

21 July 2015

European Securities and Markets Authority
103 Rue de Grenelle
75007 Paris
France

Re: Investment using virtual currency or distributed ledger technology (ESMA/2015/532)

Dear Sir or Madam,

CFA Institute appreciates the opportunity to respond to ESMA's call for evidence on investment using virtual currency (VC) or distributed ledger technology (ESMA/2015/532).

CFA Institute is the global association of investment professionals that sets the standard for professional excellence and credentials. The organization is a champion for ethical behaviour in investment markets and a respected source of knowledge in the global financial community. The end goal: to create an environment where investors' interests come first, markets function at their best, and economies grow. CFA Institute has more than 130,000 members in 151 countries and territories, including 124,000 Chartered Financial Analyst® charterholders, and 145 member societies.

This call for evidence covers three areas relating to VC or distributed ledger technology: i) VC investment products, ii) VC-based assets/securities and transfers that are traded exclusively using VC distributed ledgers, and iii) the application of distributed ledger technology to securities/investments inside or outside a VC environment.

CFA Institute's interest in virtual currencies stems from its ambition to be a thought leader for the investment management profession and to this end we have previously published a white paper on the topic¹. CFA Institute broadly welcomes financial innovation that may allow greater access to the financial system at lower cost for investors and consumers. We believe virtual currencies are an interesting financial innovation that may facilitate these goals. However, CFA Institute believes there is scope for greater investor and consumer protection in some areas of virtual currencies, particularly in custodial activities such as wallets and exchanges. We do not have a vested interest in the success or failure of virtual currencies and only opine on the relevant descriptions and analogies of VC technology set out in the call for evidence.

Specific Comments

Our first comment relates to Section 4 of the Call for Evidence, which deals with virtual currency based financial assets/securities and their transfer. In this section, question 3 asks:

¹ White paper on crypto-currencies available here:
<http://www.cfainstitute.org/ethics/Documents/Digital%20Currencies%20Policy%20Brief.pdf>

“Do you have anything to add or suggest a change to the description (paragraphs 15-18) of how virtual currency distributed ledgers work? Please clearly state to which virtual currency you are referring in your answer or whether your answer refers to virtual currencies in general.”

In responding to question 3, we have the following suggested alterations:

- Paragraph 15, sentence 2 reads “A block chain is a public register or “distributed ledger” that contains all transactions in the respective virtual currency.”

We suggest that it may be amended to read “A block chain is a public register or “distributed ledger” that contains a record of all transactions in the respective virtual currency.”

- Paragraph 15, sentence 3 reads “At any moment in time the block chain keeps track of who owns how much of the VC.”

We suggest that it may be amended to read “At any moment in time the block chain can be used to determine the balance in any anonymous address by netting all transactions into and out of that address.”

- Paragraph 16, sentence 3 reads “Miners essentially take part in a game that consists of solving mathematical problems.”

We suggest that it may be amended to read “Miners take part in a race to find a random number that generates a required hexadecimal pattern when the block is input in the hash function. This is often described as a mathematical problem to be solved, but in reality involves simply trial-and-error using brute force computing power. For this reason, raw computing power is proportional to mining success.”

Our final comment relates to Section 4.3, which investigates the differences and commonalities between virtual currencies and the traditional process of investing in financial assets/securities. In this section, question 6 asks:

“Do you agree with the analogies to traditional regulated entities as outlined (paragraph 25-32)? Please explain where you have a different opinion, including where the analogies are different for different VCs.”

In responding to question 6, we first state that we agree with the analogies made between traditional regulated entities and their virtual currency counterparts. However, we have the following additional comment based on conversations we have had with various stakeholders in the cryptocurrency industry. There is a distinction that needs to be made between different wallet providers in terms of whether they can be considered custodians. It is our understanding that the majority of wallets exist on the wallet provider’s own hardware, which users can access through the wallet provider’s website. However, as described to us by stakeholders, some wallets (the example given at the time referred to Blockchain.info) provide a web interface for users to securely access Bitcoins that are stored on their own (i.e. the user’s) computer.

Concluding Remarks

CFA Institute welcomes the initiative to better understand and take advantage of the potential benefits of virtual currencies while minimising the risks posed to investors and consumers. For further information on the facts, issues, and policy considerations associated with virtual currencies, ESMA may wish to refer to the CFA Institute policy brief on crypto-currencies referred to previously. Please do not hesitate to contact us should you wish further elaboration of the points raised.

Yours faithfully,



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