



WHITEPAPER



Index

Index	1
Abstract	2
Introduction	3
History of Money	3
Are Cryptocurrencies the Answer?	4
Qualifications of Money	4
Why not Gold?	5
Silvertoken as a Currency Solution	5
Silvertoken's Functionality	6
Transaction types	6
Storage of Silver	7
Redeeming Physical Silver	8
Silvertoken Launch (Introductory Period)	8
1 st Megabox	9
Conclusion	9

Abstract

We aim to calm the volatility of the cryptocurrency market: thus, Silvertoken. Silvertoken is a receipt for the purchase of silver giving the token intrinsic value, and it is built on the Ethereum decentralized blockchain using ERC-20¹ standards. Because Silvertoken functions as a digital token receipt for the purchase of physical silver, it carries more stability and less price volatility than other cryptocurrencies that are not supported by a precious metal. Every time a transaction takes place, a fee is collected. Parts of this fee fund storage and operating costs, while the rest is reinvested into buying more silver. So, as Silvertoken gains usage and the overall amount of purchased silver increases, the amount of silver represented by each token increases. This means each token will grow in value while purchasing power remains stable or increases. Just as fiat currencies once could be exchanged for the precious metals that backed them, Silvertokens can be redeemed for their physical silver. We plan to achieve our aim of steady, long-term growth by increasing Silvertoken's value through this reinvestment into physical silver, as well as additional investment into future technological improvements. Silvertoken is a new and unique cryptocurrency created by linking physical silver to a digital token.

¹ "Ethereum/EIPs." *GitHub*, 11 Sept. 2017, github.com/ethereum/EIPs/blob/master/EIPS/eip-20-token-standard.md.

Introduction

Bitcoin launched at a time when the general public was ill-informed about cryptocurrency. Since Bitcoin was generally only used by the tech-savvy, most people continued using fiat currency, which is government-backed and inconvertible. Bitcoin has since risen in value from pennies per-unit to over \$4000.² This change indicates a currency paradigm shift: the general public is beginning to realize the benefit of cryptocurrencies over fiat money. We're reminded of the rapid growth of the internet in the nineties as a parallel.

Blockchain technology, which is fundamental to cryptocurrencies, is changing how individuals and corporations conduct transactions. Namely, local and global transactions are faster and more economical than traditional transfers that use banks or other financial institutions. This is how these transactions work: everyone is recorded on a type of public ledger called a blockchain, which is then independently verified by multiple, separate parties to ensure legitimacy. These parties, which are called nodes, determine transaction legitimacy through consensus. While the ledger itself is public, there is a mechanism to protect the identity of each individual account, or wallet. Each wallet is linked to a public identification number, while the owner of the account remains anonymous.

Bitcoin was the first digital currency to use blockchain technology; however, for technical reasons, it is extremely difficult to build another currency off of that platform. Silvertoken is built on the Ethereum blockchain platform using the ERC-20 standard, which is designed for the creation and implementation of digital tokens. Ethereum allows for the creation of small programs that control a token's digital functions: these programs are called smartcontracts, and they allow for predetermined, autonomous tasks to be executed only once certain, predetermined parameters are met. Since the parameters are outlined during development, these tasks function automatically to prevent tampering. This is the platform we have used to create Silvertoken, a new class of digital token with greater price stability and tangible value.

History of Money

Long ago, people began using precious metals as one of the first forms of currency. Economies using precious metals as currency prospered. But, later, when governments began withdrawing their currencies' precious metal backing, these economies diminished under the weight of extreme inflation. In current times, fiat currencies are continually devalued by controlling governments and central banks. Presently, these institutions have used financial engineering to

² "Bitcoin (BTC)." *CoinMarketCap*, 2017, coinmarketcap.com/currencies/bitcoin/.

invent fractional reserve banking³, which increases leverage and profits. Unfortunately, this method creates systemic risk in global economies, and when one segment of an economy fails, the rest follows. We point to the 2008 global financial crisis as evidence that fiat currencies in combination with fractional reserve banking are nearing the end of a life cycle. However, despite the decline of these fiat currencies against inflation, precious metals continue to hold value.

Are Cryptocurrencies the Answer?

The uncertainty of the economy and of fiat currencies in particular have led to a search for a stable hedge. One such hedge is investment in Real Estate – however, the Real Estate market is impacted by central bank policy, and Real Estate itself is not a liquid investment.

Cryptocurrencies both are free of centralized policy restriction and are liquid; and, now that the general public is beginning to understand how to use them, their applications are becoming and will continue to become more mature. One of the largest benefits to the technology is its decentralization. Cryptocurrencies are mostly untraceable and are uncontrollable by central banks and governments. However, cryptocurrencies like Bitcoin lack intrinsic value. While Bitcoin holds value because of general agreement, this instability reminds us of fiat currencies deriving value from the promise of a government. In fact, if we are currently in a cryptocurrency bubble, only those cryptocurrencies with a link to things of intrinsic value, like silver, will remain stable.

Qualifications of Money

Current government issued legal tender is fiat money that loses value daily through fractional reserve banking, and central banks purchasing bonds to increase the money. In fact, the last time the United States supported its currency with allocated precious metal reserves was in 1973⁴. Since that time, United States currency is backed by bonds purchased by the Federal Reserve with money formed out of thin air. With fiat bond-backed currency, governments create a virtually unlimited supply of money for themselves; however, each new unit of money dilutes the value of the money already in circulation. This contributes to inflation, and because of this, taxpayers are slowly losing purchasing power without realizing it. In its current form, fiat

³ Reiss, Michael. “End Fractional Reserve Banking and Fix the Economy.” *Positive Money*, 8 Oct. 2017, positivemoney.org/2013/09/can-money-be-converted-to-everlasting-tokens/.

⁴ “Gold & Silver.” *Gold and Silver - Frequently Asked Questions (FAQs) - Federal Reserve Bank of Richmond*, Federal Reserve Bank of Richmond, www.richmondfed.org/faqs/gold_silver.

money is no longer stable or sustainable. By contrast, a sustainable currency must exhibit certain features⁵:

1. Durability
2. Portability
3. Divisibility
4. Uniformity
5. Limited Supply
6. Acceptability

Why not Gold?

Gold is an excellent store of value and is an essential part of any investment portfolio. However, due to its long-established high value, we think silver has more room for growth. The two metals are correlated in price movement, with gold significantly outpacing silver. This means that silver has a lower price point and is more accessible to a wider variety of investors. Even so, the ratio of investment-grade gold to silver is near one to one. Additional to the continued use of silver as a mechanism for storing value, it also has an abundantly expanding portfolio of industrial applications. We see this in the solar industry as the demand for photovoltaic cells grew 34% in 2016 with silver being a necessary material in all solar panels⁶. The value of silver should increase; but, if not, the value of Silvertoken will still continue to rise as more silver is purchased with fees generated from transactions. Thus, the amount of silver represented by each token will increase.

Silvertoken as a Currency Solution

When you purchase physical silver from us, it contains all of the properties of money except portability and acceptability. By linking your physical silver to a decentralized token, we have added these benefits and eliminated shortcomings. Silvertoken has all the benefits of owning silver combined with the benefits of a liquid, portable and easily-usable currency.

Physical Silver

Pros - Durable, divisible (not that easily), uniform, limited supply

⁵ Wolla, Scott. "Functions of Money - The Economic Lowdown Podcast Series, Episode 9." *Federal Reserve Bank of St. Louis*, 3 Sept. 2012, www.stlouisfed.org/education/economic-lowdown-podcast-series/episode-9-functions-of-money.

⁶ The Silver Institute . "World Silver Survey 2017." *The Global Source, The Silver Institute*, 2017, www.silverinstitute.org/WSS2017.pdf.

Cons - Hard to transport, unsafe to store personally, difficult to store because of size and weight, not widely accepted by vendors, burdensome to sell

Cryptocurrencies

Pros - Very liquid, easily transferrable

Cons - Uncontrolled supply (some instances), intangible, no intrinsic value (similar to fiat)

Silvertoken

Combined Benefits - Liquid, easily divisible, inflation-proof, easily transported anywhere in the world

Silvertoken's Functionality

Silvertoken has a conceptually easy functionality. Each transaction carries a one percent transaction fee. 70% of this fee is used to purchase more silver to back all tokens, increasing each token's value. The remaining 30% is divided among various operational expenses, such as technology development and silver storage costs. Silvertoken's value comes from user adoption and is correlated to the price of silver. Every Silvertoken transaction generates fees that go into purchasing more backing silver, and the amount of silver allocated to each token increases. The more people that use the token, the greater the amount of actual silver will be purchased for reserve backing. A reserve of physical silver is allocated to the currency and stored safely in high-security vaults. The number of tokens in circulation does not increase faster than the amount of physical silver backing each token.

Transaction types

Three types of transactions exist within Silvertoken. Each transaction is similar, but fees are charged to different parties because of their nature. The transaction types are:

1. Tokens sent from "wallet A" to "wallet B"
 - a. The sender (wallet A) pays the transaction fee, not the receiver (wallet B). The receiver is expecting an exact amount of tokens from the sender and charging a fee to the receiver would be problematic for sending money by reducing usability. For example, paying an exact amount owed to someone would only work if the sender pays the transaction fee.
2. Tokens being bought and sold on exchanges
 - a. At first, the largest percentage of daily volume will come from this type of transaction.
 - b. In this case the buyer of the Silvertoken pays the transaction fee.
3. Redeemed for Silver

- a. When users redeem their tokens for physical silver, we take possession of the tokens being used for redemption in exchange for an equal value of silver. The amount of silver in allocation and the relative number of tokens are simultaneously reduced from circulation, maintaining the overall equilibrium.
- b. The user redeeming the tokens for silver pays a fee for handling and delivery of the physical silver.
- c. Tokens are then sent to a “Ghost/Burn” address to ensure the tokens can never be used again.

Storage of Silver

All of the physical silver allocated for SilverToken will be stored in vaults meeting the following criteria⁷:

- Location
 - Facility
The vaults used for storage are Class 3 UL rated⁸ which means they withstand 120-minute resistance to torches and tools as rated by Underwriters Laboratories Incorporated. Facilities are located no more than 5 kilometers from an international airport, reducing theft risk in transit and allowing for easier withdraws/deposits.
 - Country
Facilities are located in financial hubs of neutral countries with no import or export tariffs on precious metals. The locations also have no taxes on income, sales or capital gains with no connection to outside government regulations.
- Insurance Coverage
 - All silver stored within the facilities is insured for full replacement value by a policy underwritten by Lloyds of London.
- Ease of Access
 - Accessibility
Fully insured shipping options are provided when withdrawing silver.
 - Silver Purchasing
Several reputable precious metals minters also use storage facilities. We may purchase silver from these minters directly, and the silver is simply moved from their silver inventory to our allocated silver inventory.
- Auditing Standards (Purity and Quantity)
 - Inventory is audited on a monthly basis by a reputable global third-party auditor.
 - Purity is verified when silver arrives at storage facilities.

⁷ “Vaulting.” *The London Bullion Market Association*, 2017, www.lbma.org.uk/vaulting.

⁸ “Standard for Burglary Resistant Vault Doors and Modular Panels Purchase UL 608.” *Standards Catalog*, UL, 5 June 2017, standardscatalog.ul.com/standards/en/standard_608_7.

- Allocation
 - The silver stored is fully allocated, meaning there is specific silver allocated to Silvertoken.
- Facility Accounting Standards
 - The storage facilities merely store silver, and do not include the silver as an asset of their company, compared to some facilities which includes metals stored as an asset of their company.
- Reputation
 - These vaults store silver and precious metals for some of the largest dealers, institutions and mints across the globe; they include:
The Royal Mint, World Mint Gold, The Perth Mint Australia, Scottsdale Mint, Blanchard, Border Gold Corp., International Precious Metal, Kitco Metals, Monument Metals, Precious Metals International and SD Bullion.

Redeeming Physical Silver

We aim to make the redemption process as simple as possible, complicit with our vision of Silvertoken as a digital receipt for purchased silver. At any point of holding/owning a token, the holder/owner may log into our website and complete a request form to redeem their physical silver represented by the token. We can offer this because the ratio of tokens to physical silver never skews towards tokens. There will be a similar handling and shipping fee to what would be expected ordering silver from a third-party vendor. Once the request is processed, the silver ordered is removed from its high-security storage vault, packaged, and shipped. Thus, users receive the benefit of silver ownership without the risks associated with its storage.

Silvertoken Launch (Introductory Period)

Purchasing a Silvertoken is equivalent to purchasing physical silver, which, during the Introductory Period, is a more sound investment than ideas and future prospects offered by other cryptocurrencies. After the Introductory Period is completed, you may redeem your tokens for real silver.

A batch of one million Silvertokens, called a Megabox, will be the unit offered. Each Megabox will be announced shortly before release. Remember, no devaluation of existing Silvertokens can occur by offering more silver and tokens for sale since an equivalent amount of silver is being purchased. Proceeds from Silvertoken sales are reinvested into purchasing silver, while maintaining the current ratio of silver to tokens. We will use the greater result of two methods to determine the price of new Silvertokens: the amount of silver representing each token multiplied by the price of silver per ounce; or, the current market price of a Silvertoken. We will

use the greater result to avoid unintentionally manipulating the market price of a token. Hypothetically, one Silvertoken with a market price of \$50 might represent \$20 of silver (a \$30 price premium over the token's value in silver). If buyers could purchase new tokens at \$20, they could immediately sell them at \$50, creating a wave of selling pressure, which would adversely affect current Silvertoken holders by depressing the market price. In this scenario we would therefore offer Silvertokens at the current market price.

The first Megabox will be offered in two parts. First, we will have an Introductory Period with 20% of the first Megabox offered at a greatly discounted rate. Next, we will offer the remaining 80% of the first Megabox of tokens at a partially discounted rate. After the completion of the Introductory Period, tokens will be available to withdraw and send to an ERC-20 compatible wallet of your choosing.

1st Megabox

Capital received from the first Megabox will be used to purchase and store physical silver. We also plan to invest in technology development to increase the token's functionality in a decentralized environment, and to further streamline the physical silver redemption process. During the Introductory Period, one Silvertoken will represent one Troy Ounce of .999 pure Silver based on the current price at the London Bullion Market Association (LBMA) plus a fee to cover costs. After the Introductory Period, additional Megaboxes will be sold once systems are in place to efficiently scale technology and capacity.

Conclusion

Silvertoken is a hybrid of a precious-metal backed currency combined with a digital token. History has taught us to distrust the long-term stability of fiat money. By shifting capital to tangible assets, like silver, people can begin to protect themselves from the fluctuations of fiat and crypto currencies. Fortunately, Silvertoken allows for exposure and ownership of real silver in the most convenient way possible. The purchase of silver leads to a receipt in the form of a Silvertoken. The Silvertoken entitles you not only to continued growth within Silvertoken, but also to the ownership of physical silver. Transaction fees are reinvested to buy more silver, increasing the amount of silver you own. Silvertoken is a "safe haven" because its intrinsic value makes it more resilient to market bubbles than other cryptocurrencies. We believe the growth of the token's value to be longevous, sustainable, and capped only by the amount of silver on earth.