KPMG

Hot Topic: Digital assets

Principal market, unit of account and income statement presentation

January 2022

This Hot Topic addresses questions about the principal market for a crypto asset, unit of account and presentation of crypto intangible asset impairment losses and sales gains in the income statement.

Introduction

KPMG Executive Summary, *Accounting for crypto assets – entities that are not broker-dealers or investment companies*, defines 'crypto asset' and provides a high-level overview of the accounting for crypto assets that meet the definition of an intangible asset under US GAAP. In this Hot Topic, we dive deeper into some of the questions that have arisen about accounting for these assets as intangible assets.

Applicability

Companies that are not broker-dealers or investment companies subject to ASC 940 (brokers and dealers) or ASC 946 (investment companies) that have acquired 'crypto assets' through purchase, as payment from another entity or by any other means.

Questions and answers

Question 10

What challenges commonly arise when determining the principal market for a crypto asset?

Background: A fair value measurement ordinarily assumes sale of the crypto asset in its principal market (if one exists), or the most advantageous market if a principal market does not exist. The principal market is that with the greatest volume and level of activity. The most advantageous market is that in which the entity would maximize its sale proceeds, net of any transaction or transportation costs. [820-10-35-5]

Absent evidence to the contrary, the market that an entity normally transacts in for the relevant asset is presumed to be its principal market (or most advantageous market in the absence of a principal market). An exhaustive search of all possible markets is not necessary, but an entity should consider all information that is reasonably available. [820-10-35-5A]

If there is a principal market it should be used in the fair value measurement, even if the price in a different market is more advantageous at the measurement date. [820-10-35-6]

For a market to be considered the principal (or most advantageous) market, the entity must be able to access it at the measurement date. Because of this, the principal (or most advantageous) market for the same asset may vary from entity to entity. [820-10-35-6A]

Interpretive response: As stated in the background, principal (or most advantageous) market assessments can vary from entity to entity, including for the same crypto asset (e.g. bitcoin, ether), and be challenging for crypto assets because of one or more of the items in the following table. This table lists the most common challenges we have observed entities encounter and how we believe entities should generally respond to each one.

Challenge	Response
An entity may 'normally transact' in, and therefore have readily available pricing information for, a market (e.g. a cryptocurrency exchange) that is smaller – i.e. has a lower trading volume and level of activity for the relevant crypto asset – than other markets the entity can access.	ASC 820 permits an entity to presume its primary transactional market is its principal market for an asset unless there is reasonably available information to the contrary. [820-10-35-5A] Because exchange volume and activity data for at least the more common crypto assets (e.g. bitcoin, ether) *is* generally reasonably available, we believe an entity would typically not *presume*, without undertaking further evaluation, that any cryptocurrency exchange on which the entity primarily transacts is the entity's principal market. Inappropriately relying on the presumption may lead to incorrect fair value measurements by an entity of its crypto assets. In practice, we have observed that an entity's primary transactional market for a crypto asset is often not the entity's principal market under ASC 820 for that crypto asset.

Challenge	Response
An entity may 'normally transact' in multiple markets for the same crypto asset, such that no one exchange qualifies as the market in which the entity normally transacts.	An entity may not have a market to which to apply the presumption described above if it regularly transacts in multiple markets for the same crypto asset. If there is not readily available information about other markets accessible to the entity, and therefore the entity would usually conclude its primary transactional market is its principal market, we believe it may be appropriate to consider: — which of the markets in which the entity normally transacts has a greater volume and level of trading activity for the crypto asset; and — if all of the markets in which the entity normally transacts are of a similar size (or the relative size of those markets is not known), which market it would intend to access for a hypothetical sale of its entire holding of the crypto asset on the measurement date.
Accurate volume and activity data may be difficult to obtain and/or be of questionable reliability. Conflicting volume data often exists, and the cryptocurrency market has been fraught with fraudulent trading and volume data.	Entities will need to exercise judgment in determining the appropriate sources for, and reliability of, crypto asset volume and activity data. They may want to ensure they obtain market data from multiple sources when assessing the principal market for a crypto asset, and that those sources are substantially corroborative of each other. In the absence of reliable volume and activity data, we believe an entity would generally revert to the presumption that its primary transactional market for the crypto asset is its principal market. Entities should develop and maintain a rational, repeatable and sustainable process to assess whether, and if so what, market information is available, relevant and reliable.
An entity may not be able to access a particular market for a crypto asset, even if reasonably reliable volume and activity data suggests it has the greatest trading volume or level of activity for the crypto asset. For example, a US entity may not be permitted to access an exchange because it does not accept US individual or entity customers. In addition, there may be other factors that individually or in combination preclude an entity legally or practically accessing a particular market.	The principal market for an asset must be accessible to the entity as of the measurement date. Therefore, an entity needs to consider any legal, practical and/or economic restrictions on its ability to access a particular market. All relevant facts and circumstances should be considered; accessibility does *not*, however, consider an entity's intent to trade in a particular market. Consistent with the example provided, an entity may not be able to access the market with the greatest volume and level of activity for the crypto asset. In that case, the principal market is the one with the greatest volume and level of activity *that the entity can access at the measurement date*. Applied differently, the accessibility requirement also means that if an entity has determined that it cannot access a market, it is not necessary to obtain data about the market's trading volume and level of activity because, regardless, it cannot be the entity's principal market.

Challenge	Response
The crypto market is growing and changing at a rapid pace; the principal market for a crypto asset may change between measurement dates.	An entity should revisit its principal (or most advantageous) market conclusion whenever facts or circumstances change that could affect that conclusion; for example, if: — the entity begins to transact for the crypto asset in other markets; — available data evidences that the existing principal market has shrunk, or that alternative markets accessible to the entity have emerged with a greater volume and level of activity than the existing principal market; or — a previously inaccessible market becomes accessible to the entity (e.g. an exchange obtains the license or other regulatory approvals necessary to now operate in the entity's jurisdiction).

Question 20

Is it ever acceptable to co-mingle multiple units of a crypto asset for purposes of assessing impairment?

Interpretive response: In general, no. Each unit (or fractional unit) of a crypto asset held by the entity is its own unit of account for assessing impairment. This is because entities can usually sell or otherwise dispose of each unit (fractional unit) separately. [350-30-35-24]

This means it is not appropriate to evaluate different crypto assets (e.g. bitcoin and ether) or multiple units (or fractional units) of a single crypto asset that have different carrying amounts for impairment as a group. Simply put, an average costing approach, which may offset an indicated loss in one crypto asset unit (fractional unit) with an indicated gain in another, is not allowed.

Nevertheless, co-mingling multiple units (or fractional units) of a single crypto asset (e.g. bitcoin) for impairment testing purposes will have no practical effect on the testing outcome if those units have the same adjusted carrying amount at the impairment testing date. Multiple units may have the same carrying amount at an impairment testing date if they were purchased at the same price, or if they have previously been impaired down to the same adjusted carrying amount.

While we generally do not think doing so will meaningfully reduce an entity's efforts to assess impairment, there may be some recordkeeping or other administrative benefit to, for example, recognizing all units of a crypto asset purchased at the same time and for the same price as a single unit of account instead of maintaining a record of each unit separately. Similarly, if an entity changes accounting systems, there may be a recordkeeping or migration benefit to recording a single asset for all units of a crypto asset that have the same carrying amount at that date.

Example 10 illustrates (1) assessing impairment for multiple tranches of an acquired crypto asset, and (2) selling a portion of an entity's holdings of a single crypto asset.

Example 10

Multiple purchased tranches of a single crypto asset – impairment and sale

ABC Corp. acquires multiple bitcoins at the dates indicated in the table below. The current, aggregate carrying amounts of each tranche reflect their original cost less any impairments taken to date.

Tranche	Purchase Date	Number of units	Carrying amt / unit	Agg. carrying amt
1	January 15, 20X1	125	$ 19,500	$ 2,437,500
2	July 1, 20X1[1]	30	33,500	1,005,000
3	July 15, 20X1[1]	20	33,500	670,000
4	April 15, 20X2	100	63,000	6,300,000
5	October 1, 20X2	75	53,500	4,012,500
		350		$ 14,425,000

Notes:

1. The July 1 and July 15 units were initially purchased at $40,000 and $41,000 per unit, respectively. These units were impaired to their current carrying amounts as a result of a previous impairment, taken after the purchase dates.
2. The weighted average carrying amount per bitcoin is $41,214 ($14,425,000 / 350 bitcoins).

Scenario 1: Indicated impairment

On November 15, 20X2, ABC observes a precipitous drop in the quoted price of bitcoin in its principal market (a large cryptocurrency exchange) to $50,000 per unit.

ABC records a total impairment loss as of that date of $1,562,500 ($1,300,000 on the 100 Tranche 4 units and $262,500 on the 75 Tranche 5 units). It is not relevant that the weighted average carrying amount of all ABC's bitcoins is $41,214 – i.e. less than the $50,000 fair value of a bitcoin on that date.

The November 15 impairment recorded by ABC is not reversed, even if the fair value of a bitcoin recovers before the end of ABC's current reporting period (December 31, 20X2).

Scenario 2: Sale of 150 bitcoin

After recording the impairment in Scenario 1, ABC sells 150 bitcoins on December 15, 20X2 at a price of $51,000 per unit. There were no indications of impairment between November 15 (Scenario 1 impairment date) and December 15.

Because there is no way to specifically identify one bitcoin from another, ABC must apply a reasonable, rational and consistent method to derecognize 150 of its bitcoin holdings and calculate the gain on sale. (Note: ABC concludes that selling bitcoins is not one of its 'ordinary activities', and therefore the sale of the 150 bitcoins is subject to ASC 610-20 instead of ASC 606.) ABC elects to use a first-in, first-out (FIFO) method in this respect. This means that ABC derecognizes all 125 Tranche 1 bitcoins and 25 Tranche 2 bitcoins. Consequently, ABC recognizes a gain on the sale of $4,375,000, calculated as follows.

Tranche	Number of units sold	Ext. carrying amount (A)	Sales proceeds (B)	Gain on sale (B) – (A)
1	125	$ 2,437,500	$ 6,375,000	$ 3,937,500
2	25	837,500	1,275,000	437,500
		$ 3,275,000	$ 7,650,000	$ 4,375,000

Question 30

Why are crypto intangible asset impairment losses and sale gains/losses under ASC 610-20 presented as *operating* income (loss) items?

Background: In our Executive Summary, *Accounting for crypto assets – entities that are not broker-dealers or investment companies*, we highlight that both (1) crypto intangible asset impairment losses and (2) gains or losses on the sale of crypto intangible assets should generally be classified as *operating* income (loss) items. We also highlight that sales of crypto intangible assets to noncustomers are in the scope of ASC 610-20 (gains and losses from the derecognition of nonfinancial assets), a view also expressed in Question 9 of the AICPA's Practice Aid, Accounting for and auditing of digital assets.

Many entities hold crypto intangible assets (e.g. bitcoin or ether) for investment purposes, akin to an investment in a security. For these entities, the question arises about why it is not acceptable for the income statement presentation of impairment losses and sale gains or losses to be consistent with that for investments in securities. Under SEC Regulation S-X Rule 5-03, these are both nonoperating income (loss) items. [S-X Rule 5-03(b)(7), (b)(9)]

Interpretive response: Question 17.4.10 in KPMG Handbook, Revenue recognition, explains why we believe ASC 610-20 requires presenting the gains or losses from sales in its scope as operating income (loss) items. Accordingly, because sales of crypto intangible assets are in the scope of ASC 610-20, gains or losses from sales of these assets must be presented in operating income (loss).

With respect to impairment losses, US GAAP does not explicitly state that indefinite-lived intangible asset impairments must be presented in operating income (loss). ASC 350-30 only specifies that such losses be a component of income from continuing operations. However, we believe it would be inappropriate to present gains from the sale of crypto intangible assets in operating income (loss), while presenting the related crypto intangible asset impairment losses before sale in nonoperating income (loss). [350-30-45-2]

Finally, while we understand the analogy drawn by some to investments in securities, it is important to remember that because crypto intangible assets are intangible assets under US GAAP they are not similar, *from an accounting perspective*, to security holdings. Further, because we believe crypto intangible asset sales are in the scope of ASC 610-20 and ASC 610-20 has gain (loss) presentation guidance, applying other presentation guidance by analogy is not permitted.

For further information

See KPMG Executive Summary, *Accounting for crypto assets – entities that are not broker-dealers or investment companies*, and other digital asset Hot Topics.

This document highlights issues specific to the accounting for crypto intangible assets.

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