

Proposal: Add Support for CrescoFin Regulated Insured Money Market

We propose to add a money market to the Aave protocol that would allow compliant investors to gain exposure to asset-backed cashflows from the real economy. The cashflows generated through CrescoFin, a regulated Swiss company, are fully insured by the Lloyd's insurance market in London. The interest rate to be paid is 3.00% (on an annual basis), significantly above interest rates paid on traditional secure savings products.

The Proposal allows investors to deposit USDC and receive iCRES tokens that offer an insured rate of interest. These tokens are fungible ERC20 tokens and can be traded anywhere in DeFi on Ethereum, as long as the receiving address is compliant.

Motivation

The Proposal is intended to allow Aave investors to participate in low-risk, real-world assets. Most of the lending in DeFi to date has been based on overcollateralization of crypto assets. This Proposal realizes Aave's intention to expand into lending against future cashflows in the real world, as is more common in traditional finance. The market size is enormous.

We also expect that the Proposal will attract significant interest from traditional financial investors, acting as an entry point to the crypto world via Aave and furthering crypto adoption. CrescoFin is committed to bringing our institutional investors to Aave.

Summary

Token type

ERC20

Lending tokens

USDC

Collateral

Fully insured

Collateral tokens

iCRES (Each iCRES token represents \$1 of insured collateral + interest)

Interest rate

3.00% APY

Offer price

1 iCRES = \$1 insured collateral and then the Aave market sets token price

Tokens issued

The number of iCRES tokens increase as more insured collateral is added

Investor type

Compliant (simple KYC test by CrescoFin)

Interest payment period

Daily

Interest payment type

Interest is paid in additional iCRES tokens

Withdrawals

Anytime[1]

Law

About CrescoFin

CrescoFin is a regulated financial institution in Switzerland, built on a blockchain tech stack, whose objective is to replace banking with code.[2]

The company operates in the traditional finance space in USD, EUR and CHF, focused mainly on institutional investors and is developing an offer in stablecoins. More details are available here: <https://defi.crescofin.ch> and here: <https://medium.com/crescofin/replacing-banking-with-code-db196c27e010>

How it works

1. CrescoFin purchases (and takes ownership of) invoices to be paid by a diverse group of investment-grade companies in the real world (the Buyer in the graph below).
2. The services provided to the Buyer by the Seller are recorded on-chain.[4]

This removes the possibility of disputes between the parties. CrescoFin only finances (purchases) invoices in respect of which the Buyer agrees to pay, at a later date (usually from 7- 30 days).

1. CrescoFin arranges and pays for credit insurance in case the Buyer does not pay. The Aave investors would be the beneficiaries (the Loss Payees) of this insurance policy.
2. The payments of these invoices flow into a fiduciary account maintained by CrescoFin at UBS in Switzerland.[5]
3. This account is tokenized to reflect the insured real-world collateral, via the creation of the iCRES tokens. The iCRES tokens are 1:1 matched against the purchase price of the invoices (the asset collateral), in units of \$1.
4. As additional insured collateral is added to the account, additional Tokens are minted (and offered for sale to investors).
5. Investors pay in USDC and purchase newly minted iCRES tokens, representing the insured collateral. The iCRES tokens pay a 3.00% rate of interest, received daily in new iCRES tokens.
6. Investors may trade the iCRES tokens in the market. In traditional finance, the price varies inversely to the yield (interest rate) desired. So, if investors would accept a lower interest rate than 3.00% for insured collateral, the price of the tokens would rise. If they wanted a higher rate, the price of the tokens would fall.
7. If an investor wishes to withdraw USDC, the iCRES tokens are burned and the investor is repaid in USDC.
8. The iCRES tokens have been optimized for low gas cost trading and are interoperable with other ERC20 tokens.
9. The iCRES tokens can only be exchanged with addresses that have been approved by CrescoFin and are specified in the on-chain registry.
10. Once an address is included in the registry they can participate in any regulated product.
11. Effectively, the iCRES tokens provide an insured interest rate to investors. However, legally, investors are purchasing tokens that represent invoices acquired at a discount. The invoices are expected to be repaid at a higher value (if not, insurance pays), which is equivalent to an interest rate. This is reflected by a distribution of additional iCRES tokens to investors. As there is no capital gains tax in Switzerland, the full proceeds are conveyed to investors without any deduction for tax.[6]

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2377×1672

](<https://i.imgur.com/6uZUS1V.png>)

Tokens

The Tokens represent a simple claim on insured assets. The key economic features are set out below.

- The investor will receive daily interest in the form of additional iCRES tokens.
- CrescoFin will use the borrowed USDC to invest in additional regulated insured assets, denominated in USD in the real world, thereby continuously adding new insured collateral to the account.

- New iCRES tokens will be minted on a 1:1 basis with new insured collateral entering the account and sold to investors.
- When investors wish to convert back to USDC, iCRES tokens are burned.

We believe that this unique Aave funding mechanism will encourage adoption of real-world assets coming into the DeFi ecosystem, in a low-risk and regulated manner. It is also likely to attract significant institutional interest in Aave.

The Tokens are regulated assets[7]

and have compliance feature built into them that use the C-Layer Standard, an audited, open-source compliance software under MIT License. This has the following implications:

- Potential investors must undergo a simple, common-sense KYC process with CrescoFin, under Swiss law. This is explained below.
- CrescoFin has a simple acceptance policy: if you are on a sanctions list by the Swiss government, then you will not be approved. If you are not on this sanctions list, then you will be approved. CrescoFin has no arbitrary power to include/exclude anyone.
- Approved users will have their on-chain address included in an anonymous on-chain registry. Personal KYC data is protected by strict Swiss privacy laws and is stored by CrescoFin in Switzerland in a computer that is not connected to the internet.
- In the (unlikely) event of an insurance claim, having the investor's details will allow them to benefit from the insurance cover, in their own name.

The KYC process

The KYC process is simple and common-sense and corresponds to Swiss law.

1. A tokenholder contacts CrescoFin (community@crescofin.ch) indicating that they wish to be approved to purchase the iCRES tokens. They need to provide their name, address and a photo ID. For the photo ID, this will be confirmed in a video call with CrescoFin; instructions will be communicated to tokenholders. Do not send your photo ID via email.
2. To prove that they control the Ethereum address, CrescoFin will ask the tokenholder to send them a message that is hashed with their private key. Instructions will be sent to the tokenholder after they contact CrescoFin requesting to be registered. CrescoFin will never ask for your private key.
3. CrescoFin checks that the tokenholder is not on a Swiss government sanctions list. If they are, then they will not be allowed to register. If no, then they will be registered.
4. An anonymous registry of approved addresses is maintained on-chain by CrescoFin.
5. The database of registered users is maintained by CrescoFin at our headquarters in Switzerland, in an off-line computer.
6. Once users/addresses are approved and included in the on-chain registry, they are automatically authorized to purchase the iCRES tokens. The iCRES tokens can be exchanged with any other Ethereum address that is included in the approved registry.
7. Registered addresses are also automatically eligible to invest in other regulated money markets on Aave that may be developed in the future, if they wish.

Oracle

CrescoFin is working with Chainlink to provide proof of reserves to investors on-chain. This guarantees that the 1:1 matching of 1 iCRES token to \$1 of insured collateral assets in the real world, for additional investor security.

Chainlink will also provide on-chain information to verify that all of the collateral for the iCRES tokens is fully insured.

ISIN Securities Codes

The products set out in this Proposal have been awarded securities codes by the International Securities Identification Number (ISIN) Organization. In traditional finance, ISINs provide a unique identifier for a security and its structure is defined by ISO 6166. The ISIN code is a 12-character alpha-numerical code. Typically, asset managers are legally (or by the regulator) required to invest client money only in financial products that have an ISIN code, which means that DeFi products are off-limits to many traditional investors. CrescoFin is the first DeFi company to have its products awarded an ISIN code and are also the first to have DeFi products quoted on the Bloomberg terminal, which is the standard reference in traditional finance. Details of the products are set out below.

[

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](<https://i.imgur.com/EzIGkdD.png>)

Investor protections

1. The Tokens are protected by Swiss law.
2. The Tokens' expected cashflows are backed by real-world assets that are fully insured.
3. The issuer is regulated and audited in Switzerland.

Some firsts

- First regulated money market in DeFi.
- First insured collateral in DeFi.
- First simple KYC mechanism for composability in DeFi.

Future opportunities

As CrescoFin is a regulated company and its real-world collateral is insured, starting a relationship with them may lead to other opportunities for the Aave community in the future, such as developing the undercollateralized lending product.

There is also the possibility to add a time element to the money market, where higher returns are paid on investor funds locked up for longer periods (e.g. 2 weeks, 1 month, 3 months). This could lead to the creation of a yield curve in crypto.

Pros & Cons for Aave investors

Pros

Cons

Low credit risk (insured)

Permissioned

Legal protections in place

Regulated

New market

Potential for new participants

[1]

However, in the event of market dislocation, there may be a delay in converting from fiat to crypto currency. Regardless, investors' funds will always be backed by insured collateral.

[2]

CrescoFin is authorised to undertake lending operations, matched deposit-taking, dealing in precious metals, asset management, derivatives, and custody, amongst other activities. The company has the regulatory approval to create the financial products set out in this Proposal. The company undertakes their own common-sense in-house KYC, in accordance with Swiss law.

[3]

The company founders have been testing the system with their own funds since 1 October 2019 and opened to Swiss institutions in Spring 2020.

[4]

This is built in Hyperledger Fabric at the moment, as CrescoFin is a regulated entity and access by these companies is

permissioned. CrescoFin is working on creating this on Ethereum.

[5]

A new fiduciary account will be established specifically for this Aave regulated insured money market.

[6]

Investors are responsible for filing and paying tax in their home country. Some jurisdictions charge a lower rate of tax on capital gains than on interest income and investors are advised to consult with tax experts in their home country. There is no Swiss withholding tax in respect of this product.

[7]

Any packaging of real-world assets, whether in token form or via a structured product in traditional finance, is the creation of securities and is a legally regulated activity. CrescoFin holds the necessary regulatory authorizations to create these securities, so there is no legal risk to investors in Aave money markets.