**Treasury operations** Technology

# THE FUTURE OF MONEY?

WHAT DOES BITCOIN MEAN FOR CORPORATE TREASURERS, AND HOW CAN THEY MITIGATE THE RISKS ASSOCIATED WITH IT? TIM WHEATCROFT INVESTIGATES



itcoin, a virtual currency originally created for peer-to-peer

e-commerce, was designed to replace the frequent, costly currency conversions required for cross-border transactions. Although it's been in existence for more than five years, it has attracted a significant surge in interest over the past year, as its price has seen huge increases (and decreases) in value.

Governments worldwide are paying close attention to Bitcoin, and while some administrations are placing restrictions on its use, others are seeking to regulate it, and some take more of a waitand-see approach. During the summer of 2014, for example, UK chancellor George Osborne set out measures aimed at making the UK a "global centre of financial innovation", and a member of the Chinese government was recorded as recognising the potential of the virtual currency.

Big businesses are also starting to accept Bitcoin as a payment method. Technology giant Microsoft recently joined organisations as diverse as pizza restaurants, alpaca farms and multibillionpound retail chains as one of the growing number of businesses that accepts Bitcoin as currency. This gave it further credibility as a viable alternative to fiat currencies.

### **Business benefits**

These endorsements wouldn't occur if the organisations concerned didn't recognise that there are clear business benefits to Bitcoin. Any market currency can be converted to the virtual currency through the use of online portals and, once held, bitcoins can be stored in an electronic 'wallet', without the need for a bank account. If the majority of an organisation's business is conducted in Bitcoin. this will lead to a reduction in storage and transaction costs, and represent an alternative to managing currency risk - albeit a risky one.

Due to its lack of liquidity (the total value of Bitcoin currently in circulation is less than £2.5bn) and the risks it represents, it's incredibly difficult to justify the use of Bitcoin in corporate finance, however. It is also highly unlikely that any decision by a business to adopt Bitcoin as a viable currency would have been made by that organisation's treasury department.

#### **Price risk**

Bitcoin isn't tied to any one country's economy. As a result, it is, by definition, insulated from the effects of monetary policy and economic events, such as the debt crisis in the EU or the falling Russian ruble. Therefore, its supporters will suggest that shifting balances to Bitcoin will protect against any dips in currencies.

But factors outside of the typical supply and demand for the currency itself mean that corporates that accept Bitcoin will experience price volatility on a daily basis, with no means of protection against extreme losses in the value of their holdings. Just last year, values plunged by 80% in one day during October, and dropped briefly from \$450 in early December to \$227 in mid January 2015.

But while smaller, independent companies, such as a local grocery or restaurant, will accept Bitcoin for low-level transactions, no treasurer from a larger organisation would risk exposure to the volatility of having millions of pounds worth of Bitcoin on hand for any longer than is absolutely necessary.

For example, after the Chinese government banned financial services companies from dealing in Bitcoin, the currency's value dropped 20% in a single day, eventually falling by almost two-thirds before recovering. To minimise this exposure, a treasurer would need to exchange their currency a number of times each day.

#### **Liquidity risk**

Bitcoin's lack of liquidity means that corporate FX managers do not consider it to be a substantial alternative to fiat currencies. Meanwhile, the relatively low amount of bitcoins in existence makes it difficult for companies of any meaningful size to be able to trade.

Were a treasury to opt to accumulate a significant holding in Bitcoin, it could prove difficult to find a buyer to exchange their Bitcoin into a fiat currency. In addition, selling a large volume of Bitcoin could also have the impact of flooding the market and moving the price.

A lack of supportive market infrastructure also means that trading is likely to be of smaller quantities than corporates require for transacting on a daily basis. As a result, exchanging large amounts of the virtual currency may incur large bid/spread asks, which may then lead to a loss of value and/or the need for transactions to be spread out over periods of time. This would, in turn, incur greater costs and increase price exposure.

# Lack of hedging opportunities

Although there are efforts under way to establish a derivatives market for Bitcoin. until derivative contracts can be offered to Bitcoin holders. it is impossible to hedge against price fluctuations. Once derivative contracts are offered, the same argument about counterparty risk applies - how does a Bitcoin holder ensure that their trading partner holds up their end of the bargain? There are potential answers to these questions, but they do not exist today.

#### **Counterparty risk**

Payment systems using Bitcoin are not currently regulated and provide no form of guarantee. It's worth considering that there would be no means of recourse should a large payment not 'go through'.

Even if the payment was to go through, or recourse was there when needed, treasurers have a requirement for payments to be made immediately, and to be assured of their outcome.

A treasurer's remit is to protect the organisation's cash holdings so any one of the situations outlined above would be enough to be cause

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## **Managing the risks**

Assuming that, despite the protestations from its treasury department, an organisation does decide to start accepting Bitcoin as a currency, there are steps that can be taken to minimise its exposure.

#### 1. Minimise holdings

Through effective forecasting, treasury teams can accurately project their Bitcoin obligations and minimise Bitcoin balances to avoid keeping excess Bitcoin on their balance sheet. While this will require more frequent transactions, it will reduce price and liquidity risk.

#### 2. Back it up

Organisations that use an online wallet should ensure that it is backed up and encrypted. Any and all passwords used in relation to this wallet should be stored carefully. After all, once a password is lost, it's gone for ever and no IT department will be able to bring it back.

Offline, or 'cold', storage, such as USB sticks, should also be backed up and handled as if it were a physical wallet, stuffed full of cash.

#### 3. Avoid keeping all your eggs in one basket

Should anything go wrong with its Bitcoin wallet, payments or exchange provider, then the lack of backing from central banks, and of any protection against counterparty risk, could leave an organisation with nothing. When large Bitcoin transfers need to be made, the risk can be spread by using a number of counterparties to exchange Bitcoin into hard currencies.

#### 4. Stay abreast of regulations, and speak with auditors

As Bitcoin is a relatively recent arrival in the corporate world, the regulatory landscape around it is still evolving. In the US, for example, Bitcoin has been designated a commodity, so price changes while Bitcoins are held trigger accounting gains and losses on the income statement. Other markets outside of the US have their own unique regional nuances, so an organisation's treasury should ensure that it stays informed and abreast of these.

#### 5. Establish strong audit and controls

One of Bitcoin's inherent benefits (or challenges, depending on your point of view) is the considerable level of anonymity that it affords, as well as its lack of audit trail – payments made with Bitcoin are irreversible, for example. In order to counter this, treasurers need to ensure that their organisations' internal processes are even more robust for Bitcoin payments than they are for regular payments.

for concern. A combination of all of them, however, would certainly set alarm bells ringing, even for the most adventurous of treasurers.

#### Looking ahead

Bitcoin remains a volatile currency, and one that treasurers should handle with extreme caution. Its increasing acceptance in the corporate world, however, as demonstrated by the faith that Microsoft has shown, means that early adoption pains will inevitably be overcome.

In time, Bitcoin, and other virtual currencies like it,

will evolve and develop into legitimate financial tools. Until that time, though, while it's possible to see huge returns from accepting and holding the virtual currency, treasurers would be strongly advised to remain safe and tread carefully in all of their dealings with Bitcoin. •

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