IFRS

STAFF PAPER

September 2018

IFRS® Interpretations Committee meeting

Project	**Cryptocurrencies**
Paper topic	Holdings of cryptocurrencies

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Introduction

1. In July 2018, the International Accounting Standards Board (Board) discussed holdings of cryptocurrencies. The Board asked the staff to seek the advice of the IFRS Interpretations Committee (Committee) about how an entity might apply existing IFRS Standards in accounting for holdings of cryptocurrencies. Additionally, the Board sought the Committee's views on whether the application of existing IFRS Standards would provide useful information to investors for decision-making.

2. The objective of this paper is to ask the Committee for its views on how an entity applies existing IFRS Standards in accounting for holdings of cryptocurrencies.

3. This paper includes:

   (a) background information (paragraphs 4–6); and

   (b) staff analysis of the application of existing IFRS Standards to holdings of cryptocurrencies:

      (i) financial assets (paragraphs 10–38);

      (ii) inventories (paragraphs 39–46);

      (iii) intangible assets (paragraphs 47–62);

      (iv) presentation and disclosure (paragraphs 63–67); and

      (v) summary of staff analysis (paragraphs 68–72).

Background information

4. Investopedia defines a cryptocurrency as 'a digital or virtual currency that uses cryptography for security.' Investopedia also notes that cryptocurrencies are not issued by any central jurisdictional authority.

5. We consider cryptocurrencies to be a specific type of asset that is part of a broader asset class known as cryptoassets. A cryptoasset is a digital asset class that includes assets recorded on a blockchain. A cryptoasset could be intended for use as a medium of exchange (eg cryptocurrencies) or may be an asset that provides the holder with particular rights (eg crypto tokens).

6. The scope of the analysis requested by the Board did not extend to cryptoassets other than cryptocurrencies. Additional analysis would be necessary if the scope of the Board's work were to extend beyond cryptocurrencies (see paragraph 37 of this paper for more information).

Staff analysis

7. We have considered the nature of cryptocurrencies to determine which existing IFRS Standard an entity applies to its holdings of cryptocurrencies. We have considered whether an entity accounts for holdings of cryptocurrencies as:

   (a) financial assets applying IFRS 9 *Financial Instruments* or IAS 39 *Financial Instruments: Recognition and Measurement*.

   (b) inventories applying IAS 2 *Inventories* either measured:

      (i) at cost; or

      (ii) at fair value through profit of loss using the commodity broker-trader exemption.

   (c) intangible assets applying IAS 38 *Intangible Assets*.

8. Our research of publicly-listed entities reporting holdings of cryptocurrencies (see paragraphs 29–36 of Agenda Paper 4B to this meeting) identified that all these Standards are applied by different entities.

9. We have not considered whether an entity applies IAS 16 *Property, Plant and Equipment*, IAS 28 *Investments in Associates and Joint Ventures*, IAS 40 *Investment Property* or IAS 41 *Agriculture* to its holdings of cryptocurrencies because, by their nature, cryptocurrencies do not meet the definitions of assets within the scope of those IFRS Standards.

Financial assets

10. Paragraph 11 of IAS 32 defines a financial asset as:

> … any asset that is:
>
> (a) cash;
>
> (b) an equity instrument of another entity;
>
> (c) a contractual right:
>
> (i) to receive cash or another financial asset from another entity; or
>
> (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or
>
> (d) a contract that will or may be settled in the entity's own equity instruments …

11. We have considered the application of the definition of a financial asset to holdings of cryptocurrencies by considering whether cryptocurrencies meet the definition of cash or a financial asset other than cash.

12. At the time of writing there are around 1,700[1] cryptocurrencies in circulation. The most commonly used and widely recognised cryptocurrency is bitcoin. In assessing whether cryptocurrencies could be a financial asset, when helpful to the analysis, we have used bitcoin as an example of a cryptocurrency.

[1] See https://coinmarketcap.com/all/views/all/

Cash

13. IFRS Standards do not describe the characteristics of cash. Paragraph 6 of IAS 7 *Statement of Cash Flows* says that cash 'comprises cash on hand and demand deposits'.

14. Paragraph AG3 of IAS 32 states that cash is a medium of exchange. It also implies that cash is a unit of account. Paragraph AG3 of IAS 32 states:

> Currency (cash) is a financial asset because it represents the medium of exchange and is therefore the basis on which all transactions are measured and recognised in financial statements. A deposit of cash with a bank or similar financial institution is a financial asset because it represents the contractual right of the depositor to obtain cash from the institution or to draw a cheque or similar instrument against the balance in favour of a creditor in payment of a financial liability.

15. We have considered whether cryptocurrencies are a medium of exchange in paragraphs 16–19 of this paper and unit of account in paragraphs 20–22. We have also considered two other common characteristics of cash that are not discussed in IFRS Standards. These are:

    (a) legal tender (paragraphs 24–25); and

    (b) use as a store of value (paragraphs 26–29).

Medium of exchange

16. For an item to be a 'medium of exchange', it must act as an intermediary in the exchange of goods and services—ie it replaces barter transactions in which counterparties must have opposite but equal needs to transact.

17. IFRS Standards do not provide additional requirements for an entity to determine whether a particular asset is a medium of exchange. A report by Morgan Stanley[2], published in June 2018, says only 4 of the top 500 e-commerce websites in the US accept cryptocurrencies. Globally, 99Bitcoins, an entity that provides web-based

[2] https://www.macrobusiness.com.au/wp-content/uploads/2018/06/82012860.pdf

information on cryptocurrencies, identifies 91 entities accepting bitcoin as a form of payment as at June 2018[3].

18. http://spendbitcoins.com/ says there are over 100,000 businesses worldwide that accept bitcoin, although many of these are small businesses that do not apply IFRS Standards.

19. At this time, we think there is insufficient evidence to support a position that bitcoin is widely accepted as a medium of exchange. We consider the same to be true for other cryptocurrencies.

Unit of account

20. The concept of a unit of account is that cash acts as a standard measurement of value that allows the comparison of the economic worth of goods and services—ie cash is used to price goods and services. Paragraph AG3 of IAS 32 describes this as 'the basis on which all transactions are measured and recognised in financial statements'.

21. IFRS Standards do not elaborate on how an entity assesses whether a cryptocurrency is a unit of account.

22. We have considered the features of existing cryptocurrencies. We are not aware of any entities that price their goods or services in cryptocurrencies. While entities may quote an amount of bitcoin they would accept alongside a fiat currency (money without intrinsic value but backed by a government authority, eg euros), the amount of bitcoin quoted changes each day in response to changes in the value of bitcoin relative to the fiat currency. In our view, this indicates that bitcoin is not a unit of account. We consider the same to be true of other cryptocurrencies.

Other factors to consider

23. We have identified two commonly considered characteristics of cash that are not explicitly or implicitly discussed in IFRS Standards. These are:

    (a) legal tender; and

    (b) use as a store of value.

[3] https://99bitcoins.com/who-accepts-bitcoins-payment-companies-stores-take-bitcoins/

24. Some have suggested that a characteristic of cash is that it is legal tender in a particular jurisdiction. For example, in section 3.2.1 of Agenda Paper 5 to the Accounting Standards Advisory Forum (ASAF) meeting in December 2016 the Australian Accounting Standards Board said:

> Furthermore, while not all jurisdictions have made formal statements, nobody seems to recognise digital currency as legal tender (yet). Also, almost all jurisdictions that have issued formal views on digital currencies have warned about its volatility and have concerns around the lack of regulation around it (Hill, 2014). It is worth noting that even though there is a lack of recognition as legal tender, numerous jurisdictions have tax-laws and anti-money laundering regulations in place. In other words, tax and other government authorities have definitions and views on digital currencies while IFRSs do not. It has been reported that some central banks are considering the use of digital currencies, and it is not an inconceivable outcome.

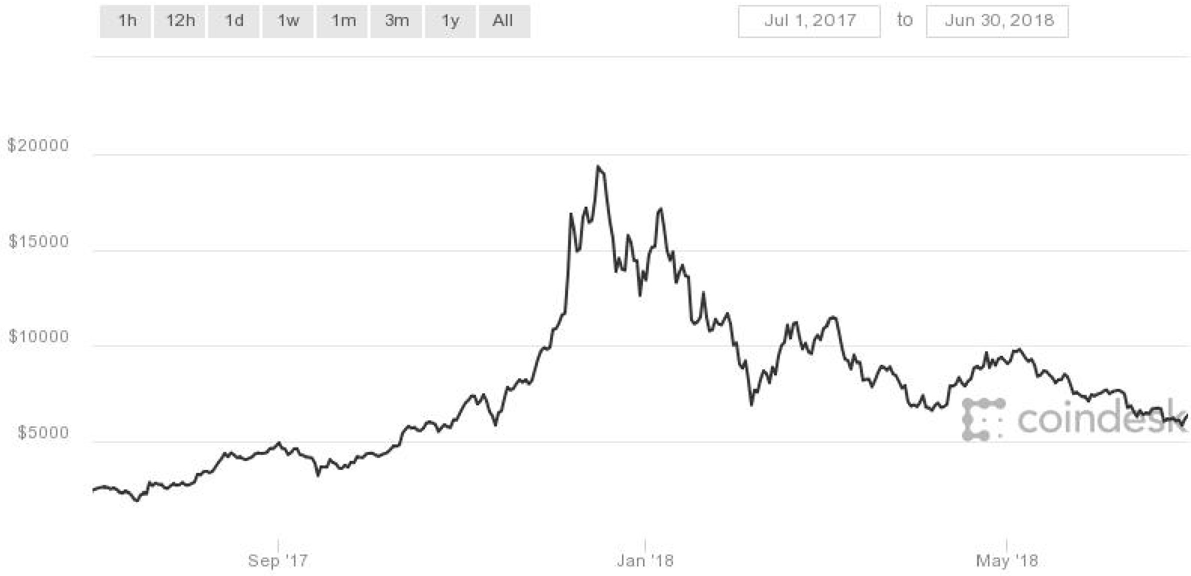
25. The notion of legal tender is not discussed in IFRS Standards, although we think the notion may provide evidence that a particular asset is used as a medium of exchange.

26. In addition to being a medium of exchange and unit of account many economists also consider a characteristic of cash is use as a store of value[4].

27. Cash is a store of value if it can act as a means of transferring purchasing power from the present to the future—ie instead of consuming the cash now it can be stored and used as a medium of exchange in the future. For this to be the case typically money is required to have a reasonably stable value over time.

[4] For example, see Mankiw, N. Gregory (2012) *Essentials of Economics*

28. The chart below shows the price of bitcoin for the year ended 30 June 2018:



29. The chart demonstrates that the value of bitcoin is currently subject to significant changes in value. This chart is also indicative of the volatility of many other cryptocurrencies.

Cash equivalents

30. Paragraph 6 of IAS 7 defines cash equivalents as 'short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value'.

31. In July 2009 the Committee published an agenda decision that says the amount of cash that will be received must be known at the time of the initial investment, ie an asset cannot be considered a cash equivalent simply because it can be converted to cash at any time at the then market price in an active market.

32. Cryptocurrencies are not readily convertible into known amounts of cash at the time of initial investment. We therefore think that cryptocurrencies do not meet the definition of a cash equivalent.

Other financial assets

33. An asset is a financial asset if it is (a) an equity instrument of another entity; (b) a contractual right to receive cash or another financial asset from another entity; (c) a contractual right to exchange financial assets or financial liabilities with another entity

under conditions that are potentially favourable to the entity or (d) a particular contract that will or may be settled in the entity's own equity instruments.

34. Cryptocurrencies represent a unit of value on a blockchain. This unit does not provide the holder with a contractual right to receive cash from another entity or to exchange financial assets or liabilities under potentially favourable conditions. Instead, holders of a cryptocurrency must sell the cryptocurrency at a specialised exchange to obtain cash for it.

35. Cryptocurrencies are not an equity instrument of another entity because they do not provide the holder with a residual interest in another entity. Cryptocurrencies are also not a contract that will or may be settled in the entity's own equity instruments.

36. We think that cryptocurrencies do not meet the definition of a financial asset.

Other cryptoassets

37. Cryptocurrencies are a subset of a broader asset class known as cryptoassets. Other types of cryptoassets may be financial assets if they provide the holder with the right to receive cash in particular circumstances or if they are an equity instrument of another entity. See Agenda Paper 4C to this meeting for consideration of the accounting for cryptoassets issued in an Initial Coin Offering.

Contracts based on cryptocurrencies

38. We are aware that some entities enter into contracts based on a cryptocurrency. For example, in December 2017, two of the world's largest derivative trading exchanges, the CME Group and Cboe Global Markets, began offering bitcoin futures. These contracts may meet the definition of a financial asset.

Inventories

39. Paragraph 6 of IAS 2 defines inventories as assets:

    (a) held for sale in the ordinary course of business;

    (b) in the process of production for such sale; or

    (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

40. Based on their nature, we think that an entity would not hold cryptocurrencies in the process of production for sale or be able to use them as materials or supplies consumed in the production process or in the rendering of services.

41. However, particular entities may hold cryptocurrencies for sale in the ordinary course of business (for example, entities that act as dealers of cryptocurrencies). When this is the case, such holdings would be within the scope of IAS 2.

42. Those entities would measure cryptocurrencies held for sale in the ordinary course of business at the lower of cost and net realisable value applying paragraph 9 of IAS 2, subject to considering the commodity broker-trader exemption in paragraph 3(b) of IAS 2.

Commodity broker-traders

43. Paragraph 3(b) of IAS 2 states that IAS 2 does not apply to the measurement of inventories held by commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at fair value less costs to sell, the commodity broker-trader recognises in profit or loss changes in fair value less costs to sell in the period of the change.

44. Paragraph 5 of IAS 2 states:

> Broker-traders are those who buy or sell commodities for others or on their own account. The inventories referred to in paragraph 3(b) are principally acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker-traders' margin. When these inventories are measured at fair value less costs to sell, they are excluded from only the measurement requirements of this Standard.

45. IFRS Standards do not provide a definition of a commodity (although gold is confirmed as a commodity in paragraph B4.3.5 of IFRS 9 and B.1 of the IG of IFRS 9). Examples of dictionary[5] definitions include 'a raw material or primary agricultural product that can be bought and sold, such as copper or coffee' and 'a useful or valuable thing'.

[5] See https://en.oxforddictionaries.com/definition/commodity

46. Where an entity buys and sells cryptocurrencies principally acquired with the purpose of selling in the near future in order to generate a profit from fluctuations in value, we think the requirements in IAS 2 do not prevent the entity from measuring those cryptocurrencies using the requirements in paragraph 3(b) of IAS 2.

Intangible asset

47. An intangible asset is defined in paragraph 8 of IAS 38 as 'an identifiable non-monetary asset without physical substance'.

48. Paragraph 12 of IAS 38 states:

> An asset is identifiable if it either:
>
> (a) is separable, ie is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so; or
>
> (b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

49. Paragraph 16 of IAS 21 *The Effects of Changes in Foreign Exchange Rates* states that 'the essential feature of a monetary item is a right to receive (or an obligation to deliver) a fixed or determinable number of units of currency… Conversely, the essential feature of a non-monetary item is the absence of a right to receive (or an obligation to deliver) a fixed or determinable number of units of currency'.

50. We think cryptocurrencies typically meet the definition of an intangible asset because they:

    (a) are capable of being separated from the entity and sold;

    (b) are a non-monetary item because there is no right to receive a fixed number of units of currency; and

    (c) do not have physical substance.

51. IAS 38 applies to all intangible assets except:

    (a) intangible assets that are within the scope of another Standard;

    (b) financial assets, as defined in IAS 32;

    (c) the recognition and measurement of exploration and evaluation assets (see IFRS 6 *Exploration for and Evaluation of Mineral Resources*); and

    (d) expenditure on the development and extraction of minerals, oil, natural gas and similar non-regenerative resources.

52. Paragraph 3 of IAS 38 lists nine examples of assets that are within the scope of another IFRS Standard, and thus not within the scope of IAS 38. For example, it includes intangible assets held by an entity for sale in the ordinary course of business (see IAS 2).

53. Accordingly, we think an entity would account for holdings of cryptocurrencies applying IAS 38, unless it determined that they are within the scope of another IFRS Standard (eg IAS 2).

54. In applying IAS 38, paragraph 72 requires an entity to apply either the cost model (described in paragraph 74 of IAS 38) or the revaluation model (described in paragraph 75 of IAS 38) to measure its intangible assets after recognition.

Specialised activities or transactions

55. Some stakeholders have suggested that paragraph 7 of IAS 38 could be used to exclude cryptocurrencies from the scope of IAS 38. Paragraph 7 states:

> Exclusions from the scope of a Standard may occur if activities or transactions are so specialised that they give rise to accounting issues that may need to be dealt with in a different way. Such issues arise in the accounting for expenditure on the exploration for, or development and extraction of, oil, gas and mineral deposits in extractive industries and in the case of insurance contracts. Therefore, this Standard does not apply to expenditure on such activities and contracts. However, this Standard applies to other intangible assets used (such as computer software), and other expenditure incurred (such as start-up costs), in extractive industries or by insurers.

56. Those stakeholders say cryptocurrencies are a specialised transaction that give rise to specific accounting issues. They say cryptocurrencies are typically not held for use in supporting an entity’s operations like those described in paragraph 9 of IAS 38. Paragraph 9 lists as common examples computer software, patents, copyrights, motion picture films, customer lists, mortgage servicing rights amongst others. Cryptocurrencies are different in nature from those examples because cryptocurrencies are existing assets that have been obtained by the entity from which the future economic benefits to be obtained arise only from their subsequent sale. This contrasts with the examples of future economic benefits that flow from an intangible asset listed in paragraph 17 of IAS 38 (ie revenue from the sale of products or services, cost savings, or other benefits resulting from the use of the asset by the entity).

57. Accordingly, those stakeholders would not consider cryptocurrencies to be within the scope of IAS 38 applying paragraph 7 of that Standard.

58. We acknowledge that IAS 38 was not written with cryptocurrencies in mind. However, paragraph 7 of IAS 38 says that exclusions from the scope of *a* Standard *may* occur if the activities or transactions are so specialised that they give rise to accounting issues that need to be dealt with in a different way. We think this sentence in paragraph 7 of IAS 38 acts in a similar way to a basis for conclusions paragraph. This paragraph was included in the original 1998 version of IAS 38, which had no basis for conclusions. At that time the scope of IAS 38 (paragraph 2 of the 1998 version of IAS 38) stated:

> This Standard should be applied by all enterprises in accounting for intangible assets, except:
>
> (a) intangible assets that are covered by another International Accounting Standard;
>
> (b) financial assets, as defined in IAS 32, *Financial Instruments: Disclosure and Presentation*;
>
> (c) mineral rights and expenditure on the exploration for, or development and extraction of, minerals, oil, natural gas and similar non-regenerative resources; and

> (d) intangible assets arising in insurance enterprises from contracts with policyholders.

59. When IAS 38 was first issued there was no IFRS Standard for the exploration of mineral resources (now IFRS 6 *Exploration for and Evaluation of Mineral Resources*) or insurance contracts (now IFRS 4 *Insurance Contracts* superseded by IFRS 17 *Insurance Contracts*). What is now paragraph 7 of IAS 38 provides an explanation for the exclusion of those activities and transactions from the scope of IAS 38. The first sentence explains in general why the Board may decide to exclude a transaction from the scope of a Standard. The remainder of the paragraph explains this circumstance exists for exploration of mineral resources and insurance contracts. Accordingly, the Board decided to exclude them from the scope of IAS 38.

60. We think that this paragraph applies only to the activities included in the paragraph—ie exploration for, or development and extraction of, oil, gas and mineral deposits in extractive industries and in the case of insurance contracts. We think that an entity cannot apply scope exclusions by analogy.

61. In addition, paragraph BC4 and BC5 of IAS 38 explain the Board's rationale when determining the definition of an intangible asset. In particular, paragraph BC5 of IAS 38 states:

> The Board observed that the essential characteristics of intangible assets are that they:
>
> (a) are resources controlled by the entity from which future economic benefits are expected to flow to the entity;
>
> (b) lack physical substance; and
>
> (c) are identifiable.
>
> The Board concluded that the purpose for which an entity holds an item with these characteristics is not relevant to its classification as an intangible asset, and that all such items should be within the scope of the Standard.

62. Accordingly, we think paragraph 7 of IAS 38 does not provide an exception from the scope of IAS 38 for cryptocurrencies.

Presentation and disclosure

63. When evaluating presentation and disclosure requirements, an entity is required to consider what information about holdings of cryptocurrencies could influence the economic decisions that users make on the basis of the financial statements.

64. An entity applies the presentation and disclosure requirements of the IFRS Standard it applies to account for its holdings of cryptocurrencies. For example, if an entity applies IAS 2 to its holdings of cryptocurrencies it applies the disclosure requirements in paragraphs 36–39 of IAS 2. If an entity applies IAS 38 to its holdings of cryptocurrencies the entity applies the disclosure requirements in paragraphs 118–123 of IAS 38.

65. If an entity accounts for its holdings of cryptocurrencies at fair value, either applying paragraph 3(a) of IAS 2 or the revaluation model in IAS 38, an entity applies the disclosure requirements in paragraphs 91–99 of IFRS 13 *Fair Value Measurement*.

66. In addition, an entity is required to apply the presentation and disclosure requirements of IAS 1. There are a number of requirements in IAS 1 we think might be particularly relevant to holdings of cryptocurrencies:

    (a) Paragraph 55 requires an entity to present additional line items, headings and subtotals in the statement of financial position when such presentation is relevant to an understanding of the entity's financial position. If an entity's holdings of cryptocurrencies are material an entity may be required to present that holding as a separate line item in the statement of financial position.

    (b) Paragraphs 121–123 require an entity to disclosure significant accounting policies and judgements that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements. An accounting policy may be significant because of the nature of the entity's operations even if amounts for current and prior periods are not material.

    (c) Paragraph 112(c) requires an entity to provide information that is not presented elsewhere in the financial statements but is relevant to an understanding of the financial statements in the notes.

67. As described in paragraph 28 of this paper, the value of cryptocurrencies may be subject to significant volatility. For example, the price of one bitcoin as at 31 December 2017 was US$14,156 but declined to US$6,974 (a 51% decline) by 31 March 2018. Accordingly, we think the requirements in paragraph 21 of IAS 10 *Events after the Reporting Period* are relevant for an entity holding cryptocurrencies. Paragraph 21 states:

> If non-adjusting events after the reporting period are material, non-disclosure could influence the economic decisions that users make on the basis of the financial statements. Accordingly, an entity shall disclose the following for each material category of non-adjusting event after the reporting period:
>
> (a) the nature of the event; and
>
> (b) an estimate of its financial effect, or a statement that such an estimate cannot be made.

Staff conclusion

68. Based on our analysis, we think an entity does not account for holdings of cryptocurrencies as cash or another financial asset because cryptocurrencies do not currently have the characteristics of cash nor do they meet the definition of a financial asset in IAS 32.

69. If the use of a cryptocurrency evolved to such an extent that it was widely used as a medium of exchange and unit of account, then we think an entity would reassess these requirements at that time.

70. If an entity holds cryptocurrencies for sale in the ordinary course of business, we think it would meet the definition of inventories and, thus, apply IAS 2. We also think it may be appropriate to apply the requirements in paragraph 3(b) of IAS 2 if the entity is a broker-trader.

71. We think that cryptocurrencies meet the definition of an intangible asset and if an entity does not apply IAS 2 to account for those cryptocurrencies it applies IAS 38.

72. An entity applies the presentation and disclosure requirements of the IFRS Standard it applies to account for its holdings of cryptocurrencies. IAS 1 and IAS 10 also contain relevant disclosure requirements.

Question for the Committee
Does the Committee agree with our analysis of the requirements in IFRS Standards as applied to holdings of cryptocurrencies, summarised in paragraphs 68–72 of our paper?