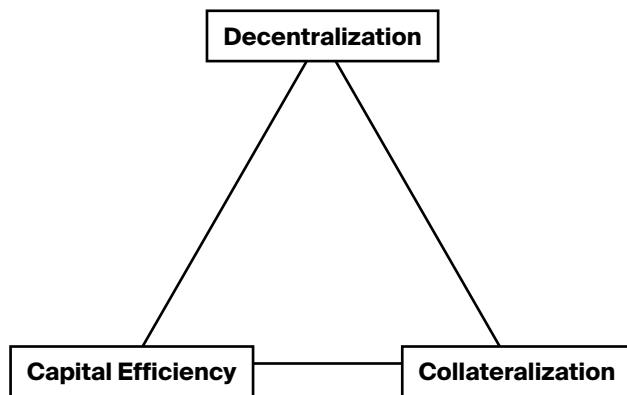


(Petro), France (Bank of France), Sweden (Riksbank), and a select cohort of Caribbean nations (Bitt). Central bank digital currencies (CBDCs) will compete with corporate issued stablecoins by tech giants, such as Facebook’s Libra, and private issued stablecoins, such as MakerDao Dai. Whether government, corporate, or private, currency issuers must make decisions with regard to token economics. For example, what type of collateral should be used to back the coin’s value on the market, if the coin’s value should be pegged to another asset, if the blockchain should be public or private, and the optimal inflation rate.

However, cryptographic stablecoins suffer from the stablecoin trilemma that forces issuers to choose two out of three goals: decentralization, capital efficiency, and collateralization.⁵

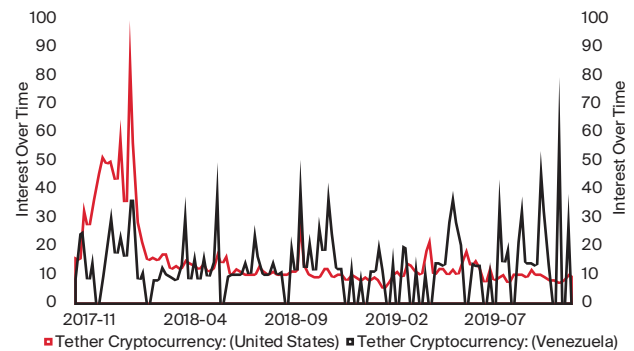
The Stablecoin Trilemma



In this context, decentralization refers to how transactions are validated in the network. This means that anyone has the ability to setup a miner or staking node and begin validating transactions instead of relying on a central authority to approve all transactions. Capital efficiency refers to coins that have 100 % collateral backing or less, and collateralization refers to coins with more than 100 % on-chain collateral backing. Stablecoins such as MakerDao Dai, EOSDT, and Neutral have two out of the three qualities, decentralization and collateralization. However, they are capital inefficient. Stablecoins such as Gemini Dollar and Tether are decentralized and capital-efficient; however, they have 100 % or less on-chain collateral backing and require users to trust the issuer. This is where most of the central bank digital currencies fit in. Finally, there

are decentralized stablecoins that are capital-efficient that rely on algorithms to stabilize their value. Basis was the most famous coin in this category; however, the project was stopped by US regulators before being released to the market.⁶

The urgency of creating central bank digital currencies is bolstered by the growing retail demand for decentralized cryptocurrencies and stablecoins. In countries with high inflation, residents can purchase Bitcoin and then convert Bitcoin into stablecoins like Tether and MakerDao Dai. According to the International Monetary Fund (IMF), Venezuela’s inflation rate in 2019 is estimated to be 10,000,000 %.⁷ This has triggered an increase in interest in cryptocurrencies, such as Bitcoin, and stablecoins, such as Tether. Bitcoin transactions accounted for \$7 million per week before the government enacted limits on Bitcoin transactions in February. Furthermore, stablecoins can be used in countries that have strict capital controls,⁸ such as Argentina, where individuals are only allowed to purchase up to \$10,000 a month worth of U.S. dollars.⁹



Source: coin.dance, Google Trends, Incrementum AG.

Venezuelans Demand Bitcoin and Increasingly Search Tether Cryptocurrency on Google.

⁵ The State of Stablecoins 2019 Hype vs. Reality in the Race for Stable, Global, Digital Money.

⁶ <https://www.theblockcrypto.com/daily/5122/stablecoin-project-basis-is-shutting-down-and-returning-the-majority-of-capital-raised-to-investors>

⁷ <https://www.imf.org/en/Countries/VEN>

⁸ <https://outlierventures.io/wp-content/uploads/2019/06/Mapping-Decentralised-Finance-DeFi-report.pdf>

⁹ <https://www.bloomberg.com/news/articles/2019-09-01/argentina-imposes-currency-controls-as-debt-crisis-escalates>