# Electronic Commerce & Law Report<sup>™</sup>

VOL. 19, NO. 11 368-373

Bloomberg

MARCH 19, 2014

#### PAYMENTS

The markets for digital currencies are highly volatile, and are at risk of manipulation. Digital currencies also are vulnerable to hacking or electronic system failures. The authors look at the rapidly evolving phenomenon of virtual digital currencies, and summarize some of the significant legal issues involved for individuals, businesses, and governments.

# **Busy Times and a Challenging Future for Bitcoin and Virtual Currencies**

BY ANDREW J. SHIPE, DAVID D. FAUVRE, ROBERT

P. TAYLOR, DENIS T. RICE AND MARCUS A. ASNER

**C** ryptographic virtual currencies (or digital currencies) represent a significant new technology with implications that should not be ignored. The most popular of the cryptocurrencies, Bitcoin, is gaining wider acceptance in legitimate commerce, and government authorities are focusing on how these digital currencies can be used and misused. Government agencies are considering the implications of cryptocurrencies under the Bank Secrecy Act and other anti-money laundering statutes, as well as their implications for consumer protection regimes, intellectual property laws and even monetary policy.

This article provides a snapshot of the current, but rapidly evolving, state of affairs and summarizes some of the most significant legal issues that digital currency technologies raise for individuals, businesses and governments around the world.

## **A Note on Virtual Currencies**

At the outset, this space does not permit a full description of how digital currencies operate. For present purposes, they can be thought of as digital money that can be transferred on a peer-to-peer basis from one digital device (*e.g.*, a computer, tablet, smartphone, etc.) to another such device. A prototypical digital currency, and certainly the most well known today, is Bitcoin.

Bitcoin was invented by an individual, or more likely a group of individuals, apparently operating under the pseudonym "Satoshi Nakamoto." (though a real person with that name has been said to be the inventor). The Bitcoin community employs a network of computers to implement highly complex mathematical algorithms that create a lottery system among would be "miners" to control the actual creation of money.

Once created, Bitcoins are added to a large database, called a "Blockchain," that reflects every Bitcoin, every account in which Bitcoins have ever been held and every transaction ever carried out using Bitcoins. To prevent cheating and efforts to corrupt the currency, the system employs a high level of redundancy of data storage.

Other digital currencies, such as Litecoin, Ripple and Peercoin are similar.

#### **Regulatory Developments in the United States**

In the United States, the governmental authorities that have been the most active in the area of digital currencies are the U.S. Treasury Department's Financial Crimes Enforcement Network (FinCEN), the FBI and U.S. Department of Justice, and the New York State Department of Financial Services (NYDFS).

In March 2013, FinCEN issued guidance on application of the Bank Secrecy Act to virtual currency.<sup>1</sup> The FinCEN guidance describes three types of participants

<sup>&</sup>lt;sup>1</sup>. Department of the Treasury, Financial Crimes Enforcement Network, Application of FinCEN's Regulations to Persons Administering, Exchanging or Using Virtual Currencies, FIN-2013-G001 (Mar. 18, 2013).

in the virtual currency markets: administrators, exchangers and users:

• An "administrator" issues virtual currency and "has the authority to redeem (to withdraw from circulation) such virtual currency."

• An "exchanger" is involved in the exchange of a virtual currency for traditional, hard currency or for other virtual currency.

• A "user" "obtains convertible virtual currency and uses it to purchase real or virtual goods or services." Users are not regulated under the FinCEN guidance. Because this definition of "user" is tied to the *purchase* of goods or services, the FinCEN guidelines do not indicate whether a *seller* that accepts virtual currency is a mere "user" or an "exchanger." However, FinCEN's Director has stated that "[t]hose who use virtual currencies exclusively for common personal transactions like receiving payments for services or buying goods online" also qualify as "users" and are not regulated under the guidance.<sup>2</sup>

Pursuant to this FinCEN guidance, virtual currency "administrators" and "exchangers" are considered "money transmitters" and are subject to regulation, while "users" are not. As a money transmitter, a virtual currency administrator or an exchanger is required to register as a money services business (MSB) and is subject to FinCEN's regulations as would any ordinary money transmitting service dealing in traditional currency.

Virtual currency administrators and exchangers also are subject to numerous other FinCEN regulations, including requirements that they implement an antimoney laundering / know your customer (AML/KYC) program, as well as record keeping requirements and reporting obligations. Failure to register as an MSB is punishable by civil penalty, and operating as an MSB without registering is a criminal offense.<sup>3</sup>

More recently, FinCEN issued two rulings in which it confirmed that: (1) to the extent a user "mines" a convertible virtual currency solely for his or her own purposes, the user is not a money transmitter;<sup>4</sup> and (2) a company that purchases and sells convertible virtual currency as an investment exclusively for its own benefit, and that produces and distributes software to facilitate such purchases, is not a money transmitter.<sup>5</sup>

In the meantime, law enforcement authorities have been active in the investigation and prosecution of

<sup>5</sup>. FIN-2014 R002, Application of FinCEN's Regulations to Virtual Currency Software Development and Certain Investment Activity (Jan. 30, 2014).

criminal activity involving the use of digital currencies. Because Bitcoin offers a high degree of anonymity, it has been used to commit crimes, launder money, and evade law enforcement. Federal authorities have charged several individuals associated with the Silk Road online marketplace for violations of narcotics trafficking, anti-money laundering and other criminal laws that were allegedly committed with Bitcoin.

At the state level, operating as an MSB can entail significant compliance obligations, including licensing and bonding. The NYDFS recently concluded two days of hearings in which representatives from law enforcement, academia, businesses and investors discussed the potential uses of digital currency, and the need for careful regulation. The NYDFS, which is a prominent and influential state regulatory authority, has indicated that it is considering creating a "BitLicense" for purposes of instituting some form of oversight in the digital currency markets. There have been few details as to what a BitLicense would entail, but an announcement is expected soon.

On March 11, 2014, the NYDFS also announced that it "will consider proposals and applications in connection with the establishment of virtual currency exchanges in the State of New York." Approved applications will eventually have to comply with rules that the NYDFS expects to propose by the end of the second quarter of 2014.

As of yet, the Internal Revenue Service (IRS) has not issued any statement to indicate how it will address the taxation of virtual currency transactions. However, the recent issuance of a report on the international regulation and taxation of Bitcoin by the Law Library of Congress may presage some action by the IRS.<sup>6</sup>

#### **Commercial Developments**

In the commercial sector, small businesses have been the most active in accepting Bitcoins as payment. However, online retailer Overstock.com recently began accepting payment in Bitcoin. Overstock.com is partnering with Coinbase, Inc., a San Francisco-based registered MSB, to facilitate the receipt and conversion of Bitcoins into U.S. dollars. Since then, Overstock.com has accepted over 3,000 orders with Bitcoin payment.

Online game provider Zynga, Inc. announced in January that it would begin accepting Bitcoins for its most popular games, such as Farmville. Other companies that will now accept payment in Bitcoin are as varied as electronics retailer TigerDirect, trading technology firm Perseus Telecom, blogging platform Wordpress and the NBA's Sacramento Kings. In England, the University of Cumbria is accepting Bitcoin as payment for two courses.

To request permission to reuse or share this document, please contact permissions@bna.com. In your request, be sure to include the following information: (1) your name, company, mailing address, email and telephone number; (2) name of the document and/or a link to the document PDF; (3) reason for request (what you want to do with the document); and (4) the approximate number of copies to be made or URL address (if posting to a website).

<sup>&</sup>lt;sup>2</sup>. Remarks of Jennifer Shasky Calvery at the National Cyber-Forensics Training Alliance Conference (Apr. 16, 2013) (available at http://fincen.gov/news\_room/speech/pdf/20130416.pdf).

<sup>&</sup>lt;sup>3</sup>. See 18 U.S.C. § 1960; 31 CFR §§ 1022.210, 1022.300, 1022.380(e), 1022.400.

<sup>&</sup>lt;sup>4</sup>. FIN-2014-R001, Application of FinCEN's Regulations to Virtual Currency Mining Operations (Jan. 30, 2014).

<sup>&</sup>lt;sup>6</sup>. Report For Congress: Regulation of Bitcoin in Selected Jurisdictions, Global Legal Research Center of the Law Library of Congress (Jan. 2014) (available at http://www.loc.gov/law/help/2014-010233%20Compiled%20Report\_.pdf).

ELECTRONIC COMMERCE & LAW REPORT ISSN 1098-5190

On the other hand, even as this Advisory is being written, what had been one of the largest Bitcoin exchanges, Mt. Gox, first suspended withdrawals, then closed and filed in bankruptcy in Japan, causing a substantial fall in the value of Bitcoins. The implications of Mt. Gox's demise for the future of cryptocurrencies is still being debated, although it has pointed up the present volatility and fragmented nature of the Bitcoin marketplace.

#### **International Developments**

While international regulation of digital currencies is undeveloped, several jurisdictions have adopted legal restrictions that govern the transfer and ownership of nonlocal currencies.

For example, China has prohibited banks and payment institutions from dealing in Bitcoins, though individuals may currently hold them and trade them. Very recently, the Reserve Bank of India issued a warning on the operational and security risks of using Bitcoin, and authorities raided the office of a trading platform for alleged violations of India's Foreign Exchange Management Act. Yet, the level of interest is still on the rise, with 30,000 downloads of the Bitcoin software (called Bitcoin qt) in India.<sup>7</sup> The Russian Central Bank recently issued a warning regarding the use of Bitcoins for money laundering and other criminal purposes.

Given the evolving international landscape, digital currency brokers and financial institutions that permit customers to use digital currencies must be especially cognizant of the identities and locations of their customers and counterparties, as well as the stance of local governments.

## A Challenging Future for Digital Currencies and Their Regulation

Consider how the invention of digital music and file sharing applications fundamentally changed the music recording industry. Could digital currencies have a similar effect on traditional currencies and global commerce?

One of the most important characteristics of digital currencies is that they can be transferred on a peer-topeer basis. To illustrate, assume that Mr. A rents an apartment from Ms. L. At present, Mr. A pays his rent by writing checks to Ms. L. Ms. L then has to deposit each check and then wait for it to clear while her bank and Mr. A's bank settle accounts. The process can be sped up if there is a direct deposit arrangement, but it still requires a fair degree of coordination and effort by the bank and everyone else.

But if Mr. A has Bitcoins, and Ms. L accepts them, Mr. A can simply send an electronic signal from his computer to Ms. L's, and take the bank out of the process.<sup>8</sup>

They no longer have to pay bank fees, and payment is immediate, even across international borders.

For retailers and small businesses, accepting this form of payment can eliminate the transaction fees charged for the use of debit and credit card payment networks. It also makes "micropayments" more feasible. Retailers that accept Bitcoins may accept them in small amounts, while those that accept credit cards must often establish minimum charges. In addition, a retailer that accepts payment with Bitcoin does not need to collect, retain and secure credit card data. Thus, using digital currencies has significant appeal for many businesses and individuals.

In order to meet this anticipated demand, many businesses are considering doing business in the digital currency arena. Such plans have significant implications. For example, in addition to MSB registration and AML/ KYC compliance, businesses that operate as digital currency brokers must consider state and federal consumer protection obligations.

In a market that is so new and so little understood, one can anticipate that regulators will seek to ensure that customers are not misled, and that their money is properly handled. Also, in the current fractured market where there are multiple unlinked Bitcoin exchanges and over-the-counter markets with varying exchange rates, regulators will be interested in whether customer orders are executed with proper diligence.

On a macro level, central bankers will—probably sooner and not later—have to assess how digital currencies, which are not backed by any government authority, will affect financial stability and monetary policy. At present, the use and market capitalization for digital currencies is not of an amount that would meaningfully impact a national economy. But as with tulips or any other asset, prices for digital currency may form bubbles. In addition, the use of multiple currencies has not been seen in the United States for many years. Central banks will be highly interested in determining the likely consequences of an economic system where there are multiple acceptable forms of payment.

The cryptographic protocol behind Bitcoin and other cryptocurrencies may also provide a useful vehicle to combat counterfeiting and cyber fraud. Governments around the world are in a fight to maintain the integrity of their real-world currencies against increasingly sophisticated counterfeiters, some of whom appear to have the resources of state powers. A cryptographically defended electronic form of payment may one day significantly reduce or even eliminate the ability of counterfeiters to undermine a national currency system.

Banks and other financial intermediaries may also be able to employ these same techniques to prevent double payments from their accounts. The formulations of such methods, and their defense as intellectual property, will be a challenging issue.

#### Conclusion

At present, digital currencies are not widely used or understood. Their markets are highly volatile, and are at risk of manipulation. Cryptocurrencies also are vulnerable to hacking or electronic system failures. Nonetheless, these friction points are being addressed. The next few months and years will determine whether any digital currencies will gain a level of trust for average persons. The potential of cryptocurrencies for the fu-

<sup>&</sup>lt;sup>7</sup>. Bitcoin Fans Seek Legal Aid For Regulatory Clarity, The Economic Times (Feb. 3, 2014) (available at http://articles.economictimesindiatimes.com/2014-02-03/news/46963201\_1\_bitcoincommunity-bitcoin-software-bitcoin-trade).

<sup>&</sup>lt;sup>8</sup>. We note that the underlying computer processes involved are very complex, but for an individual, using Bitcoins in a transaction is no more difficult than sending an e-mail.

ture economy and banking system warrants the atten- tion of businesses, regulators and others.