Capital Gains Yield RToken (CCYG RToken) - an Alternate View

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Introduction

In these challenging times, the need for value protection is a must. Yield Tokens are a form of value protection that help to ensure that users are not exposed to unnecessary risks and are protected by market fundamentals. The challenge for the crypto economy is that unlike the regular fiat economy it is not protected by regulation or man made laws which induce and prohibit various forms of natural market behavior. Hence when considering a Yield Token such as a Capital Gains Yield RToken where the behavior is enshrined within the blockchain further additional considerations about market participants need to be made as there are no historical safeguards.

Yield Token Basics

The basics of a Yield Token are that it is a token that appreciates in value and does not (usually) depreciate. This is the return that the holders receive in exchange for the risk of holding the token. The easiest example of this mechanism is the price of gold which in 1980 was worth $615[1], today would be worth north of $2,000. This highlights three fundamentals necessary for a successful Yield Token. These are:

- An INVARIANT ASSET, this is typically the core tangible asset that does not change in real terms, i.e. it has no inflationary or deflationary behavior of its own,
- An INFLATIONARY ASSET, this is typically an intangible asset like a currency that increases with time
- An EXTERNAL MEASURE OF VALUE, this is typically used to determine the exchange rate between the INVARIANT ASSET and the INFLATIONARY ASSET so in the case of a house this would be the housing market.

What would a Capital Gains Yield R Token look like?

The existing model for the R Token is that it is a stable coin that is backed by typical other stable coins. These stable coins are typically pegged to the US Dollar hence inherit the depreciatory behavior of the US Dollar by default.

Therefore in order to create a Capital Gain Yield R Token we would have to use a different basis for our R Token basket. In this case we would create a basket of Gold Backed Cryptocurrencies, where the currencies involved retain a 1 unit to 1 unit exchange rate with real world gold. To further de-risk the model each currency would be assured to be redeemable in the real world for that value i.e. the holder could take physical delivery of the gold should the need arise.

[1] http://bit.ly/3j3O1DG, accessed 2022/12/14

In this case our Capital Gains Yield R Token would then assume the appreciative qualities of Gold or in a more advanced model a wider basket of currencies. Examples of tokens that might be used would be:

- Tether Gold (XAUT)
- DigixGlobal (DGX)
- PAX Gold (PAXG)

Users would now be able to transact this CGY R Token safely in the knowledge that in the event of a market failure, the ultimate recourse would be for the receipt of a real quantity of gold from the basket. The change this brings to Reserve Staking is that when staking CGY R Token in exchange for stRSR, the value of stRSR held would be measured against the market value of the CGY R Token which would be gradually appreciating as a result of its fundamental backing.

The Math

To understand what this looks like in real world numbers, let's assume that the R Protocol was available in 1980. Using our three gold backed Cryptocurrencies above where we have

Tether Gold @ 1 Troy Ounce[2]	= 1 x $615	= $615
DigixGlobal @ 1 gram[3]	= (1 / 31) x 615	= $19.84
Perth Mint Gold Token @ 1 Troy Ounce[4]	= 1 x $615	= $615

Therefore our R Token backed by the three tokens above would be worth **$1249.84** in 1980. Assuming we staked over the intervening period with the R Protocol and held an equivalent, redeemable stRSR token the value of our staked holding would be worth an unrealized value of **$3,683.98**.

The Risks

There are several risks associated with acquiring and holding Yield Tokens. In the case of the above the primary risk for the token holder would be the various delays that exist within the R Protocol. The structural delays when entering and leaving positions expose the holder to significant risk due to the unregulated nature of the cryptocurrency market. This means that effects such as market shocks or downturns, which would usually be slowed or halted by everyday securities laws or policies, act much more quickly than would otherwise be the case. Hence for a holder who has funds locked in transition for significant amounts of capital this can translate into life changing happenstance.

2 https://www.coingecko.com/en/coins/pax-gold, accessed 14/12/2022
3 https://www.coingecko.com/en/coins/digix-gold, accessed 14/12/2022
4 https://www.coingecko.com/en/coins/perth-mint-gold-token, accessed 14/12/2022

Other risks that exist with the model above are that of failure of the underlying gold backed currencies. These rely on physical legal entities to ensure that they are perpetually viable. However these entities themselves are not without risk since they have to operate as normal corporations in a real world environment. In the event that they were to fail this could result in a failure of the associated on chain currency with a knock on impact for Reserve staking positions.

Tax

The tax implications of the Capital Gains Yield Token are somewhat complex. This largely depends on whether taxes are applied on unrealized gains[5] or on point of sale. The current assumption is that no tax is incurred with this vehicle however this is not strictly correct. The typical use case of a Capital Gains Yield Token would be to borrow against the vehicle with a view to later repay or surrender it. Hence tax would be incurred at all points where income is required to service the loan. Also in the event that the borrower surrenders the CCYToken tax would be incurred again on the transfer event[6].

With the movement afoot to tax unrealized gains so in this case the annual capital appreciation that occurs as a result of the vehicle taxation becomes somewhat more complicated. This is due to the need to in the first part determine the appropriate accounting periods and then to determine how to account for periods of depreciation where the value of the holdings were less than the forecast trend line or the previous accounting period.

These factors play heavily into the institutional acceptance of Yield bearing vehicles as at an institutional level small changes have tectonic impacts.

Institutional Embrace

Institutions present an interesting challenge with respect to adoption, in that their overriding concern is to be profit bearing, however they also have to be significantly risk averse. On the surface a Capital Gains Yield RToken would appear to be a boon to an industry awash with investor / saver and pensioner money desperately looking for a **strong predictable return**. On the surface the CCGY RToken represents a mode of **financial scalability** that has yet to be seen. However there are several challenges for the typical institution. The first of these is the ability to insure contributor funds in the event of market failure. From a long-term perspectives fund contributors will typically be made whole e.g. gold price crash of 2013[7] compared with its current price today. However contributors may not be able to “wait it out” and hence institutions

[5] http://bit.ly/3WfJJYd, accessed 14/12/2022
[6] https://www.gov.uk/capital-gains-tax, accessed 14/12/2022
[7] https://www.wsj.com/articles/SB10001424052702304591604579292321014055380

have to provide remedies that ensure that their contracted commitments are honored. This insurance issue is typically what forces institutions to become interconnected with the resultant knock on effects when said insurance fails.

The second issue for an institution when looking to adopt a CCGY RToken is the physical backing for the token and whether the backing institution can physically deliver the levels of resource in this case gold required to protect the institution in the case of failure, and the operational overhead for disposing of the resource i.e. gold on the open market and its impact on prices which may already be in a difficult state.

The third issue for an institution is regulation.

What about the regulators?

For regulators the challenge of the CCGY RToken represents itself in the form of systemic risk associated with the vehicle. As the vehicle is permissionless and pseudo anonymous the typical bias from the regulator's perspective is to wave institutions and major investors away from the vehicle as it puts them at risk of violating numerous policy regimes such as Anti-Money Laundering, Know Your Customer and Sanctions, all of which carry hefty enforcement costs for the regulator and penal costs for institutions.

Conclusion

In conclusion a Capital Gains Yield RToken is an exciting development in the DeFi and cryptocurrency space and an exceptional feat of financial engineering. The adoption of this new vehicle is not without its challenges however with ongoing developments, it is set to make a strong addition to the financial portfolios of the future.