February 2014

mcmillan Financial Services Bulletin

Bitcoin E-Gold Rush: Unregulated Technology Gains Currency

Conjuring memories of the Yukon Gold Rush, speculation and dreams of riches abound as bitcoin - a type of digital currency and programmable money - continues to gain currency with investors, entrepreneurs, and the tech savvy. Heralded as "the currency of the future", in November, 2013 a unit of bitcoin briefly became more valuable than an ounce of gold, soaring to $1,242 from less than $15 in January, 2013.

But all that glitters is not e-gold. Unlike gold and traditional currencies, bitcoins have no intrinsic value and are not backed by a national central bank. Bitcoins derive their value solely from market demand. Bitcoins are worth what people are willing to pay for them on any given day. As such, the value of a bitcoin is extremely unstable. And, although peer-to-peer transactions in bitcoin have the advantages of anonymity and low transaction fees (as compared to those charged by banks for similar services) transactions in bitcoin are unregulated, uninsured, irreversible, and susceptible to hacking.

As the masses head for the hills and frenzy to get their hands on bitcoins, do Canadian lawmakers and regulators have an obligation to step-in and impose a legal and regulatory framework that protects consumers and mitigates the risks and concerns associated with transactions in bitcoin? And are Canadian lenders ready for the challenges that present themselves when lending to businesses who deal in bitcoin?

Understanding the Technology

A bitcoin is comprised of a string of computer code. A bitcoin is "mined" using powerful computers running a software program that tirelessly searches for solutions to a very complex mathematical problem. When a computer solves an equation, a bitcoin is unearthed.

Creating scarcity, in 2008, Satoshi Nakamoto, the pseudonym for the mysterious computer programmer or team of programmers who created bitcoin, placed 21 million bitcoins into the virtual ground. Like the first Yukon Gold Rush prospectors, who locate gold nuggets with relative ease, the first entrepreneurs to run bitcoin software mined bitcoins using the basic hardware in their personal computers or laptops. However, as each computer solves a mathematical equation correctly, the bitcoin software automatically increases the difficulty of each subsequent equation. Presently, only 12.3 million bitcoins are in circulation and mining bitcoins requires an immense amount of computing power—supercomputers running 24 hours per day.

Since bitcoins have become extremely difficult to mine, the most common way to acquire bitcoins is to purchase them from a miner by converting "real" money (a national currency) into bitcoins at the market rate of exchange. A bitcoin owner stores bitcoins in his or her "digital wallet". Digital wallets, encrypted files save to an individual's computer, cell phone or USB key, verify that the holder is the rightful owner of the bitcoins.

Capitalizing on the Rush

Selling shovels to prospectors, Robocoin Techonolgies recently set up bitcoin ATMs in Ottawa, Toronto and Vancouver. The bitcoin ATM in Vancouver, which was operational in October 2013, was the first of its kind in the world. Robocoin will also debut a bitcoin ATM in Montreal and Asia's first bitcoin ATM in Hong Kong this month. Rival corporation, Lamassu Technologies, will also debut South America's first bitcoin ATM in Sao Paulo this month.

A Calgary-based Bitcoin company, VirtEx, is also making inroads. VirtEx plans to debut a bitcoin debit card that is compatible with any ATM in the fall of 2014. As a sign of bitcoins growing popularity among Canadians, the bitcoin ATM in Vancouver transacted a reported $100,000 CAD in its first week.

Buyer Beware

Although bitcoin ATMs and related offshoot technologies make buying-in to bitcoin more accessible to the average person, few holders of bitcoins actually use the technology as a currency. While an increasing number of merchants accept bitcoin, few report transactions in the currency. Instead, most owners of bitcoins hold on to their bitcoins like a speculative, high-risk stock.

In addition to value volatility, a major disincentive for holders to transact in bitcoin is the push-back the technology has received from numerous nation's central banks. The Bank of Canada does not recognize bitcoin as a form of legal tender.[1] According to the *Currency Act*, "legal tender" is the coins and notes issues by the Bank of Canada pursuant to the *Bank of Canada Act* intended for circulation in Canada (section 8).[2]

Contrast this with the statement in Re Alberta Statutes,[3] where the Supreme Court of Canada defined "money" as "any medium which by practice fulfills the function of money and which everyone will accept as payment of a debt is money in the ordinary sense of the word even though it may not be legal

---

[1] David George-Cosh, "Canada Says Bitcoin Isn't Legal Tender", *The Wall Street Journal* (16 January 2014).

[2] *Bank of Canada Act*, RSC, 1985, c B-2.

[3] *Re Alberta Statutes*, [1938] SCR 100.

tender". This suggests that Canadian law may treat bitcoin as something more akin to a new form of payment system.

Currently, bitcoin exchanges and ATMs are not considered "money services businesses" under Canada's *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* (the "PCMLTF"). Since the PCMLTF defines money as the coins or notes in circulation in a country, bitcoin transactions are not subject to the PCMLTF. However, bitcoin transactions will not continue to escape the scrutiny of the Financial Transactions and Reports Analysis Center of Canada (FINTRAC), Canada's financial intelligence unit responsible for ensuring compliance with anti-money laundering legislation.

In Canada's 2014 Federal Budget, the Government of Canada indicates it will introduce anti-money laundering and anti-terrorist financing regulations for virtual currencies, such as bitcoin, in the coming years. FINTRAC will receive up to $23 million over the next five years to monitor virtual currencies and online casinos to ensure neither technology is used by crime syndicates and terror groups. As stated in the budget:

> The Government of Canada is committed to a strong and comprehensive regime that is at the forefront of the global fight against money laundering and terrorist financing and that safeguards the integrity of Canada's financial system and the safety and security of Canadians…It is important to continually improve Canada's regime to address emerging risks, including virtual currencies, such as bitcoin, that threaten Canada's international leadership in the fight against money laundering and terrorist financing.[4]

Although the proposed regulatory amendments and changes to the scope of FINTRAC's purview in the budget come out of a five year review of the PCMLTF by the Senate Committee on Banking,

[4] Economic Action Plan 2014, "Supporting Jobs and Growth: Fostering Job Creation, Innovation and Trade" The Government of Canada at pp 133-134.

Trade and Commerce, Canadian lawmakers were undoubtedly influenced by the Silk Road scandal in the United States. Silk Road was an online black market that allowed users to anonymously purchase illicit drugs and guns using bitcoins. Two men (one a Canadian citizen) were recently arrested in Miami, Florida, for their involvement in Silk Road and each was charged with operating an unlicensed money service business, money laundering between $300 and $20,000, and money laundering currency valued at more than $20,000. The Silk Road scandal demonstrates the inherent risks presented by digital currencies and makes Canada's commitment to regulatory reform all the more timely.

E-tax Considerations

Although Canada does not recognize bitcoin as a form of legal tender, the Canada Revenue Agency (CRA) stated that transactions in bitcoin are not tax exempt. Depending on the facts, a bitcoin transaction may fall within the CRA's definition of "Barter Transaction"[5] or "Transaction in Securities".[6] As a result, income or gains from the sale of goods and services for bitcoins must be included in the seller's income for tax purposes. Similarly, any resulting gains (losses) resulting from trading in bitcoins (for example, when bitcoin holders cash-in their bitcoins for Canadian dollars), could be considered, for income tax purposes, to be either gains (losses) on either income or capital account, depending on the facts. Finally, taxable goods or services purchased with bitcoins are also subject to GST/HST.

Several other jurisdictions, including the United States, Norway, Germany, Finland, Switzerland, France, Korea, China and Thailand, have also renounced bitcoin as a form of legal tender. Like Canada, although these nations do not consider bitcoin a

[5] Interpretation Bulletin IT-490.

[6] Interpretation Bulletin IT-479R.

form of legal tender, they do recognize the technology as a unit of account or asset for tax purposes.

Should Lenders be Concerned?

From the standpoint of lenders to debtors whose property consists of bitcoin or bitcoin-denominated accounts, the legal issues raised by bitcoin will give rise to unique challenges.

Under the personal property security statutes in force in most Canadian provinces, taking security in bank accounts and securities of a borrower can generally be accomplished by signing a standard form security agreement or entering into a securities control agreement between the lender, the debtor and the debtor's bank or securities intermediary. Taking security in and ensuring control over bitcoin in a "digital wallet" stored on a remote server will certainly not be as straightforward. As a software-based system characterized by a lack of regulation and a high degree of anonymity, lenders will be rightly concerned about the ability to access bitcoin proceeds in any scenario where the borrower's viability appears to be compromised.

Further, the continuing volatility in the value of bitcoin can lead to significant fluctuation in a debtor's asset base - creating angst for both borrowers and financial institutions.

Together with the uncertain regulatory landscape discussed above, the attendant business risks of transacting in bitcoin may in fact – at least in the near term - lead lenders to restrict its use by borrowers, or at the very least lead to more in-depth due diligence as to how much of a risk factor bitcoin is in any particular business.

Conclusion

Bitcoin is a fascinating technological innovation; but, like buying a volatile option on a start-up stock, bitcoin is a risky investment and (certainly today) an impractical medium of exchange. In order to instill mainstream confidence in bitcoin for regulators, lenders and borrowers, an appropriate legal and regulatory framework will need to evolve. At this time, bitcoin is in its infancy. Until the technology proves to be a true national concern - and not just a fad - the Canadian financial services community is well advised to stay abreast of the technology and proceed cautiously, rather than rushing to cash in on the bitcoin bonanza.

by Catherine Doyle, Stephanie Robinson and Stefanie Di Francesco, Student at Law

For more information on this topic, please contact:

Toronto	Catherine Doyle	416.865.7273	catherine.doyle@mcmillan.ca
Toronto	Stephanie Robinson	416.865.7204	stephanie.robinson@mcmillan.ca

a cautionary note

The foregoing provides only an overview and does not constitute legal advice. Readers are cautioned against making any decisions based on this material alone. Rather, specific legal advice should be obtained.