

# Opium Protocol Whitepaper

Opium Team

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## **1 Abstract**

We elaborate on the need for more professional and decentralised financial derivative products, and we introduce a decentralised protocol which enables the creation, settlement and trading of decentralised financial derivatives—which are composable with crypto money markets, traditional financial markets and their market participants.

# Contents

<b>1</b>	<b>Abstract</b>	<b>1</b>
<b>2</b>	<b>Introduction</b>	<b>3</b>
2.1	The importance of derivatives for efficient financial markets . . . . .	3
2.2	The size and significance of the derivatives market . . . . .	3
2.3	The opportunities for derivatives in Decentralised Finance . . . . .	3
2.4	The need for more derivatives in DeFi . . . . .	4
<b>3</b>	<b>About Opium</b>	<b>5</b>
3.1	About Opium Team . . . . .	5
3.1.1	Products by Opium Team . . . . .	5
3.1.2	Business model . . . . .	6
3.2	Competitive Advantages . . . . .	6
3.3	Example use-cases . . . . .	8
<b>4</b>	<b>Opium Protocol Explained</b>	<b>9</b>
4.1	Opium Network participants . . . . .	9
4.2	Order creation and matching . . . . .	10
4.3	Optional derivative fees . . . . .	10
4.4	Technical Schematic . . . . .	11
4.4.1	Relayer . . . . .	12
4.4.2	Opium Match . . . . .	12
4.4.3	Opium Core . . . . .	12
4.4.4	Opium Minter . . . . .	13
<b>5</b>	<b>Opium Protocol Governance</b>	<b>13</b>
5.1	About Opium governance . . . . .	13
5.2	\$OPIUM token economics . . . . .	14
5.2.1	60%: Active users . . . . .	14
5.2.2	16%: Investors and advisors . . . . .	14
5.2.3	14%: Opium Team . . . . .	14
5.2.4	10%: Governance Reserve Fund . . . . .	15
<b>6</b>	<b>Roadmap</b>	<b>15</b>
6.1	Opium Protocol v2 . . . . .	15
6.2	Opium Exchange v2 . . . . .	15
6.3	Hummingbot integration . . . . .	15
6.4	Implementation of L2 scaling solution . . . . .	15
<b>7</b>	<b>Summary</b>	<b>16</b>
<b>8</b>	<b>Appendix</b>	<b>16</b>
8.1	FAQ . . . . .	16

## 2 Introduction

The company behind Opium Protocol was founded in 2017 and a lot has changed in crypto and digital currencies since then. We have seen a bull and bear market cycle, the birth of the “DeFi” narrative, the rise of stablecoins and novel governance schemes, amongst other innovations.

In this section we illustrate how the need for professional decentralised derivatives in DeFi is rapidly growing and how Opium Protocol is designed to fulfill the needs of this market.

### 2.1 The importance of derivatives for efficient financial markets

Derivatives are a crucial component of the global financial system. Financial systems are made up of financial markets, and financial markets are all about risk—every single transaction comes with a degree of risk for both counterparties. Professional market participants, such as traders, banks and investment firms want to offset or “hedge” these risks in order to prevent financial disaster in the event of unforeseen events such as high price volatility. Derivatives are financial instruments which allow for market participants to more easily and granularly manage their risk by limiting potential losses without significantly sacrificing potential returns. Simply put, derivatives smooth out returns and losses and, therefore, prevent systemic liquidation events and financial crises.

### 2.2 The size and significance of the derivatives market

The market for derivatives is the single largest financial market in the world. For example, the global derivatives market is about 10 times larger than the credit market and 20 times larger than the global GDP. The typical market size ratio between money/debt/derivatives is 1/10/100, which means that, in a typical financial market, the total market for derivatives is about 100x larger in comparison to the spot market of that particular asset. [1]

When considered a financial instrument for risk management, one might suggest that derivatives are solely used by professional traders and institutional market participants. Whilst this is partially true, most civilians also actively interact with and trade derivatives in their daily lives since derivatives are an important component of common financial services. For example, personal checking accounts, insurance policies and mortgages all can not exist without the use of derivatives. [2]

### 2.3 The opportunities for derivatives in Decentralised Finance

The notion of Decentralised Finance (or “DeFi in short) refers to the ecosystem of composable protocols, platforms and products which are building financial products on permissionless and (partially) decentralised architecture. DeFi products mostly reside outside of the traditional financial system, but are either inspired by, or evolutions of, traditional financial products. Completely new value propositions are also being conceptualised and tested in the market.

The DeFi ecosystem stands to become a high-potential platform for financial derivatives because of some inherent benefits compared to those in traditional finance, most notably:

- **Disintermediation:** DeFi architecture is built on blockchain technology which—at its core—has the potential to replace some key functions from the traditional financial sector. Therefore, derivatives built on DeFi have the potential to substitute costly players with transparent and inexpensive tools .
- **Accessibility:** Decentralised derivative markets are inherently more accessible. They can be used by anyone with an internet connection and an Ethereum wallet — regardless of their location or social status. This contrasts with the traditional financial sector, which mostly serves those who reside in rich and powerful countries. Because of this ease of accessibility, the addressable market for DeFi includes those that are currently not served by the traditional financial sector
- **Permissionless:** In the traditional financial system, the process for creating and listing a new derivative is very complex and the costs involved are close to a million USD. Because of this, most derivatives are created by big banks which potentially can make it an unfair and inefficient market compared to DeFi. Creating a custom derivative on DeFi is easy, cheap and can be done by anyone by using a simple UI connected to a derivative protocol.

## 2.4 The need for more derivatives in DeFi

At the time of writing, decentralised financial markets are still in their infancy. Besides total market capitalization, one major indicator of this relative infancy is the ratio between the spot trading markets and derivatives markets in DeFi which are not nearly similar to the 1/10/100 ratio which was mentioned earlier. Based on this fact, one could conclude that the market for derivatives in DeFi has a lot of potential growth ahead of itself. Below are listed some potential growth opportunities for derivatives in DeFi:

- Based on the fact that the derivatives market in DeFi is tiny, one can infer that the usage of DeFi products introduces a lot of unhedged (hidden) risks to the user. At the time of writing, the most popular DeFi protocols and products offer leveraged exposure to volatile assets whilst utilising on-chain liquidity pools for fulfilling trades. This introduces systemic tail risks to all users involved; not just the users who are using leverage whilst speculating. Those who are aware of the risks are already seeking to hedge their risks using derivatives such as Nexus Mutual, however this platform is currently struggling to meet the demand. [3]

The market for derivatives in DeFi is expected to grow exponentially with the total growth of DeFi as the space matures, thus making derivatives an incredible opportunity for both builders and investors.

- Based on the previously mentioned benefits of using DeFi architecture for derivatives, one could expect that DeFi will cannibalize a part of the traditional derivatives market.
- Over the past few years, we have witnessed a growing interest amongst institutional players in cryptocurrencies.[4] However, this is not where their participation will end. These large professionals will also start participating in this internet-native financial system, which will bring increased liquidity, volume and competitiveness to

the space. These players are unlikely to participate in yield farming because of the potential exposure to catastrophic tail risks but will, instead, participate in arbitration and will provide liquidity to the most stable and safe strategies. Regardless of how they participate, they WILL demand tools for risk management. They will require advanced derivatives for hedging their risks. They will require financial primitives with finite upside and downside potential.

In conclusion, the market for derivatives in DeFi needs to grow significantly in order to meet the expected demand for financial risk management instruments.

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## 3 About Opium

Opium is a protocol which allows for creating, settling, and trading of decentralised derivatives. As an open and universal protocol, anyone can use Opium to build and launch decentralised financial derivative contracts. Through combining oracle recipes with derivative recipes, virtually any type of financial derivative can be created. Traders of derivatives on Opium receive their positions as a token which can be transacted, traded and stored in cold wallets.

In this section, we will elaborate on the team, the concept and the potential use-cases that drove the development of the Opium Protocol.

### 3.1 About Opium Team

The company behind Opium was founded in 2017 and is fully self-funded. Opium was working on decentralised derivatives long before the “DeFi” ecosystem came into existence, and has also been focussed on attracting market participants from traditional finance. Since 2017, Opium Protocol was designed, built, thoroughly audited on security by SmartDec and launched on the Ethereum mainnet. Opium has built and released three products which are built on top of the Opium Protocol.

#### 3.1.1 Products by Opium Team

Opium Exchange is an open trading platform for decentralised derivatives. We have previously created markets for ETH futures, gas options, synthetic pre-markets for upcoming DeFi tokens and binary options. Opium Exchange is the place to hedge trading risks and speculate on opportunities inside and outside of DeFi. Opium Exchange seeks to become “the Bloomberg for decentralised derivatives,” listing thousands of financial derivative products openly tradeable by anyone![5]

Swap Rate is a platform on which you can hedge against or speculate on the interest rate fluctuations in DeFi money markets. Interest rate swaps are the most popular type of derivatives in the world and are an important building block for fixed income products. They are expected to play a crucial role in Decentralised Finance as well.[6]

The Art Exchange is the first online platform for trading art derivatives and tokenised fine art. The project is a collaboration with The Art Newspaper; the largest art-focused media in the world, and is aimed at making the fine art market more accessible.[7]

In addition, Opium is collaborating with multiple independent organizations in order to bring their derivative ideas (eg. olive oil futures, Spotify track futures, sports betting) to market through using the Opium Protocol as the foundational layer.[8]

### 3.1.2 Business model

As a neutral, universal and high-liquidity base layer for decentralised derivatives, Opium Protocol is expected to be used by many Dapps built by various organisations. Opium Team will continue to develop and launch products built on top of Opium Protocol.

Opium Protocol includes a fee mechanism which charges the profit-making trader a small fee per traded derivative contract. 90% of the fee is distributed to the creator of the derivative contract. The remaining 10% of all fees generated on Opium stays with the Opium Protocol.

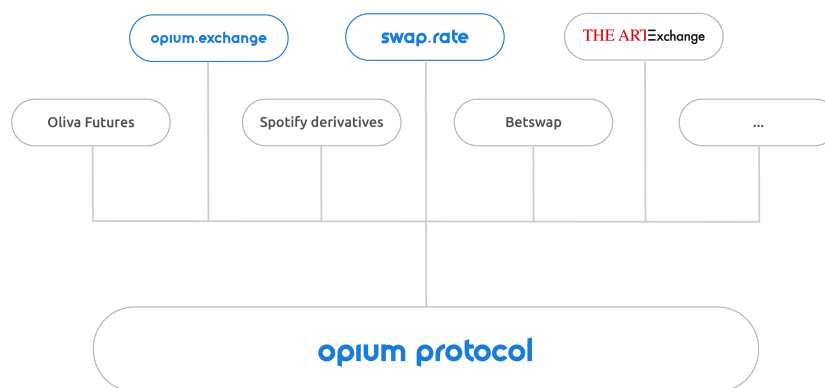


Figure 1: Opium Protocol as a base layer for financial derivative Dapps

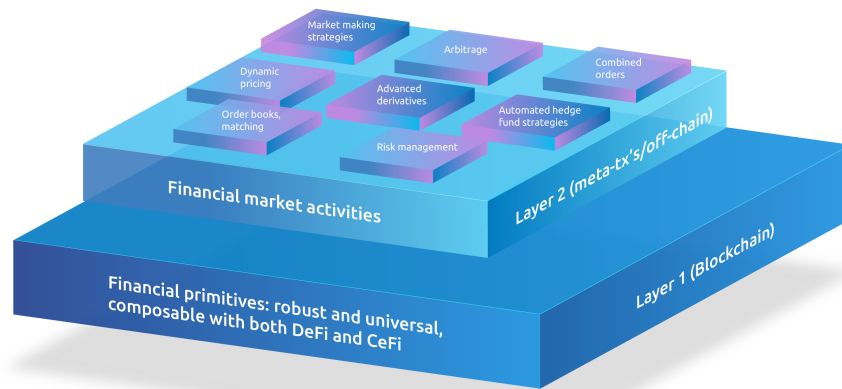
## 3.2 Competitive Advantages

The team behind the Opium Protocol has extensive experience in both traditional finance and DeFi, which makes for a unique and visionary perspective within the sector. This is reflected in the design of Opium Protocol, which is uniquely different from most derivative protocols.

Opium Protocol is unique because it is designed to be composable with both DeFi markets and traditional financial markets. Most derivative protocols in DeFi today introduce theoretically uncapped risks through the use of on-chain liquidity pools, or introduce AMMs which are actually a step back from traditional finance. At Opium, we

believe in robust and simple on-chain financial infrastructure, which can be further leveraged off-chain using Bloomberg-style product tickers.

Opium Protocol provides robust financial primitives on layer 1. More complex features (eg. order books, advanced derivatives, market making strategies, arbitrage, combined orders, dynamic pricing and automated hedge fund strategies) are implemented on layer 2. This makes for a universal and robust protocol which allows for the creation of decentralised derivatives with a risk profile more similar to traditional financial products, which are needed by professional market participants.



opium protocol

Figure 2: High-level functional architecture

### 3.3 Example use-cases

Opium Protocol is universal and allows for the creation of any type of derivative. What follows is a list of sample financial derivative products that can theoretically be built using Opium Protocol:

#### Options

- Call/put options on Ethereum gas price
- Call/put options on YFI
- Call/put options on BTC price
- Call/put options on TSLA stock price
- Binary options for sports betting

#### Swaps

- Interest rate swap on Compound supply interest rate for USDC
- Interest rate swap on AAVE borrowing interest rate for DAI
- Credit default swap for Aave credit delegation lines

#### Pre-markets (ie. ZEPOs)

- Premarkets for unreleased DeFi governance tokens (eg. Curve, YFI)
- Premarkets for unreleased network tokens (eg. Polkadot, Cosmos, NEAR)

#### Futures

- Futures on ETH
- Futures on GOOGL stock price
- Futures on olive oil commodity price

#### Advanced combined derivatives

- Financial engineering (eg. market-neutral strategy on providing liquidity)
- Structured instruments (eg. reverse convertibles hedged by plain derivatives)



## 4 Opium Protocol Explained

In this section, we will elaborate on the system architecture of the Opium Protocol. The technical architecture design of the Opium Protocol is based on the following design principles:

1. On-chain components of a financial system should never allow for theoretically uncapped losses and/or returns.
2. One of the key innovations of DeFi is the possibility of sharing ownership of a financial system with its users. The technical architecture design of Opium will allow for decentralised ownership and governance.

At its core, the Opium Protocol is compatible with these principles. The Opium Protocol does not allow for uncapped potential losses and returns (through the use of fixed margins in the form of any ERC20 token), is deployed on the Ethereum mainnet, is fully non-custodial and can be interacted with by anyone.

The Opium Protocol launched with centralised control of the protocol by the Opium Team in order to bootstrap a sustainable network of actors that are utilizing the protocol. Over time, the Opium Protocol will gradually transition to complete community and stakeholder control through decentralised governance; utilizing a governance token. The governance model will be further described later in this document.

### 4.1 Opium Network participants

The Opium Protocol is designed for use by a network of various actors which are incentivised to carry out various functions which are usually fulfilled by banks and intermediaries.

As with a classical derivatives market, users of Opium can be:

- Investors
- Hedgers
- Speculators
- Margin traders
- Arbitrageurs

And, unlike classical markets, other actors include:

- Order relayers
- Financial engineers/derivative product designers
- Contract executors
- Affiliates and/or front-end developers
- Governance token holders

## 4.2 Order creation and matching

Users of the Opium Protocol specify their orders in accordance with the TMtm specification—which, in turn, is designed to be similar to traditional financial markets. Based on this specification, an order message should include the following variables:

- T = The derivative positions offered
- M = The margin offered (in any ERC-20 token)
- t = The derivative positions asked
- m = The margin asked (in any ERC-20 token)

In short, the order message contains what + how much is offered and asked by the user. The order message is signed by the user and is sent to the relayer on the Opium Network.

The TMtm specification for orders allows for partial filling of outstanding orders with partially compatible orders. It allows for ‘swaps’ of existing position tokens; which maximises liquidity on the protocol and minimizes the need for minting & burning of position tokens. In traditional finance, professional traders often execute combined orders through their bank. On Opium Protocol, traders can perform similarly advanced combined orders solely through leveraging TMtm swaps—without the need for a bank to act as an intermediary.

Examples of TMtm swap protocol requests:

- $\langle 4 \times \textit{Future} | 0 | 0 | 6 \times \textit{USDT} \rangle$  is a sell order of 4 Futures for 6 USDT Tokens
- $\langle 0 | 5 \times \textit{DAI} | 10 \times \textit{Options} | 0 \rangle$  is a buy order of 10 Options for 5 DAI Tokens
- $\langle 4 \times \textit{Future} | 6 \times \textit{USDT} | 10 \times \textit{Options} | 0 \rangle$  is a combined sell order for [10 Options - 4 Futures] spread with a price to pay of 6 USDT coins
- $\langle 4 \times \textit{FutureA} | 0 | 8 \times \textit{FutureB} | 0 \rangle$  is a buy order of 8 FutureB with paying of 4 FutureA
- $\langle 1 \times \textit{Portfolio} | 0 | 0 | 1200 \times \textit{DAI} \rangle$  is a sell order of user Portfolio for 1200 DAI coins

## 4.3 Optional derivative fees

Every financial derivative created on the Opium Protocol can include an optional derivative fee paid by the profit-making trader of that derivative contract. The fee is set by the creator of the derivative contract - who will receive 90% of this fee. **The remaining 10% of the fee stays with the Opium Protocol.**

## 4.4 Technical Schematic

The Opium Protocol consists of multiple system components which partially reside on-chain and partially off-chain. The following schematic explains the various components, their relations and their functions.

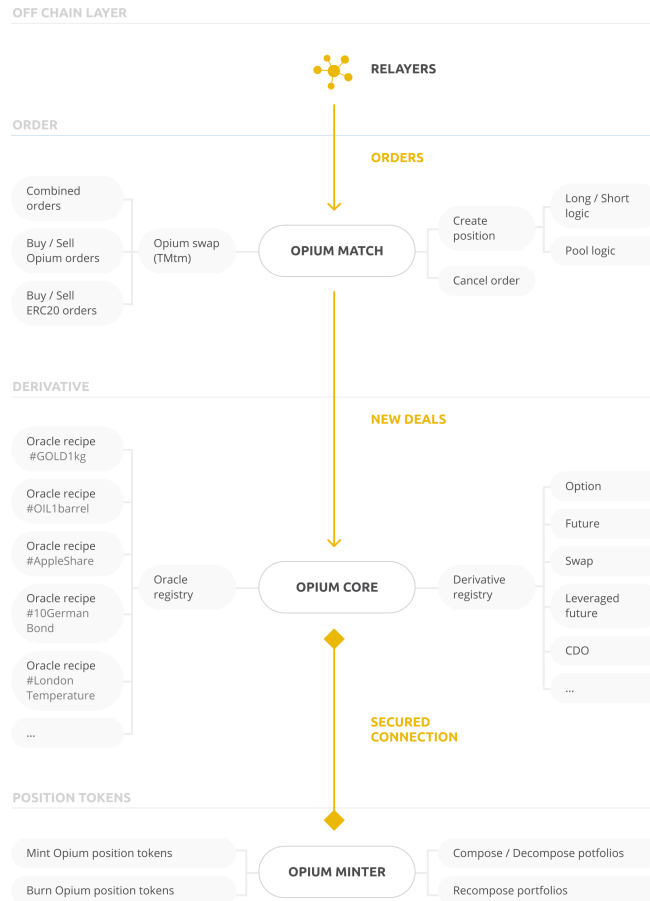


Figure 3: Technical schematic of Opium Protocol

#### 4.4.1 Relayer

Relayers are external actors which match orders of users off-chain and then broadcast them to the blockchain. Relayers are incentivised by optional settlement/relayer fees paid by the user (eg. when using the orderbook or layer-2 trading interface offered by the relayer). Relayers can also profit from arbitrage opportunities found between different markets and platforms—thus fulfilling the arbitrage function in the market. The concept of relayers was made popular by 0x and the implementation on Opium follows a similar concept.

#### 4.4.2 Opium Match

A smart contract which acts as the gateway to the on-chain components of Opium Protocol. The Opium Match contract verifies whether or not the off-chain matched orders are valid, and creates new positions out of the locked margin tokens (usually a stablecoin but this can also technically be any ERC-20 token) and executes swaps of Opium Position tokens and ERC20 tokens. Users give permission for this matching contract to move their tokens according to the matched order. In most cases, the relayers send their matched user orders to Opium Match. OTC deals can be communicated to the Opium Match contract directly, without the need for relayers.

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#### 4.4.3 Opium Core

The technical heart of the Opium Protocol consists of a set of smart contracts on the Ethereum mainnet and is referred to as the Opium Core. The Opium Core triggers other key components of the system based on data input and predetermined on-chain logic.

Financial derivative contracts built on the Opium Protocol consist of two main components: The derivative recipe and the oracle recipe. The derivative recipe is a set of logic which defines how certain margin input is recalculated into a payout at the end of a contract. An oracle recipe describes how data will be fetched from an off-chain or on-chain source, which data exactly will be fetched, and how this data will be processed. Derivative and oracle recipes are registered at their respective derivative or oracle register.

Data about margin inputs for positions is stored in the derivative register and fetched data from oracle recipes is stored in the oracle register. The Opium Core fetches data input from an oracle recipe at the oracle register to run calculations in the derivative recipe.

As derivative and oracle recipes are Turing complete, they can be comprised of any possible logic. Derivative products on Opium can, for example, be created based on price movement of a particular asset, bankruptcy and political or sports events. Users can create many combinations of derivative recipes with oracle recipes and create a contract. The Opium Core, which is on-chain, checks whether the input parameters, such as maturity, margin and, for example, strike price, fit the derivative and oracle recipe; after which, the token minter creates long or short tokens.

#### 4.4.4 Opium Minter

Long and short positions held by users of the Opium Protocol are tokenised as Opium Derivative Tokens, based on the ERC-721o token standard. As Opium tokens are ERC-721 backward compatible, these tokenised positions allow users to trade their collateralised positions on secondary markets and OTC markets, as well as safe storage of their position tokens in a hot or cold wallet of their choice.[9]

Users can also compose and decompose multiple positions into a tokenised Opium Portfolio, which is also based on the ERC-721o token standard. This enables users, for example, to create and trade spreads, indexes, portfolios and other financial products without risking one leg of the product not being executed, while saving on gas costs.

The Opium Minter is a smart contract responsible for minting Opium Derivative tokens and Opium Portfolio tokens. When two matched orders are processed by the Opium Match and Opium Core contracts, the Opium Minter contract mints new Opium Derivative tokens (on behalf of the Core contract) and burns them once the contract is executed. The Minter also takes care of composing, recomposing and decomposing Opium derivative tokens into Opium portfolio tokens.

## 5 Opium Protocol Governance

Opium Team believes that decentralised governance by an active community of stakeholders creates the most sustainable and antifragile support base for open financial infrastructure. Opium Team is standing on the shoulders of innovators[10][11][12], having learned from various events and teams which have pioneered new methods and models for governing financial protocols and gradually decentralising control.[13]

We propose a governance model which utilises a governance token (\$OPIUM). The governance model, as well as the governance token economics, is described in this section.

### 5.1 About Opium governance

The Opium Protocol requires active decentralised governance of various parameters in order to evolve the protocol for the benefits of the community. This, in turn, will result in the creation of relevant decentralised derivative contracts with sufficient liquidity—which ultimately attracts more users to the Opium ecosystem.

The governance model is based on a decentralised autonomous organisation (DAO) with AragonDAO used as the main reference. \$OPIUM token holders will interact with the DAO through proposing and casting votes on governance proposals, which will influence the Opium Protocol and the behaviour of its stakeholders.

One of the key parameters that will be controlled by the \$OPIUM token holders is the allocation of \$OPIUM governance tokens coming from the active users fund. A fixed amount of \$OPIUM tokens will be unlocked every week in order to be distributed across active protocol users and benefit the Opium ecosystem. This mechanism is similar to the notion of “liquidity mining”, but allows for more flexibility through active user definition. Below is a list of example behaviours which can be implemented through this mechanism:

- Providing order book liquidity for derivatives market
- Writing up CDSs and options
- Increasing the Total Value Locked in Opium Protocol
- Designing relevant (high-demanded) financial derivative products on Opium
- Incentivise liquidity providers to 3rd party pools/projects that are useful for Opium Ecosystem (e.g. Derivatives as collateral, Balancer pools with \$OPIUM)

\$OPIUM token holders will vote on proposals which will determine liquidity mining logic and governance token allocation.

The governance model for Opium will initially be limited to proposing and casting votes on the following changes and actions: changing DAO parameters within its permissions, execute actions on its behalf, allocation of active users fund and changes to the codebase of Opium Protocol. Any new parameters to govern, resulting from upgrades of the Opium Protocol codebase, will be controlled by Opium DAO as well.

## **5.2 \$OPIUM token economics**

The minted supply of \$OPIUM will be 100.000.000. The distribution of this supply is projected as follows:

### **5.2.1 60%: Active users**

This fund will be used to allocate governance to active users of the protocol in order to benefit the Opium Ecosystem, as described in the previous chapter. The definition of active users will be decided by governance as well on a regular basis. More tokens can be allocated for the specific actions, such as providing liquidity on a specified instrument or term, building actively used instruments or other essential activities. The tokens in this fund will be unlocked gradually and retroactively distributed to active community members, based on the specified criteria of active usage.

### **5.2.2 16%: Investors and advisors**

This fund will be used to reward early investors and advisors for their contribution to the success of Opium thus far. The tokens are going to be vested continuously for the next 2 years.

### **5.2.3 14%: Opium Team**

This fund will be used to fund expenses from the founding team behind Opium Protocol, as well as fund key hires and future growth of the team. A part of these tokens will be granted to current employees of the Opium team and are going to be vested continuously for the next 4 years.

#### **5.2.4 10%: Governance Reserve Fund**

This fund will be used for external initiatives and partnerships which will help the Opium ecosystem to further grow and flourish. \$OPIUM token holders have full control over the usage of this fund through governance proposals and voting.

## **6 Roadmap**

The Opium Protocol and various products built on top have already been audited and are live on Ethereum Mainnet. However, the Opium Team has defined multiple technical milestones which will contribute to the success of the Opium Network. This section elaborates on the key technical milestones on the Opium Team's roadmap

### **6.1 Opium Protocol v2**

Most of the Opium Protocol's key components are based on open-source smart contracts residing on the Ethereum mainnet. In order to improve the composability of the Opium Protocol with other DeFi protocols and allow for efficient decentralised governance schemes, some key smart contracts will be refactored. Some notable improvements that can be expected for Opium Protocol v2 include the implementation of decentralised governance through a DAO and support for interest-bearing tokens (eg. aDAI).

### **6.2 Opium Exchange v2**

The Opium Exchange is the flagship product built on Opium Protocol and was launched in May 2020. Opium Team has been collecting valuable feedback from users, which will be used in a holistic redesign of the Opium Exchange application and its user experience.

### **6.3 Hummingbot integration**

Hummingbot is an open source, institutional-grade crypto market making bot which has the potential to provide professional market makers with the tools they need to provide liquidity to the Opium Protocol and run automated market making strategies. Developing the API integration, and some basic market making strategies, will allow for onboarding of market makers from the Opium Team's professional network.

### **6.4 Implementation of L2 scaling solution**

The Opium Protocol is built on the Ethereum blockchain which has a limited throughput. Even though the Opium Protocol has a gas-efficient core and leverages off-chain meta transactions, users of products built on the Opium Protocol are exposed to the Ethereum gas market and, therefore, will sometimes run into high transaction fees. Implementing a layer 2 scaling solution on the protocol level is one of the key technical milestones, since it will drastically improve usability for today's users and improve composability with institutional market participants from traditional markets. Opium Team is currently

investigating all L2 solutions on the market (e.g. zkRollups) and testing their readiness for production.

## 7 Summary

Financial derivatives are a crucial component of every mature financial market, since they allow for risk management. The market for decentralised financial derivatives is expected to grow exponentially in relation to the net growth of the decentralised finance sector and, therefore, needs universal and robust financial infrastructure.

Opium is a financial protocol for decentralised financial derivative products. Opium Protocol is fully non-custodial and is based on open-source software and smart contracts. Besides being aligned with values from the DeFi space, and composable with DeFi money markets and protocols, the Opium Protocol is designed to also be composable with the traditional financial sector and its market participants.

Financial derivatives built on the Opium Exchange always feature finite potential losses and returns, and are listed using “Bloomberg-style” tickers. Through the \$OPIUM token and a governance DAO, the Opium Protocol and its ecosystem will, over time, become fully governed by a distributed group of individuals and organisations.

## 8 Appendix

### 8.1 FAQ

This section includes some frequently asked questions regarding Opium Protocol and their corresponding answers.

#### **What is a derivative?**

A financial derivative is an agreement between two (or more) parties whose value is based on an agreed-upon underlying financial asset. Changes in the price of the underlying asset results in changes to the value of the derivative agreement based on predefined logic.

#### **Are derivatives dangerous and do they cause financial crises?**

Financial derivatives are often blamed for the 2008 financial crisis, however the distinction between undercollateralized and overcollateralized derivatives is often not made. Properly collateralized financial derivatives can actually help prevent financial crises, do not require risk management, and are ideally settled on-chain. Undercollateralized derivatives, however, do need risk management, margin calls, and introduce systemic tail risks. All derivatives built on Opium Protocol are fully collateralized by a fixed margin, visibly locked on the Ethereum blockchain— which acts as Opium’s settlement layer. Anyone can verify the collateral backing a financial instrument built on Opium Protocol.

#### **How is Opium Protocol better compared to the traditional financial sector?**

Opium Protocol allows for the creation of decentralised derivatives, and these markets are inherently more accessible than traditional financial markets. Anyone with an internet connection and an Ethereum wallet can access these markets—no matter their location or social status.



Another benefit is that creating a custom derivative on Opium Protocol is easy, cheap and permissionless. In the traditional financial system, the process for creating and listing a new derivative is very complex and costs involved are close to a million USD. Because of this, most derivatives are created by big banks which potentially can make it an unfair and inefficient market relative to DeFi.

### **How is Opium different compared to other derivative protocols in DeFi?**

Opium Protocol is unique because it is designed to be composable with both DeFi markets and professional markets from traditional finance.

Instead of using on-chain liquidity pools and automated market makers, which introduce theoretically uncapped potential losses and returns, Opium offers simple and robust financial primitives. Traders can get incremental market exposure by combining financial primitives (eg. options contracts with fixed margin).

Opium also offers tools and incentives for liquidity providers from both DeFi markets and professional markets from traditional finance.

Lastly, Opium features tickers for listing derivative products similar to Bloomberg in traditional finance.

### **How will Opium Protocol attract liquidity providers?**

Three factors will contribute to building deep liquidity on Opium Protocol:

1. Early mover advantage in a growth market: The exponential growth of the DeFi market and fast-paced innovation happening in the sector generates organic demand for relevant financial derivatives (eg. premarkets for upcoming tokens)
2. Governance token distribution: The \$OPIUM governance token and the Opium governance model allows for liquidity mining programs which will attract liquidity where it is needed most.
3. Onboarding professional market makers from traditional finance: Through technical integrations of market making bots (eg. Hummingbot) and active onboarding of finance professionals, additional liquidity will be attracted from markets outside of DeFi.

### **Can I create derivative products on Opium Protocol?**

As an open and permissionless financial protocol, anyone can create financial derivative contracts on Opium Protocol. Technical documentation is made available on the Opium Gitbook.[14]

### **What is the business model for building on Opium Protocol?**

Opium Protocol includes a fee mechanism which charges the profit-making trader a small optional fee per traded derivative contract. Creators of derivative contracts determine the fee size and 90% of all fees generated by their derivative contract is distributed to them. The remaining 10% of all fees generated on Opium Protocol stays with the Opium Protocol.

### **Is Opium Protocol secure to use?**

Opium Protocol has been audited for known security vulnerabilities by independent organization SmartDec. The report is published online and can be found online.[15]

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