The Deo

Part 1 of The Deo: Introducing Player 2's Primary Currency

What is it?

The Deo is the primary currency of Player 2. The name "Deo" is derived from the greek word δύο (pronounced dýo) which means "two". We also believe the name "Deos" rolls off the tongue nicely and makes for a great currency name.

The Problem with Fiat Money

Fiat money is money that is backed by the issuing government. It has no intrinsic value and is purely dependent on the stability of the government itself.

In the worst case scenario, the government can collapse entirely, rendering its money worthless. Or the government can print copious amounts of its money, also rendering its money essentially worthless; this has happened in many countries such as Hungary (1945), Zimbabwe (2007), and most recently Venezuela (2019). In these scenarios, entire life savings of their citizens were wiped out.

Barring extreme situations, even supposedly AAA money have seen their governments turn to excessive printing in times of duress. The biggest fiat currency in the world is the US Dollar, and between 2020-2021 the US Federal Reserve grew its balance sheet from about US$4 trillion to slightly south of US$9 trillion due to COVID-19. The result is the country experiencing its highest inflation in 40 years.

The Problem with Stablecoins

Stablecoins are generally seen as a safe way to keep one's assets in cryptocurrency without the risk of volatility.

The unfortunate common denominator is that they are pegged to the US Dollar. While the US Dollar is less volatile than cryptocurrencies in general, we have established that fiat has many problems. Hence, that is not something we should be pegging our Deo to in the long run.

What should Perfect Money Look Like?

Perfect money should have the following characteristics:

1) It cannot be counterfeited
2) It is widely accepted
3) It is fully backed
4) It has the ability to maintain purchasing power parity

While none of the traditional fiat currencies hold all these qualities, it is very possible to create such a currency using cryptography.

Cryptocurrencies inherently tackle point 1. As cryptocurrencies gain adoption, that will likely increase acceptance, taking care of point 2. This leaves the last two points.

A Weighted Reserve

In order to fulfill both points 3 and 4, we endeavor to have the Deo collateralized by a Reserve consisting of a basket of cryptocurrencies that broadly represents the crypto market.

As an example, let us assume that the crypto market only consists of three cryptocurrencies: C1, C2, and C3. If C1 commands 50% of the market, and C2 and C3 commands 25% each, our Reserve would contain 50% C1, 25% C2, and 25% C3. This backing allows us to create a peg between the Deo and the underlying basket of cryptocurrencies.

This weighted Reserve ensures that our Deo is fully backed and maintains purchasing power parity with the broader crypto market.

Responding to Demand

With the peg setup, the core job of those managing the Reserve would be to maintain the peg within a small range.

If demand for the Deo rises, then the Deo would trade at a premium to the peg. Reserve should mint and sell new DEOs, and use the proceeds to purchase the basket of cryptocurrencies.

This does two things:
1) Allows the newly minted DEOs to be properly collateralized and
2) Brings the Deo back to its peg.

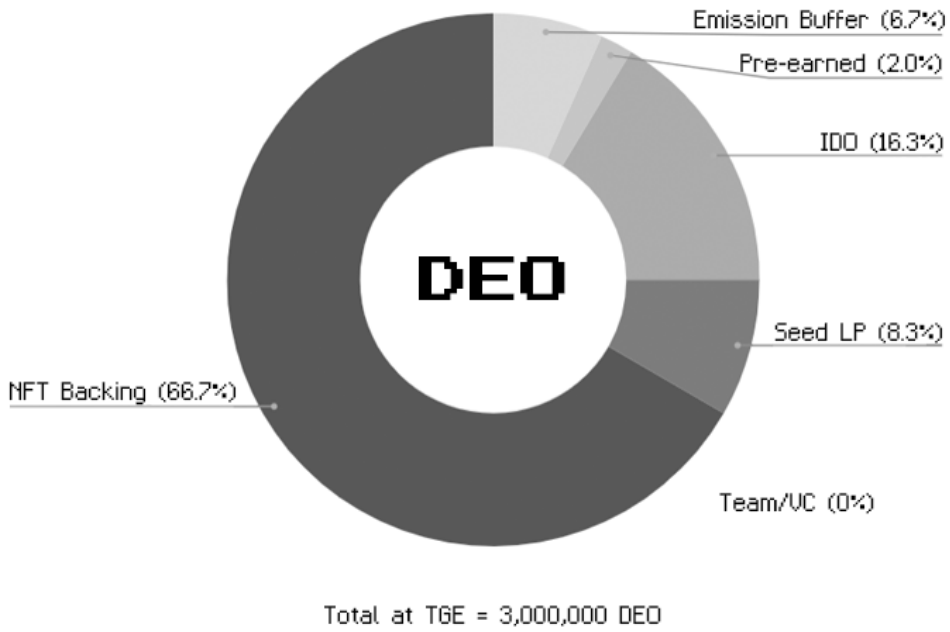
Conversely, if demand for the Deo falls, the Reserve should buy back DEOs from the open market and sell the equivalent value from their basket of cryptocurrencies. The DEOs that were purchased should then be burnt. This brings the Deo back to its peg while still maintaining the correct collateralization.

This is how the Deo will remain pegged while allowing for the expansion and contraction of the Player 2 economy.

The Perfect Money

Our design allows for three of the four characteristics to be fulfilled, but whether the Deo becomes widely accepted is something we have to work hard on. However, if it does, **the Deo will be perfect money**.

Part 2 of The Deo: Impossible Tokenomics



The Launch

There will be 3 million DEO minted at our token generation event (TGE). All tokens will be backed by 0.1 USDC to start, except our Emission Buffer.

Emission Buffer

The Emission Buffer is what will allow Player 2 to release new DEOs. It is a staging pool that will be paired with the prevailing backing USDC value before being released into circulation.

This Emission Buffer will be constantly refilled which means the Deo has **no supply cap**. However, all new tokens must be backed.

To determine how new DEOs are released, Player 2 has a special type of emission mechanism called Dynamic Emissions. We cover more of this in the next chapter.

Impossible Tokenomics

The Player 2 team will receive **zero DEOs** and **zero IDO funds**. The team does not profit from the IDO.

All funds received will be used to back DEOs. This means IDO participants will be receiving the DEO token at a pure cash valuation with no premium.

Player 2 is also fully self funded, which means there is no venture capital token allocation.

Part 3 of The Deo: Achieving a Stable Price Appreciation

Growing Deo's Market Capitalization

When a project grows in value, it is typically reflected by a growth in its market capitalization.

Market Capitalization =
Circulating Supply x Token Price

Market Capitalization can also be thought of as the collective wealth of all the token holders; the higher the market capitalization, the larger the collective wealth. Player 2 endeavors to do the same for its Deo, thereby growing the collective wealth of its holders.

Price Volatility as an Issue

Most crypto projects have scheduled emission rates, however the growth rate of projects is typically **anything but consistent**.

Assuming constant emissions, if the project growth rate is less than the emission rate, prices will start to fall. This is what causes volatile prices.

Price volatility has been one of the biggest criticisms of crypto. It is common to see the price of newer tokens spike within a very short period only to come crashing down shortly after. In many of these scenarios, it is common for investors who bought near this initial peak to lose >90% of their investment.

It is true that if a project grows substantially, the token prices may eventually recover. However, one must keep in mind that it becomes exponentially harder with each passing day. An ever increasing circulating supply means that fresh demand of $10,000 may initially be sufficient to push the token price from $5 to $50, but it will require substantially more new demand to push the price similarly later.

The unfortunate result is that most cryptocurrency charts look like this.

We would argue that this is not very inspiring.

Solving for Price Volatility

In line with our Player 2 core value, we asked "Why not?". And in this case: Why not solve price volatility? Is there a better way Player 2 can grow its market capitalization without the price volatility? Can we help our Players avoid that ill fated -90% trap that most projects have?

We think it is possible.

Since the formula only has two components, it is simple to decipher where to look. Assuming Player 2's growth will come in waves, if we want to keep the price growth relatively stable, we will have to make the supply growth volatile. Specifically, the supply growth should accommodate the project growth.

How?

This sounds easy in theory, but how do we execute this in practice?

We call it **Dynamic Emissions**.

During times of strong demand, Player 2 should actively sell DEOs on the open market. This does two things:

1) It allows Player 2 to grow its market capitalization. *This is good for the collective community.*
2) It prevents a massive price spike, thereby preventing the typical bubble and pop. *This is good for protecting individuals that might buy at unsustainably high prices.*

And in times of negative demand DEOs can be bought back and burnt if it falls below its intrinsic value; this is why having a backing collateral is important.

As a pair, Dynamic Emissions and buybacks will absorb volatility swings. And in doing so, it acts as a counter-weight against speculative short-term traders, while simultaneously creating value for long term holders.

As its Reserve grows, Player 2 can gradually raise the sale and buyback ranges, resulting in a slow and steady appreciation of the Deo.

We think this is much more inspiring and more importantly, it ensures that **our long term holders are rewarded**.

Part 4 of The Deo: Balancing the Economy

External vs Internal

The economy is complex and intertwines, but it can be largely segmented into two components: The external and internal economy.

The previous chapter deals with the external economy; it is akin to countries dealing with their foreign exchange rates. In this chapter we dive into the internal economy; we will examine what is necessary to sustain an economy, even in isolation.

The goal is to design Player 2's economy to be self-sufficient, yet be able to take advantage of new capital flowing into the ecosystem. This allows us to build a moat if need be, yet ride the wave if the broader market is on an upswing.

A Balanced Economy

To balance an economy, there needs to be tools where money can be injected and removed. This is traditionally the role of central banks and these tools allow them to incentivize more economic activity, or put a dampener if things get overheated.

In crypto terminology, this is the equivalent to emissions and burns. Player 2 has multiple ways to do so, and multiple ways should exist; there will be times where we may want a more direct approach, but in other times prefer something less direct.

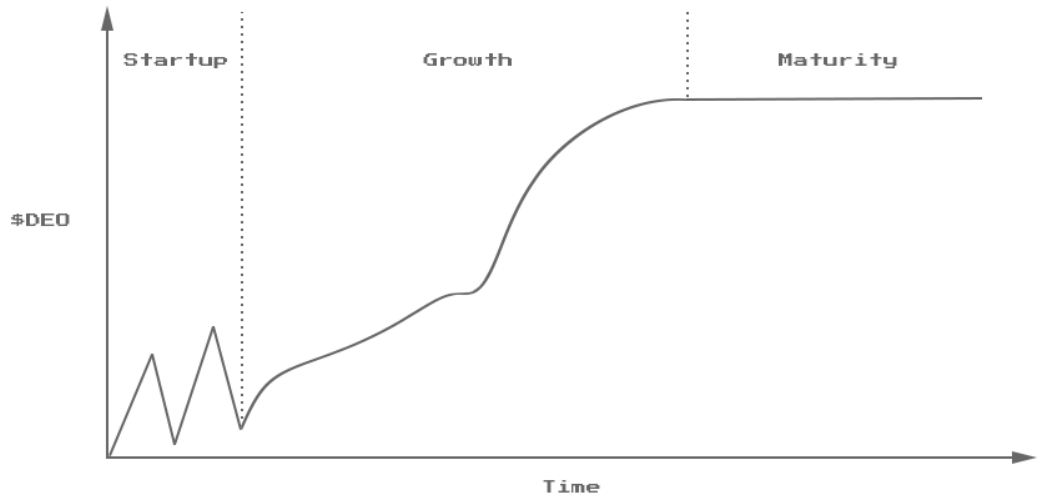
In Player 2 we call anything with net positive emissions a "Farm" and anything with net negative emissions a "Casino". We should have multiple adjustable parameters in both our Farms and Casinos.

A Bustling Marketplace

While it is important to balance the emission and burns, it will be all for naught if nobody uses our currency.

This is why **Player 2 is a platform for commerce**; our goal is to build a bustling marketplace. The better businesses we have, the more people will come. This creates a high velocity of money which is typically associated with a healthy, expanding economy. Combine a balanced economy with a bustling marketplace, and we have ourselves a **robust economy**.

Part 5 of The Deo: The Evolution



The Three Stages

As the Player 2 economy develops, it will push through different stages. This can be broadly grouped into three categories:

1) Startup
2) Growth
3) Maturity

Being able to identify the stages is important, as this will guide the **evolving backing strategy** of the Deo.

Startup Stage

This is at launch when liquidity is low, and short-term traders are largely in control of price movements.

It is typically chaotic with extreme volatility. Prices tend to whipsaw as traders overreact heavily to both good and bad news.

Growth Stage

This is where you start to see a healthy blend of traders and holders.

Holders are looking to accumulate further and in doing so will provide price support. Volatility is reduced as a result.

During this stage, Player 2 will continue to allow the backing per token to increase. This means the Deo will continue to be an appreciating asset. Since markets are always forward looking, we believe the Deo will trade at a premium to its intrinsic value as the markets are likely to price-in future gains.

Maturity Stage

This is when Player 2 moves from **growing** the backing per token, to **maintaining** the backing per token.

In the beginning, we want the backing per Deo to climb. This makes the Deo an attractive investment which will attract new Players into our ecosystem.

However, a fluctuating currency is not ideal for spending; this is because the cost of goods and services may be different from one moment to the next.

If Player 2 is to achieve their goal in making Deo the perfect money, Deo needs stability in value. This means it needs to transition from growing the backing, to maintaining the backing.

The timing of this transition is crucial and should ideally be done when there is a critical mass of Players, as at that point, maximizing growth becomes less of a priority.

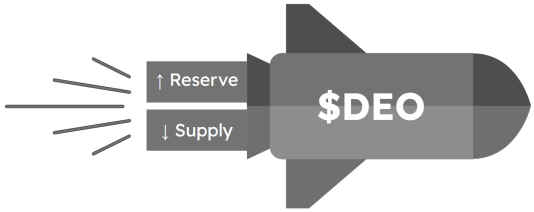
To begin the transition, Dynamic Emissions should cease. The job of the Reserve will then evolve to maintaining a loose peg with upper and lower bounds.

Should new capital follow in, the Reserve should issue new DEOs to holders through interest rates. Conceptually, holders will move from accruing wealth via price appreciation, to accruing wealth via token accumulation.

Part 6 of The Deo: Twin Engines of Growth

Rising Intrinsic Value

What makes the DEO sound is its backing in the Reserve. However, what makes the DEO an attractive investment is its growing backing. We call this backing per DEO its intrinsic value (IV). Our Player 2 ecosystem is designed to increase this IV over time. We do this primarily in two ways and we call them the Twin Engines of Growth.



Engine 1: Grow Reserve

The first way to increase the IV is to grow the Reserve. Player 2 will have its own revenue sources, including but not limited to: Dynamic emissions, the leasing of land, administrative fees, and advertisements.

Mathematically, Engine 1 can be represented this way:

If Supply $\Delta = 0$
and Reserve $\Delta = \uparrow$
then IV $\Delta = \uparrow$

Engine 2: Burn Supply

The Player 2 world will act as a platform for businesses to operate in, and all businesses will incur a sales tax.

Conceptually taxes are meant to help the people. Taxes can be used by governments to fund public services such as education, healthcare, and infrastructure. However, in practice not all tax dollars get put to good use.

True to our core value of "why not?", we explored different ways to solve the inefficient tax issue.

Ultimately, we came to two conclusions:
1) Taxes should be made simple for all. The convoluted tax laws are often the core problem.
2) Taxes should benefit the people. And it should be done in the most efficient manner.

In Player 2, only businesses will need to pay taxes. And in order to benefit the people in the most efficient manner, these taxes will be used to buy and burn DEOs. This reduces the overall supply, thereby raising the Deo's IV, and directly adding value to all holders.

Mathematically, Engine 2 can be represented as such:

If Supply $\Delta = \downarrow$
and Reserve $\Delta = 0$
then IV $\Delta = \uparrow$

Part 7 of The Deo: Transitioning the Reserve Composition

Eventual Goal

As introduced in Part 1, the eventual goal is to have the Deo collateralized by a basket of cryptocurrencies that broadly represents the crypto market.This allows our Deo to maintain purchasing power parity to the broader market.

However, the current crypto ecosystem is still nascent and as a result, highly volatile. We should wait for the markets to mature before embarking on transitioning our reserves.

Starting with Stables

The Reserve will start with purely stablecoins, because at the time of writing, this is the best way to protect our economy. Eventually when the crypto market matures, Player 2 can gradually transition its Reserve to a basket of currencies.

Yield from Other Currencies

At the time of writing, most crypto currencies have some form of emissions. This means in transitioning out of stables, the Reserves can also start to earn yield. This will add a new way to grow our Reserves, yet again benefitting all our Players.

Protecting the Reserve

The legitimacy of the Player 2 currency is pinned to the existence of its Reserve. Utmost care should be taken to preserve the Reserve. Generating zero yield is infinitely preferable to generating a yield with the risk of loss. Player 2 has plenty of ways to grow its economy and does not need to rely on its Reserve to generate a profit.

Guardians of the Reserve

While the Reserve will be initially safeguarded by the Player 2 team, the end goal is to create a digital world that is owned by no one, yet owned by everyone. For this to happen, we must also transition the control of the Reserve.

But who will be the new guardians of the Reserve? Governance in a decentralized and anonymous world is something Player 2 will explore together as a community.

The Currency of the Future

Bitcoin revolutionized the concept of money, but there is currently no de facto currency.

With the completion of this final stage - the transition of the Reserve - we will have the opportunity to position the Deo as a prime candidate to become the de facto currency of the future. But we cannot do this alone. While the model is primed, adoption is key. This is why we need as many hands to make it a reality.

Will you help us shape the future?