

Bitcoin and the rebirth of free banking

Submission to Senate inquiry on digital currency

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About the author

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Introduction

As part of its current Economics work program, the IPA is undertaking research into the benefits of digital currencies and fundamental reforms of the existing monetary system. This includes the prospects for 'free banking,' or the regulation and management of the financial sector without recourse to central banking activity (presently conducted in this country by the Reserve Bank of Australia).

This submission draws from a forthcoming IPA research monograph on the history of Australian free banking and the future of our monetary system. I would be pleased to elaborate upon the matters discussed in this submission in a public hearing of the Committee.

Key characteristics of Bitcoin

Bitcoin is an open-source, peer-to-peer digital currency, and is reputed as the world's first completely decentralised digital-payments system.

Overcoming the need for a third party to keep a ledger on the flow of transactions, and thus avoiding the 'double-spending' problem, Bitcoin distributes the necessary ledger among all the users of the system via a peer-to-peer network. Every transaction that occurs in the Bitcoin economy is registered in a public, distributed ledger, called the 'block chain.' New transactions are checked against the block chain to ensure the same Bitcoins have not already been spent, and so eliminating the double-spending problem.¹

To put this more simply, the global peer-to-peer network, composed of thousands of users, effectually takes the place of an intermediary.

Transactions on the Bitcoin network are not denominated in currencies presently supplied by governments, such as dollars or euros or yen, but are instead denominated in Bitcoins. The value of the currency is derived from the value that people assign to it. The dollar value of a Bitcoin is determined on an open market, just as is the exchange rate between different world currencies.²

Despite a growing awareness of the existence of digital currencies, the presence of Bitcoin within the Australian financial system remains relatively small, at this stage. As at December 2013 there were more than 30 businesses that publicly stated they accepted Bitcoin for goods and services. In April 2014 Australia's first Bitcoin automatic teller machine was established in Sydney, allowing users to buy and sell Bitcoins and exchange them for cash. The ATM also enables new Bitcoin users to register an account, which then facilitates trades using the virtual currency.

Advantages and disadvantages of Bitcoin

Aside from the potential of Bitcoin, and other 'cryptocurrencies' to facilitate economic transactions outside of the regulatory and fiscal impositions of the state, several advantages have been ascribed to Bitcoin.

Making transactions easier and cheaper to process, Bitcoin can help reduce transaction costs and, in turn, facilitate the growth of micropayments and other financial innovations. Indeed, Bitcoin has been described as a conceivable digital platform upon which other layers of functionality, including the processing and transferral of stocks, bets and similar information.⁵

¹ Jerry Brito and Andrea Castillo, 2013, *Bitcoin: A Primer for Policymakers*, George Mason University, Mercatus Center, p. 4.

² Ibid.

³ Negar Salek, 2013, 'Every shop in the world where you can spend Bitcoins', The Australian Financial Review, 4 December.

⁴ Paddy Wood, 2014, 'Australia's first bitcoin ATM launches', The Sydney Morning Herald, 15 April.

⁵ Brito and Castillo, op. cit., p. 10.

In recent decades several authors have highlighted the potential for information and communications technologies, such as the internet, to erode the monopolistic status of government-issued currencies.⁶

Bitcoin has emerged as a practical manifestation of this anticipated development, with a key benefit of non-government alternatives to central banking note issuance seen to be the means to disincentivise governments from inflating their money supplies. This sentiment was affirmed in a statement by the creator of Bitcoin, the anonymous programmer using the *nom de plume* Satoshi Nakamoto: 'The root problem with conventional currency is all the trust that is required to make it work. The central bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of trust.'

On the other hand, perhaps the greatest criticism levelled against Bitcoin is its volatility, as demonstrated, for example, by its fall in value in response to the closure of the Mt. Gox e-exchange following a high-profile online hacking incident, in addition to the potential for other hacking and similar attacks on Bitcoin exchanges.

Regulatory uncertainties, such as the episodic banning of Bitcoin by China and the closure of the 'Silk Road' online market by regulatory agencies, have also contributed to the volatility of Bitcoin values over time.

Figure 1 shows the market prices (expressed in \$US) of Bitcoin since 2010, when Bitcoin first traded for three US cents.

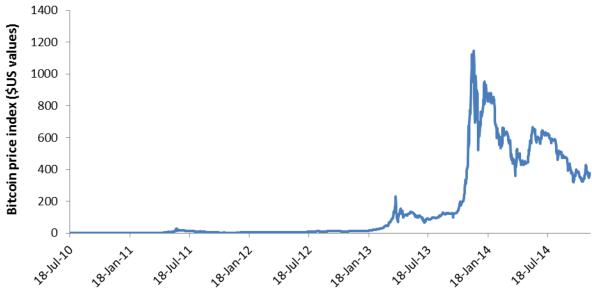


Figure 1: Bitcoin market prices (\$ US)

Source: www.coindesk.com.

⁶ Adam Mikkelsen, 1998, 'Electronic Money and the Market Process', *Policy* (Summer): 10-15; Richard W. Rahn, 2000, 'Money: the ultimate privatization', Sunday Times, http://www.sundaytimes.lk/000402/bus2.html (accessed 1 May 2014).

⁷ Kevin Dowd, 2014, New Private Monies: A Bit-Part Player?, Institute of Economic Affairs, p. 40.

After low initial trading, both in terms of prices and quantities, the market price rose strongly, peaking at nearly \$US 30 in June 2011 and then falling back sharply. In March and April 2013 Bitcoin values rose strongly again, to peak at almost \$US 215 on 8 April 2013, only to fall back to just over \$US 63 eight days later. By late November and early December of that year, it rose to about \$US 1,200, before falling back to its latest value of about \$US 370.

Proponents of Bitcoin have argued, on the other hand, that the digital currency has performed reasonably well under the 'stress tests' posed by changes already experienced, and with users discovering new ways to counteract extreme volatility in Bitcoin values. Further, the supply of Bitcoin remains fixed at 21 million, with over 13 million Bitcoins 'mined,' or brought into circulation.⁸

Taxation treatment of digital currencies

There has been an active discussion within policy circles, both in Australia and abroad, about the taxation and regulatory treatment of emergent cryptocurrencies, such as Bitcoin.

In the United States, the Internal Revenue Service has defined Bitcoin as property and, therefore, subject to capital gains taxation. It August 2014 the Australian Taxation Office delivered a ruling, for the purposes of 2013-14 income tax returns, that 'businesses will need to record the value of Bitcoin transactions as a part of their ordinary income. They must also charge GST when they supply Bitcoin and may be subject to GST when receiving Bitcoin in return for goods and services.'

To enable the continuing development of non-state forms of currency, it would be most desirable that government leave Bitcoin, and other cryptocurrencies, tax free and not subject to extraordinary regulatory conditions not otherwise applicable to existing notes and coins currently issued monopolistically by government.

We share the concerns expressed by some Bitcoin exchange vendors that the ATO's requirement that GST be imposed upon Bitcoin transactions could stifle the development of this technology. 9

The future of digital currency

It is important to situate the emergence of digital currencies, such as Bitcoin, within the broader contexts of financial sector deregulation and diverse monetary management regimes around the world.

In spite of pervasive state control still in existence (most notably state monopolies of note issue), it is important to bear in mind that since the 1970s and 1980s the institutional structures pervading financial and monetary systems have moved, in some respects at least, in a less, not more, regulated direction.

⁸ Information supplied by blockchain.info/charts/total-bitcoins.

⁹ Kye White, 2014, 'Senate Bitcoin inquiry to address 'impossible' ATO ruling', ABC Technology and Games, http://www.abc.net.au/technology/articles/2014/10/03/4099907.htm.

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Australia and other advanced economies generally undertook a range of reforms equipping banks and other financial institutions to more effectively intermediate savings and investment activities, and ensure their existing and new financial products better reflect risks. These included lifting interest rate and credit market controls, and the easing of restrictions upon entry (by domestic and international entities) into the financial sector.

Domestic reform measures have been complemented by policies, for example the easing of exchange rate controls, that have enabled the freer flows of capital across political borders. This emancipation of mobile capital has played an important role in reconciling inter-country imbalances between savings and investments, and has been reflected in the very significant growth in global foreign direct investment over the last few decades.

Not only do improvements in the freedom to partake in financial activities contribute to the observed generally positive association between economic freedom and economic growth, but as indicated in a recent empirical analysis that 'higher economic freedom is associated with a lower probability of a banking crisis.' ¹⁰

However, there has been the worrying trend across most countries of policymakers responding to the GFC by undertaking actions which pose as a (partial) retreat from deregulation. This re-regulation will need to be reversed if businesses and individuals are to enjoy the long term benefits associated with freeing up financial sector activities - including greater convenience and diversity in services, improved efficiency and reduced costs.

While the free banking regime has been abandoned in most countries in which it was once practiced, there are some semblances of free banking arrangements still in existence in some pockets of the globe.

In Hong Kong, for example, the money supply and foreign exchange rate are managed by a government-run currency board, the Hong Kong Monetary Authority (HKMA), yet the majority of the territory's currency has been composed of privately issued bank notes. Three banks presently issue private bank notes: the Hong Kong Shanghai Banking Corporation (HSBC), Standard Chartered Bank, and the Bank of China. They each issue several denominations ranging from \$20 HKD to \$1,000 HKD, and the banks are required to hold 100 per cent reserves for any notes they issue.¹¹

While the quantity of private notes outstanding has increased at an average annual rate of 7.3 per cent per annum from 1993 to 2010, Hong Kong has successfully maintained relatively low levels of price inflation.

Insofar as these, and similar, developments are of some relevance, the case for digital currencies,

¹⁰ Scott L. Baier, Matthew Clance and Gerald P. Dwyer, 2012, 'Banking Crises and Economic Freedom', in James Gwartney, Robert Lawson and Joshua Hall, *Economic Freedom of the World: 2013 Annual Report*, Fraser Institute, Vancouver, p. 215.

¹¹ Thomas L. Hogan, 2012, 'Competition in Currency: The Potential for Private Money', Cato Institute, Policy Analysis No. 698.

and free banking more generally, is inextricably linked with broader notions about the role of competition, monopolies and central planning in economic affairs.

Most economists readily support competition in that it incentivises suppliers to ensure their customers prosper, and believe that monopolies reduce consumer welfare when they restrain output and raise prices. It is also well known that central planners face inherent knowledge problems and poor incentives when they attempt to allocate scarce resources.

It is in this context that the opposition to free banking, or, in other words, competition, de-monopolisation, and a lack of central planning in monetary and financial affairs, is a curious feature of the intellectual framework of mainstream economics.

As the GFC and its aftermath have demonstrated, relying on politicians and bureaucrats to manage monetary and financial systems more efficiently and effectively than individuals and businesses does not come without very real risks for robust economic performance.

With the malign legacies of quantitative easing and ultra-low interest rates still plaguing the slow-growing global economy, the model of benevolent and omniscient central bankers has been increasingly revealed as inapplicable as it is with respect to other fields of economic and social policy management.

The full extent of growth and development for digital currencies, like Bitcoin, are being challenged by adverse, and potentially heavy-handed, tax and regulatory rulings by governments, and the risk is that emerging digital currency technologies could be stifled before they enjoy sufficient time to develop and mature as potential media of exchange and stores of value.

The public policy settings are being tested by the emergence of Bitcoin, with governments remaining unclear as to whether it ought to be defined, at least for the purposes of taxation laws, as a currency or an asset. The Bitcoin case highlights the fact that governments are often slow to react to changing technological developments unfolding in markets, and, when they do react, they usually react punitively on the basis of some threat, sometimes real but more often imagined, to the scope of their authority.

But rather than seeing Bitcoin and other digital currencies necessarily as a problem, government regulators and fiscal authorities should avoid their frequently exercised tendencies to prematurely 'regulate first, and ask questions later.'

This suggests, for example, they should avoid taxing digital currencies so as to avoid the risk of technology, with potentially many beneficial applications, being unnecessary crowded out in a financial environment which ordinarily allows for considerable scope for innovations elsewhere.

But with increasingly globalising commerce, both undertaken in the real and virtual realms of activity, critically relying upon upon reliability and trust between market participants, there is some room for cautious optimism for the future of digital currencies that effectively address the problems surrounding present financial and monetary systems practices.