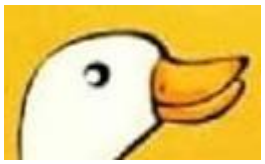
Goosie Rules



Loans with no Margin Call

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Contents

Overview

Money created by people backed by their crypto.

- pegged to the US dollar;
- doubling of assets without spending another penny;
- 50% of assets deposited protected from downside volatility (i.e. risk free investing);
- trustless - men and women stay in control of the assets they deposit;
- money to spend while retaining the upside potential of their crypto;
- no tax to pay when spending with goosie
- truly decentralised like Bitcoin with no central LLC or foundation.

Men and women deposit an approved coin into the smart contract. The smart contract automatically mints goosie to 54% of the value of the coin. 50% of goosie are sent to the goosie blockchain and appear in the user's wallet as money to spend. 4% are sent to the goosie blockchain as system fees. The man or woman creating the liquidity pay the fees when the collateral is released.

Goosie are minted at the assumed peg of 1 goosie for 1 US dollar[1]. Collateral is released by burning the same US dollar *value* as goosie minted.

To release collateral the smart contract checks the current market value of goosie to determine how many are required. E.g. if $100 worth of goosie was originally minted and goosie are currently trading at 96 cents, then the user needs to burn $100/0.96 = $104 worth of goosie to release their collateral.

Technical Details

Overview

Each man and woman using the protocol has a smart contract for each coin held as collateral (e.g. DOGE, BTC). They all function in the same way except they have different price oracles for the coin they represent. Each also has a price oracle for the current average USD value of goosie.

Collateral is released once the same USD value of goosie is burnt as has been minted against the deposit.

The protocol can be integrated with existing wallets such as Exodus, Binance, Bitpay etc.

[1] Optionally the rules of the goosie club allow the protocol to be formatted with a peg to gold, the world's most enduring measure of stable value.

The integration includes a wallet for goosie coins themselves.

All private keys are recoverable via a seed phrase using BIP and IPFS (Inter Planetary File Sharing) as per most non-custodial wallets.

Functions of the smart contract

The goosie smart contract performs a number of functions:

- Mint goosie at 54% of the current value of the coin collateral deposited;
- Send goosie minted to the goosie blockchain;
- Release collateral by burning the equivalent USD value of goosie as minted against it.

In order to achieve this:

- Each coin requires a different smart contract.
- To mint goosie the smart contract calls on the current price of collateral deposited.
- To unlock collateral the smart contract calls upon the current USD value of goosie.

Records

The smart contract records the following for each deposit:

- Amount of coin e.g.25 XRP;
- Weighted average price (WAP) of all deposits of a coin, e.g. XRP;

Operation

Deposit/mint goosie

On deposit the contract performs the following operation:

*Number of goosie minted = Amount of coin deposit * current coin price in USD * 0.54*

Goosie are sent to the goosie blockchain where:

50% to the man or woman performing the self-mint;

4% to the goosie addresses for system fees.

The contract updates it records:

New coin balance = previous balance + current deposit

*New WAP = ((previous WAP * previous balance) + (current price * current deposit volume))/new balance*

For example:

Deposit Example	
Current WAP	$30
Current volume	6
New deposit	
Price	$42
volume	4

A user has 6 coins in their smart contract with a WAP of $30.

They deposit 4 new coins with a current value of $42 each.

The number of new goosie minted are:

*Number of goosie minted = Amount of coin deposit * current coin price in USD * 0.54*

in other words:

*4 * 42 * 0.54 = 91*

The contract updates the coin balance:

New coin balance = previous balance + current deposit

in other words:

6 + 4 = 10

The contract updates the WAP:

Deposit Example		
		WAP * vol
Current WAP	$30	
Current volume	6	$180
New deposit		
Price	$42	
volume	4	$168

*New WAP = ((previous WAP * previous balance) + (current price * current deposit volume))/new balance*

in other words:

($180 + $168)/10 = $34.8

Withdrawal/burn goosie:

On a request for withdrawal the smart contract notifies the man or woman the number of goosie required to be burnt (potentially this part can be achieved by the wallet/app itself, see below):

*Number of goosie minted = (WAP * coin volume) * 0.54*

*Number of goosie required for burning = number of goosie minted * (vol of coin for withdrawal/total coin volume)*

Adjustment for current market price of goosie = number of goosie required for burning / current goosie market price.

The number of goosie required for burning is reported to the user.

The user deposits the required number of goosie with the smart contract and provides an address for the collateral to be sent to.

The smart contract burns the goosie deposited and sends the collateral.

The contract then updates its records

New coin balance = previous balance – current withdrawal

The WAP remains unchanged.

For example:

Withdrawal Example	
Current WAP	$30
Current volume	6
Withdrawal request volume	4

The number of goosie that have been minted is:

*Number of goosie minted = (WAP * coin volume) * 0.54*

in other words:

30 * 6 * 0.54 = 97

The number of goosie required for burning:

*Number of goosie required for burning = number of goosie minted * (vol of coin for withdrawal/total coin volume)*

in other words:

97 * (4/6) = 64.8

Say goosie are currently trading at 90c. As the value of goosie burnt has to always equal the assumed $1 value of when they were minted, the volume needing to be burnt has to be adjusted:

Adjustment for current market price of goosie = number of goosie required for burning / current goosie market price.

in other words:

64.8/0.90 = 72.

The user is informed that 72 goosie are required to be burnt to release the 4 requested coins.

Wallet Interface

Against each coin deposit the user can see if any more goosie are available to them due to the rising price of their collateral. The following message in displayed in each coin wallet:

Due to the increased value of your collateral $XXX in new goosie are now available. To mint new goosie withdraw your coin and re-deposit.

The calculation for the increase in liquidity is:

*if (current coin price > current WAP, (current coin price – WAP) * (current coin volume * 0.54), 0)*

The Goosie Blockchain

Goosie require a blockchain where ownership of goosie is recorded. This should be a low fee environment. Men and women are able to hold goosie with their own private keys without using the protocol. The protocol is only required for the minting/burning of goosie.

Reducing fees

The smart contract is called in order to:

- mint new goosie
- send goosie to the blockchain
- burn goosie

Here are a number to strategies to reduce fees:

One solution is to develop using a low fee smart contract environment e.g. an Ethereum side chain like Polygon or L2 solution or non Ethereum platform.

As well as the above it may also be useful to create a means of calling coin prices data off-contract to ascertain if there is new liquidity for the user based on their current WAP for a coin. In this way the contact is only called if the user wishes to burn goosie to release collateral.

Security would not be critical as the algorithm only needs to give an indication of new liquidity to the user. For example:

On App open

For each coin deposit in a wallet where balance > 0 check whether new liquidity is available for the user by:

Check current WAP for coin

Check current coin volume

Check current coin market price.

The WAP and current volume may be available on the smart contract blockchain without having to call the contract itself and incur fees. Alternatively it can be stored on the user's wallet. Market price is accessed by the usual oracles.

The app displays the amount of new liquidity available to the user.

Only if the user proceeds to deposit goosie to be burnt is the smart contract called.

Appendix: How goosie works

Risk Free Investing

Goosie are always minted at 54% of the value collateral deposited. 4% are for system fees. 50% are for the man or woman to spend. This means by default 50% of a man or woman's assets held in the protocol are protected from their downside volatility. Their collateral may go down but they have secured the original deposit value by minting goosie whose value, pegged to the US dollar, does not fall over the short term. This makes this portion of their collateral risk free while retaining its upside potential.

Double assets at no cost

By using the self-loan of goosie minted to purchase more of the coin used as collateral men and women can double the assets they own without it costing them another penny. Excluding fees and any changes to the price of the coin, if they use their goosie to purchase more assets eight times they will have doubled the assets they own. Each time they deposit half the previous amount of asset and have half the amount of goosie minted against them.

asset total	goosie minted
1.00	
1.50	50%
1.75	25%
1.88	13%
1.94	6%
1.97	3%
1.98	2%
1.99	1%
2.00	0%

Figure 1 Men and women can use the goosie self-minted by the protocol to double their assets at no cost to themselves.

Money to spend

The smart contract automatically issues goosie as a self-loan to 54% of the value of the collateral posted. Excluding the 4% fees this immediately unlocks liquidity to 50% of the value of the asset for men and women to spend as they choose. Their asset is held securely in the smart contract over which they retain full control. No third party is involved. They release the asset at any time by repaying the value of the goosie they have lent to themselves.

Stable Money

Goosies are pegged to the value of the USD. While imperfect due to inflation, the USD remains the world's reserve currency. The US dollar is also the currency against which most crypto currencies are measured.

For added stability a version of the protocol can be built using gold as the peg. Gold is the world's most enduring measure of stable value.

No margin call

One might expect a need for a margin call in order to maintain the peg of goosie to the US dollar if the value of the collateral falls below 100% coverage. As outlined above the guarantor value approach to maintaining a peg makes this unnecessary.

No tax

Crypto-currencies are generally treated in most jurisdictions as property. This means that the sale of the crypto coin is a taxable event if there has been an increase in its value. However men and women are not taxed on loans they take out from a legacy bank or DeFi lender. Goosie are self-loans and hence are not taxable events.

Second, goosie are pegged to the value of the USD, a measure of short and medium term stable value. This means even if there was tax to pay it is likely to be minimal compared to using a volatile crypto currency.

Also, goosie operates as a club. Clubs are private associations of men and women who have the ability to create their own jurisdiction (rules) as to how they operate. If men and women choose to mint goosie for their own private use this does not necessarily mean the sale of goosie becomes a taxable event in national jurisdictions.

Never sell your digital assets

Using digital assets as money removes the opportunity to participate in their upside potential. By spending goosie, self-loaned against these assets a man or woman retains the upside potential of their investments while at the same time having money to spend.

Interest free loans

By using the protocol men and women choose to lend money to themselves at zero interest. They only pay the 4% system fee and other transaction costs.

Secure

Men and women using the protocol retain control of their private keys at all times, both for the smart contracts holding their collateral and for their goosie wallet.

By operating in the private and with no central organisation the protocol is less vulnerable to regulatory changes.

Keep on earning

Men and women can increase their liquidity in line with the rising value of their collateral.

As the value of their collateral rises men and women can unlock it by burning goosie and re-depositing their collateral in order to access the increase in liquidity available to them.