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Nsure.Network

Open Insurance Platform for Open Finance

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Abstract

Nsure is a decentralised insurance platform for Open Finance. The project borrows the idea of Lloyd's London, a market place to trade insurance risks, where premiums are determined by a Dynamic Pricing Model. Capital mining will be implemented to secure capital required to back the risks at any point of time. A 2-phase crowd voting mechanism is used to ensure every claim is handled professionally.

Background

Insurance is a tool that helps to re-distribute risk across a community. Due to the extensive amount of capital required to underwrite these risks, the multi-trillion-dollar industry is dominated by oligopolistic companies that have the ability to pool capital at scale for potential claim obligations.

The profitability of insurers depends on the amount of claim payouts relative to the amount of premiums collected. Despite heavy regulatory oversight, there exists an agency problem as there is an incentive for insurers to turn down claims. In addition, the conservative nature of insurers and their increasing reliance on data-driven risk assessments means that the protection gaps of newer risks will continue to remain unfilled.

An example of an undersupplied segment is Decentralized Finance (DeFi). The rapid development of DeFi and innovative liquidity mining schemes have brought a substantial increase in the total value of assets utilized on chain. Liquidity providers are willing to provide capital to bootstrap DeFi products in return for yields, often without understanding the potential security risks in a comprehensive manner. Even with security audits in place, the nascent DeFi sector continues to be a target of hacks and smart contract exploitations, resulting in the loss of users' funds.

Nsure is purposefully designed to solve the principal-agent problem and allow anyone to become an insurance issuer for the DeFi sector. While conventional insurance depends on issuer' judgment on claims, Nsure rids these unequal judgments by adopting on-chain resolution via claim assessors.

Economic Model - How it works

Nsure's "DeFi insurance" is based on 1) supply-demand driven Dynamic Pricing Model, to find the right price; 2) the Capital Model, to secure capital required to back the risks at any point in time; and 3) 2-phase crowd voting mechanism, to make sure every claim is handled in a permission-less and transparent manner.
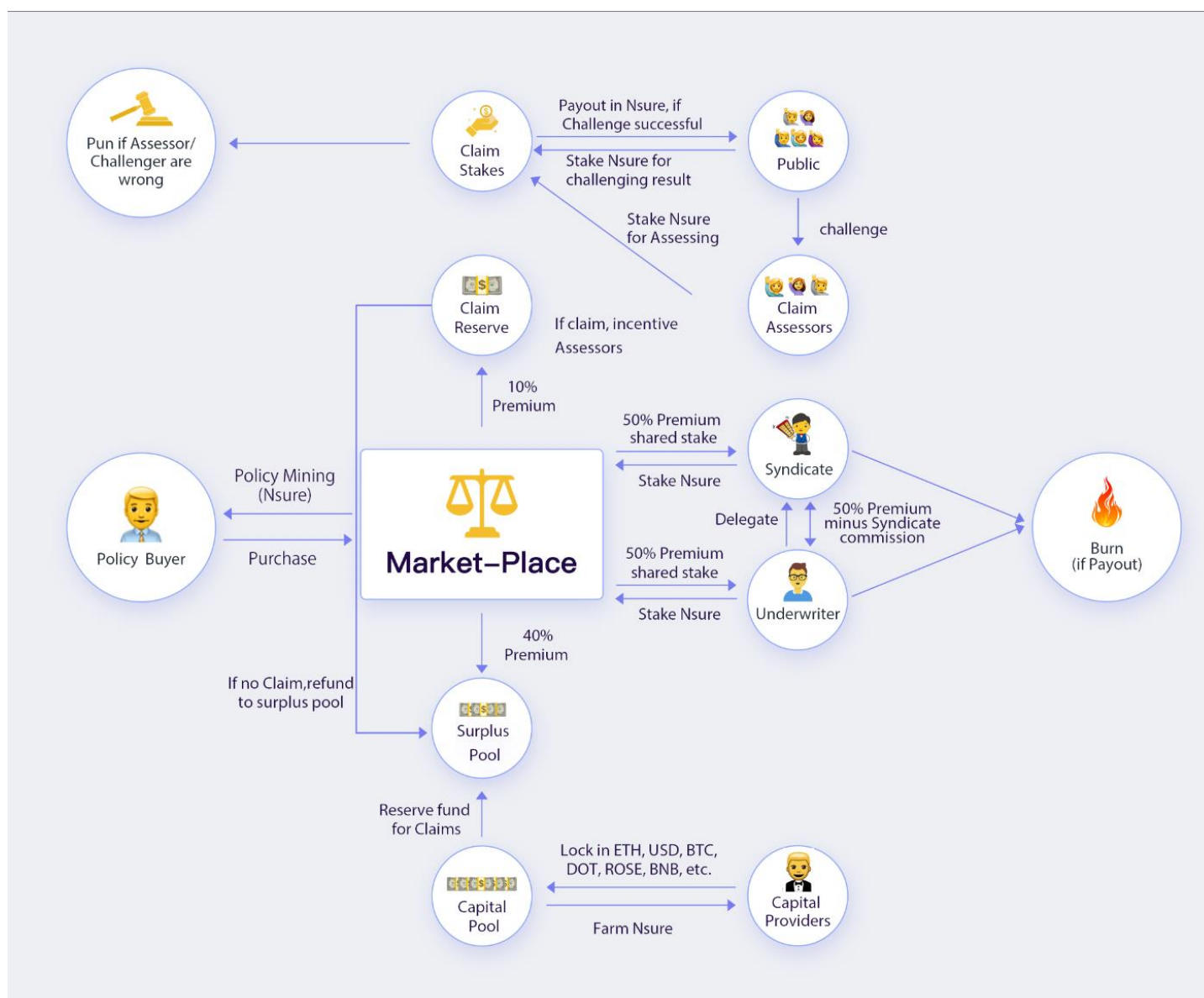
- NSURE Token

The native digital cryptographically-secured utility token of Nsure.Network (**NSURE token**) is a transferable representation of attributed functions specified in the protocol/code of Nsure.Network, which is designed to play a major role in the functioning of the ecosystem on Nsure.Network and intended to be used solely as the primary utility token on the platform.

NSURE token is a non-refundable functional utility token, which will be used as medium of exchange between participants on Nsure.Network. The goal of introducing NSURE token is to provide a convenient and secure mode of settlement between participants who interact within the ecosystem on Nsure.Network, and it is not, and not intended to be, a medium of exchange accepted by the public (or a section of the public) as payment for goods or services or for the discharge of a debt; nor is it designed or intended to be used by any person as payment for any goods or services whatsoever that are not exclusively provided by the issuer. NSURE token does not in any way represent any shareholding, participation, right, title, or interest in the Company, the Distributor, their respective affiliates, or any other company, enterprise or undertaking, nor will NSURE token entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. NSURE token may only be utilised on Nsure.Network, and ownership of NSURE token carries no rights, express or implied, other than the right to use NSURE token as a means

to enable usage of and interaction within Nsure.Network.

NSURE token would provide the economic where every participant is fairly compensated for its efforts, in particular under the "Capital Mining" mechanism. NSURE token is an integral and indispensable part of Nsure.Network, as without such layer, a mismatch in incentives would occur, e.g. for users to expend resources to participate in certain activities, or provide services for the benefit of the entire ecosystem. Users of Nsure.Network and/or holders of NSURE token, which do not actively participate, will not be eligible to participate in any incentive system rewarding NSURE tokens.

- Capital Pool (Capital Mining)
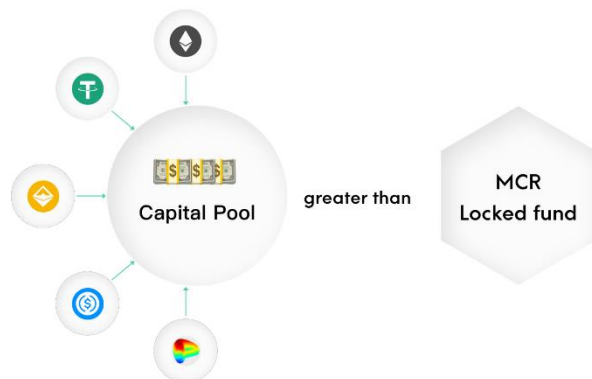
The Capital Pool plays a central role within the platform to support its core economic activity. NSURE tokens will be issued as incentive for capital providers participating in the pool. For each Ethereum block produced, a certain amount of NSURE tokens will be distributed to all users who are providing capital, in proportion to their share in the capital pool.

The tokens rewarded may be used to 1) stake on the insurance contracts, acting as underwriter within the platform, to provide further capital and share part of the premiums collected; 2) utilize and access various functions within the ecosystem; 3) sell to other users

incentives, which will be consumed to encourage users to contribute and maintain the ecosystem on Nsure.Network, thereby creating a win-win system

in the secondary market.

As the capital pool, surplus pool, and the number of supported contracts grow, the core use-case of the protocol is designed to increase in both, efficiency as well as capacity for the insurance products at disposal. 50% of all premiums are to be distributed to reward participants in the underwriting pools. This mechanism is expected to act as a natural balance, thus further attracting new participants in order to match the demand, providing the needed capital & capacity to attract even more users.

In the event of having the surplus pool being unable to cover Minimum Capital Requirement (MCR) conditions, participants within the capital pool may encounter partially being unable to withdraw assets from the pool until adequate MCR conditions are restored. This may occur either as the result from policy expirations and/or from the inflow of new funds into the capital pool.

In the unlikely event of the surplus pool not being able to cover the full payout needed for approved claims, the capital pool enter as reserve and utilised to cover the remaining capital needed for approved claim payouts. The Capital Model also is used to monitor the systematic risk, and algorithmically mitigate the risk profile for capital pool participants. If capital providers wish to exit capital pool, a 14 day lockup will be activated in order to prevent speculation or any kind of system-abuse attempts. Any capital deduction that may occur during the unlocking period, will be subtracted from the participants, while mining remains on-going until the lockup time is over.

- Purchase insurance
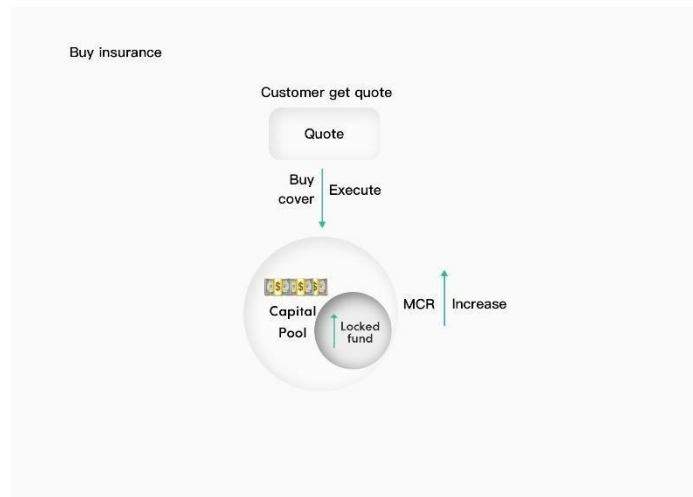
An insurance agreement is generated every time a user purchases an insurance product from the marketplace. The insurance agreement stipulates the insurance risk, the insurance amount, the date of insurance and the corresponding premiums. Users may purchase such products via ETH, "Stable Coins" like, USDT, DAI,, USDC as well as BTC in chain-compatible format (e.g. WBTC, RenBTC, etc.) . The insurance agreement will become effective after payment automatically.

The policyholders (insured users) will also share a fraction of the capital mining incentives (distributed in NSURE tokens) as a reward for utilizing the platform. We believe this mechanism will support the early days of the platform in attracting increased demand as well as capital funds in order speed up on building the needed backbone-liquidity. In addition, by distributing NSURE tokens to platform users based on utilization rates, it is intended to imply a fair distribution to platform participants.

When insurance claim conditions are met during the insurance term, the platform will automatically initiate a compensation request in order to execute a payout, and one or more voting decisions will be initiated to decide on the grant compensation by NsureDAO members.

- Surplus Pool

The surplus pool will accrue capital each time an insurance premium is paid. 40% of every premium paid will be injected into the surplus pool. 10% of the premiums will be reserved till the expiration of the contract for incentivizing DAO members on the claim process. In the event of having no claim being submitted for a purchased policy, the reserved funds will be relocated back into the surplus pool. The nature of the surplus pool is to grow in size over time, and is intended to be the main source to cover insurance claims. In the event of the surplus pool not being able to fully cover claim payouts at any point in time, the capital pool will act as reserve to cover any outstanding payouts. When the surplus pool grows large enough, the rate of mining rewards can be adjusted by the NsureDAO.

- Nsure Staking (Underwriting)
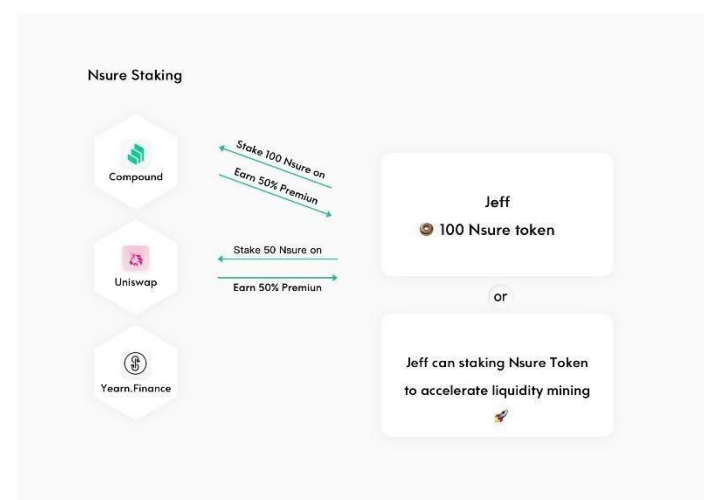
NSURE tokens may be staked by holders to supplement the capital pool for products of their choice, receiving 50% of the insurance premiums paid in exchange, which are to be released linearly. The overall staking requirements and rewards are influenced by the Capital Model used as backbone in the platform model, which takes into account the correlation between different insurance products. NSURE holders may choose to stake on as many as interested, and so contributing to the available capital pool, thereby the greater risk taken may potentially

result in earning higher returns sourced from premiums.

In the event of a successful claim, the same percentage of Nsure tokens staked on a specific product that underwent a payout will be deducted and burned as means to share losses resulted at platform level.

Staked tokens are limited from withdrawal and transfer functions, and tokens are to be released from lockup under request. The terms set for request are based on a 14-day buffer time to unstake/un-lock. During the buffer period, the stake to be unlocked will not be subject to any premium rewards. However, in the event of a successful claim the pending tokens

are still subject to underwriting liabilities (e.g. burnt proportionally). This mechanism is intended to avoid any attempts of abuse and or front-running of the model in case of any event-based occurrence that may influence participants.

For the first phase of the platform, products will be focused on providing coverage against the risk of hacks and other code-based exploits, involving smart contracts within the insured protocol. Additional, less-correlated products will be introduced, with the means of reducing correlated risk exposure to capital providers and stakeholders within the ecosystem.

Here's an overview of the model from a product-centric perspective:
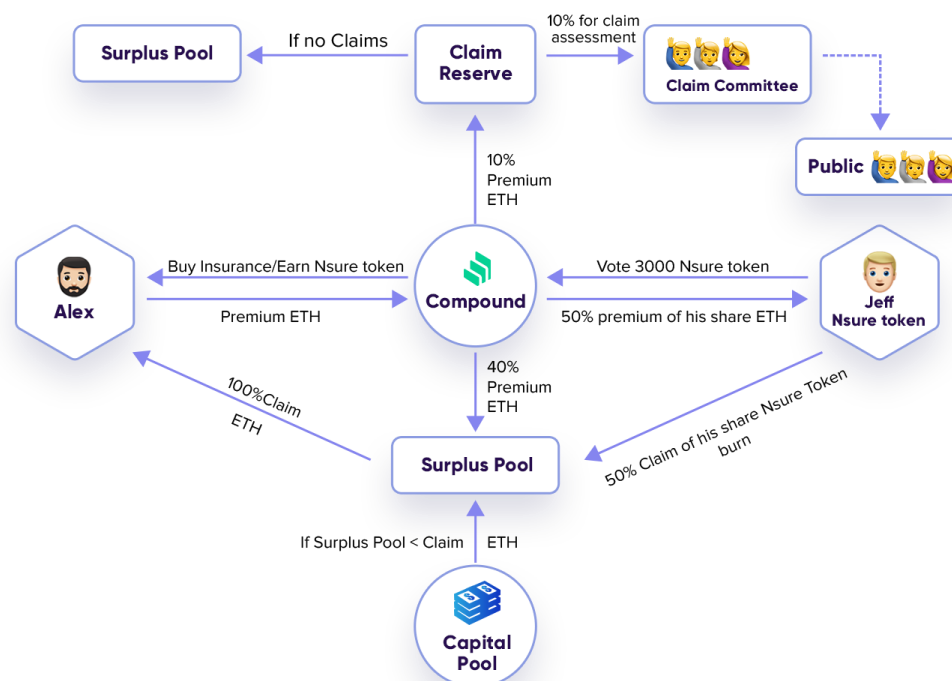
Risk Model Consideration

Risks are diverse. It is technically implausible to measure all risks in a precise manner, and calculate the required risk capital accurately. Therefore, the risk reserve mentioned in this paper refers to the minimum capital requirement needed to prevent "bankruptcy". Minimum capital requirements determined are based on the capital model. The source of the risk reserve consists of two parts, the

first being sourced from a set percentage from each insurance premium paid (Surplus Pool), while the second refers to the compensation amount locked in the Capital Pool.

First of all, we must identify and select the main risks to be considered, which are mainly divided into four categories: asset risk, pricing risk, interest rate risk and other business risks; Secondly, use the probability of bankruptcy to calculate the risk

coefficient and determine the risk capital required for this type of risk; Finally, we make adjustments based on the correlation coefficients between different risks.

Assuming that the total amount of the claim pool is A and the asset value of the insured amount is L, it should be ensured that for any small ε, $P\{L > A\} \leq \varepsilon$. The platform's surplus level is (A-L), 50% of which is dedicated to the surplus pool (40% - capital reserve) & claim process (10% - participation incentives, if any), directly subject to claim payouts. The remaining 50% of the risk reserve is used for counterparty incentive rewards.

We set the random variable X=-(A-L), and the venture capital MCR is the minimum capital required to resist the adverse fluctuation of X. If $\varepsilon = 0.05$, the probability that X is not higher than the minimum capital level MCR must remain above 95%, that is $P\{X \leq MCR\} \geq 95\%$. The minimum capital level MCR is obviously related to the confidence level $1 - \varepsilon$. If the distribution function of X, F(x) is known, and MCR is enabled, only F (MCR) = ε is needed to be set, which is the quantile point corresponding to ε. Its geometric meaning is shown in the figure below, where E(X) represents the expected level of the fluctuation of unfavorable earnings and MCR represents the minimum capital requirement.
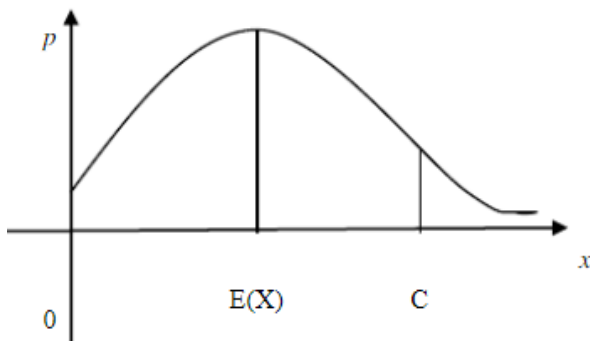
If we consider only one type of risk, the principle is the same. Unfavorable volatility is X=E (A)-A or X=L-E (L). Venture capital MCR can be understood as the minimum capital requirement to absorb unfavorable fluctuation, namely $P\{E(A) - A >$

$MCR\} \leq \varepsilon$ or $P\{L - E(L) > MCR\} \leq \varepsilon$. If the probability distribution of A or L is known, then MCR is the corresponding number of points, expressed as: $MCR = E(A) - y(\varepsilon)$ or $MCR = y(1 - \varepsilon) - E(L)$.

Suppose we make A or L obey a normal distribution, then $MCR = \Phi(\varepsilon) \times \sigma$ or $MCR = \Phi(1 - \varepsilon) \times \sigma$, then the risk factor of the asset is $\frac{MCR}{E(A)}$ or $\frac{MCR}{E(L)}$, which is the ratio of the minimum capital requirement to the premium. From this, we can calculate the minimum capital required for future claims based on the amount of premium.

In addition, if the expected cost of bankruptcy is increased, the expected cost of bankruptcy is required to be controlled to a percentage lower than the expected gap, such as 1% or 0.1%. When considering the liability risk, it can be assumed that the asset value is fixed. The asset value L of the insured amount is a random variable, and it obeys a continuous probability distribution whose distribution density is p(x). EPD refers to the overall average of the portion of liabilities exceeding assets, the so-called gap or bankruptcy cost, that is:

$$D_L = \int_A^\infty (X - A)P(X)dx$$

The EPD ratio refers to $\frac{D_L}{E(L)}$ (or $\frac{D_A}{E(A)}$). Let $c_L = \frac{A-L}{E(L)}$ and assume that L obeys a normal distribution. It can be derived that the EPD ratio of the asset value risk L of the insured amount is

$$d_L = \frac{D_L}{E(L)} = K_L \phi\left(\frac{-c_L}{K_L}\right) - c_L \Phi(\frac{-c_L}{K_L})$$

The EPD ratio for the total amount of claim pool assets A is

$$d_A = \frac{D_A}{E(L)} = \frac{1}{1 - c_A}[K_A \phi\left(\frac{-c_A}{K_A}\right) - c_A \Phi\left(\frac{-c_A}{K_A}\right)]$$

Among them, $K_L (K_A)$ is the ratio of the standard

deviation of the insured asset value L (the total amount of the claim pool is A) to the expected liability, $\Phi(\cdot)$ is the distribution function of L (A), and $\phi(\cdot)$ is the asset Or the density function of debt. Given the value of the EPD ratio (1% or 0.1%), combined with the above-mentioned equation, the risk coefficient c_L or c_A needed can be found, and then find the risk capital MCR_L or MCR_A of each type.

In more detail, if the correlation of risks between different products is taken into account, the covariance needs to be adjusted accordingly.

Suppose there are n types of products of the same scale, the concentration is f = 1/n = the premium income of the largest type of product / the premium income of all products, and the risk capital MCR of each type of product is the same.

Assumption 1: overestimated MCR, and Assumption 2: underestimated MCR. Thus just offset their adverse effects. The concentration adjustment factor is

$$\sqrt{\rho + (1 - \rho)f} \approx \sqrt{\rho} + \sqrt{1 - \rho} \times f$$

Given f is relatively small. If it is assumed that the average correlation coefficient between each business is 0.4, then $\rho = 0.4$，$\sqrt{\rho} = 0.63$. Then the adjusted reserve risk capital requirement MCR=63%+37%×(the largest product reserve/all product reserves).

Dynamic Pricing Model

- Pricing principle

The pricing of insurance products is to use the data of past events to obtain the probability of risk. This risk and its probability of occurrence are objective and measurable. This is also the fundamental basis for determining the insurance premium.

The law of large numbers is that when enough events of the same nature occur, their risk probability will be closer and closer to the actual probability, so that a more accurate estimate can be obtained. Since there are differences in the way of thinking of each individual in real life, it cannot be assumed to be independent and identically distributed; hence it is more generalized to quote the Chebyshev Theorem of Large Numbers.

Suppose that x_1, x_1, x_2, ·····, x_n, ······are a group of independent random individuals, each of which has an expected value $E(x_k)$ and a variance $D(x_k)$. If there is a constant MCR which makes $D(x_k) \leq c$ $(k = 1, 2, \ldots, n)$, then for arbitrarily small positive numbers ε, the formula $\lim_{n \to \infty} P\left\{\left|\frac{1}{n}\sum_{k=1}^{n} x_k - \frac{1}{n}\sum_{k=1}^{n} Ex_k\right| < \varepsilon\right\} = 1$, as the number of people increases, that is, $n \to \infty$, the obtained mean will get closer and closer to the real mean of the real society.

- Pricing Model

However, due to the current lack of historical data on smart contract exploits and lack of relevant information on assisting pricing, it is expected that the cost of purchasing new insurance agreements at first may be higher. As the code undergoes more related tests, the processing cost will gradually decrease.

Rather than a single centralized entity setting up a premium rate, or individual capital suppliers and policyholders having to negotiate over premium terms, Nsure implements the Dynamic Pricing Model to determine price, based on supply and demand; supply being the tokens staked as counterparty and demand being represented by the policies bought. We assume the risk backers' thinking to follow a beta distribution:

$$X \sim Beta(\alpha, \beta)$$

where α is the total power provided by policies sold, and β is the total power backed for such risk. Then the final premium rate is calculated:

$$P\{X \leq Risk\ Cost\} \geq 95\%$$

The exact formula for policy premium is as below: -

$$Annual\ Premium = Risk\ Cost \times Risk\ Factor$$

Risk factor takes care of the riskiness embedded in each project. It is based on the rating we given for each project. In the pricing of traditional insurance, similar factoring exists called underwriting tier, which is applied to the base premium rate. Without the Risk Adjustment Factor, premiums of 2 projects would be identical if their capital demand and supply are the same, which is unsatisfactory since the difference of riskiness in the 2 De-Fi may not be equal. By multiplying the risk factor, we are basically evaluating the risk by capping the premium rate.

For Parameters:

$$\alpha = Policy\ Limit \times Demand\ Scale\ Factor$$

$$\beta = Staking\ Pool \times Staking\ Scale\ Factor$$

Scale factors are applied to ensure a reasonable sensitivity of beta function output (premium rate) to its input (demand and supply).

Premium is subject to the minimal premium which is different among different rating. Additional premium will be loaded as Risk Cost to have the final cover price for the claim settlement and internal cost.

Formula to adjust the premium to certain duration

$$Policy\ Prem = \frac{Duration}{365} \times Annual\ Prem \times [1 + \left(\frac{365}{Duration} + 1\right) * Avg\ Claim\ Cost]$$

Average claim cost represents the loading of implicit

additional free claim assessment chance for short-term policies.

The model suggests the following pattern:

- When capital supply is high, i.e. more power is backed for a risk, the premium rate will be low
- When demand is high, i.e. more policies are purchased, the premium rate will increase
- Higher amounts of tokens backing a risk, i.e. more popular, the less volatile the premium rate change will be. Vise versa for a less popular risk, as the premium rate will be more sensitive for large demand change, to avoid pricing error.

Capital Model

Insurance is a highly leveraged industry; therefore, the primary concern of the insurance capital model is to calculate the capital required to guarantee solvency of the risk pool to some arbitrary and high confidence level like 99.5% in the latest EIOPA's Solvency II framework.
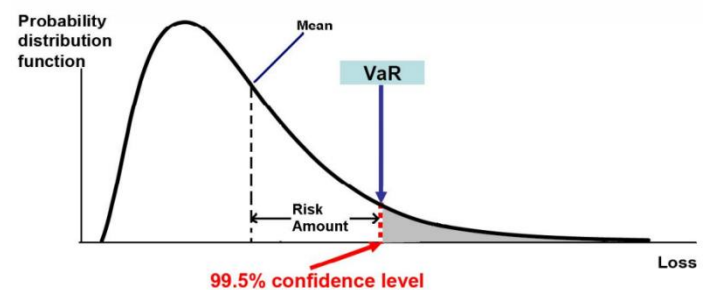
The Capital Model is used to calculate the minimum capital amount the fund needs to hold, which is used to determine 1) the capital locked in the Capital Pool and 2) the staking requirement and rewards for stakers in the Capital Pool.

ETH, NSURE, USDT, DAI, and USDC are allowed to be used for paying the premium and the liability will also be based off these currencies accordingly. Therefore, we will exchange the exposure with all other currencies into a stable currency, the MCR is

calculated:

$$\sqrt{\sum_{i,j} Corr(i,j) * RF(i) * EX(i) * RF(j) * EX(j)}$$

Where

- RF(i,j) is the risk factor for product i and j
- EX(i,j) is the total exposure for product i and j
- Corr(i,j) is the correlation between product i and j

$$Corr(i,j) = \begin{bmatrix} 1 & \cdots & a \\ \vdots & \ddots & \vdots \\ a & \cdots & 1 \end{bmatrix}$$

Leverage will be granted by two dimensions:

- Risk factors of different products. The leverage is given by the probabilistic occurrence of events. The higher Security Rating, the higher the leverage
- More less-correlated products. The leverage is given by the diversification

The introduction of leverage factor is to credit low risk project by encouraging more staking on them as they consume less staking power from underwriters, and vice-versa. The existence of correlation between projects accounts for the following facts in DeFi industry:

- Developers forks or refers to existing projects' code so there is similarity among projects
- Out of the similarity in structure, projects of same business type tends to be vulnerable to same hack method
- Projects could share oracle risk if they are fed prices from the same oracle
- Risk out of the lego structure of DeFi — collapse of underlying project fails the upper level projects, especially for projects with announced collaboration

The initial parameters will be set at research based on the data available at the time, which will be monitored and updated based on backers' behavior and community voting mechanics.

Another concern of the capital model is asset-liability match. ETH, USDT, Bitcoin will be allowed to be used for paying the premium and the liability will also be paid based on the currency accordingly. However, the difficulty is how to match the asset (capital in Surplus and Capital Pool) and liability (Total amount covered) dynamically, because the price of ETH and Bitcoin fluctuate widely. Our solution is to adjust up the capital mining speed for assets in scarcity to recover the balance.

The capital model result will be calculated daily, to track the systematic risk, and performed off-chain due to gas considerations.

Claim Assessment

Claim is one of the most important parts of an insurance company. To ensure it is handled professionally with efficiency and fairness in balance, Nsure utilizes a 2-phase voting mechanism for claim assessment & processing.

Any active policyholder can submit a claim. For the initial batch of products, Proof of loss is set as criteria/requirement, in order to prevent from speculators and fraud attempts. The maximum pay out to be achieved is the cover amount of the policy. Any policy, in the event of requesting a claim, will proceed to be either paid or considered expired after claim resolution (paid or denied)
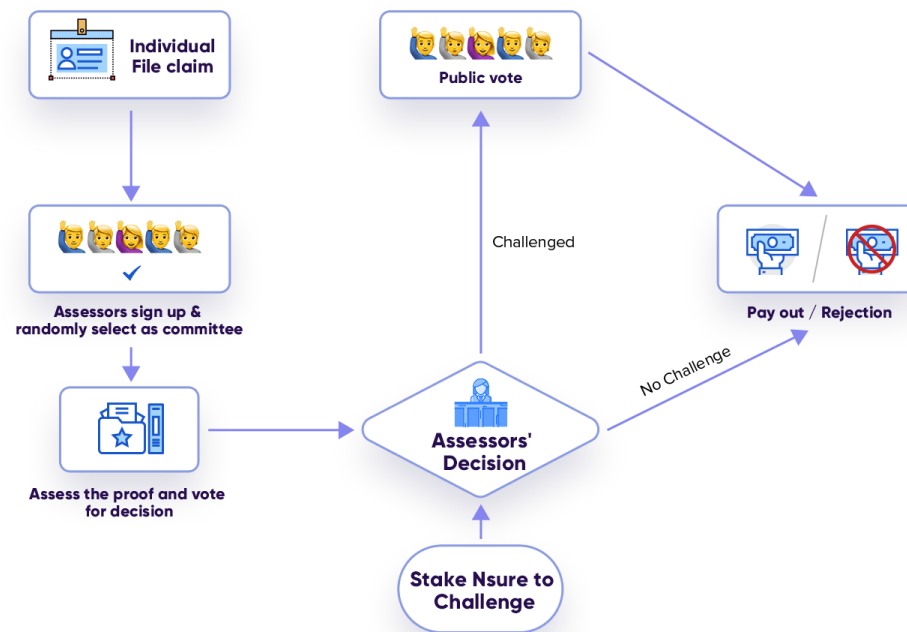
As Defi insurance claim assessments are highly complex and require domain specific knowledge, we are driven by the thought that having a simple vote by average participants will result in a prudent result and might potentially harm policyholder's interest.

Derived from game theory, some simple rules for the claim assessment process are set as follows:

The assessors and challengers are requested to stake in order to participate in the assessment process. Assessors vote to display their bias on the claim. Consensus reached is based on majority and participants of this fraction are rewarded accordingly. If the result is successfully challenged and reverted, assessors will undergo penalty by losing their value at stake; while in the event of a failed challenge, the challenger will undergo the same pun of losing their stake.

The first phase of voting is to be done by the assessors who displayed interest in registering in a timely manner, at first-come first-serve basis. When a claim is available for assessment, assessors can sign up to assess. A random draw will be performed to select final assessors from those who signed up in order to reduce

the risks of deliberate manipulation. The result shall be made within the time required and following simple majority. Any assessor who fails to make a vote in time shall not be considered on sharing rewards resulting from the process, while he/she will still be subject to losing their staked funds if the result is successfully challenged and reverted. Once consensus is reached, the claim detail will be public and enter the pending phase.

During the pending phase, anyone can stake NSUER tokens and start a challenge if they do not agree with the assessor's result. If there is no challenge by any NSURE holders, then the claim result will be final. If there is a challenge, then the claim assessment will escalate to the third phase - a public vote.

All NSURE token holders, in exception of address staked on the product related to the pending claim case, can join the public vote. Note that all staked tokens to participate in public voting will experience a 7-day lockup period to prevent any attempts of short-term market manipulation. If the public vote is in favor of the assessor's result, then the staked tokens from the challengers will be rewarded to all participants. If the public vote is against assessor's result, then the

assessors who vote on the majority will lose both their staked token and assessment fees to the challenger.

Distribution

The first issuance is aimed at a niche group of crypto currency enthusiasts, who also serve as beta product testers to provide feedback on complex insurance products prior to its release. The short to mid-term development goal is to build a safe product that serves the DeFi sector's insurance needs. Majority of the NSURE tokens used as incentive in the early stages will be distributed via capital mining and through participation of the NsureDAO. Broader sales, distribution and marketing channels will be established once the product has a recurring base of users. Given potential future iterations of the insurance products and structure, the model is set to require users to purchase NSURE tokens to Stake, a set of sales and payment procedures, as well as wallet tools will be developed to achieve large scale growth.

Our long-term development goal is not only to issue products with needed use cases and product-market fit, but to build a non-discriminatory platform that allows the masses to participate freely.

Distribution partners can use the integrated open API architecture of the blockchain to interact with our products. Users who hold NSURE tokens are potential sales partners, as every insurance premium sold results in partial rewards to NSURE holders who take on corresponding risk via staking. We are determined to make the smart contract platform design as open and flexible as possible, so that distribution partners can interact and communicate under the prescribed conditions.

Competitive Advantage

- Transparency

A key factor in making a good insurance platform is the health of financial information, such as the usage of funds and whether there are sufficient premium floats to pay potential claims. Since the blockchain is a distributed ledger, each node has the same transcript of records on on-chain data. When the data changes, every insured person can see the synchronized and updated data, making the operation of each fund open and transparent. Therefore, there will be a dedicated module on the homepage of the website to disclose relevant information, and provide an accurate real-time financial status every quarter such as risk factors, minimum capital requirements, historical data on token prices, a summary of claims assessment, and the number of locked/circulating tokens.

In particular, it is highlighted that NSURE token: (a) does not have any tangible or physical manifestation, and does not have any intrinsic value (nor does any person make any representation or give any commitment as to its value); (b) is non-refundable and cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Company, the Distributor or any of their respective affiliates; (c) does not represent or confer on the token holder any right of any form with respect to the Company, the Distributor (or any of their respective affiliates), or its revenues or assets, including without limitation any right to receive future dividends, revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property or licence rights), right to receive accounts, financial statements or other financial data, the right to requisition or participate in shareholder meetings, the right to nominate a director, or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of

participation in or relating to Nsure.Network, the Company, the Distributor and/or their service providers; (d) is not intended to represent any rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss; (e) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument, unit in a collective investment scheme or any other kind of financial instrument or investment; (f) is not a loan to the Company, the Distributor or any of their respective affiliates, is not intended to represent a debt owed by the Company, the Distributor or any of their respective affiliates, and there is no expectation of profit; and (g) does not provide the token holder with any ownership or other interest in the Company, the Distributor or any of their respective affiliates.

The contributions in the token sale will be held by the Distributor (or their respective affiliate) after the token sale, and contributors will have no economic or legal right over or beneficial interest in these contributions or the assets of that entity after the token sale. To the extent that a secondary market or exchange for trading NSURE token does develop, it would be run and operated wholly independently of the Company, the Distributor, the sale of NSURE token and Nsure.Network. Neither the Company nor the Distributor will create such secondary markets nor will either entity act as an exchange for NSURE token.

- Product Upgrade roadmap

We will continue to pay attention to product improvements based on market feedback, and launch new products with blockchain code as the core to meet the needs of more users. We hope that with time, community members will drive each other to jointly promote and develop open-source tools for Nsure.

- Size of the capital pool

The capital pool size is expected to scale alongside the type of product offerings, which will increase the level of diversification benefits for users of the platform. This ensures the effective use of funds, reduces risk costs, reduces the risks caused by insufficient claims, and makes the cost of copying the protocol much higher. A meaningful network of risk assessors (reputable smart contract code auditors) will be established, and sufficient incentives will be provided for our users to participate.

- Community Governance

Under normal circumstances, all operations on Nsure can be completed by smart contracts. Nevertheless, in order to take into account the interests of users and better achieve decentralization effects while ensuring the process to be more transparent, decisions of certain events will require the community to vote. Therefore, the platform will set up a DAO (Decentralized Autonomous Organization) to facilitate such decisions and manage extreme situations. It should be noted that NsureDAO does not have the custody of funds within the pools, nor can it release funds to any specific person. Each committee member may be replaced by voting at any time.

NsureDAO will work in accordance with the two core principles of sustainability (protecting the interests of community members by ensuring the sustainability of the overall funding pools) and growth (promoting sustainable premium increases and NsureDAO membership growth). The members of the NsureDAO organization are set to include several actors with specific expertise in insurance, co-governance, and blockchain development. Some of the powers that committee members have are: (1) Reaching consensus to implement specific code that cannot be automatically deployed; (2) Punishing bad actors

within the Nsure ecosystem (such as malicious claims, false claims, etc.); (3) The power to implement emergency suspension under special circumstances.

NsureDAO members can negotiate and propose relevant proposals to the benefit of the Nsure network. The voting proposals submitted must include clear voting options and NsureDAO's recommendations. Each community member is given a period of time to vote, and the result with a majority decision will be implemented. Any NSURE holder can become a member of NsureDAO and vote on features of the Nsure.Network platform. For the avoidance of doubt, the right to vote is restricted solely to voting on features of Nsure.Network; it does not entitle NSURE token holders to vote on the operation and management of the Company, its affiliates, or their assets, and does not constitute any equity interest in any of the aforementioned entities.