

PANTERA

BLOCKCHAIN LETTER

April 30, 2020

Dan Morehead

CEO & Co-Chief Investment Officer

Dear Investors,

This is a really distressing, massively confusing time. I have no idea what's going to happen in 99% of things right now. However, I strongly believe it's close to inevitable that this will be very positive for cryptocurrency prices.

My kids used to count to 100, "*One, two, skip a few, a hundred.*" It feels like we're doing that on Quantitative Easing. QE1, QE2, skip a few, a hundred.

QE1, 2, 3,...,n
as $n \rightarrow \infty$

As Quantitative Easing approaches infinity, it simply has to have an impact on things whose quantity can't be eased.

When governments increase the quantity of paper money, it takes more pieces of paper money to buy things that have fixed quantities, like stocks and real estate. They settle above where they would absent an increase in the amount of money.

The policy is already achieving its goal: the S&P500 is actually above its May 31, 2019 level. There is no chance that would be true without trillions of new dollars. Like hydrostatic pressure, that flood of new money will float all boats – inflating the price of other fixed-quantity assets like gold, bitcoin, and other cryptocurrencies.

Since our March 25th Letter, bitcoin has rallied 32%. Bitcoin is now up on the year (+23% Year-To-Date).

2020 Year-To-Date Performance	
Bitcoin	+23%
Gold (GC00)	+13%
Corporate Bonds (HYG)	-10%
Stocks (S&P 500)	-12%
Real Estate (DWRTF)	-27%
Commodities (CRB)	-39%
Oil (CL1)	-68%

Performance based on May 1, 2020

One of our principal arguments for bitcoin in a portfolio is that it has had a 209% 9-year compound annual growth rate with essentially zero long-term correlation to stocks, bonds, oil, and other asset classes. From a Portfolio Theory perspective: If you can find something that goes up in the biggest crisis in a century, you should have some of that in your portfolio.

I think this is only the beginning. Why?

NOT V-SHAPED

It is clear that this recession won't be V-shaped.

In the 2007-2009 recession, US real GDP fell \$650 billion (4.3%) and did not recover its \$15 trillion pre-recession level for three years. That recession didn't have the psychological impacts unique to this pandemic. When we look back, I'm afraid this recession will more likely resemble an L.

- Most American families have had their finances seriously damaged.
- Every day we read about small businesses such as restaurants, bars, etc. permanently closing.
- The economy has to recover in steps; e.g., Detroit can't assemble cars until their suppliers can build parts, and many of the suppliers' suppliers will have gone bankrupt or will be unable to restart for other reasons.
- When will people trust mass transit, airlines, trains, etc. again?
- Many people can't go back to work until schools and daycare facilities reopen.

Just taking one of those topics:

According to the Bureau of Labor Statistics, 40% of American families have children under the age of 18. Almost everybody with a child under 18 was in the labor force. The labor force participation rate (the percentage of the population working or looking for work) for all women with children under age 18 is 72.3%. The rate for all fathers with children under age 18 is 93.4%. Even in married households, both parents work in 64.2%. Now they/we are in the largest homeschooling army ever assembled!

You can't start the economy before you start the schools.

If employers tell their employees to come back – and they look at the doleful eyes of their young homeschooler sitting next to them – they aren't coming back. Schools and daycare have to be functional before the economy can begin the long normalization process.

The clock on that process starts the day school is back in session.

A special shout out to Purdue – one of the first universities to set a goal of confronting the challenges of the virus:

"We have every intention of being on campus this fall. We are sober about the challenges that will bring. We believe in the value of the on-campus experience, and we're determined, if we're permitted to do so by the public authorities and medical circumstances."



THE VIRUS'S IMPACT ON THE ECONOMY

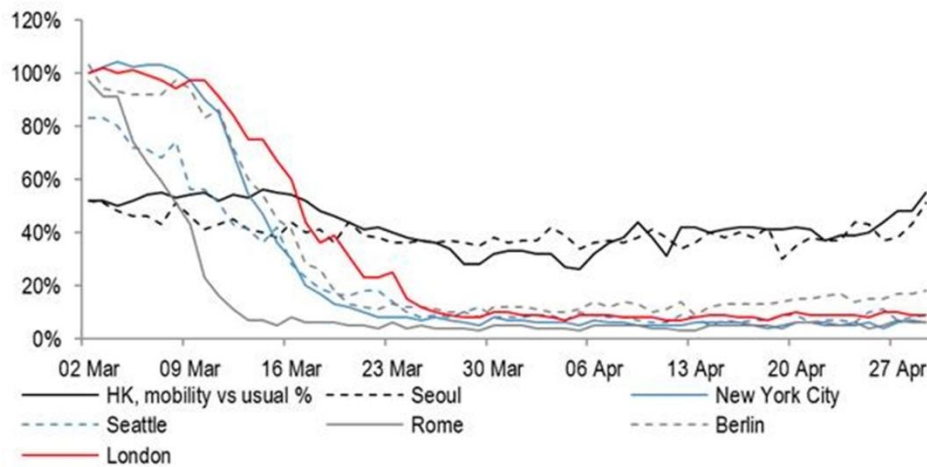
"I feel like the 2008 financial crisis was just a dry run for this," said Ken Rogoff, a Harvard economist and co-author of the famous history of financial crises, *This Time Is Different: Eight Centuries of Financial Folly*. "This is already shaping up as the deepest dive on record for the global economy for over 100 years," he said. "Everything depends on how long it lasts, but if this goes on for a long time, it's certainly going to be the mother of all financial crises."

Diane Swonk, the chief economist for the accounting firm Grant Thornton, said it well:

"It's going to take much longer to thaw the economy than it took to freeze it."

There's some fascinating real-time tracking of activity coming from Wall Street.

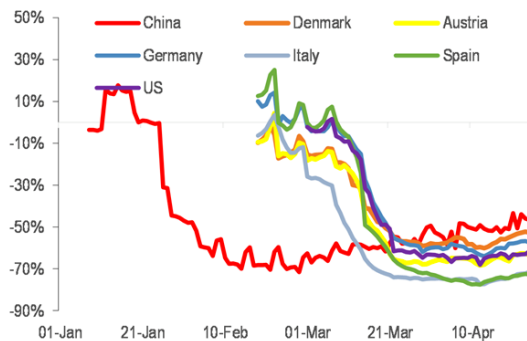
Using phone location tracking, here is the degree to which citizens of selected major cities are moving about relative to normal times.



The next chart combines Google mobile phone location tracking with other real-time metrics of activity – flights, restaurants, energy consumption – in major countries.

Chart 3: Alternative data show slow improvement as lockdowns are eased, but through higher mobility as leisure and flights stay subdued

JPM composite of daily alternative data sources. Composite is an equally-weighted average of metrics tracking a) flights; b) leisure (restaurant reservations, box office revenues); c) mobility; and d) energy consumption. Depending on data availability the underlying metrics expressed as % change relative to previous year/years or % change relative to level in weeks preceding COVID outbreak in each area.

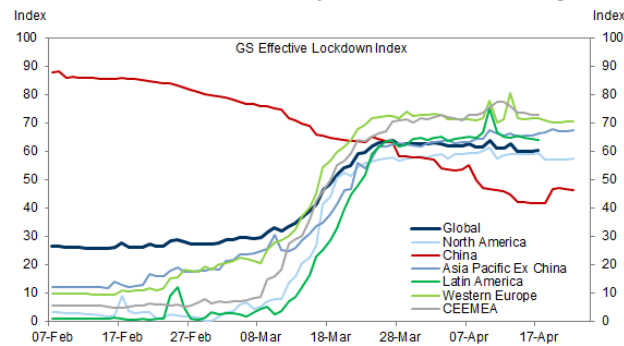


Source: J.P. Morgan



Another representation (with the axis upside down this time) showing activity across entire regions. All but China frozen at 70% locked down.

Exhibit 3: The ELI Has Remained Broadly Stable Last Month in Most Regions Except in China



Source: Oxford University, Google, Apple, Wind, Goldman Sachs Global Investment Research

These impacts will likely persist for a much longer time than many policy-makers seem to think. The virus is thought by experts to be 20-50 times more prevalent than statistics based solely on the very limited testing.

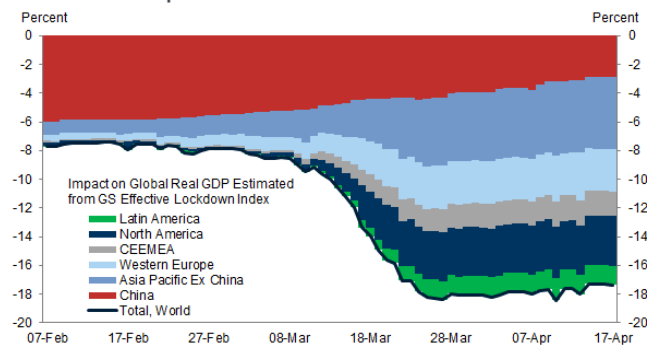
There are only a few populations to have been tested in their entirety. Several fascinating statistics come from the USS THEODORE ROOSEVELT (on which my cousin serves):

- 50 times as many crew members were infected as officials originally thought – 840 (out of 4,938) crew members have been infected
- The majority of crew members infected with the SARS-Cov-2 virus did not develop any symptoms of the disease COVID-19
- In their young, healthy population, it has been 100 times less fatal than the official stats from some countries
- Dozens of sailors who initially tested negative later tested positive

I believe it will take society a long time to come to grips with the reality that we need to learn to co-exist with the virus. Until that time, the economy – and all the complexity of life on so many levels – will flatline.

Using these real-time indicators to estimate real-time GDP, here is an early visualization of the L-shape of the recession.

Exhibit 8: Our ELI-implied Hit to Global GDP Now Stands at 17%



Source: Goldman Sachs Global Investment Research

LIKELY POLICY RESPONSE



Recessions are typically caused by a lack of income or overextended credit. Fiscal and monetary authorities are accustomed to coordinating their policy response against that challenge.

This virus is both a psychological shock and a physical constraint on economic activity – an invisible one at that. It will be very difficult to counter-act with the standard economic policy tools.

MONETARY POLICY

Our March letter was our first and will probably be the last monetary policy discussion.

“In the age of Zero Interest Rate Policy (ZIRP), monetary policy has already lost most of its efficacy. Rates have been near zero in most major economies for a long time. Japan – which invented ZIRP – named the new reality “the lost decade”. That was 25 years ago.

Monetary policy is impotent against the economic and psychologic impacts of a pandemic.

“Hey, Honey, the Fed cut rates 100 basis points today. Let’s go to the movies.”

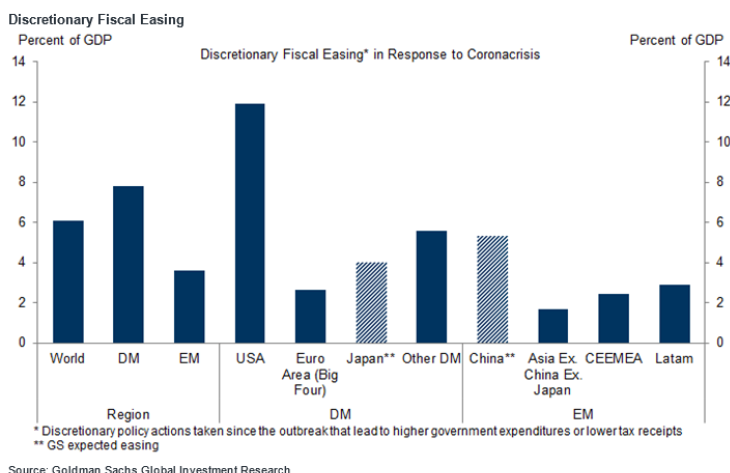
To put the previous monetary response in perspective, during the Global Financial Crisis in 2008-9, the U.S. cut rates 438 bps. The global cut was 297 bps.

A month ago the world’s central banks had cut lending rates 55 bps year-to-date. Now it’s only 4 more basis points: 59bps. With roughly 60% of the world in GDP-weighted terms at or near its effective lower bound, there is little more room.

FISCAL POLICY

Fiscal policy is very inefficient at combatting an invisible physical barrier to commerce.

Countries are trying very different fiscal approaches.



As a visceral shock of how fast this is moving, when I pasted the final version of this graphic in over the placeholder version from when we first started drafting this letter earlier in the month it had almost doubled.

JP Morgan on fiscal deficits globally:

“Although the global fiscal stimulus may be similar to 2008-09, it will be delivered against the backdrop of a deeper recession and a higher starting point for deficits and debt. This recipe should deliver an eye-popping 6.8%-pts of GDP rise in global net lending this year, pushing deficits to 11.3% of GDP. In USD terms, we expect global government net issuance to soar to



nearly \$8.5 trillion, followed by a \$6.5 trillion need in 2021. In the US, the projected federal deficit will require roughly \$6 trillion in net issuance over two years."

In the United States when you add the fiscal stimulus on top of the structural budget deficit you get numbers for which I lack adjectives:

JP Morgan's current forecast for the U.S. deficit is 19.5% of GDP.

This is larger than the widest deficits during the Great Depression and it is larger than the average annual deficits the United States incurred while fighting World War II.

(The U.S. deficit averaged 16.2% of GDP during the fiscal years 1942-1946.)

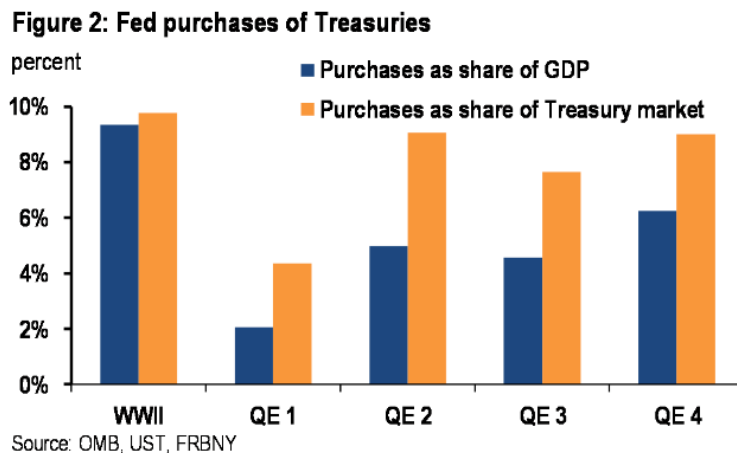
Factoid:

The world population fatality rate of World War II was approximately 1,000 times that of this virus.

Countries like Norway, Taiwan, Germany, and New Zealand are proving that the most effective tools are science and localization technologies.

Factoid II:

Those countries plus other successful nations like Iceland, Finland, and Denmark share a common feature – they are all led by women. Coinkydink? Ben Bernanke made an illustrious career studying the Great Depression. We'll have a new cohort of corona-academics take on these questions.



BUYING EQUITIES WITH PRINTED MONEY IS NO BUENO

Former Federal Reserve Chair Janet Yellen recently said some startling things. On April 6, 2020, Yellen told CNBC's Sara Eisen on *Squawk on the Street*, "The Fed...is far more restricted than most other central banks..." (So far, so good. That's why the U.S. has had one of the least-bad paper currencies. It's "only" lost 90% of its purchasing power since 1950. Most paper currencies have fared much worse.) "It would be a substantial change to give the Federal Reserve the ability to buy stock..." "I frankly don't think it's necessary at this point. I think intervention to support the credit markets is more important, but longer term it wouldn't be a bad thing for Congress to reconsider the powers that the Fed has with respect to assets it can own."

Normally the Fed is only allowed to buy government debt and agency debt with government backing, Yellen said. (Remember last month – Walter Bagehot's dictum: "[T]o avert panic, central banks should lend early and freely, to solvent firms, against good collateral, and at high rates.")

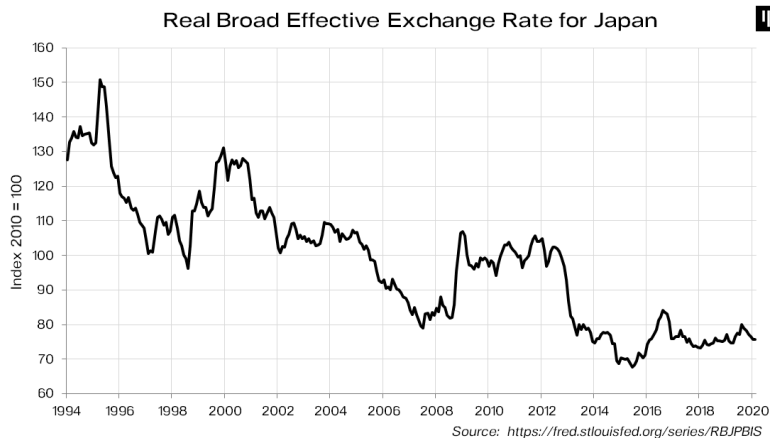


When did junk bonds and unfunded municipal pension liabilities become good collateral for the U.S. Dollar? Equities...whaa?

I lived and traded in Japan in the early 1990's as they entered what we are all now in. I've watched with professional fascination as the Bank of Japan invented QE, ZIRP, and buying equities with printed money.

Lots of interesting stories and a few current thoughts, but TLDR:

Not a pretty picture for their currency. #BuyBitcoin



Pantera's one-time associate who went on to fame as the Buy Bitcoin Guy was prescient. Bottom line: When Janet Yellen is telling the Federal Reserve to buy equities, you should Buy Bitcoin.



[Semiannual Monetary Policy Report to the Congress, July 12, 2017]

IMPACT ON CRYPTO

Here we update our market views from the March Letter:

"We believe that tokens will out-perform venture for a several-month period. Tokens reprice instantaneously, and so they have much more volatility, on both the upside and the downside. Venture pricing is typically lagged. The number of deals dries up quickly. Many months later,



when both sides finally agree where the supply and demand curves meet, you'll see the number of deals pick back up, but at lower prices."

This has happened. Tokens are up 32% since we last wrote. In the meantime we have been buying venture deals – either directly or in the secondary markets – at discounts of 20-36% from where they were trading just before the crisis.

"We reduced our token risk about 15% for about a week. We now believe that the short-term high correlation with general markets is over and that crypto will trade independently."

We covered our risk reduction on March 24th. We're limit long. Crypto is beginning to trade independently of other assets. Crypto is up while most asset classes are down.

"In the five major S&P downdrafts since 2012, bitcoin's correlation with stocks spiked sharply positive for 32 days in the initial movement, but tapered off to neutrality over an average of 71 days."

Correlation has stayed high for 30-ish days. We expect it to drop off now.

"We believe bitcoin will probably out-perform other tokens for a while....The increase in dominance historically lasted an average of approximately 4 months and an average gain of 7.8%. We believe that is likely to happen again."

Bitcoin dominance was 64.60% in mid-March. It is now 66.40%. We expect it to continue to gain – but probably not as much or for as long as in past cycles.

"We have increased the share of Digital Asset Fund in our algorithmic strategy to 30% of the fund."

We believe the markets are no longer range-bound so long-biased strategies are now best. We have reduced Quant to 20% of the fund and set it in a long-only mode.



BITCOIN UP YEAR-TO-DATE, OVERTAKES GOLD



When I tweeted that graph, I got this funny line back:

"Gold is extinct. Bitcoin is the asteroid."



- Giovanni Colombo @therealcolombo

Gold's been around for 5,000 years, so it's not going away overnight. But, it's certainly past its Sell By date. Time to allocate some to the gold of this millennium.

BITCOIN BLOCK REWARD HALVING

We've been writing about the intense interest around the Bitcoin block reward halving and the effect these events may have on price. For those unfamiliar, Bitcoin money supply is fixed and known. (It's 100% QE-proof.) Every ten minutes a fixed amount of bitcoin are issued. Every four years that "block reward" is cut in half - until the year 2140 A.D., when the Zeno's Paradox ceases at 21 million bitcoins. When bitcoin first came out it was 50 BTC every ten minutes, then 25, now 12.5.

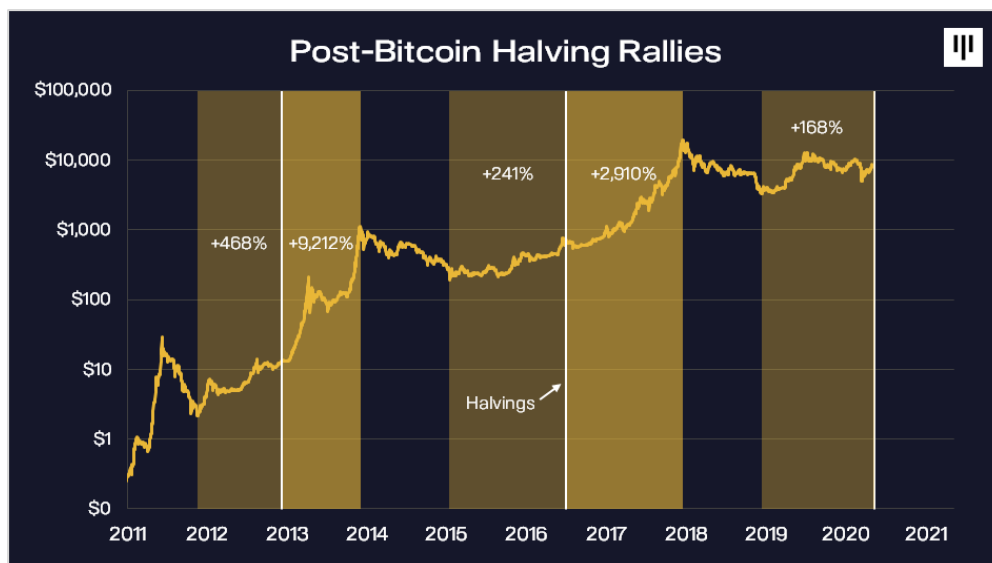
We're just days away from the third halving event (expected to occur on May 12th). The reward will be cut to 6.25 BTC. Below is a graph showing Bitcoin's price action leading up to and following previous halving events. Although there are only a couple of data points - and with the caveat that the past doesn't predict the future - halvings have coincided with increases in price due to a perceived and/or real scarcity of supply.

Efficient Markets Theory would hold that if we ****all**** know it's going to happen, then it has to be priced in. Paraphrasing a line attributed to Warren Buffet on the dogma, "The markets are almost always efficient, but the difference between almost and always is \$80 billion to me." Thus, even if we think everybody knows something it doesn't mean there isn't a ton of money to be made.

It seems reasonable to say that if the new supply of bitcoin is cut in half, all else being equal, the price should rise. This *ceteris paribus* line is easy to envisage. Most miners sell their block rewards as fast as they can. They need the money to pay for energy, data center space, and to buy faster chips in the never-ending arms race. When the number of bitcoins they receive and thus sell is cut in half, it's got to have an impact. That is what has happened in both past cycles. The magnitude of the impact is proportional to the scale of the decrease in supply. More on that in a couple paragraphs.

Bitcoin has historically bottomed 459 days prior to the halving, climbed leading into it, and then exploded to the upside afterwards. The post-halving rallies have averaged 446 days - from the halving to the peak of that bull cycle.

In this cycle, the market did in fact trough 514 days before the halving. IF history were to repeat itself, bitcoin would peak in August 2021.



One potential framework for analyzing the impact of halvings is to study the change in the stock-to-flow ratio across each halving. The first halving reduced the supply by 15% of the total outstanding bitcoins. That's a huge impact on supply and it had a huge impact on price.

Each subsequent halving's impact on price will likely taper off in importance as the ratio of reduction in supply from previous halvings to the next decreases. Below is a chart depicting past halvings' supply reductions as a percentage of the outstanding bitcoin at the time of the halving.

HALVINGS :: REDUCTION IN BITCOIN SUPPLY					
Halving	Reduction Of Supply Per Block	Total Reduction Over 446 Days	Outstanding Bitcoins	Reduction In Supply As Percentage Of Outstanding	Ratio Reduction In Supply From Previous To Next Halving
11/28/12	25 BTC	1,605,600	10,501,590	15.3%	
7/9/16	12.5 BTC	802,800	15,750,652	5.1%	3.0x
5/12/20	6.25 BTC	401,400	18,375,712	2.2%	2.3x

The second halving decreased supply only one-third as much as the first. Very interestingly, it had exactly one-third the price impact.

Extrapolating this relationship to 2020:

The reduction in supply is only 40% as great as in 2016. If this relationship holds, that would imply about 40% as much price impulse – bitcoin would peak at \$115,212 /BTC.

HALVINGS :: IMPACT ON PRICE				
Halving	Rally	Ratio Rally From Previous To Next Halving	Beginning Price	Ending Price
11/28/12	9,212%		\$12	\$1,132
7/9/16	2,910%	3.2x	\$648	\$19,497
5/12/20	1,182%*	2.5x	\$8,988*	\$115,212

(*) based on May 2, 2020 price


I realize that price may sound ludicrous to some today. But, \$5,000 sounded equally ludicrous as our first written price forecast when we launched Pantera Bitcoin Fund at \$65 /BTC. Mark Twain is often attributed with the saying, "History doesn't repeat, but it often rhymes." Just sayin' that there's more than a 50-50 chance bitcoin goes up – and goes up big.

“WHAT’S THE DIFFERENCE? IT’S JUST A BITCOIN FUND”

I ****know**** it sounds counter-intuitive that it really matters which bitcoin fund you pick, but it does.

We'll list the nitty gritty in the subsequent text, but this graphic sums it up:



BITCOIN FUND PERFORMANCE			
	Pantera Bitcoin Fund	GBTC (Grayscale)	Pantera Out-Performance
1 Year	+32%	+9%	+23pp
2 Year	-18%	-43%	+25pp
3 Year	+509%	+439%	+70pp
4 Year	+1,595%	+1,052%	+543pp

Pantera Bitcoin Fund Advantages

Pantera Bitcoin Fund provides institutions and high-net-worth individuals quick, secure access to large quantities of bitcoin – without the burdens of buying and safekeeping them. The Fund features daily liquidity and very low fees (0.75% management fee and no performance fee).

Pantera Bitcoin Fund offers many advantages over other products in the space – including brokerage accounts like Coinbase or Bitstamp. We believe that Pantera Bitcoin Fund is the only bitcoin investment vehicle offering daily liquidity, no premium to NAV, low fees, audited financials, and management by an SEC-registered investment advisor.

The minimum investment is \$100,000. For additional information on investing in Pantera Bitcoin Fund, click this [link](#). Or, you can email our Investor Relations team at ir@panteracapital.com.



VENTURE INVESTING AFTER A CRISIS

Data from Cambridge Associates confirms the intuition that venture investing just after a financial crisis is actually the very best time.

The venture funds launched in the decade before the last crisis had an average IRR of 6.3%. For the funds which were able to buy less expensive assets after the crisis, the average IRR was 18.2%.

Pantera has already been able to lock in some of that discount.

Recently we've been doing deals at valuations 20-36% lower than they were before the downturn – for companies continuing to grow revenue during the crisis. This is in an environment where public tech stocks are flat or up YTD. So venture deals are actually much cheaper on a relative basis. We're also seeing more deals that have real revenue numbers with consistent growth even in the current market environment. We anticipate that over the next year or two, valuations will stay lower than the levels we saw in 2018 and 2019, and many of the best companies are started during a recession (like Uber, Airbnb). This provides great opportunities for us to buy amazing companies at far more attractive prices. Similar dynamics happened in 2009 and 2010 where valuations decreased and the funds that could take advantage of this achieved some of the best venture returns in history.

VENTURE RETURNS BEFORE AND AFTER CRISIS

Before The Crisis (1999-2008)

VINTAGES	RETURNS
1999	-0.89%
2000	0.73%
2001	2.72%
2002	-0.49%
2003	9.18%
2004	8.33%
2005	7.14%
2006	8.80%
2007	15.41%
2008	11.86%

Average: 6.28%

After The Crisis (2009-2015)

2009	15.37%
2010	27.75%
2011	19.67%
2012	17.69%
2013	19.31%
2014	14.36%
2015	13.30%

Average: 18.21%

Source: Cambridge Associates: US Venture Capital Index and Selected Benchmark Statistics



BLOCKCHAIN PAYMENTS GROWTH IN THE CRISIS

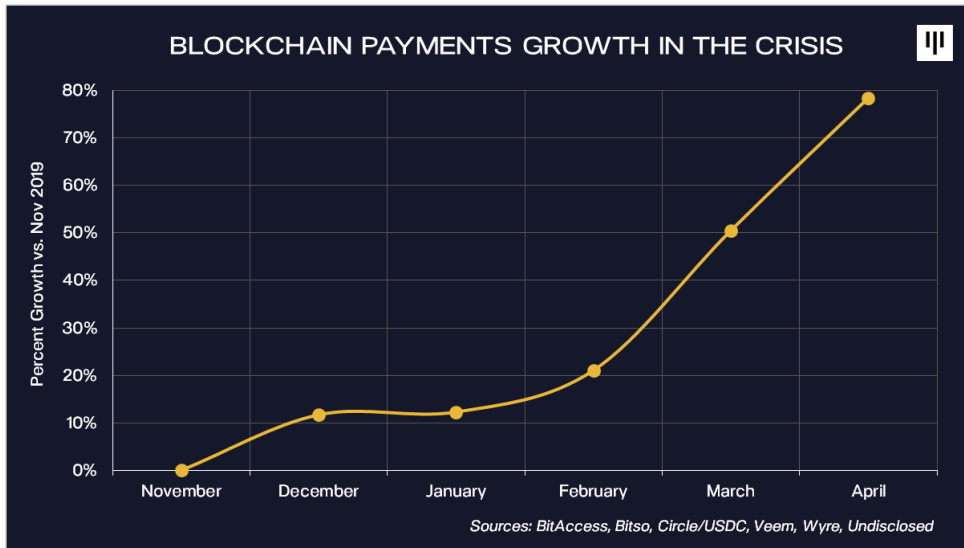
There's so little good news in the world today that we want to highlight where our companies are playing a positive role in helping people during this difficult time. Since the crisis began, we have seen a surge in blockchain-enabled money transfer, driven by increased demand for digital payments and cross-border remittance services. For example, USDC stablecoin adoption is up 60+% and other companies have posted similar increases in volume through March and April.

To help share a real-time index of the results of private companies, we surveyed our portfolio companies in these sectors, then aggregated and normalized their metrics. The chart below depicts the average growth in blockchain payments through the crisis, using November as the benchmark.

The constituent companies in the index are:

- BitAccess: global provider of bitcoin ATM solutions
- Bitso: Mexico-based cryptocurrency exchange and remittance provider
- Circle/USDC: business banking and payments infrastructure, powered by USDC (USD Coin), a stablecoin backed by US dollars and founded by Circle and Coinbase
- Veem: global B2B payments platform – *“real-time wires at half the price”*
- Wyre: payments and compliance infrastructure enabling fiat on-/off-ramps
- A soon-to-be-announced remittance investment in Venture Fund III





THE LEHMAN OF 2020 OR USDC?

Would you rather have your savings in the Lehman Brothers of 2020 – or a token you control, which is fully backed by US Treasuries? Looks like \$300 million voted with their feet. USDC, Circle’s stablecoin, has grown 41% in the seven weeks since the financial crisis began.

Circle also recently launched Circle Business Account, a service enabling developers and businesses to scale globally at cheaper costs by combining USDC, banking connectivity, and wallet infrastructure in powerful APIs.

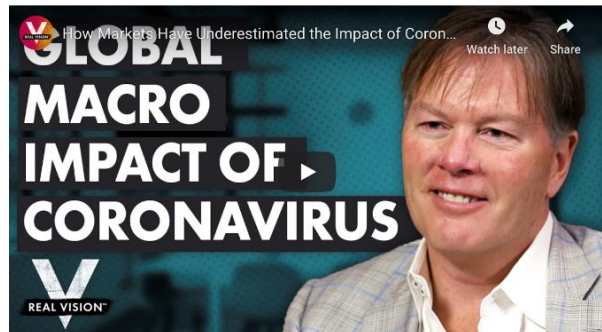
You can register for a Circle Business Account or learn more about their new Circle APIs launch by clicking [here](#).



REAL VISION INTERVIEW

Last month’s letter *Crypto In This Crisis* served as the discussion piece for a recent interview I did with long-time friend and Real Vision Founder/CEO, Raoul Pal. You can watch it [here](#).

Our March letter is already the most-read in Pantera’s 17-year history. If you missed it and want to get the background to this, please click [here](#).





“MACRO IMPACT ON CRYPTO” CONFERENCE CALL

Pantera’s investment team will be hosting a conference call to share perspectives on the global macro situation and how we believe it will impact the cryptocurrency markets. The call will take place on Tuesday, May 5 at 9:00am PDT. You can register for it using the button below:

Register

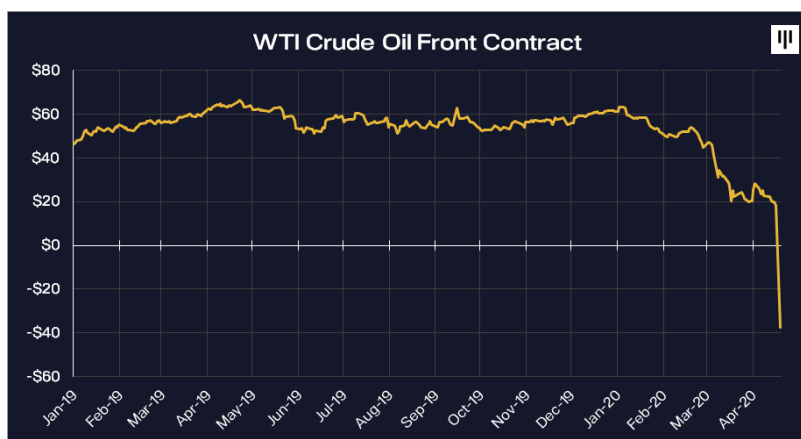
If you are interested in digging deeper on any of these themes or our funds, please contact Pantera’s Capital Formation team at +1-650-854-7000 or ir@panteracapital.com.



AT LEAST YOU DON’T HAVE TO PAY PEOPLE TO TAKE YOUR BITCOIN

We’ve been evangelizing the benefits of bitcoin in a portfolio for a long time. How blockchain is a legit asset class, asymmetric upside, etc. But, wow...this is one of my favorites:

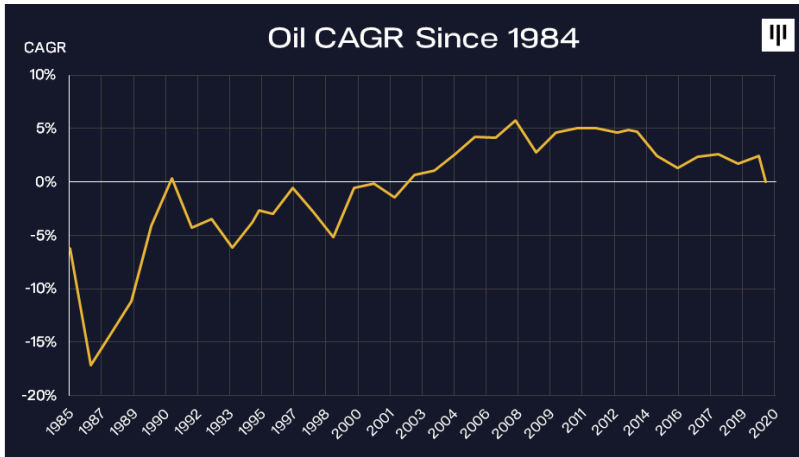
People with long April crude oil futures contract had to pay \$30 a barrel for somebody to take it off their hands!



Even excluding that anomaly, oil has been a terrible asset class. Oil’s 35-year compound annual growth rate (CAGR) is zero point zero. (This is using the rolling third futures contract to avoid short-term storage issues like above.) It’s never even hit 6% in the very best of times.

Bitcoin has a 9-year CAGR of 215% with essentially zero long-term correlation to the rest of the world.





At least with bitcoin, if it all goes to Hell you can just smash your thumb drive.

Stay safe,

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PORTFOLIO COMPANIES AND PROTOCOL TOKENS





PRODUCTS YOU CAN USE TODAY

Many Pantera portfolio companies/protocols are currently live and running today. Try them out below!

- [Abra](#) All-in-one cryptocurrency wallet and exchange app
- [Alchemy](#) Blockchain node infrastructure and developer tooling
- [Amber](#) Institutional crypto finance services
- [Audius](#) Music streaming and sharing platform
- [Bakkt](#) Physical bitcoin futures and custody for institutions



- [BitOasis](#) Middle East-based cryptocurrency exchange
- [BitPesa](#) Africa-based cryptocurrency exchange
- [Bitstamp](#) World's longest-standing crypto exchange
- [Blockfolio](#) Cryptocurrency portfolio and price tracking mobile app
- [The Block](#) Cryptocurrency and blockchain news
- [Brave](#) Speed and privacy focused browser with BAT token integration
- [Chronicled](#) Blockchain-enabled enterprise supply chain solutions
- [Circle](#) Peer-to-peer payments technology company
- [Civic](#) Secure, blockchain-enabled identity ecosystem
- [Coinsuper](#) Hong Kong-based cryptocurrency trading platform
- [Earn](#) Earn crypto by learning about crypto
- [ErisX](#) Spot market trading for cryptocurrency and physical bitcoin futures
- [Flexa](#) Spend crypto at 30,000 stores using the SPEDN mobile app
- [Harbor](#) Digital platform for streamlining alternative investment processes
- [InstaDApp](#) Manage, optimize, and deploy assets across DeFi protocols
- [Kinesis](#) Platform for exchanging physical gold, silver, fiat, and cryptocurrency
- [Merkle Data](#) Risk management and analytics software for crypto institutions
- [OpenToken](#) Software to help run token offerings
- [Origin](#) Build decentralized marketplaces on Origin platform
- [Ripio](#) Global credit network
- [ShapeShift](#) Non-custodial marketplace for trading between digital assets
- [Staked](#) Staking and lending service for compounding crypto holdings
- [Tagomi](#) Electronic brokerage offering prime services for digital asset investors
- [TruStory](#) Platform for open debate
- [Veem](#) Global payments network merging traditional payment rails and crypto
- [Xapo](#) Bitcoin wallet for ease of access and security

FUND DOCUMENTS

If you would like to receive additional information on Pantera's funds, including the Private Placement Memorandum, Limited Partnership Agreement, or Subscription Documents, please fill out the form on [this page](#) to begin the subscription process.

BLOCKCHAIN FUNDS



PROGRAM	PASSIVE	HEDGE			VENTURE		
Fund	Bitcoin Fund	Digital Asset Fund	ICO Fund	Long-Term ICO Fund	Venture Fund I	Venture Fund II	Venture Fund III
Launch	July 2013	November 2017	July 2017	December 2017	August 2013	August 2014	June 2018
Assets	Bitcoin Bitcoin Cash	Assets tradable on blockchains: • Cryptocurrencies • ERC20 tokens • Augur contracts (soon) • Other Digital Assets (in the future)	Pre-auction SAFTs ICO tokens only at auction	Pre-auction SAFTs ICO tokens only at auction	Equity in blockchain-enabled startups	Equity in blockchain-enabled startups	Equity in blockchain-enabled and adjacent technology startups
Return Profile	Bitcoin Market Returns	Potentially Highest Risk-Adjusted Return	Very Speculative, Potentially Highest Absolute Return	Very Speculative, Potentially Highest Absolute Return	Venture Returns	Venture Returns	Venture Returns
Edge	Low cost Mid-market execution No Premium to NAV	Technical Knowledge	Early Access with Discounts / Technical Knowledge	Early Access with Deeper Discounts / Technical Knowledge and Long-Term Tax Treatment	Brand + Knowledge of the Space	Brand + Knowledge of the Space	Brand + Knowledge of the Space
Holding Period	Indefinitely	Days to Years	Months to Years	All positions held at least one year	3-10 Years	3-10 Years	3-10 Years
Long-Only	Yes	Long/Short	Yes	Yes	Yes	Yes	Yes
Risk Management	Passive Tracker	Discretionary	Discretionary	Discretionary	Buy & Hold	Buy & Hold	Buy & Hold
Secondary Liquidity for Assets	Yes	Yes	Yes	Yes	No	No	No
Subscriptions	Daily	Monthly	Monthly	Monthly	Closed	Closed	June 30
Redemptions	Daily	Quarterly, 65 days' notice	Quarterly, 12 months' notice	Quarterly, 12 months' notice	End of Fund	End of Fund	End of Fund
Investors	Global	U.S. Investors	U.S. Investors	Non U.S. Investors	Global	Global	Global

*The Digital Asset Fund's first full month was December 2017

CONFERENCE CALLS :: ICO, DIGITAL ASSET, AND VENTURE FUNDS

Macro Impact on Crypto Conference Call

Tuesday, May 5, 2020 9:00am PDT / 18:00 CEST / 12:00am CST (May 6th)

Open only to LPs of the fund. Please register (in advance) via this link:

<http://info.panteracapital.com/general-information-conference-calls>

Meeting ID: 411-135-267

Digital Asset Fund LP Performance Call

Tuesday, July 21, 2020 9:00am PDT / 18:00 CEST / 12:00am CST (Jul 22nd)

Open only to LPs of the fund.

Long-Term ICO Fund LP Performance Call

Tuesday, July 28, 2020 7:00am PDT / 16:00 CEST / 10:00pm CST

Open only to LPs of the fund.

ICO Fund LP Performance Call

Tuesday, July 28, 2020 9:00am PDT / 18:00 CEST / 12:00am CST (Jul 29th)

Open only to LPs of the fund.

PAST ICO, DIGITAL ASSET, AND VENTURE FUND CONFERENCE CALL RECORDINGS

Recordings of recent ICO, Digital Asset, and Venture Fund III conference calls are available on [this page](#).

RECENT PRESS



- [Dan Morehead on Real Vision, "Global Crisis Meets Macro & The Future of Crypto"](#)
- [Dan Morehead on What Bitcoin Did, "Bitcoin's Coming of Age"](#)
- [Dan Morehead on Real Vision, "On the Cutting Edge of Macro and Bitcoin"](#)
- [Paul Veradittakit on How Origin Enables Freedom](#)
- [Dan Morehead on CNBC, 'Crypto Trader Show' :: Live In Los Angeles](#)
- [Dan Morehead on CNBC, 'Crypto Trader Show' :: Live In Los Angeles](#)
- [CNBC, 'Crypto Hedge Fund Pantera On Track to Raise \\$175 Million'](#)
- [Dan Morehead on CNBC, Fast Money](#)
- [Joey Krug on the June 8 Episode of the "Unconfirmed: Insight and Analysis from the Top Minds in Crypto" podcast, episode entitled "How to Create Regular Cryptocurrency"](#)
- [Dan Morehead on CNBC, Fast Money](#)
- [Dan Morehead on Fox Business, Mornings with Maria](#)
- [Dan Morehead on Bloomberg Panel, Bitcoin: The Past, Present and Future](#)
- [Dan Morehead on Bloomberg, Pantera's Morehead Says Bitcoin 'Is a Screaming Buy'](#)
- [Dan Morehead on CNBC, Hedge Fund CEO Says Bitcoin's Flashing a Rare Buy Signal](#)
- [Dan Morehead on CNBC, Early Innings for Cryptocurrency Craze: Pantera Capital CEO](#)
- [Dan Morehead on CNN, Bitcoin: Digital gold or Ponzi scheme?](#)
- [Dan Morehead on Fox Business, Morning with Maria](#)
- [New York Times, A Bitcoin Hedge Fund's Return: 25.004% \(That Wasn't a Typo\)](#)
- [Dan Morehead on Fox Business, Mornings with Maria](#)
- [Dan Morehead speaks at Money2020 Conference with Kik's Ted Livingston](#)
- [Dan Morehead speaks at Sohn Conference CNBC](#)
- [TechCrunch, While Investment Firms Ponder ICOs, This Team is Barreling Ahead With a \\$100 Million ICO Fund](#)
- [TechCrunch, ICOs, How Do They Work? | Disrupt SF 2017](#)

OPEN POSITIONS

Pantera is actively hiring for the following roles:

- Quantitative Researcher
- Systems Engineer
- Administrative Assistant

If you have a passion for blockchain and want to work in Menlo Park, San Francisco, or New York, please follow this [link](#) to apply.

Interested in joining one of our portfolio companies? The Pantera Jobs Board features 400+ openings across product, engineering, finance, marketing, and other functions. Visit the Jobs Board [here](#) and apply directly or submit an application for our Talent Network [here](#) to join our resume database.

APPENDIX

<https://www.nytimes.com/interactive/2020/04/03/upshot/coronavirus-cities-social-distancing-better-employment.html?action=click&module=moreIn&pgtype=Article@ion-Footer>

FURTHER READING



Some good material to start with on the development of blockchain technology and cryptocurrencies as speculative instruments:

- [Bitcoin: A Peer-to-Peer Electronic Cash System](#) - white paper by Satoshi Nakamoto
- [12 Graphs that Show Just How Early the Cryptocurrency Market Is](#) by Chris McCann
- [Blockchain Investments and the New Problem Asset for Conventional VCs](#) by Jake Brukman
- [Cryptoeconomics 101](#) by Nick Tomaino, and his [Tokens, Tokens and More Tokens](#)
- [Fat Protocols](#) by Joel Monegro
- [What Does \\$300 Ether Mean?](#) by Vinay Gupta
- [Token Economy](#) by Stefano Bernardi and Yannick Roux
- [Traditional Asset Tokenization](#)
- [The Rise of the Token Sale](#) by Max Mersch
- [Making Sense of Cryptoeconomics](#) by Max Mersch
- [Why Amazon's Margin Is Filecoin's Opportunity](#) Forbes, Aug 28, 2017
- [Joey Krug RealVision Interview Excerpts: ICOs, Future of Digital Currency, Ethereum Flash Crash](#) RealVision, Aug 10, 2017
- [Pantera Capital to Raise \\$100 Million in Investment for ICO Hedge Fund](#) Coindesk, Jun 28, 2017
- [While Investment Firms Ponder ICOs, This Team is Barreling Ahead with a \\$100 million ICO Fund](#) TechCrunch, Jun 28, 2017
- [Balaji CNBC Interview](#) CNBC
- [US Fed Hints at Blockchain Integration](#) Coindesk
- [Coindesk State of Blockchain Q2 Report](#) Coindesk
- [The Isle of Man Welcomes ICOs](#) Coindesk
- [Ethereum Metropolis Release Testnet To Launch](#) Coindesk
- [Closure Steps for Chinese Exchanges](#) Coindesk
- [China Shmyrna, Bitcoin Trading is Way More Distributed Now Anyway](#) Coindesk
- [Lawmakers Seek Tax Exemption on BTC Transactions Under \\$600](#) Coindesk
- [ICO "Rounds" Are Coming](#) TechCrunch
- [Crypto Regulation? Not Anytime Soon, Says White House Official](#) Coindesk
- [Why Decentralization Matters](#) by Chris Dixon. Outstanding perspective on how we went the open Internet 1.0 to a closed Internet 2.0—and the promises of a new Internet ecosystem powered by Blockchain.
- [Beyond the Bitcoin Bubble](#) The longest read on this list from NY Times Magazine. A great ten-thousand-foot view. A must-read.
- [Fat Protocols](#) Written over two years ago, an image in this article is one of the most frequently referenced in the industry
- [A Letter to Jamie Dimon](#) Famous retort to Mr. Dimon's flippant remark about bitcoin being a fraud. Concise, even-tempered, a brilliant article.
- [Interview with David Sacks](#) Former Pay Pal COO Sacks lists ten use-cases where he anticipates blockchain can be disruptive in the not-too-distant future.
- [Mapping the Blockchain Project Ecosystem](#) Attempt to categorize the protocol tokens based on use –helpful for newbies.
- Two of the best books are *Digital Gold* by Nathaniel Popper for a fun high-level history and an in-depth technically-minded look *Mastering Bitcoin* and *Mastering Ethereum* by Andreas Antonopoulos.

And some additional information on the ICO model specifically:



- Recommended Primer: [Token Mania](#)
- [Kin Whitepaper](#)
- [Kin Webpage](#)
- [AVC Venture Capital on Kin](#)
- [Tech Crunch Article on Kin](#)
- [Reuters Article on Kin](#)
- [Video on Kin by AVC](#)
- [USV on Protocol Value](#)
- [Tokenomics – A Business Guide to Token Usage, Utility, and Value by William Mougayar](#)
- [Earn's CEO on Token Economies](#)
- [Basic Attention Token Whitepaper](#)
- [Basic Attention Token Webpage](#)
- [Nick Szabo and Naval Ravikant on Tokens](#)

Additional information on blockchain regulation:

- [SEC's Office of Investor Education and Advocacy Investor Bulletin on ICOs](#)
- [SEC Issued Statement on ICOs and the DAO](#)
- [China Banned ICOs](#)
- [FINMA Issues Stricter ICO / AML Regulatory Compliance Requirements](#)
- [SEC Puts Task-Force on ICOs](#)
- [SEC Shuts Down Protostarr](#)
- [South Korea Bans ICOs](#)

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Blockchain Letter

A monthly letter with our thoughts on significant market and ecosystem-related developments. Also, includes our thoughts on blockchain venture capital and news on our portfolio companies for accredited investors.

Blockchain Investor Letter

Public Letter plus exclusive information for accredited investors.

White Papers

Periodic, original blockchain research and academic papers.

- ["A Crypto Thesis"](#) by Pantera Co-CIO Joey Krug [2019.01.08]. Joey's insights on crypto and blockchain innovations what is still needed for user and institutional adoption. Informative and detailed primer for anyone considering investing in the space.

Follow us on [Twitter](#) and [Medium](#) for the latest blockchain news and insights. [@PanteraCapital](#), [@Dan_Pantera](#), [@JoeyKrug](#), and [@Veradittakit](#).

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