Cryptocurrency

Too Cryptic for you?

IQ Capital Group

"smart thinking"

Considering its seems impossible to turn on the news, pick up a newspaper or even have a coffee without the cryptocurrency topic being the all-encompassing focus of debate, little is either actually known about this asset class or as polarising as its validity... The fact is it is complex, unregulated and evolving, and the term "currency" possibly misleading.

Given the emerging nature of the sector, the meteoric rise of certain currencies, the volatility, and obscurity of founders and participants alike as well as the difference in the "cryptocurrencies" themselves we certainly make no claims of authority on the subject. We have however researched, read and debated the various points of view in order to establish a "beginners" foundation on the topic and some common principles that may be an introduction to some, an alternate point of view for others or the catalyst for further debate or exploration.

The beginnings…

In late 2008 a man introduced himself to the world as Satoshi Nakamoto and announced he had developed a Peer to Peer Electronic Cash System. He called it Bitcoin, the first Cryptocurrency.
In January of 2009 further detail was released when Satoshi stated when announcing the first release of Bitcoin "A new electronic cash system that uses a peer to peer network to prevent double spending. It's completely decentralised with no server or central authority…"

Great.., but what does that mean?

A cryptocurrency is basically another term for virtual currency or digital currency, and some seemingly exist to meet the same purpose of any "currency" whereby it is a medium of exchange, specifically its fundamental use as money, and its exchange for a myriad of products and services.

Dissecting the terminology a little further will help greater understand what it is and how it works.

The "crypto" in cryptocurrency refers to cryptography.

Cryptography in its original context was the practice of encrypting information into secret code in order to preserve its integrity and a means of securely exchanging information. In the cryptocurrency environment this generally refers to the practice of mathematically generated code and computer science in order to create a secret algorithm that securely creates and accounts for each unit of digital currency, which are mostly referred to as "Bitcoins" or "altcoins" collectively known as cryptocurrency.

The "decentralised" refers to its peer-to-peer platform, P2P, which in essence is a virtual network of participants in an open source environment where the architecture, resources and workload etc. are shared amongst its "peers".

Given that the P2P platform is the fundamental basis and point of difference of cryptocurrencies, as opposed to conventional currency, it is worth analysing further this influence.

P2P when in the context of cryptocurrency, in particular Bitcoin and some 500 other "coins" now in circulation, means the system works independently of any central bank, administrator or authority. This means that each unit of currency is transacted without an approving central authority but rather the collective consensus directly amongst its users, or "peers", with each and every transaction recorded by an open source ledger known as a blockchain. The blockchain is a connected network of nodes that verifies through cryptography each and every transaction or creation of new "coins", adding them to the blockchain on completion and distributing publicly through its relevant software the transactions for all to see.

This decentralised, computerised "ledger" is the overarching record of each and every unit of currency and transaction. Once specific mathematical conditions have been met, a new "block" or entry in the ledger is created which is always related to the preceding block and the foundation of the next future block, which by nature is constantly growing and evolving, and relies on multiple users within the P2P platform to authenticate and validate each unit of currency and update to the ledger which can't then be altered once it is part of the blockchain.

This system is completely opposing to the established framework, or the "norm" that we, society, generally take for granted and participates in on a daily basis. That is a central authority or administrator that controls the supply, transaction and ostensibly value of currency. At a macro level this is fiscal policy of governments, the administration of this policy through its agencies, such as welfare and tax agents, and the major banks within the jurisdictions in which they operate. At a micro level, which we would generally readily relate to, are our local banks and tax agencies. From this perspective our "central administrator" would be the ATO accounting for each unit of currency we have, our bank manager validating if the transactions we have instructed can occur or if a foreign currency transaction is to an authorised recipient etc. all of whom possess our personal information and maintain a ledger of our transactions, available funds and passwords.

Noteworthy is the fundamental principle of verification and authority over every single transaction in any payment or exchange system in order to avoid fraud and maintain integrity and legitimacy. In any payment system the rudimentary requirement is the authenticity of its transactions and balances, the comparison here is the different ways in which this objective is achieved. Cryptocurrencies use progressive methods of cryptography and blockchain whilst the traditional framework is one of trusted third parties acting as trustees and central administrators.

So, I think I know what it is, but how do I get some and how does it work..?

Well, like all currency or assets they are acquired through investment or personal exertion.

Investing in cryptocurrency is today much like any investment in that you may invest your conventional currency and purchase cryptocurrency. Like most trading platforms for particular asset classes, there are many cryptocurrency platforms through which you can establish an account very easily, most often for free and minimal details such as a user name and email address. Also like any asset class is the ability to invest fractionally in the currency, i.e. part of one coin or unit, and again not unlike other asset classes is the importance of choice, that is choice of the cryptocurrency and the trading platform through which you engage. The volatility and risk of this sector at the moment is as astonishing as it is unregulated, which demands careful consideration of the currency you chose as well as the platform you trade with.

Seasoned traders tips are to choose a trading platform that demonstrates significant volumes, this helps to avoid scam activity as well as offer liquidity in buying as well as selling cryptocurrencies.

You will notice when reviewing the list of cryptocurrencies on various bourses the notation that numerous coins are "minable".

We feel this is where the true philosophy of cryptocurrency as a decentralised, peer-to-peer electronic cash system is exemplified. This mining activity across a P2P network epitomises their disruptive, progressive and revolutionary interpretation of the way forward.

Miners are entities within the P2P network that provide the "bookkeeping" service required to maintain and develop the blockchain. They decipher the cryptographic code of the preceding block and arrive at a mathematical algorithm that authenticates the latest block of transactions and allows this new block to be added to the blockchain for peer verification and the update to the public ledger of cryptocurrency transactions.

In providing this peer service to the network a fee is earned each time you successfully solve the equation required to update the blockchain, and anyone who feels they have the skills, time and tools to provide this service can participate and earn these fees for their efforts.

In saying this however, and it is during discussing and researching this element that the pioneering nature of cryptocurrency really comes to life and incites the notion of the gold rush of a bygone era, deriving an income or return on investment through mining is in reality happenstance at best for the majority. The toolkit of a crypto miner is not a stake of claim and a pan but a diverse portfolio of cryptocurrency software and expensive computer hardware that all amounts to significant set up costs, time and ongoing running costs within a suitable environment to maintain computational power to continually process multiple algorithms and contribute to solving the cryptography of each new block.

Mining has become a cryptocurrency sub-sector in itself. Due to the onerous requirements of successfully mining the data and actually earning a fee "mining pools" have emerged where the resources of many participants work towards processing a new block collectively and fractionally share in the fees earned relative to their contribution.

In summarising this it would appear that for the majority of us if we want cryptocurrency we are simply better off "buying" it.

Much in the same way we may purchase foreign currency when traveling to another country and accept the exchange rate and our "money" equals a certain amount of "that" money, the same can be said for cryptocurrency. A review of a crypto bourse demonstrates that over 800 currencies are in circulation and the value of each unit of our "conventional" currency fluctuates wildly against the corresponding value of "digital" currency.

I think I know what it is, how it works, but I still don't get it..!

Well, you're not alone…

Whilst the majority of us by now understand in essence what cryptocurrency is, even if we don't completely grasp the complexities of how each "unit" comes to existence, we get that it is purportedly a form of cash, but still ask ourselves why do we need it, and what for?

It's at this point that the crypto debate becomes even more polarising, when asking why, what is and to what end is cryptocurrency relevant that everyone, the layperson and industry analyst alike, expresses an array of opinions.

It's very difficult to avoid digressing into the depths of analytical and technical argument of the merits of cryptocurrency when debating or trying to establish its "purpose", which to the layperson suddenly becomes very confronting.

We touched at the beginning on whether the term currency within cryptocurrency was misleading, and there is robust argument that indeed it is… And we agree.

The fact is that currency as a medium of exchange, primarily money, serves a very succinct purpose that is entrenched in our psyche. We understand its value, how we get it and what we can do with it.

It is entirely understandable therefore that when we interpret cryptocurrency we focus on the "currency" aspect and immediately try to apply real world tangible uses of this "virtual" currency and how it will interface in this practical application.

It is evident that the interpretation of the entire cryptocurrency sector has been moulded by the principles and structure of Bitcoin. Given Bitcoin is without doubt the forefather of today's cryptocurrencies and is also widely accepted as the benchmark cryptocurrency with many other digital currencies trading in and out of Bitcoin as an entry and exit point of virtual currency, this is also understandable.

However, a quick look at a bourse such as Coinmarketcap displays over 800 cryptocurrencies, yet very few of those would generally meet society's definition of a "currency", and fewer still would fulfil any of the real world tangible uses we try to apply to this purpose.

Bitcoin can be used as a currency, whilst not its sole use or even intended use, a growing list of over 1,000 merchants around the world demonstrates "real world" applications, one wonders however if these merchants a really embracing cryptocurrencies as the way forward or simply trying to impress their "progressive" qualities and gain exposure off the back of Bitcoins ubiquitous publicity.

In light of this though it is maybe more appropriate that the cryptocurrency sector be better encapsulated as a virtual or digital asset class.

There are many types of financial instruments that exist to serve a purpose, and from this point of view we may think of cryptocurrencies as another type of financial instrument or commodity, and in doing so better understand what objective we want to achieve and what cryptocurrency is best structured to meet that objective.

There are many idiosyncrasies within each currency, whilst the progressive philosophy is based in the decentralised P2P approach, others are more simply companies that manage a digital asset and act as an intermediary between assets and clients whilst charging fees for facilitating investment.

So, in determining whether you need or want to own cryptocurrency you should first decide for what purpose or outcome you desire.

In discussing, researching and debating this topic it is obvious that many objectives are being pursued.

Some are simply "forex" trading, albeit with digital currency, and investing fiat currency into cryptocurrency looking to take advantage of wild fluctuations and exiting back into fiat currency at a profit. Others are looking to cryptocurrency as a hedge against traditional stock market assets and fluctuations, whilst others are embracing cryptocurrency as the future and simply preparing now for the inevitable "future currency".

Given the lack of any formal regulation over a rapidly evolving sector there are those of course with only nefarious activities in mind. The potential for profit through scam activity has been realised on many occasions whilst others are simply collecting proceeds of crime through virtual identities and virtual currency.

Whatever the objective it is clear that cryptocurrency has certainly piqued mass interest.

The hype however in and around the cryptocurrency sector is no doubt somewhat misguided. Often based on a narrow interpretation of what cryptocurrency is, or the meteoric increase in value of some currencies promising overnight riches, it grabbed our attention. Whilst these riches have certainly been attained by some with early or astute investors reaping those significant gains, of greater significance are the losses suffered by others.

There is also significant environmental risk at the moment. As we have discussed the sector is largely unregulated with legislative policy being enforced on an ad hoc or kneejerk basis, and different jurisdictions allocating cryptocurrency to different asset classes for the purpose of regulation and taxation. The private sector has also applied its own measures in attempting to manage its potential exposure, with some financial institutions blocking the use of debit and credit cards for the purpose of acquiring cryptocurrency as well as account closures to businesses linked to cryptocurrency.

Despite all this, the uncertainty, the regulatory reform that many see as inevitable, the "bubble that has to burst", many mainstream, long established financial institutions, multinational organisations and governments around the world have also acknowledged what cryptocurrency has achieved, in particular Satoshi Nakamoto and Bitcoin, the proprietary and progressive technology in blockchain.

Many see this as the foundation of all future payment gateway systems, the future of energy supply, and a truly transformative approach on many fronts that has multiple efficiency applications across a diverse range of business that must be embraced in order to thrive and remain relevant. Whether cryptocurrency as a "currency" founds itself is yet to be seen, but the technology associated with it is certainly being embraced already and researched for alternate applications.

IQ Financial Planning remains focused on understanding new and emerging asset classes in order to truly offer its clients diverse advice.

If you are considering what investments are appropriate to you and will meet your objectives please don't hesitate to contact us and discuss how our award winning service may help.