

Blockchain, a libertarian panacea?

Blockchain, the technology underpinning Bitcoin, has given partisans of the libertarian movement unlooked for backing. This technology and its offshoots will soon give rise to number of solutions, over and above cryptocurrencies. Surely, we are at the dawn of an economic revolution? What might its consequences and implications be? Who would use these applications and lay down the legal framework that would govern these blockchain solutions? These are a few examples of some of the questions that we ought naturally to be asking ourselves.



Bitcoin, the start of a revolution?

Over the last few months, a profusion of articles, reports and other presentations have come out on this fascinating new blockchain technology. Its best ambassador is none other than the Bitcoin which has now reached highs that would have been unimaginable a few years ago, with one Bitcoin equalling about 15.000 USD. It is often said that this technology could spark a complete revolution in many sectors of economic activity, just as the internet did for all business activities. What is more, it could even take the very way our modern society is structured and turn it on its head. However, going beyond the purely technical workings of blockchain, which are difficult to explain because they are so complicated, nobody is raising

questions about some of the implications of its ever-widening spread. Blockchain was developed as the result of a venture driven by libertarian ideals, with the underlying idea, initially, of side-lining intermediaries, such as central banks and even some government bodies. Might this decentralised system lead to a partial withdrawal of governments and their ancillary institutions from the role of intermediary?

Could blockchain become an instrument to serve libertarianism?

Blockchain technology is an innovation that operates in a decentralised way to make permanent records of transactions, such that they cannot be deleted. Each transaction has an encrypted block, containing one or more transactions and the data relating to them. These blocks are recorded in a digital block chain, each of which has been approved by the group. Before a block can be added, each node in the network must validate and approve it. What is more, the data stored in a block chain can never be deleted.

Blockchain could therefore be described as a sort of accounting general ledger or unchanging register of transactions that stores blocks of data shared on a network of computer nodes. This is often seen as having the merit of simplifying transactions, increasing transparency, reducing costs and reinforcing reliability. However, the most fascinating aspect of Blockchain is perhaps the way it can do away with the intermediary in dealings between parties to a transaction. Parties to a transaction who do not necessarily know each other can deal with each other, without supervision, with no intermediary and with no centralised third party. This is a totally new way of sharing value, money, information or contracting securely for ownership rights, while at the same time saving on administrative formalities.

The features of this decentralised register mechanism, which gives users more power, clearly chime with certain claims and values advocated in libertarian political philosophy. Satoshi Nakamoto, the creator of the blockchain, and the consortium that developed Bitcoin, certainly had libertarian aspirations and wanted to break free from the conventional monetary system. Nonetheless, it would be a mistake to go so far as to think that all Bitcoin users were libertarians. However, and sometimes without them realising it, they may be using a technology that has major features that dovetail with certain aspects of the ideal libertarian society. Blockchain might therefore be the technology that demonstrates the technical feasibility of taking some powers away from governments and passing them to individuals.

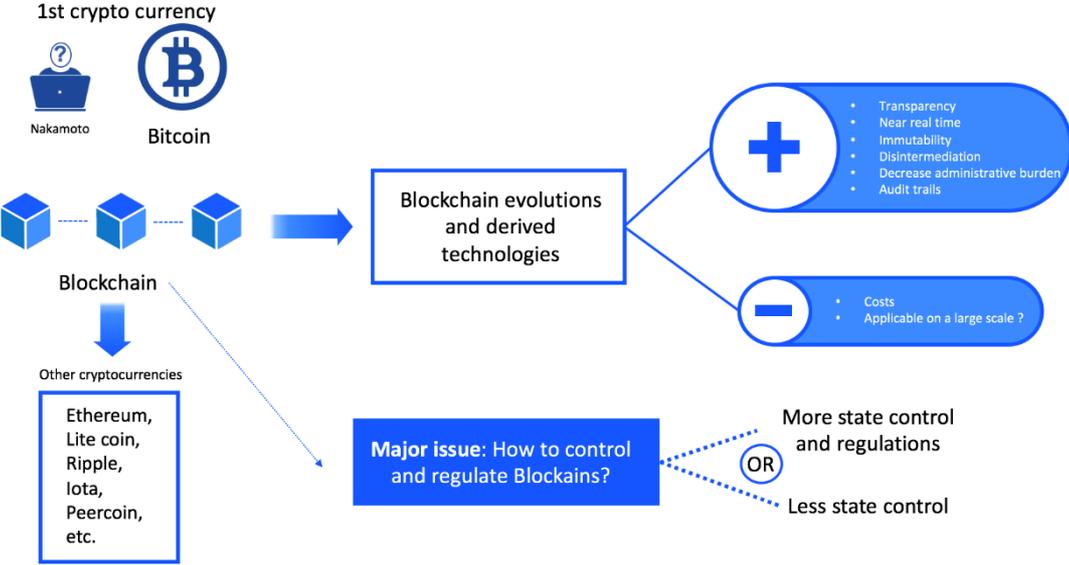
Libertarianism is currently in fashion

Libertarianism is alive and well, especially in the United States. This political and philosophical movement fundamentally regards individual liberty and individual property as natural rights. It also advocates free markets. Libertarians therefore put an overwhelming emphasis on liberty and deplore any unlawful infringement of it. From this perspective, governments ought to confine themselves to a minimalist role to keep any infringement by them of individual property rights to the lowest possible level. The most obvious form of this

infringement is taxes. This movement has taken tangible shape in the form of a Libertarian Party in the United States, drawing the main thrust of its programme from this ideology. During the election it established itself as the third largest party. Its results have improved steadily over the last few presidential elections. In 2016 the Libertarian candidate won 4,489,221 votes, or 3.28% of the ballot, whereas the 2012 candidate won 1,275,971 votes, or 0.99% of the ballot. Its partisans claim to transcend traditional political divides.

The merits of the blockchain seem to fit in well with libertarian ideology. However, while it may lead to the State losing some of its influence in certain spheres, the impact may be more nuanced, and we even need to allow for the possibility of it having the opposite effect.

Blockchain : the invisible technology that's changing the world

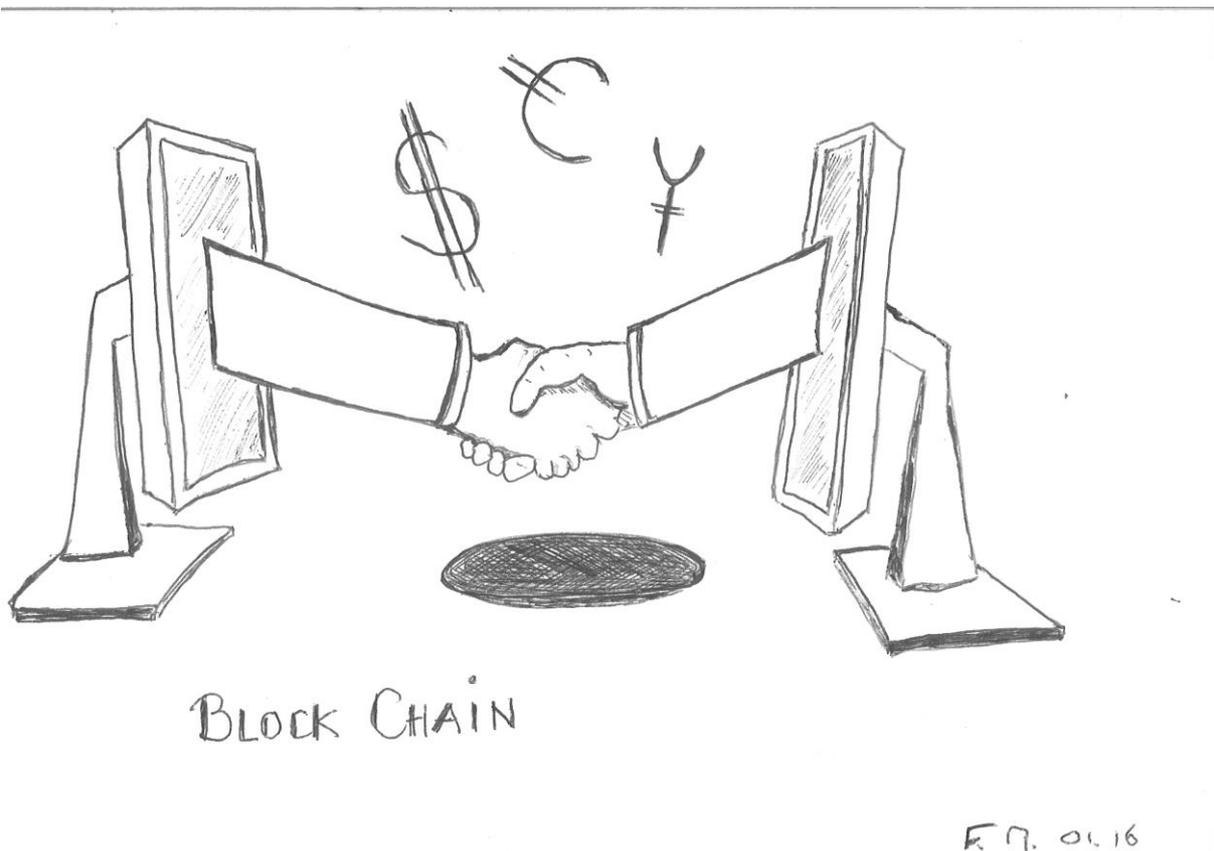


Retreat by the State or a stronger State?

This technology could therefore potentially enable people to break free from the State and its hangers-on, such as central banks and market infrastructure, avoiding the need to use intermediaries for certain transactions. It could therefore be a building block in the libertarian edifice by allowing for greater individual freedom at the expense of weakening centralised authority. Cryptocurrencies are a perfect illustration of the consequences that the application of this technology may have. These currencies are based on the blockchain or technologies deriving from it, and are global virtual currencies, not government sponsored. The total quantities of them are voluntarily and immutably limited. This would have been inconceivable in the past, as the right to mint money was an appurtenance of the State. The rise of these virtual currencies would seem to be another reaction to the 2007 global financial crisis. This technology makes it possible to bypass the control of governments and central banks when using, valuing and trading currencies. Governments have reacted to

bitcoin in a variety of ways. Some countries such as China and Russia see them as an enemy and ban them, whereas others, such as Germany, recognise them as private currencies.

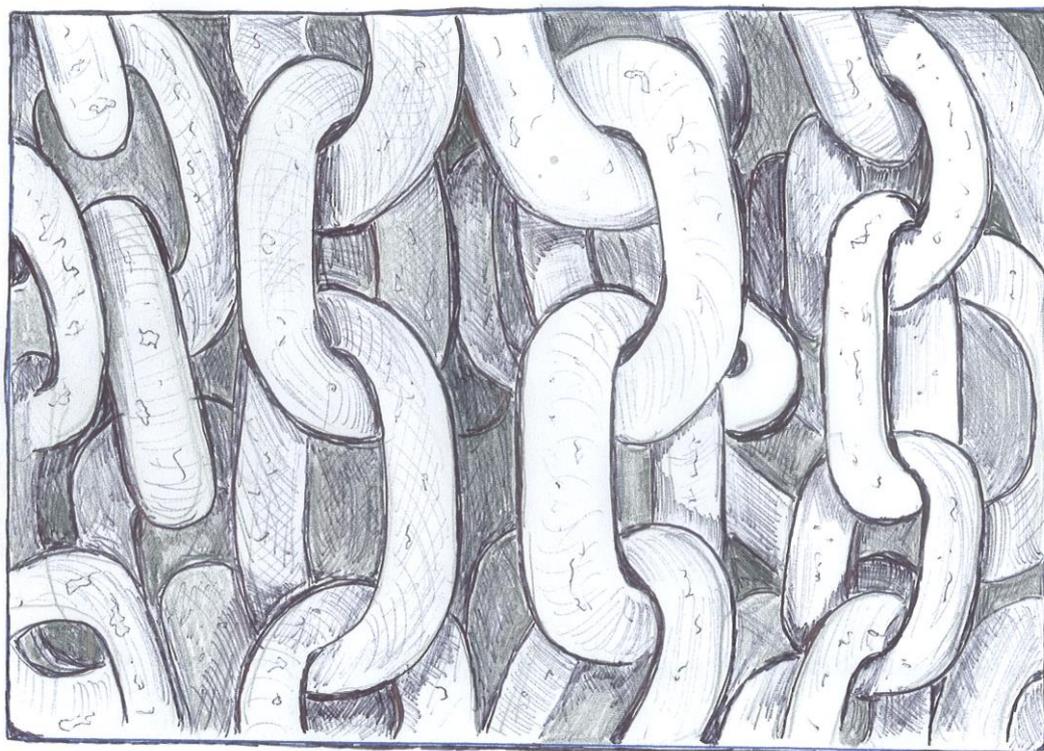
Paradoxically, the criticisms made of these cryptocurrencies revolve around the anonymity afforded to malicious individuals and organisations behind these transactions, who use them to try to evade government control. Its use as a road towards a libertarian society is by no means completely mapped out. It may have been seriously cast into doubt by recent experiments by some governments in using blockchain to carry out administrative tasks on their land registries, their citizens' civil status registries, healthcare systems and even voting systems. We could mention initiatives by the Swedish and Georgian governments, both of which set up a secure and transparent real estate register with the aim of ensuring the transactions on it were secure. What is more, blockchain might have a further application in the supervision of electoral processes. For example, Denmark has already used blockchain in internal online elections, within the Liberal Alliance party. This brings out another paradox. This technology, which was intended to free people from government control, has ended up being used by some governments.



Yesterday will soon be a fading memory

Human imagination would seem to be the only limit on blockchain's potential. This revolutionary technology raises a myriad of questions. What should the tax and contractual arrangements for it be? What industries will be affected? What about anonymity and safeguarding the right to privacy? What will become of the current regulators? What jobs will be created, and which others will come under threat? How well will it cope with the

forces resisting it? We can now see the plethora of potential solutions that this technology and its derivatives could provide. The irony of what we find is that this mechanism, which arose from libertarian aspirations and was supposed to loosen government's grip, could end up having the opposite effect. Several governments are in fact trying to use this technology for their own ends, which would completely hijack its original purpose. Only the future will show us to which side the scales will tilt and what the future holds – for private blockchain applications intended to foster liberty on the one hand, and experiments with alternative uses by governments on the other hand. We cannot be sure that these cryptocurrencies will stay the course, but like many other great inventions which ended up being used for a different purpose, such as Coca-Cola, Post-its, Viagra, the Internet, and dynamite, blockchain and its derivatives may in the future be used in a whole host of other industries, including in fintech companies.



What may we expect from these blockchain derivatives?

Nobody knows whether these cryptocurrencies will stand the test of time. Some bankers, including Jamie Dimon (JPMorgan), have recently expressed their doubts as to how long they will keep going. But whatever becomes of these virtual currencies, it seems clear that technologies deriving from blockchain will have many and varied uses, whether by governments or others, particularly in the financial sector. Fintech companies use this technology and will use it even more in the future, since it seems to hold infinite potential, for example for supply chain finance, e-payments, FX, financing and more. We are only just on the verge of a major technological revolution. There are still many unanswered questions as to how governments are to oversee these applications, on the regulations to be introduced to lay down the limits to be observed and finally on the oversight powers to be

conferred upon supervisors to prevent the excesses inherent in new solutions of this type. The crucial issue is who will oversee and regulate these chains. In the final analysis, as always, perhaps governments will need to play the role of controller. The trend to disintermediation has gained more traction than ever before, and blockchain will make a major contribution to it. The very role of banks and central banks, market infrastructure and other clearing houses has now been cast into doubt. Nobody knows whether this will be for the better or for the worse. But we need to recognise that bitcoin, whatever may become of it, acted as the trigger for radical change in our modern world of finance. Bitcoin has shifted the boundaries and forced everyone in the finance industry to rethink their business model and review their operating methods, failing which they risk disappearing completely.

It is interesting to note that, with blockchain, a philosophical and political movement was behind an invention – Bitcoin. The main aim of this movement was to side-line governments, but this invention has now ended up as the foundation of a technological and economic revolution that will radically transform the lives of all of us working in finance. Blockchain is perhaps not the libertarian panacea that will free us from government control, but it has paved the way for undoubted progress. We are only just at the dawn of this revolution. We need to be ready to adapt to it.

As Michel Serres said "Science is what a father teaches his son; technology is what a son teaches his father"

Simon and François Masquelier