

# Fear and Future of Cryptocurrency: An Introspection

*Mr. Shams Ul Hayat<sup>1</sup> and Dr. Nassir Ul Haq Wani<sup>2</sup>*

## 1. Introduction

There is no doubt that Cryptocurrency is a word that provokes a very strong response these days. On one hand, Team Crypto proclaimers the arena as the next big thing as they speak in blue sky terms about the future of this new form of currency that takes digital shape and is beyond restriction. In direct opposition is Team Tradition that warns of the perils of decentralization and fraud around pure digital currency. Indeed, there was nothing short of a frenzy around trading on the CBOE Bitcoin futures a few days ago, while the day after reports detailed a large digital heist surrounding Ethereum. Doomsday sentiment around this new area of tech convergence with that of the financial spectrum is plentiful. Just why is there so much fear around the area of cryptocurrency, and what will 2018 mean for this pioneering area, particularly as we move to a general cashless society that is easily driven and adopted by the massive Millennial demographic?

To answer this question, it's best to turn to those well-entrenched in the crypto area on a day-to-day basis. The following are real-time insights from a number of crypto executives as they see reasons behind the fears as well as key predictions for 2018 so that you can be prepared: Taking into light Konstantinos Karagiannis, Chief Technology Officer, Security Consulting Practice, BT Americas on why there is so much fear around crypto: There's fear on two sides: financial and technical. Financial is mostly that it's a bubble. Every time Bitcoin pulls back in price where as Technical is that coins will be: lost, stolen/hacked, or just plain frauds (as is the case with some ICOs). There are top three trends in this space for 2018 like Fraud ( We're not done with scams like ICOs that are not real, or sites that will get you into a 'pool' of some sorts for a set fee), Creative theft in the real world (Someone was just kidnapped to try and get their coins. This could get worse) and Hacking, of course (A lot of exchanges still make basic security mistakes. Ethical hacking needed here!)

Another speculation is from John Monarch, CEO of ShipChain, a block-chain based logistics software company, on why there is so much fear around crypto is that It's a new asset class that has taken the world by storm since Bitcoin first hit the scene. The volatility in the market often is what leads to the fear, but the excitement around the tech itself is outpacing that. I'd say most people actually involved are more happy about the evolution of cryptocurrencies and block-chain than they are fearful. His top three major trends in this space for 2018 are Regulation, Legacy companies entering the scene and Governments and businesses utilizing blockchain. Aside from just cryptocurrencies, government and businesses will figure out where blockchain has a place in their world and using this technology to better their operations.

*1. Assistant Professor, Kardan University Kabul Afghanistan*

*2. Assistant Professor and Head, Research and Development, Kardan University Kabul Afghanistan*

Jim Angleton, President for Aegis FinServ Corp explains that on why there is so much fear around crypto is because CryptoCurrency space runs with the wind. Essentially the facts speak for themselves. They can be compromised via selected, targeted Cyber Intrusion leading to a hack with malware or ransomware. In addition, your unregistered (not registered with Blockchain) are safer from hack than Registered. His top three trends in this space for 2018: We see Blockchain becoming more diverse and adaptive offering new methods of privacy, security, ID security, Metrics to Secure online service and more, 108 Countries are experimenting with issuing digital currencies in favor of eliminating their paper currency and exiting dependence upon the USD. We believe 20+ Countries will begin Beta Testing towards their goals, Bitcoin will see less “buyers’ and more sellers. Once this occurs the price per coin will reduce and or it could be classified as a ponzi style investment. The flip side is bitcoin continues along with their ETF Investment theories and become priced much higher thus leaving many individuals to lose interest.

Peter Loop, a blockchain expert with IT services and consulting company Infosys decided to get right to his top three trends in this space for 2018 are that with the rise of ransomware attacks demanding cryptocurrencies, blockchain and IoT cybersecurity will emerge with defenses based on cryptocurrency technologies, blockchain will drive digital transformation of the enterprise specifically with automation, digitization of processes, tokenization of physical assets and activities and codification of complex contracts and JPMorgan will open a cryptocurrency trading desk, despite Jamie Dimon’s viral ‘fire in a second’ comments to any JPMorgan trader who was trading bitcoin.

In short, 2018 will be a roller-coaster ride when it comes to this new area of tech. Below is a quick infographic from Coinlist to help you stay a bit ahead of the curve. But in such a wild west scenario as cryptocurrency, there will be new developments in the game probably before you reach the end of the image below. Stay tuned for much more in the year ahead.

## 2. Will our future be in Bitcoin?

Bitcoin was created to work outside national currencies, which is a draw to people who don’t trust central banks. The issues of privacy also stop it from becoming the future of money. “Bitcoin is problematic in that it provides too much privacy and not enough privacy,” Traditionally, we think of money as a kind of means of exchange and a store of value, but Bitcoin is best at the means of exchange, but not very good at the store of value.” The future likely won’t be based on bitcoin.

*Economists studying cryptocurrency and computer security experts agree: The future likely won’t be based on bitcoin. Of course, that’s not to say that the future won’t be based on other cryptocurrencies.* In the meantime, bitcoin will remain as a grand test of the block chain technology. “When bitcoin finally fails, I think we will look back on it as a really important, valuable experiment in which more lessons will be learned than there will be loss.”

## 3. A shift In the Financial System

“I think the whole idea is probably horrifying to the bitcoin people, but it’s the ultimate harbinger of success when the person you’re trying to defeat co-opts your own plans and turns them against you,” says Yermack. “The ultimate victory is where the central bank co-opts their technology and

makes it the basis of their own operation. And I can see it very clearly play out that way,” Yermack says. “Monetary policy and financial stability — I think those problems will be exactly the same in 50 years.” But in 50 years, a nationally backed cryptocurrency could replace the paper dollar, he says. When it comes to the future of money, crypto currency’s influence will be felt in its improved ability to avoid technological problems like hacking, Ryan says. Based on the issues of cybersecurity looming ahead, Ryan thinks that the blockchain will be the technology to transform the money of the future. Blockchain could make its way into the mainstream in two primary different ways. One option is to switch from physical to digital currency. A dollar would still be a dollar, but transactions would use blockchain to make them more secure. The second way would be to move your bank account from something like Citibank and transform it into an account in the Federal Reserve itself. If all of a nation’s money were centralized, it would make the Federal Reserve more efficient at its job of stabilizing and regulating the economy, says Christian Catalina, assistant professor at MIT’s Sloan School of Management who studies the economics of cryptocurrency.

Some institutions are beginning to try it. Estonia is working to create an e-Residency program, and part of their plan includes launching the estcoin, the world’s first national cryptocurrency. The Bank of England is working to create its own cryptocurrency and has created an experimental cryptocurrency framework called RSCoin that would use a centralized system. To go crypto, the Bank of England would create digital money as if it was printing physical notes. For example, in 2017, there were 73.2 billion British pounds in circulation. A British economy using only cryptocurrency would have the same fixed number of pounds, just represented by a digital “coin” instead of a physical note. Since the value of the British pound is based on how many are in circulation, exchanging a physical note for a digital one has no economic significance — that is, a pound is still a pound, says Yermack. Like bitcoin, RSCoin would use a public ledger and the cryptographic system to distribute money.

In their paper on the RSCoin model, the authors write that a cryptocurrency backed by a national bank should help make cryptocurrency usable on a larger scale, since the central bank could employ other institutions to do the computations to verify transactions. In a model with one central bank and only 30 commercial banks, RSCoin could make 2,000 transactions per second — not quite up to VISA’s speed, but certainly fast enough for British citizens to move about their financial lives quickly and securely. For a consumer, a centralized cryptocurrency won’t change much, says Catalini. “[Consumers] will just see cheaper prices in the denomination they’re familiar with, and blockchain technology may be used in the background to offer new or better types of financial and payment services.” So with a national cryptocurrency, bank fees would likely drop, and money transfers would happen faster.

And with national cryptocurrencies, it will be more difficult to conduct illegal activity. Even with the anonymous ledgers used today, governments can track users and financial information, says Aniket Kate, a computer scientist at Purdue University. Since all transactions on the blockchain are recorded on every connected computer, it would be difficult to hide financial indiscretions from the government, Kate says. Over the next fifty years, Yermack thinks that law-abiding citizens, banks, and governments alike could benefit from moving to some form of digital currency. “There is a huge opportunity cost in not making the central bank more efficient,” says Yermack. “I think what you’re really going to need in the long run is a reorganization of the branches of government and probably more levels of political

control over the central bank.” As countries creep closer to creating their own cryptocurrency, they will have to decide just how private they want transactions to be. Bitcoin’s famous openness might not be so appealing for *all* transactions — you might not like it if your neighbor could see that you’re buying vibrators and cat food in bulk (of course, you could also find all their weird purchases). However, cryptocurrencies can protect user privacy in varying degrees, Kate says; a future system could inhibit your neighbor’s prying eyes. But the issue of privacy is potentially more of a social problem than a technical one. In Norway, all tax records are public knowledge. In other parts of Scandinavia, electronic banking is also on the public record, says James. Citizens of Denmark, Sweden, Norway, Greenland, and Iceland rarely use their physical currencies, James says, making those countries a microcosm for a possible future of digital-only currency.

*“The only question that seems to be open is: would it be the kind of Scandinavian system we talked about, where every transaction can be monitored [and] that lends itself to a surveillance state?” James asks. “Or will it be a kind of Bitcoin-like system, where there is an anonymity built in?” As countries start to make the switch to digital currencies, their societies, along with the governments themselves and the economies upon which all rely, will have to figure out how to adapt.*