Questionnaire

Stablecoin AAA Reserve

Questionnaire

Note: you can decline to answer certain questions (like marketing / go to market) which may be trade secrets and we will put in "declined to answer due to current trade secret".

a. General

i. Which blockchain / DLT are you building on top of?

Ethereum,. AAA Reserve is an ERC20 token.

ii. How does the stablecoin work?

100% collateralised by holdings cash and fixed income across the top 6 fiat currencies (in ratios consistent with Bank of International Settlements):

1. Basket of currencies provides stability over short term. AAA Reserve has been 3x more stable than USD since launch
2. Cash provides liquidity
3. Fixed income provides a return for credit risk (rather than keeping in a bank account, and not getting remunerated for the credit risk)
4. Corollary of fixed income holdings is that AAA Reserve can track inflation over the long term (not just peg to a single currency and devalue against inflation) – serving as a better store of value.

iii. **What is the purpose of your coin? What does it aim to achieve, and which problems does it solve?**

To serve as an effective Medium of Exchange and/or Store of Value. This is particularly relevant for, say, transactions in crypto (e.g. retail, where the gross margin is small), and, over the longer term for the execution of pay-outs arising from smart contracts with unknown settlement dates (eg. life insurance policies).

iv. **When we say something is stable what do you think it means? And when it comes to monetary policy specifically?**

We define stable in our whitepaper as (i) low volatility over the short term, relative to the volatility of fiat currencies for developed countries and (ii) maintaining purchasing power over the medium to long term (tracking inflation).

v. **What is your revenue model?**

Not for profit.

b. Launch & marketing

i. **What does the market need to be confident in the stability of your token?**

Pricing evidence: which has been available and publish since launch (Jan 2018): https://www.aaareserve.com/arc-nav.

ii. **How are you bootstrapping to that level of confidence?**

By running a small (live) Alpha test phase for 6 months – with allocations across top 3 currencies only. Which has now completed.

iii. **What are your go-to-market strategies?**

We are now exploring these, but primarily through the following use-cases:

1. Supporting ICOs (and working with ICO advisers)
2. Serving as a bridge between fiat and crypto
3. Supporting stable value requirements: e.g. lending, saving, retail etc
4. International money transfer

c. Economics

i. **What is your coin stable with respect to?**

Any major fiat currency, adjusted for inflation over the long run.

ii. **How much volatility can this peg withstand? Is that the same for upwards and downwards pressure? How wide is the band of behavior it can support?**

Unlimited

iii. **How easy is it to analyze the band of behavior from which it can recover?**

N/A. See NAV for details.

iv. **How expensive is it to maintain the peg/stability mechanism?**

A small surplus is generated from the fixed income investment which will cover costs. Any surplus goes back to the holder (if too much of a surplus, then donated to charity).

1. **How transparently can traders observe the true market conditions?**

   Completely: aaa.reserve.com/arc-nav

v. **Which monetary theory (theoretical) assumptions do you think are not true and how does your protocol account for that?**

Please see paper on Money and Currency:
https://www.aaareserve.com/sites/default/files/arc-public-docs/overview-of-money-and-currency.pdf
(and other docoumentaiton: https://www.aaareserve.com/arc-reserve-documentation)

vi. **Does your stablecoin supply scale in response to demand? If so, how?**

Yes. Any new purchase of coins results in a new issue of coins at the current NAV, with an equivalent amount going into the collateral pool.

vii. **Who provides the capital to maintain exchange rate peg? How are they compensated / Why do you think they would continue to lock up capital, given other investment opps?**

Holders of AAA coins provide collateral. AAA isn't a peg – so there is no cost to maintain or arbitrarily track a specific fiat currency.

viii. **An eventuality plan in case of a "black swan" event.[1,2] The 1% case will happen eventually.**

Depends on Black Swan:

1. High demand: dealt with by virtue of process of issuance
2. Removal of demand: dealt with by process of redemption
3. Fixed income issues: holding are in AAA credit institutions and Government backed securities, with transparent NAV, regularly marked-to-market. Return over long run will outweigh any volatility this introduces and counter inflation.

d. Tech

i. **Are any novel consensus mechanisms used, over and above the underlying blockchain?**

A few:

1. Regulatory construct: AAA was the first(?) cryptocurrency signed off by a regulator in Europe (in Jersey as a debt security)
2. Legal construct: Arc Fiduciary Ltd holds the cash and fixed income investment; this is a ring-fenced not for profit, whose shares are held by a Special Purpose Trust (which orphans the assets and makes them bankruptcy remote)
3. Economic construct: method by which AAA has 'natural buoyancy' in the event of a short run on the currency.

ii. **What transaction throughput can the blockchain currently handle and how does it plan to scale? Do its plans coincide with your plans for your estimated demand?**

Limited only by Ethereum blockchain capacity

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[1] https://en.wikipedia.org/wiki/Black_swan_theory

iii. **What tradeoffs does your protocol make and why did you make those tradeoffs? (supply/demand, temporarily peg breaking) (censorship resistance) (privacy tradeoffs) (accuracy of present market data and ease of manipulation of the data feed protocol uses (responsiveness of market and ease of manipulation)**

The biggest trade-offs are:

1. Regulatory: it may be classified as a security in some regions. This is unavoidable for collateralized cryptocurrencies.
2. Decentralisation: it is currently impossible to fully decentralize fiat-backed cryptocurrencies (you need a legal body to have ownership of the fiat assets under current legal frameworks).

iv. **Are there any centralized components of your system? Would any of these be easy for govs to shut down?**

As per above – the ownership of cash and fixed income. It would be difficult or a government to shut this down, given (i) AFL is regulated and (ii) AFL will end up owning government gilts and treasuries – so it 'plays nicely' with traditional economic frameworks.

v. **Does your protocol require information outside the blockchain such as a feed of price data? If so, how does this oracle work? Who manages it, what are the incentives for managing it, and what happens if the data they provide has a glitch?**

Yes – AAA uses feeds for fx and fixed income valuations. This is outsourced to a third-party Financial Intermediary Service Provider.

vi. **Which participants can see which transactions? What is the data and metadata available, and to whom? How does this impact privacy?**

Transactions are viewable through any Ethereum compliant app – e.g. Etherscan.

vii. **Are you doing anything with formal verification? Smart contracts used?**

Any initial purchaser of AAA, or ultimate seller back to AFL of AAA needs to complete Proof-of-Identity before the transaction completes – which includes KYC/AML. The smart contract also includes Proof-of-Reserves and Proof-of-Funds to ensure fair price is paid. See Technical Whitepaper

viii. **What is the rebase period? (Length of time between currency adjustments.)**

N/A

ix. **Can we make this automated?**
    1. **Do we use a smart contract, or network rules of the blockchain operators?**

N/A

e. Regulation

i. **What are your perceptions of local and global regulation in supporting stable coin, asset backed token economies?**

In general, cryptocurrency operators probably need to move closer to the existing regulatory framework, rather than the other way around. However, there are significant variations in the approach by different regulators, and this present challenges for all asset backed cryptocurrencies.

ii. **What could be done to improve regulation in terms of speed, quality, value for your company?**

It will be a long road for regulatory change; and we don't see any quick 'fixes'. However, we would like to see a level playing field – where crypto-operators who pay scant regard for regulations are held to account in a timely fashion by regulators.

f. Testing

i. **What kind of simulations have you done and what have they helped you learn? (simulating broad array of market conditions)**

1. **Mental models for simulations**
2. **Econometric models**
3. **Agent-based Modelling / Computer simulations**
4. **Other (Please describe)**

We back modelled the economic theory for 10-20 years (see white papers). The actual performance is consistent with this modelling.