TrueUSD: A Regulated and Tokenized Version of the US Dollar TrueCoin, LLC Last Updated: May 30, 2019 Questions: ryan.rodenbaugh@trusttoken.com

1. Introduction

Blockchains, or distributed ledgers, have quickly gained adoption as one of the most promising technologies to emerge in the last ten years. They bring the potential to maintain public, yet secure, ledgers of all sorts of data ranging from supply chains to voting records. Many governments and Fortune 500 companies have started dedicated blockchain divisions to begin leveraging the technology; including Microsoft, Amazon, the EU, and others.

One of the most exciting applications of this new technology is its ability to act as an alternative payment rail. Similar to SWIFT, but available globally, more secure, and much faster at settling transactions. TrueUSD (TUSD) emerged as an early leader in the space in March of 2018. TUSD is tied directly to the value of the USD. TUSD is fully backed 1-to-1 with USD held in escrow accounts for the benefit of TUSD token holders, it can be transferred to people anywhere in the world for \$0.01, and can be redeemed for the underlying fiat USD after completing a KYC/AML check.

The industry is still in the earliest days of discovering the value that stablecoins can unlock and we are always seeking partners in this process of discovery.

2. What is a Stablecoin?

A lot of the vocabulary for this industry is still being developed and it is possible that in a few years, 'stablecoin' will no longer be what how the industry describes assets like TUSD, but for 'stablecoin' has become common lexicon. In its simplest form, a 'stablecoin' is a digital asset, on a *blockchain*, that is designed to maintain a consistent value, typically by linkage to the value of another asset.

Presently, there are 4 ways to design a stablecoin:

- (1) Algorithmic (derives value from a separate token specific to the stablecoin)
- (2) Commodity Collateralized (derives value from a commodity, e.g., Gold)
- (3) Cryptocurrency Collateralized (derives value from other cryptocurrencies, e.g., ETH, BTC)
- (4) Fiat Collateralized (derives value from a fiat currency, e.g., USD, EUR)

TUSDs fall under the 4th category, fiat collateralized. This discussion will only focus on this type of stablecoin, but there are plenty of other <u>resources</u> available to learn about the other types.

Said another way, "A fiat collateralized stablecoin is a fully collateralized, transferable, and programmable digital token that could be redeemed for fiat money." (<u>Source</u>)

3. Vision for Stablecoins

Stablecoins are a foundational pillar for the blockchain-based financial system. A stablecoin, when properly implemented, can serve as a medium of exchange for a new ecosystem of financial contracts, applications, and businesses.

The industry is still in the earliest days of discovering the value that stablecoins can unlock. Much like how someone in the 90s would have failed to have imagined internet applications like Google and Facebook, people now cannot purport to be able to envision all future applications of stablecoins.

Presently, a few use cases have emerged for stablecoins:

- <u>Trading</u> At present, the majority of cryptocurrency trading on exchanges is done using stablecoin pairings. For example, on the largest cryptocurrency exchange, Binance, TUSD is traded against many cryptoassets including Bitcoin and Ethereum. Stablecoins are popular for trading assets as it feels familiar to how you would trade a stock. For example, in the equities markets, stock prices are quoted in USD and typically are exchanged for cash or cash equivalents. Equities are not typically exchanged for each other, such as trading Tesla shares for Google shares. Prior to stablecoins, on cryptocurrency exchanges, you were only able to trade 1 crypto asset (e.g., Bitcoin) for other cryptoassets (e.g., Ethereum). This means that a trader is taking on double price risk. With stablecoins like TUSD, this price risk is mitigated.
- Moving Money Stablecoins have proven to be transformational for moving money around the world. For <\$1 USD, you are now able to send millions (or billions) of dollars in a single transaction. This use case has yet to be fully taken advantage of, but is happening on a small scale right now.
- 3. <u>A Trusted Store of Value</u> Individuals in some countries face high barriers to entry to opening a simple bank account. Through TrueUSD, individuals and businesses around the world can access the economic security of the U.S. dollar and custody the value themselves.

In addition to the use cases that have emerged, there are other use cases for stablecoins that will likely be bigger than what exists today. Some use cases to be most excited about include:

 <u>Remittances</u> - As Truecoin continues to tokenize additional fiat currencies (e.g., Hong Kong Dollar, Philippine Peso, Argentine Peso, etc.) this will enable the fast and inexpensive ability to remit money around the world. At present, the costs associated with sending money from one country to another can be prohibitively high with fees eating up to 10% of the transferred asset's value. Stablecoins eliminate many of the fees charged by middlemen and allow for more assets to arrive back in the local countries. This is a net positive for governments as it allows for funds to be transferred back into local economies and not taken by foreign money remitters.

- 2. <u>B2B and International Trade</u> The market for companies sending money between each other, and hedging between the currencies of their home market and markets they are doing business in, is well over \$1T. It is antiquated that in 2019, companies still need to pay high fees to intermediaries to simply send funds between companies. Large companies (e.g. Apple) get bank-grade rates for transfers, but small-and-medium-sized businesses face high fees and friction.
- 3. <u>Blockchain-based FX markets</u> Advanced traders may find additional use cases for FX Marketplaces composed of tokenized currencies, e.g., TrueGBP / TrueUSD.

4. Proof of Reserves

TrueUSD and all of our additional tokenized currencies including TGBP, TCAD, TAUD, and many more to come work with 3rd party accounting firms to provide monthly attestations to confirm the fiat reserves collateralizing each tokenized currency. From launch, Truecoin has worked with Cohen & Co., a top-50 US accounting firm, to verify that the funds backing TUSD are always held at a 1:1 ratio and that Truecoin has made no material changes to the 'terms of service' that protects users. All the attestations that have been published since the launch of TrueUSD can be viewed <u>here</u>.

In addition to the monthly attestations, Truecoin has begun the transition to a 'live attestation' dashboard. Through a partnership with Armanino, a top-25 US accounting firm, TrueUSD holders are able to view a real-time dashboard of TrueUSD funds, advancing transparency from months to minutes. The real-time dashboard has been built independently by Armanino and will provide third-party confirmation, with TrueCoin as an exclusive client. That dashboard can be viewed on the Armanino <u>website</u>. Eventually, the real-time confirmation dashboard will replace the monthly attestations.

5. Creation and Redemption

One of the most important aspects of a fiat-collateralized stablecoin is the ability to be able to freely purchase and redeem the digital token back into the underlying fiat currency consistently, without hassle, and in an inexpensive manner. With these facts in mind, Truecoin has strived to make the TUSD redemption process as smooth and inexpensive as possible while complying with all necessary compliance measures. You can find diagrams of how the creation and redemption process works <u>here</u>.

6. Stablecoin Code of Ethics

Stablecoins are a foundational pillar for the blockchain-based financial system. A stablecoin, when properly implemented, can serve as a medium of exchange for a new ecosystem of financial contracts, applications, and businesses.

But until recently, cryptocurrency markets have been hurt by a lack of trustworthy fiat-backed stablecoins. While there has been a surge of new stablecoin projects, there has not yet been an industry-wide dialogue about what it will take for a fiat-backed stablecoin to be trusted as an integral part of the industry's infrastructure.

In the future, regulators may establish clearer policies for digitized currencies. In the meantime, fiat-backed stablecoin projects can take the initiative and hold ourselves to a high standard of ethics. While specific approaches may vary, there are at least a few lessons from the past that stablecoins should not repeat.

In short, the core pillars of this code of ethics include:

- 1. Fully Backed Every token will have the equivalent fiat value stored in the bank to back it.
- 2. Stable The market should recognize the inherent value of the stablecoin as being equal to the price of the underlying currency.
- 3. Redeemable We will never prevent or discourage legitimate redemptions from verified customers.
- 4. Compliant We will ensure the long-term survival of the stablecoin through regulatory compliance.

You can view the entire Stablecoin Code of Ethics on our website.

7. Compliance

- **7.1.** As a registered and regulated Money Service Business with the Financial Crimes Enforcement Network ("FinCEN"), TrueCoin LLC is fully compliant with Bank Secrecy Act (BSA)/Office of Foreign Assets Control (OFAC) and Know Your Customer (KYC)/Anti-Money Laundering (AML) laws. A risk-based compliance program has been implemented that is designed to comply with these applicable requirements.
- **7.2.** TrueCoin LLC requests personal identification information and documentation from persons or entities and contracts with multiple third parties to verify and validate customer information including screening the names against various sanctions lists. Once all KYC/AML checks have been completed, the person or entity's account is created on the platform.
- **7.3.** A third-party vendor performs fund origination verification on all persons or entities. This includes ensuring wires or checks submitted by the customer are in the name of the account holder, should the names and address not match, the

wires are returned. From time to time, TrueCoin LLC might reach out to an existing customer for additional information or documentation. Should this additional information or documentation not be sufficient, TrueCoin LLC will not allow the customer to continue transacting on the platform.

7.4. In addition to identity verification and source-of funds validation, TrueCoin LLC utilizes a third party to perform OFAC and other sanctions watch-list checks on all persons or entities. TrueCoin LLC will not be doing business with any person or entity appearing on such a watch-list.

8. Additional Products

Since launching Tokenized USD (TUSD) in March of 2018, we have gone on to launch Tokenized British Pounds (TGBP), Tokenized Canadian Dollars (TCAD), and Tokenized Australian Dollars (TAUD). By 2020, we plan to launch additional tokenized currencies including TEUR, THKD, and more. We believe many of the biggest potential use cases for stablecoins (e.g., remittances, international trade) will require people to be able to seamlessly move from one tokenized currency to another.



9. Why This Matters

We view stablecoins as a critical piece of infrastructure for the continued growth of the blockchain industry. Even larger than the role that tokenized currencies will have in growing the blockchain ecosystem, is the capability they have to improve the existing financial system. Tokenized fiat currencies have the capability to create several orders of magnitude improvements to the existing financial system by abstracting away layers of fees, improving the speed and time to cash delivery.

There are countries (e.g., Philippines) which derive double-digit percentages of their GDP from money remitted from overseas. The fees charges on \$10bn+ worth or remitted dollars can be 10-figures worth of fees that are not being sent back to individuals in the local market. This is just one example of how improving the existing financial system with tokenized currencies can have an outsized impact on individuals around the world and their local economies.

10. Conclusion

Since launch TUSD in March of 2018, we have seen an incredible amount of interest in our project and stablecoins more broadly. There is still a large amount of whitespace in front of us in terms of what stablecoins can enable.

We look forward to the coming months and years of building out TUSD and our entire suite of tokenized currencies and additional assets.