The Crypto Credit Report

Issue 7

Q4 2020

CREDMARK

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Introduction

What mattered in Q4:

The crypto industry continues to thrive as mainstream companies look to incorporate digital assets in a variety of ways. Overall, the crypto lending industry has over $40 billion in locked value.

Increased demand for both the assets and deployable capital for leverage continues to amplify the rate at which crypto lending is growing, with every metric we measure growing by over 100%.

Private firms continue to offer high rates on crypto deposits in the retail sector with Institutional demand to borrow digital assets at an all time high.

Outstanding debt in the institutional sector makes up over 60% of all outstanding debt.

Defi continues to grow at a rapid rate with innovative platforms that offer users exposure to high yield financial products, but the growth is also exposing data inconsistency across data providers.

Corrections

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Industry Snapshot

Industry | Q4

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.

Q4 '19 - Q4 '20	Q4	Q1	Q2	Q3	Q4	Q4/Q1	Q1/Q2	Q2/Q3	Q3/Q4
Active Debt (MM)	**$1,791**	**$2,582**	**$5,179**	**$8,204**	**$16,949**	**44%**	**100%**	**58%**	**106%**
Private	$1,663	$2,430	$4,632	$6,280	$13,300	46%	90%	36%	111%
Defi	$129	$152	$536	$1,924	$3,649	18%	252%	259%	89%
Active Collateral (MM)	**$3,615**	**$5,111**	**$10,151**	**$19,747**	**$42,737**	**41%**	**98%**	**95%**	**116%**
Private	$2,955	$4,512	$8,453	$10,790	$26,549	66%	87%	28%	146%
Defi	$659	$599	$1,698	$8,957	$16,188	-9%	183%	428%	80%
Interest Generated (MM)	**$29**	**$43**	**$71**	**$138**	**$296**	**48%**	**65%**	**94%**	**114%**
Private	$26	$40	$64	$106	$218	51%	60%	66%	105%
Defi	$3.4	$3.1	$7	$32	$78	-7%	125%	357%	143%

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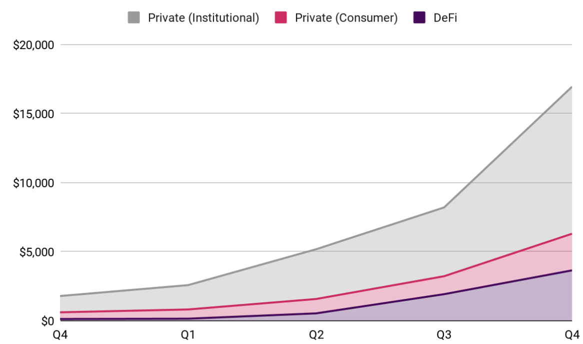
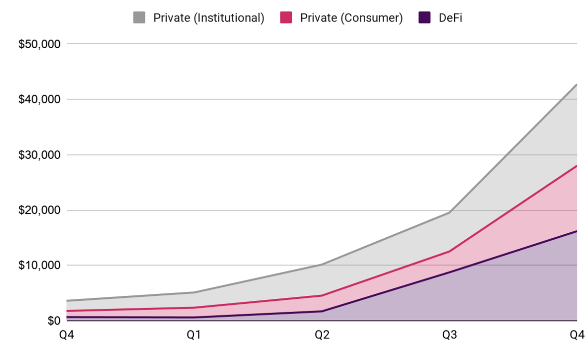
Charts (Numbers in Millions | Q4 '19 - Q4 '20)

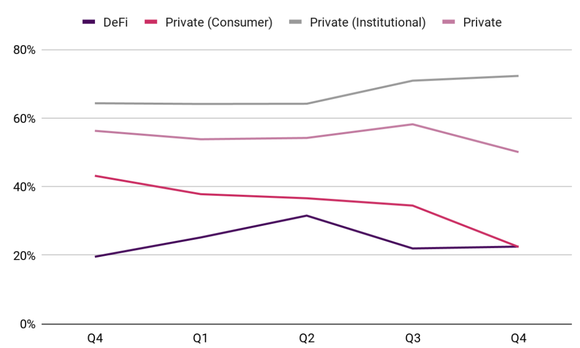
Active Debt



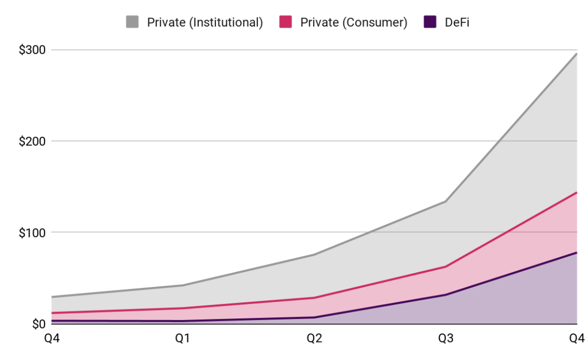
Active Collateral



LTV



Interest Generated



Industry | Commentary

The crypto lending industry continues to show tremendous growth as all time highs (ATH) for BTC, ETH and many others are continuously broken on a daily basis. The industry as a whole now has over $40 billion[1] in assets under management (AUM)[2], a 116% increase from the end of Q3. Outstanding debt is up 100% from Q3 showing that demand to borrow against crypto is at an all time high and Interest Generated is estimated to be just under $300 million for Q4 marking growth well over 100%.

[1] BTC was $28,990 on Dec 31 and ETH was $737. To give context to the numbers in this report, **BTC experienced a price increase of 169% while ETH price rose by 104% from Q3 to Q4.**
[2] **AUM**, **Active Collateral** and **Collateral** are all used interchangeably throughout this report

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As the demand for crypto assets continues to climb, many exchanges and OTC desks are looking to borrow crypto at unprecedented rates in order to fulfill trades and provide liquidity to their customers. Other family offices, hedge funds and high net worth individuals look to borrow fiat and stablecoins against crypto holdings in order to increase their exposure to variable crypto assets or add leverage to existing positions.

Both private firms and DeFi each report well over 1 million active users. While the use of anonymous addresses makes it impossible to evaluate exactly how many people are using these platforms, it is obvious that the industry is reaching a wider user base with every passing quarter. The interest rates available in both the private sector and in Defi continue to be attractive and are now gaining interest from mainstream and casual investors. In Defi, yield farming, and liquidity mining continue to offer users tremendous returns for staking their assets on lending platforms and exchanges.

As vendors, payment companies and retail companies edge ever closer to creating an infrastructure where crypto assets are accepted as legitimate payment, crypto borrowing and lending are in a position of strength in regards to the financial products they can offer users.

Private Lending

We are reporting consumer and institutional lending as two separate categories[3].

Please note that we use the price of assets at the end of the quarter to calculate USD values.

[3] **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.

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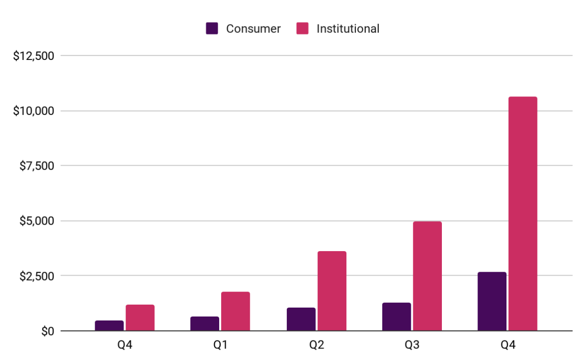
Private Lending | Q4

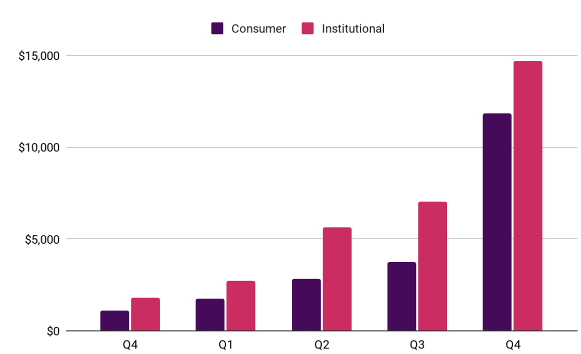
Q4 '19 - Q4 '20	Q4	Q1	Q2	Q3	Q4	Q4/Q1	Q1/Q2	Q2/Q3	Q3/Q4
LTV	**56%**	**54%**	**55%**	**58%**	**50%**	**-**	**-**	**-**	**-**
Consumer	43%	38%	37%	35%	22%	-	-	-	-
Institutional	64%	64%	64%	71%	72%	-	-	-	-
Active Debt (MM)	**$1,663**	**$2,430**	**$4,642**	**$6,280**	**$13,300**	**46%**	**90%**	**35%**	**111%**
Consumer	$485	$669	$1,040	$1,300	$2,654	37%	55%	25%	104%
Institutional	$1,178	$1,761	$3,602	$4,980	$10,646	49%	100%	38%	113%
Active Collateral	**$2,954**	**$4,512**	**$8,453**	**$10,790**	**$26,549**	**66%**	**87%**	**28%**	**148%**
Consumer	$1,123	$1,766	$2,841	$3,768	$11,826	99%	60%	34%	213%
Institutional	$1,831	$2,746	$5,612	$7,022	$14,723	50%	104%	25%	109%
Interest Generated (MM)	**$26**	**$39**	**$64**	**$106**	**$218**	**51%**	**60%**	**66%**	**105%**
Consumer	$8.5	$14	$21	$31	$65	65%	50%	48%	109%
Institutional	$17	$25	$42	$75	$152	44%	68%	79%	102%

Charts (Numbers in Millions | Q4 '19 - Q4 '20)

Active Debt



Active Collateral



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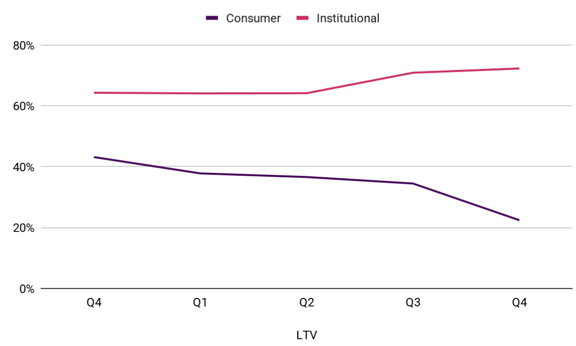
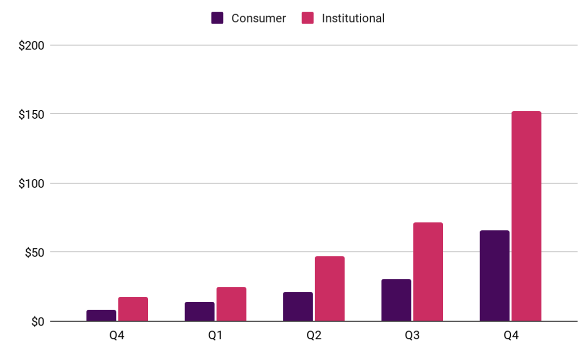
LTV



Interest Generated



Private Lending | Q4 | Commentary

In Q4, the private lending industry saw AUM rise by 148% with debt increasing by 111%. Projected interest generated by these loans grew by 105%. BTC and other assets continue to breach their previous all-time highs, partially contributing to the rising value of assets and debt. Crypto assets are also gaining mainstream appeal as companies like Tesla, Square and funds like Blackrock have begun to show support for these assets.

Overall AUM remains high in comparison to outstanding loans, but the ratio of collateral that is directly tied to loans is much lower, especially on the institutional side. We don't have enough data to reliably show what that specific ratio is, but many firms are operating near or at 1:1 collateral to debt.

Larger institutions such as Genesis are lending BTC and ETH as 70% of their loan book while stablecoins and fiat makes up around 30%. High yield is being driven by huge demand for crypto assets of all kinds. Exchanges, OTC's and hedge funds are looking to borrow variable assets to perform market making trades while family offices, and high net worth individuals are looking to acquire these assets. As demand continues to rise the BTC available to purchase is becoming increasingly scarce as many investors look to hold their assets.

Institutions are willing to borrow at increasingly higher rates, sometimes near 20% in order to increase exposure and pile on leverage to their bullish positions. According to sources, 70% of institutional lending is done to facilitate market neutral trades[4] by other large institutions while 30% is borrowed for working capital and levering up on existing positions. Very few firms are shorting crypto assets except in the case of futures which is done as part of market neutral strategies.

[4] A **market-neutral strategy** is a type of investment strategy undertaken by an investor that seeks to profit from both increasing and decreasing prices in one or more markets, while attempting to completely avoid some specific form of market risk.

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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. Protocols that are strictly liquidity providers include Synthetix and Uniswap.

DeFi | Q4

Q4 ‘19 - Q4 ‘20	Q4	Q1	Q2	Q3	Q4	Q4/Q1	Q1/Q2	Q2/Q3	Q3/Q4
Active Debt (MM)	**$129**	**$152**	**$536**	**$1924**	**$3,649**	**18%**	**252%**	**259%**	**89%**
Compound	$24	$19	$373	$1,000	$1,700	-20%	1860%	168%	70%
Maker	$90	113	$127	$613	$1,130	25%	12%	383%	84%
Aave	$3.5	$11	$20	$300	$642	214%	82%	1400%	114%
dYdX	$9	$8	$16	$11	$17	-11%	100%	-31%	54%
Alpha Hemora					$60	N/A	N/A	N/A	N/A
CREAM					$51	N/A	N/A	N/A	N/A
Active Collateral (MM)	**$659**	**$599**	**$1,698**	**$8,957**	**$16,188**	**-9%**	**183%**	**428%**	**80%**
Compound	$85	$78	$620	$1,800	$3,700	-8%	690%	190%	105%
Maker	$341	$334	$446	$1,920	$2,800	-2%	33%	330%	45%
Aave	---	$29	$160	$1,460	$2,450	---	452%	813%	68%
Liquidity	$194	$114	$432	$3,534	$6,751	-41%	279%	718%	91%
Lending	$39	$42	$40	$243	$487	8%	-5%	508%	100%
Interest Generated (MM)	**$3.4**	**$3.1**	**$7**	**$32**	**$78**	**-8%**	**125%**	**357%**	**143%**

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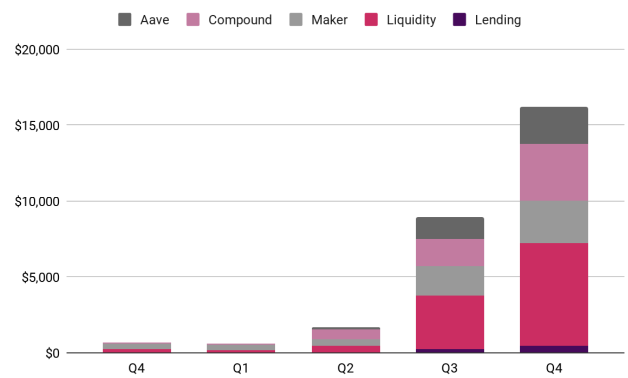
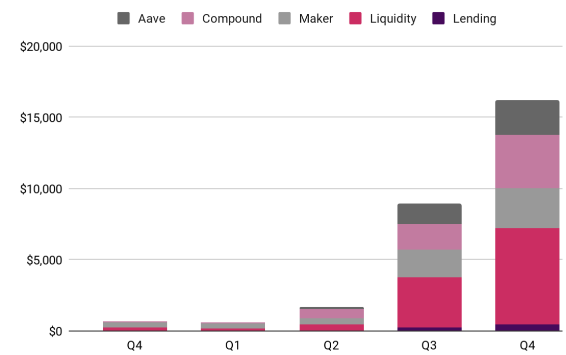
Charts (Numbers in Millions | Q4 ‘19 - Q4 ‘20)

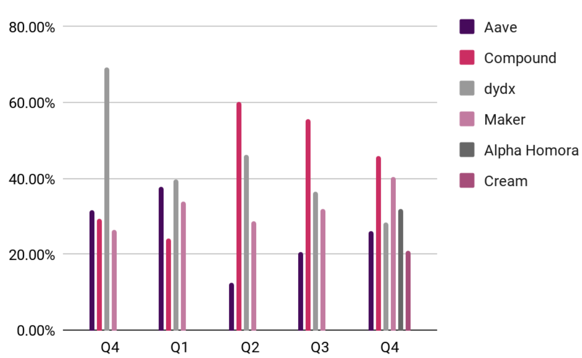
Active Debt



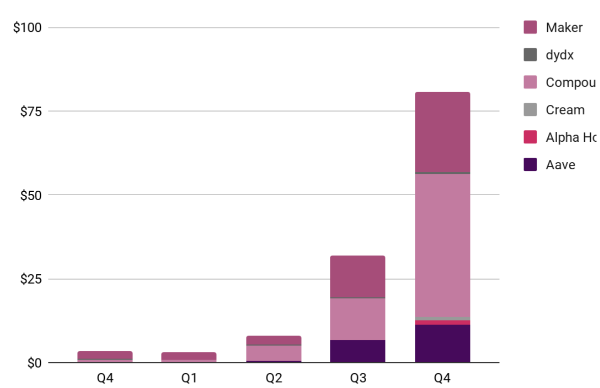
Active Collateral[5]



LTV



Interest Generated



DeFi | Q4 | Commentary

Defi continues to see growth in total value as AUM increased 80% from Q3 to Q4, however some data shows the total balance of Ethereum decreasing as users continue to stake ETH in the ETH 2.0 project. Outstanding debt has grown 89% and projected interest generated has grown by

[5] ‘Lending’ in this chart refers to the combined collateral of dYdX, CREAM finance and Alpha Homora.

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143%. Aave, Compound and Maker continue to dominate the lending market holding 96% of all outstanding debt in Defi.

DeFi has comfortably passed up the private retail industry in regards to AUM. While not all the platforms included in DeFi offer the ability to borrow, they do offer retail users a wider variety of yield generating products with returns that easily surpass private retail products. DEX's that offer users the ability to provide liquidity via asset pairs give users direct exposure to massive volume seen on exchanges, removing the centralized layer of abstraction that is the private retail firm. Similarly, users have direct access to yield farming tokens like COMP, yearn, BAL and many others as well as the traditional yield that is realized from depositing assets in platforms.

While there is a potentially higher technical barrier to entry in DeFi, transacting in the crypto space has not reached a point where private firms offer an experience that is drastically easier than DeFi. The strong growth in AUM and user adoption in DeFi seems to support this idea.

Defi still poses challenges is the form of high gas fees, platform exploits and in times of market regression, rapid liquidations. Additionally, basic data like AUM held by any given platform seems to differ based on the data provider and the models used. More complex risk assessment models and other financial tools cannot evolve without some consensus on basic data points.

Private firms still have the advantage of giving their clients the option to pay back loans via margin calls, particularly on the institutional side. The innovation occurring in DeFi suggests that this is a problem that can and will be solved down the line.

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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	✓		
CREAM	✓		
Balancer	✓		
Bancor	✓		
dForce	✓		
Compound	✓		
dYdX	✓		
Aave	✓		
Maker	✓		
nüo	✓		
Synthetix	✓		
Uniswap	✓		
Bankera		✓	
BlockFi		✓	✓
Cred		✓	✓
Celsius Network		✓	✓
Constant		✓	
Helio Lending		✓	
Nebeus		✓	
Nexo		✓	✓
Ledn		✓	✓
SALT		✓	✓
Unchained Capital		✓	✓
YouHodler		✓	
DrawBridge			✓

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Genesis Capital		✓
Lendingblock		✓
Blockchain.com		✓
Trinito	✓	

Data Sources[6]

Source	Publisher	URL
DeFi Pulse	Concourse	https://defipulse.com/
Coinbase	Coinbase	https://coinbase.com
Genesis Report	Genesis	https://genesistrading.com/about/insights/
Makerscan	InstaDApp	https://makerscan.io
MKR Tools	Mike McDonald	https://mkr.tools
LoanScan Dashboard	LoanScan	https://loanscan.io
Aave Dashboard	Aave	https://aave.com/
Dune Analytics	Dune Analytics AS	https://duneanalytics.com
Synthetix Dashboard	Synthetix	https://dashboard.synthetix.io/
Celsius App	Celsius	https://celsius.network/get-the-app/
Messari	Messari	https://messari.io/article/aave-announces-credit-delegation-enabling-uncollateralized-lending
Trinito Dashboard	Trinito	https://trinito.io/pool
Glassnode	Glassnode	https://studio.glassnode.com
Bytetree		https://terminal.bytetree.com/bitcoin
Blockchain Whispers		https://blockchainwhispers.com/bitmex-position-calculator/#
Bincance		https://academy.binance.com/economics/the-wyckoff-method-explained

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

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Aavewatch		https://aavewatch.com/borrows
Cointelegraph		https://cointelegraph.com/news/3-reasons-bitcoin-price-could-be-on-the-verge-of-a-new-uptrend
Coindesk	Coindesk	https://www.coindesk.com/defi-yield-farming-comp-token-explained
NEWSBTC		https://www.newsbtc.com/2020/07/14/data-bitcoin-accumulation-phase-10k/
Article	Lendingblock	https://lendingblock.com/guides/collateral-management

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Acknowledgements

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

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Yoo, Eric	Trinito	Chief Strategy Officer
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