BR.MINT

A Brazilian Real-Backed Fiat Stable Currency

WHITEPAPER

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A Project by Tritum Digital Assets

INTRODUCTION

Since the introduction of Bitcoin's original white paper in 2008 and network launch in 2009, the ultimate goal of all digital ledger based asset systems has been the creation of a frictionless, democratized monetary instrument to act as a currency. A medium of exchange which is recognized and accepted anywhere, and which can be possessed and sent anywhere with minimal effort or cost. The new iteration of digital gold, a comparison made in many circles, regarding what these cryptocurrencies could achieve: fungibility, divisibility and ease of possession and transport.

This has been a very difficult goal to achieve for a number of reasons, chiefly amongst which is the volatility of the native instrument utilized. Cryptocurrencies of all sorts have been extremely price volatile, which makes them tough to adopt in the real world for commerce between normal individuals and businesses used to utilizing national currencies and for whom price volatility is limited to foreign exchange risks between their domestic and international currencies.
For these same reasons, precious metals such as gold have not remained the primary instrument of account or commerce for typical economic transactions.

Relatability, therefore, has been difficult for most consumer and commercial users. When it is difficult to quantify and understand what a unit of an instrument is worth in terms of its local buying power at any given time, it is very difficult to drive adoption. Notwithstanding the practical issue of your reserves of that monetary instrument having variable economic value in relation to the most common form of local commerce, the national currency. A stablecoin, proposed here, essentially bridges these gaps, providing the facilities that the digital asset based system produces, with the relatability needed to be widely accepted as a means to trade.

Money and Cryptocurrencies

From the dawn of civilization to modern societies, humans have been engaging in commerce. In this context, money arose as a way to facilitate such transactions by standardizing a measure of value against which goods and services could be more easily compared, and as a way to provide humankind with a way to store value created through work. As time passed, money has had different forms and shapes, from salt to gold to paper money. Regardless of format it always carried the same attributes: it is fungible and serves as a medium of exchange, it is scarce which makes its value perennial and it represents a unit of account.

These attributes we also captured in the worldwide gold backed paper money system, which fostered commerce by increasing the number of transactions possible, and thus the velocity of money. This, however, was a constrained model for political monetary policy purposes. As a result, in 1971 the US officially ended the Bretton Woods agreement, destroying the link between gold and paper money, which was now "guaranteed" only by the government. This new "fiat" monetary system differed from its predecessors in the sense that the fundamental principle of scarcity was broken, since governments controlled money supply and required buy-in from its users that the paper money had value. Since then, the purchasing power per unit of national currencies around the world has consistently systematically declined. The US Dollar, for example, has lost 80% of its value since 1971. Increases in the monetary base of fiat currencies are effectively the same as the currency debasements that brought down the largest empires in human history. Repeated government interference affects the perenniality of value of existing fiat currencies, diminishing its purchasing power and eroding wealth. This lead to the corrosion of trust in the current system and created a latent demand for an alternative where people's wealth is not exposed to such limitations. Against this backdrop, cryptocurrencies were created as an alternative to the government led monetary system plagued by perceived flaws.

Based on distributed ledgers, cryptocurrencies are sovereign financial instruments, not beholden to any governments and can be an efficient way to transfer money. The crypto economy continues to grow rapidly on a global basis, with increasing numbers of tokens introduced to the market daily. A broad array of functions and intended use cases exists amongst them, but a key common element of the majority is high volatility. These digital assets have not proven to be a good store of value on a short to medium term basis as they have seen by most as speculative instruments and have been subject to extreme price movements. To illustrate, during the twelve month period from December 2017 to 2018, Bitcoin, currently the most traded cryptocurrency, lost over 83% of its value compared to the US dollar. This limitation has been a deterrent to widespread adoption of cryptocurrencies as a store of value and its acceptance as a medium of exchange in commerce.

Stablecoins

A major issue for most points of access, or "gateways" between traditional financial systems and cryptocurrencies has been the constriction of flow between fiat currency and digital assets. As users of digital assets have attempted to move funds into and out of volatile or speculative instruments from a local currency, they have discovered that this series of restrictions have made it difficult to transact between the ecosystems. This is especially true when there has been a flight to safety out of digital assets back into fiat currency, which arguably has exacerbated price downturns as a lack of fiat liquidity existed within the ecosystem to absorb all of the sell-side pressure.

This has lead to a need for liquidity within digital asset markets, and a resultant increase in available stable-value assets to dampen volatility. This stable-value demand has created a number of solutions focused on enabling increased real world utility from the purchasing power of a growing number of digitized assets. Most prominently and successfully, this has centered around US dollars. These, and other tokens which are backed by a variety of real-world assets have demonstrated success in their ability to provide a stabilized price product within the digital asset ecosystem as well as a more relatable unit to be adopted as an actual currency for any form of general economic activity[1].

In its typical electronic or physical forms, a local fiat currency operates on wholly different digital and non-digital systems, and therefore not well suited for interoperability within blockchain-based high efficiency systems. In the evolution of stablecoins, fiat-backed tokens have been created as a way to solve this problem. A stablecoin is a cryptocurrency whose value is collateralized by the asset, or currency, it proposes to emulate. Pegged at a given ratio of 1:1, a unit stablecoin is minted once the same unit of the asset is secured as collateral to that creation. A fiat-backed stablecoin is therefore simply a digital representation of a fiat currency. For every stablecoin created, an issuer would guarantee that they place and keep the corresponding local currency in its backing accounts. A user of a stablecoin can thus always redeem the coin for fiat money from the issuer, or easily find a willing buyer at fiat face value. At redemption from treasury, the token would be destroyed as the underlying funds are removed from the backing accounts.

This form of stablecoin combines the advantages of fiat money with the digital benefits of a token. Stablecoins will always keep the benefits of cryptocurrencies — traits like transparency, security, immutability, digital wallets, fast transactions, and low fees, and unbound by distance or national borders — without losing the comforts and familiarity valued by the general public of trust and stability they value in fiat currency.

Most large stable value token solutions to date have been products backed by a national currency, such as the USD tokens created by Paxos, Circle, and Tether. These have been extremely successful since introduction with issued notional values exceeding US $3.5 billion[2]. An emergent group of products backed entirely within the digital asset economy by managed baskets of digital assets are also notable and novel but still appear too experimental for broad adoption with market caps under US $100M at the time of this writing[3].

Within the digital asset exchange industry, this has enabled dozens of exchanges to offer fiat-like instrument pairings without the difficulty of a fiat on and off-ramp bank relationship and rapidly aid the growth of their market's liquidity, and subsequently the overall digital asset market's size and liquidity.

Tritum strongly believes that markets require more than just a US currency backed stablecoin to satisfy the global demand for equivalent services in many other large markets. Especially so in markets where there is substantial value in reducing friction in payments and financial flows which is broadly the case in developing markets. In association with the launch of Bolsa Cripto in Brazil, we introduce BR.Mint – a tokenized Brazilian Real stablecoin backed on a one to one basis with transparent, provable reserves of Real currency.

Brazil and the BR.Mint

BR.Mint is an innovative and one of a kind stablecoin in the Brazilian market. To date, no other Brazilian Real backed stablecoin exists, nor have we seen meaningful development for other major South American markets. We believe the BR.Mint will be useful in addressing several challenges presented by the Brazilian markets.

As a developing country, labour productivity in Brazil is 4x lower than in the US. Part of the reason is rooted in highly bureaucratic processes which results in elevated transaction friction.

Another reason for comparatively low productivity are high transaction costs. Brazil has one of the highest transaction spreads and interest rates in the world. Over the past several decades, bank fees and interest have proven to destroy the purchasing power of Brazilian citizens.

As a simple illustration, if a Brazilian had placed R$ 100 (one hundred Reais) in a savings account with a major Brazilian bank 10 years ago, in 2009, today they would have almost doubled their capital, for a total of R$ 192. This is not as impressive as it appears at first glance. If the same customer had, from the same bank borrowed, that same R$ 100, today they would owe close to R$ 7,000,000 (seven MILLION reais)[4]. This figure is astounding and surreal, but is a real world example.

Regardless of having cut the countries interest rates in half over the last 4 years, from 14.25% in 2015 to 6.5% in 2019[5], banks have not proportionally lowered their own lending rates. Another key example of high transaction costs are credit cards fees paid by merchants. While rates hover around 2%, in Brazil they can be twice as high, averaging 4.5%. These types of inefficiencies can be conveniently addressed with the adoption of a stablecoin that is subject only to the in-chain transaction fees of its underlying blockchain instead of a rate over the transaction amount.

Furthermore, the Brazilian banking system operates its standard day between 10am and 5pm, limiting clients to this relatively small window of time to execute transfers of funds. Conversely, BR.Mint will liberate this purchasing power as a blockchain operates continuously with near instantaneous final settlement.

International transactions today are also costly and time consuming. High spreads, fees, and taxes are speed bumps that tie up Brazilian productivity and will be essentially eliminated with the use of BR.Mint as the vehicle of transport of the same Real funds.

Finally, in countries such as Brazil with persistent levels of inflation, stablecoins provide optionality and independence as holders can, via the existing infrastructure of digital asset exchanges and services provides quickly convert money into other products including other stablecoins, such as those backed by less volatile currencies should they seek an effective replica of bank-provided foreign currency savings vehicles. Today, conversion to US Dollars from Real, for example, would consume several percent of the converted funds, and effectively be uneconomic for smaller sums of money.

In this day and age, these systemic frictions, frustrations, and constrictive practices make a clear case for the delivery of a fully modern, 24/7 payments and transaction system for Brazil. The Brazilian population deserves a way to park its cash deposits with ease in other more convenient and transparent instruments.

BR.MINT: FEATURES AND BENEFITS

BR.Mint is a token, created in the Ethereum blockchain that is backed one-to-one by BRL (Brazilian Real) deposits and available through the BR.Mint Platform and in crypto exchanges. BR.Mint can be acquired at a 1:1 exchange for BRL and also redeemable at a 1:1 ratio without any fees. BR.Mint is committed to transparency, trust, and full commitment to maintaining its 1:1 asset backing balances at all times. As is standard practice with other fiat-backed stablecoins such as Paxos, BR.Mint will immediately remove or add Real to its asset accounts upon creation or redemption of units with the company. BR.Mint endeavours to have this process audited and provide public proof of this asset backing on a regular basis.

Initially, BR.Mint will be available on its own platform and our partner-exchange, Bolsa Cripto, for use as a pairing to other cryptocurrencies and with other stablecoins such as PAX, USDC, and EURS. We will seek further listings for BR.Mint on other exchanges and integration into other digital asset payment solutions around the world as soon as possible.

In line with the ultimate benefits of cryptocurrencies, BR.Mint will enable the Brazilian Real to become borderless, convenient to carry in digital wallets, and quick to transact. We strongly believe this will enable BR.Mint to become the instrument of choice for remittances between families in Brazil and abroad, as well as function as an easy unit of electronic payment wherever traditional payment infrastructure has been risky, high friction, slow, or expensive.

With our native platform, or any other Ethereum compatible digital wallet, BR.Mint will be able to be received by anyone with their smartphone or computer, and redeemed for Brazilian Real via the BR.Mint Platform, Bolsa Cripto or any other exchange, to be withdrawn into cash quickly if desired. An exclusive smartphone app will be developed in order to serve both consumers and merchants as a way to turn mainstream the usage of the token in everyday transactions across the country.

The BR.Mint will open up many new opportunities for the Brazilian market:

- With the BR.Mint in an account, a user can instantly transfer money anywhere in the world at a minimal cost.
- Anyone with an Ethereum wallet, or the BR.Mint app, can receive BR.Mints.
- Provide an easy mechanism to transfer and convert Real into other tokenized national currencies or cryptocurrencies for international asset exposure as a hedge against local inflation, or as a way to place capital in different countries and to facilitate international commerce.
- BR.Mints could also be bought and sold against other fiat-backed stablecoins as an alternative to traditional foreign exchange providing the same result at a very low cost.
- Enable Real settlement of transactions outside of existing bank business hours by being fully 24/7 and as resilient as the underlying Ethereum blockchain.
- Simplify anyone taking online payments. BR.Mint will be the natural currency for Brazilian businesses to enable digital payments with local currency and nearly no fees.
- As digital adoption increases more and more individuals have digital wallets, BR.Mint can become the effective banking system for the underbanked population. With this, BR.Mint can be used as the most convenient way to pay salaries and to transfer money between individuals.

SUMMARY

- BRC Ltda, will hold one Real for every BR.Mint issued. These funds will always be kept segregated from other operational accounts.
- All funds will be held with a Brazilian bank.
- A customer deposit of 1 Real will cause the system to issue 1 BR.Mint.
- A customer redemption of 1 BR.Mint, will cause the system to burn 1 BR.Mint. A BR.Mint only exists as long as the corresponding Real exists in the deposit account.
- BRL can be listed on exchanges globally. Being the only stablecoin backed by the Real, it will be a tool to see the value of the Real as compared to other digital assets.
- The BR.Mint platform – with a minimum unit value, and the Bolsa Cripto exchange, will allow users to cash out of their holdings directly and instantaneously to the Brazilian fiat currency, Real
- BR.Mint is available 24/7 to facilitate settlement against any type of asset including crypto, security and asset tokens, or for payments. Unlike fiat, which is only available to settle trades during bank business hours, BR.Mints can move anywhere, anytime.

Technology

BR.Mint will be issued through the Ethereum network. Being the largest token infrastructure platform, this can facilitate adoption of the BR.Mint which can be sent to, or received, by anyone with an Ethereum wallet. All transactions operate according to the rules of a smart contract on the Ethereum platform following the ERC-20 protocol.

We strongly believe transparency is key to valuable, long-term sustainability in the crypto-space. As part of that view, the Ethereum network allows a full view of all relevant transaction and circulating balance information for BR.Mint for public consultation. With frictionless transactions, transparent token supply and on-chain transactions available to everyone, we offer building blocks that will put BR.Mint as part of the solution for the constrictions and frictions of the global economy.

Trust and Compliance

OPERATIONAL CONTROLS

We seek to provide a fully transparent, trusted model. This has been a major holdback of some of the leading instruments such as Tether where doubt has been cast on their actual asset backing.

The issuance and redemption process, including the management of fiat balances at our asset holding account will be extremely tightly controlled, and audited. Every precaution will be taken to follow industry leading practices to ensure the underlying fiat currency remains in place and no hacks, or other forms of attack are able to compromise the 1:1 backed ratio of Real to BR.Mint. Assets will be held in custody by a regulated financial institution and will be managed to provide the fastest transaction time possible.

AUDITS

We will make every effort to demonstrate proven reserves visible and trackable to all participants by providing real time update of funds available and coins outstanding on our website.

At least on a quarterly basis, balances will be audited by globally recognized and qualified auditor and a complete history of audit reports will be made available on our website.

ON-CHAIN SURVEILLANCE

As an additional layer of protection, we recognize that certain attack vectors may be attempted via the blockchain into our BR.Mint controlling smart contract to seek vulnerabilities. We also recognize that the ability to track and monitor units of BR.Mint in circulation at all times for reasons of compliance, regulatory reporting, or any other function requires a qualified, neutral 3rd party agent. As is best practice with other fiat-backed stablecoins we will engage a recognized and respected blockchain analytics company to monitor and surveil activity around the BR.Mint smart contract to mitigate risks related to fraud and cyber security.

TEAM

The team behind BR.Mint have an unparalleled combination of experience and expertise in global financial services and Brazilian markets. We are committed to delivering high quality, secure, professional solutions for digital assets globally, and bringing broad adoption of these technologies, assets, and unique opportunities to the market.

The team has a very long history of finance and electronic trading from the global equity markets, working for many years in the US, Canada, and Europe at firms such as Nasdaq, TMX (Toronto Stock Exchange), quantitative trading firm Infinium, the Canadian regulator IIROC, and other clearing and broker-dealer companies.

John Willock
Experienced in EU, US, Canadian electronic securities markets for over a decade at Nasdaq, and at TMX, John has led innovation in regulated markets to bring enhanced transparency, liquidity, and profitability to global capital markets. Specialized in running high margin, high growth securities data businesses, John is an expert at understanding and deriving value from untapped areas of the developing digital asset space. John has been personally active in cryptocurrencies and blockchain since 2011. He decided in 2018 to focus all of his time on realizing the economic benefits from these emerging technologies in the regulated, institutional space.

Rafael Mottin
Serial entrepreneur with successful exits in the Brazilian market. Has operated in the Brazilian mining industry coordinating strict governmental regulations with several producing mines, with passages in the transport and logistics industry, as well as an online real-estate platform. With an MBA from the University of Toronto, has extensive experience in building and leading teams from diverse backgrounds, and especially in executing projects from conception to implementation within the complexities of Brazilian bureaucratic business environment. Has an extensive multidisciplinary network in-country and the ability to effectively navigate in the South American business environment.

Per Hogberg
Previously business unit CFO and VP of Economic Research at Nasdaq where Per worked for 15 years. Strong understanding of the global capital markets after working out of Sydney, Stockholm, London and New York. Per's quantitative and legal, regulatory, and strategic financial background will help enable our exchange to develop a strong offering, launch strategy, and track competition to stay in a leading position.

Jack Hamilton
An 18 year Nasdaq strategic client relationship manager for data, services, and listings. Jack is an expert in delivering valuable solutions to customers and developing and keeping close relationships with key stakeholders.

Predrag Risticevic
Recently COO of ETC Clearing Canada, and Head of Trading for Infinium an advanced HFT proprietary trading firm. Predrag's technology and business expertise in clearing and trading infrastructure will drive the architecture for Borsa Crypto's electronic liquidity and custody solutions.

Marcelo Mendonça

Seasoned advertising and marketing professional with over 13 years of experience working with world-class clients from numerous industries, including Automotive, Consumer Goods, Financial, Real Estate, and Retail. As a partner at a full-service agency and also at a trade marketing company in Brazil, he managed seven-digit integrated marketing campaigns that included both online and offline channels. Marcelo has an MBA from the Rotman School of Management (University of Toronto), with a major in Brand Management and Business Design.

Alexandre Ziviani

A well rounded, young, corporate finance professional, Alex worked for the Brazilian practice of Ernst & Young auditing large to small companies in different industries and then played a key role in restructuring debt profile for one of Brazil's top10 sugar and ethanol producers. After obtaining his MBA from UoT in 2018, Alex Joined Thomson Reuter's graduate rotational program in Finance, where he currently is a Corporate Treasury Manager. Alex is driven, curious and currently is pursuing his Canadian CPA designation.

Jim Andriopoulos

Formerly at Canadian regulator IIROC, and CFO of Wells Fargo Securities Canada and CFO of several proprietary trading firms. Jim is an expert in navigating complex regulatory and financial structures, and is key to ensuring Bolsa Cripto's position as a fully regulated, compliant platform in this evolving regulatory environment.

REFERENCES

[1] For the purposes of this paper focusing on asset-tied products we disregard securities-backed instruments which are primarily an evolution of traditional capital markets models to a new digital format. Tritum's other projects will address regulated securities markets products and solutions.

[2] As of May 2019

[3] May 2019

[4] https://www.conversaafiada.com.br/economia/r-100-na-poupanca-r-192-no-cheque-especial-divida-de-r-7-milhoes

[5] https://www.bcb.gov.br/Pec/Copom/Ingl/taxaSelic-i.asp

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Enabling massive liquidity, on a domestic and global basis in the Brazilian national currency via digitization of the Real.

www.brmint.com