

Reporter: InsurAce.io Date: 2022/06/04

About this Document

This document presents the investigation and findings regarding the claim requests submitted to InsurAce.io Advisor Board on UST de-pegging starting from May 8, 2022 with the corresponding claim voting proposal.

Description of the Incident

TerraUSD (UST), the algorithmic stablecoin that was supposed to be 1:1 pegged to the USD dollar started to lose its \$1 peg from May 8, 2022. The current price of UST is \$0.018 at the time of writing. (June 04, 2022)

Advisor Board Investigation

Our Advisory Team have completed a thorough investigation of the incident, analysing industry technical analysis, community reports, and on-chain data-driven reports, as well as following Terra related news closely. Enclosed are our findings.

- The price of UST started to fall to 0.97 on May 8, 2022 after the Luna Foundation Guard (LFG) first removed \$150M from the Curve UST+3pool followed by some unknown actors who further dumped UST tokens, draining Curve liquidity.
- With Curve liquidity drained, large amounts of UST were dumped on centralized exchanges, causing UST to fall further. In the meantime, a massive sell-off was triggered by fear, uncertainty and doubt as many users started to remove their UST from Anchor Protocol or pull out from LUNA. A full-on bank run ensued with billions of funds flowing out, which caused the price to nosedive.
- The on-chain analytics firm, Nansen, has recently released its in-depth report on the trading activity that led to the depegging of the UST and concluding that the de-peg of UST could instead have resulted from the investment decisions of several well-funded entities, e.g. to abide by risk management constraints or alternatively to reduce UST allocations deposited into Anchor in the context of turbulent macroeconomic and market conditions.
- The report revealed that a small number of players identified vulnerabilities early into the UST de-peg, specifically in the relatively shallow liquidity of the Curve pools securing TerraUSD (UST)'s peg to other stablecoins, and moved to exploit these.

For details, please refer to Nansen Report

The InsurAce.io community also contributed information from both sides. <u>Here</u> is a report suggesting that there was no de-peg only manipulation, and <u>Here</u> is a counterargument showing analysis in favour of a true de-peg. Both were conducted independently of the InsurAce team.

Conclusion

The Advisory Board have considered these reports, as well as feedback from experts across the industry and the recommended course of action is: **ACCEPT**

Payout Proposal

The InsurAce.io UST De-Peg cover was officially been triggered on May 13, 2022 5:00am UTC, following a 10 day Time Weighted Average Price (TWAP) of UST below \$0.88 as per our UST De-Peg Cover Wording.

Eligibility

Based on the coverage and exclusions stated in the UST De-Peg Cover Wording, InsurAce would like to propose a payout proposal to those impacted cover Owners fulfilling ALL the following criteria:

- Holding UST or any representation of UST supplied directly as liquidity in the
 wallet or in accounts with any custodians (e.g. centralized exchange, asset
 management providers, etc.) at the time of purchase of the Cover; and
- Holding active UST De-peg Cover on May 13, 2022 5:00am UTC 1; and
- Holding UST or any representation of UST supplied directly as liquidity on May 13, 2022 5:00am UTC

Exclusion: Cover Owners who are no longer holding UST or any representation of UST supplied directly as liquidity (e.g. aUST) in their wallets or in accounts with any custodians at any time during the cover period will be disqualified from making a claim. (e.g. User A had 100 UST, sold 100 UST, and buys back 100 UST. The cover terminated when User A sold their 100 UST. Hence, any amount bought thereafter will not be claimable. If User A sold 30UST and 70UST remained, the 70UST would still be claimable.) This includes but is not limited to users who sold their UST for arbitration purposes. It also includes funds lost through liquidations whilst staked in third party protocols like abracadabra.money.

For more details, kindly refer to the T&C: <u>UST de-peg cover wording</u>.

Claimable Amount Calculation

InsurAce.io will compensate Cover Owners for the value (value = UST quantity x \$1 USD) of the quantity of the UST the Cover Owner is holding on May 13, 2022 5:00am UTC where:

the value is subject to a maximum of the Cover Amount; and

¹ For Cover Owners whose cover has not been activated yet at the time the de-peg event is triggered, they will still be eligible to file a claim further down the line if the 10-day TWAP is still below \$0.88 on that later date.

 the quantity claimable should be no more than the quantity of UST the Cover Owner held 10 days before the de-peg event is triggered (May 3, 2022 5:00am UTC).

Example	Claimable Amount
User A has a 1000 UST Stablecoin De-peg Cover. - They had 500 UST on May 3, 2022 5:00am UTC. - They further sold 100 UST before the de-peg was triggered and had 400 UST on May 13, 2022 5:00am UTC.	400 UST
User B has a 1000 UST_Stablecoin De-peg Cover They had 500 UST on May 3, 2022 5:00am UTC They bought another 100 UST and had 600 UST on May 13, 2022 5:00am UTC.	500 UST
User C has a 1000 UST_Stablecoin De-peg Cover They had 2000 UST on May 3, 2022 5:00am UTC They sold 500 UST and had 1500 UST on May 13, 2022 5:00am UTC.	1000 UST
User D has a 1000 UST_Stablecoin De-peg Cover. - They had 1000 UST on May 3, 2022 5:00am UTC. - They sold all 1000 UST before the time the de-peg is triggered.	0 UST
User E has a 1000 UST Stablecoin De-peg Cover They had 1000 UST on May 3, 2022 5:00am UTC They put all 1000 UST into Anchor for aUST before the time the de-peg is triggered.	1000 UST

Claimable Amount Adjustment

Per InsurAce.io UST De-Peg Cover T&C, any funds received by the cover owners as compensation for their losses from the UST token issuer and/or Terra ecosystem will be excluded from the claim payments.

Following the LUNA 2.0 Airdrop by Terra ecosystem, InsurAce.io has made adjustment on the claimable amount in 2 ways:

<u>Option 1</u>: Full payout on the claimable UST quantity (1UST = 1USD) whereas cover owners need to send the new LUNA tokens get from airdrop to InsurAce.io.

- The quantity to be send will be calculated following the official announcement on the <u>airdrop calculation logic</u>. Only the corresponding portion of the claimed amount from the quantity released at genesis are required to be sent.
- Cover Owners are required to send the new LUNA token within 5 days once the claim is approved. If them fail to do so, we will proceed with deduction

following option 2 with delayed payout.

Pools	LUNA Airdropped on Terra 2.0
Pre-Attack aUST Holders	0.01827712143
Pre-Attack LUNA (LUNC) Holders	1.034735071
Post-Attack UST (USTC) Holders	0.02354800084
Post-Attack LUNA (LUNC) Holders	0.000015307927

Table 2: LUNA Airdrop Ratios

Example: User A held 1000 aUST at Pre-Attack snapshot and got 5.46 LUNA airdrop.

They claimed the loss of 500 aUST with InsurAce.io. Amount required to be sent will be 5.46/2 = 2.73 LUNA.

<u>Option 2</u>: Deduction will be made on the final payout whereas cover owner decide to keep/trade the new LUNA tokens themselves.

- We will follow the method in Option 1 to calculated the quantity of new LUNA tokens should be sent to us and then the value of this quantity.
- Value deducted will be calculated based on the average trading price of the new LUNA tokens on the 1st trading day which is 1 LUNA = 6.1957 USD (Details on the calculation for price of new LUNA: LUNA Price)

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If the cover owner decide to keep/trade these amount, regardless of what price they sold the token, we will deduct 2.73 * 6.1957 = 16.91 USD from the final payout.

* A survey form regarding the two options has been sent to eligible claim applicants to indicate their choice. Those failed to respond are automatically rolled into option 2.

Claimable Amount Summary

Based on the above criteria and calculation method, the Advisor Board has compiled

a summary of claimable amount for all claim submitted in excel sheet below:

UST De-Peg Claimable Amount Summary

- For Claim Assessors, if you find any calculation errors in the sheet, you can sent email to claims@insurace.io with detailed explanations to challenge the claim.
- For Claim Applicants, if you have any objections, you can make an appeal after the voting in the complaint stage and provide further evidence to claims@insurace.io (Check the process here: lndividual Complaint)

Summary:

Estimated Total Payout Amount after deductions: \$11,729,446.91

Claim Payout Process

Upon claim approval, cover owners are required to swap the proposed amount of UST and new LUNA token to us within 5 days. InsurAce.io will send the equivalent amount of Payout Tokens to the insured based on a payout ratio of 1 UST = 1 USD. The details of the swap process will be announced later.

Payout Token may not be the same token that the insured used to make the premium payment, but rather a combination of the assets in the underwriting pool (eg. USDC, USDT, ETH, BNB, INSUR and etc,) to alleviate operational hazards and selling in a high volatility environment.

The value of the Payout Tokens will be calculated according to the USDC value posted to CoinGecko at the time of the payout.

InsurAce.io is not responsible for differences in the market value of the Payout Token from the time of pay out to the time the insured collect the claim payout.

* Cover owners with locked funds can arrange for delayed payout time. Swap will be enabled once claimed UST tokens have been transferred to cover owner wallet.

If this payout proposal is **Accepted**:

- Payout for all individual claims related to this group claim will be processed directly following the amount in excel sheet above accordingly. There will be no more voting on the individual claims.
- The final payout amount is subject to change if cover owners fail to send InsurAce their UST or new LUNA token required.
- If a claim receives a challenge from Claim Assessors on its eligibility, claimable amount and etc., InsurAce team will remove the claim from Group claim, and proceed the claim individually. The Advisory Board will re-

evaluate the claim and make the final decision regarding the payout.

• 20% of available premium pool will be used as part of the payout.

If this payout proposal is **Rejected**, cover owners can make an appeal in the complaint stage. The Advisory Board will have the sole discretion in making the final decision regarding the payout.