YfRisk PROTOCOL

Whitepaper

Draft: March 2021

This white paper titled “YfRisk credit analysis model”
Open Platform assessment DeFi Access, Cost, and Risk Factors

Introduction

Decentralized finance (DeFi) has become the premier narrative in the crypto sector in 2020. The DeFi market represents a broad stroke effort to infuse financial innovation, governance, and permission less access into the global financial system. Many DeFi observers and analysts view Compound Finance's launch of its native COMP governance token as the spark for the recent DeFi bull run. A parabolic price run and the realization of liquidity mining as an effective means to align incentives among community users quickly gathered momentum and spread to other projects.

Total value locked (TVL) amongst DeFi protocols has soared past $11 billion, and decentralized exchanges (DEXs) such as Uniswap, Curve, and Balancer have absorbed vast portions of user capital. In particular, Uniswap's locked value recently surpassed $2 billion, and the DEX's daily trading volume now exceeds3 that of centralized exchange (CEX) behemoth Coinbase.
The innovation happening within DeFi circles is not simply replacing legacy systems and slapping decentralized labels on them either. Tinkering with open-source, community-governed concepts has led to myriad breakthroughs in what's possible with a composable financial stack.

Decentralized finance (DeFi) seeks to use both innovations in distributed ledger technology and smart contracts to offer a robust, composable ecosystem for the extension of financial services to an ever-growing community. In creating robust projects, the DeFi ecosystem has created new opportunities for wealth and participation.
as each user creates liquidity, participates in governance, and reduces volatility for every other. If DeFi can be observed as a composable set of programmatic features deployed to a distributed ledger network, each user's path through these features may be unique, but are underpinned by similar considerations and risks as paths are navigated. By observing these paths as choices among all DeFi participants, the YfRisk rating model seeks to enable the development of software and tools that introduce intelligent, non-monopolistic intermediary functions, which simplify access to the DeFi ecosystem, while reducing cost and risk for its participants.

YfRisk has issued the Regulation to Approve the DeFi Projects for DeFi Funding Crypto Market.

With facing market huge changes, threats, and regulation, the need for DeFi community to identify, measure, monitor, and control creditrisk – over the entire DeFi, as well as on individual transactions – is greater than ever.

Scope

This white paper willing to build Open Platform assessment Access, Cost, and Risk Factors Defi rating model.
The YfRisk rating model is supporting DeFi lending process. It enables DeFi community to measure the credit risk of the DeFi projects and issue a DeFi risk rating that should be mapped to the Crypto Market risk rating standards

- Phase I: built YfRisk DeFi analysis rating model for DeFi Projects that should analyses both subjective (Management andbusiness) and objective (financial) factors of each beneficiary to support the lending process. "YfRisk Credit Analysis Model V1.0"
- Phase II: built YfRisk analysis rating model for new DeFi Projects that should analyses and focus more on the subjective (Management and business) factors, in addition to the creditworthiness, or treated as DeFi funding.

YfRisk DeFi Analysis

YfRisk analysis, as part of DeFi project assessment process, is a method of drawing conclusions from quantitative and qualitative data assessment regarding the creditworthiness of an entity. YfRisk analysis calculates the financial ratios, examination of collateral and other sources of repayment, credit history and management ability.

YfRisk Analysis is also concerned with the identification, evaluation, and mitigation of risks associated with an entity failing to meet financial commitments.

The 5 C's of YfRisk Analysis

- Character
    - general impression of the buying protection is analyzed.
    - The lender forms a very subjective opinion about the trustworthiness of the entity to repay the loan.
    - Discrete inquiries, background, experience level, market opinion, and other sources to collect qualitative information.
- Capacity
    - ability of the client to service the loan from the profits generated by his investments.
    - The lender will setup the repayment schedule, cash flow from the business and payment history.
    - Inefficient capital allocation is another problem holding back DeFi adoption.
- Capital
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    - he capital model determines how much capital pools need to hold in order to meet theirobligations and remain solvent over a period of time
    - an indicator of how much the owner is at risk if the business fails.
    - While a pool could hold 100% of collateral to match its cover amount exposure, this would be highly inefficient use of capital given the probabilistic occurrence of events.
    - Lenders expect a decent contribution from the client s own assets and personal financial guarantee to establish the funding.
    - Strengthen the trust between the lender and the borrower.
- Conditions
    - Purpose of the loan as well as the terms under which the facility is sanctioned Working capital, purchase of additional
    - The lender considers various factors, such as macroeconomic conditions, crypto currency positions, and industryetc...

Corporate YfRisk Rating

The YfRisk rating scale divides “investment grade” and “Non-Investment”. The scale goes from very low-risk triple-A at the top to very high risk, and finally “default” at the bottom. YfRisk have defined and mapped the accounts to the rating scale:

	Moody's, Fitch and S&P Long Term Rating Scale				
	S&P	Fitch	Moody's		
1	AAA	AAA	Aaa	Standard Accounts	Investment Grade
2	AA+	AA+	Aa1		
3	AA	AA	Aa2		
4	AA-	AA-	Aa3		
5	**A+**	**A+**	**A1**		
6	A	A	A2		
7	A-	A-	A3		
8	BBB+	BBB+	Baa1		
9	BBB	BBB	Baa2		
10	BBB-	BBB-	Baa3		
11	BB+	BB+	Ba1		Non-Investment Grade
12	BB	BB	Ba2		
13	BB-	BB-	Ba3		
14	B+	B+	B1		
15	B	B	B2		
16	B-	B-	B3		
17	CCC+	CCC+	Caa1	Special Mention	
18	CCC	CCC	Caa2	Sub-standards	
19	CCC-	CCC-	Caa3		
20	CC	CC	Ca	doubtful	
21	C	C	C		
22	D	D		Loss	

DeFi Market

There are 4 types of competition – Perfect competition, monopolistic competition, oligopoly, and monopoly.

Many DeFi operate under conditions of monopolistic competition, including independently owned and operated high-street stores and restaurants. In the case of restaurants, each one offers something different and holds anelement of uniqueness, but all are essentially competing for the same customers.

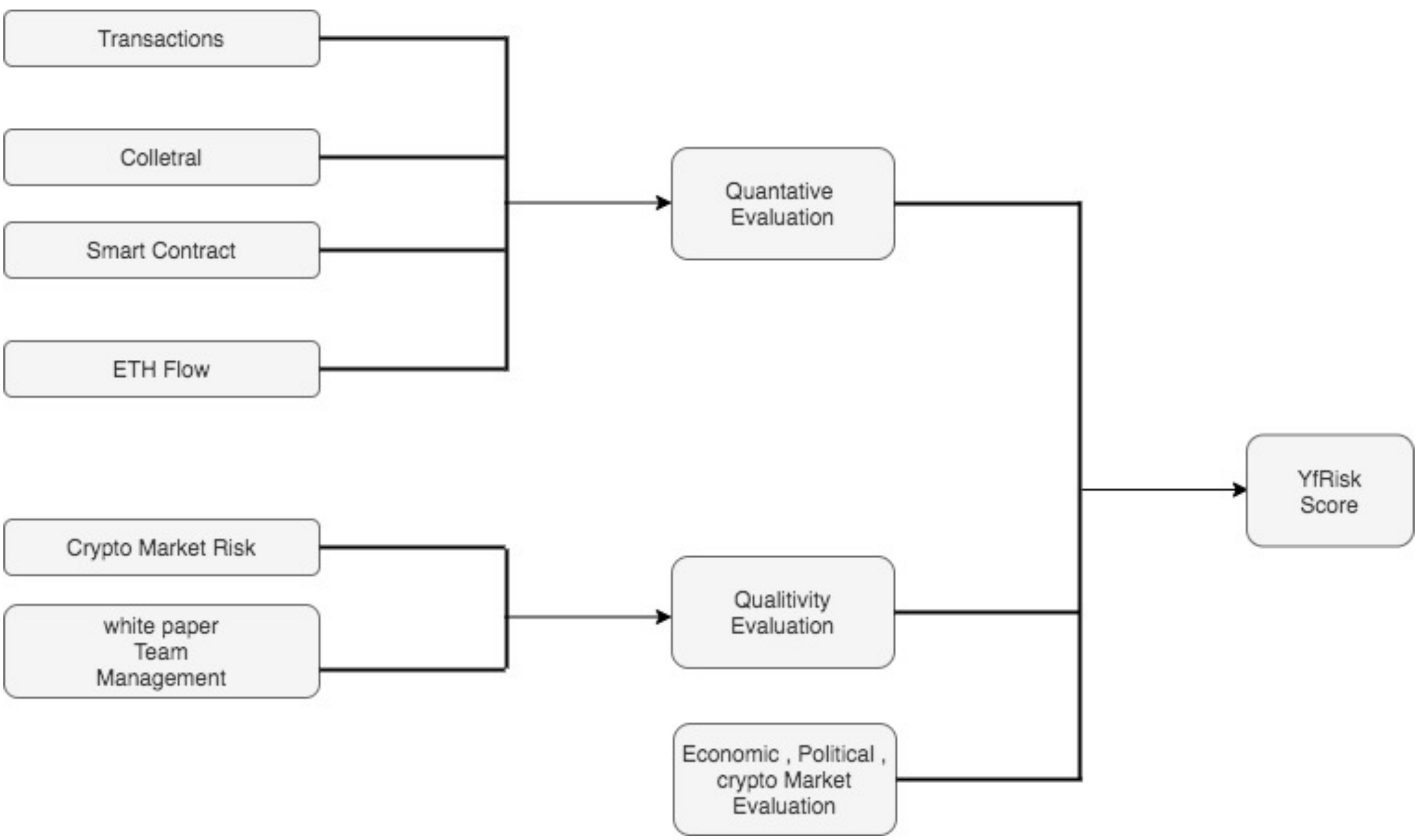
Monopolistic competition market :

- Each DeFi project makes independent decentralized decisions about price and output, based on its project, its market, and its costs of production.
- The DeFi project has a more significant role because of the increased risks associated with decentralized decision-making
- There is freedom to enter or leave the market, as there are no major barriers to entry or exit.
- A decentralized feature of monopolistic competition is that products are differentiated. Crypto product differentiation such as total supply , design, performance, and features and Marketing differentiation.
- Usually have to engage in advertising to let holder know their differences.
- DeFi projects assumed to be profit maximizers with owner actively involved in managing the business.
- There are usually some large numbers of independent DeFi projects competing in the crypto market.
- Monopolistically competitive firms are most common in crypto industries.

YfRisk Rating Factors

YfRisk Rating Model should provide a rating for DeFi Projects based on quantitative and qualitative assessment and cover 5 Cs - Collateral should be out of the rating measurement – and issue a detailed rating report – 360 view of the counterparty - supporting the fund approval decentralized decision making.

YfRisk Rating Model should measure Credit Analysis factors to end up with standard rating methodology among the DeFi Projects. As the above definition of DeFi market, the recommended factors and their weights for existing DeFi projects.



Qualitative Factors 60%

• Products - Distribution - Brand • Governance and management • Industry risk • Character and reputation • Macroeconomic Environment

Financial Factors 40%

• Profitability • Liquidity • Efficiency • Solvency • Liquidity • Leverage • Owner's personal net worth (PNW)

When there is acceptable data available, the analytical framework is divided into several categories to ensure that salient qualitative and quantitative issues are considered. The qualitative factors are oriented to business analysis, such as the company's products and the quality of management; the quantitative factors relate to financial analysis. In addition, the analysis should respect the structural factors, includes the macroeconomic, business fundamentals, technology change, government spending, or regulatory actions.

Most of DeFi having high risk (non-investment rating) as initial. Therefore, the rating scale mapping should be more conservative as their efficiency count significantly on the owner of the business.

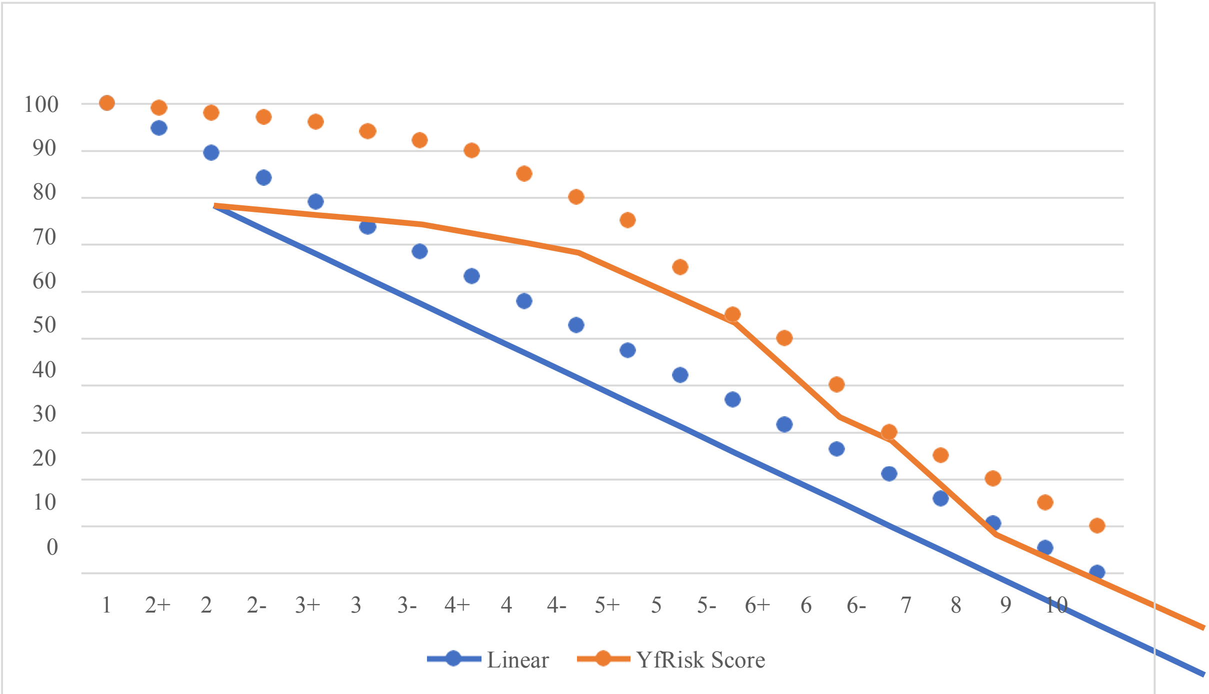
Attached Excel workbook that having the detailed factors weights and description of each factor.

Type	Section	Section weights	Factor	Weight	Score
Qualitativ (60%)	Stability	72.5 / 43.5	Repayment History	15.0	9
			External checkings and reputation	15.0	9
			Industry Risk	10.0	6
			Years in Business	10.0	6
			Products / services	10.0%	
			Supply risk	5.0%	3
			Business location	7.5%	
	Management	27.5% / 16.5%	Management Depth	10.0	6
			Succession	5.0	3
			Ownership involvement	12.5	8
Quantitativ (40%)		15.0 / 6.0	Owner's personal net	10.0	4
			Quality of financial	5.0	2
	Financial	45.0 %	Debt Service Coverage (DSCR) EBITDA / Total Debt	20.0	8
			Solvency (Leverage) total Debt / Tangible NetWorth	10.0	4
			Operating Margin Net Profit Before Tax / Sales	7.5	3
			Net Sales Growth	7.5	3
	Liquidity	15.0% / 6.0%	Current Ratio (Current assets/Current /liabilities)	5.0	2
			Quick Ratio (Current assest - Invontory Current Liablities)	10.0	4
	Efficiency	25.0% / 10.0%	Working Capital trurnover	5.0%	2%
			Net Profit Before Tax / Total	7.5%	3%
			Net Profit Before Tax / Tangible Net Worth	7.5%	3%
			Gross Margin (net sales revenue - its cost of goods sold	5.0%	

YfRisk Rating Scale

The outcome of the YfRisk Rating score should be mapped to the international rating scale. The main purpose of the scale (Risk Rating) to have DeFi in buckets (ratings). Each rating category has group of clients that share the same quantitate and qualitative assessment. The recommended YfRisk Rating Scale:

	Moody's, Fitch and S&P Long Term Rating Scale			YfRisk	RR	Score		
	S&P	Fitch	Moody's	Yfrisk protocol	Risk Rating	Upper Boundary		
1	AAA	AAA	Aaa	Prime	1	100%	Standard Accounts	Investment Grade
2	AA+	AA+	Aa1	Very High grade creditworthiness	2+	99%		
3	AA	AA	Aa2		2	98%		
4	AA-	AA-	Aa3		2-	97%		
5	**A+**	**A+**	**A1**	High grade	3+	96%		
6	A	A	A2		3	94%		
7	A-	A-	A3		3-	92%		
8	BBB+	BBB+	Baa1	Medium grade	4+	90%		
9	BBB	BBB	Baa2		4	85%		
10	BBB-	BBB-	Baa3		4-	80%		
11	BB+	BB+	Ba1	Low grade	5+	75%		Non-Investment Grade
12	BB	BB	Ba2		5	65%		
13	BB-	BB-	Ba3		5-	55%		
14	B+	B+	B1	Speculative	6+	50%		
15	B	B	B2		6	40%		
16	B-	B-	B3		6-	30%		
17	CCC+	CCC+	Caa1	Extremely Speculative	7	25%	Special Mention	
18	CCC	CCC	Caa2	Substantial risk	8	20%	Sub-standards	
19	CCC-	CCC-	Caa3	Default	9	15%		
20	CC	CC / C /D	Ca / C	Loss	10	10%	Loss	
21	C	C	C					
22	D	D					Write-off	



As per the score (Risk Rating) of the counterparty you can drew the policy of lending:

- Secured, non-secured loans (collateral management) such as, 150% covering securities for rating in "Speculative" boundary.
- Approval matrix for credit approval committee
- Override for the credit approval committee should be available and recorded
- Annual review and update of the DeFi data
- Portfolio reports and customers behavior monitoring

Yfrisk Governance

Over the past few months, the DeFi “yield farming” activity has given further credence to an important aspect of DeFi: decentralized governance. Projects such as Curve, Yearn, Compound , to name a few, have demonstrated that when properly structured
and incentivized, active engagement from the community in governance for the advancement of the protocol can be achieved.

The governance structure is comprised of two layers:
the community stakeholders and the YfRisk. The purpose of both is to ensure that YfRisk operates in a fair, transparent, and sustainable fashion on all aspects of business development, technology development, claim assessment, and risk management. Tasks range from daily operation decisions (such as adjudicating contested claims, updating risk parameters) to strategic decisions (such as proposing new protection contracts, adjusting ecosystem tokenomics) to emergency “break- the-glass” decisions (such
as pausing functionality if required).

Any person who holds YfRisk is considered a community stakeholder, and will be able to participate in the governance process by locking YfRisk in return for voting rights, with economic incentives as outlined under the previous section of YfRisk Staking. There will also be avenues for holders to delegate their voting rights to others, for purposes of either convenience or for more strategic outcomes .

The token will serve as the arbitrator for situations where community stakeholders are unable to reach a decision and will also serve as a fail-safe to override decisions that may be deemed detrimental to the YfRisk ecosystem. The Yfrisk will be comprised initially of the Foundation and token holders who stake a significant amount of token .

Furthermore, individuals or entities with expertise in finance, insurance, and governance may be appointed by the initial members of the Yfrisk. These Yfrisk members may be incentivized with token that vest over their tenure, assuming the actions of said members contribute positively to the growth of the Yfrisk ecosystem. The goal for Yfrisk is to function as a steward, and eventually transfer all token governance to members
and focus only on development and sustaining the platform as directed by the governance process.