## Will Bitcoin of similar replace fiat currencies when confidence dies?

By David Uren, The Australian, 29 January 2016

I know I'm too late but I'd like to nominate Craig Wright, claimed to be the inventor of the bitcoin, as Australian of the Year. Under his presumed pseudonym of Satoshi Nakamoto, he was the toast of last week's World Economic Forum in the Swiss mountain town of Dayos.

"Welcome to Davos, Satoshi," proclaimed posters around the town signed by the giant Swiss banking group, Credit Suisse.

If indeed Wright, an IT security consultant from Sydney, is the inventor of the bitcoin, as leading information technology journals suggest, then he joins the ranks of the great innovators of the information technology revolution.

The International Monetary Fund prepared a study for the Davos conference on the implications of Satoshi's invention for global financial markets. Virtual currencies, the IMF said, throw into doubt the "paradigm of state-supported fiat currencies and the dominant role that central banks and conventional financial institutions have played in the operation of the financial system". Virtual currencies led by the bitcoin are issued without the involvement or backing of the state.

The technology underlying the bitcoin is potentially more far-reaching than virtual currencies themselves. The IMF hailed the technology's potential to "strengthen financial efficiency by facilitating peer-to-peer exchange while reducing transaction times and costs, especially across borders. In the longer term, these technologies have the potential to deepen financial inclusion by offering secure and lower-cost payments options."

But the fund also acknowledged there was a dark side as virtual currencies have potential as "vehicles for money laundering, terrorist financing, and tax evasion, and other forms of illicit activity". The boldest and most notorious business to be based on the bitcoin was the Silk Road website, used to traffic everything from heroin to cigarettes, hitmen and essay-writing services.

The IMF warned there were potential risks to financial stability as the new technologies come into more widespread use. They could threaten the business of existing financial institutions.

The bitcoin and its technology were the main topic at the forum.

Citigroup chief economist Willem Buiter dismissed the bitcoin, saying anything that could be programmed could be hacked. Mastercard head of global markets Ann Cairns said the bitcoin was irrelevant but its technology was great: "There's nothing wrong with using new algorithms to actually move money."

The bitcoin appeared in the ether on January 3, 2009, as the financial crisis enveloped the world. It was announced with an email from an untraceable address signed by a Satoshi Nakamoto, who claimed to be a 36-year-old Japanese programmer motivated by anger over the financial crisis. He wanted to create a currency that could not be manipulated by politicians or central banks. "The root problem with conventional currency is all the trust that's required to make it work," he wrote in a posting about his invention. "The central bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of that trust. Banks

must be trusted to hold our money and transfer it electronically, but they lend it out in waves of credit bubbles with barely a fraction in reserve."

In the 1970s, as inflation roared through the world, economist Friedrich Hayek similarly argued that central banks and governments could not be trusted to run their currencies that should be privatised.

With bitcoin, a technology was developed that made this possible. Instead of payments systems being centralised, the bitcoin uses a ledger that captures all transactions and is distributed online in code known as a "blockchain". It uses a mixture of cryptography and transparency to make it prohibitively difficult to forge transactions. Every transaction is time-stamped and tied to an individual address, although the person behind it remains anonymous. There are incentives for other users of the system to verify the validity of transactions.

It is very early days in the use of this technology. The hype at Davos was similar to that which surrounded the internet 20 years ago. Financial institutions around the world are looking at it and start-ups are finessing its capabilities, but no one knows quite what the transformations it will produce will look like.

The direction, however, is clear. Over the past decade, business has become less material and more virtual. That is most obviously true of the Googles and Ubers, which have massive sales in Australia with minuscule physical presence. BHP Billiton's marketing office in low-tax Singapore has become a source of massive profit despite never touching a lump of iron ore. Starbucks and Ikea say the source of profits in far-flung subsidiaries is the intellectual property sold by their head office, not the efforts of their baristas or sales staff.

A world in which the regulatory stamp of government is no longer required for trusted financial transactions will accelerate this rise of the stateless corporation. The OECD and tax authorities around the world may have their minor victories, but they are fighting a losing war.

The IMF missed the point when it declared "the key question concerns who should oversee the virtual currency markets and financial market institutions using the blockchain technology in payment settlement and other activities". The essence of this technology is that no one oversees it and there is no regulation. The IMF is crying to the wind when it says: "While internationally agreed regulatory principles and co-operation among country authorities would be beneficial, the appropriate framework for such co-operation remains to be defined."

When we celebrate innovation, we may not like what we get.