Virtual money in the virtual bank: legal remedies for loss

KEY POINTS
- Historically, money has developed to become a token rather than an embodiment of value, and this holds good in a computerised world.
- Cryptocurrency was hoped not to be susceptible to fraud, but there can be no guaranteed protection against human error.
- There are lessons to be learned from recent litigation, including that arising from the collapse of Mt. Gox.
- English common law is robust enough to facilitate the development of legal remedies for lost cryptocurrency.

This article summarises the development of coins, paper money and cryptocurrencies as tokens rather than embodiments of value, explores some recent litigation in the US and Japan, and speculates on the likely juridical basis of future developments in English common law.

A BRIEF HISTORY LESSON

Once upon a time, more than a couple of thousand years ago, and most probably in the Middle East, a bright idea occurred to some official. It had been the custom to stamp an identifying mark on a large and heavy ingot of precious metal, by which government certified its value. The official thought of similarly stamping small pieces of precious metal, more easily carried around, and so invented the coin as a medium of exchange. A few hundred years ago someone else realised that there was no need to worry about the value of the coin being “debased” by adding base to precious metal, so long as the law provided that the coin had a nominal value as legal currency (“legal tender”). The coin was thus no longer an embodiment of that value but a mere token of it. Of course, more “primitive” cultures had already for generations been using cowrie shells, feathers, or other tokens for the same purpose.

Meanwhile banks or their equivalent had for centuries also been issuing paper promissory notes or bills of exchange (almost certainly first in China), promising to exchange the paper for valuable metal on demand, and still called “bank notes” in England and “dollar bills” in the US. In England they continue to recite on their face the promise to exchange the note for value, even though it is more than a hundred years since the legal obligation to do so was abolished, and it is 85 years since the pound sterling was last pegged to the value of gold. So we still use metal and paper currency as tokens, certified by legislation as legal tender, with government obviously able to control the amount of such currency in circulation.

Banks and other financial institutions also kept ledger records of their transactions, including ledger records of customers’ credit balances (“money in the bank”). This credit balance would be a notional amount once the money had been lent elsewhere. From ancient times banks allowed customers the facility of giving a paper order to transfer money to a third person, for example by way of what in England is called a “cheque”, or by way of a “confirmed irrevocable letter of credit”, such as is typically used to finance international trade by payment for goods in exchange for documentary proof of delivery of the goods.

ALONG CAME COMPUTERS

From about the middle of the twentieth century, and the invention first of the electronic computer, and then of the transistor enabling drastic reduction in the size of computers, it began to become feasible to bring into ordinary commercial use computerised ledgers, both in conjunction with credit cards to provide revolving credit, and then to control and to effect transfers of money.

In 2009 the introduction of Bitcoin as the first “peer-to-peer” cryptocurrency was intended to bypass established financial institutions by creating a virtual currency. Cryptocurrency, existing only as a record in a computerised ledger, operates as a medium of exchange. It also fulfils other functions of money by being used as a benchmark of value (a unit of account) or wealth (share of economic value), and is capable of being exchanged with other established currencies at a floating exchange rate, which in practice tends to fluctuate wildly.

Such a cryptocurrency is not to be confused with “electronic money”, for example money designated in pounds sterling and made available to spend by a customer of the issuer using an electronic device such as a mobile phone. The issuer is required to register with the Financial Conduct Authority under the Electronic Money Regulations 2011, which however do not purport to apply to a cryptocurrency.

Perhaps the devising of Bitcoin was motivated by a general feeling that electronic transfers of virtual currency could not be safely entrusted to banks, who were being blamed for prompting the September 2008 stock market crash by bulk sales of the right to enforce inadequately secured mortgage loans. Perhaps a different or additional motivation was a perception, right or wrong, that banks were independently or collusively charging at excessive rates for electronic transfers of money.

IS CRYPTOCURRENCY SAFE?

However, if anyone thought that cryptocurrency was safe from...
misappropriation, they were mistaken. Cryptocurrency holdings are recorded on an electronic ledger accessible only to authorised users by means of an encrypted key. With Bitcoin that electronic ledger is called a “block chain” because the structure of the electronic ledger comprises blocks of data in the form of a chain. Safety was supposed to be guaranteed by having the electronic ledger exist in multiple electronic copies, which would be inherently difficult to change simultaneously. It is reported that several leading banks (including Barclays) are now actively considering whether to adopt the “block chain” electronic ledger system to effect money transfers.

So impressive does all this sound that on 19 January 2016 Sir Mark Walport, the British Government’s chief scientific adviser, told BBC Radio’s Today programme that the Bitcoin method was a way of reducing fraud, a way of reducing corruption: it’s a way of potentially distributing benefits to people who haven’t got a bank account. He seemed surprisingly unaware of the risk of fraudsters gaining access to whatever electronic devices might be employed. For example, a card reader surreptitiously attached to a cash point can give access to a “chip and pin” credit card, likewise a smartphone surreptitiously held near a “contactless” card, and so on, all of which demonstrates that no electronic device can guard against a human being succumbing to fraud. As is well known, financial institutions tend to prefer to bear loss from fraud themselves, rather than lose transaction fees, or pay insurance premiums. Previous articles in this Journal have included interesting discussions whether it is theoretically possible to use cryptocurrency as security (see for example, David Quest QC, ‘Taking security over bitcoins and other virtual currency’ [2015] 7 JIBFL 401), but perhaps the practical question is whether a lender would ever want to take that particular risk.

That cryptocurrency goes missing is well documented. A company called Bitpay, Inc. commenced proceedings on 15 September 2015 in the (federal) District Court in Atlanta, Georgia, US against its insurer for failing to pay under a policy against computer fraud, covering ‘loss of … money … or other property resulting directly from the use of any computer to fraudulently cause a transfer of that property from inside the premises or banking premises’. The definition of “money” was later extended by agreement between insurer and insured to cover Bitcoin. In the proceedings in the District Court, the plaintiff is alleging that a fraudster sent an email which caused the plaintiff to connect to a fraudulent website, where the plaintiff was deceitfully persuaded to disclose the key to its Bitcoin account, and lost bitcoins to the value of US$1.85m. The insurer has filed a defence denying liability on grounds that include a denial that the lost bitcoins were removed from inside the insurer’s premises or banking premises, and the litigation continues. The other grounds of defence may be arguable, but one recalls the dictum of HH Judge Mackie QC sitting in the English High Court in W v Veolia Environmental Services [2011] EWHC 2020 (QB) at para [40] that ‘Cheerful, prompt and knowing overpayment of claims by insurers is unheard of, at least in this court’.

Either way, the implication seems to be that losers of bitcoins are unlikely to be compensated in full.

On 7 December 2015, a US (federal) criminal court in San Francisco imposed a 71 month prison sentence on a man called Bridges, who while a member of the US Secret Service’s electronic crimes task force investigating Silk Road, an online criminal market place that was part of the “dark internet”, had participated in stealing bitcoins that at the time were worth some US$350,000.

These examples would seem to indicate that Sir Mark Walport’s confidence that someone on benefits who has a computer but no bank account would be immune from uninsured loss through fraud seems somewhat naive.

**COLLAPSE OF MT. GOX**

More notoriously, a Japanese company called Mt. Gox KK, trading as a Bitcoin exchange, collapsed in February 2014 after 850,000 bitcoins valued at hundreds of millions of pounds virtually vanished. Aspects of the ensuing litigation are instructive. On 24 February 2014 Mt. Gox KK filed an application in court in Japan seeking a form of administration that might enable sale as a going concern and thus avoid liquidation, but on 16 April 2014 applied to be put into liquidation. At the time of writing, the fifth meeting of creditors had been fixed for 17 February 2016. Comparable steps appear to have been taken with regard to Mt. Gox, Inc., an associated company incorporated in Delaware, US, whose principal place of business was also in Japan. Meanwhile, on 27 February 2014 the proceedings Greene v Mt. Gox, Inc. were commenced in the US (federal) District Court for Northern Illinois as a class action against a number of companies and individuals alleged to be involved.

Joyce v Mt. Gox, Inc. is a similar lawsuit pending in the Ontario Superior Court of Justice in Canada. On 24 February 2014 a partial settlement of the US District Court
claiming to be a preferred creditor by virtue of a proprietary interest in the bitcoins he had lost. On 5 August 2015 the court ruled in favour of the trustee. The ruling has been widely misinterpreted as a decision that no proprietary interest can subsist in a cryptocurrency. However, as pointed out by Akihiro Shiba, a Japanese attorney, in an internet article for CoinDesk, the decision did no more than decide that the individual did not have a sufficient proprietary interest to be classed as a preferred creditor, leaving him to claim as an ordinary creditor; and it was a first instance decision, on a question of the interpretation of a Japanese statute, and is subject to appeal. However, one may comment that within its very limited scope, the judgment would be hard to criticise, and that an English insolvency judge would be likely to reach the same conclusion.

**LIKELY APPROACH OF AN ENGLISH COURT**

In English law, money as a token of value has long been regarded as property, as convincingly argued by Dr David Fox in his monograph *Property Rights in Money* (2008). English law should therefore have no conceptual difficulty in treating cryptocurrency as being worth its exchange value. When printers of bank notes were tricked into permitting fraudsters to circulate unauthorised bank notes in Portugal, a majority of the House of Lords held the printers liable in damages for the exchange value of the spurious bank notes, rather than just for their nominal value as printed paper: *Banco de Portugal v Waterlow and Sons Ltd* [1932] AC 452. Similarly, in *Fairstar Heavy Transport NV v Adkins* [2013] EWCA Civ 886, the Court of Appeal held that a principal was entitled to recover its business emails from a former agent who had control of the only copies, there being no reason in such a context to distinguish between printed and electronic documents.

It hardly makes a difference that HMRC treats Bitcoin as foreign currency for the purposes of income, corporation and capital gains tax, and as regards VAT will necessarily follow the European Court of Justice in accepting that no VAT is payable on an exchange of Bitcoin with another currency: *Skatteverket v David Hedqvist* (Case C-264/14), report available at http://www.bailii.org/eur/cases/EUECJ/2015/C26414.html

Similarly, it makes little difference that in the absence of express contractual provision, particular rights and remedies may depend on physical possession of something tangible, which cryptocurrency is obviously not. For example, it has been held that no non-contractual possessory lien is capable of subsisting in the contents of an electronic database: *Your Response Ltd v Datateam Ltd* [2015] QB 41 (CA). In *Re Lehman Brothers International (Europe) (administration)* [2012] EWHC 2997 (Ch), Briggs J had to construe express contractual provisions alleged to create a lien over intangibles. He recorded at para [34] that all counsel before him (4 leaders and 5 juniors) agreed that the rule was that ‘rights properly classified in English law as a general lien were incapable of application to anything other than tangibles and old-fashioned certificated securities’, and that, although ‘I invited the parties to consider whether the time might have come for English law to take a broader view of the matter … counsel continued to invite me to treat the established limitation of the scope of a general lien to intangibles as set in stone, or at least as firmly set to be disturbed at first instance’. In the end, he did not have to decide the issue, because he construed the relevant security as a charge. The significance of his decision, and its relationship to the decision of Vos J in the earlier case of *Re F2G Realisations Ltd (in liquidation)*, *Gray v GTP Group Ltd* [2011] 1 BCLC, [2010] EWHC 1772 (Ch) was well distilled in an article by Daniel Saoul, ‘Lehman: liens untied’ [2013] 3 JIBFL 143.

Whether English law is yet ready to provide effective remedies in tort or restitution for misappropriated cryptocurrency is a more complex conceptual issue, and *Armstrong DLW GmbH v Winnington Networks Ltd* [2013] Ch 156 (Stephen Morris QC) deserves closer analysis than the length of this article allows.

English criminal law has sometimes seemed to struggle with the concept of intangible assets, and whether there can be the statutory crime of “theft” of a bank credit balance of which the only record of its existence is in a ledger, electronic or otherwise; or only some such statutory crime as “gaining a pecuniary advantage by deception”. However, the Fraud Act 2006 may be seen as dispelling any remaining confusion by concentrating attention on what the fraudster has done, rather than whether he has done it to something tangible.

So there is no necessary conceptual difficulty in the law of contract as developed on a case by case basis under English common law continuing to be applied on the same basis to cryptocurrencies, to answer questions whether contractual obligations have been incurred, on what terms, whether performance of such obligations may be avoided or brought to an end, and what remedies may be available. As explained above, the claim of the individual loser of bitcoins in the Japanese insolvency proceedings was not dismissed on the ground that a right of property could not exist in cryptocurrency, but only on the ground that he could not claim as a preferred creditor. In any event, many transactional and litigation lawyers both in practice and of necessity tend to think of the jurisdictional basis of money less as personal property in ownership or use, and more in terms of obligations owed by and to persons with respect to that money; and therefore less in terms of proprietary rights and more in terms of available remedies. Further developments may be expected!

**Further reading**

- Taking security over bitcoins and other virtual currency [2015] 7 JIBFL 401.
- LexisNexis Financial Services: Practice Notes: An introduction to virtual currencies.