ENIGMA

# Enigma 2019

## End-of-Year Review

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Every month, the Enigma Team brings together financial, economic, legal and political expertise to provide a comprehensive, global overview of the state and evolution of the cryptocurrency market in its Monthly Report. We analyze all crypto-related regulatory developments in the industry, review monthly statistical and financial analysis of the top cryptocurrencies by market capitalization, and conduct an in-depth examination of a topic we deem relevant for the month.

For the final month of 2019, our Team has decided to conduct a year-end review of the growth of the industry not only over the past month, but over the past year, in an effort to better understand the year ahead.

written by Anastasia Ulianova, Digital Asset Research Analyst at Enigma Securities



| New York | London | Paris | Tel Aviv | Singapore | Geneva | Gibraltar |
|---|---|---|---|---|---|---|
| Park Avenue, 6th Floor 430 | Gossard House 7/8 Savile Row | Rue Saint-Honoré 336 | Menachem Begin 11 Ramat Gan | Robinson Road 160 | Rue De La Croix-D'Or 27 | ,World Trade Center, 6 Bayside Road |

# Contents

# Opening Review

It has been an oscillating year for the cryptocurrency market as it returned to the international spotlight. And with the holiday season come and gone, the industry bid goodbye to the previous decade, welcoming in the new one. But with the parting of one year, there is inevitably a time of reflection that comes about, not only of past events and developments, but crucially of how these will affect the near and distant future ahead of us.

And indeed, 2020 has much to look forward to in the crypto space. With the long Crypto Winter finally having shown the first signs of spring in 2019, industry players are all expecting to see greater global adoption of digital assets in the new year. Naturally we see all heads – crypto experts and amateurs, supporters and opponents, the enthusiastic and the unenthused alike – turning towards Bitcoin's schedule halving event in May 2020, with debates heating up over whether the event's consideration is already priced in to the present valuation of the King Coin. Of course, Bitcoin isn't the only coin whose technical characteristics have gotten us rooted to our screens monitoring news. We also expect this year to see the launch of the much-awaited Ethereum 2.0, the blockchain having successfully transitioned to the proof-of-stake model.

Additionally, 2020 brings expectations to see the winner of the global CBDC race, as China still powers ahead, and France surprisingly announces their bid to compete and become the first country to issue a digital currency. In related news, our team will also be observing the continuation of the Libra effect spill into the new decade, as well as news of the actual Libra stablecoin. With Facebook's announcement having shaken financial, regulatory and political circles to their core, 2019 became the year government agreed the industry could no longer be ignored. Now, it is time to decide which way this train will turn.

All in all, there are many exciting developments promising greater growth for the industry up ahead. For our team at Enigma Securities, our greatest expectation for 2020 is to see greater institutional interest and demand for the space, and increased regulation as fintech starts to be addressed as a radically separate field from traditional financial services, with a different, new set of rules to play by. And so, for our closing issue of the previous year, we have chosen to focus this month's Spotlight on some of the biggest events of 2019, and how they will shape the year ahead.

And as always, Enigma Securities will continue to use its extensive knowledge and experience to provide the very best financial solutions to its institutional clients, sharing insights into cryptocurrency markets through Weekly and Monthly Reports.

# News Analysis

## Global Policy and Regulation

2019 marked an important year for cryptocurrencies and blockchain technology as regulators worldwide cast their light on the industry, with many governments and international organizations believing that they can no longer ignore the revolutionary potential of this technology. Though seemingly small in certain countries, this growing interest is of crucial importance to the global growth and adoption of crypto — it is through the increasing efforts manifested to clarify the legal standing and official positions of each country on the industry that this growth may be impeded or succeeded.

### Asia

#### China

An important player for whom the past year has been crucial in dealing out crypto and blockchain-related news is none other than China, and naturally the economic giant continues to abound in related news at the turn of the decade, promising to make 2020 an exciting year for crypto.

Though retaining its hostile stance towards cryptocurrencies, China continues to call for the widespread adoption of blockchain and DLT as it steps up spending into the technology's development. But as it continues supporting these technologies, reports in December have turned the industry's attention towards the country's censorship of one of the most popularly used Ethereum block explorers – etherscan.io. Records have shown that the website can no longer be accessed by IP addresses from inside mainland China, unless using a VPN.

Though official reasons remain unclear, some have speculated that this event is symptomatic of China's attempts to reconciliate the decentralized nature of blockchain technology with the opposingly centralized nature of its governance tactics. Indeed, as we learnt from CoinDesk, there have been numerous reports in the past that have suggested that blockchain may be used for the posting of politically sensitive messages by encoding them into transactions occurring on the chain. Specifically, cases point to such messages appearing in relation to the #Metoo movement as well as a pharmaceutical-related scandal in China, with the cryptocurrency users sharing the hash of those transactions on online platforms. Considering the fundamental structure of the blockchain, should such a sensitive message be encoded, it cannot be easily, if at all, modified, removed from the chain, or otherwise tampered with, unlike a regular Internet post.

Accordingly, there is a high likelihood that

China will be taking further action, notably using censorship, to limit these potential dangers. As we further monitor developments in the country, China makes an insightful case of the effects digital assets and, more importantly, blockchain technology may have on a country's political and legal spheres.

Nonetheless, as China continues riding the blockchain wave, it is also finding multiple innovative solutions for its national use. An interesting such case study is that of the country's leading usage of blockchain in the settlement of legal disputes by its Internet Courts. According to data published by the country's official news agency, Xinhua, these courts have settled over 3.1 million litigious cases between March and October 2019 using a blockchain-AI combination. Deemed the first country to have established such internet courts, China is keeping pace with the changing nature of the legal profession as automation becomes the new norm of today.

Also, having been recognized by the Supreme Court, we increasingly see these courts use blockchain technology for the legal authentication of evidence in disputes. Naturally, this is just one of the many applications this revolutionizing technology possesses. In consideration of virtual assets which operate on the chain, though they have gained a loud reputation for being a tool for the facilitation of financial crimes including money laundering, as mentioned above, the inherent decentralized and transparent qualities of the system in fact allow for better tracing and analysis of financial crimes than has ever been possible with fiat currencies before. In any case, the successful use and recognition of blockchain technology weighs heavily on the positive side of the scale, with many countries standing to benefit from such a use.

Still, as is well known, China remains highly distrustful of the digital assets that run on blockchain technology, despite its wholehearted support of the latter. Indeed, Following November's crackdown explored in our previous issue, China chose to end the year with emphasis, with national financial regulators warning of the risks of a crypto resurgence in the country. Notably, we see China Securities Regulatory Commission (CSRC) specifically detail the dangers of such an event. Calling relevant authorities to take appropriate action in defense against what the government deems pure speculation, the country reaffirms its strict stance against any entity or individual engaging in any form of digital asset transaction.

Meanwhile, China continues making leaps in the financial technology industry, standing ready to begin testing its CBDC, which it has stated will be structurally different from the operation of such assets as Bitcoin or stablecoins. We look forward to examining the solutions implemented by the country, after a minimum of six years of research on the subject, to address questions including on the interoperability and scalability of the technology. Furthermore, as the country stands poised to become the leading nation in the innovation of its financial industry, the development of Libra, significant for causing the acceleration of the Digital Yuan project, as well as other global positioning in the digital asset arms race will be key in understanding the new global positioning of the U.S. Dollar in a new global financial structure.

## North Korea

As the year ended, our team has followed closely the case of Virgil Griffith, longtime researcher for the Ethereum Foundation and friend of co-founder Vitalik Buterin, who has been accused by U.S. officials of aiding North Korea in evading internationally imposed sanctions using Blockchain and cryptocurrencies. Cointelegraph had in fact reported back in September that the country was interested in developing their own national digital asset.

With regards to Griffith, following a joint investigation by the FBI and the Department of Justice's National Security Division, he was arrested on November 28th, 2019 for his participation in a conference titled 'Blockchain and Peace' in Pyongyang, to which he had reportedly been warned not to attend. The conference is now deemed as having been specifically designed for the sharing of highly technical information with the North Korean regime, which would effectively assist them in engaging in money laundering and evading international sanctions. At present Griffith is accused of having accordingly violated the International Emergency Economic Powers Act (IEEPA), which could potentially lead to a prison sentence of up to 20 years.

Nonetheless, and despite Griffith's apparent distaste for his home country, he has received unwavering support from the Ethereum Foundation, while being represented by Brian Klein, a renown defense and civil litigation expert. As the case progressed and the month closed, we witness Griffith released to his parents' home in Alabama on a $1 million bail pending trial, in an appeal of an initial denial of bond which cited Griffith as a potential flight risk.

## India

In India, lack of clarity remains the main order of the day on the matter of crypto regulations in the country. At present, in spite of widespread perception of the illegality of cryptocurrencies in the country, India does not have as yet any crypto-specific regulations which specifically label them as illegal. Instead, only a banking restriction imposed by the central bank is currently in effect, preventing regulated financial institutions from engage with crypto-related businesses, such as exchanges.

However, crypto professionals and enthusiasts in the country are breathing a sight of relief this month as a draft bill entitled "Banning of Cryptocurrency and Regulation of Official Digital Currency Bill 2019", originally planned to be introduced in the Winter session of Parliament, was not included on the agenda at present. This bill is intended to officially ban the use of all private cryptocurrencies in the country, while considering the issuance of a CBDC. Nonetheless, the local crypto community is actively pushing for a more positive official response to the industry, in the hope that the government revise their present hostile perception. Overall, the country has taken a cautious approach to the development of the industry within its borders amidst concerns over the possible negative consequences of a supported implementation, yet unable to decisively disregard the potential, especially following

Facebook's announcement of the Libra stablecoin.

Meanwhile reports have emerged that the Income Tax Department of India has been conducting trainings for its officials in cryptocurrency investigations since as far back as 2017. Due to the uncertainty of the classification of digital assets, confusion abounds amongst investors in the country as to how they should account for them for tax purposes. However, the Tax Department appears to be actively taking steps towards addressing this issue.

## South Korea

Another tax authority whose interest in digital assets has garnered attention this month is that of South Korea. Per a report from The Korea Times dated December 9th, the South Korean Ministry of Economy and Finance will be revising a bill with the aim of taxing digital asset transactions as capital gains in the first half of the new year. This, in additional to a broader move by the government to bring the crypto industry under the authority of its financial regulators with the enforcement of KYC/AML procedures and the introduction of a crypto exchange licensing system, is another in a series global developments contributing to the increased legitimation of the industry, something which our Team at Enigma looks forward to seeing more often in the new decade.

## Japan

By contrast, Mr. Haruhiko Kuroda, Japan's Central Bank's Governor, has publicly stated during a speech at the Symposium for the 35th Anniversary of the Center for Financial Industry Information Systems, that there is at present no public demand in the country for the issuance of a CBDC, though he did support the development and use of private digital currencies.

Similarly, the Mitsubishi UFJ Financial Group Bank (MUFG), Japan's largest and the world's fifth-largest bank, has openly stated that it does not plan to issue a digital currency for the time being.

## Kazakhstan

In Kazakhstan, a country which has so far been receptive to blockchain and cryptocurrencies, legislation pertaining to the taxation of digital assets has reportedly been finalized and is at present under consideration. The available information currently suggests that this new law would not classify digital assets and crypto mining as taxable, due to not recognizing these assets as "real money". Instead, they will only become subject to taxation following their exchange for fiat money, and mining operations will broadly be considered entrepreneurial activity, to be taxed in a manner analogous to traditional data centers.

## Europe

### France

European countries are not to be left behind in the global crypto race as the year closes, with France's Central Bank ambitiously aiming to challenge China for the title of the first country to issue a CBDC. According to official statements, notably by the Bank of France's Governor Mr. Francois Villeroy de Galhau, the Central Bank is planning a test run for its CBDC in the first quarter of 2020, a digital euro at present aimed strictly at private financial institution as opposed to retail customers. According to French financial publication Les Echos, French authorities sees this initiative as a way to improve the efficiency of the French financial system, as well as a preemptive response to Libra's future launch. This eagerness can once more be attributed a global 'Libra Effect', as countries continue to question the dangers posed to their monetary sovereignty by Libra and its potentially millions of users through its originator: Facebook. Indeed, on this front, the European Union has reiterated their commitment that no stablecoin be operational on the regional market until all LEGAL, regulatory and oversight concerns have been addressed.

### Sweden

Of course, France is not the only European country looking into issuing a CBDC. This month, we see Sweden partner with Accenture to develop its e-krona. Already one of the world's primary cashless societies, the widespread adoption and use of a digital currency does not appear to be a far-off reality for the Nordic country. However, in contrast to France's eagerness, Sweden's Riksbank remains committed to a purely testing environment phase, with having not as of yet fully committed to issuing the e-krona. Also unlike France, Sweden began investigating the implications of a digital currency long before the global rush initiated by Facebook and China's race, based purely on the consequences of having a cash-averse society. Nonetheless, despite their interest in an e-krona, Riksbank has reportedly been skeptical of basing its currency on a blockchain or otherwise DLT, citing it as an inefficient system, but retains the opinion that whatever form the currency takes, it should be able to interact with the popular technology. Still, our team will continue to monitor the status of the e-krona, and the country's solution to a non-DLT based digital currency.

### Switzerland

In Switzerland, officials have also taken a cautiously skeptical stance towards digital assets and the blockchain technology that powers them, with the country's Financial Market Supervisory Authority (FINMA) citing it as one of the new money laundering risks posed to the financial industry. Given Switzerland's reputation as a hub for private wealth management, money laundering and other financial crimes including terrorism financing are at a particularly high risk of occurrence, which in turn may slow the crypto adoption in the country.

In fact, AML and CFT concerns, in addition to the issue of tax evasion using cryptocurrencies are amongst the most influential factors slowing down global adoption of digital asset systems, as countries and their central banks worldwide weigh the systems benefits against the inevitable risks of its attraction to illegal players.

## European Union

AML/CFT and tax evasion concerns, amongst others, have been amply voice by European Union officials, which include the Council of the European Union, the European Commission and the European Central Bank. These entities are now stepping up efforts to ensure the compliance of European-operating crypto businesses, notably with the establishment of the 5AMLD legislation, the Fifth Anti-Money Laundering Directive, which now requires all crypto-related businesses to conduct KYC/AML processes. This piece of legislation will require implementation to the crypto space in all European states, which until now has been completely unregulated in certain countries. Consequently, an examination of criminal activities in crypto will show that European businesses process considerably higher volumes of activity connected to illicit gains, particularly in comparison to countries such as the United States where AML regulation has already been enforced. The question nonetheless remains as to how each country will implement the intricacies of 5AMLD within their borders.

The increased regulatory attention dedicated to the digital asset industry in one of the primary markers of the end of the Crypto Winter the past year, and we expect it to continue in 2020. This will effectively cause a legitimation of the industry, which until now continues to a certain extent to evoke associations to criminal enterprises.

Naturally, these issues also apply to European concerns over the potential introduction of stablecoins, such as Facebook's Libra, into their economies. However, an important additional issue points to national monetary sovereignty, which will perceptively be threatened by the incredible potential of cross-border transaction facilitation purported by a global coin. In this regard, though some predict that the inherent decentralized qualities of blockchain technologies will make banks irrelevant, and eventually non-existent, the future will most certainly not see banks disappear as they strive to compete and adapt to what will certainly be a new global financial structure.

## Ukraine

Meanwhile on the Eastern front of Europe, December witnesses Ukraine pass the final version of a money laundering law addressing digital assets based on FATF guidelines. And while this law acknowledges the dangers of digital assets being used for financial criminal purposes, it nonetheless is an official approval on the ownership and use of digital assets in the country. At present, the country is reportedly being assisted by global crypto exchange Binance in the development of further legislation to address the crypto space.

## Russia

In following the global trend, the end of 2019 also sees Russia reportedly showing interest in exploring the possibility of a CBDC albeit with greater caution. The Bank of Russia is committed to understanding the full spectrum of benefits and potential negative consequences of digital assets, looking to near-future implementations in other global jurisdictions, suggesting that the advent of the digital ruble is not part of the nearby future. The Bank has further reportedly begun testing stablecoins in a 'regulatory sandbox'.

With regards to the digital asset industry, thus far it has largely remained unregulated in Russia, even as official entities have taken a conservative stance towards it. The Bank of Russia has in fact stated on multiple occasions that it cannot recognize private cryptocurrencies as legal tender. However, as 2019 witnesses reports of a potentially strict legislative framework being drafted by the country's financial authorities, 2020 will be an interesting time to monitor the situation. With local industry players calling for regulation over prohibition, this year will see Russia laying the groundwork for the foundation of the Russian crypto industry in the years to come, a fact only made more important by considerations over the country's relative economic status. At writing time, reports from Russia's interior ministry suggest that this framework could be finalized and implemented by 2021.

# North America

## United States

Eyes continue to lock on the United States as lack of clarity and mixed feelings on the cryptocurrency industry and its regulation continue to dominate the political landscape. Overall, it continues to look as if the world's superpower will not issue a national digital currency in the new year pending further consolidation of an official stance on digital assets. Following Federal Reserve Chairmain Jerome Powell's statements the previous month, in December we see the United States Secretary of the Treasure, Steven Mnuchin, comment on the matter during a House Financial Services Committee hearing, stating his and Powell's agreement that the near future, which he defined as the next five years, will not see the United States develop a CBDC. He further stated in response to inquiries regarding Facebook's Libra, that should the project be fully compliant, emphasizing particularly Countering Terrorism Financing and Anti-Money Laundering regulation (CFT/AML), that he should have no objections to the stablecoin's release. Meanwhile the Financial Stability Oversight Council (FSOC), headed by Mnuchin, remains another of the many official U.S. entities that is cautiously suspicious of the potential effects of digital assets on the wider economy, as detailed in a report issued by the FSOC earlier this month. Indeed, the Chairman of the U.S. Securities and Exchange Commission (SEC) has stated that the country's approach to cryptocurrencies has been "measured yet proactive."

Nonetheless, the United States and its cryptocurrency industry see a friendly face join the Senate early December, as Bakkt's former CEO, Kelly Loeffler, announces her plans to take up a seat in the U.S. Senate for the state of Georgia. Yet, on the opposite side of the scale this month, we also witness the election of renown crypto-critic Congressman Brad Sherman to the position of Chairman of the Subcommittee on Investor Protection, Entrepreneurship and Capital Markets, which will oversee the SEC, NYSE and FINRA. Sherman has been known for his vehement stance against the cryptocurrency industry, his judgement of its exclusive use for money laundering and criminal purposes and for advocating the institution of a complete ban on the industry. This notorious stance has earned him much criticism from Bitcoin bulls and crypto supporters alike.

In stark contrast to these statements, Kenneth Blanco, Director of the Financial Crimes Enforcement Network (FinCEN) has delivered a speech this December emphasizing the improvement in industry oversight amongst cryptocurrency businesses after FinCEN published guidelines in May outlining the application of appropriate regulations and obligations to certain crypto business models. As the year closes and the new decade starts, this improvement falls clearly into a general trend for 2019 which saw the crypto space slowly begin to grow into its own regulated industry, not only in the United States but worldwide. And despite vocal critics of digital assets, our team at Enigma expects to see this trend continue in 2020 as an increasing number of countries take not only interest but action in the industry – ranging from creating new legislation to planning to issue CBDCs.

Already, this is manifesting itself in the U.S. as Congressman Paul Gosar looks to bring greater clarity to cryptocurrency regulation in the country with a proposed bill entitled "The Crypto-Currency Act of 2020," which is purported to define how different United States regulatory entities should classify and regulate digital assets. This bill was announced in mid-December and will continue to be monitored by players in the industry as well as our Team at Enigma in the hopes the 2020 brings greater regulatory clarity to the crypto space.

## South America

### Venezuela

Cryptocurrencies continue to be popular in South America, particularly in those countries whose national currencies are inherently volatile, such as Venezuela. As reported by Cointelegraph, amid consistent devaluation of the national currency in the country, the volume of Venezuelan bolivars traded against Bitcoin hit an all-time high this month, breaking previous records. This comes as the government is promoting its national oil-backed Petro cryptocurrency, issued notably as part of an effort to circumvent U.S.-imposed sanctions on the country. In fact, according to an announcement by Venezuelan President Nicolas Maduro, the government planned to pay half a Petro to part of its older population as their Christmas bonus for the year.

The case of Venezuela and the enormous popularity of cryptocurrencies, and especially Bitcoin, amongst the population is often brought up as a prime example in favor of the decentralized system envisioned by the King coin's creator, Satoshi Nakamoto. Indeed, it provides the population a means of avoiding the questionable and politically charged economic policies of the country. However, at this stage data suggests this interest in cryptocurrencies is primarily driven by the facilitation of its exchange for USD, a more stable currency, as opposed to a more direct desire to mainstream the crypto industry. Nonetheless, it is developing countries such as Venezuela that will become key players in the legitimation and widescale adoption of digital assets, as the benefits of a decentralized system become more apparent in countries with weak or growing economies, and/or political instability.

### Argentina

In South America, this is further highlighted by Bitcoin and altcoins popularity in Argentina, another country suffering from high inflation, where the Central Bank has banned the purchase of Bitcoin. As reported in our Monthly Report for the previous month (November 2019), this ban has adversely affected Bitcoin purchases in the country, with Bitcoin trading volume soaring post-ban. In December, it now reaches new all-time highs once more as the year approaches its end.

### Brazil

Meanwhile in Brazil, the country's tax authority, the Department of Federal Revenue (RFB) has issued new regulations in follow-up to its previous crypto tax code issued in this past summer, requiring taxpayers to declare all their cryptocurrency transactions. The cryptocurrency market in Brazil is an extremely desired avenue for the country's investors, indicating once more the role to be played by developing economies in the legitimation of the crypto space.

### Paraguay

Finally, in news in the region, the government of Paraguay is set to roll out a series of cryptocurrency regulations in the new year in a first for the country, as it gathers information through a large-scale national audit to understand the scale and presence of the crypto industry within its borders. As reported by CoinDesk, this move comes after as pressure increased on Paraguay's government following the issuance of the Financial Task Force's (FATF) June recommendations on Virtual Assets and Related Providers (VASP). As the new year takes over, our team at Enigma will continue to monitor the temperature and state of the crypto industry in the country

## Africa

### South Africa

This month, South Africa becomes one of the latest countries planning to issue new regulation for the use of digital currencies, set to be implemented in Q1 FY20. While still relatively undefined, reports suggest that these regulations to be introduced by the country's central bank – the South African Reserve Bank – are aimed at restricting the use of cryptocurrencies for the purpose of evading currency controls.

Already cryptocurrencies, and especially Bitcoin, have proven to be extremely popular in South Africa, with the country ranking second in the world after Nigeria in online searches for the term "Bitcoin", according to Google Trends. In addition, according to the Global Digital Report 2019 conducted jointly by global agency Wearesocial and social media management company Hootsuite, South Africa further ranks as the top country for cryptocurrency ownership, with a reported 10.7% of internet users in the country owning some form of digital assets.

This comes as an important indication of the central role African countries will come to play in the widespread adoption of cryptocurrencies. In combination with the development of Blockchain technology, these will have a profound effect on the development of African economies, especially those whose national currencies experience frequent volatility and devaluations. Another important driving factor will the common occurrence cross-border remittances which play a critical role in developing societies. In the case of South Africa, the country consistently ranks amongst the most expensive in the world from which to send money despite the existing large flows of remittance payments to other countries in the Southern African Development Community. Thus, by leveraging digital asset technology, the African continent has the enormous potential of becoming a key player in the industry in the coming years.

## Middle East

Iran

As U.S.-Iran relations remain tense, Iranian President Hasan Rouhani is looking for ways to bypass sanctions imposed on his country and the U.S.' dominance in the global financial structure, by notably citing the possibility of Muslim countries creating a Muslim cryptocurrency, in a speech he delivered at as Islamic conference in Malaysia on December 19th. This, amongst other efforts cited such as the use of exclusively local currencies, would reduce these countries' reliance on the U.S. Dollar, and by extension – the leverage the Western power has over them, Rouhani reportedly argued.

This proposal to create an alternative to the U.S. Dollar was seemingly supported by Malaysia. This marks the next in a series of cases of countries, including particularly rogue states, that are increasingly turning to digital assets as a way to protect their economies from internationally imposed sanctions, suggesting the extent of the transformative power cryptocurrencies possess to upset the current world order, through the revolutionization of its financial system.

# Bull and Bears by the Numbers

This past year has been a roller-coaster year for digital assets, as prices soared to highs not seen since the 2017 bubble in the summer, only to turn bearish in the second half of the year, descending all the way to December.

Many factors have affected these price changes (see *Spotlight*), but what the year will most likely be remembered for is the increased efforts by international regulators to bring clarity to the crypto space.

Furthermore, based on the industry's overall performance, institutional interest in digital assets is once against growing, and we can expect greater attention being paid to it in 2020, with many financial investors having already expressed their interest in allocating part of their assets to the crypto space.

| Ticker | Price 31.12 | 7D | 1M | 6M | 12M | Cap 31.12 |
|---|---|---|---|---|---|---|
| **BTC** | 7195 | -1.06% | -2.94% | -37.90% | 77.85% | 130B |
| **ETH** | 129.6 | 3.12% | -12.88% | -57.83% | -14.19% | 14.3B |
| **XRP** | 0.1933 | 1.39% | -13.55% | -52.12% | -47.39% | 8.4B |
| **BCH** | 205 | 8.62% | -5.25% | -51.10% | 26.38% | 3.7B |
| **LTC** | 41.2 | 3.69% | -9.85% | -65.63% | 9.58% | 2.6B |
| **EOS** | 2.6 | 3.57% | -5.13% | -56.86% | -6.02% | 2.4B |

## Bitcoin (BTC)

As the year ended, Bitcoin broadly remained in a $6,500 – $7,500 range.

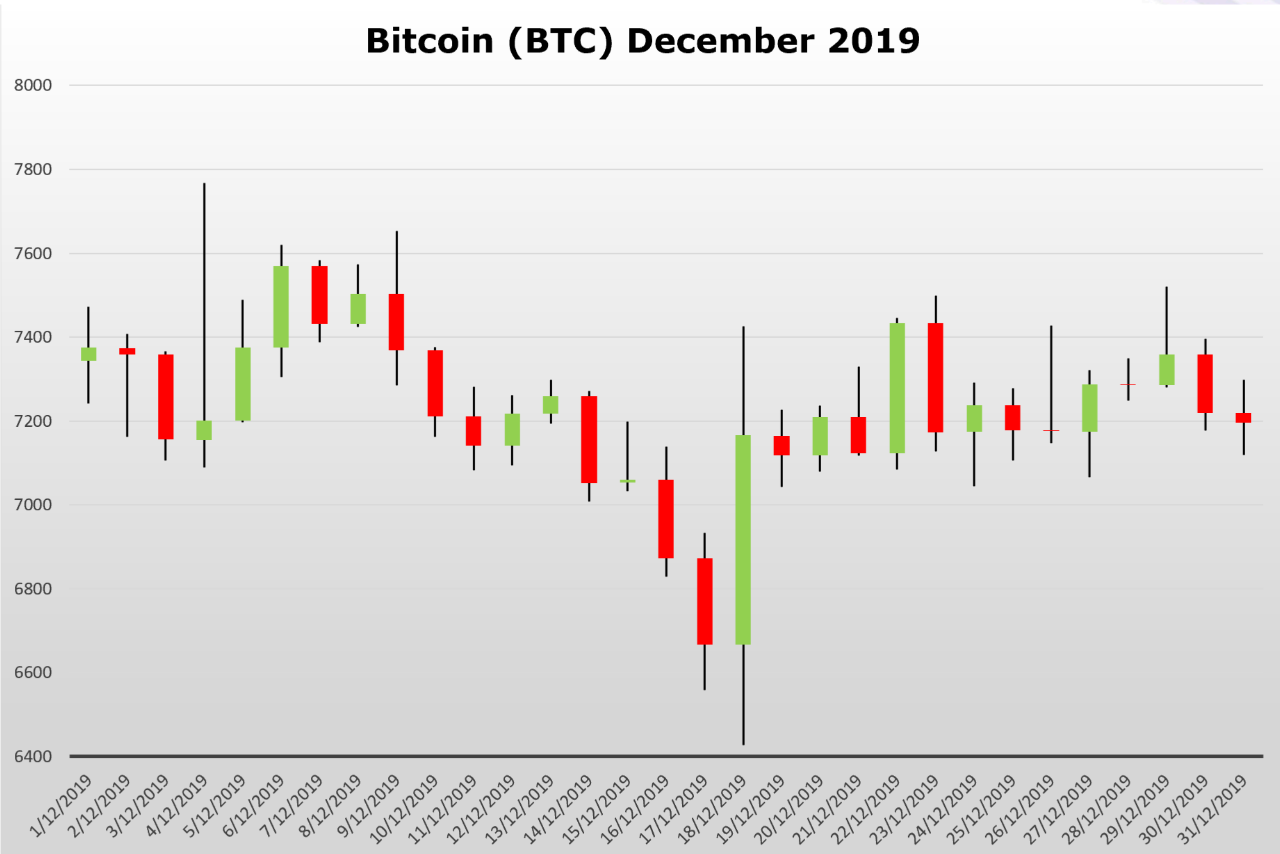
It opened the month trending at $7,343, reaching an early high breaking $7,700 on December 4th, after which it began trending downwards. On December 18th, BTC's price fell to an eight-month low of $6,427, raising fears of a stabilisation below $6,500.

However, a dynamic rally raised it back above the $7,000 range, to close the year at $7,195, which though a 2% decrease from its December opening price, marks a **yearly gain of 112%** from its opening price in January 2019.

Bitcoin traded this last month at an average volume of $20.4B, peaking at 31.8B on December 18th. With the Volume closing at a little over $20B, **2019 saw an 381% increase in BTC trading volume** from its initial $4.3B.

Bitcoin **market capitalisation also registered a yearly gain of 94%** closing out at approximately $130B, despite decreasing by another 2.8% ($3.8B) during the month.

In 2019, BTC reached its high on June 26th at approximately $13,796 and its low on February 8th at $3,391.



## Ethereum (ETH)

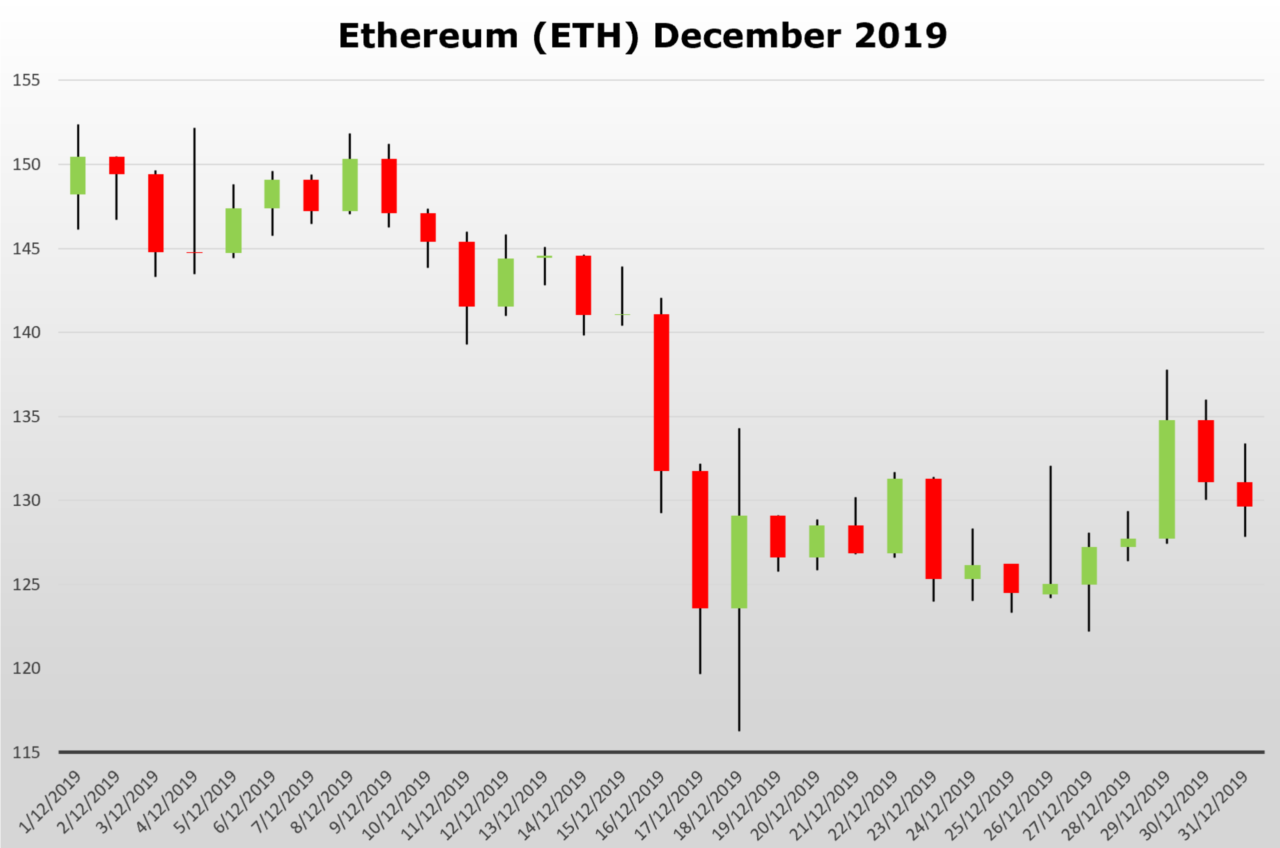
ETH experienced more pronounced losses in December 2019, falling 12.5% from its opening of $148 to its closing at $129.6, despite early gains reaching above $152.

Key dates for ETH this month are the days leading up to December 18th, which saw its biggest movements downwards for this period, bottoming out at $116 on the day in question, before rallying up to $129. Overall, **ETH experienced this year a decrease in value by 2.8%** from its opening price in January 2019.

ETH traded this last month at an average volume of $7.8B, peaking at 11.9B on December 18th. With volume closing at $8.9B, **2019 saw an 296% increase in ETH trading volume** from its initial $2.3B.

Unlike BTC, ETH **market capitalisation stayed roughly the same for the year, decreasingly slightly by 2.7%** closing out at approximately $14.3B, having lost 14% (2.3B) over the month of December.

In 2019, ETH reached its high on June 26th at approximately $361 and its low on January 28th at $103.



## Ripple (XRP)

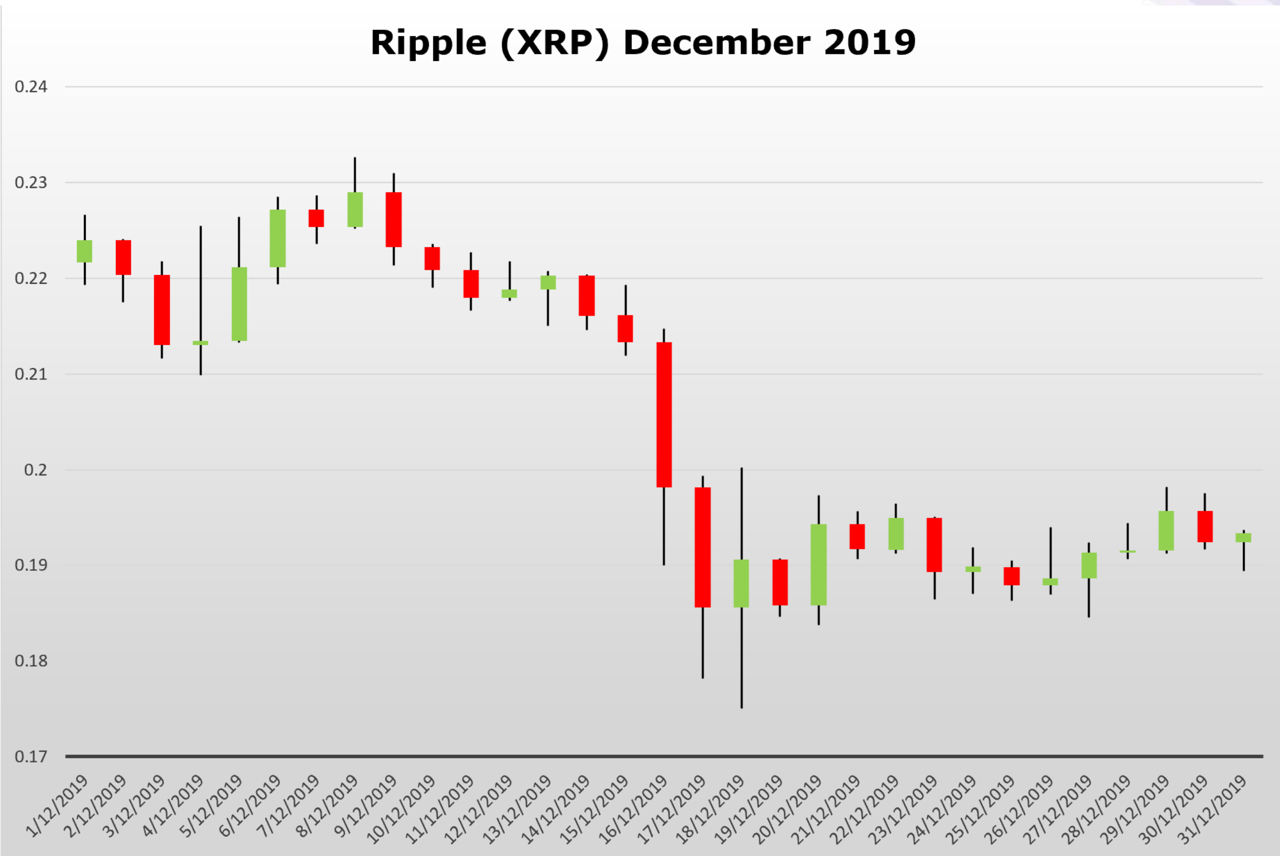
XRP charts a similar pattern to Ethereum, having fallen 12.8% from its opening of 0.2217 to its closing at 0.1933, despite early gains reaching 0.2326 on December 8th.

Key dates for XRP this month are the days leading up to December 18th, which saw its biggest movements downwards for this period, bottoming out at $0.1750 on the day in question, before rallying up to $0.1906. Overall, **ETH experienced this year a decrease in value by a staggering 45%** from its opening price in January 2019.

XRP traded this last month at an average volume of $1.3B, peaking at 2.1B on December 18th. With volume closing at $1.1B, **2019 saw an 148% increase in XRP trading volume** from its initial $450M.

2019 saw XRP **lose 43% in market capitalisation**, closing out at approximately $8.4B, having lost 14.3% (1.4B) over the month of December.

In 2019, XRP reached its high on June 22nd at approximately $0.5054 and its low on December 18th at $0.1750.



## Bitcoin Cash (BCH)

As with all other cryptocurrencies we explore, BCH charts a similar pattern in the first half of the month, slopping down in the days leading up to December 18th to its monthly low of $169.8 on the day in question.

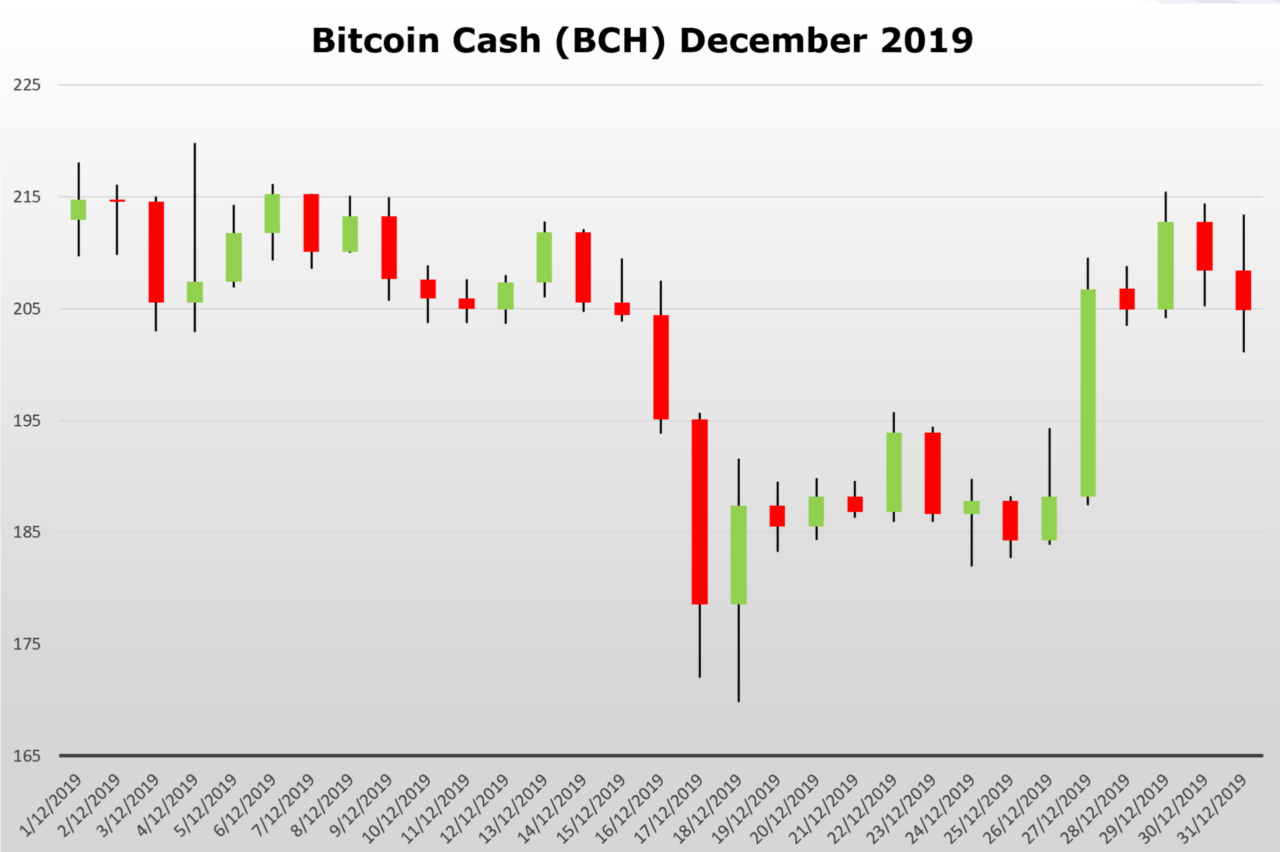
However, BCH managed to rally towards the end of the year to close at $205, a 3.75% decrease from its monthly opening of $213.

Overall, **BCH experienced this year an increase in value by 35%** from its opening price in January 2019.

BCH traded this last month at an average volume of $1.47B, peaking at $2.5B on December 18th. With volume closing at $1.7B, **2019 saw a 540% increase in BCH trading volume** from its initial $268M.

2019 saw BCH **grow its market capitalisation by 29%**, closing out at approximately $3.7B, having decreased by 5% ($198.5M) over the month of December.

In 2019, BCH reached its high on June 26th at approximately $482 and its low on January 28th at $109.



## Litecoin (LTC)

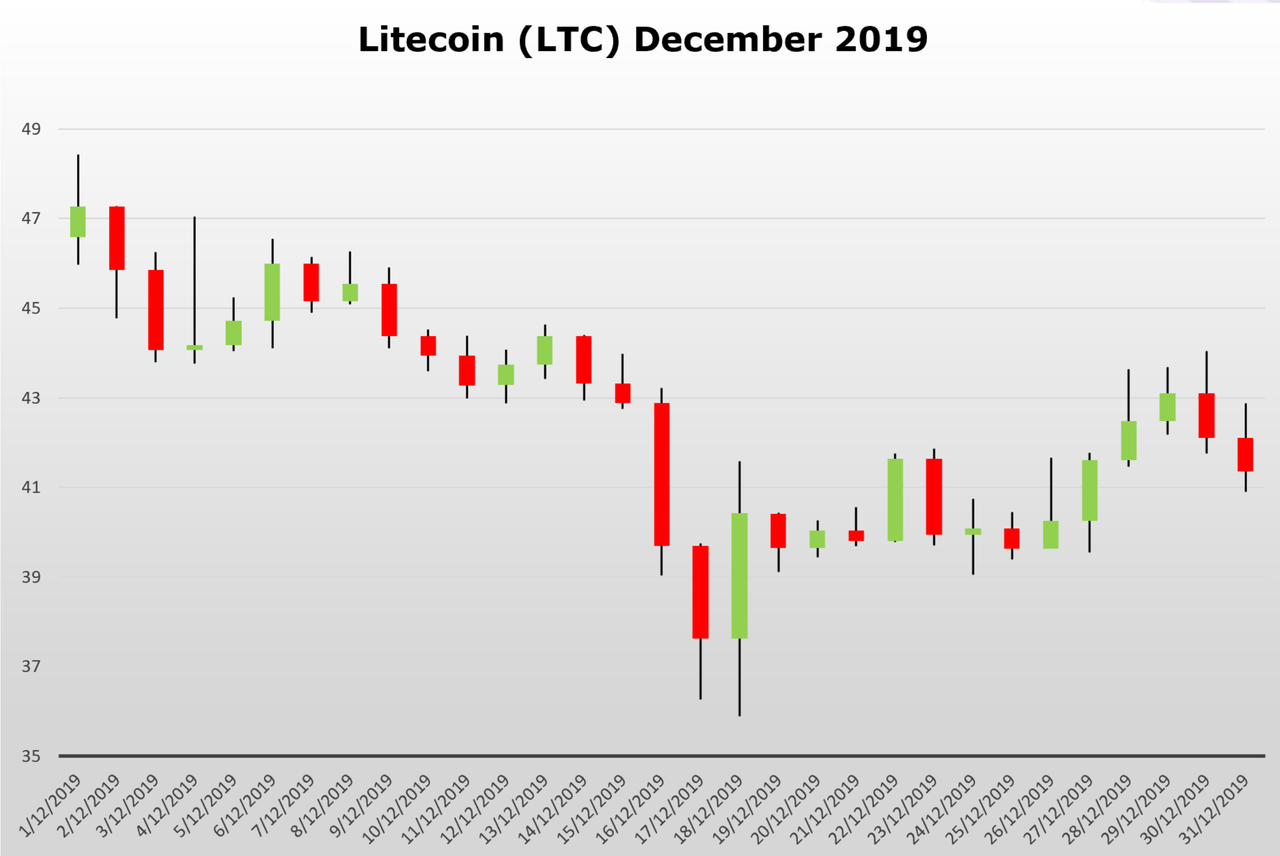
LTC has trended bearish this past December, following a similar pattern to other coins in the days leading up to December 18th to its monthly low of $36.7 on the day in question. Rallying towards the end of the month, LTC closed the year at $41.2, a 12.9% decrease from its monthly opening of $47.5 .

Overall, **LTC experienced this year an increase in value by 35.7%** from its opening price in January 2019.

LTC traded this last month at an average volume of $2.87B, peaking at $3.8B on December 18th. With volume closing at $3.0B, **2019 saw an 695% increase in LTC trading volume** from its initial $379M.

2019 saw LTC **gain 38% in market capitalisation**, closing out at approximately $2.6B, having fallen 13.3% ($405M) over the month of December.

In 2019, LTC reached its high on June 22nd at approximately $142 and its low on January 13th at $30.3.



## EOS (EOS)

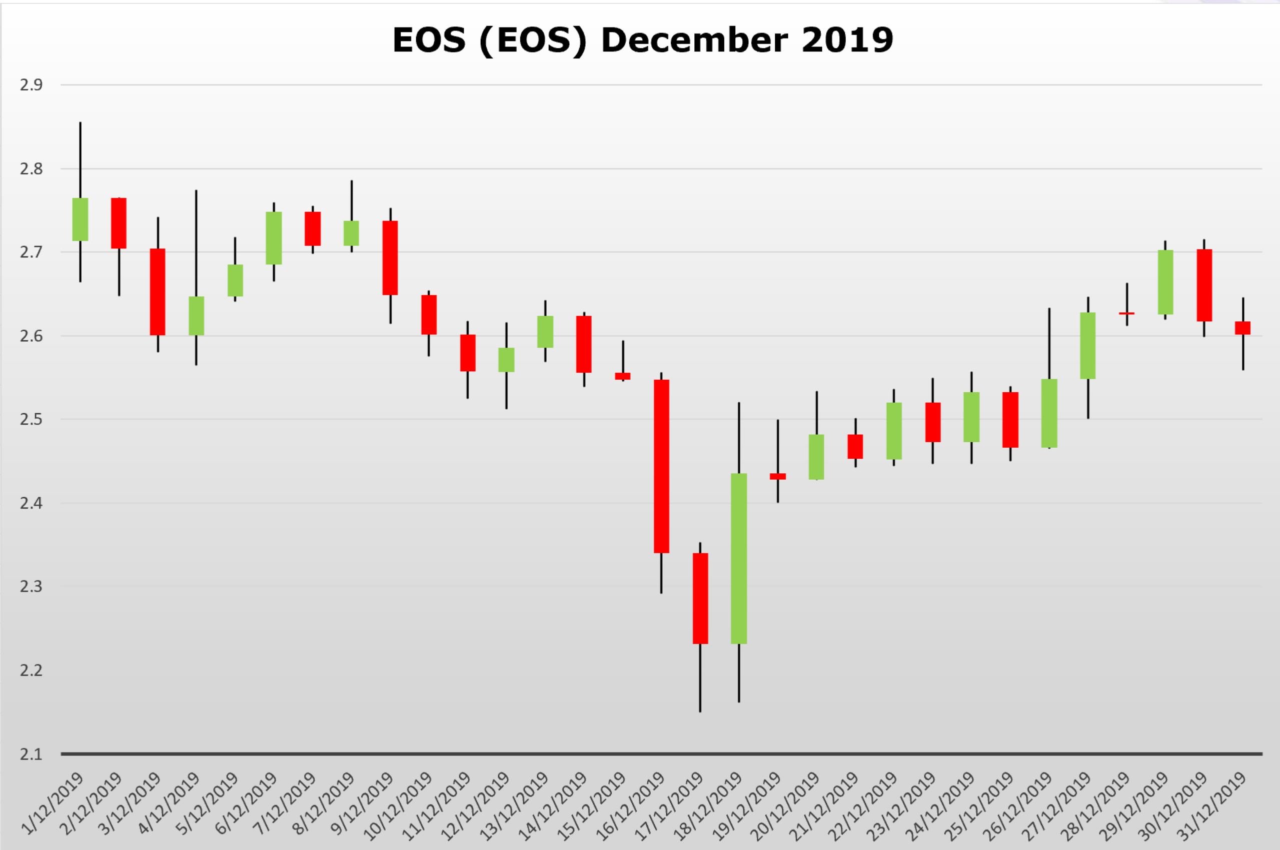
EOS has followed a pattern close to BCH and LTC, trending downward in the days leading up to December 18th, reaching its monthly low of $2.15 on the 17th, and rallying as the end of the year approached to close out at $2.6, a 4% decrease from its $2.7 monthly opening.

Overall, **EOS experienced this year an increase in value of only 0.4%** from its opening price in January 2019.

EOS traded this last month at an average volume of $1.65B, peaking at $2.7B on December 18th. With volume closing at $1.56B, **2019 saw a 131% increase in EOS trading volume** from its initial $2.4B.

2019 saw EOS **increase by only 1.2% in market capitalisation**, closing out at approximately $2.4B, having fallen 6.7% ($175M) over the month of December.

In 2019, EOS reached its high on the 1st June at approximately $8.29 and its low on December 17th at $2.15.



## Monthly Spotlight

### Reflections: Transitioning to the Blockchain 20s

In this first decade following the 2008 financial crisis, the tech 2010s brought with them the discovery of a revolutionizing technology for the global financial system – virtual assets. Now, in this time of reflection as we transition to the new decade, we look to the past in order to understand the future.

Today, the still nascent digital asset industry is finding itself at a turning point. With the long Crypto Winter finally showing signs of wither, an elusive spring seems poised to emerge, bringing alongside the hope for greater industry growth and widespread adoption. It is therefore at this critical time junction that our team has chosen in this month's Spotlight issue to look back and examine the biggest events and developments of 2019 which will continue to resonate and shape the industry in the year to come.

#### Bitcoin's Summer Splurge

As the year began and Bitcoin celebrated its 10th anniversary, Q1 was marked by a stable trend, turning bullish at its closing. Indeed, after a long period of fighting for the resuscitation of the digital asset industry in 2018, 2019 progression slowly fuelled the resurgence of crypto to the global scene. One of the primary markers of this renewed attention was Bitcoin and correlated altcoins' price performances over the summer.

Contradicting premature declarations of the industry's death, Bitcoin's spring rally initiated a bull run which dragged its price to a new high not seen since the 2017 bubble. On June 26th, the King Coin reached up to its annual high of approximately $13,800, before turning back to slowly descend back to the $7K range by December.

There are several factors that have been tied to this impressive display, first and foremost of which is Facebook's May confirmation of plans to launch the Libra stablecoin. Accordingly, initial hype surrounding the project turned the international spotlight on the crypto industry for the first time since 2017 and propelled Bitcoin and altcoins upwards. But as the full implications of a global digital currency began to sink in, awakened fears amongst politicians and lawmakers worldwide lead to the start of the projects still ongoing regulatory troubles. These were particularly gruelling considering the social media giant's 2.45 billion of active users, of which even a portion could contribute to a revolution of global financial structures and, cosnequenctly, uncertain consequences for the global economy.

With these concerns turning to regulatory action, Bitcoin and altcoins slowly began to decrease in value following a long bear trend through to the end of the year. As the planned launch of Libra in 2020 continues to approach, we can expect the results of Facebook's efforts to reconcile its stated desire for full compliance with the competitive aspect of a global crypto race to continue to echo throughout the industry in the new year.

A second influencing factor has been the global rise in international and domestic political tensions. The protests in Hong Kong, hyperinflation in Venezuela, Brexit in the UK – all of these events point to the fact that we live in increasingly uncertain times.

Studying behavioral investment patterns, financial analysts have tied this feeling to an increasing number of investors turning to cryptocurrencies, and specifically Bitcoin, to hedge against these political and economic turbulences. This behavior has especially been tied to the protracted U.S.-China trade war, ongoing throughout the year. Thus, with Bitcoin being increasingly treated as a haven in times of turmoil, its trading volume has consistently risen over the past year, as the coin comes once more to be known as "digital gold." As reported by Cointelegraph in September, proof of this behavior manifested itself in August, when Bitcoin's price fell over 7% amid a de-escalation of tensions between both economic powers.

It is consequently highly likely that such behavior will continue to affect the prices of various cryptocurrencies, and especially Bitcoin, in the future to come. Of course, due to the inherent nature of virtual assets, their valuation is especially tied to global human sentiment towards the industry, more so than any other traditional asset class. Nonetheless, by virtue of this reliance on the fundamental workings of human psychology, Bitcoin's impressive growth over the past year as one of the best performing assets, as well as its unparalleled performance in the last decade can be taken as a reliant metric measuring a continuing and growing interest in the industry. Of course, this means that political and economic events will only persist in affecting the price in 2020, and with concerns of an approaching recession we might see further radical movements.

Finally, an important event which will continue to drive global Bitcoin adoption comes from a technical perspective – the development of the Lightning Network. One of the biggest technical concerns that has plagued Bitcoin since its creation is the issue of its scalability. New blocks get added to the chain every 10 minutes, amounting to approximately 7 transactions per second. However, when considering the number of transactions per second processed by SWIFT or VISA, the blockchain appears as an inefficient system for global implementation. But though a global consensus on a solution to this problem has yet to be reached, the Lightning Network could prove to bring that ideal closer to fruition.

Just like Internet before browsers and applications, before transport layer security and the development of the internet protocol suite as we now know it, networks looked substantially different. And though it is now hard to imagine a world without the World Wide Web, many at that time dismissed the idea of developing a global network that could be mainstreamed for daily use. Today, the blockchain is in a similar state. Thus, the development and testing of its second layer, the Lightning Network, holds crucial importance to the future growth of the industry. Emphasizing this is the fact that many other blockchain developers for a variety of other cryptocurrencies are now working on a similar project.

As a result, though still in a developmental stage, a potential partial solution to the scalability problem has generated intrigue into the positive effects on widespread adoption, in addition to the various possibilities for usage it will bring. Some, including steadfast Bitcoin supporter Tim Draper, have predicted that this new feature will cause the coin's price to soar to the six-digits by 2022. Therefore, with its continued testing and the increasingly innovative ideas generated by blockchain developers, 2020 is sure to experience even greater interest in the industry.

## The 'Libra Effect'

As previously observed, one of the most important events of 2019 was Facebook's formal announcement of its development of the Libra stablecoin, which caused Bitcoin and altcoins' prices to surge shortly after the release of its whitepaper on June 18th. Managed by the Libra Association, its launch is planned for some time in 2020.

Though initially greeted with positive interest, the groundbreaking potential of such a coin issued by the largest social media company in the world soon began raising a variety of fears amongst regulators and politicians worldwide. Amongst concerns raised have been the commonly heard ones of ensuring AML compliance and the risks of tax evasion. However, due to Libra's global nature, which would essentially circumvent traditional financial institutions in the matter of cross-border payments, many countries, China being first and foremost, have further expressed concern for the sanctity of their monetary sovereignty. These have naturally lead to much criticism over the project, even more so considering Facebook's reputation, which remains fraught with scandal following 2018 and concerns over the company's treatment of data privacy.

However, perhaps the most pronounced consequence of Libra's announcement has been the triggering of an international race by countries to launch their CBDC, the first in line of which is China. Indeed, in the case of the economic giant, China remains concerned over its national economic reliance on the U.S. Dollar, which would not improve following the launch of a global stablecoin by a U.S.-based company. Furthermore, as one of the world's most important quasi-cashless societies, not only does adoption not seem farfetched, but more importantly it would diminish the reach of the country's central bank over the finances of its population. Thus, though China has been researching and developing a form of a centralized digital currency for the past six years, it was the prospect of Libra that truly became a catalyst for its acceleration, with the country now planning to role out its CBDC in 2020.

In the United States and in many European countries, the announcement has not been greeted with greater enthusiasm. While France attempts to compete with China in the CBDC race, the remainder of Europe is cautiously evaluating the consequences of introducing a stablecoin into their economies. In fact, high-ranking officials from the European Union have repeatedly stated that they will not allow the launch of any stablecoin on their territories until they understand the full spectrum of benefits and drawbacks that such a move would entail. To the Libra management, who have committed themselves to full compliance, by promising to acquire all necessary permissions before launching, this has proven a difficult obstacle to overcome. At worse, it is one which can threaten to kill the project altogether. These disputes continue to this day, spilling over into 2020, and we can certainly expect more resistance on this front.

Paradoxically, should Libra fail or not in the face of its legal battles, the flurry of attention it has drawn has, in and of itself, been positive to the industry, even accounting for countries that remain hostile to them. The interest in developing a digital currency is one bell that cannot be un-rung, and has prompted regulators worldwide to step up their efforts to clarify their national stances, ensuring the digital asset industry no longer remains ignored. Therefore, 2019 was decisively marked by greater legislative attention, with many new laws, pertaining notably to KYC/AML, being drafted, issued and otherwise worked on. Of course, not all of these find their origin with Libra's announcement. Nonetheless, while lack of regulatory clarity has been an important impediment for industry players, the sense of urgency generated by Libra has and will continue to contribute to quicker legislation on digital assets worldwide, determining the formation of the future crypto landscape.

It is in this climate that the world welcomed the new year, which promises to be pivotal both for the direction of the industry and for global financial structures. In continuing from 2019, 2020 will see the result of the CBDC race, the fate of Libra, as well as being a key year for Bitcoin, with its scheduled halving in May. Overall, we can expect to see greater efforts to mainstream the industry over the next year, in addition to greater institutional interest, which has begun to blossom in 2019.

Finally, an interesting fact to consider about Libra is the origin of its name. Evoking images of the astrological sign represented by the scales, there have been speculation that it is actually a poke from Facebook CEO Mark Zuckerberg in his famous animosity towards Tyler and Cameron Winklevoss, who own a New York-based cryptocurrency exchange named Gemini, another astrological sign – symbolic for the Winklevoss twins. However, David Marcus has denied any such connection, stating that he and not Zuckerberg came up with the name.

# We Recommend Reading

## Enigma Weekly Research: De-Coding Crypt

(*https://www.enigma-securities.io/research*)

Enigma's clients have access to highly regarded research, including "De-Coding Crypto", a weekly report featuring our analysts' latest analysis on the market. Topics in the past have included the regulatory environment, upcoming market catalysts, as well as deep-dive analysis of pertinent themes in the crypto and blockchain spheres.

- ***Three concerns for crypto in 2020*** (2 January 2020)
  In this issue, our Research Team focuses on some potential stumbling points for crypto in 2020, including catalysts — and lack thereof — for another bull market, and the infrastructural questions at the heart of the industry that remain unanswered.

- ***Whither Canaan?*** (18 December 2019)
  In this issue, our Research Team takes a deep-dive look into recently NASDAQ-listed cryptocurrency mining hardware firm Canaan, looking at what's behind its decline in valuation post-IPO. It further assesses what this means for cryptocurrency prices more broadly.

- ***Alts in December: opportunities for alpha*** (11 December 2019)
  This issue focuses on the short-term outlook in December and beyond for non-BTC assets, and where potential gains might be seen. The team also discusses the regulatory situation around the crypto ruble.

- ***Bitcoin this December: freeze or thaw?*** (4 December 2019)
  This issue takes a look at the outlook for BTC in December 2019, and discusses whether the historically volatile month proves to be so once again. It further discusses the Telegram/GRAM situation going forward.

# About Us

Enigma Securities is a leading, regulated liquidity provider, offering its clients bespoke liquidity solutions through the use of a proprietary electronic trading platform and API access.

The firm was founded in 2017 as a subsidiary of Makor Partners Limited (UK), amid growing institutional demand for digital asset trading. Looking to seize the new, exciting opportunities presented by cryptocurrencies and blockchain technology, Enigma became one of the first regulated brokerage firms to set up banking relationships and custody solutions to meet institutional standards.

Since its launch, the firm has expanded its capabilities to the broader Fintech arena, leading innovation while working to bridge the gap between the traditional financial services industry and cryptocurrency markets.



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