LOGOS

MACROWISE A.G

WHITE PAPER 2018



Executive Summary

The world of cryptocurrencies has been expanding rapidly. Leading digital assets such as bitcoin and ether have had their share of success but they are still far too volatile to be trusted as a stable storage of value or a medium of exchange for everyday transactions. These speculative assets have driven investors to search for a more stable digital currency that can realize the full potential of blockchain technology. The SDR¹ (Special Drawing Right), an international monetary reserve asset comprised of a basket of currencies (the U.S. Dollar, Euro, Chinese Renminbi, Japanese Yen and British Pound Sterling) was created by the International Monetary Fund and is held by banks to keep their reserves stable. However, it is largely inaccessible to the average investor or entity. With the creation of blockchain technology, it is now easier to offer a similarly robust basket to the masses.

This new type of currency, broadly known as a stablecoin, is a type of cryptocurrency that maintains a fixed value relative to an underlying asset. The goal is to preserve the value of your money, while capturing the benefits of a decentralized, electronic peer-to-peer token such as bitcoin.

The current market leader in terms of market capitalization

 $^{^{1}} https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR$



in the stablecoin space is Tether, with a market cap of over \$2 billion. Tether converts cash into a digital currency that is tied, or tethered, to US Dollars held in bank reserves. In essence, Tether's value is directly pegged to the U.S. Dollar at a 1:1 ratio, meaning it is supposedly backed 100% by cash in the bank. Many new players have been entering the asset-backed stablecoin space including SAGA, Maker Dai, and TrueUSD.

These asset-backed stable coins remain centralized around a bank or the underlying fiat currency to which they are pegged, which detracts from the desire for a decentralized banking system at the forefront of the cryptocurrency revolution. For this reason, many believe that the long-term solution for a true and stable storage of money must be algorithmic. Current algorithmic stablecoin projects include Basis, Fragments and Carbon which derive value from monetary supply and related scarcity. For example, "Basis is designed to keep prices stable by algorithmically adjusting supply. When demand is rising, the blockchain will create more Basis. The expanded supply is designed to bring the Basis price back down. When demand is falling, the blockchain will buy back Basis. The contracted supply is designed to restore Basis price." This is very similar to the way central banks function when they buy and sell debt in an attempt to stabilize



purchasing power.

To this point, the financial innovation and engineering has largely been based around the cryptocurrency universe and the need for a less volatile, decentralized digital currency. What seems to be lost thus far is the fact that many fiat currencies around the world are also volatile and susceptible to extreme fluctuations in the foreign exchange markets. Moreover, the new central banking-like algorithmic solutions have academically interesting but completely unproven schemes to manage supply and have been subject to criticisms of their viability under protracted periods of pressure to decrease supply.

This is where Macrowise AG comes in. Our goal is to bridge the gap so to speak. We aim to connect the traditional financial world of fiat money and central banks with the decentralized, cryptocurrency universe.

In order to achieve this, we have created the LOGOS Token. The LOGOS token is focused on protecting your purchasing power independent of geographical location by providing access to a basket of reserve currencies and monetary metals. The basket is weighted based on our proprietary liquidity indicator. That in simpler terms means that when there is credit expansion or liquidity tightening, the LOGOS token will adjust the weightings



of its holdings to better maintain stability. Where most stablecoins neglect the business cycle, our algorithm will be based on international trade and the liquidity factors that impact currency exchange rates. This will be the first digital currency of its kind to achieve globally-stable purchasing power.

The LOGOS token will be perfect for all types of investors seeking to diversify or stabilize their monetary holdings. Users will include those in the cryptocurrency universe, international businesses, citizens in emerging markets, and just about anyone who wishes to travel, conduct e-commerce, pay debts, remittances and receive income while relying on a less volatile means of exchanging money for goods and services.

Countless emerging markets have experienced large devaluations to their currencies recently, and in this increasingly international world, the purchasing power of these citizens abroad has also plummeted. Our goal is to provide the millions upon millions of people living in these regions around the world with a safe, low-cost, easy-to-use, alternative currency to protect them from their weakening economy and political ideologies that don't align with their future.



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1 Abstract

The financial industry is constantly evolving as new technologies and trends present themselves. Exchange Traded Funds have become a simple, popular method for investors to diversify or provide a benchmark return at minimal cost. The development of blockchain technology and subsequent cryptocurrency craze is attempting to move the world of finance away from the traditional economy of centralized banks and fiat currencies, and towards a digital, decentralized economy.

In our ever-connected, international world, consumers must not only think about their home currencies, but also about how their money translates into the rest of the world. The aspiration to venture outside of one's home nation or simply conduct business abroad has quite possibly never been more prevalent than it is today. Human beings are traveling, expanding their borders and trading with foreign partners in the never-ending pursuit to make a better life for themselves. Social contracts between nations and their citizens can complicate these desires when policies such as trade wars and changing political ideologies impact the economy and directly influence the wallets of their citizens. This situation is especially common in emerging markets.

There is an omnipresent need for a product to better protect



the purchasing power of people around the globe. The demand for a stable, global currency is growing. The global financial crisis of 2008 made way for the creation of Bitcoin and the push for a new alternative decentralized banking system. Now 10 years later, the crashing of bitcoin and various currencies amidst escalating political turmoil will launch the formation of a new global monetary alternative - the LOGOS Token. This is the first step in the development of a decentralized asset management platform focused on democratizing global macro investment strategies.

2 Introduction

2.1 The Rise of P2P Money

Defining money is a complex matter that intersects economic thinking, philosophy, mathematics and sociology. A major part of the studies conducted on money are centered around the functionality, i.e as a unit of account, an instrument of exchange, or the storage of value. Other studies focus on the format of money: fiat, commodity, digital, crypto. Our focus is on the hierarchical evolution of money and the opportunities that emerge with that.

Money is a common, hierarchical pool resource necessary to coordinate economic transactions for any kind of society. Indeed, money is a representation of the social contract between the in-



dividual and the state, but also between the individual and other communities. The first protocol, bitcoin, was the first step in the development of a complete new layer of the international monetary system. The hierarchical nature of money is illustrated below as a series of levels or rings. The innermost ring consists of commodities (our diagram uses gold), and as the layers expand outward, they move further away from the original monetary metal of exchange, representing different forms of money. The last layer, P2P money, consists of cryptocurrencies and is also where the LOGOS Token will be located.



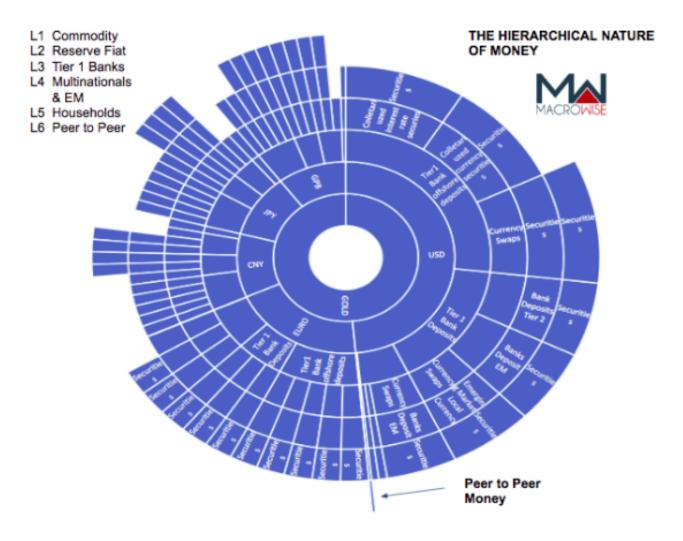


Figure 1: Hierarchical Nature Of Money

Our point is that cryptocurrencies will not replace the role of the U.S. Dollar or the Chinese Renminbi just as the Dollar never replaced the role of gold in the financial system. Bitcoin is not a challenger of the Dollar's status, but rather a complement and was the beginning of a newest layer within the international monetary system that will empower people with better odds to succeed.



To explain our argument, let us first explain our oversimplified framework of the hierarchy of money.

2.2 Hierarchical Level 1: Tribal Money

To begin, think of a simple tribal society in a disconnected world. Individual civilizations separated by seemingly immense terrains of land, with war being their only successful mechanism for achieving economic growth. Only by conquering new territories, rich in strategic resources or location were tribes able to assert their dominance and advance culturally and economically.

The lack of trust between competing tribes made it nearly impossible for economic coordination of the whole tribal society to take shape. Commodity money, such as gold or silver, were the only universal instruments for trade across societies.

2.3 Hierarchical Level 2: Reserve Money

Empires made possible the coordination of standardized economic transactions. Leaders minted their own version of money to be used throughout their kingdoms. However, without coordination between empires with differing currencies, the use of gold remained necessary in order to make 'international' transactions. Civilizations have undergone many attempts with fiat



money backed by the state and many of them have ended in epic episodes of hyperinflation.

As empires and civilizations evolved into independent states and leading governance systems became democracies, independent central banks accomplished the feat of stabilizing inflation in countries with reserve currencies and emerging markets with responsible fiscal policies.

Coordination between states was a difficult matter. There were many attempts to better coordinate international transactions in the 20th century. The Gold Standard, the Bretton Woods System, and the Exchange Rate Mechanism were all experimented with an effort to simplify international trade.

However, the settlement was not reached by a mutual agreement among nations but rather by the geopolitical hegemonic role of the United States. As a result, the U.S. Dollar emerged as the preeminent reserve currency.

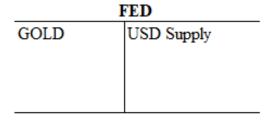


Figure 2: FED's Balance Sheet



2.4 Hierarchical Level 3: Offshore Dollars

With globalization there was a need for the U.S. Dollar by central banks in other countries, Tier 1 Banks all around the world, as well as multinational corporations. Interest rate derivatives and currency swaps formed a new format of money in yet another layer of the international monetary system.

Tier 1 Bank			
Derivatives	Offshore USD		
	Deposits		

Figure 3: Tier 1 Bank's Balance Sheet

2.5 Hierarchical Level 4: Emerging Markets Local Currency Banking Money

This layer is comprised of the local money of countries without the global reserve status and credit money. The emerging markets have implicit sovereign credit risk built into their currencies inherently.

EM Central Bank		Commercial Bank	
USD Reserves	EM Money Supply	USD Reserves	Deposits
			Reserves
			Currencies

Figure 4: EM Central and Commercial Banks's Balance Sheet



2.6 Hierarchical Level 5: Securities - Household Money

This household layer of money comes in the form of securities: bonds, equities, and other investment vehicles.

Households		
Cash Local	Loans	
Currency		
Bonds		
Shares		

Figure 5: Households's Balance Sheet

2.7 Hierarchical Level 6: Peer to Peer (P2P)

This new layer constitutes of electronic peer to peer transactions supported by cryptography and blockchain technology. As stated previously, we see LOGOS as an essential tool to protect the purchasing power of people around the world, and it fits in this level. The users of cryptocurrencies have the different cryptos as their assets while P2P credit makes up their liabilities. LOGOS will be one of the central parts of the decentralized monetary system, able to coexist with the current international system.



Digital Wallet			
LOGOS	P2P Loans		
Bitcoin			
Ether			
Tokens			

Figure 6: Digital Wallet's Balance Sheet

3 Existing Currency Formats for the Digital Native

Currency	Advantage	Risk
Gold	Protection against inflation & negative real interest rates, No dependence on a government	Global economic growth is inversely correlated with gold
Modern Market Money (US, EUR, CNY, JPY, GBP)	Broad acceptance, legal tender, high liquidity, hierarchical power representation of the global economy.	Inflation Negative real interest rates
Emerging Market Money (INDR, BRL, TRY)	Demographic trends, commodity growth & new geopolitical structures	Political mismanagement, corruption & regime change
Cryptocurrencies	A new decentralized economy, no dependence on government, no dependence on central banks	Over regulation, fraud, money laundering, hyper volatility
Stable Cryptocurrencies (Havven, DAI, TrueUSD, BitShares, Tether, Saga, Basis, Reserve)	Alternative to the US Dollar, Arbitrage opportunities (without restoring bank wires), Useful for ordinary transactions	Fraud, lack of possibilities and innovation, third party dependency (auditions) Lack of transparency, untested academic approaches to algorithmic central banking

Figure 7: Balance Sheet



3.1 Developed Market Fiat Money

The first logical alternative is to convert one's home currency into another, more stable option. The U.S. Dollar and Euro are the most popular for numerous reasons, but this strategy too has its drawbacks. As stated previously, the exchange rate can be subject to extreme fluctuations, both in favor of the home currency and against it. Most banks or financial institutions only hold the currency of one's home country in the banking account. It obviously wouldn't be the safest option to hold large amounts of physical cash.

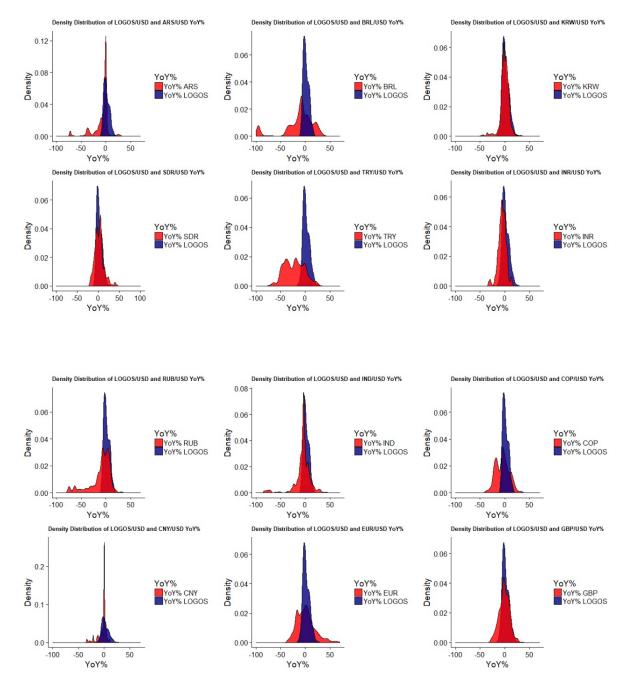
3.2 Emerging Market Fiat Money

The vast majority of people earn or have their savings in the currency of their home country. The problem with emerging market currencies is that the exchange rate is very susceptible to fluctuations, which can be swift and enormous. There is a strong bias for devaluations in these currencies as the economy and even at times the political structure in these countries is less stable.

The graphics below show the histograms of the YoY variations of the Chinese Yuan and the Indian Rupee against the USD. Many emerging markets in Latin America, the Asian Pacific and Africa suffer from the same problem. A citizen living in an emerging



country and earning in the local currency is vulnerable to a potentially volatile exchange rate and could suffer dramatic losses to their purchasing power.





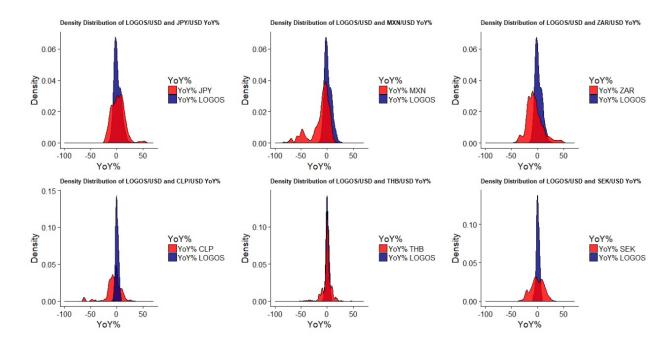


Figure 8: Emerging Markets against LOGOS

3.3 Gold

Gold can be a great way to store value during times of uncertainty. When global economies are struggling or currencies are undergoing competitive devaluations, gold is usually a safe haven as it is during periods of trade wars and real wars. However, gold in general performs poorly during times of globalization and global economic growth.



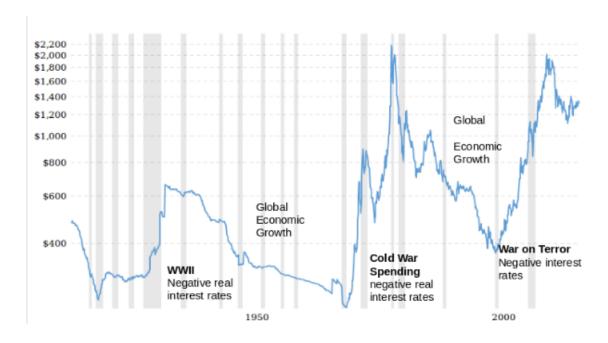


Figure 9: Gold Prices

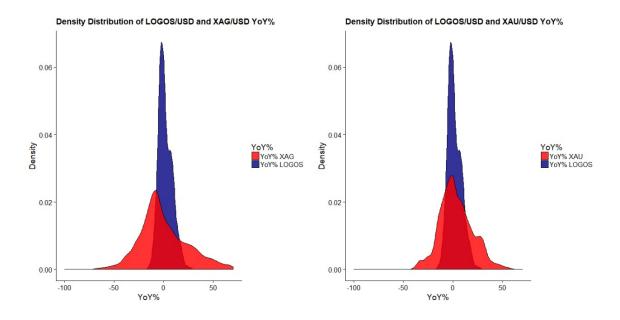


Figure 10: Gold against LOGOS



3.4 Cryptocurrency

Cryptocurrencies essentially operate as a "peer-to-peer electronic cash system." These digital or virtual assets work as a medium of exchange and function independently of a central bank. The decentralized control of these electronic currencies works through blockchain, which functions as a sort of public database or ledger, where all transactions are recorded and are made available for everyone to see. Each transaction is a file that consists of the sender's and receiver's public account information (their wallet address) and the amount to be transferred. The safety, integrity and balance of ledgers is maintained by a community of mutually distrustful parties called miners. After the sender confirms the validity of the transaction, the miners mark them as legitimate, timestamp them and spread the transaction across the network where they become unforgeable and irreversible, thus completing the transaction. Miners have a financial incentive to maintain the security of a cryptocurrency ledger. These mathematical cryptographic validations confirm the proof of the transaction, or the "Proof-of-Work," thus adding another block to the ledger that cannot be changed. Bitcoin is an interesting solution of decentralized trust, however it's price behavior is extremely volatile with similar characteristics to a commodity.



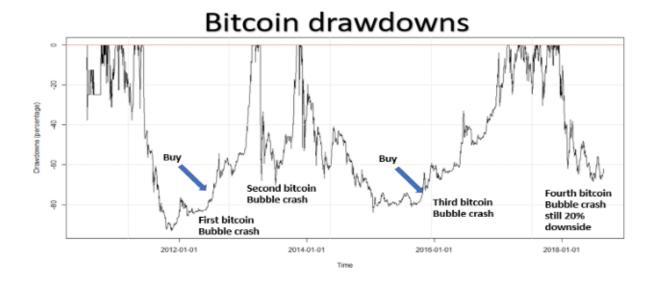


Figure 11: Bitcoin Prices

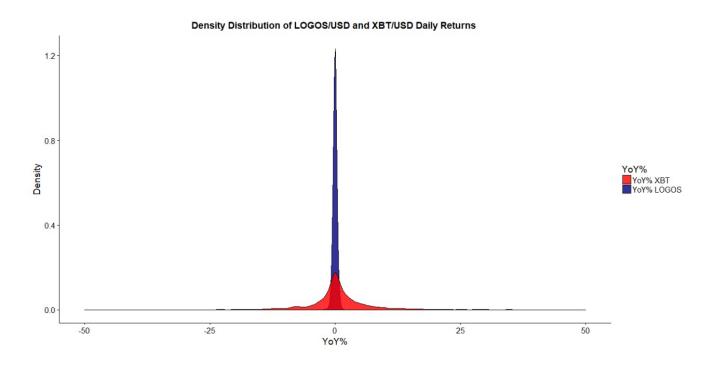


Figure 12: Bitcoin against LOGOS



4 The SDR

The current financial system is a system that was created during the peak of western countries economic growth with the Marshall Plan after WWII. The pillar of this system is the International Monetary Fund (IMF), which holds a basket of reserve currencies that represent the global financial transactions- the special drawing rights (SDR). The basket of reserve currencies isn't a way to protect purchasing power however. For a person holding assets in a reserve currencies basket, his purchasing power will be protected from the real interest rate: $LIBOR_{av} - Inflation_{av}$. A negative average real interest rate in the reserve currencies destroys the purchasing power of a citizen that is holding the SDR basket.



Figure 13: G10 Real Interest Rates



4.1 SDR proportions: Justified?

To better represent the global economic growth with a basket of currencies, the Chinese Renminbi needs to have a bigger representation in relation to the USD, and the Indian Rupee also must be included.

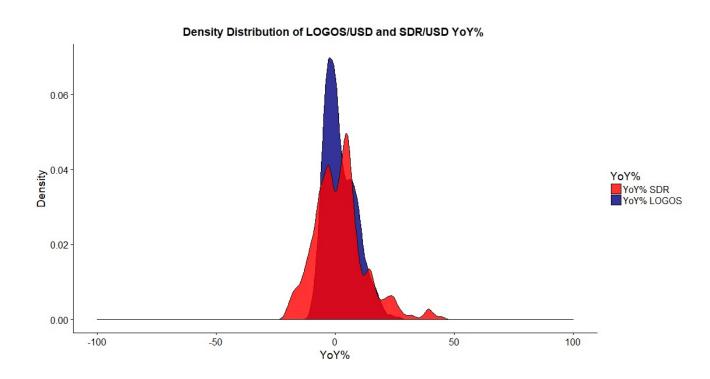
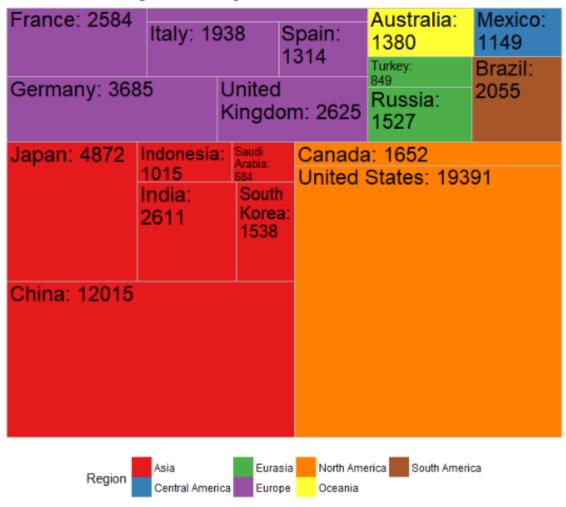


Figure 14: SDR against LOGOS



G20 GDP by hemisphere



The area of each tile represents the country's GDP, in billion of dollars, as a proportion of all countries in that hemisphere

Figure 15: Balance Sheet

Demographic trends also support the idea that the biggest consumption markets will be in India and China, as well as other countries with strong commercial ties to these two.



Global Demography in 2017

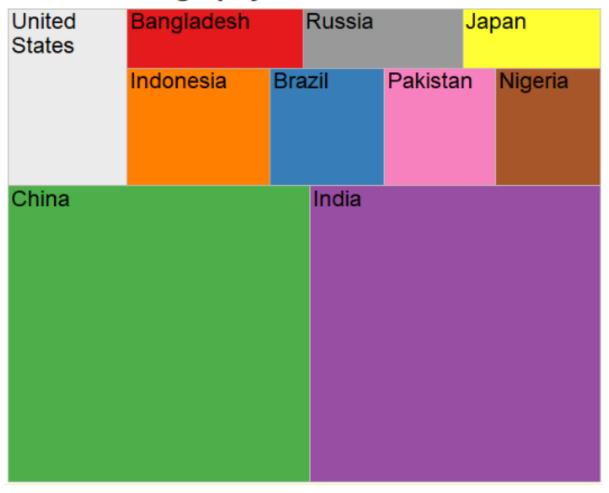


Figure 16: Balance Sheet



4.2 How the currency world looks from the SDR perspective

Cluster Dendrogram

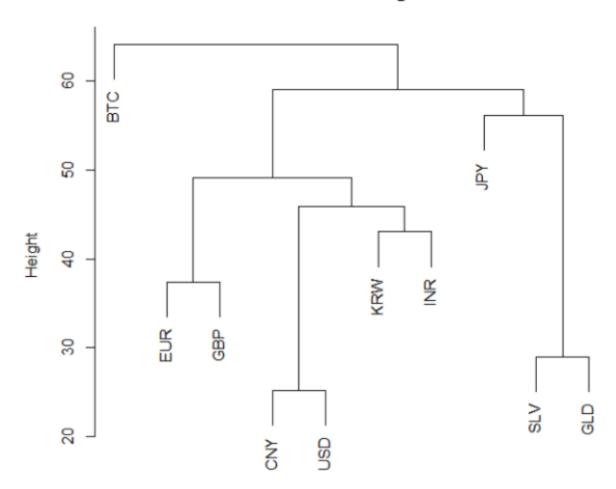


Figure 17: Balance Sheet

In order to define a stable currency, we need indicators that signal when there is liquidity expansion and when there is liquidity contraction. Only based on liquidity can we create the correct process to define the allocation of our stable currency portfolio.



${f if}$ (Liquidity_signal= risk ON)

currency portfolio that minimizes the maximum drawdown in respect to the ${\rm SDR}$

else

reserve currency portfolio weighted using real interest rates.

5 LOGOS vs. SDR

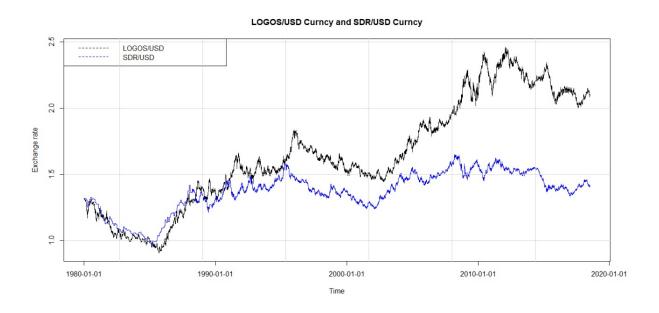


Figure 18: Balance Sheet



5.1 Weights

5.2 LOGOS vs. SDR

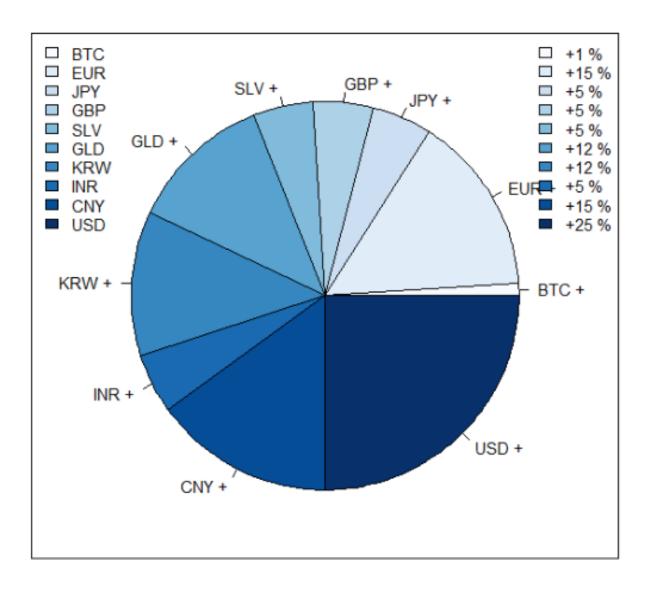


Figure 19: Balance Sheet. Note: LOGOS is a dynamic allocation system that is a particular states. This portfolio do not represent the actual allocation of the LOGOS token

6 Protocol and Token

Why Ethereum?



There are actually a considerable number of options for creating a Token. No matter if you want it to be a DApp, a stablecoin, a game or a token for fundraising, gambling or anything else, you have a couple of options for building your token, and we will explain why we chose Ethereum.

First of all, you have Bitcoin blockchain, the cryptocurrency that started it all, but it's also "obsolete" or unuseful if you want your token have a considerable level of complexity. Bitcoin was created with the aim of being a payment system, not a smart contract platform. Another problem with Bitcoin is the scalability. Even if we don't need millions of transactions per second, 2 transactions per second is a very slow transaction speed (the slowest in this analysis). Nevertheless there are well known tokens built on top of this blockchain, like Tether, but it still retains scalability and flexibility problems.

Moving on, we have Hedera Hashgraph. They solved the scalability problems, eliminating the 'Orphan blocks' problems and the speed issue that these blocks caused. But it has many issues as well, the most important being one that their code is NOT open source, which slows down the development, improving and testing of solutions that you can have with Ethereum or Bitcoin. These two open source options maintain a huge commu-



nity ready to search for and solve any problems that they find in the code. Another issue is that the results promised (hundreds of thousands of transactions per second) might not be real in a real world environment. The Carbon Token is being developed with this technology.

Another option is EOS blockchain, which aims to solve the scalability problem in Ethereum (supporting millions of transactions per second). It's also focused on DApps, specifically the ones that require lightning quick transaction speeds, such as instant messaging or gambling. This might be a good option, but nevertheless, we are looking for a well developed blockchain, one with a huge community and developers already around it. We also don't need millions of transactions per second.

NEO is another considerable blockchain for the token. Is also open source and has advantages against the Ethereum blockchain, like transaction speed². However, the competitive advantage that Ethereum has is the community behind it, making the blockchain strong and with a very complete smart contracts platform. We can see this last aspect in the advantages of all the community solving the scalability issues.

Ultimately, when it comes down to it, we see Ethereum as hav-

²It's said that NEO can handle over 10,000 transactions per second, but this is just theoretical transaction speed. In practice, NEO can handle around 3,000 transactions per second.



ing a competitive advantage. They already have a large community of users and followers, they have growing trust and relative ease already established, further promoting and building stronger blockchain and smart contract platform in itself.

The scalability problem essentially refers to the structure of the platform slowing down the overall transaction speed. With the Proof-Of-Work (used by Ethereum and Bitcoin), the energy costs might not only be expensive for the miners, but also decentralization costs to the platform (this because, in time, less miners can handle the costs of mining).

There are currently three options for solving this issue: Plasma, Sharding and Casper. The Plasma solution proposes the creation of lateral blockchains (like sons of the main blockchain) and deviate part of the transactions that the principal blockchain has to process. Sharding proposes that a singular node doesn't have to process all the transactions in the blockchain, but a specific part, so a singular group of nodes process a singular group of transactions and so on. For this solution to be successful, the singular node, has to trust that the other nodes processing the other transactions. Finally, the Casper solution proposes the gradual migration from Proof-Of-Work to Proof-Of-Stake, reducing the mining, ambiental and decentralization costs.



These solutions let us see the potential of a growing community with similar interests, trying to fix the problems in an optimal way. The Ethereum foundation launched a Casper Testnet and has been studied and tested by the Ethereum community since it's publication in Q1 2018. The community expects this scalability issue to be solved in between 2019-2020.

Another reason for using Ethereum Blockchain as a base for the LOGOS is the ERC20 Tokens standard. These tokens have been going mainstream for ICOs and DApps development, increasing the already complete platform with a huge community interacting in the blockchain, making it stronger and more connected due to the ease of trade between ERC20 based tokens³.

LOGOS Core On-chain components

Main Contract: Receives an asset, like ETH or LOGOS (as an Input) and calculates the amount of return assets (Output) according to LOGOS's price. A successful transaction process is needed for KYC compliance.

Authorized Wallet Address Manager: Determines the eligibility of a wallet (Address) to trade LOGOS (KYC procedure).

Authorized Wallet Address Data Source: Contains the "database" of the addresses permitted to trade LOGOS. Every consumer who wants to trade LOGOS has to pass a KYC procedure and only

 $^{^3\}mathrm{ERC20}$ is the most common standard for developing cryptocurrencies on top of Ethereum



when it's completed can their address be in the data source.

Liquidity Engine: Implements the LOGOS Basket's ponderation calculation model. This model converts the ETH or LOGOS input in the Main Contract to LOGOS's currencies. Making the conversion process to the basket of currencies and updating the blockchain data and LOGOS price according to this new input.

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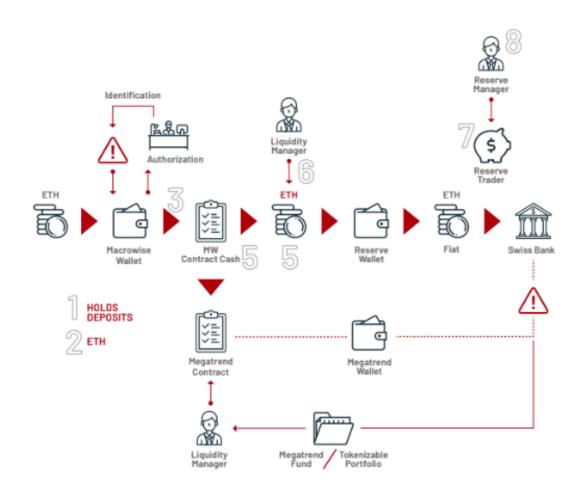


Figure 20: LOGOS acquisiton process



7 Expansion of Tokens

The principal idea of the LOGOS Token is first and foremost to function as a stable coin. Through our algorithm based based primarily on liquidity, the LOGOS Token will be able to better protect and maintain the purchasing power of holders across borders. From this base, the goal is to expand into other tokens based on megatrends. As a long only platform, these specialty tokens will be aimed at specific macro-events or possible events with actionable trade ideas. There will be a subsequent white paper related to every thematic token. Our advantage to passively managed funds is that we will not diversify by asset class or geography, but instead on megatrends.

These niche tokens will be based on a multitude of megatrends and macroeconomic events with identifiable trade ideas, a few possible examples include:

- Investments based around technologies and countries fostering democracy
- The New Silk Road and the countries, technologies and companies involved
- Artificial Intelligence and Robotics
- Disruptive Technologies and Industry Changers



- Protein Consumption
- Regime Changes: Venezuela, Korea...

The possible frameworks are limitless and we believe this new way of investing in tokens based on macroeconomic events will be a game changer that will send shockwaves through the archaic financial system.

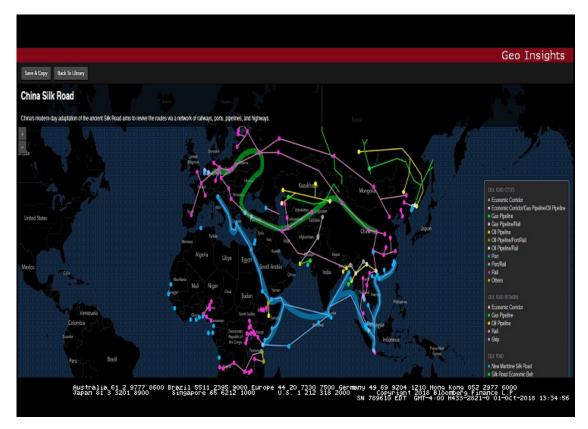


Figure 21: Silk road map



8 Conclusion

P2P money is a new layer of the international monetary system, it will not replace fiat money or gold, but will work as a compliment. Geopolitical and economic uncertainty are growing issues for nearly every citizen on the planet, with the ability to protect their money as one of their most fundamental concerns. Many countries, institutions and people in general have begun looking towards blockchain technology in an attempt to find solutions to their needs. The idea of a stablecoin or even a simple token to store the value of money is at the forefront, but, the real value of any project is everything else that comes with it, the aggregated value.

With that in mind, we at Macrowise are proposing the creation of a new token built on top of the Ethereum blockchain in order to gain access to an already active community with many users of the smart contract platform.

The construction of the token and it's configuration will be based on global macro research and our proprietary global liquidity model. The LOGOS Token will be an instrument aimed at protecting one's purchasing power, reducing the difficulty and costs of conducting global trade across borders, and providing a gateway to wealth creation and management opportunities. This



algorithmic token will be constantly looking for the most optimal basket of currencies and monetary metals that reflect the global liquidity in order to maintain stability amidst changing geopolitical and economic scenarios around the globe.

The chief objective is to build a bridge between the traditional banking system and the new P2P cryptocurrency universe made possible through blockchain technology. The LOGOS Token will be your transport into this ongoing monetary revolution.

9 The Macrowise LOGOS Team

9.1 Executive Team

Guillermo Valencia

Co-founder - Head of business development and global macro research. Co-founder of Macrowise, where he is the global macro detective so to speak. Working as a curator, Guillermo combs through large amounts of data, diverse investment frameworks, and pairs his findings with privileged conversations he has with great minds in the industry to identify new, unique investment ideas.

Prior experience includes working for Gavekal in Hong Kong where he developed a novel framework about currency wars. His career began as quantitative investment analyst at the Com-



pass Group, focusing on developing statistical arbitrage strategies for Latin American conglomerate and commodities markets. He holds a Master's in Technology Management and Economics from the Swiss Federal Institute of Technology ETH Zurich and a Bachelor's in Electrical Engineering from the Pontificia Universidad Javeriana in Bogota.

Juan Pablo Marin

Co-founder - Head of Data Science Juan Pablo is an Electronic Engineer from Universidad Javeriana (Bogotá, Colombia). After three years working as a software specialist for IBM, he obtained a MSc degree in Electrical Engineering and Information Technology from ETH Zurich in 2010 (Zurich, Switzerland). His research in computational statistics was applied to macroeconomics of innovation, philosophy of science and hydrology. Juan Pablo has used Network Theory to foster innovation in Latin America, helping to place the power of predictive analytics into the hands of decision makers. Juan Pablo was named Network Fellow of Harvard University for one of their solutions using Big Data to understand institutional dynamics and his solutions with data visualization and analysis have been used in the founding of 2 predictive analytics companies.



Oliver Buhl

CEO and Co-Founder

Oliver is behind the strategy of developing the Macrowise stable coin alternative for multinationals and is also the head of Macrowise operations.

Leader and Management of Commercial area: Sales, Marketing and cement logistics (1.4-1.7M ton), Lead of RMX Business (0.9M m3), responsible for country turnover of CHF 250-300Mio, EBITDA 30-35- Successful development and execution of new marketing and sales strategies, new structure of entire commercial organization, introduction of KPI's and market analysis, Price and Margin Management, operational excellence in production and logistics, strengthening of customer portfolio (distributors, end customers, large construction projects), product and service portfolio strategy, marketing campaigns -Since May 2016, Camera Comercio Colombo Suiza, Bogotá, Colombia, President – Swiss-Colombian Chamber of Commerce

Jose Ospina

Co-founder - Head of Tokens Development

Jose is a certified Ethereum developer, co-founder and full stack developer of www.collectiveone.org. Originally trained as an Electronic Engineer, he focused for 5 years on the analysis of complex



dynamical systems during his Ph.D. and Postdoc activities. After his period in the academy, he worked as a technical manager in the European aerospace industry for 5+ years, until leaving two years ago to become a solo-entrepreneur. Since then, he has been developing a tool to facilitate the emergence of new types of (open) organizations, which led to him learning about DAO and blockchain technology, as well as the opportunities they provide. Jose is an experienced programmer with a highly adaptable technical profile.

Thomas Floracks

Co-founder - Head of Product Development Thomas is a seasoned entrepreneur and product leader specialized in building and growing online marketplaces. In 2008 he co-founded VivaReal, Brazil's leading real estate marketplace, and led product development and organic growth strategies for almost 10 years. VivaReal attracts a monthly audience of over 10 Million visitors, raised over 70 Million USD in venture capital and grew to over 600 employees before merging with its biggest competitor end of 2017. Thomas left the new company Grupo ZAP in February 2018 and currently acts as an angel investor and advisor for startups that have a sustainable, positive impact on the environment, healthcare, extreme poverty, education or climate change.



Tyler Krebeck

Chief Operating Officer Tyler is responsible for overseeing the production, research and development of numerous tasks at Macrowise. Working closely with Guillermo Valencia, Mr. Krebeck takes the lead on analyzing investment opportunities and implementing actionable trade ideas. He has a Bachelor's Degree in Finance from Loyola University Chicago and is a level II CFA candidate. Prior experience includes work as a credit analyst at MUFG Bank, as an associate portfolio manager for the Commerce Trust Company and the lead corporate actions analyst at NISA Investment Advisors.

9.2 Analysts

Karen Correa

EM Analyst

Karen studies International Trade and Finance at Universidad del Rosario, Colombia. At Macrowise, she analyzes macroeconomic environment in Emerging Markets. The main premise of her work is to formulate indicators through the use of historical data, fundamentals, as well as the context of economic and political landscapes for particular countries.



Julian Ramirez

Data Analytics and Global Macro Research

Julian studies economics, applied mathematics and computer science at Universidad del Rosario. He works in the implementation of different algorithms, data visualization and the analysis of currencies. He is working in different global liquidity models.

Leonardo Gonzalez

Token Development

Leonardo studies economics and computer science with an emphasis in geopolitics and Middle-Eastern politics at Universidad del Rosario. He focuses on cryptocurrency, blockchain activity and token development strategies. He also manages softwares as IFTEX, Stata and R.

9.3 Advisors

James Leitner: Director of Falcon Capital Management. Global Macro Investor.

James grew up in Germany and Turkey. He earned his Bachelor's Degree from Yale in Economics with an emphasis in Russia and Eastern Europe. He also holds a Master's Degree from Columbia University, specializing in International Finance and Russian Studies and also a JD from Fordham University Law



School. Mr. Leitner worked as a FX trader at Morgan Guaranty Trust, was Chief Dealer at Bank of America International, Vice President of proprietary trading at Shearson Lehman, and Managing Director at Banker's Trust. Since 1991, Mr. Leitner has been managing absolute return portfolios at Falcon Management Corporation.

Mr. Leitner serves on the Dean's Planning Council and the advisory board of the Leitner Center. He is also a Fellow of Yale's Pierson College, a member of the Dean's Council of the School of International and Public Affairs (SIPA) at Columbia University, and a member of the Manhattanville Ad Hoc Committee. In 2009, he received the Columbia University Alumni Medal for his distinguished service on behalf of SIPA, and during the 2010 Fordham Law Diploma Ceremony he was honored with the Eugene J. Keefe Award, which is given to the person who has made the most important contribution to the Fordham Law community. In 2010, he received the Yale Medal, which is the highest award presented by the Association of Yale Alumni, conferred solely to honor outstanding individual service to the University.

Christopher Calicott

Christopher Calicott is the Managing Director of Trammell Venture Partners, an Austin-based venture capital firm focused



on investing in highly technical seed- and early-stage startups in three core technology domains: Machine Intelligence, Blockchain Technology, and Cybersecurity. Thematic around these disruptors, the general partner of Trammell Venture Partners has subject matter expertise in these technologies, which it uses to support portfolio companies both from a technical diligence and a product development standpoint.

Calicott marries his own technology background with expertise in disruptive data analytics, machine intelligence, and multi-sided platform strategies, business development, and early-stage company growth mechanics. He is an advisor and mentor to early stage founders and also a coach to the startups in a number of accelerator programs. Recently, he's been called on to consider the impact of new market phenomena, such as token offerings on the venture industry ecosystem, including issues ranging from capital efficiency concerns, to valuations on on-balance-sheet crypto assets, to venture capital industry disruption potential, and what he believes will be a movement toward the tokenization of traditional securities and non-digital assets.