

Chapter 1: Celsius, Next Terra?

“If you don’t know the source of the yield, you are the yield” - Jerome Powell

## Chapter 1: Celsius, Next Terra?

October 8, 2021, Celsius Network reported that their assets under management have crossed \$25 billion.

Before the fall of Terra, Celsius had already been experiencing violent client deposit withdrawals. In May, the firm's AUM was reported to be around \$11B ~ 56% decrease in 6 months.

After the Terra collapse, the firm found itself in an even worse situation as people have lost their trust in “risk-less” 10% + yields. Terra ecosystem was a major revenue generator for Celsius as they had \$535M deposited in Anchor protocol.

Luckily, they were able to withdraw their funds on time due to their exposure to the terra ecosystem downfall on-time to avoid the catastrophe.

On the investor portal, bnktothefuture, where Celsius have previously successfully raised \$20m+, some investors raised a concern about Celsius’s exposure to Terra. The CEO said that the firm had “limited exposure to UST and Terra.

Nansen recently published a report analyzing on-chain activity of Terra De-Peg. According to the report, Celsius wallet’s withdrawal of funds from the Terra Ecosystem from UST might have played a role in de-pegging of the stable coin..

Nansen also showed the firm’s exposure to be near \$530M, which is far from “minimal.” Even if the company did not experience significant losses as they were able to limit their exposure on-timely, “\$535M” of deposits must have served as a significant source of revenue for Celsius. Currently,

Celsius is offering up to 7-9% yield on stalbecoins while the USD prime rate is at 3.25%. After the market conditions have worsened, the demand for leverage in crypto has decreased.

The firm previously released their annual financial statement for the year of 2019 and 2020, but never released such numbers for 2021 despite historical AUM inflows. Various investors have previously inquired about the lack of transparency, but no reasonable answers were provided.

The annual financial statements released in 2019 and 2020 had some interesting figures:

In

	Note	Period ended 31 December 2020 \$000	As restated year ended 29 February 2020 \$000
Turnover	4	51,165	15,332
Cost of sales		(24,063 )	(14,620 )
<b>Gross profit</b>		<b>27,102</b>	<b>712</b>
Distribution costs		(408 )	(891 )
Administrative expenses		(35,448 )	(10,065 )
Other operating income	5	46,459	1,594
Other operating charges	6	(42,661 )	(145 )

2020, The firm has spent 47% more on “Administrative expenses” than they did on “Cost of Sales”, which includes their “Reward paid to community” aka yields). Such astronomical figures are especially surprising given that the firm only had 2 directors and 2 employees at the time.

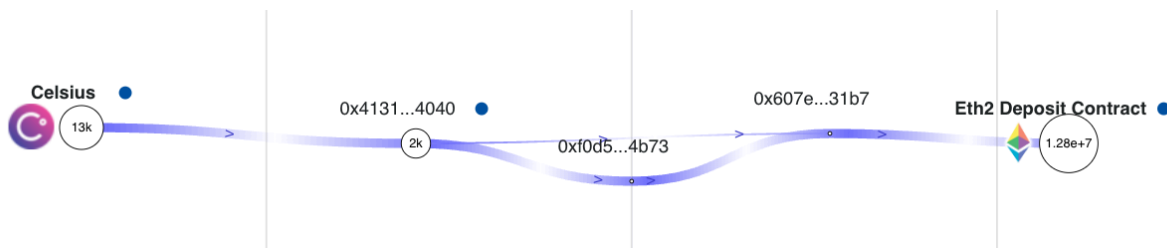
	Group Period ended 31 December 2020 No.
Directors	2
Employees	2
	<u>4</u>

How can a lending company with 4 employees spend more on administrative expenses than on interest paid to customers?

There are several other examples where the leadership team at Celscius decided not to be “fully transparent.”

In 2021, Stakehould, a custody firm, lost its access to their private keys. The table below shows the public wallet addresses that deposited the most amount of ETH into the Stakehould staking contract.

#	Wallet Address	ETH deposited into Stakehould
1	0x3c79d7e8a5d6b49336f0fd2f3adde745954bc9f7	20,597.00
2	0xf0d54551a359d5b57b7035d847b5c8d8eb374b73	14,297.51
3	0xb90e50f2b083bb236c9c5d31997ed4e9f9e1dacd	10,555.25
4	0xef22c14f46858d5ac61326497b056974167f2ee1	10,242.00
5	0x41318419cfa25396b47a94896ffa2c77c6434040	5,407.56
6	0x62ffb5b8f6c6e3dc949f4e7b163831fe6d2ed423	1,815.45



Nansen, on-chain analytics firm, links the Wallet #4 to “Celsius Trading”. Over 50% of incoming and outgoing ETH for wallets #3 and #4 are associated with known Celsius public wallets, making it extremely likely that these are also Celsius Wallets. Wallet #2 and #5 also demonstrates such a pattern of behavior.

Based on information based on the public ledger, we can speculate that the firm has lost around 35K of ETH deposits in the Stakehould incident. No information about \$70M losses has been acknowledged by the firm. According to CoinDesk, the company also lost \$120M on the Badger Dao hack.

Based on the prior events, an investor has a right to be skeptical about the numbers that the company is currently presenting.

In December of 2020, the firm collaborated with Chainalysis to produce a report confirming the accuracy of net funds collected by Celsius. Chainalysis verified that Celsius had for \$7.6B in deposits and \$4.2B in withdrawals since it launched its services in June of 2018. This report is currently not publicly available.

At the time, the firm's public filings were audited by Nyman Libson Paul, a chartered audit firm based in the UK. Since the firm has not released their financial statements, the firm has never undergone an audit. Even though Chainalysis verified the firm's assets and withdrawals in 2020, no such reports have been done since then.

In 2021, the firm raised \$20.2 million of equity crowdfunding via BnkToTheFuture. The equity crowdfunding in the UK and US is largely unregulated and does not require stringent public disclosures. In Business School, we were taught that some firms will intentionally try to raise capital through equity crowdfunding platforms to avoid disclosing their financials.

Currently, Celsius Network claims to have \$11B in AUM, but such numbers have not been confirmed.

The firm also releases "CelsiusByTheNumbers" report on social media. It is unclear how the firm calculates its TVL and if this is the same number as their AUM.



I manually combined the numbers reported in the "CelsiusByTheNumbers" reports and summarized the figures in the table below.

You can see a striking difference in 5 weeks before and after the terra ecosystem collapse. The platform had Net inflow of ETH every week.

Weekly outflows for March/April

	Mar 18th - Mar 24th	Mar 25th - Mar	April 1 - April 7	April 8 - April 14	April 15 - April 21
Net BTC(coins)	(523)	(1,916)	867	2,100	241
Net BTC (USD)	(\$15,986,018)	(\$58,564,456)	\$26,485,439	\$64,188,600	\$7,366,406
Net ETH(coins)	5,543	16,946	5,818	14,446	6,294
Net ETH(USD)	\$10,376,496	\$31,722,912	\$10,891,296	\$27,042,912	\$11,782,368
NET STABLES	(\$22,690,000)	(\$82,450,000)	(\$32,020,000)	(\$34,640,000)	(\$3,560,000)
Inflows	\$312,020,000	\$393,530,000	\$358,170,000	\$471,640,000	\$239,650,000
Outflows	(\$307,330,000)	(\$491,400,000)	(\$435,320,000)	(\$354,740,000)	(\$225,990,000)
Net Inflow/Outflow	\$4,690,000	(\$97,870,000)	(\$77,150,000)	\$116,900,000	\$13,660,000

Weekly outflows for April/May

Please note, the report was not released for the week of May 12 to May 17 (hint: the previous week had \$750M of outflows).

	April 22- April 28	April 29 - May 5	May 6 - May 12	May 12- May 17	May 20 - May 26	May 27 - Jun 2n
Net BTC(coins)	(1,382)	(755)	(4,967)	N/A	(3,824)	(5,343)
Net BTC (USD)	(\$42,242,212)	(\$23,088,701)	(\$151,821,322)	N/A	(\$116,884,384)	(\$163,314,138)
Net ETH(coins)	(9,016)	(9,598)	(89,031)	N/A	(41,593)	(52,052)
Net ETH(USD)	(\$16,877,952)	(\$17,967,456)	(\$166,666,032)	N/A	(\$77,862,096)	(\$97,441,344)
NET STABLES	(\$1,370,000)	\$10,900,000	(\$384,000,000)	N/A	\$35,000,000	(\$22,000,000)
Inflows	\$180,340,000	\$201,700,000	\$396,780,000	N/A	\$192,000,000	\$194,000,000
Outflows	(\$276,100,000)	(\$263,120,000)	(\$1,150,000,000)	N/A	(\$364,000,000)	(\$498,000,000)
Net Inflow/Outflow	(\$95,760,000)	(\$61,420,000)	(\$754,000,000)	N/A	(\$172,000,000)	(\$304,000,000)

Even without the Terra Collapse, the firm was experiencing net outflows at the end April.

The week after the Terra meltdown (May 6th- May 12th), there was outflow of \$750M of funds (150M in ETH and \$150M in BTC). Last two weeks of May, the firm experienced \$450m of net

outflows. Even if we ignore the week, where the outflows were not reported, Celsius experienced \$1.2B of outflows.

### Monthly Outflows

Monthly Inflows/Outflows						
	Dec 31- Jan 27th	Jan 28 - Feb 24	Feb 25th - Mar 24th	March 25th to April 21st	April 22 to May 26th	1st week of June
Inflows	\$1,829,780,000	\$1,822,780,000	\$1,266,070,000	\$1,462,990,000	\$970,820,000	\$194,000,000
Outflows	(\$1,506,480,000)	(\$1,122,730,000)	(\$1,366,200,000)	(\$1,507,450,000)	(\$2,053,220,000)	(\$498,000,000)
Net Inflow/Outflow	\$323,300,000	\$700,050,000	(\$100,130,000)	(\$44,460,000)	(\$1,082,400,000)	(\$304,000,000)
Net BTC(coins)	855.00	8,861.00	(3,038.00)	1,291.50	(10,928.37)	(5,343.00)
Net BTC (USD)	\$26,133,930	\$270,845,326	(\$92,859,508)	\$39,475,989	(\$334,036,619)	(\$163,314,138)
Net ETH(coins)	(7,394)	8,183	5,039	43,504	(149,238)	(52,052)
Net ETH(USD)	(\$13,841,568)	\$15,318,576	\$9,433,008	\$81,439,488	(\$279,373,536)	(\$97,441,344)

### HODL MODE.

The firm recently activated “HODL Mode” which prevents its users from withdrawing their deposits from the platform. The firm previously stated that “You control when HODL Mode is activated.” Such feature gave users ability to temporarily disable outgoing transactions from their Celsius accounts. No reasonable explanation has been made why so many users are locked from withdrawing their funds.

“HODL mode” + 1.5B withdrawals in a month = NOT HODL MODE

Given the aggressive outflows, how long can Celsius Survive?

On-chain analysis of Celsius’ public wallets:

The following public wallets are known to be associated with Celsius Network based on information from Nansen and based on transactions history of such wallets. Even though Wallet #10 is not marked as a “Celsius wallet” by the Nansen, we can see that 100% of all ETH received (43K ETH) and 100% of ETH sent (16k ETH) has been to and from other confirmed Celsius wallets. Other wallets also demonstrate similar behavior.

<b>Wallet 1(Comp+AAVE)</b>	0x8ACeaB8167c80CB8b3DE7fa6228b889bB1130Ee8
<b>Wallet 2(Maker)</b>	0x87a67e7dc32fdc79853d780c6f516312b4a503b5
<b>Wallet 3(Convex+Curve)</b>	0x73cae59e9d6e73b43ad32de120b456783f72b7aa
<b>Wallet 4 Staked ETH Wallet</b>	0x1CeDC0f3Af8f9841B0a1F5c1a4DDc6e1a1629074
<b>Wallet Celsius 5</b>	0x4f6742badb049791cd9a37ea913f2bac38d01279
<b>Wallet 6(Bancor)</b>	0xc926c5803b9337013232bc36cdf2d82608c62466
<b>Wallet 7</b>	0xda36468efd3c09b6e52a9dc73cf7863a5e5671c4

<b>Wallet 8</b>	0xdbaa0bCEC419c47A75EfBb93C745aebAE3fE9C7b
<b>Wallet 9</b>	0xef22c14f46858d5ac61326497b056974167f2ee1
<b>Wallet 10</b>	0xc131701ea649afc0bfcc085dc13304dc0153dc2e
<b>Wallet 11</b>	0x3473779Fd4D366774fE7D2Ceb089B30d94D7F1d1
<b>Wallet 12</b>	0x41318419cfa25396b47a94896ffa2c77c6434040
<b>Wallet 13</b>	0xf0d54551a359d5b57b7035d847b5c8d8eb374b73
<b>Wallet 14</b>	0xb90e50f2b083bb236c9c5d31997ed4e9f9e1dacd
<b>Wallet 15</b>	0x41318419cfa25396b47a94896ffa2c77c6434040

Table #1 Shows Wallet #'s Assets and Liabilities:

Since the majority of the wallet's funds have been deposited into AAVE and COMP, the wallet has 1) assets: funds that are deposited into a platform and loans taken against deposits. Currently, they have \$1.8B of assets dominated in ETH, WBTC and StETH and \$800M of loans denominated in stable coins.

Wallet 1(Comp+AAVE) <small>0x8ACeaB8167c80CB8b3DE7fa6228b889bB1130Ee8</small>		Comp + AAVE wallet	
<b>Assets Deposited into AAVE</b>			
<b>AAVE Assets</b>	<b>Asset</b>	<b>CurrentUSD Value</b>	<b>AAVE Liabilities</b>
			<b>CurrentUSD Value</b>
	ETH	76,086.00 \$ 126,683,190.00	USDC
	WBTC	15,914.00 \$ 465,993,748.00	USDT
	stETH	409,080.00 \$ 681,118,200.00	DAI
	<b>Total AAVE Assets</b>	<b>\$ 1,273,795,138.00</b>	<b>Total AAVE Liabilities</b>
			<b>\$ 592,543,686.21</b>
	<b>Total AAVE Equity</b>	<b>\$ 681,251,451.79</b>	
<b>Assets Deposited into COMP</b>			
<b>COMP</b>	<b>Asset</b>	<b>CurrentUSD Value</b>	<b>Comp Liabilities</b>
			<b>Asset</b>
			<b>CurrentUSD Value</b>
	ETH	85,584.00 \$ 142,497,360.00	USDC
	WBTC	13,578.00 \$ 397,590,996.00	USDT
	Comp	13,244.00 \$ 781,396.00	DAI
	<b>Total COMP Assets</b>	<b>\$ 540,869,752.00</b>	<b>Total COMP Liabilities</b>
			<b>\$ 207,837,594.00</b>
	<b>Total COMP Equity</b>	<b>\$ 333,032,158.00</b>	
	<b>Wallet Assets AAVE +COMP</b>	<b>\$ 1,814,664,890.00</b>	<b>Wallet Liabilities</b>
	<b>Total Equity AAVE +COMP</b>	<b>\$ 1,014,283,609.79</b>	<b>\$ 800,381,280.21</b>

Wallet #2

<b>Wallet 2(Maker)</b>		0x87a67e7dc32fdc79853d780c6f516312b4a503b5		<b>Maker wallet</b>		
Deposited Assets						
<b>Maker Asset</b>	<b>Asset</b>			<b>Maker Liabilities</b>	<b>Asset</b>	<b>CurrentUSD Value</b>
WBTC	17,753.96	\$	519,871,456.72	DAI	18,131,622.00	\$ 18,131,622.00
LINK	6,748,089.00	\$	53,309,903.10	DAI	278,378,560.00	\$ 278,378,560.00
<b>Total Maker Assets</b>		\$	<b>573,181,359.82</b>	<b>Total Maker Liabilities</b>		<b>\$ 296,510,182.00</b>
<b>Maker Total Equity</b>		\$	<b>276,671,177.82</b>			

Wallet #2 is the main wallets used on Maker, where they have deposited \$570M of WBTC and LINK and taken a loan worth around \$300m.

Wallet #3 has \$30M deposited into Convex

<b>Wallet 3(Convex+Curve)</b>		0x73cae59e9d6e73b43ad32de120b456783f72b7aa	
<b>CONVEX Asset</b>	<b>Asset</b>		<b>CurrentUSD Value</b>
USDT	15,530.00	\$	15,530.00
WBTC	530.00	\$	15,519,460.00
ETH	9,382.00	\$	15,621,030.00
<b>Total Convex Assets</b>		\$	<b>31,156,020.00</b>

The summary of all wallets is given below. Based on the public ledger information, we estimate the firm to have \$3.1B in assets versus \$1b of AAVE loans.

Total Assets and Liabilities are summarized in the graph below:



	<b>Assets</b>	<b>Liabilities</b>	<b>Equity</b>
<b>Wallet 1(Comp+AAVE)</b>	\$ 1,814,664,890.00	\$ 800,381,280.21	\$ 1,014,283,609.79
<b>Wallet 2(Maker)</b>	\$ 573,181,359.82	\$ 296,510,182.00	\$ 276,671,177.82
<b>Wallet 3(Convex+Curve)</b>	\$ 31,156,020.00		\$ 31,156,020.00
<b>Wallet 4 Staked ETH Wal</b>	\$ 525,294,765.00		\$ 525,294,765.00
<b>Wallet Celsius 5</b>	\$ 58,964,141.35		\$ 58,964,141.35
<b>Wallet 6(Bancor)</b>	\$ 6,851,988.00		\$ 6,851,988.00
<b>Wallet 7</b>	\$ 13,528,284.00	\$ 11,888,492.00	\$ 1,639,792.00
<b>Wallet 8</b>	\$ 26,630,010.00	\$ -	\$ 26,630,010.00
<b>Wallet 9</b>	\$ 26,444,722.00	\$ -	\$ 26,444,722.00
<b>Wallet 10</b>	=		
<b>Wallet 11</b>	\$ 49,950,000.00		
<b>Wallet 12</b>	\$ 8,826,165.00		
<b>Wallet 13</b>	-		
<b>Wallet 14</b>	\$ -		
<b>Wallet 15</b>	\$ -		
<b>Total</b>	<b>\$ 3,135,492,345.17</b>	<b>\$1,108,779,954.21</b>	<b>\$ 1,967,936,225.96</b>

The assets that we see on-chain are not an exhaustive list of all firm's assets. Celsius can have assets on centralized exchanges such as FTX or Kraken, the balance of which are impossible to track. The firm can also hedge their market exposure through various instruments such as derivative contracts or they can have other OTC arrangements, which are not reflected on-chain.

Having said that, on-chain analytics shows that Celsius currently has \$3.1B of assets with \$1.1B worth of debt, leaving the firm with \$2B of Equity. The firm also has the asset denominated in crypto while its loans are denominated in stables, which exposes the firm to currency risk against the dollar.

We are unsure what the firm's AUM is and it can range somewhere between \$7B to \$11b,

We only see \$3B of assets on-chain, which have \$1b of loans against them. The firm also participates in exchange lending and institutional lending and assets used in such activities are beyond our on-chain analytical endeavors.

Even if at 11\$b AUM mark, the \$1.5B of monthly withdrawals will not keep the firm alive for a long time, especially after customers were put on a forced "HODL" mode.

In 2020, per the firm's Income Statement (attached below), you can see that the firm was operating at a loss despite its historic rise in net deposits. It is not hard to imagine how the firm will do with net deposits dropping by billions.

<b>Total Revenues</b>	<u>51,165</u>
	<u>(24,063)</u>
<b>Gross Profit</b>	<u>27,102</u>
<b>Expenses</b>	
Distribution Cost	(408)
<i>Administrative Expenses</i>	<u>(35,448)</u>
<b>Total Admin and Distribution Expenses</b>	<u>(35,856)</u>
Utilisation of treasury cryptocurrencies	
Other operating income(Utilisation of treasury cryptocurrencies)	46,459
Other Operating Charges(Treasury cryptocurrencies utilised)	<u>(42,661)</u>
<b>Total from Utilization of Treasury crrypto</b>	<u>3,798</u>
<b>Operating Income (EBIT)</b>	<u>-4,956</u>
<b>Fair value movements</b>	
Unrealised gain/(loss) on cryptocurrency debtors	384,168
Unrealised gain/(loss) on cryptocurrency creditors	<u>(2,581,578)</u>
<b>Total Fair Value Movement</b>	<u>(2,197,410)</u>
<b>Income From Investments</b>	
Net realised losses and income from investments	(10,692)
<b>Unrealised gains/(losses), amounts written off and impairment of investments</b>	
Unrealised gains/(losses) on investments	493,286
Impairment of fixed asset investments	(506)
Amounts written off investments	
<b>Total</b>	<u>492,780</u>
<b>Interest receivable and similar income</b>	
Interest receivable from group companies	3,679
Other interest receivable	<u>212</u>
	<u>3,891</u>
<b>Interest payable and similar expenses</b>	
Other loan interest payable	(3,644)
Other finance income	<u>1,424</u>
	<u>(2,220)</u>
<b>Income before income taxes</b>	<u>(1,718,607)</u>
Income tax expenses	<u>322,199</u>
<b>Loss for the financial period</b>	<u>(1,396,408)</u>

Another concern regarding Celsius' liquidity is its staked ETH position.

	<i>ETH</i>	<i>stETH(Lido)</i>	<i>ETH 2,0</i>	<i>st(ETHStepHound)</i>
1 <b>Wallet 1(Comp+AAVE)</b>	161,670.00	409,080.00		
2 <b>Wallet 2(Maker)</b>				
3 <b>Wallet 3(Convex+Curve)</b>	9,382.00			
4 <b>Wallet 4 Staked ETH Wal</b>	11,130.00		324,000.00	
5 <b>Wallet Celcius 5</b>	17,615.00			
6 <b>Wallet 6(Bancor)</b>				
7 <b>Wallet 7</b>				
8 <b>Wallet 8</b>	15,994.00			
9 <b>Wallet 9</b>				
10 <b>Wallet 10</b>	26,680.00			
11 <b>Wallet 11</b>	30,000.00			
12 <b>Wallet 12</b>				5,301.00
13 <b>Wallet 13</b>				14,297.51
14 <b>Wallet 14</b>				10,555.25
	272,471.00	409,080.00	324,000.00	30,153.76

ETH	272,471.00	27%	\$ 453,664,215.00	Liquid
stETH	409,080.00	41%	\$ 681,118,200.00	Low stETH-ETH liq
ETH2	324,000.00	32%	\$ 539,460,000.00	Illiquid
st(ETHStepHound)	30,153.76	3%	\$ 50,206,012.28	Keys lost
<b>Total ETH</b>	<b>1,005,551.00</b>	<b>1,665.00</b>	<b>\$ 1,674,242,415.00</b>	

Celsius public wallets have around 1M of ETH coins, but most of these coins are staked in liquid and non-liquid stacking platforms.

- 1) Liquid ETH: Most of liquid ETH is deposited into AAVE and COMP. Both deposited positions have a loan against the assets with around 45% TLV. Given the loan against the deposited position, the Celsius will have to pay off the loans before being able to withdraw their liquid ETH position.
- 2) 409k of ETH is in StETH tokens, which means it is in liquid staked format.

The liquidity pool on Curve, st-ETH vs ETH is highly imbalanced and there is only 150k of ETH available for 524 of stETH. This balance decreased from 80% to 20% in one day.

Screenshot from June 11:

Currency reserves

**ETH:** 144,135.13 (21.55%)  
**stETH:** 524,639.08 (78.45%)  
**ETH+stETH:** 668774.21  
**USD total:** \$1.1b

Screenshot from June 10:

Currency reserves

**ETH:** 251,122.56278417 (28.11%)  
**stETH:** 642,168.71077040 (71.89%)  
**ETH+stETH:** 893,291.27355457  
**USD total:** \$1.6b

If the firm becomes a market seller of St ETH on public pools, the firm can only get 144K for 524k of stETH. Such a scenario is highly unlikely as the firm could potentially work out private deal on OTC markets.

- 3) 324K of ETH has been deposited into ETH 2.0 contracts and Celsius will not have access to this position for at least 1-2 years.
  - 158K staked through Figment
  - 166,400 staked through Ethereum Foundation ETH 2.0 Contract
- 4) Celsius also experienced a loss of 30k ETH when Stahekound lost their private keys

Currently, around only 27% of firm’s 1M ETH coins are liquid~270k coins; the firm had 50k withdrawals in the last week when the numbers were reported. In addition, the liquid ETH is deposited into AAVE, which has a USD loan taken against it, exposing the firm to currency risk.

Monthly ETH Inflows/Outflows						
	Dec 31- Jan 27th	Jan 28 - Feb 24	Feb 25th - Mar 24th	March 25th to Apr 21	Apr 22 to May 26th	1st week of June
Inflows	\$1,829,780,000	\$1,822,780,000	\$1,266,070,000	\$1,462,990,000	\$970,820,000	\$194,000,000
Outflows	(\$1,506,480,000)	(\$1,122,730,000)	(\$1,366,200,000)	(\$1,507,450,000)	(\$2,053,220,000)	(\$498,000,000)
Net Inflow/Outflow	\$323,300,000	\$700,050,000	(\$100,130,000)	(\$44,460,000)	(\$1,082,400,000)	(\$304,000,000)
Net ETH(coins)	(7,394)	8,183	5,039	43,504	(149,238)	(52,052)
Net ETH(USD)	(\$13,841,568)	\$15,318,576	\$9,433,008	\$81,439,488	(\$279,373,536)	(\$97,441,344)

The firm might find itself in a complicated position if ETH depositors try to redeem their ETH from the platform. Realistically, this issue could be resolved if another bigger institution is willing to exchange the StETH for another asset.

Forced selling of stETH into the imbalanced St-ETH/ETH pool could further derail the St-ETH/ETH peg, which could cause a cascade of liquidations across DeFi and further deterioration of sentiment in the market.

addendum:

In 2020, one of the biggest impacts on their income statement was from “Revaluation surplus,” which is split among two items:

- Traded crypto
- Treasury crypto

Based on the filings, only CEL tokens can be held in the treasury. Revaluation surplus updates the price of the treasury based on \$CEL token.

At the time, Celsius Network had about 270M treasury tokens (117M in treasury reserves and 155M in treasury). On Dec 31, the \$CEL price closed at \$5.45 and with ~272M CELS = \$1.4B. So, a huge chunk of the valuation came from just the treasury tokens.

The price is currently at \$.3 - \$.4~\$95M. They have been using their tokens as collateral for various loans(See below). Back in June, the CEO made a post saying that they have \$4B worth of CEL tokens, which will be earning yields soon, implying 650M tokens given the price at the time. I think the number referred to customer deposits + treasury. So, if their valuation and the LTV of the loans were dependent on a large number of their own \$CEL tokens, I don't see how the company can pay any of its liabilities back. Here is an example. They moved \$100M worth of tokens to be used as collateral. I am having a hard time imagining how this company can have any capital unless they raise from investors. Celsius also received a cease-and-desist letter from NJDA. The letter said that they recently changed their terms and agreements so if a company goes bankrupt, anyone who deposited could potentially get zero recovery. Let alone being a token holder, I don't think depositors are getting their capital out. Even if they survive, I don't see any accrual to token holders. I think the token will probably have some type of option value like how ghost chains trade/or equity of distressed firms.

I think given the firm's rate of asset outflows; the firm might not have enough assets to meet incoming withdrawal by clients.

## Chapter 2: Nexo, Next Celsius?

### “Rebalance your portfolio or will the market do it for you”

Applying the same methodology to Nexo:

We are going to look at on-chain assets of Nexo. From Nansen and breadcrumbs, I identified the following wallets to be related to Nexo.

<a href="#">Nexo 2(Nansen)</a>	0xffec0067f5a79cff07527f63d83dd5462ccf8ba4
<a href="#">Nexo(Deposit)</a>	0x199f1aa9bbaa539c589c6f09b05e0c540e183cae
<a href="#">Nexo(xb60)</a>	0xb60c61dbb7456f024f9338c739b02be68e3f545c
<a href="#">Nexo</a>	0x9bdb521a97e95177bf252c253e256a60c3e14447
<a href="#">Nexo (investor protection)</a>	0x1c433cbf4777e1f0dce0374d79aaa8ecdc76b497
<a href="#">Nexo: Wallet</a>	0x65b0bf8ee4947edd2a500d74e50a3d757dc79de0
<a href="#">Nexo 1</a>	0x00ee047a66d5cff27587a61559138c26b62f7ceb
<a href="#">Nexo 3</a>	0x0031e147a79c45f24319dc02ca860cb6142fcba1
<a href="#">NEXO</a>	0x57793e249825492212de2aa4306379017301e1da
<a href="#">Nexo(font confirmed)</a>	0x4d7f1790644af787933c9ff0e2cff9a9b4299abb
<a href="#">NEXO(not confirmed)</a>	0x463e5b673d1029989c9b059d36393c539bef9094
<a href="#">NEXO 100M</a>	0x9099ffbbe0f127741d58760fbaf644def3cccd07
<a href="#">Nexo</a>	0x8Fd589AA8bfA402156a6D1ad323FEC0ECee50D9D

I used on-chain data to look at Nexo's assets and liabilities. Overall, it looks #Nexo has around \$1.8B in assets and has only around \$100M of Debt in DAI.

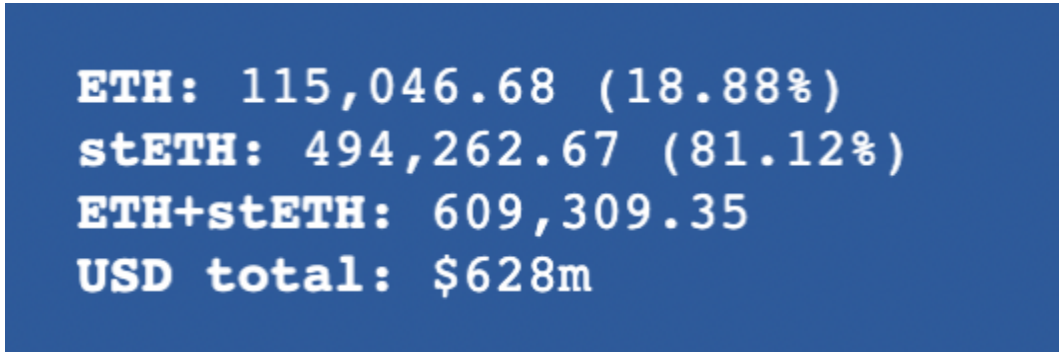
Nexo Chain Assets					
Maker ETH	446,200.00	1,206.72	538,438,464.00	MaketETH	
WBTC	27,543.00	22302	614,263,986.00	WBTC	
USDT	155,000,000.00	1	155,000,000.00	Stable	
NEXO	267,592,281.53	0.77	206,046,056.78	NEXO	
ETH	62571	1,206.72	75,505,677.12	ETH	
USDT	12,614,620.46	1	12,614,620.46	Stable	
LINK	1,956,460.00	7.04	13,773,478.40	Other Liquid	
DAI	26,000,000.00	1	26,000,000.00	Stable	
USDC	22,000,000.00	1	22,000,000.00	Stable	
TUSD	6,187,893.87	1	6,187,893.87	Stable	
MAKER	7,969.66	807.82	6,438,052.84	Other Liquid	
MANA	5,460,294.00	0.9	4,914,264.60	Other Liquid	
stETH	88,450.05	1,206.72	106,734,444.34	stETH	
PAXG	9,271.00	1836	17,021,556.00	Other Liquid	
APE	492,677.00	4	1,970,708.00	Other Liquid	
			<b>1,806,909,202.40</b>		
DAI DEBT				107,000,000	

The firm's assets can be broken down into Stables, WBTC, Nexo token, stETH, ETH in the Market Vault and other liquid tokens.

Nexo Assets on-chain			
MaketETH	\$	538,438,464.00	30%
WBTC	\$	614,263,986.00	34%
Stable	\$	221,802,514.33	12%
Nexo	\$	206,046,056.78	11%
stETH	\$	106,734,444.34	6%
ETH	\$	75,505,677.12	4%
Other Liquid	\$	44,118,059.84	2%
		<b>\$ 1,806,909,202.40</b>	<b>100%</b>
Nexo Assets on-chain			
Non-Nexo	\$	1,600,863,145.62	89%
Assets ex NEXO & stETH	\$	1,494,128,701.29	83%



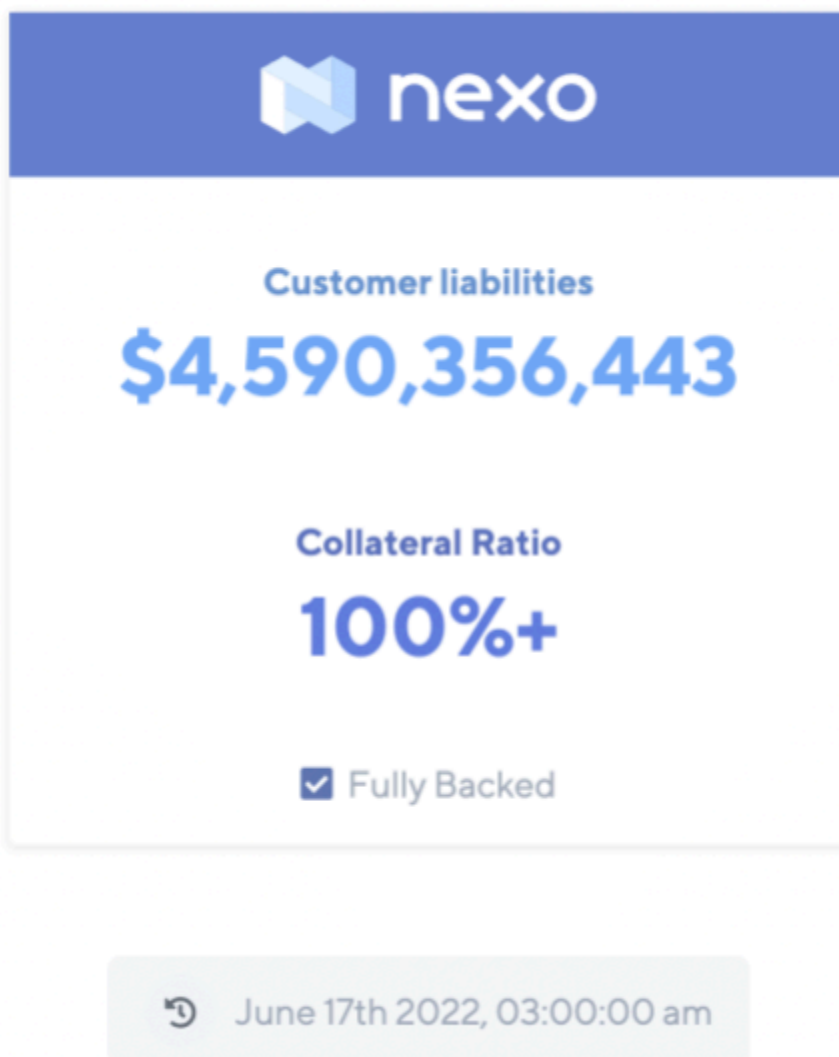
Of the assets on their balance, about \$200M of value is linked to the price their own #nexo token. It creates a circular logic in valuation since the firm's valuation affect the token price and visa versa.About \$106M of their assets are in stETH, which is highly illiquid due to imbalance on the curve pool. If the firm is forced to sell stETH on the curve market pool, the firm will be selling at a huge discount(same way 3AC did)



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ETH: 115,046.68 (18.88%)
stETH: 494,262.67 (81.12%)
ETH+stETH: 609,309.35
USD total: $628m
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Keep in mind, these are only assets & liabilities on-chain. The firm can have a lot of assets and liabilities which are not reflected on-chain(assets on exchanges, price hedges expressed through derivative products, etc)

Nexo, security pages lets anyone to monitor their customer liabilities. The latest number shows \$4.5B of customer deposits.



"Customer liabilities" from Nexo's standpoint are funds Nexo is holding on deposit.

The following table shows the same number over a period of time. The number has decreased by \$360M from June 15 and by \$1.6B from June 13. How can a lender that has \$4.5B in customer assets experience \$1.6B of asset outflows in one week? Even if the firm has \$4.5b in liquidity- how long #nexo going to last if they are experiencing billions in outflow? Given the high amount of leverage lenders usually undertake, a small erosion in equity can cause a great distressed on lenders. Should the customer be worried?

Date	Assets as of date	Change from prev period
3-Dec-21	\$ 13,605,917,444.00	
17-Dec-21	\$ 11,413,129,071.00	\$ (2,192,788,373.00)
27-May-22	\$ 7,241,338,127.00	\$ (4,171,790,944.00)
13-Jun-22	\$ 6,199,140,000.00	\$ (1,042,198,127.00)
14-Jun-22	\$ 5,320,364,155.00	\$ (878,775,845.00)
15-Jun-22	\$ 4,962,216,484.00	\$ (358,147,671.00)
17-Jun-22	\$ 4,590,356,443.00	\$ (371,860,041.00)