



WHITEPAPER 2.0:

Bitazza's Strategic Roadmap

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Introduction

Between August 2020 and August 2021, the number of active exchanges fell from its peak of 845 to 672¹. During said period, centralized exchanges, high-risk exchanges, and over-the-counter (OTC) markets all experienced declines, the former from about 120 to just below a hundred², whereas the number of decentralized exchanges (DEXs) grew substantially. This diversion in fortunes highlights that what was once a blue ocean for the centralized exchange business model has now turned red, and that sustainable growth in the space necessitates a unique value proposition. With this in mind, Bitazza³ plans to introduce a two-tier token structure combining a Bitazza utility token (BTZ) with a fully-backed stablecoin, USD Freedom (USDF), which offers benefits beyond the exchange and draws upon novel tokeneconomics and credible-collateralization to drive the growth of the Bitazza platform and ecosystem.

This whitepaper will touch upon the transformative potential of blockchain technology in general and of Bitazza's product offerings in particular, then highlight what we view as major problems plaguing many applications of the former. Specifically, we detail issues concerning stablecoins and utility tokens, including but not limited to, key shortcomings in their tokeneconomics. Following this, we discuss our two-tier token structure and crypto payment solutions, and introduce what we believe to be a novel approach to governing the long-run supply of a utility token. The paper concludes with a discussion of our planned token allocation and expansion strategy.

¹ : <https://go.chainalysis.com/rs/503-FAP-074/images/Crypto%20exchange%20competitive%20landscape%20report.pdf>
² : <https://go.chainalysis.com/rs/503-FAP-074/images/Crypto%20exchange%20competitive%20landscape%20report.pdf>
³ : Unless otherwise stated, Bitazza refers to the parent company of the Bitazza group of companies, namely Bitazza Global.

Banking the Unbanked with Blockchain

Despite the technological advancements of the past decades, lack to basic financial services remains a global issue. The World Bank's latest report showed that the percentage of banked adults globally stood at 69%, marking a steady increase from 51% in 2011 and 62% in 2014, but nonetheless a figure which leaves 31% of the global adult population without a crucial tool for economic betterment⁴.

The increased share of online banking and the emergence of digital-only banks – banks providing services exclusively through digital platforms⁵ – of the past decade are natural responses to this lack of financial access. However, the advent of blockchain technology and innovations which facilitate its adoption in financial services have afforded cryptocurrencycentric platforms such as Bitazza the opportunity to deliver even more capable solutions.

Payment

Blockchain-enabled transfers can be considerably cheaper and faster than any pre-existing payment solution, online or otherwise. According to the World's Bank most recent study of remittance prices, the global average cost of sending \$200 in 3Q21 was 6.30%⁶. Across all regions, costs for digital channels were less than for cash, but still registered as highly as 6.5% - the figure for remittance to Sub-Saharan Africa. On the other hand, an empirical study of 11.78 million transactions involving USDT between October 1st 2018 and June 30th 2021 found a mean value of \$53,733 and a mean transaction fee of 0.58%. Furthermore, while the average inter-bank transfer takes three days to settle, a Bitcoin transaction requires an average of 10 minutes⁷.

⁴ : <https://ufa.worldbank.org/en/ufa>

⁵ : <https://www.infosys.com/industries/financial-services/white-papers/Documents/next-wave-banking.pdf>

⁶ : https://remittanceprices.worldbank.org/sites/default/files/rpw_main_report_and_annex_q321.pdf

⁷ : <https://www.sciencedirect.com/science/article/pii/S2666285X21000923>

Saving

The persistently high proportion of unbanked adults corresponds to the percentage of said population without access to banks' saving products. But even amongst those able to save via traditional financial institutions, there is the question of the efficacy of such savings. In the years since the 2008-9 credit crunch, global interest rates remained historically low⁸, which combined with high inflation would result in very low real interest rates. For an extreme example, one need not look further than Zimbabwe, which in 2020 had a real interest rate of negative 79.8%⁹. As well as providing access to saving products for the unbanked, blockchain-enabled savings/staking solutions such as Bitazza Earn can capitalize on comparatively lower overheads and early-stage industry growth to provide higher rates of return than brick-and-mortar and online-only banks.

Credits

Even amongst those with access to basic banking services, credit history requirements mean access to funds for emergencies or investments is often most restricted for those in greatest need of it. The International Finance Corporation found in its most recent study that micro, small and medium enterprises in developing countries have an unmet financing gap of \$5.2 trillion/year, 46% of that coming from East Asia & the Pacific¹⁰. An example of how blockchain could be utilized to remedy the issue is Grassroots Economics, a Kenya-based initiative funded by UNICEF's Innovation Fund, which issues tokens backed by goods/services produced by community members (e.g. livestock, carpentry services) against which they could secure lines of credit. In 2020, Grassroots Economics had 58,400 users and facilitated almost half a million transactions worth \$3 million through usage of the Community Inclusion Currencies¹¹ (CIC) on their xDAI blockchain¹².

Insurance

The need for documentation and the complicated claims process can often represent prohibitively challenging obstacles for low-income individuals¹³. In addition to the online verification process digital-only insurers offer, blockchain technology affords benefit holders the possibility of oracle-linked smart contracts embedded to ensure automatic settling of claims as appropriate. It is readily evident that blockchain-enabled solutions which circumvent the restrictions of traditional banking infrastructures and offer advantages over pre-existing digital channels have the potential to be socially and economically transformative for large populations. The question remains then, as to what sets Bitazza apart from other platforms purporting to provide such solutions? The answer is two-fold, specifically, our competent approaches to tackling problems plaguing most present offering of stablecoins and utility tokens, as well as our selective deployment of said solutions to address the markets/regions most in need of them.

The Problems

Problem 1: The inherent instability of stablecoins

On the consumer/investor side, the volatile nature of cryptocurrencies has undoubtedly hampered their adoption – volatility by definition reduces risk-adjusted returns, but also even the prospect of *upwards* volatility could discourage spending and therefore limit the widespread adoption of a cryptocurrency for payment. While the invention of stablecoins proposed to solve the issue, in practice achieving stability has been demonstrated to be exceedingly difficult even amongst the largest and best capitalized stablecoins. Table 1 below summarizes findings from a recent study published in the Journal of Empirical Finance¹⁴, which examined four of the largest stablecoins to find that all endured considerable volatility. Also noteworthy is that fiat-collateralization provides for lower price volatility than crypto-collateralization, even when the latter is supported by over-collateralization – DAI's mean annualized volatility of 0.2722 is higher than the respective figures for the four remaining stablecoins. This would suggest that to achieve stability, fiat-collateralization is the way forward. Indeed, this sentiment is echoed by the Federal Reserve in its recent report on stablecoins¹⁵.

Table 1: The volatility of stablecoins

Metric / Crypto	BTC	USDT	USDC	BUSD	DAI	TUSD
Mean annualized volatility	0.5256	0.1670	0.2096	0.2256	0.2722	0.2303
Collateralization type	None	Fiat	Fiat	Fiat	Crypto	Fiat
Collateralization	0%	100%	100%	100%	170.42%	100%
Risk - free reserve	0%	39%	100%	100%	0%	100%

Source: 'On the stability of stablecoins'. Risk-free reserve data collected by author.
<https://www.sciencedirect.com/science/article/pii/S0927539821000761>

The problem with fiat-collateralization of course, is the inherent capital-inefficiency which impedes the growth of a stablecoin's market capitalization. Even if one were to opt for crypto-collateralization or an algorithmic model, substantial capital is still nonetheless required to buy the crypto assets or to power the supporting ecosystem. This was illustrated when the Luna Foundation proposed on February 8th to provide a \$450mn cash injection to Terra's Anchor Protocol to help the DeFi borrowing/lending protocol maintain its roughly 20% interest rates through 2022¹⁶.

On the other hand, algorithmic stablecoins have been largely shown to be anything but stable. The unraveling of Iron Finance's TITAN hybrid model of partial crypto-collateralization and a swap-stabilization¹⁷ in June 2021

⁸ : <https://www.sciencedirect.com/science/article/pii/S0022199618302927>

⁹ : https://data.worldbank.org/indicator/FR.INR.RINR?locations_ZF

¹⁰ : <https://www.finextra.com/blogposting/21248/game-changers-for-sme-banking>

¹¹ : https://ssir.org/articles/entry/working_toward_financial_inclusion_with_blockchain#

¹² : <https://www.frontiersin.org/articles/10.3389/fbloc.2021.739751/full>

¹³ : https://ssir.org/articles/entry/working_toward_financial_inclusion_with_blockchain#

¹⁴ : <https://www.sciencedirect.com/science/article/pii/S0927539821000761>

¹⁵ : <https://www.federalreserve.gov/econres/ifdp/files/ifdp1334.pdf>

¹⁶ : <https://beincrypto.com/luna-foundation-450m-cash-injection-boost-anchor-defi-reserves/>

¹⁷ : [http://www.wakeforestlawreview.com/2021/10/built-to-fail-the-inherent-fragility-of-algorithmic-stablecoins/through 202216](https://www.wakeforestlawreview.com/2021/10/built-to-fail-the-inherent-fragility-of-algorithmic-stablecoins/through 202216)

saw its TITAN utility token fall precipitously to effectively zero – where it remains¹⁸ – while the price of its IRON stablecoin fell 30% in a day¹⁹. More recently, the collapse of OlympusDAO's OHM cast doubt on the viability of rebase tokens²⁰.

There exists then, a need for a stablecoin solution that allows for capital efficiency and therefore facilitates ecosystem growth, but also accommodates concerns regarding price stability and economic sustainability in a manner superior to such swap-stabilization or rebase mechanisms.

Problem 2: The limited utility of exchange - issued utility tokens

If we look at the top ten centralized exchanges by market capitalization, their tokens generally have limited utility outside the respective exchange platforms. In fact, the further one moves from the core features of the exchange towards considerations for the wider ecosystem, the less one sees an exchange-issued token offering a related benefit. This can be seen from Table 2, where all tokens provide discounts on trading fees, but only five offer investment management benefits/discounts. Looking further out into the ecosystem, only two offer credit card rebates and extensive channels to spend the tokens, and only one grants control to a community/DAO-managed treasury.

Table 2: Centralized exchange tokens and their benefits²¹

Name	Symbol	Trading discount	Staking reward	Investment access	Credit card rebate	Goods/service payment	Comm. wallet control
BTZ TOKEN	BTZ	✓	✓	✓	✓	✓	✓
Binance Coin	BNB	✓	✓	✓	✓	✓	✓
Crypto.com Coin	CRO	✓	✓	✓	✓	✓	✓
FTX Token	FTT	✓	✓	✓	✓	✓	✓
LEO Token	LEO	✓	✓	✓	✓	✓	✓
KuCoin Token	KCS	✓	✓	✓	✓	✓	✓
Huobi Token	HT	✓	✓	✓	✓	✓	✓
OKB	OKB	✓	✓	✓	✓	✓	✓
GateToken	GT	✓	✓	✓	✓	✓	✓
Woo Network	WOO	✓	✓	✓	✓	✓	✓
WazirX	WRX	✓	✓	✓	✓	✓	✓

Source: Top Centralized Exchange Tokens by Market Capitalization: <https://coinmarketcap.com/view/centralized-exchange/>
Accessed 11:00 GMT+7, 6th March 2022.

It would seem then, that most exchange-issued utility tokens could stand to offer more utility beyond the exchanges that issued them.

¹⁸ : <https://coinmarketcap.com/currencies/iron-titanium-token/>

¹⁹ : <https://coinegraph.com/news/iron-finance-bank-run-stings-investors-a-lesson-for-all-stablecoins>

²⁰ : <https://ambcrypto.com/olympus-daos-ohm-down-97-97-from-ath-can-projects-12-month-action-plan-help/>

²¹ : Token benefits taken from projects' websites and whitepapers.

Our Solutions

For the aforementioned problems, we have incorporated what we think are competent solutions into our token design. Many of today's applications of blockchain technology are recent inventions, but the key obstacles faced by the industry – bank runs on stablecoins, recursive expectations complicating token valuation – are not unique to the technology. Consequently, tackling these issues do not necessarily require new solutions, but perhaps simply novel applications of pre-existing solutions in a new setting. Indeed, Bitazza's approach to token economics relies not on groundbreaking cryptographic innovations, but rather, on insights from empirically tested microeconomics and game theory, as well as recent theoretical advancements in auction theory.

Collateralization Evolution

In its first incarnation, Freedomverse's stablecoin will be 100% fiat-collateralized, with issuance in lockstep with fiat and/or fiat-collateralized stablecoin deposits made to Freedomverse. A customer may deposit his BUSD as trading capital on our exchange platform, for example. Alternatively, a customer signing up to use our Freedom Wallet may choose to top up his balance with a fiat deposit. Card-free convenience, USDF-specific discounts and perks from our partners, would help incentivize customers to opt for a USDF mobile payment solution over conventional cashless ones.

Such deposits would be placed in an escrow account, upon which Freedomverse would create a nominally equivalent amount of USDF for the customer to use in our ecosystem. In accepting fiat-collateralized stablecoins we would opt only for those whose collaterals are demonstrated via regular audits to be fiat-equivalent risk-free assets. For example, we would likely eschew Tether (USDT), for which only approximately 39% of its reserves as of February 21st 2022 constituted what would conventionally be categorized as risk-free assets (cash, bank deposits and T-Bills)²².

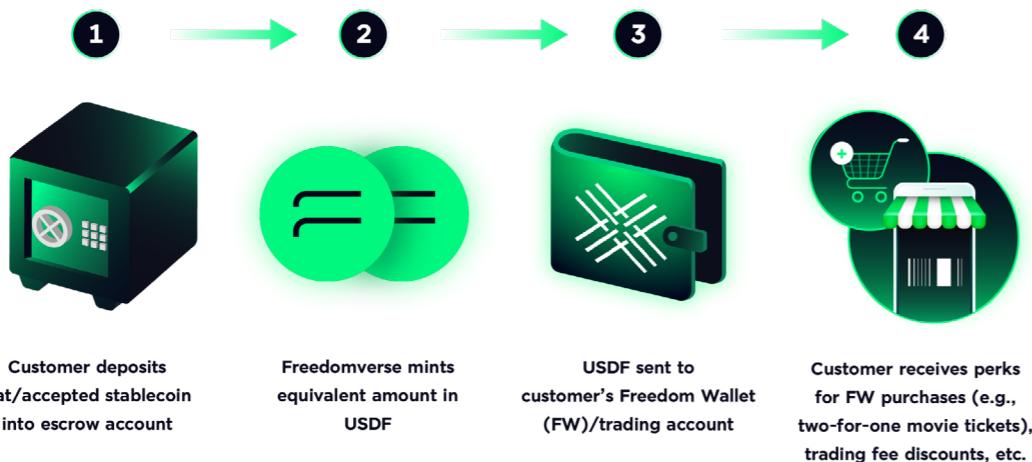
As the number of partners and customers grows, more USDF will be issued, each unit effectively backed 100% by a United States Dollar. Concurrently, our utility token BTZ will be issued (i.e., sold or auctioned off) to Freedom Wallet partners and open market investors/traders. To ensure utmost transparency and to establish USDF's credibility in the marketplace, its fiat reserves will be audited monthly by a Big Four accountancy firm from the start of issuance. This would also minimize the prospects of regulatory censure down the line²³.

²² : <https://tether.to/en/transparency/#reports>

At the same time, roughly 44% (84.25%*52.51%) of USDT's reserves were in the form of relatively illiquid commercial paper.

²³ : <https://fortune.com/2021/10/15/tether-crypto-stablecoin-fined-reserves/>

Diagram 1: USDF issuance through Freedomverse



As BTZ's market capitalization grows, we will use it to provide an overweight partial-collateralization for USDF alongside more established non-stablecoin cryptocurrencies such as ETH. By way of example, a dollar worth of USDF may be capitalized by an 80-cent fiat deposit and \$2 worth of crypto assets. A central tenet of this second (and third) stage of life of USDF is that no more than 20% of the market cap of issued USDF would be supported by crypto collateralization. We believe this model combats the failures of past experiments to emulate the fractional reserve banking system through 1) instituting over-collateralization to provide a safety net in times of excess volatility and 2) delaying the introduction of a reputation reliant structure until after the Bitazza ecosystem has proven its merit. In practice it is often the case that banks with small assets are subject to less stringent reserve requirements. For example, prior to March 26th 2020, US depository institutions with assets²⁴ less than \$32.4mn did not have to hold reserves at all, while those with more than \$640.6mn in assets were required to have 10%²⁵. While this makes sense from the point of view of macroeconomic stability, it exposes customers of those smallest institutions to the greatest risk. At Freedomverse we aim to do the exact opposite – to ask customers and the market at large to have confidence in our business and its liquidity management only after the former has had a demonstrably strong track record.

The third and final incarnation of USDF will utilize a delayed swap-stabilization mechanism with a leverage cap whereby through a Constant Product Market Module (CPMM) enabled vesting option, BTZ will be used as a counterweight to USDF.

A swap-stabilization mechanism is utilized by Terra, which uses its utility token LUNA as a counterweight to its myriad of stablecoins such as the UST, and as such we would be remiss to ignore the recent woes experienced by Terra's LUNA and its stablecoins.

²⁴ : Net transaction account balance. <https://www.federalreserve.gov/monetarypolicy/reservereq.htm>

²⁵ : <https://www.federalreserve.gov/monetarypolicy/reservereq.htm>

<https://www.investopedia.com/terms/f/fractionalreservenbanking.asp#:~:text=Fractional%20reserve%20banking%20is%20a,by%20freeing%20capital%20for%20lending.>

On 7th May 2022, the TerraUSD (UST) moved noticeably below its \$1 peg for the first time in over a year, dropping to a low of \$0.985²⁶. While initial efforts to prop up the value was met with some success, UST price soon dropped markedly, falling 25.4% from \$0.9954 to \$0.7934 over May 9th 2022. This was followed by an even more precipitous deterioration in price, with UST falling steadily through the week to trade at \$0.1767 as of the end of May 15th 2022 UTC²⁷. At the same time, LUNA suffered an even more dramatic drop in price, falling 50.1% from \$64.13 to \$32.00 on May 9th 2022, before falling yet further. As of the end of May 15th 2022 UTC, LUNA traded at \$0.0002²⁸.

The problem with LUNA/UST

Terra's market module enables atomic swaps²⁹ between different Terra stablecoins and between LUNA and UST through an algorithmic market maker (AMM)³⁰ and permits users to always trade \$1 worth of LUNA for 1 UST and vice versa, as well as for them to make the analogous trades across all Terra stablecoins³¹. This enabled arbitrage opportunities that help maintain the peg of each stablecoin at around \$1. For example, if UST falls to \$0.99, users could buy it and swap for \$1 worth of LUNA, burning 1 UST and minting \$1 worth of LUNA to capture \$0.01 worth of profit. The increased LUNA supply decreases LUNA price while the decrease in UST supply pushes its price up towards the \$1 peg³². Theoretically, the arbitrage continues until UST reaches a price of \$1.

In the example above, for users to capitalize on said opportunity afforded by the market module to burn UST to mint LUNA, users need to have faith in a non-zero short-term value of LUNA – an expected collapse in LUNA price in the time it takes for the swap to be executed would stay the hands of would-be arbitrageurs. Moreover, persistent downward pressure on UST's price would invariably lead to a deluge of LUNA entering the market via executed swaps, precipitating a fall in the latter's price.

One could argue that LUNA's value is supported by its role in validating transactions on the Terra blockchain and the ecosystem Terra has built around its platform. Terra initially benefited from the adoption of its blockchain by its partner, leading Asian payment technology platform Chai, founded by Terra's cofounder Danial Shin³³ and capitalized on this to expand its blockchain service to an ever-growing larger ecosystem. As Terra processes transactions on behalf of Chai³⁴ and other merchants/companies, this ecosystem would provide real economy linkages to the rewards received by validators and their delegators for staking LUNA tokens³⁵.

However, such as argument, compelling as it may be, belies the empirical reality leading up to the collapse of the LUNA-UST mechanism. Firstly, the main driver of adoption for UST was not as a means of payment for goods/services via Chai's mobile payment app (CHAI). Before the unraveling of its peg on 7th May 2022, 75% of UST's entire circulating supply – \$14 billion from \$18 billion – was deposited on Terra's Anchor protocol, where UST deposits earned yields of up to 20%³⁶. It could be argued then, that the driver of the symbiotic relationship was not LUNA and the real economy revenues accrued to it, but rather, the exceptionally high yield accessible to UST

²⁶ : An atomic swap is the exchange of cryptocurrencies from different blockchains, conducted without a third party's involvement. <https://www.investopedia.com/terms/a/atomic-swaps.asp>

²⁷ : <https://docs.terra.money/docs/develop/module-specifications/spec-market.html>

²⁸ : <https://docs.terra.money/docs/learn/protocol.html>

²⁹ : <https://docs.terra.money/docs/learn/protocol.html>

³⁰ : <https://messari.io/asset/terra/profile>

³¹ : <https://medium.com/terra-money/in-numbers-four-months-of-chai-a8820a1dc2f5>

³² : <https://docs.terra.money/docs/learn/protocol.html#validators>

³³ : Note that real here merely refers to the creation of good/services with inherent economic value, which includes accommodation and clothing, but does not preclude digital commodities such as play-to-earn NFTs.

³⁴ : <https://xord.com/research/curve-stableswap-a-comprehensive-mathematical-guide/>

³⁵ : <https://www.imf.org/external/pubs/ft/fandd/1997/03/pdf/ulhaque2.pdf>; <https://www.reuters.com/article/us-global-ratingssovereign-s-p-exclu-siv-idUSKBN27126>

³⁶ : <https://www.coindesk.com/layer2/2022/05/11/the-luna-and-ust-crash-explained-in-5-charts/>

holders, which was then used to prop up the value of LUNA through Terra's market module. The problem with this of course, is that the value of LUNA becomes contingent upon the continuation of the exceptionally high yield afforded to UST holders. Moreover, this yield is paid out in UST³⁷, which in turns, has its price secured by LUNA. In the long run, this mechanism could only be sustained through real growth in the Terra ecosystem – e.g., through Anchor distributing loans to projects that generated real economic value – and some would argue that the bearish turn in the cryptocurrency market was only a catalyst which hastened the inevitable collapse of a financial house of cards.

The BTZ/USDF distinction

The BTZ/USDF swap-stabilization model would employ a Constant Product Market Maker (CPMM), which unlike the linear invariant or Constant Sum Market Maker (CSMM), allows the exchange rate between two tokens to adjust automatically so swaps get increasingly expensive as one moves further from the initial equilibrium/peg, mitigating the risk of either token's pool/supply being drained entirely³⁸. Diagram 2 summarizes this collateralization evolution for USDF.

The *gradual evolution* of USDF will allow for the build-up of goodwill amongst market participants who would come to accept USDF as a prudently managed stablecoin before the transition from fiat to crypto-collateralization and then to the most sentiment-dependent model of algorithmic stabilization. From its launch on September 12th 2020³⁹, UST began life as a purely algorithmic stablecoin, and as such, its first true test came a mere 20 months after a period of rapid growth and a limited track record of its issuer successfully defending its peg.

For USDF, deciding when to transition between stages of collateralization would be subject to the management's discretion, in turn guided by key parameters reaching certain thresholds. By way of example, special attention may be paid to the ratio of the average 24-hour trading volume of USDF to total platform revenue, analogous to how major rating agencies utilize a country's external debt to GDP ratio as a key metric for determining its creditworthiness⁴⁰. This should ensure that by the time USDF takes on its most vulnerable incarnation, Freedomverse has both the financial and reputational capital to withstand scrutiny from the market.

A second fundamental difference between USDF and UST, and indeed, all other prominent algorithmic stablecoin projects is the introduction of a leverage cap. The collapse of UST has been called a bank run⁴¹, but even among US banks and financial institutions, those deemed large enough to represent systemic risk had to maintain a reserve requirement of 10%⁴², which entailed a maximum leverage ratio of 9x (900%). That an issuer with a limited track record would ask the market to accommodate it taking on infinite leverage seems nothing short of lunacy. With this in mind, Freedomverse will cap the leverage of USDF to a modest 25%, to ensure that even in this potential third incarnation, the collective value of our fiat collateral supporting USDF is no less than 80% of the nominal value of USDF issued. The cap would provide USDF holders with a sense of security during times of extreme volatility, but also, afford Freedomverse an avenue to raise the necessary capital through pre-arranged credit lines.

³⁷ : <https://docs.anchorprotocol.com/protocol/overview>

³⁸ : <https://xord.com/research/curve-stableswap-a-comprehensive-mathematical-guide/>

³⁹ : <https://medium.com/terra-money/announcing-terrausd-ust-the-interchain-stablecoin-53eab0f8f0ac>

⁴⁰ : <https://www.imf.org/external/pubs/ft/fandd/1997/03/pdf/ulhaque2.pdf>; <https://www.reuters.com/article/us-global-ratings-sovereign-s-p-exclusiv-idUSKBN27126V>

⁴¹ : <https://www.wsj.com/articles/crash-of-terrausd-shakes-crypto-there-was-a-run-on-the-bank-11652371839>

⁴² : <https://www.federalreserve.gov/monetarypolicy/reservereg.htm>

Diagram 2: Collateralization Evolution of USDF



1. 100% Fiat-collateralization

2. >100% Crypto-collateralization

3. Partial swap-stabilization with USDF

Growth in Bitazza ecosystem and non-exchange revenues

Thirdly, and perhaps most important of all, BTZ and, in turn, USDF, would be supported by credible, exogenous real economy revenues. Holders of LUNA receive a share of the transaction revenue on the Terra blockchain, which includes transactions conducted via the CHAI mobile payment app which runs on the blockchain. However, as of April 7th 2022, only a total of KRW2.54 trillion (\$1.98bn) in transaction value and KRW8.2 billion (\$6.38mn) in transaction fees had been cumulatively generated by CHAI on the Terra blockchain⁴³. By way of comparison, LUNA's and UST's market capitalizations as of April 7th 2022 stood at \$36.43bn⁴⁴ and \$16.73bn⁴⁵, respectively. That LUNA was trading at 5,710x cumulative earnings from CHAI tells us that LUNA's valuation represented a considerable departure from any demonstrable economic value the Terra blockchain.

Before allowing BTZ to serve as a counterweight to USDF, as well as establishing a credible record of prudent peg management and imposing a leverage cap, Freedomverse would ensure that the real world revenue generated by its ecosystem implied a sensible price-to-earnings (P/E) multiple of the market price of BTZ. That is the aforementioned credibility component. Exogeneity of real world revenue stems from the fact that BTZ is not used to power the blockchain on which transactions within the Bitazza ecosystem are conducted. What may be misconstrued as a lack of technological sophistication is in fact, a mark of structural robustness. Terra's Proof-of-Stake system requires LUNA to be staked for transactions to be processed⁴⁶. As such, if LUNA's drop in price causes would-be stakers to sell their tokens, this would inhibit the blockchain's ability to effectively process transactions, in turn undermining fundamental support for LUNA's value. The BTZ token is an ERC-20 token issued on Ethereum, while transactions related to the Freedom Card and other projects from which BTZ holders would receive shares of revenues are processed by blockchains which do not rely on BTZ to function. As such, the BTZ utility token does not need to maintain a certain price level to retain its utility. More generally, exogenous support for BTZ's value lends it greater resilience to market downturns.

The fourth important distinction between ours and pre-existing Partial swap-stabilization modules including Terra's is our incorporation of the delayed swap mechanism. Simply put, while in its third phase, USDF would be swappable with one dollar worth of BTZ, whereby the BTZ would be locked up to vest according to a pre-determined schedule. Should USDF move away from its peg, this compulsory vesting of BTZ received through the swap mechanism ensures that as the circulating supply of USDF decreases and our reserves remain unchanged, the short-term reserve ratio for USDF improves. Moreover, delayed vesting ensures BTZ does not fall victim to dumping by arbitrageurs and that Freedomverse would have ample time to raise the capital necessary to bolster long-term reserves for USDF. The guiding principle behind this mechanism is not a new invention

⁴³ : <https://app.flipsidecrypto.com/dashboard/chai-payments-dashboard-Zx5gGI>

⁴⁴ : <https://coinmarketcap.com/currencies/terra-luna/historical-data/>

⁴⁵ : <https://coinmarketcap.com/currencies/terrausd/historical-data/>

⁴⁶ : <https://docs.terra.money/docs/learn/protocol.html#consensus>

in the field of tokenomics, rather, it takes inspiration from esteemed economists Diamond and Dybvig's seminal paper on bank runs⁴⁷, published in the June 1983 edition of The Journal of Political Economy. In it, the two observe that mismatched liquidity – when the bank's assets have long-term maturities while their liabilities are due in the short-run – coupled with the self-fulfilling nature of expectations, make bank runs a possible (though not inevitable) outcome in any period⁴⁸. Through introducing vesting for BTZ received through the swap and securing emergency credit facilities beforehand, Freedomverse can minimize the risk of runs of USDF and better insulate BTZ from speculative attacks.

Our long-term aspiration for BTZ and USDF is that through the delayed Partial swap-stabilization mechanism, real economic value would accrue to holders of BTZ, with BTZ's fundamental value providing sustainable support for USDF's dollar parity.

Utility Beyond the Platform

Bitazza's utility token will have the one of the most comprehensive set of utilities amongst exchange tokens. Trading discounts are already available to holders, and with the launch of the Freedom Card and Freedom Wallet programs later this year, holders will also qualify for credit card rebates through staking, and be able to spend their BTZ and USDF at a growing number of retailers. Furthermore, Q42022 should see the launch of our asset management venture, as well as the establishment of a Decentralized Autonomous Organization (DAO) for the longterm partial governance of the Bitazza ecosystem. Through staking BTZ, one would qualify for discounted asset management fees and be eligible to vote on key parameters and proposals, including the allocation of the community wallet/Treasury. Lastly, through Bitazza Earn those who stake – be it via Freedom Card subscriptions, for governance, or simply to earn market-competitive yields – will earn interest payments paid out in BTZ.

Ensuring BTZ has a myriad of utility beyond our exchange platform, as well as rewarding those who believe in the long-term prospects of our business, are how we will develop a robust and more sustainable value thesis for our utility token, which would in turn, allow BTZ to better support USDF and other potential stablecoins Freedomverse may issue.

Enabling crypto payments solutions would boost firms' business outlooks

Price volatility, regulatory concerns and technological barriers make it difficult for a business, especially one without sufficiently large capital and customer base to capitalize on the economy of scale of its investment, to implement a cryptocurrency payment solution. In its survey of 584 small business owners and top-level executives published September 2021, software as a service (SaaS) company Skynova found that 34% cited limited knowledge as the reason for not accepting cryptocurrency payment⁴⁹. The most cited reason, at 50%, was market volatility⁵⁰.

However, failure to do so is likely costing companies access to a lucrative market segment. A 2020 study commissioned by BitPay of merchants that started accepting cryptocurrencies found that 40% of customers paying with cryptocurrencies were new customers, and that the average

purchase amount through cryptocurrencies was twice that of credit card purchases⁵¹. Advisory firms including Deloitte have echoed this sentiment, that facilitating cryptocurrencies payments would allow companies to access new demographics⁵².

Of course, many businesses already recognize the advantages crypto payment channels could offer. In a December 2021 report by payment company Mercuryo of 501 UK-based senior financial decision-makers, 57% of respondents expressed belief that accepting cryptocurrency payments would afford their companies a competitive advantage⁵³. The high figure is hardly surprising, given that 58% of respondents also received requests for such a payment channel from customers and partners⁵⁴.

Visa conducted an extensive survey with 6,430 respondents across developed and developing economies over 3Q2021 and found that engagement with cryptocurrencies varied inversely with age – for example, 51% of owners of cryptocurrencies are under 35, whereas 78% of those who have not engaged with it at all (with no ownership, research into, or interest about crypto) are over 35⁵⁵. Such a finding is consistent with the notion that engagement with cryptocurrencies will only increase in the future.

The findings also highlight a general disparity between interest in and adoption of crypto-linked cards. While 83% and 77% of active and passive owners of cryptocurrencies are interested in crypto-linked cards, only one in ten has one, while the figure drops to 9% for owners based in emerging markets⁵⁶. As well as the most frequently cited reason of supporting the broader cryptocurrencies movement, payment optionality and being able to monetize one's crypto assets likely contribute to such high levels of interest⁵⁷.

This potent combination of businesses/retailers' accommodating attitude and growing consumer interest suggests that the crypto-linked credit card market is set for high growth, particularly in emerging markets, provided a readily accessible solution is available. Freedom Card purports to be such a solution. Similarly, the Freedom Wallet white label solution, which also serves as a signaling mechanism for BTZ, allows businesses to circumvent the complications of setting up an in-house cryptocurrency payment solution, all the whilst strengthening brand awareness for them.

⁴⁷ : https://www.macroeconomics.tu-berlin.de/fileadmin/fg124/financial_crises/literature/Diamond_Dybvig_Bank_Runs_Deposit_Insurance_and_Liquidity.pdf

⁴⁸ : https://www.macroeconomics.tu-berlin.de/fileadmin/fg124/financial_crises/literature/Diamond_Dybvig_Bank_Runs_Deposit_Insurance_and_Liquidity.pdf

⁴⁹ : <https://www.skynova.com/blog/accepting-bitcoin>

⁵⁰ : <https://www.skynova.com/blog/accepting-bitcoin>

⁵¹ : <https://bitpay.com/resources/forrester-report-says-bitpay-adds-new-sales-and-2x-aov/>

⁵² : <https://www2.deloitte.com/us/en/pages/audit/articles/corporates-using-crypto.html>

⁵³ : <https://cointelegraph.com/news/retailers-to-drive-crypto-payments-adoption-survey>; https://drive.google.com/file/d/149hT923mH1jl_Tv-ET-AdOKrJzItnZJ4/view

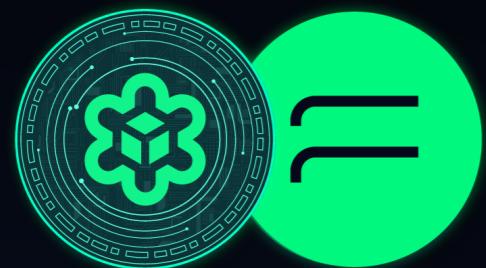
⁵⁴ : https://drive.google.com/file/d/149hT923mH1jl_Tv-ET-AdOKrJzItnZJ4/view

⁵⁵ : <https://usa.visa.com/content/dam/VCOM/regional/na/us/Solutions/documents/visa-crypto-consumer-perceptions-white-paper.pdf>

⁵⁶ : <https://usa.visa.com/content/dam/VCOM/regional/na/us/Solutions/documents/visa-crypto-consumer-perceptions-white-paper.pdf>

⁵⁷ : <https://usa.visa.com/content/dam/VCOM/regional/na/us/Solutions/documents/visa-crypto-consumer-perceptions-white-paper.pdf>

Bitazza Product Breakdown



The **Bitazza utility token (BTZ)** is an ERC-20 token, while the **Freedomverse's stablecoin (USDF)** will be issued as a 100% fiat-backed cryptocurrency with a 1:1 peg with the United States dollar on Bitazza's blockchain solution – a decentralized Ethereum Virtual Machine (EVM)-compatible blockchain with a delegated Proof-of-Stake (dPoS) consensus mechanism. While we anticipate the incorporation of PoS into Ethereum's mainnet (aka The Merge for Ethereum 2.0) sometime in 2022⁵⁸ to improve the network's scaling-efficiency, our vision for both the BTZ and USDF tokens is that they would both eventually chain-agnostic, be it through a cross-chain or a multichain solution.

FREEDOM CARD



Freedom Card is a prepaid card which can be topped up via the Bitazza Wallet. Qualifying for a card requires staking a minimum amount of BTZ. Membership is tiered, with larger stakes corresponding to higher membership levels and improved rebate rates and benefit pools. Through our partnership with Visa, Freedom Card holders have access to the largest card payment network in the world, with Visa-issued cards accepted by 44 million merchants and more than 200 countries/territories worldwide⁵⁹.

Compared to the two leading players in the crypto debit/prepaid card space, Binance and Crypto.com, Bitazza's partnership with Visa ensures that the Bitazza Card will match the reach of Crypto.com Visa Card and exceed that of Binance Card which only covers Europe, excluding the UK⁶⁰. Moreover, the Bitazza Visa card will offer up to 10% cashback paid out in BTZ tokens, higher than the 8% maximum rate offered by Binance and Crypto.com⁶¹, or indeed the cashback rate offered on any other widely recognized crypto-linked payment cards⁶². Under the present BTZ supply management scheme and broadly conservative assumptions (e.g., BTZ price of \$0.0222/token), our rebate scheme would be comfortably sustainable until at least 2024.

⁵⁸ : <https://ethereum.org/en/upgrades/merge/>

⁵⁹ : <https://www.mybanktracker.com/credit-cards/faq/which-credit-cards-most-accepted-worldwide-272908>

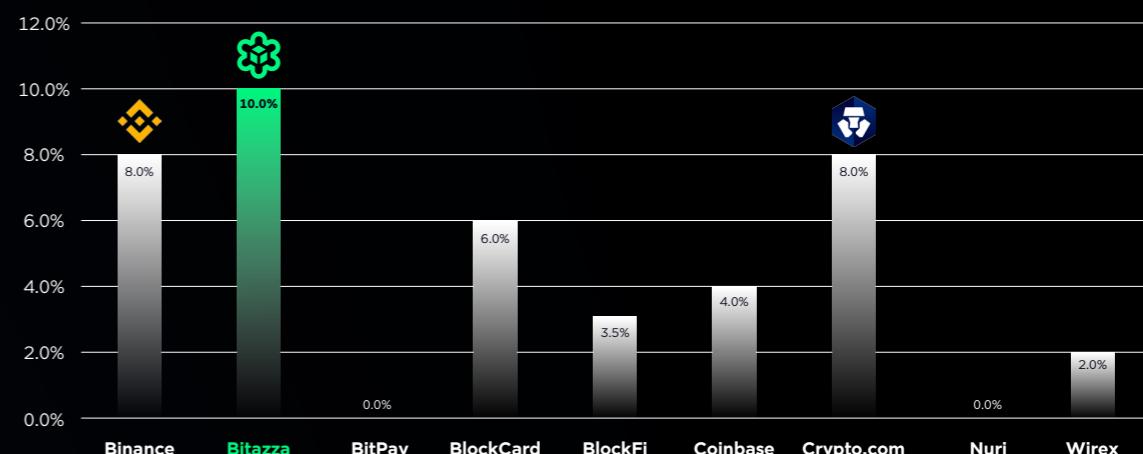
⁶⁰ : <https://www.investopedia.com/best-bitcoin-debit-cards-5114761>

⁶¹ : <https://www.binance.com/en/support/faq/c93fe535bcf4431aa32623ae0a49d4f2>

<https://help.crypto.com/en/articles/2742447-crypto-com-visa-card-rewards-benefits>

⁶² : <https://www.investopedia.com/best-bitcoin-debit-cards-5114761>

Chart 1: Comparing Bitazza Freedom Card's maximum rebate rate vs. competitors



Source: Top Centralized Exchange Tokens by Market Capitalization: <https://coinmarketcap.com/view/centralized-exchange/>

Accessed 11:00 GMT+7, 6th March 2022.

FREEDOM WALLET

Freedom Wallet is our white-label iOS and Android-compatible community-based, blockchain-enabled mobile payments solution, for which transactions would be fuelled by BTZ. Specifically, merchants and retailers would be required pay an initiation fee to set up the customizable solution for their customers and a monthly service fee thereafter, with both fees to be paid in BTZ. While Freedom Card will be available internationally to all customers of ⚡, Freedom Wallet requires solutions tailored to each retailer and consequently, its initial launch will focus exclusively on Thailand, where Bitazza has cultivated close working relationships with blue chip corporates and their retail arms. This would also allow us to capitalize on the local popularity of mobile payment – a 2021 survey by payments company Rapyd found that the most popular form of payment in Thailand was TrueMoney, the preferred mean of payment for 16.8% of those surveyed⁶³.

The blockchain on which Freedom Wallet is built upon allows for optional fee abstraction – a transaction could have its network transaction fee covered by a third party – allowing retailers to absorb costs for and boost the competitiveness of a newly launched crypto payment channel, for example.

Moreover, as Freedom Wallet will utilize smart contracts on the blockchain, it would afford users functionalities more traditional mobile wallet solutions cannot, such as payment automation subject to oracle data or social recovery of access.

Freedom Wallet could also be deployed with specific socio-economic objectives in mind, for example, to enable the tokenization of farmers' expected total crop yields, in a manner similar to Grassroots Economics's CIC, whereby a closed-loop economy would be established to prevent speculative trading and risk-contagion.

Lastly, we have our Asset Management initiative, planned as an offshore associate company, along with a separate custodian firm.

⁶³ : <https://www.rapyd.net/blog/the-most-popular-thailand-payment-methods/>

About the BTZ Token

Looking beyond token supply models

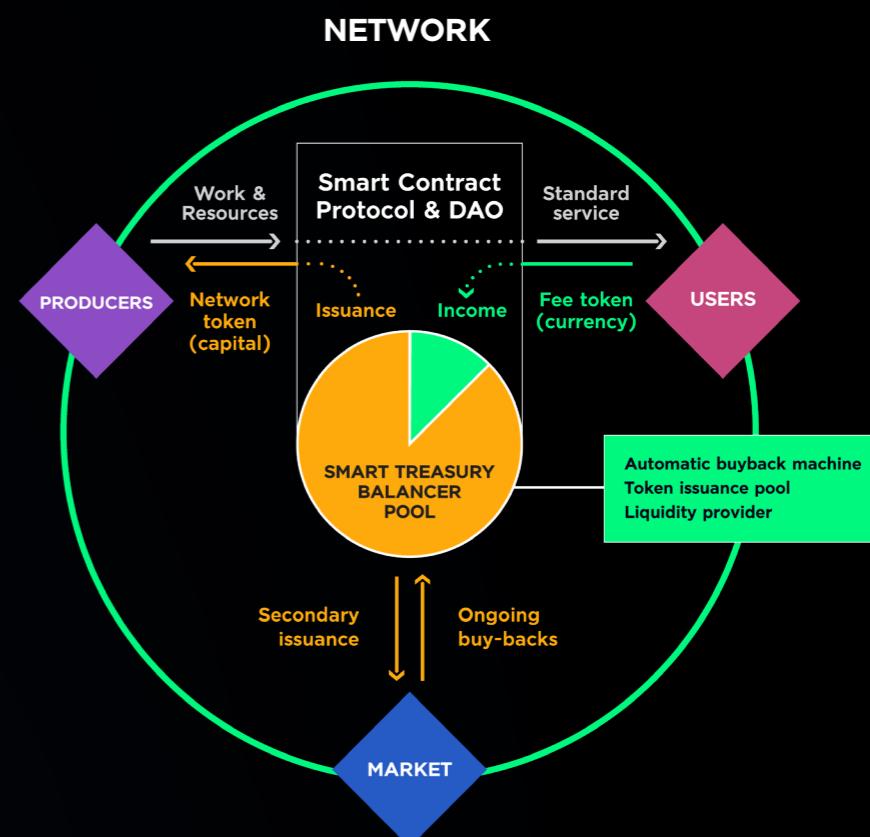
A common theme amongst the most prominent exchange tokens is their usage of the buy-back-and-burn mechanism. Analogous to stock buybacks, burning a token reduces its supply, which theoretically increase its value, all else being equal. In the realities of the equities and cryptocurrency markets however, the opposite often happens⁶⁴.

Part of the problem may be the signal sent by such a burn – that management has few other tangible strategies for creating value for the company/platform. This issue is discussed at length by Placeholder VC's managing partner and influential crypto-economy thinker Joel Monegro in his seminal article. Monegro makes the salient point that while assets which serve purely as currencies, i.e., as a medium of exchange (USD, USDT), would see its value rise as supply falls, for assets that represent *deployable capital* (e.g., equity shares in a company, MKR), burning them could be value-destroying⁶⁵. This is because for such assets, reducing supply boosts fundamental value/asset through improving participation ratios for outstanding stakeholders, not simply because of the increased scarcity as is the case with currencies. As “burning doesn’t create new value, (but) only redistributes current value among a smaller group of people”⁶⁶, if the burning process also results in slower platform growth due to reduced deployment of said capital asset, the overall value of the platform would have been reduced.

Empirically, whenever the price of a token does not immediately adjust upwards by an equivalent absolute rate as the burn, the burn decreases the market capitalization of the network.

The solution proposed by Monegro is what he dubs the Buyback and Make model in which a platform/network can have a circular token economy whereby income received by the network is automatically used to buy the network’s utility tokens and redistribute them to producers who work for the network (e.g., miners)⁶⁷. The process is illustrated in Diagram 3. In such a model, the tokens are not burnt, but redeployed to generate new value for the network.

Diagram 3: Buyback and Make



*Image from Joel Monegro Source: 'Stop Burning Tokens - Buyback and Make Instead'
<https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>

While Buyback and Make provides an elegant solution to combine the benefits of token supply management and capital deployment, we believe it leaves untouched two pertinent points of consideration. The first is one of practicality and specificity: the example assumes the network generates income in ETH, but leaves open the question of *how* a network would generate this income.

A broader, more philosophical point of consideration is the question of asset price determination – if we want to not only grow the Bitazza platform and ecosystem, but also ensure BTZ’s price reflects such growth, we cannot ignore the question of *what determines the price of a digital token?* On this subject, we believe the most valuable insight on the subject is offered by the titan of macroeconomics, John Maynard Keynes. In his seminal work, *The General Theory of Employment, Interest and Money*, Keynes likens the stock market to a beauty contest for which entrants are rewarded for picking the most attractive/popular faces per the overall voting⁶⁸. The optimal strategy then, may be not to pick the contestant/stock which is the prettiest or which represents the best value proposition in terms of its underlying fundamentals (the best candidate), but rather, that which one expects others to think is the best. Given this, there would then be cause to consider what others believe one’s beliefs about *their beliefs* to be, and so on⁶⁹.

Of course, in practice expectations and fundamentals both contribute to a security’s value, but there is much truth to Keynes’s argument that recursive expectations move prices, all the more so for cryptocurrency markets where a widely accepted approach to valuation has yet to emerge. With this in mind, Bitazza proposes the ‘Buyback’/Redistribute and Signal model.

⁶⁴ : <https://www.investopedia.com/tech/cryptocurrency-burning-can-it-manageinflation/#:-text=%22Burning%22%20a%20cryptocurrency%20refers%20to,decreases%20the%20number%20in%20circulation>

⁶⁵ : <https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>

⁶⁶ : <https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>

⁶⁷ : <https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>; <https://www.kraken.com/learn/what-is-balancer-bal>

⁶⁸ : https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf for electronic copy of Keynes’s book.

⁶⁹ : https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf (page 77-78).

The Redistribute and Signal Model

The Redistribute and Signal model takes BTZ utility tokens received as payment for Freedom Wallet subscriptions and *redistributes* them to those who would both create value for the network and credibly *signal* their confidence in it. As the exchange platform and related ecosystem grow, we would utilize a portion of trading commission and transaction revenues to purchase BTZ for the same purpose. Thus, the model is one of redistribution and signaling which would eventually evolve to encompass a buyback element.

Credible Signaling

In Game Theory, a signal is credible if it can be correctly interpreted by observers to accurately convey the beliefs/preferences of a player in a dynamic game with incomplete information⁷⁰ (e.g. financial markets where one trader looks for clues regarding market direction and sentiments from past trades). Costless signals do not allow for observers to correctly identify player type and such ‘cheap talk’ do not facilitate separating equilibria that allow players to capitalize on their strengths/preferences to achieve type-specific optimal outcomes⁷¹.

For BTZ, two credible channels will be utilized, one for business partners and the other for investors/traders of the token. Firstly, from the BTZ tokens received, a portion will be earmarked for selling back to Freedom Wallet partners at discount. Due to the many considerations at play – from metrics such as Monthly Active User number for each retailer’s white-label wallet to more subjective questions regarding ecosystem contribution – rather than a straightforward auction, discounted sales would be offered at the discretion of the management and eventually, by voting through the DAO.

The tokens would be governed by legal and smart contracts to only be used for future Freedom Wallet subscriptions, thus such purchases would constitute costly signaling that would be economically justifiable only for players/companies with long-term confidence in our ecosystem and expectations of positive future earnings from it⁷².

Secondly, we will run a series of auctions amongst BTZ holders whereby each entrant submits a bid in terms of the amount of BTZ he is willing to stake, the winner of auction receiving the BTZ which, along with the bidder’s winning bid, must be staked for a predetermined length of time. Submission of bids would be done via smart contract to prevent renegeing and to ensure the bidding/signaling is costlier for those who do not believe in the longevity of the token and platform. Over time, the length of time of the staking period may be decided through the DAO.

There is considerable empirical support that signaling works in practice. A 2018 study of the mobile phone market in China examined three different costly signaling programs by retailers on the Chinese online marketplace Taobao (e.g. 30-day Repair Warranty) vs. ‘cheap talk’ (e.g. using keywords such as ‘genuine product’ in the product description) and found each of former programs had statistically significant effects on revenue and sales, whereas the latter did not. Moreover, costlier strategies had larger effects on revenue and sales⁷³.

Furthermore, evidence can be found in recent academic literature that increasing players’ ability to accurately discern the beliefs, emotions, and intentions of others (Theory of Mind/ToM ability) in sequential Prisoners’ Dilemma games results in higher rates of cooperation and improved likelihood of reaching the optimal outcomes⁷⁴.

Combining such empirical evidence with the theoretical exposition provided in the Appendix lead us to be confident that our Redistribute and Signal model would provide an effective framework for regulating the long-term token economics for BTZ.

Candle Auction

Bitazza will enact a candle auction via smart contract for the redistribution of BTZ. Recent research at the Web3 Foundation showed that the format mitigates two key issues inherent in auctions carried out on the blockchain, namely that of front-running and the information dissemination via smart contracts⁷⁵.

Front-running opportunities naturally arise on blockchains as upcoming transactions are visible to network participants before their inclusion in new blocks. In the context of a first-price auction, a tech-savvy bidder can see and react to another’s bid before it takes effect, to outbid the latter bidder as he pleases⁷⁶.

While technical solutions to front-running exist, there have been shown to be ineffective when smart contracts – effectively public codes – are used. More generally, the use of smart contracts to place bids can often leave the bidder in a disadvantageous position. For example, in second-price auctions⁷⁷, an auctioneer could exploit public knowledge of a smart contract’s valuation and place a shill bid just below said valuation, essentially robbing the winning bidder of any net utility from winning the item⁷⁸.

⁷⁰ : http://web.stanford.edu/~rjohari/teaching/notes/246_lecture16_2007.pdf

⁷¹ : https://ocw.mit.edu/courses/sloan-school-of-management/15-025-game-theory-for-strategic-advantage-spring2015/lecture-notes/MIT15_025S15_Lec_19.pdf

⁷² : The author uses ‘token’ or tier-one token to refer to the BTZ utility token, ‘platform’ to refer to the Bitazza exchange, its related AMM for stablecoin parity-maintenance, ‘ecosystem’ and ‘network’ interchangeably to mean Bitazza, its platform and tokens, as well as the companies Bitazza partners with.

⁷³ : https://s3.wp.wsu.edu/uploads/sites/308/2018/05/TaobaoPaper_2018.pdf

⁷⁴ : https://economics.yale.edu/sites/default/files/mcbride_tom-coop-2016-07-14.pdf This is not the case for simultaneous PD games, however.

⁷⁵ : <https://polkadot.network/blog/research-update-the-case-for-candle-auctions/>

⁷⁶ : <https://polkadot.network/blog/research-update-the-case-for-candle-auctions/>

⁷⁷ : An auction format in which the bidder with the highest bid wins and pays the second highest bid.

⁷⁸ : <https://polkadot.network/blog/research-update-the-case-for-candle-auctions/>

Both issues could discourage participation in the auction, reducing auction revenue – and in BTZ's signaling model, produce a weaker signal than would otherwise be the case.

These issues are mitigated by employing a stylized candle auction in which there are several rounds of auction, each one ending at a random time, and with a round randomly retrospectively selected as the winning round. In such a setting, front-running becomes less of an issue because a bidder can submit incremental bids to test the front-runner's valuation – the latter being compelled to bid lest he loses out from the auction decisively ending before he bids – thus increasing the chance for the first bidder to secure his prize.

This format also discourages shill bidding, not least because such a bid may inadvertently become the winning bid. Häfner and Stewart underline the superiority of candle auctions by mathematically demonstrating that introducing random ending times – a feature inherent in candle auctions – leads to a higher winning bid (i.e. stronger signal) than a fixed one.

Diagram 4: Redistribute and Signal



Roles in Bitazza's Token Economy

Bitazza Stakers

The consensus mechanism for Ethereum 1.0 means that BTZ runs on Proof-of-Work (PoW), thus precluding conventional staking mechanisms and the validator rewards associated with PoS blockchains⁷⁹. Nonetheless, to help ensure price stability over the short-medium term, Bitazza plans to introduce within 2Q22 a portal for holders to stake their BTZ for a minimum lockup period of 30 days, in exchange for BTZ-denominated interest payments. Bitazza staking will last at least four years, with total interest payments constituting no more than 30% of the Ecosystem & Community Growth allocation. Moreover, the scheme is forecasted to provide market-competitive yields⁸⁰ throughout its duration, and to conclude only after the Bitazza ecosystem has sufficiently developed to the point where other benefits such as discounted asset management fees would provide powerful standalone incentives for holding BTZ.

It is important to note that beyond its initial phase, the continuation of the staking model does not necessitate the continued depletion of BTZ supply. For one, to the extent part of the staking rewards is paid out to partners and for business development incentives, a good portion of the BTZ would be paid back as Freedom Wallet subscriptions, to be redistributed per our signaling model. Secondly, Bitazza staking could eventually switch to paying out exogenous rewards as a mean to preserve the productive asset – BTZ – for growing the ecosystem. Indeed, such schemes have the benefit of affording stakers better risk-diversification (as holders are paid in a different asset) and allowing the utility token better prospect for price appreciation (with less sell pressure from rewards pay-outs)⁸¹. For example, leading⁸² Decentralized Exchange (DEX) 0x protocol specifies that market markers receive rewards proportional to the protocol fees their orders generated and the amount of protocol token ZRX staked, but paid in Wrapped-Ethereum (WETH)⁸³.

⁷⁹ : <https://coinmarketcap.com/alexandria/article/crypto-staking-guide-2021>

⁸⁰ : <https://www.stakingrewards.com/cryptoassets/>

⁸¹ : <https://medium.com/fitzner-blockchain-consulting/staking-models-for-productive-assets-20f9051d286b>

⁸² : <https://dune.xyz/hagetc/dex-metrics>

⁸³ : <https://0x.org/docs/guides/zrx-portal-faq>

Bitazza Governance

Core Bitazza Management

The CEO of Bitazza Global and the relevant upper management personnel are the first to identify and discuss key issues/proposals. Once the broader strategic vision and specific targets have been set, Bitazza will refer to DAO-based voting to establish secondary parameters.

Holders/Stakers

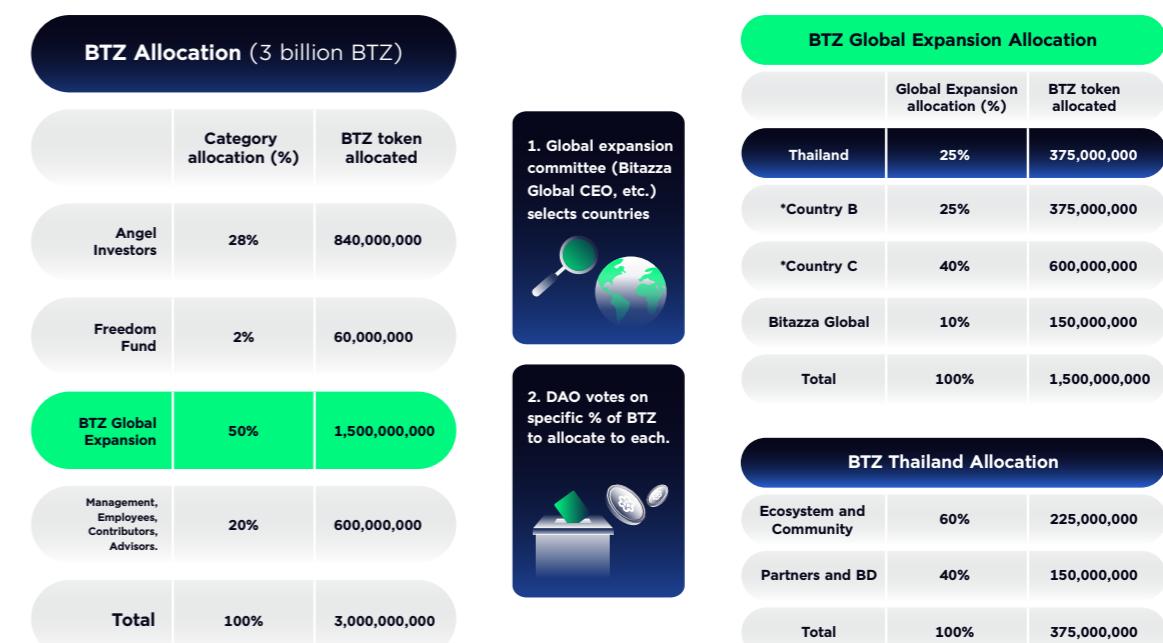
BTZ holders will be able to vote through the DAO on the particulars of certain proposals (e.g. how much BTZ to allocate to local partnerships in Vietnam), as well as stake their BTZ tokens to collectively calibrate a specified set of protocol parameters via our real-time governance function (e.g. influencing the yield paid by the staking protocol). Such an approach combines strategic decision-making with market-based optimization. That staking is required for the real-time governance function is to mitigate exploitative adjustments of parameters⁸⁴.

Our vision is for the Bitazza ecosystem to be all-inclusive and empower users across socioeconomic classes. With this in mind, the governance role afforded to holders/stakers will become increasingly important, but we would eschew full decentralization. This is because it is our view that a tiered management structure – with key decisions first being deliberated by Bitazza's management before DAO-like decision-making is introduced within a management-specified framework – works best for ensuring efficiency and accountability. We have seen the perils of the opposite approach, for example with SushiSwap, where its aspirations to become a full-fledged DAO resulted in basics of good business practice such as hiring an accountant or treasurer being neglected, as well as more glaring missteps such as Sushi's Miso auction hosting the BitDAO launch without first ensuring regulatory compliance and consequently losing revenue opportunities⁸⁵. Indeed, the DeFi platform most recently took steps to adopt a more conventional business structure⁸⁶.

Allocation of BTZ

The planned allocation for BTZ is shown in Diagram 5 below, with 50% being allocated towards global expansion, which includes community building and ecosystem incentives across all markets including Thailand. Expansion into markets beyond Thailand is led by Bitazza Global's CEO and relevant management, but would eventually be supplemented by DAO-based decision-making, e.g., voting on the percentage of BTZ to allocate to local partnerships within a given market. While each local management team would be entitled to a measure of discretion regarding personnel incentives, such incentives would have to be in line with the larger personnel compensation framework (i.e., capped at 20% of total local allocation). This would leave at least 38.5% of total BTZ supply for the purposes of ecosystem and community expansion, as well as partnership and business development globally⁸⁷.

Diagram 5: BTZ token allocation



⁸⁴ : Unlike 1inch's and several other DAOs, voting in our DAO does not require staking.

<https://help.1inch.io/en/articles/4767696-how-to-stake-1inch-tokens-and-participate-in-1inch-network-s-instant-daogovernance-models> Our staking process introduces a time delay before staked tokens could be removed, which not only mitigates the problem of exploitative voting to introduce arbitrage opportunities, but also, due to the limited scope with which the DAO can influence business decisions there is less danger of allowing holders to vote without staking.

⁸⁵ : <https://www.coindesk.com/tech/2021/12/30/sushi-tries-to-pick-up-the-pieces-a-defi-governance-case-study/>

⁸⁶ : <https://www.coindesk.com/tech/2021/12/30/sushi-tries-to-pick-up-the-pieces-a-defi-governance-case-study/>

⁸⁷ : From $0.5 * (0.25 + (0.65 * 0.8))$.

Our allocation for wider community building⁸⁸ is comparable to those of the most prominent exchange-issued tokens. For example, Crypto.com has 30% of the total supply of CRO earmarked towards community building (20% for ecosystem grants and 10% for community development⁸⁹), though as of February 2022, 33.6% of the current token holdings across five wallets had been allocated to community development and ecosystem grants (25.5bn/75.9bn)⁹⁰. Similarly, for WOO Network's WOO token, 40% has been slated for community building in the broad sense (25% as ecosystem rewards to incentivize network usage, 10% as rewards for ecosystem partners and 5% to WOO Ventures, to invest in early-stage projects⁹¹).

Also noteworthy is that thanks to our redistribute and signal model which eschews burning, BTZ used for partners and business development would be recycled to facilitate continuous ecosystem expansion. For example, with 50 Freedom Wallet partners and a monthly subscription rate of \$10,000, the 150mn BTZ tokens allocated for Thai partnerships would, at \$0.0111/BTZ, be sold and used up in just under three years and four months. Redistribution prevents such a concern hampering growth.

Expansion Plans

Bitazza's global expansion is managed by Bitazza Global, with our exchange platform and BTZ token already available to international users. Going forward, Bitazza Global will set up local subsidiaries and joint ventures (JVs) to drive marketing efforts and foster business relationships in key expansionary targets. For a market to be prioritized, we look beyond high cryptocurrency adoption alone, but also seek out accommodating competitive and regulatory environments. Broadly speaking, our expansion strategy is guided first by secondary research, further evaluated through primary feasibility studies for high potential targets, then confirmed via final due diligence and high-level discussions with national regulators.

Once we confirm that a country represents a sufficiently lucrative opportunity, we would commence local hiring efforts and allocate a portion of the 1.5bn BTZ tokens for global expansion to the market. While the range for the specific allocation would be determined by Bitazza Global's management, in the future, the specific percentage allocated would be subject to voting through the DAO. Our experienced marketing team and data-driven approach would then ensure that any launch capitalizes upon the nuances of the local market. For example, with 47% of cryptocurrency value received in Vietnam between June 2020-21 coming through DeFi platforms, any local marketing efforts may focus on Bitazza's offerings of ERC-20 tokens and EVM-compatible blockchains⁹².

⁸⁸ : Community building' here used to also include ecosystem, partnerships, and BD incentives. The same definition is used in calculating the respective figures for other tokens used in comparison above.

⁸⁹ : <https://www.gemini.com/cryptopedia/crypto-com-blockchain-ecosystem-overview#section-cryptoeconomics>; <https://learn.bitcoin.com/altcoins/what-is-crypto-com-coin-cro/>

⁹⁰ : https://crypto.com/images/crypto_com_whitepaper.pdf

⁹¹ : <https://learn.woo.org/token/wootoken>

⁹² : <https://blog.chainalysis.com/reports/central-southern-asia-oceania-cryptocurrency-geography-report-2021-preview/>

Target Markets/Regions

We examined various markets and regions with regard to factors pertaining to the competitive, demographic and regulatory environments and identified several high potential areas.

Crypto-centric Developing Economies

Targets in this category have high cryptocurrency adoption rates juxtaposed with limited penetration rates of basic banking services amongst the adult population. We find such markets in South Asia, Southeast Asia, as well as across Africa and South America. For example, across South Asia we have Pakistan, Bangladesh and Nepal, which placed 3rd, 29th and 30th for overall crypto adoption respectively, while in Southeast Asia, Vietnam, Thailand, and the Philippines rank 1st, 12th and 15th, respectively⁹³. Similarly, Kenya, Nigeria and Togo placed 5th, 6th and 9th, while Venezuela, Argentina and Colombia were listed at 7th, 10th and 11th, respectively⁹⁴.

At the same time, these regions all have large swathes of the adult population remaining unbanked, suggesting that readily accessible crypto-enabled banking solutions could capitalize on huge reserves of previously unmet demand. For example, the World Bank's latest study found that in South Asia, only 17% of adults saved at a regulated financial institution⁹⁵. For Sub-Saharan Africa, the figure is even lower, at 14%⁹⁶. Binance Earn, with its industry-competitive staking rewards, would represent a promising alternative in these markets. Even in markets such as Thailand with a relatively low unbanked population amongst the group, high cryptocurrency ownership – a January 2022 estimate of 20.1% placed it first for cryptocurrency ownership amongst internet users aged 16-64⁹⁷ – our Freedom Card and Freedom Wallet will represent convenient channels for monetizing crypto assets.

Crypto-friendly Developed Economies

Targets in this category have clear and accommodative regulations regarding cryptocurrencies, high incomes, as well as competitive domestic market structures. We find such markets in some parts of Europe, amongst other regions. For example, in the Iberian Peninsula we find Portugal and Spain, both of which legally permit cryptocurrency trading and have favorable tax structures for those who do⁹⁸.



Crypto-centric Developing Economies

represent lucrative, readily evident opportunities - elephants in the room - with high crypto adoption rates and inadequate traditional banking infrastructures.



Crypto-friendly Developed Economies

represent the pioneering nations in the crypto space - top dogs in their geographic regions - with accommodating policies, high income levels, and competitive market structures.



Africa, South America, South Asia
and Southeast Asia are where
we find our elephants.

We find top dogs in the Iberian
Peninsula for Europe and
in Australia for Asia-Pacific.

⁹³ : <https://go.chainalysis.com/rs/503-FAP074/imThe%20Future%20of%20Southeast%20Asia%20%99s%20Digital%20Financial%20Serviceages/Geography-ofCryptocurrency-2021.pdf>

⁹⁴ : <https://go.chainalysis.com/rs/503-FAP074/imThe%20Future%20of%20Southeast%20Asia%20%99s%20Digital%20Financial%20Serviceages/Geography-ofCryptocurrency-2021.pdf>

⁹⁵ : <https://ufa.worldbank.org/en/global-progress#eap>

⁹⁶ : <https://ufa.worldbank.org/en/global-progress#eap>

⁹⁷ : <https://wearesocial.com/uk/blog/2022/01/digital-2022-another-year-of-bumper-growth-2/>

⁹⁸ : <https://tile.loc.gov/storage-services/service/ll/llgrid/2021687419/2021687419.pdf> Accurate as of November 2021.

⁹⁹ : <https://cointelegraph.com/news/seven-eu-states-sign-declaration-to-promote-blockchain-use; https://www.ft.com/content/95b57148-f7e1-11e8-af46-2022a0b02a6c>

¹⁰¹ : <https://nomadlist.com/>

¹⁰² : <https://www.coindesk.com/business/2021/10/11/first-portugal-based-crypto-exchange-cryptoloja-launches-online-trading/>

¹⁰³ : <https://finance.yahoo.com/news/bank-spain-approves-bit2me-crypto-145328486.html>

¹⁰⁴ : <https://finance.yahoo.com/news/bank-spain-approves-bit2me-crypto-145328486.html?guccounter=1>

Profits from buying and selling within a 12-month period is taxed at rates between 24.75-52%.

Conclusion

With a conservative and evolutionary approach towards collateralization for USDF, alongside a novel tokenomics model for BTZ, Bitazza will utilize our dual-token structure to grow into an all-encompassing ecosystem, offering utility for BTZ holders beyond the immediate Bitazza platform – some of the most wide-ranging vs. its peers – as well as market-competitive card and staking rewards, and a mobile payment solution that capitalizes on local networks and demographic trends.

Appendix

Redistribute and Signal as a Separating Signaling Equilibrium

This author would argue that today's digital assets market could often be well-approximated as an asymmetric information game where a potential investor (entrant/player 1) deciding whether or not to enter a market (i.e. buy the token) faces differing payoffs depending on the action taken by investors already in the market (incumbent/player 2). The strategies and therefore observed actions of player 2 in turns depend on his preferences, which vary by his type/nature, which is not readily observable.

Within the field of Game Theory, such a game has been modeled by Cho and Kreps¹⁰⁵ and it provides a useful framework for illustrating the proposed tokenomics mechanism for Bitazza. In this so-called Beer and Quiche game, player 2's type is randomly predetermined by Nature, but is unobservable by player 1 before he enters the market. Through his observable action, player 2 signals his nature to player 1, who then reacts accordingly. The Nash Equilibrium is by definition, where each player cannot unilaterally change his strategy to improve his payoff. In such a game, costly signaling is the key to a separating equilibrium in which player 2's strategy stipulates he takes different actions according to the signal he observes (e.g. buys the token given he sees present owners staking).

This is best illustrated via an example. Diagram A1 shows a game where an incumbent may be someone with conviction in the long-term future of Bitazza's platform or not (Diamond/Paper Hand, respectively), and he can signal his type to a potential entrant via choosing to bid and stake his BTZ holding or not (Bid/Don't bid). The cost of staking BTZ for a Diamond Hand is 1, but markedly higher at 8 for a Paper Hand. Note that this is both consistent with the notion of the psychological cost of holding an asset one believes would eventually collapse in value and the economic argument that a considerable portion of short-term speculators disinterested in the project's long-term future are also trading on margins and/or other short-term credit lines and thus face higher costs of locking up their tokens for extended periods. If player 1 does not enter he experiences neither profit nor loss (0), but entering a market where the incumbent is a Paper Hand is worse than not entering ($0 > -1$), whereas if he enters a market with a Diamond Hand incumbent, player 1 improves his payoff vs. not entering ($3 > 0$).



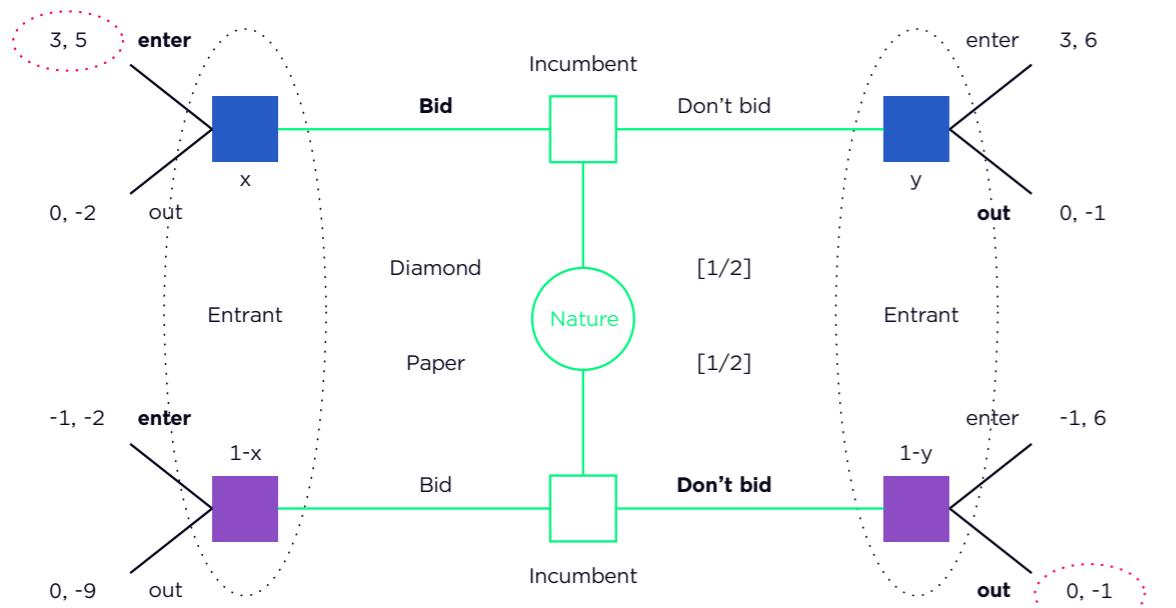
FOR MORE INFORMATION

Bitazza Thailand: <https://th.bitazza.com/>

Bitazza Global: <https://www.bitazza.com/en>

¹⁰⁵ : <https://www.jstor.org/stable/1885060>

Diagram A1: REDISTRIBUTE AND SIGNAL AS A SEPARATING SIGNALING EQUILIBRIUM



It is straightforward to show that a separating equilibrium exists where the incumbent bids only if he is a Diamond Hand, and does not bid only if he is a Paper Hand, the entrant correctly believes that $x = 1$ and $y = 0$ (or $1 - y = 1$) – that is if the incumbent bids he is definitely a Diamond Hand, and one of two distinct outcomes prevails depending on player 2's type – if he is a Diamond Hand, he will signal this with a bid and the potential entrant will enter the market and help ensure the long-term success of the token (yielding the top-left 3, 5 payoff). Note that there is no incentive for false signaling. If player 2 is a Paper Hand and chooses to signal that he is not by staking, even in the event he tricks player 1 into entering, player 2's payoff is actually worse than if he never signaled and the player 1 stayed out ($-2 < -1$). This is due to the higher cost of signaling a Paper Hand relative to that for a Diamond Hand – costly signaling is credible signaling and facilitates separating equilibria.

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