



CASTLE ISLAND
VENTURES

Cryptodollars

Introduction to Blockchain and Cryptocurrencies • Mar. 2022

Discussion Outline

Introduction

- Definitions
- Market size and dynamics
- Velocity vs cryptoassets
- Backing

State of finance today

- Consolidation and increase in average bank size
- Banks are exclusionary and used as a political cudgel
- CBDCs on the horizon

Why cryptodollars matter

- Full auditability and transparency
- Credibly neutral and open access
- Real time attestations
- Western property rights for all

Further reading

Definitions

A cryptodollar is a dollar-denominated token circulating on a public blockchain

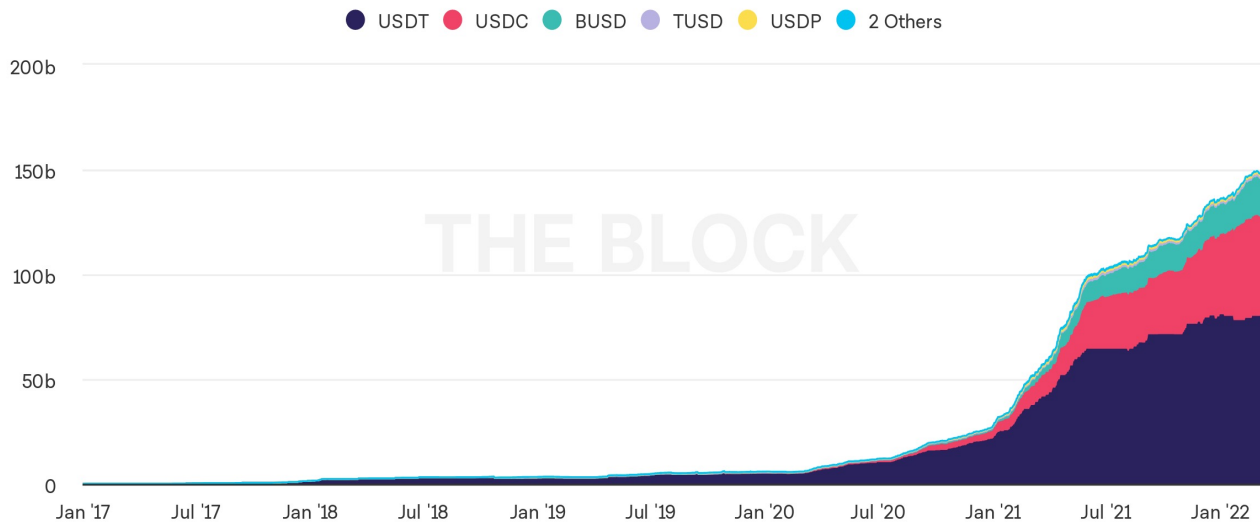
- Mostly **liabilities of an issuer** backing them with redeemable **high quality liquid reserves**, like USTs
- Some are backed by an over or undercollateralized portfolio of cryptoassets
- Majority are freezable, but some are censor-resistant
- ‘Cryptodollars’ is a reference to ‘Eurodollars’ – also created to transact without supervision/oversight of the onshore dollar system



From virtually nothing to \$185B in 5 years



Total Fiat-backed Stablecoin Supply



THE BLOCK

SOURCE: COINMETRICS
UPDATED: MAR 22, 2022

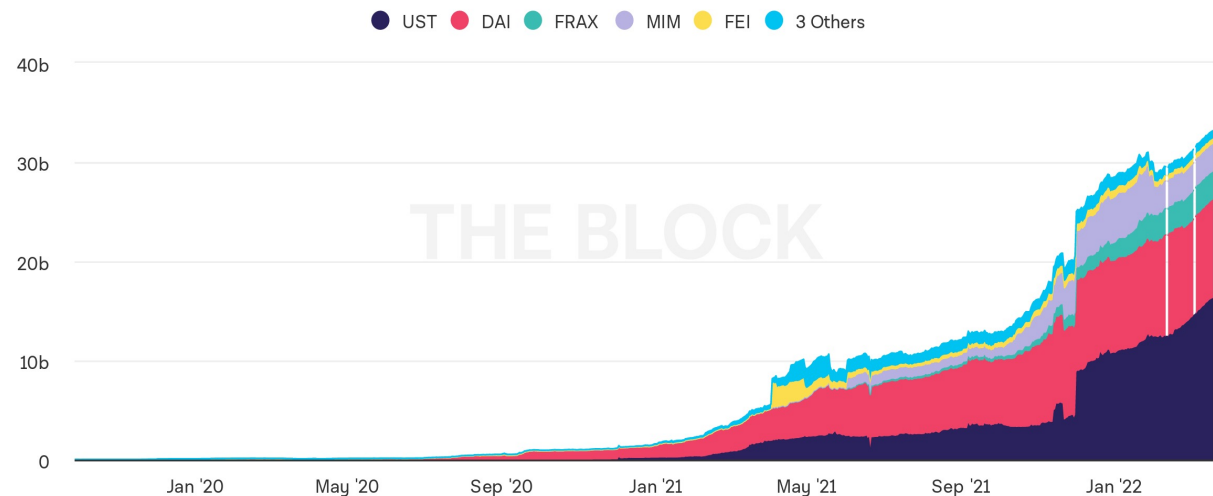
Crypto backed (DAI) or undercollateralized (UST) crypto dollars have grown dramatically



Fiat backed crypto dollars total \$150b, with Tether and USDC dominating



Total Crypto-backed and Algorithmic Stablecoin Supply



THE BLOCK

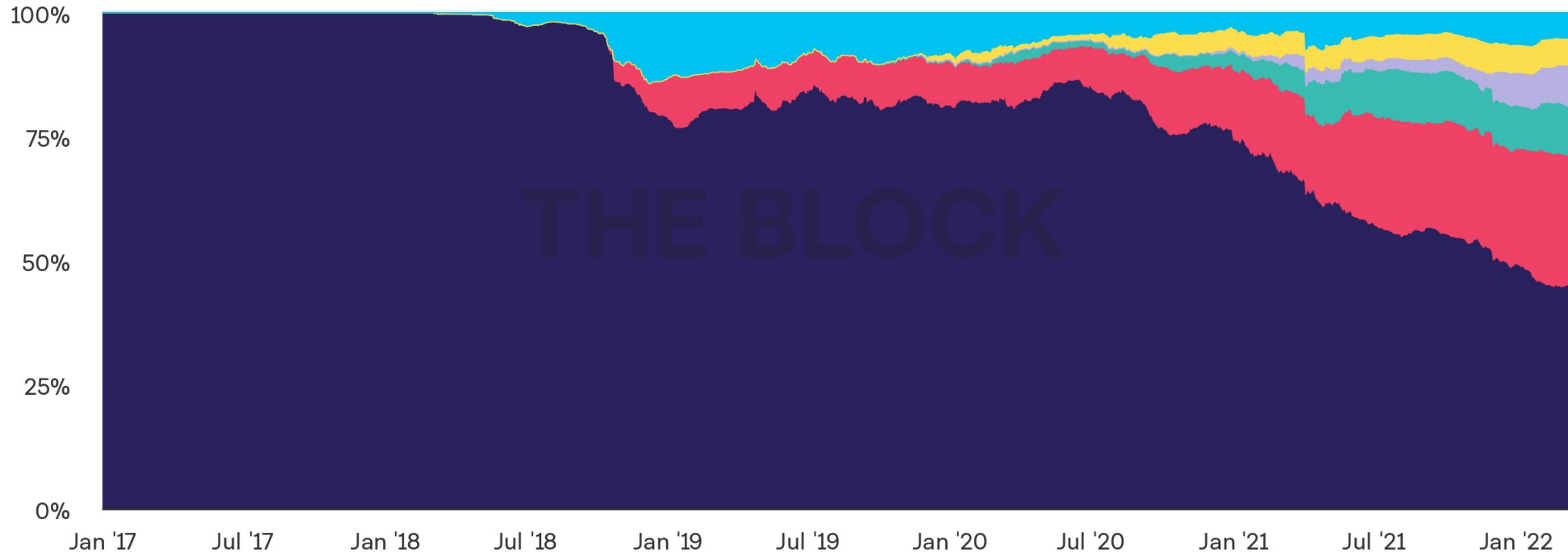
SOURCES: THE BLOCK, FLIPSIDE
UPDATED: MAR 22, 2022

Tether losing ground



Share of Total Stablecoin Supply

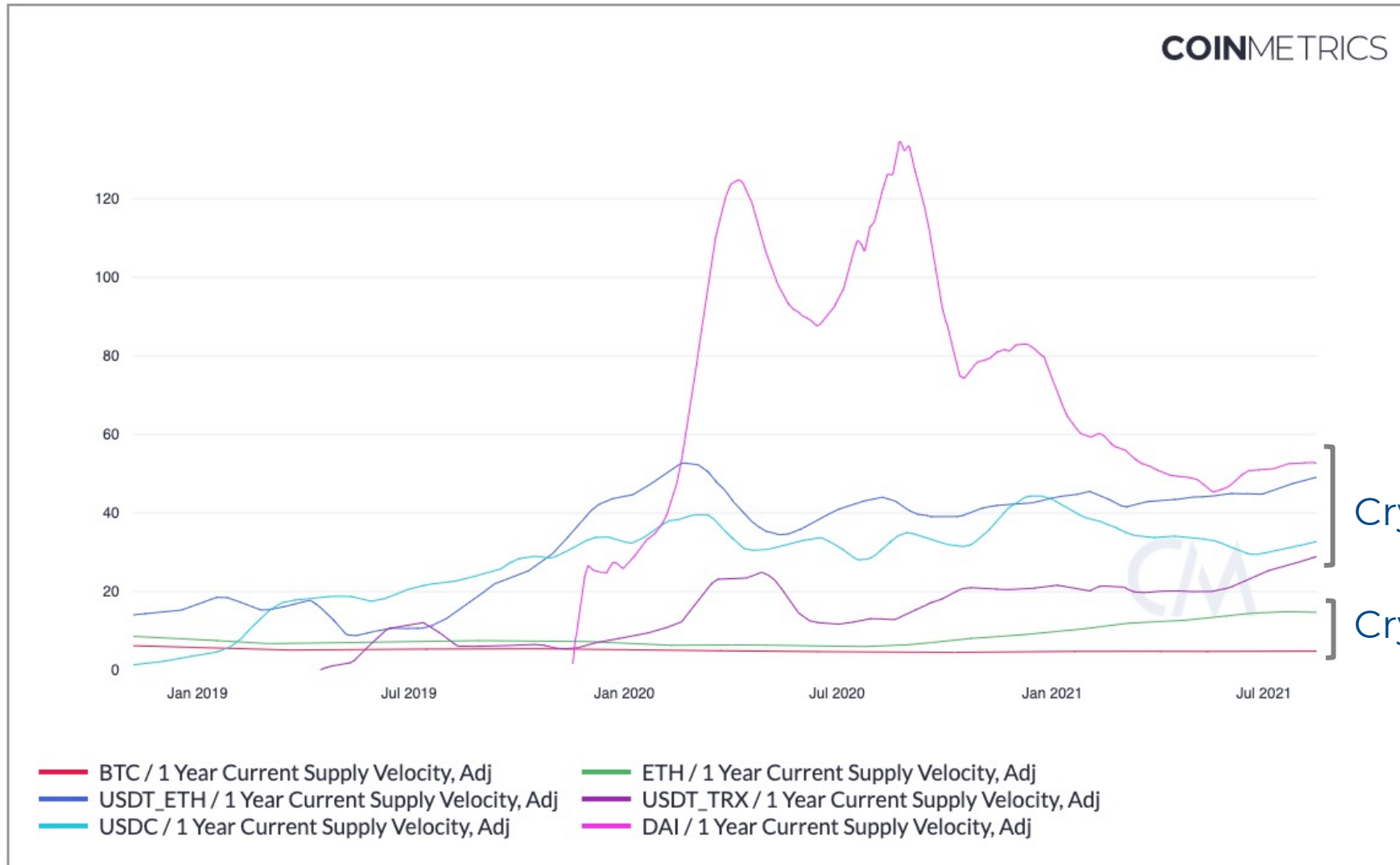
● USDT ● USDC ● BUSD ● UST ● DAI ● 10 Others



After years of total dominance, Tether has finally fallen below 50% market share, with USDC, BUSD, and UST gaining

SOURCES: THE BLOCK, COIN METRICS
UPDATED: MAR 22, 2022

Crypto-dollars have higher velocities than crypto-commodities



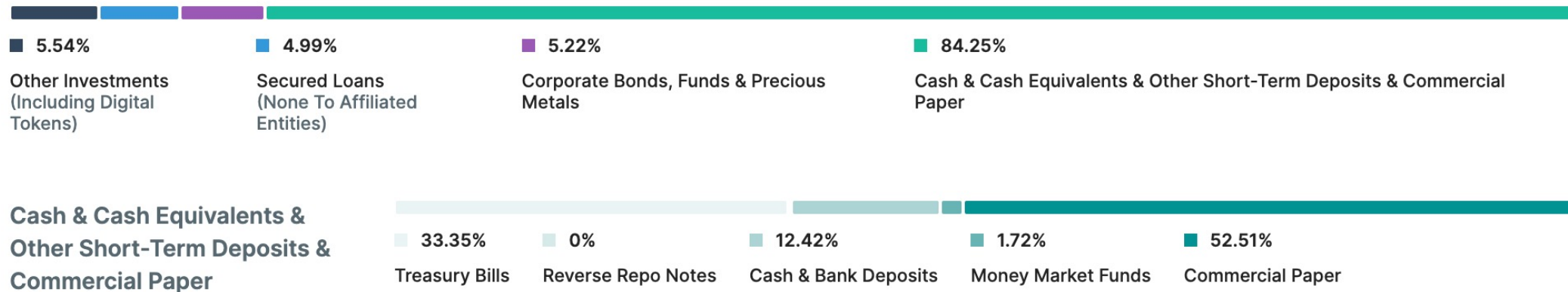
Crypto-dollars

Crypto commodities

Array of collateralization strategies

- Tether's backing is infamously murky, although their transparency has improved recently
- USDC and other onshore stablecoins are mostly backed by cash and treasuries
- Others like UST are only partially backed, and maintain asset-liability mismatches

Reserves Breakdown



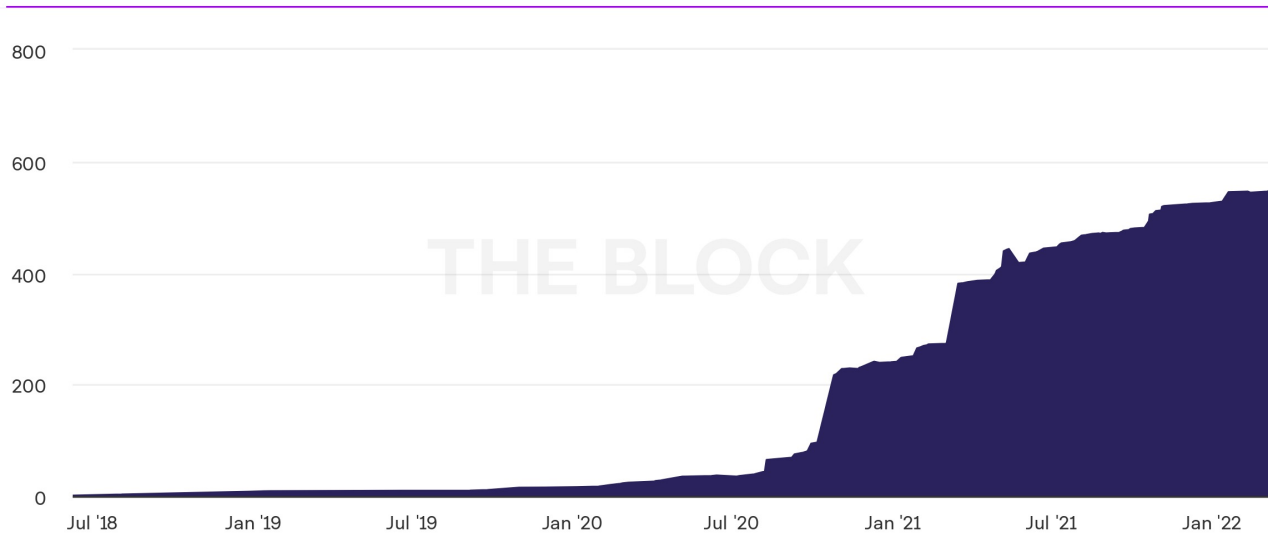
Tether reserve breakdown as of Feb. 2022



Fiat-backed cryptodollars are not fully censor-resistant



USDT Banned Addresses on Ethereum



SOURCE: BITQUERY
UPDATED: MAR 18, 2022

Right now, fiat-backed cryptodollars like USDT and USDC are **freezable**, although issuers only directly face off against users engaging in **creation or redemption**

The internals of the network graph are largely unsupervised, giving cryptodollars cash-like qualities

Banned Addresses USDC - Number of Banned Addresses

@phabc

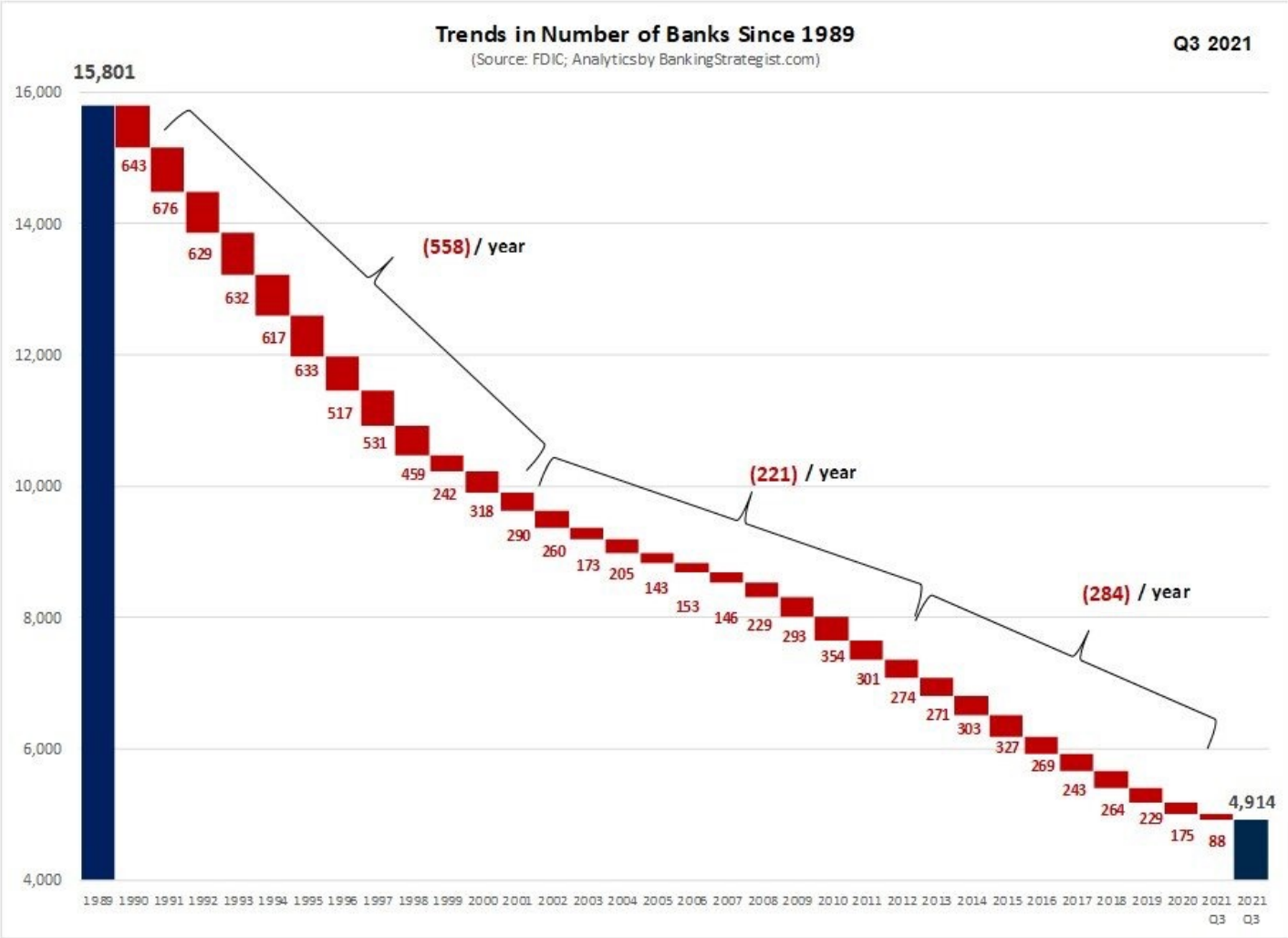
25
Banned Addresses



**The architecture of finance is hopelessly
politicized**



Bank sector in the U.S. has seen significant consolidation



Commercial banks have died off and consolidated in the last 30 years

Bank consolidation means less credit for SMEs, more regulation, and easier surveillance

Dodd Frank, new FDIC rules, and declining interest rates have caused massive waves of consolidation in the bank sector over the last 30 years



Dodd-Frank Massively Increased Small Bank Compliance Overhead

Figure 20. Histogram of Compliance/Legal Personnel

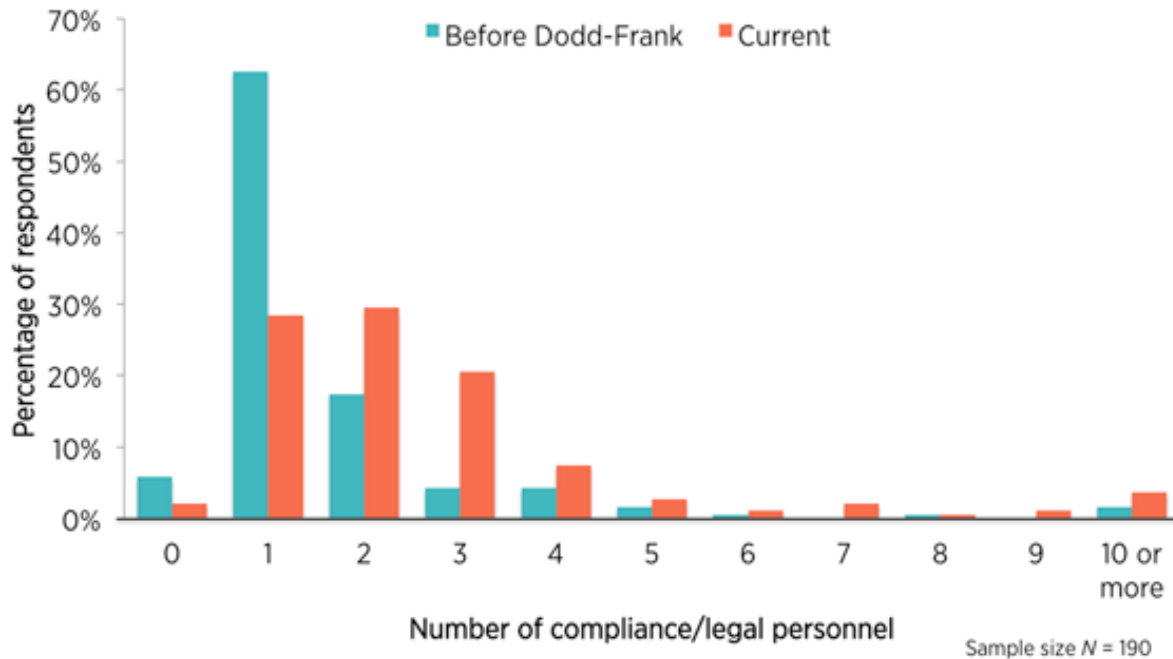
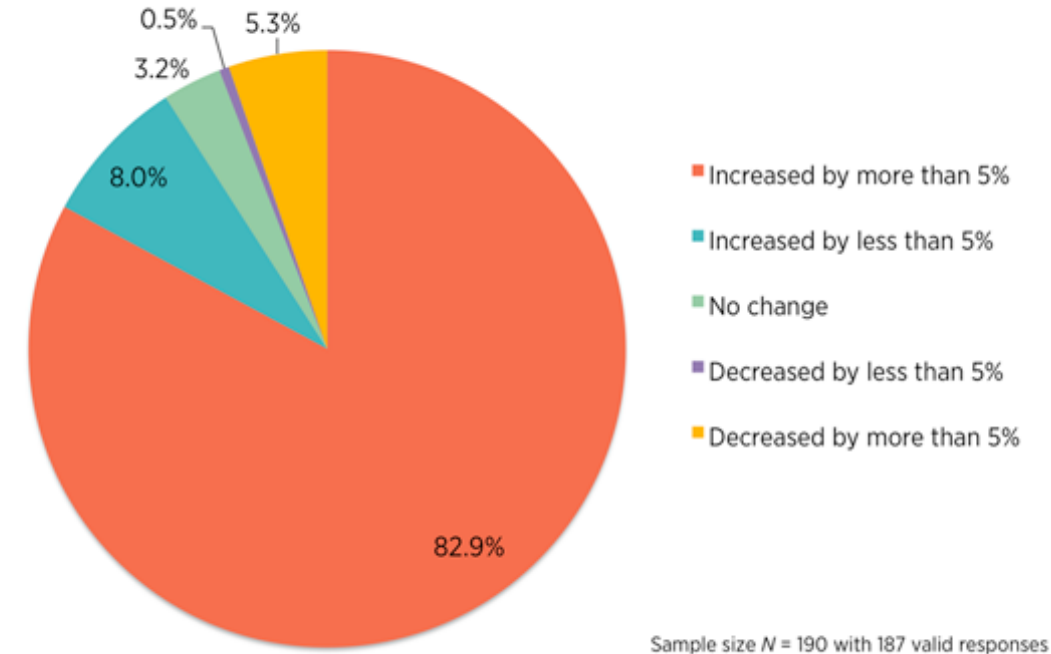


Figure 19. Change in Annual Compliance Costs since Dodd-Frank



How Are Small Banks Faring under Dodd-Frank?
 Pierce, Stratmann, Robinson – Mercatus Center, 2014



A Concentrated Bank Sector is Easily Politicized

The list of high-risk payment types was quite broadly drawn, with no indication as to what criteria had to be met to be included in it:

- Ammunition Sales
- Cable Box De-scramblers
- Coin Dealers
- Credit Card Schemes
- Credit Repair Services
- Dating Services
- Debt Consolidation Scams
- Drug Paraphernalia
- Escort Services
- Firearms Sales
- Fireworks Sales

- Get Rich Products
- Government Grants
- Home-Based Charities
- Life-Time Guarantees
- Life-Time Memberships
- Lottery Sales
- Mailing Lists/Personal Info
- Money Transfer Networks
- On-line Gambling
- PayDay Loans
- Pharmaceutical Sales
- Ponzi Schemes
- Pornography
- Pyramid-Type Sales
- Racist Materials
- Surveillance Equipment
- Telemarketing
- Tobacco Sales
- Travel Clubs¹⁵

In 2012, the Obama administration via the FDIC and DOJ began threatening banks with investigations if they didn't deplatform entire industries

Banks had no choice but to submit to these extra-judicial requests, only stopped when Congress stepped in



Banking as a Political Cudgel is Standard Practice Today

OnlyFans founder blames banks for ban on porn

Tim Stokely says Bank of New York Mellon 'flagged and rejected' all interbank wires linked to website

POLICYMAKING

Ocasio-Cortez questions bank funding of prisons that hold immigrants

February 25, 2019, 2:34 p.m. EST 1 Min Read

Issue: February 25, 2021

Free speech social network Gab says it has been refused by three banks in the last month

Financial deplatforming.

By Christina Maas Posted 3:30 pm

The New York Times

Bank of America to Stop Financing Makers of Military-Style Guns

RISK MANAGEMENT

Democratic senators urge more banks to crack down on gun sellers

By Neil Haggerty May 02, 2018, 5:39 p.m. EDT 1 Min Read

Home › Successes

Six banks step away from Dakota Access Pipeline (DAPL) and backers



A CBDC would totally eliminate the qualities of cash

Agustin Carstens, head of the BIS



CBDCs would permit:

- Surveillance-embedded cash
- Negative int. rates on cash
- State control over personal expenditures
- Full politicization of finance

*“In cash, **we don’t know** who is using a \$100 bill or a \$1000 peso today. A key difference with a CBDC is a **central bank will have absolute control** on the rules of regulations that **determine the use** of that central bank liability, and we will have the **technology to enforce that**. [...] That makes a **huge difference** with respect to what cash is.” (Oct. 2020)*

Why cryptodollars matter



Crypto-dollars Provide Global Access to Western Financial Products & Property Rights

MARKETS | FINANCE

Turks Pile Into Bitcoin and Tether to Escape Plunging Lira

Cryptocurrencies are embraced in Turkey and parts of the developing world where government economic policies spark significant distrust

[If there was a rush to withdraw dollars](#), Turkish banks would need to get some of those dollars back to meet depositors' needs, and there is some question whether the government could source the dollars. In a worst-case scenario, some fear the government could force banks to convert dollar deposits into lira.

That is pushing some to exchange bank-held dollars and cash dollars for what are known as stablecoins, cryptocurrencies whose value is pegged to traditional currencies such as the dollar, according to several Turkish savers. More than half the trades against the lira in December involved tether, Chainalysis said.



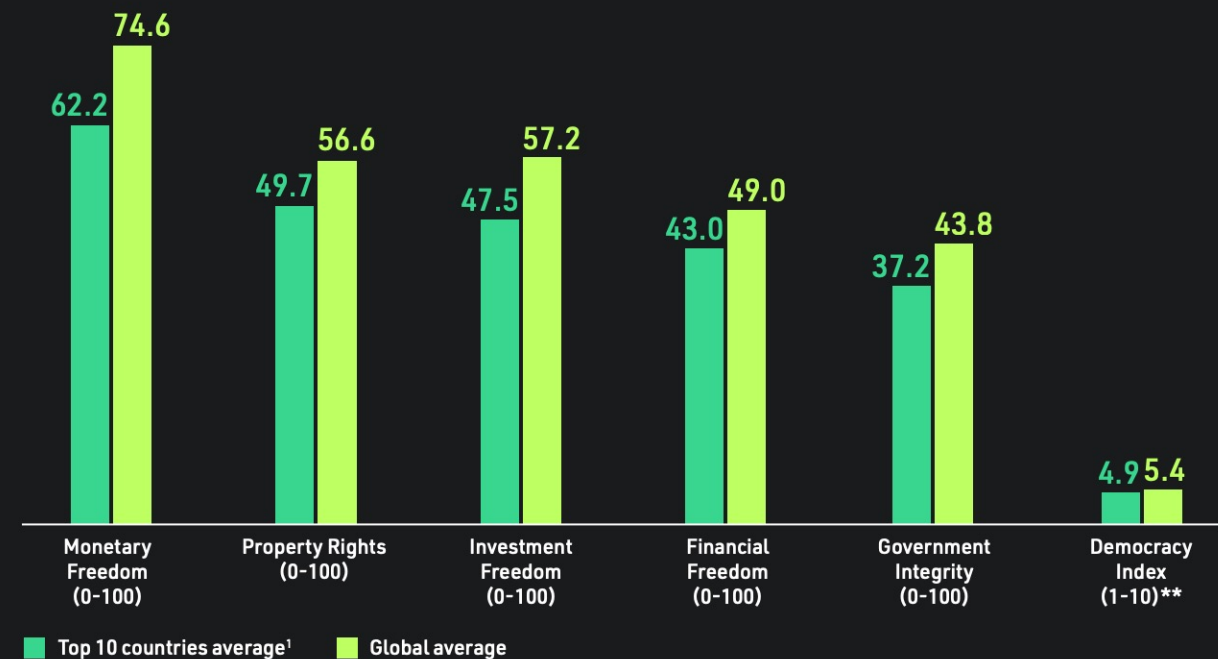
High Crypto Penetration Correlates with Weak Governance

TABLE 1:
Top 20 most crypto-active countries - Chainalysis Global Crypto Adoption Index

RANK	COUNTRY	OVERALL INDEX RANKING ¹	RANK	COUNTRY	CRYPTO ADOPTION INDEX ¹
1	Vietnam	1.00	11	Colombia	0.19
2	India	0.37	12	Thailand	0.17
3	Pakistan	0.36	13	China	0.16
4	Ukraine	0.29	14	Brazil	0.16
5	Kenya	0.28	15	Philippines	0.16
6	Nigeria	0.26	16	South Africa	0.14
7	Venezuela	0.25	17	Ghana	0.14
8	United States	0.22	18	Russia	0.14
9	Togo	0.19	19	Tanzania	0.13
10	Argentina	0.19	20	Afghanistan	0.13

Crypto disproportionately penetrates in emerging markets, especially countries in the grip of inflation, monetary repression, capital controls, or untrustworthy bank sectors

CHART 1:
Key socioeconomic statistics of top 10 crypto-active countries versus global average 2021



Crypto-Dollarization will bring USD Banking to EM

Finance

Emerging market 'cryptoization' threatens financial stability - IMF

By Tom Wilson

Factors such as low credibility of central banks and weak domestic banking systems that can fuel "dollarization" can also contribute to growing crypto use, the Fund added.

Wide adoption of stablecoins - digital tokens designed to hold a steady value and seen as useful for savings and commerce - could also pose significant challenges by reinforcing existing dollarization forces, the IMF said.

"Dollarization can impede central banks' effective implementation of monetary policy and lead to financial stability risks through currency mismatches on the balance sheets of banks, firms, and households," it said.

USD banks – once a privilege reserved only for the 1% in EM – are now available on the smartphones of the middle and working classes in the global south



Living on public ledgers, stablecoins are inherently auditable

Real time comparison of liabilities (on the blockchain) vs assets (in commercial banks)

Welcome to Armanino's TrustExplorer, a real-time assurance dashboard. You are viewing data for the TrueCurrency stablecoins.



How does TrustExplorer work? [?](#)

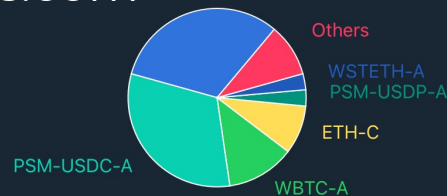
Graph Table

Currency	Tokens	Escrowed Fiat	Collateralization Status	Updated	Reports Generated
TUSD	1,485,615,925	\$1,495,916,720	101%	March 13th 2022, 04:13 PM Learn more	2703
TGBP	36,063,345	£36,429,698	101%	March 13th 2022, 04:12 PM Learn more	1125
THKD	19,660,821	HK\$19,912,872	101%	March 23rd 2022, 09:28 PM	994
TAUD	32,459,150	A\$32,835,350	101%	March 13th 2022, 04:12 PM Learn more	1073
TCAD	15,856,507	CA\$15,982,362	101%	March 13th 2022, 04:12 PM Learn more	1131

Armanino's trustexplorer built for TUSD

Real time assessment of system solvency based purely on blockchain data

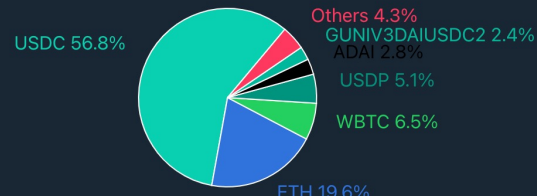
Daistats.com ETH-A



Dai Collateralization

\$17,036,482,213.2

Total Locked



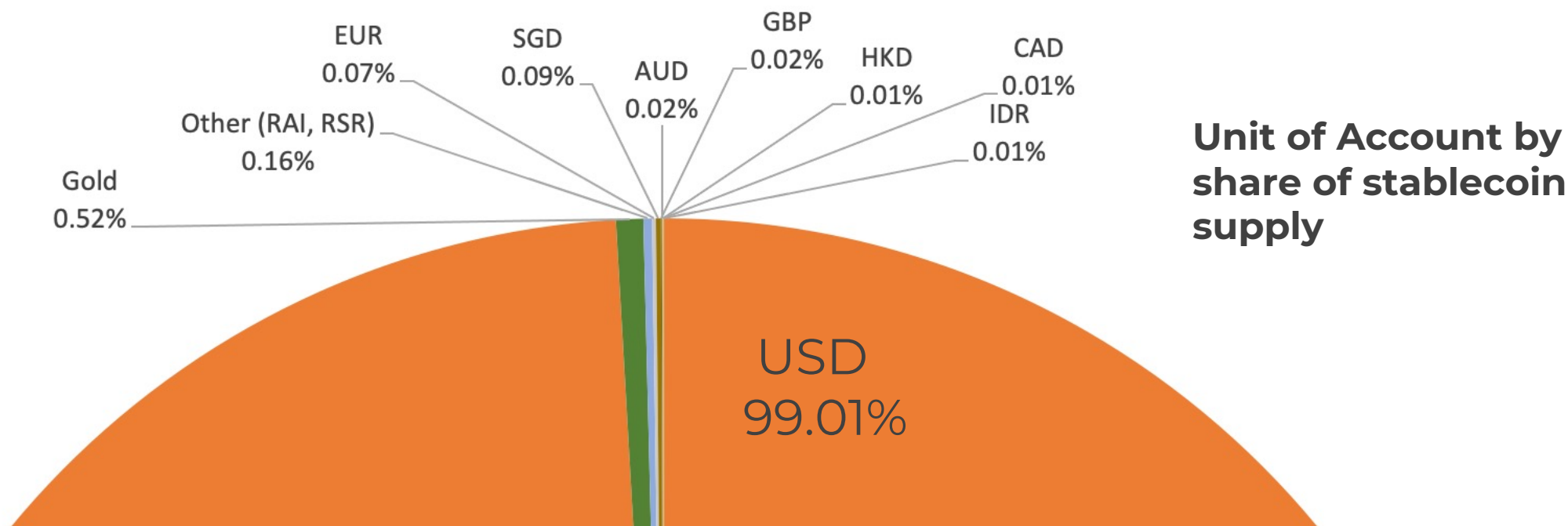
Dai Generated by Collateral

172.25%

Collat. Ratio

Crypto-Dollarization is a boon for the US Dollar

USD denominates **99% of all stablecoins** globally, despite constituting **60% of FX reserves** and **40% of international trade**



Regulatory directions

- Federal govt – CBDC or hybrid
- State (public) – Wyoming stable token act
- State (private) – SPDI and trust charter

Business

Avanti Financial Joins Kraken as a Wyoming-Approved Crypto Bank

Blockchain pioneer Caitlin Long is now the CEO of her own special purpose depository institution (SPDI) in Wyoming.

By Nate DiCamillo · Oct 28, 2020 at 3:33 p.m. EDT · Updated Sep 14, 2021 at 6:24 a.m. EDT

SF0106 Wyoming stable token act.

Sponsored By: Senator(s) Rothfuss and Nethercott and Representative(s) Olsen and Yin

AN ACT relating to trade and commerce; authorizing the state treasurer to issue Wyoming stable tokens as specified; providing definitions; providing a sunset; providing limitations; providing an appropriate title; providing that the act is an emergency measure; providing that the act is an emergency measure; providing that the act is an emergency measure.

40-31-103. Wyoming stable token authorized; value.

2/15/2022
2/17/2022

(a) The treasurer is authorized to issue Wyoming stable tokens as provided for in this act.

(b) A Wyoming stable token is a virtual currency representative of and redeemable for a United States dollar held in trust by the state of Wyoming as provided by W.S. 40-31-106. A stable token shall only be issued in exchange for a United States dollar.



Further reading

General

- Izabella Kaminska on FT Alphaville, [Crypto Tethers as the new Eurodollars](#)
- Peter Johnson in Jump Capital, Stablecoins: [The Impending Rise of a Multi-Trillion Dollar Market](#)

Regulatory

- JP Koning on the Moneyness blog, [Stablecoin Regulatory Strategies](#)
- Antony Lewis, [KYC in Stablecoins](#)

Cryptodollars and Free Banking

- The Economist, [The explosion in stablecoins revives a debate around ‘free banking’](#)
- Larry White on Alt-M, [Should we Fear Stablecoins?](#)
- Nic Carter in Coindesk, [Why Central Bankers Invoke Free Banking to attack Stablecoins](#)
- Castle Island Ventures, [Cryptodollars: the story so far](#)
- George Selgin in the Cato Blog, [Making Money Myths](#)

Crypto and Dollar Dominance

- Nic Carter in Coindesk, [The Crypto-Dollar Surge and the American Opportunity](#)
- Niall Ferguson in Bloomberg, [50 Years After Going Off Gold, the Dollar Must Go for Crypto](#)

