The Crypto Credit Report

Issue 4

Q1 2020

CREDMARK

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Introduction

What mattered in **Q1**:

Investors and traders in both crypto and traditional markets sold off risky assets in favor of more stable assets. As a result, prices of volatile crypto assets fell causing liquidations across most exchanges. Overall, crypto assets lost $100 billion in value over the course of a week.

During the market crash in mid-March, private lending firms liquidated less than 10% of loans compared to DeFi which saw over 20% of loans liquidated. Overcollateralization across the industry and good communication between counterparties softened the blow of BTC losing 50% of its value in one day.

DeFi security breaches in Synthetix, Maker, bZx and dForce combined with the market crash in March contributed to the loss of locked collateral and subsequent lack of recovery of locked value throughout Q1.

Corrections

In our last report (Q4 2019) we had an inaccurate split of Celsius consumer vs institutional numbers. All numbers in the report have been adjusted to accurately represent the split.

In the previous report, we stated that Bankera offers crypto loan products. To clarify, Bankera Loans is a subdivision of the Bankera ecosystem which offers a variety of products and services including wallets and an exchange in addition to their Loan product.

In the previous report, we stated that Ledn was founded in 2019. Ledn was founded in 2018 and offers consumer products in addition to their institutional arm.

Collateral for institutional loans was updated to represent accurate assets under management. We are able to talk directly to a specific firm in order to clarify their self-reported numbers. As a result, we have much more accurate representation of the growth of the industry,

Industry Snapshot

Industry | Q1

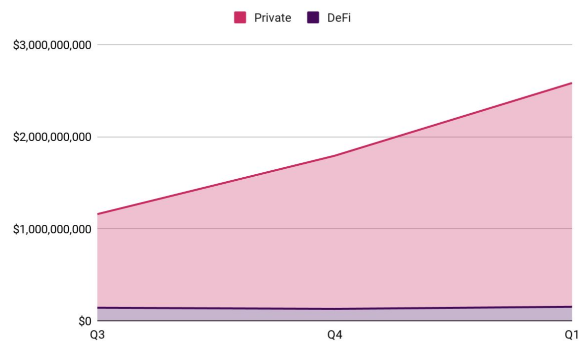
Overall

These numbers include public data from DeFi lenders and private data from consumer and institutional lenders. This represents 85% of lending firms. We have not adjusted our numbers to account for the 15% of the industry from whom we have not received data. If you know of a firm that is not represented in this report please bring this to our attention.

	Q3	Q4	Q1	Q3/Q4	Q4/Q1
Active Debt (MM)	$1,158	$1,791	$2,582	54%	44%
Active Collateral (MM)	$2,451	$3,615	$5,111	47%	41%
Interest Generated (MM)	$20	$29	$43	45%	48%

Private vs. DeFi

Active Debt



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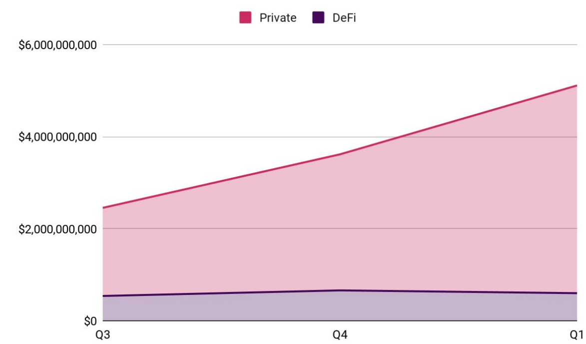
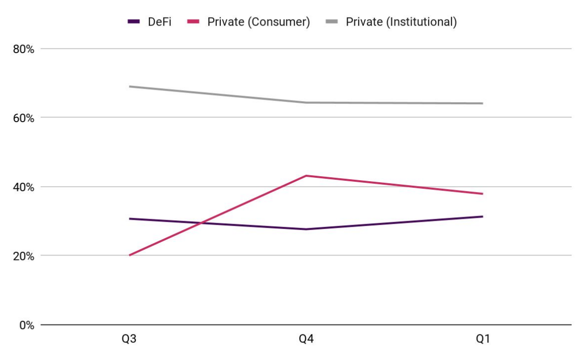


LTV



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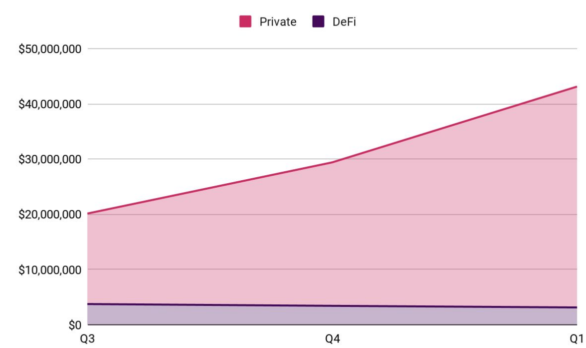


Industry | Commentary

The Crypto lending industry exhibited strong growth in Q1. Active debt grew by 44% leading to a 48% increase of interest generated. Assets under management grew as well to the tune 75%. An increased demand for stablecoins and the continued demand of BTC for the purpose of trading led to the debt growth, while further development of Interest bearing financial instruments and competitive interest rates continue to make crypto firms a smart place to store assets.

The industry endured its first major stress test since its inception in 2018. The emergence of Covid-19 leading to the events of Black Thursday created a scenario that tested the integrity of these financial systems.

Markets across the world responded to the threat of the virus by moving funds to fiat in anticipation of global economic slowdown as countries world-wide imposed stay-at-home orders. This created a liquidity event where risk assets were quickly sold. In a market such as crypto, where liquidity is already scarce, this caused prices to drop by almost 50% in one day.

This drop led to massive losses on exchanges as highly leveraged traders were liquidated. On BitMEX alone, liquidations reached $750 million. Other exchanges experienced similar losses.[1] In total, crypto saw its market cap fall by $100 billion in one week.

DeFi experienced similar losses due to the dropping price of crypto and several high profile technical slip ups. bZx, dForce and Maker contracts were all exploited. $35 million was lost between the 3 platforms.

The *private* crypto credit market response, told a very different story. A big start to the quarter, strong and transparent communication between counterparties and appropriate action taken led to few liquidations on the institutional side. This preparation, coupled with a slight recovery in crypto prices towards the end of march, enabled the crypto credit market to experience overall growth quarter-over-quarter with active debt seeing 44% growth and active collateral (or assets under management) growing by 41%. In the retail world, proper KYC of customers allowed firms to give fair warning of impending price fluctuations.

Crypto credit firms continue to demonstrate impressive stability in an industry built upon inherently volatile assets. With few liquidations and strong institutional relationships, these firms were able to maintain strong growth and maintain a bullish outlook for the rest of the year.

[1] https://www.forbes.com/sites/billybambrough/2020/03/19/major-bitcoin-exchange-bitmex-has-a-serious-problem/#4ec8763d4f7d

Private Lending

We are reporting consumer and institutional lending as two separate categories[2].

Note that we use the price of assets at the end of the quarter to calculate USD values[3].

Private Lending | Q1

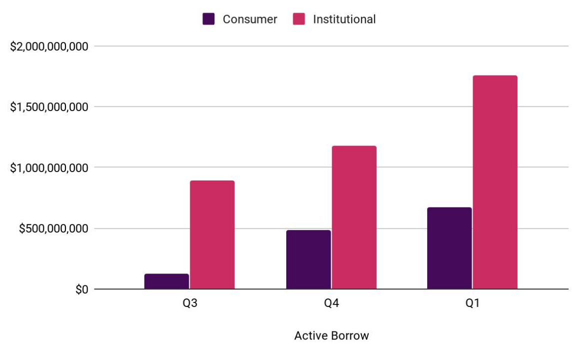
	Q3	Q4	Q1	Q3/Q4	Q4/Q1
LTV	**59%**	**56%**	**54%**		
Consumer	27%	43%	38%		
Institutional	74%	64%	64%		
Active Debt (MM)	**$1,015**	**$1,663**	**$2,430**	**63%**	**46%**
Consumer	$124	$485	$669	291%	37%
Institutional	$891	$1,178	$1,761	32%	49%
Active Collateral (MM)	**$1,913**	**$2,955**	**$4,512**	**41%**	**66%**
Consumer	$621	$1,123	$1,766	42%	99%
Institutional	$1292	$1,831	$2,746	41%	50%
Interest Generated (MM)	**$17**	**$26.2**	**$39.8**	**54%**	**51%**
Consumer	$5.3	$8.8	$14.6	66%	65%
Institutional	$11.7	$17.4	$25.2	48%	44%

[2] **Consumer** lending refers to firms that allow individuals to borrow and deposit relatively small amounts of crypto. **Institutional** lending refers to verified institutions making large, market making trades and borrowing or lending large amounts of crypto.

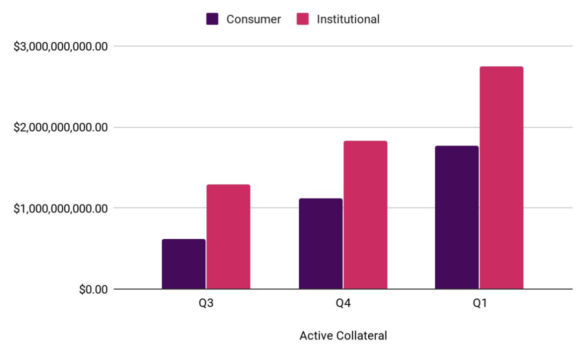
[3] On March 30th, BTC was trading at $6,404 on Coin

Charts

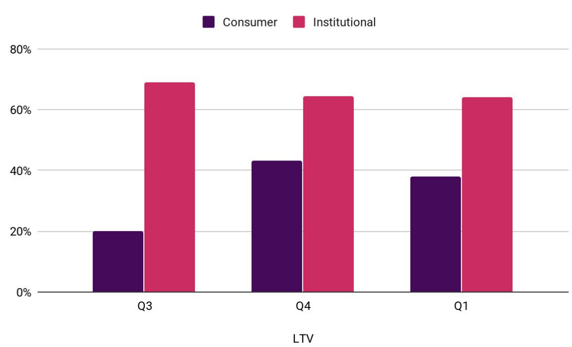
Active Debt



Active Collateral



LTV



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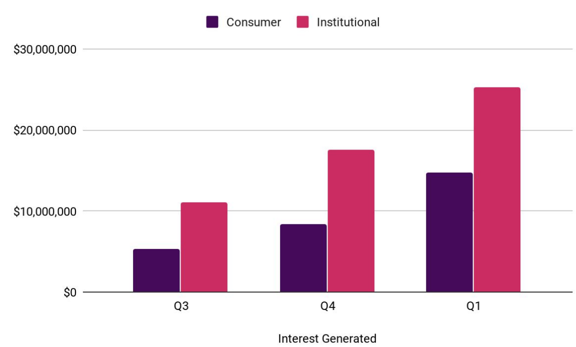


Private Lending | Q1 | Commentary

The private lending industry showed strong growth in every metric. Debt grew by 46%, collateral by 66% and interest generated by 51%. Q1 would have been the strongest quarter by far if not for the market crash in mid-March. Increased institutional activity and competitive interest rates in the retail IBA market contributed to growth.

In our talks with lenders, we noticed that most were acutely aware of the potential for a market crash over a month before it actually occurred. Institutional lenders in particular prepared for impending turbulence through conversations with their counterparties who expressed anxiety over the growing pandemic as early as February. One firm mentioned that the unusual volume of BTC futures trading suggested a potential market crash leading them to reach out to their counterparties. As a result, these counterparties and clients either added collateral or repaid loans far in advance of March 12th, which led to low numbers of liquidations.

The past quarter has shown that the volatile price of digital assets is not necessarily correlated with the health of the crypto lending industry. Before the market crash, Q1 was shaping up to be the best quarter in the history of crypto credit with firms seeing QoQ growth well over 100% in both active debt and collateral under management. Even after the crash, transparent communication and appropriate collateral allowed ending firms to maintain loans with their counterparties throughout this turbulent period.

Miner lending is becoming a topic of interest. Lending out equipment against BTC is increasingly popular as miners cannot generally secure good rates with traditional lending firms. We anticipate rapidly shifting demand as Ethereum switches to PoS[4] and BTC halvening[5] approaches. More to come in future reports.

Private retail continued to increase in popularity as firms continue to offer competitive interest rates on crypto savings accounts and introduced new currencies on their platforms

DeFi

We define DeFi as the collection of permissionless protocols that are built on smart contracts. Their data is publically available on the Ethereum blockchain.

Some of our analysis groups data by protocol types: *lending* and *liquidity*. The remaining data looks at platforms that offer loans as a product. Lending protocols include Compound, dYdX, Maker, nüo, Aave, and Fulcrum/Torque. Liquidity protocols include Synthetix and Uniswap.

DeFi | Q1

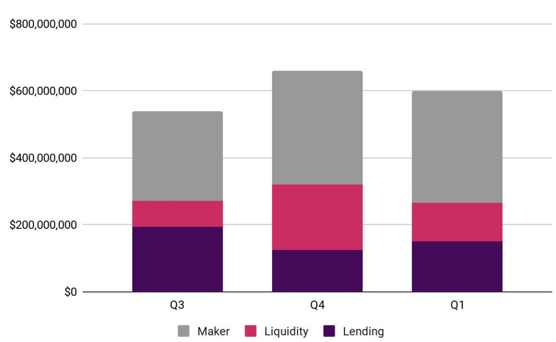
	Q3	Q4	Q1	Q3/Q4	Q4/Q1
Loans		20,385	38,867		90%
Active Debt	$141,533,000	$129,000,000	$152,000,000	-8%	18%

[4] Proof of Stake. Further explanation can be found here.
[5] The Halvening refers to an upcoming date where mining a BTC block will generate half as much of BTC as a reward.

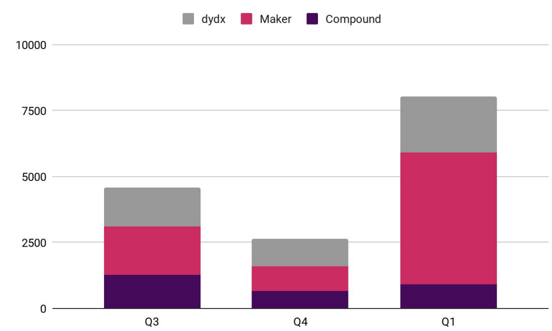
Active Collateral	$539,000,000	$659,900,000	$599,200,000	21%	-9%
Interest Generated	$3,752,800	$3,401,500	$3,171,250	-9%	-7%

Charts

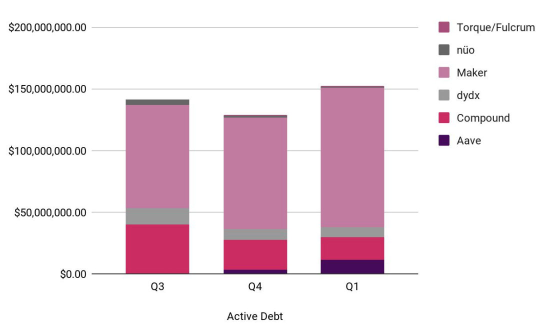
Active Collateral



Liquidations



Active Debt



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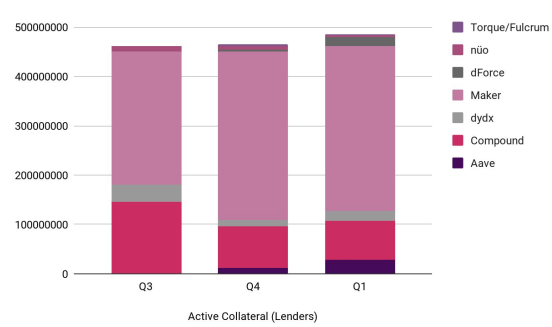
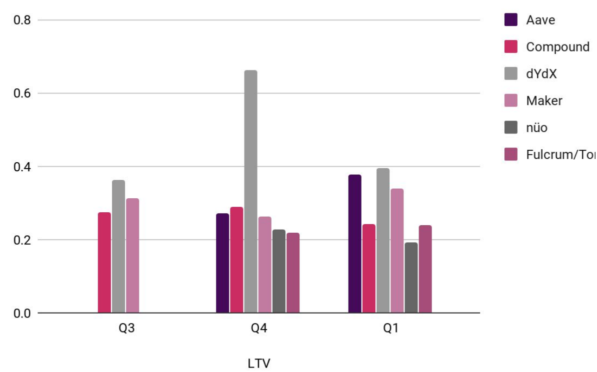


LTV



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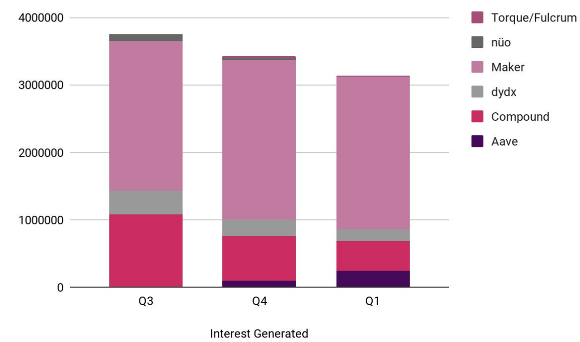

DeFi | Q1 | Commentary

DeFi saw active collateral fall by almost 9% in Q1 as the price of ETH dropped by over 50% in one day causing liquidations across every platform. Debt increased as new products continue to evolve, especially relating to Maker's Multi-Collateral DAI, but interest generated continued to fall for a second straight quarter due to mass liquidations as well as short loan terms.

Q1 of 2020 saw value locked in DeFi reach $1 billion for the first time in history. Unfortunately, the rise of Covid-19 made this a short-lived milestone as DeFi saw almost half its value disappear in less than a day due to the plummeting price of ETH in mid-March coupled with faulty liquidation protocols. The exploit of Maker occurred as a direct result of the market crash on March 12th.. A combination of lagging price feeds, over-congestion on the blockchain and liquidator bots that were not optimized for drastic price changes created an environment where a select few bots were able to seize bundles of 50 ETH for almost no collateral.

Plunge in ETH price as well new protocols and products entering the market proved an opportune time to take out loans against a weaker ETH as new loans soared by 90% QoQ.

While, DeFi lost almost half of its value during the market crash, debt saw growth as stablecoins like USDC and DAI make up a majority ,and thus are not affected by the price fluctuations of ETH. Furthermore, many liquidations occurred on Maker without any DAI getting burned keeping outstanding debt steady as collateral fell.

However, active debt has remained strong as Makers Multi-Collateral Dai continues to provide new tokens to collateralize leading to a flurry of new loans. Aave has been promoting innovative products like flash loans to increase lending activity which led to tremendous growth throughout the quarter.

Unlike privatized firms , DeFi did not see a bounce back of AUM and were not shielded from massive liquidations. Without an institutional sector to buoy the industry, locked collateral was liquidated at a much higher rate. ETH's price recovered by 47% whereas BTC recovered by 72%. Since Defi is entirely backed by ETH, the industry did not see the same correction at the end of March that the private firms experienced.

Synthetix looked to join the DeFi lending game, but a bug discovered in late March put this on pause. The bug was in reference to a faulty bit of code in the liquidation engine. More info can be found by following the link in the footnotes[6].

Lenders

We currently categorize our lenders as follows: *DeFi* and *private*. Private lenders are further broken down by their target customers: *consumer* and *institutional*.

Detailed descriptions of each lender can be found at https://credmark.com/the-industry/lender-appendix.

	DeFi	Consumer	Institutional
bZx Protocol	✓		
Compound	✓		
dYdX	✓		
Aave (formerly ETHLend)	✓		
Maker	✓		
nüo	✓		
Synthetix	✓		

[6] https://blog.synthetix.io/bug-disclosure/

Uniswap	✓		
Bankera		✓	
BlockFi		✓	✓
Cred		✓	✓
Celsius Network		✓	✓
Constant		✓	
Helio Lending		✓	
Nebeus		✓	
Nexo		✓	✓
Ledn		✓	✓
SALT		✓	✓
Unchained Capital		✓	✓
YouHodler		✓	
DrawBridge			✓
Genesis Capital			✓
Lendingblock			✓
Trinito		✓	

Data Sources[7]

Source	Publisher	URL
DeFi Pulse	Concourse	https://defipulse.com/
Coinbase	Coinbase	https://coinbase.com
Genesis Report	Genesis	https://genesiscap.co/insights/q4-insights-2019/
Makerscan	InstaDApp	https://makerscan.io
MKR Tools	Mike McDonald	https://mkr.tools
LoanScan Dashboard	LoanScan	https://loanscan.io
Aave Dashboard	Aave	https://aave.com/

[7] In addition to the many vendors who contributed their data for this report. See "Acknowledgements" below for a partial list.

Dune Analytics	Dune Analytics AS	https://duneanalytics.com
Synthetix Dashboard	Synthetix	https://dashboard.synthetix.io/
Celsius App	Celsius	https://celsius.network/get-the-app/
Article	Business Wire	https://www.businesswire.com/news/home/20190910005976/en/Celsius-Network-Crosses-100-Active-Institutional-Accounts
Trinito Dashboard	Trinito	https://trinito.io/pool
Article	Coindesk	https://www.coindesk.com/25-million-in-2-weeks-blockfi-booms-as-bitcoin-ether-investors-seek-interest
Article	Forbes	https://www.forbes.com/sites/billybambrough/2020/03/19/major-bitcoin-exchange-bitmex-has-a-serious-problem/#4ec8763d4f7d
Article	Lendingblock	https://lendingblock.com/guides/collateral-management
Article	dYdX	https://medium.com/dydxderivatives/utilizing-margin-and-leverage-on-dydx-60b34ca8f3cb

Acknowledgements

The following people contributed data, insights, or other content to this report. Not all reporting vendors chose to be acknowledged.

Contributor	Organization	Title
Abraham, Jarrett	SALT	Director of Corporate Development
Ahmad, Momin	Credmark	Lead Analyst
Alluri, Vamsi	Maker	Integration Engineer
Beach, Charlie	Lendingblock	COO
Cho, Young	Celsius	CFO
Di Bartolomeo, Mauricio	Ledn	Co-founder, CSO
Geiger, Phillip	Unchained Capital	Director of Product Marketing
Jasukaitis, Paulius	Bankera	Project Manager
Kelly, Joe	Unchained Capital	CEO
Kono, Kai	Liquid	Managing Director
Le, Claire	Constant	Business Development Manager
Leon, Daniel	Celsius	COO
Manolov, George	Nexo	Business Development Executive
Mashinsky, Alex	Celsius	CEO
Murphy, Paul	Credmark	CEO
Olson, Mats	Dune Analytics	CTO
Patel, Roshun	Genesis	Analyst
Petterson, Kelly	Lendingblock	CMO & Head of Business Development
Prince, Zac	BlockFi	CEO
Reeds, Adam	Ledn	Co-founder, CEO
Roper, Chris	Constant	Communications Manager
Saint-Donat, Paul	dlab/SOSV	Program Manager
Sato, Asahi	Credmark	Graphic Designer
Shapiro, Max	Bitmex	Associate
Swain, Steve	Lendingblock	CEO & Co-founder
Torrey, Dan	Genesis	Head of Institutional Sales
Trenchev, Antoni	Nexo	Managing Partner
Verma, Siddharth	nüo	Co-founder
Yin, Zhuoxun	dYdX	Head of Operations
Yoo, Eric	Trinito	Chief Strategy Officer
Zumwalde, Neil	Credmark	CTO