Top Ten Risks for the Crypto-Currency Investor:
A View from the Cayman Islands

Introduction

The rise of the financial technology businesses in recent years brings new legal issues, requiring entrepreneurs, investors and professional advisors to carefully monitor and adapt to new regulatory developments as well as developing case law. Blockchain in particular has become the new buzzword in financial media, with cryptocurrencies, Initial Coin Offerings (ICOs) and tokens coming a close second. In this first issue of our series dedicated to FinTech-specific risk factors applicable to Cayman Islands (“Cayman”) investment funds, we highlight some of the major risk factors that investors in crypto-currencies should become familiar with.

Brief Overview: Bitcoin and other Cryptocurrencies

A bitcoin is a digital currency that is issued by, and transmitted through, an open source, digital protocol platform (the “Bitcoin Network”). The Bitcoin Network is an online, peer-to-peer user network using a digital transaction ledger known as the “Blockchain”, which is stored, in whole or in part, on all users’ software programs. Each transaction is recorded, time stamped and publicly displayed in a “block” in the publicly available Blockchain, therefore creating a verifiable transaction history of all bitcoins in existence (except for off-Blockchain transactions). The protocols for the Bitcoin Network permit the creation of a limited number of bitcoins (not to exceed 21 million²). Accordingly, other (competing) cryptocurrencies have been developed, such as Ethereum, Ripple and Litecoin³. As cryptocurrency networks do not rely on governmental authorities or financial institutions to create, transmit or determine the value of digital currencies, users may acquire and trade digital currencies without the involvement of intermediaries. However, numerous third-party service providers have appeared, to facilitate transactions and converting digital currencies to or from fiat currency. Cryptocurrencies and related trading platforms and exchanges have experienced an extremely high rate of growth during the past years.
Top 10 Risk Factors specific to Bitcoin and Other Cryptocurrencies

Successfully investing or trading bitcoin and other cryptocurrencies requires technical skill and at least a basic knowledge of how Blockchain works. Below we set out some of the most significant issues that investors should be aware of in this new and rapidly changing industry.

1. **Loss or destruction of the private key**
   Bitcoins (and this applies to other cryptocurrencies) are stored in a digital wallet and are controllable only by the possessor of both the public key and the private key relating to the digital wallet in which the bitcoins are held, both of which are unique. If the private key is lost, destroyed or otherwise compromised, an investor may be unable to access the bitcoins held in the related digital wallet which will essentially be lost. If the private key is acquired by a third party, then this third party may be able to gain access to the bitcoins.

2. **Other cyber-security risks including malicious activity**
   Trading platforms and third-party service providers may be vulnerable to hacking or other malicious activities. For example, in August 2016, nearly 120,000 units representing US$72 million-worth of bitcoins were stolen from the Bitfinex exchange in Hong Kong, which led to an immediate 23% drop in pricing. One year earlier, in September 2015, BitPay lost approximately $1.8 million of bitcoins due to a phishing attack. Also, if one or more malicious actor(s) obtain control of sufficient consensus nodes on the Bitcoin Network or other means of alteration, then a Blockchain may be altered. While the Bitcoin Network is decentralized, there is increasing evidence of concentration by creating of “mining pools” and other techniques, which may increase the risk that one or several actors could control the Bitcoin Network or other similar Blockchain.

3. **Risks associated with peer-to-peer transactions**
   Digital currencies can be traded on numerous online platforms, through third party service providers and as peer-to-peer transactions between parties. Many marketplaces simply bring together counterparties without providing any clearing or intermediary services and without being regulated. In such a case, all risks (such as double-selling) remain between the parties directly involved in the transaction.

4. **Other risks related to trading platforms and exchanges**
   Digital currency trading platforms, largely unregulated and providing only limited transparency with respect to their operations, have come under increasing scrutiny due to cases of fraud, business failure or security breaches, where investors could not be compensated for losses suffered. Although one does not need a trading platform or an exchange to trade bitcoins or other cryptocurrencies, such platforms are often used to convert *fiat currency* into cryptocurrency, or to trade one cryptocurrency for another.
5. **Loss of confidence in digital currencies**
Digital currencies are part of a new and rapidly evolving “digital assets industry”, which itself is subject to a high degree of uncertainty. For a relatively small use of digital currencies in the retail and commercial marketplace, online platforms have generated a large trading activity by speculators seeking to profit from the short-term or long-term holding of digital currencies. Most cryptocurrencies are not backed by a central bank, a national or international organization, or assets or other credit, and their value is strictly determined by the value that market participants place on them through their transactions, which means that loss of confidence may bring about a collapse of trading activities and an abrupt drop in value.

6. **Regulations preventing or restricting trading of digital currencies**
There are significant inconsistencies among various regulators with respect to the legal status of digital currencies. Regulators are also concerned that bitcoin and other cryptocurrencies may be used by criminals and terrorist organizations\(^\text{v}\). In the future, certain countries may restrict the right to acquire, own, hold, sell or use digital currencies.

7. **Currency-conversion risks**
Policies or interruptions in the deposit or withdrawal of *fiat currency* into or out of the trading platforms may impact the ability of certain investors to convert. For example, when two of the largest trading platforms in China stopped margin lending and withdrawals in February 2017 and started implementing stricter anti-money laundering policies following discussions with Chinese authorities, this immediately triggered a decrease in pricing and trading volume\(^\text{vii}\).

8. **Taxation of digital currencies**
For investors in cryptocurrencies, it should be noted that there is substantial uncertainty with respect to the tax treatment of an investment in digital currencies. Bitcoins and other cryptocurrencies may be considered assets in certain jurisdictions and currency in others. Sales or value-added taxes may be imposed on purchases and sales of digital currencies. The investors, based on their home jurisdiction, may require specific tax advice on a regular basis to ensure the tax treatment of their investments in digital currencies.

9. **Slow-down of network**
For bitcoins, mining is the process by which bitcoins are created and transactions verified. Through downloading a specific software, the user’s computer becomes a “node” that validates blocks (*i.e.* details of some or all of the most recent transactions). Miners which are successful in adding a block to the Blockchain are automatically awarded bitcoins (plus transaction fees for transactions recorded). However, if the rewards for solving blocks and transaction fees are not sufficiently high, or if a high volume of transactions occur at the same time, the Blockchain may experience a slow-down. A slow-down is also possible for other cryptocurrencies, if the number of transactions on the blockchain is very high.
10. **Dilution due to competition or “fork” in the Blockchain**

Last but not least, cryptocurrencies are based in protocols which govern the peer-to-peer interactions between various users. Dissent between users as to protocols to be used may result in a “fork”, opening two separate networks. For example, in 2016, Ethereum experienced a permanent fork in its Blockchain that resulted in two versions of its digital currency, Ethereum (ETH) and Ethereum Classic (ETC), which trade very differently. Very recently, Bitcoin also experienced its first fork, leading to the creation of Bitcoin Cash (BCC), a new cryptocurrency.

**Regulation of Cayman Funds investing in Bitcoin and other Cryptocurrencies**

Investors may also choose to invest in a fund trading (exclusively or as part of a more diversified portfolio) in cryptocurrencies, which would be in a better position to avoid or better manage some of the risks above. Cayman investment funds looking to invest in cryptocurrencies and other digital assets would still be required to comply with the Cayman Islands Mutual Funds Law (the “*Funds Law*”) if they issue to their investors equity interests (i.e. shares, interests or unit trusts, depending on the fund structure) which entitle the investors to participate in the profits or gains of the investment fund, and which are redeemable or repurchasable at the option of the investors before the commencement of winding-up or the dissolution of the fund (i.e. open-ended funds). Cayman investment funds which issue debt instruments, private equity funds, and other closed-ended funds (which do not give investors the right to redeem their shares, units or interests from the fund at the investor’s option) do not fall within the scope of the Funds Law.

In the case of Cayman open-ended funds, the Funds Law specifically sets out that the offering materials shall describe the equity interests offered in all material respects, and contain such other information as is necessary to enable a prospective investor in the fund to make an informed decision as to whether or not to subscribe for or purchase the equity interests. Whether governed by the Funds Law or not, investment funds should disclose to investors all the material terms of their offering (including risk factors to be considered) in order to avoid potential lawsuits based on, among other things, breach of contract, fraudulent misrepresentation, or negligent misstatements at common law. The material terms of the offering are usually set out in a Private Placement Memorandum or Offering Memorandum (“*PPM*”) and Cayman Courts would expect the PPM to contain all information that is necessary to enable a prospective investor to make an informed decision as to whether or not to subscribe for or purchase the shares, units or interests being issued by the investment fund.

Although for the moment the Cayman Islands Monetary Authority (CIMA) has not (yet) issued any guidance on digital assets, it is expected that CIMA would have a position similar to the one adopted in the United States by the Securities and Exchange Commission (SEC), which very recently clarified that securities laws generally apply to offerings of tokens, Initial Coin Offerings (ICOs) and other digital assets based on the underlying economics of a transaction, irrespective of the technology used and irrespective of whether the investments are made in *fiat currencies* or cryptocurrencies.
“Off-Blockchain transactions” involve the transfer of control over, or ownership of, a specific digital wallet holding bitcoins, or of the reallocation of ownership of certain bitcoins in a pooled ownership digital wallet. Information regarding such transactions is generally not publicly available.

As of August 15, 2017, 16.51 million bitcoins had been created according to https://blockchain.info/charts/total-bitcoins.

As of August 15, 2017, more than 800 alternate digital assets were tracked by CoinMarketCap.com, with a total market capitalization (including bitcoin) of approximately $142 billion, out of which bitcoin’s market capitalization was $71 billion, and the second largest digital currency, Ethereum, had reached $28.4 billion.


According to news released by Sandia National Laboratories in August 2016, the U.S. Department of Homeland Security (DHS) and Sandia National Laboratories are working together on a bitcoin de-anonymization tool – see Sandia LabNews, Vol. 68, no. 16.


See Section 4(6) of the Funds Law.