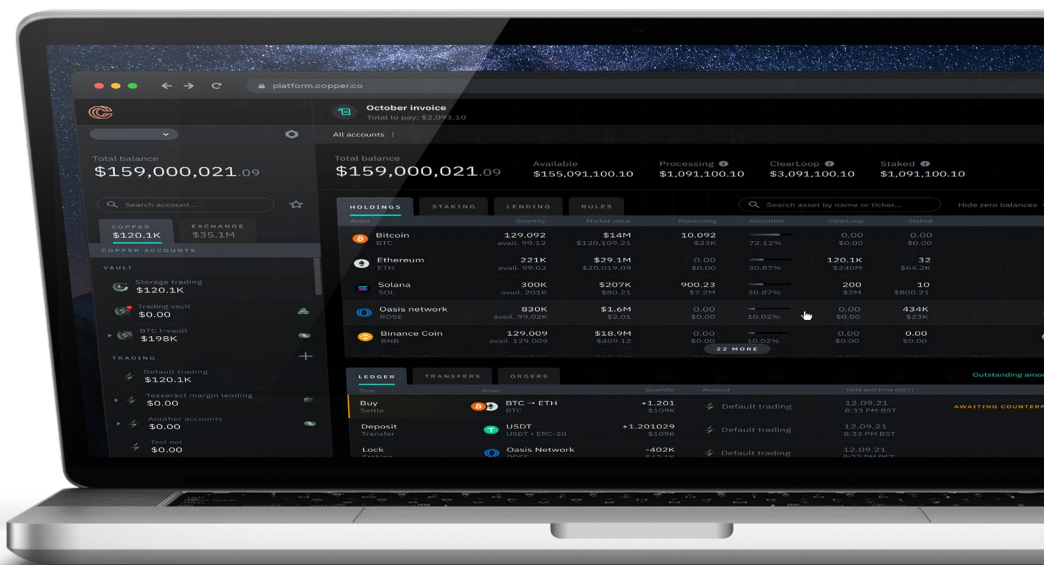




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