LANDOLLAR STABLECOIN

THE FIRST MORTGAGE BANK DIGITAL CURRENCY (MBDC)

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ABSTRACT

Landollar a new type of stablecoin, backed by a new type of mortgage.

Cryptocurrency Stablecoins represent a practical form of digital payment currency that is gaining popularity for web3 peer to peer transactions. Yet to date, concerns about price stability and backing have limited consumer acceptance of stablecoins as everyday spendable currency, even when they are advertised as safe and redeemable for US dollars on demand.

Current Stablecoin architectures ideally consist of 1 to 1 reserves in U.S. Dollars and US treasury bills, but others utilize complex and opaque collaterization schemes involving other crypto assets, questionable reserve accounting methods, algorithyms to manipulate supply, and other features which compromise decentralization and security, which are the main value propositions of blockchain.

By definition, any stablecoin's price is pegged to the value of a national currency in order to fix it's exchange rate, but this alone does not guarantee price stability when a given coin's redeemable cash reserves are depleted or frozen due to a bank run or bank failure; indeed, such a centralized point of failure takes the "Stable" out of the coin.

Likewise, one must make a sharp distinction between pegging, and backing; Just as a given stablecoin's market price can fluctuate due to external events, claims of backing by commodities such as gold for example, are only as good as one's ability to get their hands on the gold.

For a true money use case, then, a better-backed stablecoin is needed.

Enter LANDOLLAR

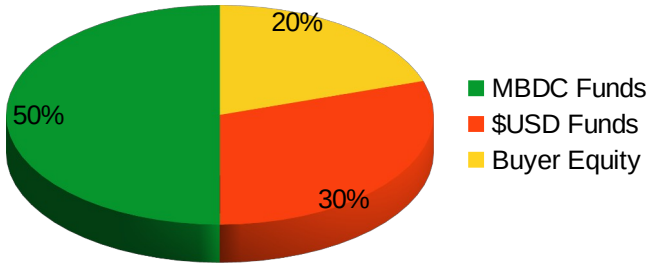
MORTGAGE BANK DIGITAL CURRENCY **is a new type of stablecoin, issued on demand at mortgage origination by participating lenders to directly fund senior debt, which cannot exceed 50% loan to value for the mortgaged property. For the borrower, it constitutes a principal-only loan denominated in MBDC, and is governed by a smart contract which requires mortgage principal to be repaid in same.**

When combined with $USD lender funding in the form of junior debt, these 2-tiered hybrid mortgages somewhat resemble a "wraparound" mortgage, but are originated by the same lender, and regulated and underwritten like a conventional mortgage with similar loan-to-value ratios. Naturally, principal and interest on the junior $USD debt are payable in $USD. however as the issuer and guarantor of MBDC, the lender also acts as a seamless exchange for the two currencies.

Owing to the lender's minimal cost of funds from minting, rather than borrowing most of the funds from conventional sources such as consumer deposits, federal reserve accounts or certificates of deposit, the lender can offer far lower blended interest rates to the borrower.

Blockchain archives, smart contracts and blockchain oracles automate many aspects of escrow, title security, loan servicing and contract compliance. This further reduces costs to all parties while insuring transparency, and likewise streamlining the process of legal recourse in the event of default.

Naturally, in the event of borrower default, the lender may foreclose on the property; in the event of lender failure or bankruptcy, the debt remains secured by the property. In either eventuality, the value of the currency itself remains secure. Assuming proper underwiring, this makes the MBDC debt 200% collateralized at 50% loan to value.



Lenders that originate, service and hold MBDC mortgages naturally have every incentive to practice sound lending and business practices, in that they have their 2nd position $USD funding at risk.

Requiring MBDC to pay 1st mortgage principal sustains on-going real-world demand; burning MBDC principal as it is repaid regulates supply. Circulating MBDC supply represents loan principal amounts outstanding at all times; nothing more, nothing less.

Within the 50% LTV limit, additional MBDC may be minted as property value increases, giving the property owner access to increased equity while allowing the currency supply to increase in a gradual and controlled manner. These self-regulating features help maintain both a floor, and a ceiling for the value of the currency.

In sum, sound loans make for sound mortgages; sound MBDC mortgages make for sound money. The traits of immutability, public transparency and decentralization are shared by real property and blockchain technology; Mortgage Bank Digital Currency combines them with straight-forward safeguards to regulate currency supply and demand; no algorithms are required.

FOREWARD

As Blockchain tech and WEB3 evolve, central banks are content for cryptocurrency investments to absorb some of the excess liquidity created by an era of money printing, knowing that a consolidation of the industry is inevitable once a popular, spendable digital currency emerges.

Speculation abounds that the US Federal Reserve Bank (The Fed) might "Deputize" said digital currency in lieu of issuing a digital dollar. Other central banks, led by China, India and elsewhere are issuing Central Bank Digital Currencies (CBDC's) which are simply digital versions of, and proxies for their respective fiat currencies.

Meanwhile, billions of new consumers now have the means to participate in Web3 commerce via smart phone.

In every eventuality, the banking business must adapt to the brave new world of CBDC's, digital currencies and decentralized finance if banks are to maintain their relevancy in the marketplace for money and financial services. Banking mainstays like mortgage lending and servicing, and durable goods financing in particular stand to benefit from smart contracts and other advances in Blockchain technology.

Meantime, merchants as well as government taxing authorities all have a stake in real-time tax payment transfers concurrent with taxable transactions, particularly in nations that rely primarily on value added (VAT) sales taxes rather than income taxes.

In order to achieve mainstream acceptance, a viable WEB3 digital currency must be capable of scaling to all of these possibilities.

New money for a new economy

Money is the essential component of modern commerce, and the grease that keeps the world moving. It buys our food, clothing and shelter, and is one of the most basic and useful tools of civilization. Like civilization itself, money has evolved over time.

Historically, there has there has been no alternative to the coin of the realm for average people, and few ways to avoid paying tribute to the financial middlemen who control access to banking and finance.

Today, thanks to blockchain technology and advances in personal communication and computing power, there exists both an infrastructure and a demand for a new type of electronic virtual money which knows no international boundaries, and which, by enabling peer-to-peer transactions for the masses, minimizes the reach of these financial middlemen.

And yet, some guarantees are needed that this new money will not suddenly shrink in value, or disappear altogether on the whim of a tyrant, a thief or the taxman. There must be still other assurances of the basic privacy, value and stability of this new money; increasingly, the full faith and credit of a central bank or government, even the United States Government, is not enough.

Sound Money Principals

It is not enough for money to be backed by a nation's military, economic and diplomatic strength; the strength of a given currency is directly tied to the demand for goods and services which can only be purchased by it: This is the real reason why the US Dollar is the world's reserve currency; This is why financial sanctions which limit access to dollar-based financial systems are so effective. Yet, even the dollar's value can be diminished by manipulating the laws of supply and demand.

For example, as the money supply increases relative to the supply of goods and services, the value or purchasing power of money falls, and the costs of goods and services rises, or inflates.

Conversely, when the supply of goods and services increases relative to the supply of money, the costs of goods and services will fall, and the purchasing power of money will rise. This is known as deflation.

In the long term, money printing and inflation become an impediment to economic growth, and debase the currency, a phenomenon we are starting to experience today in the US as a result of decades of deficit spending.

The solution to currency debasement is sound money, money that does not depend on the full faith and credit of government institutions, but on something closer to home.

To achieve sound money, there must be a much closer correlation between the supply of money and the supply of goods and services. Sound money must be backed by assets whose location and value can be verified in an accurate, public and transparent manner. In troubled times, confidence in money can only equal confidence in what backs the money.

Gold is scarce and valuable, with a strictly limited supply, yet there is not nearly enough of it to be a practical, spendable form of money. Real property, on the other hand, is the world's most popular, useful and valuable asset, one which is everywhere and always in demand.

Blockchain Technology now makes it practical to collateralize real estate with mortgages denominated in digital currency, rather than fiat currency. It is on real property then, that sound money is ideally based.

FAITH & CREDIT

The full faith and credit of the US government is no small thing; it represents the vast economic, military and political power of the United States, the most powerfil nation in the world in all of these aspects. Another perspective is that the US represents 3% of the world's population, but 25% of it's economic output. The vast pool of investible assets which can be purchased only with dollars is the real secret of the US dollar as the world's reserve currency, yet the dollar's value (and the wealth of the US itself) is being steadily eroded by unchecked spending on the part of the US government.

Absent a reversal of this trend, it is a mathematical certainty that the reserve status of the US Dollar will end, although probably not with a bang, but with a whimper as other alternatives emerge.

Likewise, with the diminishing of the dollar's power, the decline of the United States in both real and relative terms must inevitably follow.

These points are not lost on the many nations whose governments hold US Treasury bonds, and who have seen their holdings devaluate steadily. And they are certainly not lost on rival nations who seek to increase their own status as an alternative to the US in the realms of economic, military, and diplomatic power and influence.

One obvious solution is greater fiscal restraint and less dollar printing on the part of the US, but the real long term solution is sound money, backed by real world assets, which by itself will serve to restrain excess government spending.

Sound money will take the form of a new and decentralized asset-backed currency, minted in the US by approved lenders and backed by mortgages on real property in the US.

A new standard for currency

We submit that the preferred digital currency of the emerging WEB3 economy will require sufficient volume, backing and acceptance in order to be the trusted store of value and medium of exchange for peer to peer transactions.

In order to compete in the marketplace with other digital currencies including Central Bank Digital Currencies, this currency must be backed by fixed real world assets, the values of which must be verifiable in a public and transparent manner, as opposed to reserves of fiat currencies, commodities or other digital-assets.

It cannot simply be different from other currencies, it must be better.

It must be widely accepted and easy to spend on goods and services, with transactions as fast and reliable as using a debit card is today. It must also enjoy all of the advantages of Blockchain Tech, including decentralized, immutable and transparent public accounting records.

LIKE CASH, IT MUST BE AVAILABLE VIA SELF CUSTODY 24/7 ON DEMAND IN SMALL AMOUNTS, WITH THE OPTION TO DEPOSIT, SAVE AND INVEST LARGER AMOUNTS IN TRUSTED FINANCIAL INSTITUTIONS.

Then, and only then can it be resistant to the ups and downs of market conditions.

To date, consumer acceptance of government issued digital currency in China has been disappointing, no doubt due to Orwellian features such as expiration dates and other surveillance state controls.

Meanwhile, President Trump has banned CBDC's in the US via executive order, and formed a working group to craft pro-crypto legislation, as well as establish a digital assets reserve. Time will tell if the CBDC ban remains in effect, yet:

THERE REMAINS A STRONG CASE FOR A PRIVATELY ISSUED DIGITAL CURRENCY THAT PROTECTS AND RESPECTS CONSUMER'S FINANCIAL PRIVACY, FREE OF AUTHORITARIAN CONTROLS SUCH AS THOSE SEEN WITH CHINESE DIGITAL CURRENCY WHICH COULD CONCEIVABLY BE INTEGRATED INTO ANY CENTRAL BANK ISSUED DIGITAL CURRENCY.

A final word about acceptance: Merchant acceptance is well and good, but consumer acceptance is the gold standard for any currency.

As an alternative to the gold standard, we introduce LANDOLLAR, the land standard of digital currency.

Landollar is a Mortgage Bank Digital Currency, (MBDC) a new type of Stablecoin issued at mortgage origination to fund senior debt denominated in same, combined with junior debt funded in US Dollars. These hybrid mortgages are in turn collateralized by specific parcels of real estate.

A word about asset decentralization: Rather than computer nodes, this term refers to the network of MBDC mortgage lenders as well as individual mortgaged properties which are decentralized physically, minimizing the risks of the market, casualty loss and natural disasters. This insures that the currency value will remain stable in the face of localized disruptions.

Minted via smart contract on the Algorand Blockchain for security, scalability and speed of transactions, MBDC volume,

value and stability reflect that of the most decentralized, yet most popular and valuable of all fixed assets, real property.

A word about regulation: Lack of the need for a trusted third party is a key feature of Blockchain or distributed ledger technology, with the lack of government regulation an added bonus; however, commerce requires both merchant and consumer acceptance.

Alas, commerce is regulated by governments.

Thus, a government seal of approval combined with a minimum level of regulation is a necessary trade-off. Dogmatic adherence to the idea of zero government involvement is an unrealistic expectation, and an obstacle to adaptation and acceptance of digital currency in the wider marketplace.

MBDC Regulatory Concerns / Reserve Requirements

Pending State and Federal Stablecoin legislation will likely require that Fiat-backed Stablecoin issuers hold 1 for 1 US dollar reserves, or short-term US treasury bond equivalents in order to maintain liquidity for stablecoin redemptions. There are several disadvantages to these requirements, not the least of which are requirements that these funds be deposited in third-party banks, which can only insure the deposits up to the FDIC limit of $250K.

In putting such huge unsecured sums in a relatively few banks, those institutions (and the stablecoins backed by said funds) could be vulnerable to a temporary liquidity event resulting in a bank run, where many depositors make demands to withdraw funds at once, such that the bank runs out of funds. This was demonstrated in epic fashion by the failure of Silicon Valley Bank in 2023; Total losses were determined to be in excess of $50 Billion Dollars by the FDIC Inspector General's report in September of that year.

As SVB collapsed, USDC stablecoin lost it's peg and 13% of it's market value. While this was not a direct cause of the bank run, It was certainly a direct result, and highlighted the risk of highly centralized stablecoin reserves, and the need for accurate and verifiable accounting of same.

As earning assets for the lender, MBDC Mortgages add an extra layer of security to MBDC Stablecoins in circulation, and additional guarantees of their value and stability.

MBDC Mortgages provide a steady source of demand for MBDC, and a mechanism for regulating supply. In the event of either borrower default or lender bankruptcy, the mortgage itself remains intact as an earning asset, with additional liquid reserve requirements as follows:

1. **5% of the MBDC mortgage balances held in a USLD operating account, available for redemption from USD to MBDC for mortgagor principal payments.**

2. **5% of the MBDC mortgage balance in vault cash in the form of USD, or USD short term treasury notes, available for redemption from MBDC to USD on demand.**

In practice, participating banks will have offsetting demands for USDL and US Dollars; USLD for principal payments on MBDC mortgages, exchanges of USLD for dollars as well as ongoing merchant deposits and withdrawals in both currencies.

ASSUMPTIONS & ASSERTIONS

For instructional purposes, this writing will dispense with the term cryptocurrency in favor of digital currency, and refer to WEB3 rather than the decentralized web or internet. We will use the terms land, real property and real estate interchangeably, and likewise, the terms Blockchain and distributed ledger.

Our use case is valid for privately owned and mortgage-able real property, both residential, industrial and commercial. This includes unimproved properties, including land suitable for development, pastures and farmland.

Applications for publicly owned real property assets such as government buildings and public infrastructure, schools and universities, parks, etc are beyond the scope of this writing but would have many advantages over conventional bond financing, assuming proper controls and oversight exist.

Our use cases are in the United States, but are applicable in any developed nation, as well as many developing nations.

We will avoid overly technical descriptions of the architecture and features of the Algorand blockchain and ecosystem, and instead refer the interested reader to existing writings notated on the helpful links page below for additional insights.

LANDOLLAR (USLD)

THE FIRST MORTGAGE BANK DIGITAL CURRENCY

MBDC is minted on demand to fund senior mortgage debt on individual properties. These mortgages are originated, serviced and held by registered mortgage lenders, who are chartered by State and Federal governments and subject to existing underwriting procedures and reserve requirements. Thus, there is no need to re-invent the wheel; current mortgage lending regulations provide the guide rails.

MBDC Mortgage Safeguards

As every real estate investor knows, the easiest method of financing a property is when the seller is the bank, aka owner financing. With an MBDC mortgage, the property itself is the source for the majority of the funding, which consists of *no more than 50% loan-to-value* of directly minted MBDC secured by the property as senior debt, with the junior portion of funding in USD lender capital. Two important features of this hybrid structure are that *the MBDC portion is senior to the USD portion; and it's principal MUST be repaid in MBDC. Another key feature is that neither MBDC nor USD debt may be paid seperately; they must be repaid concurrently. Legally, 2 mortgages are recorded, but an MBDC mortgage may be thought of as a single, two tiered mortgage, denominated in both USLD and USD.*

As the MBDC mortgage principal is repaid, tokens are burned accordingly and the supply in circulation is thus reduced, until the mortgage is satisfied and the volume minted for that particular mortgage is burned to zero.

This serves as a self-regulating mechanism which controls the currency supply, sustains real-world demand and drives acceptance of blockchain mortgages to scale. The USD principal and interest payments are repayable in either currency at prevailing exchange rates of USD to MBDC.

Upon a sale or transfer of ownership of the property, the total mortgage debt may be satisfied, (In which case the balance of MBDC tokens will be burned) modified for additional funding (In which case more MBDC may be minted based on increased equity) or simply assumed on terms agreeable to lender and borrower, as outlined in the mortgage documents.

ADVANTAGES OF MORTGAGE BACKED DIGITAL CURRENCY

For mortgage lenders and borrowers, MBDC is a new, lower cost source of funds, one which combines the standard procedures and regulatory environment of mortgage lending with the minting, distribution and acceptance of digital currency.

For consumers and merchants, MBDC is designed for wide acceptance as a safe and collateralized medium of exchange, to be used as legal tender for all purchases and debt payments, public and private.

For state, local and federal governments, MBDC acceptance makes possible real-time tax remittances for all taxable transactions. Blockchain archiving of property records, and integrated smart contract features also insure property taxes and related fees are paid to and recorded by said authorities in a timely and transparent manner.

All are primary stakeholders in the acceptance and use of MBDC and it's accompanying payment protocols.

A brief history of currency

In past ages, a citizen of the Roman empire could walk about Rome with a few gold, silver, bronze or copper coins in his purse and buy food, lodging or transportation without having to go thru a third party. Of course, he also carried a dagger or a broad sword to insure that he could fight off those who were inclined to rob him of his coins; such were the hazards of the decentralized financial system that existed 2,000 years ago.

Gradually, the sheer demand for money outstripped the supply of precious metal in most realms, and economies evolved using fiat money rather than precious metal coins to trade in exchange for goods and services.

Fiat money, which dates back to around 1000 AD in China, can be defined as specie (coin or paper money, for example) which has little or no intrinsic value, but which is declared legal tender for all debts, public and private, and backed by the full faith and credit of a trusted guarantor institution (usually a government, or government-chartered institution)

As currencies evolved and international trade grew, Governments sought to make their fiat currencies convertible with other currencies by backing them with gold and silver reserves.

The Gold standard was introduced in the 1800's, and arguably is still used to a certain extent; every central bank of the G20 nations holds substantial gold reserves. Officially, however, the gold standard for currency is long gone, and few remember the financial turmoil and economic damage that ensued when the United States ended the dollar's peg to gold in 1971.

Among other effects, this action removed any constraints on printing money for the US Federal Reserve; a devaluated dollar led to a decade of high inflation and double-digit interest rates, and today the U.S. Dollar, the primary reserve currency for international finance, is backed by the full faith and credit of the US Government, which has a current debt of $35+Trillion Dollars, and future entitlement obligations for up to $100T.

Clearly, the dollar's supremacy is at risk if current trends continue; digital currencies present both challenges, and opportunities to the current financial systems of every nation, but especially to the US as the guardian of the world's primary reserve currency, and as it's premiere economic power.

Modern evolution of banking and credit

Today, while fiat money remains dominant, cash is no longer king for everyday transactions. Most consumers opt to use bank debit cards, credit lines and electronic payments to pay for bills as well as retail purchases.

Credit card processors serve another important function; As third parties extending credit lines for purchases, they assume counter party risk, or the risk that one party will commit fraud or not deliver goods or services as promised.

Whether online or in person, this convenience and security comes at an average cost of 2 to 3% or more of the price, including transaction charges and network access fees, which does not even include interest for balances carried. Naturally, these costs are passed on to consumers and were $176 Billion worldwide in 2020.

In less developed nations, the old systems of barter, trade and cash sales with fiat money endure, yet many of the un-banked pay even more exorbitant fees when cashing checks, paying bills, or sending or receiving transfers of money internationally. Unbanked online purchasing involves still more access fees and commissions.

Yet, large retailers, credit processors and financial institutions no longer have a monopoly in either computing power, data storage, or even payment technology.

True electronic money

Individuals and businesses acting as buyers and sellers communicate directly on many levels. Now, when transacting with digital currency they are capable of effectively cutting out financial middlemen using the most ubiquitous of modern conveniences, the personal computer and the smart phone.

This is the true promise of Web3 Decentralized Finance (DeFi) systems, where financial transactions will once again be peer-to-peer, and internet-native currency will take the place of cash.

Like cash, consumers will enjoy cash-only prices on goods and services, avoiding additional charges and inflated credit-only prices for fuel and other commodities. Added benefits of internet-native currency include near-instant settlement and zero-downtime, 24/7 decentralized payment networks, with a fraction of the fees of a legacy banking system, but the convenience, speed and safety of electronic payments, and above all, direct control and possession of one's money.

Because settlement times are near-instant, there is no counter-party risk; thus there is no need to pay third-party transaction fees and the risk of fraud is lessened because consumer and merchant are dealing directly, and transacting instantly. Such are the benefits of electronic cash, which spends like.....cash.

The limits of today's Digital Currency

We can encapsulate the practical limitations of any given digital currency, including Bitcoin as relative scarcity, (insufficient volumes to be the currency of WEB3), risk of price volatility due to market conditions, and lack of collateral or government backing to insure value stability. How then can they be a practical means of liquidity?

Stablecoins can solve the price volatility issue, but only at the risk of being tied to other assets which can be problematic to quantify as to actual value. Often their reserves are held in un-insured bank accounts, and accessible only by centralized legacy financial rails, which are vulnerable to a host of threats, not the least of which are bank runs or failures.

And, If indeed a given stablecoin is simply a proxy for the dollar, backed by an equal amount of dollars or dollar denominated securities, how then are they a store of value, and what advantage have they over CBDC's?

Finally, with no backing by either fixed assets or governments, there is nothing to insure that any given digital currency, including Bitcoin, might not be outlawed and/or see it's value drop sharply due to unforeseen events or government actions.

How then can it be considered a suitable legal tender for all debts, public or private? These and other factors have limited consumer acceptance of digital currencies, and by extension, decentralized finance applications.

Why Landollar?

USLD transcends these limitations.

It's total potential volume is limited only by the totality of deeded real property in the world. As a Stablecoin, USLD will initially be pegged to the US dollar at 1 to 1 when minted.

The mortgages are funded by USLD (not to exceed 50% LTV) as senior debt, and the balance of the loan will be Junior debt in the form of $USD lender capital. The senior debt is denominated in MBDC. This portion is principal only, and must be paid in USLD, and the tokens burned to retire the debt; All

interest charges are on the USD balance whilst USD principal and interest are payable in USD.

This insures that the value of the USLD will be as stable as the value of the mortgage, which in turn will be based on the property's appraised market value, with borrower and lender equity as a cushion.

In the event of a de-peg and drop in value, USLD will retain it's par value for mortgage principal payments, thus prepayments can be made at par, even if the exchange value falls. This is another self-regulating feature.

Like any conventional mortgage, borrowers will be required to have "Skin in the game", and face foreclosure in the event of default. A default, just like every other aspect of the borrower's performance, will be recorded on the Algorand blockchain for all the world to see.

Why Land?

"Under all is the land. Upon its wise utilization and widely allocated ownership depend the survival and growth of free institutions and of our civilization."

So begins the preamble to the REALTOR's code of ethics, but these words ring true for many other reasons. Real Property is where people live, work and play. It is a finite yet easily valuated commodity, present everywhere and always in demand, yet it's value varies greatly by locality.

Land records, including ownership and sales are public information, kept on a local basis, and those regulations which affect it's use and value are likewise local, transparent and, like land itself, distributed, rather than centralized.

Land ownership has long represented wealth, power and stability. Tribes and empires have fought for land since before recorded history; the dream of land ownership propelled the colonization of the new world, and for utility, land is more prized than gold or silver; It's market stability, although not absolute, always withstands the test of time. Only in extended times of extreme economic hardship does the value of land deflate; yet, it's utility remains.

Perhaps the best example of a mortgage backed currency is the German Rentenmark, issued in 1923 by the Weimar Republic following hyperinflation and a complete collapse of the value of the nation's existing currency. It mortgaged the value of the nation's agricultural land and industrial assets, and replaced the paper mark at the rate of one to a billion. This stabilized prices almost immediately and in fact the money rose in value, rather than falling.

This helped to restore confidence in the German economy, and when combined with the new gold-backed Reichsmark, the German economy revived and flourished thru the end of the decade of the 1920's.

The story of the Rentenmark is one of the value of sound money, and proof positive that, for stability of value, land is unequaled.

It is logical, then, that a digital currency designed for widespread acceptance and everyday usage would combine the stability of land value with the liquidity and utility of a stable coin.

That stable-coin is Landollar.

Mortgage Composition: Commercial & Residential

Both commercial and residential mortgages will have ratios of MBDC to USD, and total loan to value ratios determined by lender risk, borrower equity and credit, and regulatory guidelines; in other words, by the same criteria used for a conventional loan fully funded by lender capital. However, minted MBDC can never exceed 50% of the property value.

These requirements insure lender fidelity, in that they will likewise have funds at risk; In every other respect, existing lending parameters prevail.

As always, basic real property information in the US is a matter of public record and is recorded by city or county taxing authorities as an assurance of authenticity and transparency. These will be recorded immutably on the blockchain and generally include property descriptions, surveys, easements and liens of record, historical sales and building permits, and current owner information.

Additional requirements include records of third-party appraisals, the mortgage smart contract, transfers, modifications and real-time payment activity including property tax payments which will also be recorded and a matter of public record.

The ability to archive these records immutably and transparently is why blockchain is the ideal medium for recording real estate transactions in every respect.

Cross links between Blockchain archives and the local property assessor's website will insure accessibility for all records. (Not to mention they might also render title searches and title insurance obsolete; but we digress)

Computer collectivism

The true breakthrough of blockchain technology is defined by the ability of multiple, decentralized and disparate computers (nodes) working in sync to form a single global state, or simply put, to execute processes collectively in order to perform a single function.

For the most basic function of recording information on the blockchain, all nodes must agree on the validity of the transaction, before it can be date

stamped and recorded on any node. Once validated, the transaction is archived on each node as an immutable record.

Each node utilizes virtual machine software to manage data and communication between the nodes to maintain the global state; Each node can simultaneously maintain it's local state with disparate functions, databases and security for each node, and thus they are still free to perform their primary, centralized and dedicated functions individually.

Collectively, however, the global state forms a robust system of processing power, authentication and record storage for a network that is not dependent upon any single server or trusted third party for access, operation or verification; rather, the consensus of the network acts as the trusted party.

This is the essence of WEB3, aka the decentralized web. This idea of trustless verification was pioneered by none other than Silvio Macali, founder of the Algorand Foundation, and it was one of the precursors of Blockchain technology.

Each individual node acts as an autonomous piece of a collective puzzle, able to opt in or out as required to be a part of the Global State in order to complete the task that is consensus; the network functions with the unavailability of any combination of multiple nodes, with no one node being crucial, but rather, the consensus between the nodes that make up the global state being the final step in validating the transaction.

Then and only then is the transaction archived, immutable and available for all the world to see; In newer blockchains like Algorand, these same principals hold true for smart contracts and other decentralized finance (DeFi) applications, which likewise utilize distributed, rather than centralized processes and allow internet-native, peer-to-peer financial transactions far more complex than merely transferring tokens.

This first true Decentralized Application (DAPP) architecture made possible the first blockchain mortgages, which integrate the processes of mortgage origination, servicing and smart contract compliance with decentralized and immutable records of same.

In early blockchains like Bitcoin and Ethereum1.0, which use proof of work (POW) consensus protocols, achieving consensus is a complex effort which requires massive amounts of computing power from each participating node, rewarding validators with the ability to "mine" digital currency in exchange for solving the complex algorithmic puzzles required to achieve consensus.

Although this process validates blockchain transactions without a trusted third party, it is a cumbersome and slow process, because every node stores every record of every transaction. But, is it necessary to transmit and store the digital equivalent of hundreds or thousands of pages of information on every participating node, for every transaction, in order to achieve consensus and validate a transaction? There has to be a better way. Fortunately, the Algorand Blockchain provides it.

Why Algorand?

The range of collaborations and projects on ALGORAND is truly international in scope. It was designed with one goal in mind: To build a web-scale blockchain which solves the trilemma of competing priorities regarding security, scalability and decentralization.

Algorand is so named because it's consensus process is ALGORITHMICLY RANDOM. It's Pure Proof of Stake (PPoS) consensus algorithm works by selecting a sample of random validators with any size stake, rather than validators prioritized in proportion to the quantity of their holdings.

This is a more secure process than other simple PoS consensus mechanisms in that the chosen validators cannot be predicted in advance based on the size of their stakes; and so a given group of validators representing large stakes (and thus more voting power) cannot be assembled to "gang up" on the system and validate an invalid transaction, or reject a valid one.

Speed is measured by the speed of a completed transaction by a consumer, and by the speed of creating a new block, or propagation by technical people. ALGORAND has under 3 second transaction finality, with a network that has had ZERO downtime since launch.

This speed is key in eliminating counter-party risk, or the risk that a transaction will prove to be invalid after one or the other party has performed whilest the other party is left empty-handed. Credit card companies are well

paid to assume this risk; But the finality speed of ALGORAND eliminates the need for this particular financial middleman.

Security is judged by a platform's vulnerability to hacking including denial of service attacks, online fraud or theft, quantum computer attacks and more. ALGORAND is one of the only blockchains designed to be resistant to quantum computer attacks; of course, when your founder is Silvio Micali, the world's foremost cryptographer, this is perhaps to be expected.

Scalability refers to a system's ability to handle large numbers of transactions both quickly and efficiently; it is one thing to finalize transactions quickly, but quite another to do so at the speed and volumes demanded by world commerce. ALGORAND's speed, volume and reliability are consistently among the best-in-class for all L1 blockchains, reaching speeds of up to 16,000 Transactions per second.

Decentralization is measured by the number of validator nodes, ideally distributed geographically so that the maximum number are available to the network at any given time without disruption due to war, weather, power outages, etc. With almost 4,000 Validator nodes all over the world and on-chain governance, ALGORAND is highly decentralized in all respects.

STATE PROOFS are yet another method of insuring and verifying the integrity of the ALGORAND blockchain in an accurate, transparent and decentralized manner. This function operates in an ALGORYTHMICLY RANDOM manner by generating proof of state reports for a super majority of blocks, and randomly sampling a significant number of said reports as PROOF of the state of the blockchain at that given time. This in turn allows for faster and more secure interaction with other chains without lengthy verification routines.

Most blockchains utilize EVM or Etherium virtual machine architecture. Algorand uses AVM, or Algorand virtual machine. This is one of the keys to the almost instant finality times and high security of transactions on the Algorand blockchain; the execution environment for smart contracts on Algorand is built for speed and simplicity, and does not measure the complexity of each transaction in order to access higher gas fees, as does the EVM; rather, each finalized transaction is accessed the same (much lower) fee regardless of complexity. In the case of the AVM, being built for speed means being built for low transaction fees (as in fractions of a penny).

All of these advantages and more are what make ALGORAND the web-scale blockchain of choice.

ENUMERATION RENUMERATION

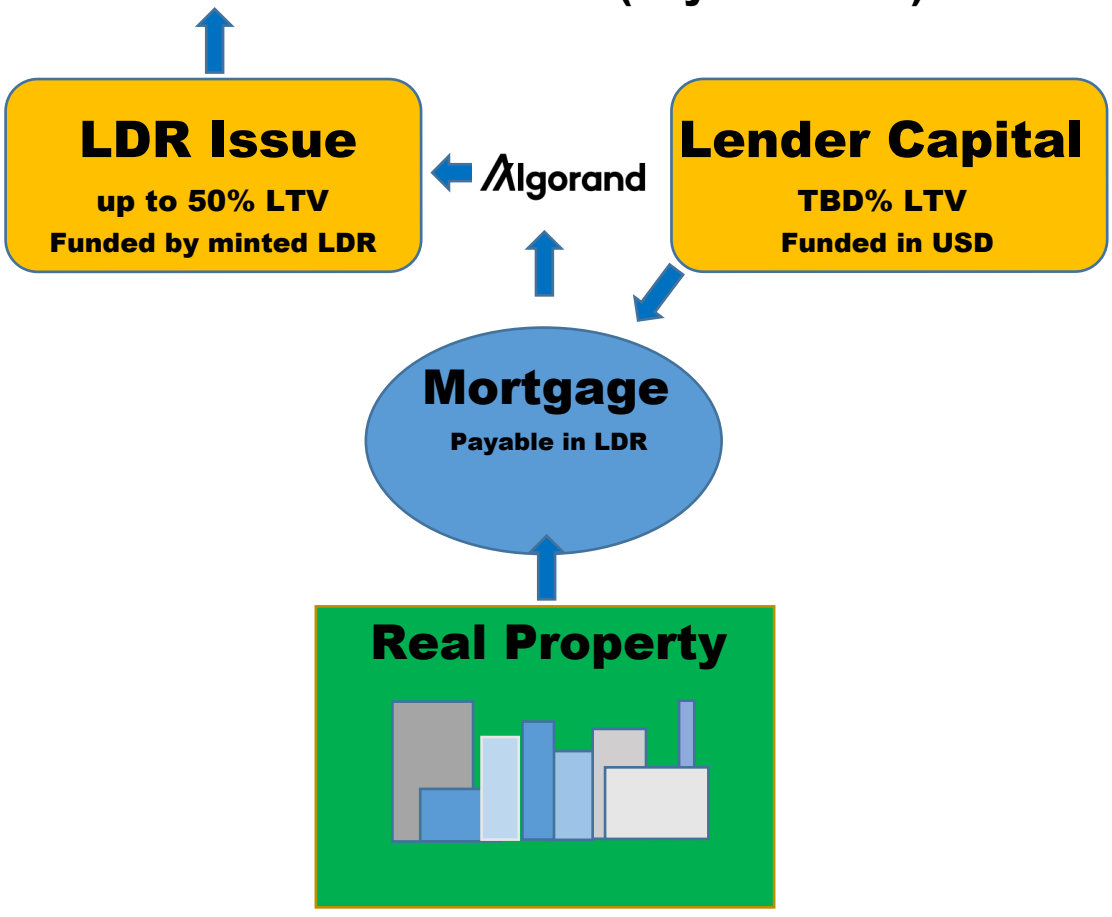
In order to create a new MBDC issue, each coin activated is identified by a loan number by approved lenders with a URL which leads to public records for the property.

Finally, a Gold deed coin will be struck and engraved based upon the international price of one ounce of Gold in $USD on the date of mortgage origination. The deed coin represents fee simple ownership of the property and is held as security by the mortgage holder for so long as the mortgage is owed, and serves 2 additional purposes: To provide tangible gold reserves for the lending institution and proof of the existance of the mortgage, and to serve as a "soft peg" to the price of gold.

Upon satisfaction of the mortgage, the final coins are burned and the deed coin transferred to the titleholder as proof of fee-simple ownership.

Individual Landollar Digital Coins (graphic representation)

Landollar Deed Coin (Physical Gold)



Currency Supply, Regulation and Liquidity

MBDC cannot be mined, it can only minted via smart contract, and issued by the lender upon mortgage origination. It is burned as the mortgage principal is repaid; it can also be minted incrementally on a periodic basis by the lender, by increasing the mortgage amount in order to advance funds to the borrower. This can happen when the collateral property increases in value, and only when verified by a third-party appraisal.

This means greater liquidity for property owners while allowing the currency supply to adjust in a gradual, responsible and controlled manner.

In no event can the MBDC balance exceed 50% of the property's value. This allows currency supply, rather than the value of the currency to increase as a regulating mechanism. *AS MORTGAGE PRINCIPAL IS REPAID, THE TOKENS ARE BURNED, AND THE SUPPLY THUS REDUCED AS AN ADDITIONAL SELF REGULATING MECHANISM.*

The market will ensure that lenders compete with each other to promote the advantages of blockchain mortgages and give incentives to pass on the lower cost of funds. At the same time, borrowers will be fully informed of the advantages of originating new mortgages or refinancing existing conventional mortgages, all with the security and transparency that only the blockchain can provide.

Network Architecture

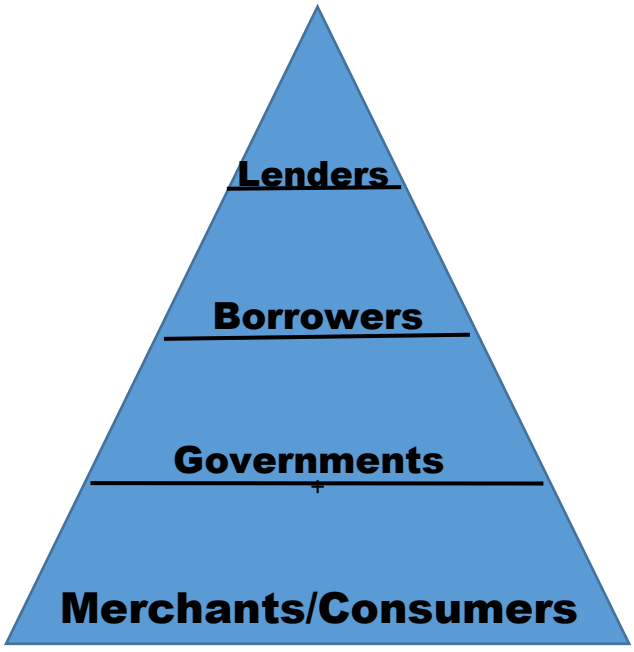
The network of nodes used to authenticate transactions and smart contracts rests on 4 legs, includes all of the requirements for Algorand non-relay, none-archival nodes, and will participate in governance and consensus:

1. The network of mortgagors, consisting of both individuals and institutions both public and private, who give mortgages on their real property in exchange for funds to purchase, or refinance same.

2. The network of participating mortgage lenders, or mortgagees of said properties, who get mortgages on real properties in exchange for funds lent to purchase or refinance them.

3. The network of municipalities which maintain public records of the properties upon which the mortgages are held, and which assess property taxes and service fees for said properties. Likewise State and Federal government entities which also assess sales and excise taxes, and duties and tariffs for various goods and services.

4. The network of merchants who accept payments for goods and services, and currently collect and remit taxes levied on said transactions to local, state and federal taxing authorities.



By definition, this will limit validators to those with a proof of stake; In other words, those paying and being paid for the transactions in question, and their fellow network members. Of course, consumers/wallet holders will also enjoy the benefits of secure and speedy transactions with fraction of a penny costs, and may or may not elect to be validators in the future depending on the volume and frequency of usage of USLD.

Technology Stack

***Payment System features*, for *vendors and borrowers* as well as *consumers:* Will be compatible with smart contract compliance and concurrent payment of state and local sales taxes, resort taxes, etc, as well as value added taxes (VAT) and other fees depending on the country.**

Software suite (As well as hardware requirements) for *lending institutions* required to issue, trace, and accept USLD coins and payments, and to burn principal collected to retire debt. Also to serve as archivers and validators.

Software suite for *Government Property Assessors and tax collectors* (As well as hardware requirements) to serve as validators and record and archive integrated smart contract mortgages as well as receive concurrent payments for taxable transactions, and property taxes and fees.

Value propositions for stakeholders

Mortgage lenders will fund mortgages by issuing USLD as well as lending bank funds in USD, and in turn may sell the USLD on an exchange for USD with which they can keep cash in their vaults, purchase treasury bills or other securities, or any other use consistent with sound banking practices and liquid asset requirements, including lending it to consumers in the form of personal loans, loans for durable goods, credit lines, etc.

This means that lenders can offer borrowers more competitive interest rates when purchasing or refinancing, with no compromises on service, speed or loan to value ratios. Borrowers may access even greater liquidity thru their lender as equity builds, and property values increase, if desired.

Because the minted USLD is senior debt, the market risk to both borrower and lender is similar to that of a conventional mortgage, with the assurance that it will always be used to retire the USLD portion of the debt.

Local governments will be paid sales tax receipts in real time, concurrently with all taxable transactions rather than in arrears, meanwhile merchants will not be forced to collect and accumulate tax receipts for later remittance, and will avoid credit card and bank processing fees for tax receipts collected as well as for their own revenues.

This also applies to property taxes, which are traditionally paid on an annual basis; now it is practical to pay them on a monthly basis concurrently with mortgage payments, with no third party escrow account required.

All enjoy the advantages of blockchain archiving, transparency and safety.

Conclusions

It is no exaggeration to state that LANDOLLAR is a product of the creative destruction that characterizes WEB3 as it is today; Literally thousands of ICO's have resulted in trillions of units of minted and mined currencies, most of which have little utility and zero intrinsic value, and are collateralized by little other than hype, and/or other digital assets.

LANDOLLAR was conceived as a state-of-the-art alternative to existing currencies, as a safe and stable medium of exchange, an over-collateralized store of value, and to provide additional means of liquidity for what has traditionally been an illiquid asset class.

This is all possible because it is secured by senior debt on that most useful, valuable and stable yet decentralized asset: real property. It's initial peg to the value of gold is instructive; It's peg to the dollar (or any other currency) is incidental.

MBDC is not the product of romantic ideals about global community and collaboration, decentralization of either power or finance, nor a statement for or against big government, or it's regulation.

It is simply designed to be a web-scale, digitally-native currency that offers the safety and security of backing by local banks, secured by privately owned real property,

MBDC is not simply a proxy for fiat currencies, nor simply an alternative to other digital currencies. It is a more stable, transparent and versatile form of money, publicly verifiable and traceable to it's collateral asset. It is designed to be the preferred global currency of WEB3.

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