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Crypto assets

Partially updated February 2023

About the Crypto assets guide

PwC is pleased to offer our updated accounting and financial reporting *Crypto assets* guide. This guide discusses the relevant accounting and reporting considerations related to crypto assets.

This guide summarizes the applicable accounting literature, including relevant references to and excerpts from the FASB's Accounting Standards Codification. It also provides our insights and perspectives, interpretative and application guidance, illustrative examples, and discussion on emerging practice issues.

This guide should be used in combination with a thorough analysis of the relevant facts and circumstances, review of the authoritative accounting literature, and appropriate professional and technical advice.

References to US GAAP

Definitions, full paragraphs, and excerpts from the FASB's Accounting Standards Codification are clearly labelled. In some instances, guidance was cited with minor editorial modification to flow in the context of the PwC Guide. The remaining text is PwC's original content.

References to other PwC guidance

This guide provides general and specific references to chapters in other PwC guides to assist users in finding other relevant information. References to other guides are indicated by the applicable guide abbreviation followed by the specific section number. The other PwC guides referred to in this guide, including their abbreviations, are:

- *Derivatives and hedging (DH)*
- *Fair value measurements (FV)*
- *Financial statement presentation (FSP)*
- *Not-for-profit entities (NP)*
- *Property, plant, equipment and other assets (PPE)*
- *Revenue from contracts with customers (RR)*

Summary of significant changes

The following is a summary of recent noteworthy revisions to the guide. Additional updates may be made to future versions to keep pace with significant developments.

Revisions made in February 2023

Chapter 3: *Crypto transactions*

- **CA 3.4** was revised to incorporate the AICPA’s updated guidance on the accounting for crypto asset lending in Question 25 of the AICPA’s Practice Aid, *Accounting for and auditing of digital assets* (“Digital Assets Practice Aid”).

Chapter 5: *Disclosure of crypto assets*

- **CA 5.1** was updated to include additional disclosure considerations outside of the financial statements for SEC registrants based on the SEC’s *Sample Letter to Companies Regarding Recent Developments in Crypto Asset Markets*.
- **CA 5.3** was added to address disclosure matters related to crypto asset lending based on the updated AICPA Digital Assets Practice Aid.

Revisions made in November 2022

Chapter 1: *Introduction*

- An ongoing standard setting note related to the FASB’s active project on the accounting for and disclosure of crypto assets was added to **CA 1.1**.

Chapter 3: *Crypto transactions*

- **CA 3.7.4** was updated to include a discussion of the deferred tax accounting considerations related to the Staff Accounting Bulletin No. 121 (SAB 121) safeguarding liability and corresponding asset.

Chapter 4: *Fair value of crypto assets*

- **CA 4.1.2** was enhanced to address the impact of restrictions on the sale or transferability of crypto assets on fair value.

Chapter 5: *Disclosure of crypto assets*

- Question CA 5-2 (relating to the presentation of the crypto asset safeguarding liability and corresponding asset within the income statement) and Question CA 5-4 (relating to the classification of the crypto asset safeguarding liability and corresponding asset within the fair value leveling hierarchy) were added to **CA 5.2**.

Revisions made in May 2022

Chapter 3: *Crypto transactions*

- **CA 3.7** was added to address the accounting for obligations to safeguard crypto assets based on SAB 121 released by the SEC staff.

- The guidance formerly included in **CA 3.1.2** was moved to **CA 3.7**.

Chapter 5: *Disclosure of crypto assets*

- **CA 5.2** was added to address presentation and disclosure matters related to SAB 121.

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Chapter 1:
Introduction—updated
November 2022

1.1 Introduction

Cryptographic assets (crypto assets) are transferable digital representations that are designed in a way that prohibits their copying or duplication. The technology that facilitates the transfer of crypto assets is referred to as blockchain or distributed ledger technology. Blockchain is a digital, decentralized ledger that keeps a record of all transactions that take place across a peer-to-peer network and enables the encryption of information.

Crypto assets come in a variety of forms, and new crypto assets (sometimes referred to as digital tokens or digital assets) continue to be created. These assets may function as a medium of exchange, provide a right to use a product or service, provide rights to an underlying asset, provide voting rights, or provide rights to profits and losses among others.

Note about ongoing standard setting

The FASB has an active project related to the accounting for and disclosure of crypto assets. Specifically, the project considers measuring certain crypto assets at fair value in accordance with ASC 820, *Fair Value Measurement*. Financial statement preparers and other users of this publication are therefore encouraged to monitor the status of the project, and if finalized, evaluate the effective date of the new guidance and the accounting implications.

1.2 Classification

In some situations, crypto assets provide the holder with an interest in an underlying asset. The underlying assets might be commodities (such as gold or oil), intangible assets (such as a license or a patent), artwork, real estate, or some other tangible asset. While some asset-backed tokens represent a claim on the asset itself, others have no ability to redeem the underlying asset. When the crypto asset represents a contractual right to receive cash equivalent to the value of the underlying asset, it might meet the definition of a financial asset. If the crypto assets represent a right to the asset itself, it might be accounted for in a manner similar to the underlying asset and therefore measured following the relevant accounting standard for the underlying asset.

A holder should analyze the characteristics of crypto assets and the rights the holder obtains to determine its classification and resulting accounting to apply:

Cash

A crypto asset may be cash if it is accepted as legal tender and issued by a government. If the crypto asset is not cash, it would not meet the definition of a foreign currency.

Cash equivalents

A crypto asset may be a cash equivalent if it is short-term, highly liquid, and redeemable with the issuer. See FSP 6.5.2 for additional information.

Financial instruments

Financial instruments include contracts that impose an obligation on one party and convey a right to another party to deliver/receive cash or another financial instrument. If a crypto asset provides a

contractual right to receive cash or another financial instrument, it would be classified as a financial asset. See CA 2.1.2 for the classification and measurement of crypto assets that meet the definition of a financial asset.

An investment company may determine that it is appropriate to account for a crypto asset as an “investment.” See CA 2.1.

Inventory

Crypto assets are often purchased or mined with the intent to sell them. Thus, crypto assets may meet some of the characteristics of inventory. However, as crypto assets are not tangible assets, they do not meet all the requirements in ASC 330, *Inventory* to be considered inventory.

Broker-dealers that are subject to ASC 940, *Financial services – Brokers and dealers*, might consider their crypto asset holdings “inventory.” See CA 3.1.1 for accounting by broker-dealers.

Intangible assets

Crypto assets will often meet the definition of intangible assets. The ASC master glossary defines intangible assets.

Definition from ASC Master Glossary

Intangible Assets: Assets (not including financial assets) that lack physical substance. (The term intangible assets is used to refer to intangible assets other than goodwill.)

Given their lack of physical substance, unless the crypto assets fall within the scope of other asset classes, they should be classified as intangible assets and reporting entities should follow the accounting guidance in ASC 350, *Intangibles – Goodwill and other*.

Chapter 2:
Holding crypto assets

2.1 Initial recognition and measurement

In many cases, reporting entities acquiring crypto assets for investment purposes will follow the guidance of ASC 350, Intangibles – Goodwill and other, which requires acquired intangible assets to be recorded at cost.

Reporting entities that qualify as investment companies under ASC 946, Financial services – Investment companies should determine if the crypto assets they acquire represent debt securities, equity securities, or other investments. These investments should be initially measured at the purchase price, including transaction costs, and subsequently adjusted to fair value each reporting period. The remainder of this chapter focuses on accounting for crypto assets when an entity does not qualify as an investment company under ASC 946.

2.1.1 Receipt of crypto assets accounted for as intangibles

If a reporting entity purchases a crypto asset using cash, the value of the cash paid, including transaction costs, represents the cost of the crypto asset for the buyer.

Transactions involving the receipt of crypto assets in exchange for goods or services provided in the ordinary course of business with customers should follow the noncash consideration guidance in ASC 606, *Revenue from Contracts with Customers* (see CA 3.1). The receipt of crypto assets as part of an acquired business should be accounted for in accordance with ASC 805, *Business combinations*.

If a reporting entity obtains crypto assets from a non-customer in return for non-financial assets, ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*, should be applied to determine the initial measurement of the acquired crypto asset. ASC 610-20 refers to the measurement principles of ASC 606-10-32-21, *Measurement*, to determine the transaction price when noncash consideration is received.

ASC 606-10-32-21

To determine the transaction price for contracts in which a customer promises consideration in a form other than cash, an entity shall measure the estimated fair value of the noncash consideration at contract inception (that is, the date at which the criteria in paragraph 606-10-25-1 are met).

The estimated fair value of the crypto asset received as noncash consideration is determined as of the contract inception date, which may differ from the date the crypto asset is received. See CA 3.1.

Example CA 2-1 addresses how to determine the transaction price when an exchange is denominated in crypto assets.

EXAMPLE CA 2-1

Noncash consideration – Accounting for crypto assets earned in connection with a revenue transaction

Security Inc enters into a contract to provide security services to Manufacturer over a six-month period in exchange for 12,000 units of crypto assets. The contract is signed and work commences on January 1, 20X1. The performance is satisfied over time and Security Inc will receive the units of

crypto assets at the end of the six-month contract. For purposes of this example, assume that the crypto asset is readily convertible to cash.

How should Security Inc account for this transaction?

Analysis

Security Inc should determine the transaction price by measuring the fair value of the 12,000 units of crypto assets at contract inception (i.e., on January 1, 20X1). Security Inc would measure its progress toward complete satisfaction of the performance obligation and recognize revenue each period based on the transaction price determined at contract inception. Security Inc should not adjust revenue to reflect any changes in the fair value of the crypto assets after contract inception.

Security Inc. separately determined that an embedded derivative was present in the receivable or contract asset. (See FSP 33.3.1 for a determination of whether the right to consideration is a receivable or contract asset.) In reaching that conclusion, Security Inc considered whether the embedded derivative should be separated from the host contract pursuant to ASC 815-15-25-1. It specifically also evaluated the definition of a derivative in ASC 815-10-15-83, including whether the crypto asset would meet the net settlement criteria.

Security Inc would recognize any changes in the embedded derivative through earnings separate from revenue.

2.1.2 Accounting for purchases of stablecoin

Stablecoins differ from other forms of crypto assets because they peg their value to a traditional asset, such as a fiat currency, in order to minimize price volatility. The issuer of the stablecoin may achieve this by collateralizing the stablecoin with the asset to which it is pegged (e.g., maintaining a reserve of the fiat currency).

To determine the appropriate accounting for a stablecoin, the holder of the crypto asset must determine if it represents a financial asset. Financial assets include contracts that provide a right to receive cash or another financial instrument from another entity.

Stablecoins may meet the definition of a financial asset if the contractual arrangement includes a right to receive cash from the issuer. Understanding the rights to demand redemption under the contract are critical to making this assessment as the contract may include provisions that limit the holder's ability to redeem the stablecoin for cash. Conditions that limit redemption at the discretion of the issuer would likely impact the ability to classify the holding as a financial asset. Contractual limitation on redemption based on conditions outside the control of the issuer (e.g., laws that prohibit redemption to those engaged in criminal activity) may require further legal analysis. In determining the classification, we believe a holder should consider:

- the legal form of the stablecoin,
- redemption rights,
- collateralization,

- counterparty risks,
- contractual rights, and
- applicable laws and regulations.

See CA 2.1.3 for the accounting if a stablecoin meets the definition of a financial asset. A stablecoin that does not meet the definition of a financial asset should be evaluated to determine if it is an intangible asset, which is described in CA 1.2.

2.1.3 Accounting for purchases of financial assets

If a crypto asset meets the definition of a financial asset, it should be analyzed to determine if it is a debt security under ASC 320, *Investments – Debt securities*, an equity security under ASC 321, *Investments – Equity securities*, or a receivable under ASC 310, *Receivables*. Additionally, ASC 825, *Financial instruments*, permits fair value accounting for instruments that meet the definition of a financial asset.

2.2 Impairment of crypto assets classified as intangibles

If a crypto asset is determined to be an intangible asset, ASC 350, *Intangibles – Goodwill and other*, requires reporting entities to determine whether the asset has a finite or indefinite life. The useful life of an intangible asset should be considered indefinite if no legal, regulatory, contractual, competitive, economic, or other factors limit its useful life to the reporting entity. Given the nature of many crypto assets, they will usually have an indefinite useful life.

Indefinite-lived intangible assets are not amortized. Instead, they are tested for impairment annually or upon a triggering event that indicates it is more likely than not that the asset is impaired. ASC 350-30-35-18B provides factors to consider in assessing whether it is more likely than not that an indefinite-lived intangible is impaired.

2.2.1 Testing for impairment

An indefinite-lived intangible asset is impaired when its carrying amount is greater than its fair value.

Reporting entities will need to have processes in place to monitor for events (e.g., trades that occur below the reporting entity's cost) that indicate that the fair value of the crypto assets may be below their carrying value. The impairment test under ASC 350 is a one-step test that compares the fair value of the intangible asset with its carrying value. If the fair value is less than the carrying value, an impairment is recorded. Once the intangible asset is impaired, the impairment loss is not reversed if the fair value subsequently increases.

ASC 350-30-35-19

The quantitative impairment test for an indefinite-lived intangible asset shall consist of a comparison of the fair value of the asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an entity shall recognize an impairment loss in an amount equal to that excess. After an impairment loss is recognized, the adjusted carrying amount of the intangible asset shall be its new accounting basis.

ASC 350-30-35-20

Subsequent reversal of a previously recognized impairment loss is prohibited.

Example CA 2-2 illustrates the accounting for a crypto asset that was impaired and subsequently increased in value.

EXAMPLE CA 2-2**Fair value recovery before end of reporting period**

On October 1, 20X1, Reporting Entity acquired one unit of crypto asset for \$20,000. On November 15, 20X1, it was observed that the price of the crypto asset had declined to \$18,000/unit. Reporting Entity deemed this a triggering event for impairment and wrote down its crypto asset to a new carrying value of \$18,000 and recorded an impairment loss for the decline in value. On December 31, 20X1, Reporting Entity's year end, the price of the crypto asset increased to \$19,000/unit.

Can Reporting Entity write up the carrying value of its crypto asset to the new fair value of \$19,000?

Analysis

No. Recognizing a recovery after an impairment has been taken is not permitted. Accordingly, Reporting Entity should reflect a carrying value of \$18,000 for its crypto asset at year-end and report the full impairment loss of \$2,000 in earnings for the period.

2.2.2 Determining the unit of account

Reporting entities may acquire crypto assets in various separate transactions. Each individual acquisition of crypto asset held by a reporting entity represents a unit of account for impairment testing purposes. Accordingly, reporting entities should maintain the carrying values of each acquisition in order to perform impairment testing. Reporting entities should not combine purchases of crypto assets across multiple acquisition dates with different cost bases.

Example CA 2-3 addresses how to determine the unit of account when testing crypto assets for impairment.

EXAMPLE CA 2-3**Determining unit of accounting for impairment testing**

During the year, Reporting Entity completed the following transactions to purchase the same type of crypto asset:

Acquisition date	Units acquired	Price/Unit	Carrying value
January 10, 20X1	7	\$20,000	\$140,000
April 20, 20X1	5	\$21,000	\$105,000

October 15, 20X1	2	\$26,000	\$52,000
Total	14	\$21,214*	\$297,000

*\$297,000/14 = \$21,214

On November 1, 20X1, Reporting Entity tests its crypto assets for impairment and determines the current trading price of the crypto asset is \$23,000/unit.

Does Reporting Entity need to record an impairment loss as of November 1, 20X1?

Analysis

Yes. Reporting Entity should record an impairment for crypto assets with a value higher than \$23,000/unit. Accordingly, the two units acquired on October 15, 20X1 are impaired as the carrying value per unit is \$26,000 compared to the fair value of \$23,000. Reporting Entity should record an impairment loss equal to \$6,000 and write down the carrying value of the two crypto assets acquired on October 15, 20X1 to \$23,000 each.

It would be incorrect to compare the \$21,214 average carrying value for all 14 units to the \$23,000 fair value and conclude that an impairment did not occur.

2.3 Disposal and derecognition

ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*, provides specific guidance for transfers of certain nonfinancial assets, such as intangible assets, to non-customers. Accordingly, sales of crypto assets (that are accounted for as intangible assets) to non-customers should be accounted for under ASC 610-20.

ASC 610-20-25-1

To recognize a gain or loss from the transfer of nonfinancial assets or in substance nonfinancial assets within the scope of this Subtopic, an entity shall apply the guidance in Topic 810 on consolidation and in Topic 606 on revenue from contracts with customers as described in paragraphs 610-20-25-2 through 25-7.

2.3.1 Determining whether a sale is to a customer

Determining whether the counterparty to a disposal arrangement is a customer is important as proceeds received from customers will follow the guidance in ASC 606, *Revenue from Contracts with Customers*.

If a counterparty to a contract engages with an entity to obtain the output of the reporting entity's ordinary activities in exchange for consideration, that counterparty is considered a customer. Otherwise, the counterparty is considered a non-customer.

Transactions with customers will be reported in revenue and cost of goods sold under ASC 606 while transactions with non-customers will usually be presented as a gain or loss included in income from continuing operations under the applicable guidance. See CA 2.3.2.

Example CA 2-4 addresses how to determine if a sale is to a customer within its ordinary business activities.

EXAMPLE CA 2-4

Determining whether a sale is to a customer

Aircraft manufacturer had excess capital that it invested in crypto assets. It subsequently sold those assets to a third party as it needed additional working capital.

How should Aircraft manufacturer present the sale in its income statement?

Analysis

The sale of the crypto assets is outside the manufacturer's ordinary business activities and therefore the third party would be deemed a non-customer. Accordingly, the proceeds should not be reported in revenue but rather the excess over carry value should be reported as a gain or loss.

See CA 3 for the accounting for sales of crypto assets to customers.

2.3.2 Derecognition of crypto assets

In order for a reporting entity to derecognize crypto assets, it must evaluate whether it transferred control based on how it classifies the crypto assets it holds. Crypto assets classified as intangible assets would be subject to ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*. Crypto assets classified as financial instruments would require evaluation under ASC 860, *Transfers*.

For crypto assets classified as intangibles, an entity must determine whether it has transferred control of the crypto assets in accordance with ASC 610-20. The seller should first evaluate whether it has (or continues to have) a controlling financial interest under ASC 810, *Consolidation*. If the seller has a controlling financial interest, derecognition would not be appropriate as it would continue to consolidate the applicable subsidiary.

If the seller determines it does not have a controlling financial interest, the seller should next evaluate the guidance in ASC 606, *Revenue from Contracts with Customers*, to assess whether control has transferred. The reporting entity should first evaluate the criteria in ASC 606-10-25-1 to determine whether a contract exists.

If a contract does not exist (e.g., if collection of consideration from the counterparty is not probable), the entity would continue to recognize the crypto asset as required by ASC 350-10-40-3. Additionally, the entity will record a liability for any consideration received. Subsequently, the entity will continue to assess the contract to determine the point at which the criteria for revenue recognition are met in accordance with ASC 606-10-25-1. Alternatively, the reporting entity would derecognize the liability when one of the events described in ASC 606-10-25-7 occurs (e.g., the contract is terminated).

Once the seller determines the criteria for revenue recognition are met, the seller would need to determine the point at which the counterparty obtains control as described in ASC 606-10-25-30. For crypto assets, the transfer of control analysis should consider which entity bears the risks and rewards of ownership. Once control is transferred, the crypto asset will be derecognized and the seller would recognize the resulting gain or loss.

Crypto assets are typically fungible (i.e., each unit is identical and has the same fair value at any given time). When an entity sells a portion of its crypto asset holdings, it will need to determine a systematic and rational approach to identify the units sold. Reporting entities should have a method for tracking the acquisition date and purchase price for their crypto asset holdings. In addition, entities should adopt a method, such as specific identification, first in, first out (FIFO), or last in, first out (LIFO) to identify the units sold and determine the cost basis to use.

If the counterparty has not yet obtained control over a crypto asset, but has paid cash to the seller, the seller should not derecognize the crypto asset but instead apply the guidance in ASC 606-10-45-2 and record a liability for any consideration received.

For many transactions involving crypto assets within the scope of ASC 610-20, control over each crypto asset in the contract will transfer at the same time. This means that the crypto assets transferred would be derecognized at the same time. Therefore, in practice, the reporting entity may not need to separate and allocate the consideration to each distinct crypto asset. However, for other transactions, control over each distinct crypto asset may not transfer at the same time. This would result in those crypto assets being derecognized at different points in time, making it necessary to separate and allocate consideration to each distinct crypto asset in the transaction.

2.3.3 *Measuring the gain or loss on disposal*

Once a reporting entity determines that it should derecognize a crypto asset under ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*, the gain or loss on the transfer must be determined. The gain or loss is calculated as the difference between the consideration allocated to each distinct crypto asset and its carrying amount.

When a contract includes the transfer of more than one distinct asset, an entity should allocate the consideration to each distinct asset in accordance with ASC 606-10-32-28 through ASC 606-10-32-41. Generally, this means that the consideration will be allocated to the distinct assets based on their relative standalone selling prices.

Crypto assets will likely be subject to impairment testing prior to derecognition, therefore significant losses are not expected upon derecognition.

Noncash consideration received in exchange for the transfer of crypto assets needs to be measured at fair value at contract inception. If a reporting entity exchanges one crypto asset for another crypto asset, the reporting entity may not be able to reliably determine the fair value of noncash consideration received. In this case the value of the noncash consideration received should be measured indirectly by reference to the standalone fair values of the crypto assets sold or transferred by the reporting entity.

Example CA 2-5 addresses how to determine the cost basis for the sale of a portion of a reporting entity's crypto assets.

EXAMPLE CA 2-5**Determining cost basis for crypto assets sold**

On March 1, 20X1, Reporting Entity sold 50 units of the same crypto asset to Buyer. The sale is outside Reporting Entity's ordinary business activities and therefore Buyer is not considered a customer of Reporting Entity. Buyer agrees to pay Reporting Entity \$35,000/unit for the 50 units. Reporting Entity uses FIFO to determine the cost basis for its crypto asset sales. The following table shows Reporting Entity's holdings of the crypto asset.

Acquisition date	Units acquired	Units remaining	Purchase price/unit
January 10, 20X1	100	35	\$20,000
February 15, 20X1	60	60	\$30,000
Total	160	95	\$23,750*

*Weighted-average purchase price per unit: $\$3,800,000/160 = \$23,750$

How should Reporting Entity calculate the gain or loss on sale?

Analysis

Reporting Entity has entered into an agreement to sell crypto assets (nonfinancial assets) that are not an output of its ordinary business activities. ASC 610-20 requires that Reporting Entity follow the measurement principles in ASC 606, *Revenue from Contracts with Customers*, to calculate the gain or loss recognized upon sale. Accordingly, the total consideration received by Reporting Entity of \$1,500,000 is compared to the carrying value of the 50 units of crypto assets sold equal to \$1,150,000 (see calculation using FIFO below). The difference results in a gain of \$350,000 that Reporting Entity would recognize in its income statement. The Reporting Entity should not use the weighted-average purchase price as the cost basis.

FIFO cost basis calculation

Acquisition date	Units sold	Carrying value/unit	Total cost
January 10, 20X1	35	\$20,000	\$700,000
February 15, 20X1	15	\$30,000	\$450,000
Total	50		\$1,150,000

Example CA 2-6 addresses when a reporting entity enters into a contract to exchange one unit of a crypto asset for another unit of crypto asset.

EXAMPLE CA 2-6**Exchanging one crypto asset for another crypto asset**

Company A exchanges one unit of crypto asset it holds for one unit of another crypto asset held by Company B. The fair value of Company B's crypto asset is determined to be \$12,000. The carrying value of Company A's crypto asset is \$10,000.

How should Company A account for the exchange?

Analysis

ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*, requires an entity to measure the fair value of noncash consideration in accordance with ASC 606, *Revenue from Contracts with Customers*. The difference between the fair value of the noncash consideration received and the carrying value of the asset sold results in a gain or loss that should be recognized in the income statement. In an arm's length transaction, it would be rare to recognize a loss as the crypto asset being sold would likely have been previously impaired.

Accordingly, Company A should derecognize its one unit of crypto asset at carrying value and record the one unit of crypto asset acquired at fair value:

Dr Crypto asset acquired	\$12,000	
		Cr Crypto asset sold
		\$10,000
		Cr Gain on sale
		\$2,000

Example CA 2-7 addresses the determination of cost basis when a bundle of crypto assets is sold for a stated contract price.

EXAMPLE CA 2-7**Sale of multiple crypto assets for single contract price**

On March 1, 20X2, Company A sold a bundle of crypto assets to Buyer for a stated contract price of \$225,000. The crypto assets sold under the contract are shown below. Assume no prior impairment was incurred for these crypto assets.

Crypto asset	Acquisition date	Units	Purchase price/unit	Carrying value
A	January 10, 20X1	3	\$20,000	\$60,000
A	April 20, 20X1	2	\$23,000	\$46,000
B	October 15, 20X1	6	\$18,000	\$108,000

On the date of the sale, Company A observes that the fair value of Crypto Asset A is \$21,000/unit and the fair value of Crypto Asset B is \$20,000/unit.

How should Company A account for the sale?

Analysis

Company A should first record the impairment of its two Crypto Asset A units acquired on April 20, 20X1 as the carrying value of \$23,000/unit exceeds the observed fair value of \$21,000 on the date of sale. Company A should record an impairment loss of \$4,000.

Impairment Loss	\$4,000	
Crypto Asset A		\$4,000

The contract price of \$225,000 should then be allocated to each crypto unit based on the fair value of each type of crypto assets on the date of sale as follows:

Crypto asset	Acquisition date	Units	Carrying value	Transaction price	Gain/(Loss)
A	January 10, 20X1	3	\$60,000	\$63,000	\$3,000
A	April 20, 20X1	2	\$42,000*	\$42,000	-
B	October 15, 20X1	6	\$108,000	\$120,000	\$12,000
Total				\$225,000	\$15,000

*Reflects the new carrying value of the crypto assets after impairment

Company A should therefore record a gain on sale of \$15,000:

Cash	\$225,000	
Crypto Asset A		\$102,000
Crypto Asset B		108,000
Gain on sale		15,000

Chapter 3:
Crypto transactions—updated
November 2022

3.1 Receipt of crypto for goods and services

Reporting entities may accept crypto assets as a form of payment in exchange for goods or services they offer to customers. To determine the classification of the crypto asset received, the reporting entity would consider the guidance in CA 1.

Crypto assets that meet the definition of intangible assets and are received by a reporting entity as payment for goods or services are a form of noncash consideration. Reporting entities should follow the guidance in ASC 606, *Revenue from Contracts with Customers*, on accounting for the receipt of noncash consideration, which requires the consideration to be recorded at fair value at contract inception. That is, the entity should use the fair value of the crypto asset, measured at the time when all requirements of ASC 606-10-25-1 have been met, as the transaction price.

Refer to RR 4.5 for further guidance on the accounting for noncash consideration.

If the reporting entity continues to hold the crypto assets received, changes in value after contract inception are not reflected in revenue. For example, if the crypto asset is classified as an indefinite-lived intangible asset, any impairments would be reflected as an operating expense.

If the crypto asset received is classified as a financial asset, changes in value after initial recognition will be reflected in other income/loss.

3.1.1 Accounting for crypto assets by broker-dealers

A broker-dealer that is within the scope of ASC 940, *Financial services – Brokers and dealers*, should recognize any commission income received from its customers as revenue as the services are performed. Any crypto assets held by a broker-dealer as an agent for its customers should not be reflected on the broker-dealer's balance sheet. However, a broker-dealer should consider Staff Accounting Bulletin No. 121 (SAB 121) which would require it to record a safeguarding liability and a corresponding asset at the fair value of the crypto assets safeguarded for its customers. See CA 3.7.1 for additional information on SAB 121.

Sometimes broker-dealers will hold crypto assets for their own proprietary trading. ASC 940-320-35-1 indicates that proprietary trading inventory should be measured at fair value with changes in fair value recognized in profit and loss. We believe that it is acceptable to interpret the reference to inventory in this context to include crypto assets as the term inventory has historically been interpreted to include other assets such as physical commodities.

3.1.2 Receivable settled in crypto asset

A reporting entity may satisfy its performance obligation prior to receiving the consideration. When the expected consideration is a crypto asset, the reporting entity should consider whether the resulting contract asset or receivable includes an embedded derivative. In determining if an embedded derivative is present, specific consideration should be given to whether the crypto asset meets the criteria for net settlement (i.e., whether it is readily convertible to cash). See DH 4 for guidance on embedded derivative instruments. A similar analysis would be necessary for a reporting entity that has an obligation to deliver crypto assets.

3.2 Principal vs. agent considerations

When a reporting entity is an intermediary between a seller and buyer of crypto assets, the reporting entity will need to assess whether it is an agent facilitating the sale or the principal to the buyer for the sale of crypto assets. A reporting entity that is a principal will recognize revenue (assuming sale of crypto assets is part of the reporting entity's ordinary business activities) for the gross amount paid by the buyer for the crypto assets and cost of sales for the cost of the crypto assets. A reporting entity that is an agent will only recognize as revenue the net amount it retains (i.e., its commission) after remitting amounts to the seller for the crypto assets provided by that party and will not present the crypto assets on its balance sheet.

To determine whether it is the principal or agent in a revenue contract, ASC 606, *Revenue from Contracts with Customers*, requires a reporting entity (intermediary) to identify the specified goods or services to be provided to the customer (end consumer) and assess whether it controls each specified good or service.

Excerpt from ASC 606-10-55-36A

To determine the nature of its promise (as described in paragraph 606-10-55-36), the entity should:

- (a) Identify the specified goods or services to be provided to the customer (which, for example, could be a right to a good or service to be provided by another party [see paragraph 606-10-25-18])
- (b) Assess whether it controls (as described in paragraph 606-10-25-25) each specified good or service before that good or service is transferred to the customer.

In most transactions, the crypto asset is the specified good to be provided to the customer. The reporting entity must then consider whether it controls the crypto asset before it is transferred to the customer. Control of an asset refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset. Control also includes the ability to prevent other entities from directing the use of, and obtaining the benefits from, an asset. ASC 606-10-55-39 includes indicators that an entity controls a good or service:

- Which entity is primarily responsible for fulfilling the promise to provide the crypto asset to the customer?
- Does the reporting entity have inventory risk before or after the crypto asset has been transferred to a customer?
- Which entity has discretion in establishing the price paid by the customer for the crypto asset?

Refer to RR 10 for further discussion of principal vs. agent assessments. Due to the nature of crypto assets, the assessment of whether a reporting entity takes control of the asset may require significant judgment. If a reporting entity fulfills purchase requests from customers using both crypto assets it holds directly and crypto assets held by third-party suppliers, this may indicate that the reporting entity is primarily responsible for fulfilling the promise and therefore, the principal for the sale of crypto assets. If a reporting entity is solely matching buyers and sellers of crypto assets and does not take ownership of the crypto assets at any time, it is likely an agent facilitating the transfer of crypto assets.

3.3 Mining—consensus mechanisms

To validate crypto transactions, there are two types of consensus mechanisms, proof of work and proof of stake. Proof of work can be resource demanding, accordingly, as an alternative, some platforms verify transactions through proof of stake. The proof of stake consensus mechanism provides holders of the crypto assets the ability to validate transactions based on their proportionate holdings in the asset.

Upon execution of a transaction utilizing crypto assets, reporting entities known as miners often perform a complex computation to create the hash necessary for the public ledger. In proof of work, miners provide computing power in order to participate in the block validation process. Each block is verified by a miner before its information is stored. When the block is added to the chain and consensus exists regarding the block, it is shared by all network nodes. This gives rise to a unique transaction history. For validating the transaction, the miner may receive a transaction fee from a participant in the transaction and/or a block reward. A block reward is the receipt of newly issued crypto assets issued to the miner for successfully validating the block of transactions.

If the miner receives a transaction fee from a participant in the transaction, the miner should consider whether the transaction is a contract with a customer in the scope of ASC 606, *Revenue from Contracts with Customers*. If so, the miner would generally recognize the transaction fee as revenue when it satisfies its performance obligation (i.e., validates a transaction on the distributed ledger).

If the miner receives a block reward under the consensus protocols of the crypto asset, the miner will need to assess whether the receipt of the block reward is a contract with a customer in the scope of ASC 606, which may require judgment.

3.4 Borrowing and lending transactions—updated February 2023

In February 2023, the AICPA updated its guidance on the accounting for crypto asset lending as outlined in Question 25 of the AICPA’s Practice Aid, *Accounting for and auditing of digital assets* (“Digital Assets Practice Aid”). Question 25 provides an example of a reporting entity that lends crypto assets to a counterparty for a specified period of time in return for a fee. The fact pattern in Question 25 is similar to the following: Lender lends 1,000 units of a crypto asset to Borrower for one year. The loaned crypto asset meets the definition of an intangible asset in ASC 350, *Intangibles – Goodwill and Other*. The lending arrangement requires Borrower to pay a fee of one unit of the crypto asset each month during the term and return 1,000 units of the crypto asset to Lender at the end of the term. Control of the loaned crypto asset is transferred to Borrower upon the transfer, and Borrower has the right to transfer, encumber, and pledge the crypto asset at its discretion.

Applying the revised guidance results in a conclusion that it would be appropriate for the lender to derecognize the loaned crypto assets in this circumstance.

The AICPA’s Digital Assets Practice Aid provides a list of factors that should be considered when evaluating whether loaned crypto assets should be derecognized.

Excerpt from AICPA Practice Aid *Accounting for and auditing of digital assets*

In assessing whether the crypto assets lent should be derecognized in this fact pattern, various indicators of control and elements of asset derecognition would be considered, including, but not limited to, the following:

- The lender has transferred the present rights to the economic benefits associated with the crypto asset for a different right to receive crypto assets in the future;
- The lender cannot sell, pledge, loan, or otherwise use the lent crypto assets while the loan is outstanding, as those rights have been transferred to the borrower;
- Inherent in the realization of the economic benefits associated with the crypto asset loan receivable is exposure to credit risk of the borrower; and
- The borrower of the crypto assets can deploy those assets at its discretion for the duration of the lending arrangement and bears the risk of loss or theft of those assets, and otherwise has the ability to direct the use of the assets transferred.

When the loaned crypto assets are derecognized by the lender, the SEC staff would not object to the lender recognizing an asset that represents its right to receive the crypto assets from the borrower at the end of the loan period (which may be referred to as a crypto asset loan receivable). The crypto asset loan receivable would be recognized at the fair value of the loaned crypto assets at the time the crypto assets are transferred to the borrower unless industry-specific guidance applies to the loan (e.g., investment company guidance under ASC 946, *Financial Services – Investment Companies*). The lender would recognize any difference between the fair value of the crypto assets at the time of transfer and the carrying amount of the crypto assets in the income statement. Given the crypto assets are accounted for as intangible assets under ASC 350, they were initially measured at cost and then subsequently evaluated for impairment prior to derecognition. Accordingly, the derecognition of the carrying amount of the crypto assets and the recognition of the crypto asset loan receivable at fair value will often result in a gain. The lender would continue to remeasure the crypto asset loan receivable to the fair value of the loaned crypto assets at each subsequent reporting date.

Additionally, because the crypto asset loan receivable exposes the lender to the credit risk of the borrower, the lender should recognize an allowance for expected credit losses related to the crypto asset loan receivable utilizing the principles in ASC 326, *Financial Instruments – Credit Losses*.

The revised interpretive guidance in the AICPA's Digital Asset Practice Aid is effective immediately. The SEC staff would not object to this model being applied like a new accounting principle under ASC 250, *Accounting Changes and Error Corrections*, which requires the guidance to be applied retrospectively for all periods presented (unless impracticable to do so).

The accounting by the borrower in a crypto lending arrangement outlined in Question 26 of the AICPA's Digital Assets Practice Aid was not revised. We believe the borrower in a crypto lending arrangement may determine that it has obtained control of the asset and would accordingly recognize the crypto asset on its balance sheet. It would also recognize an obligation to return the crypto asset to the lender. While the asset may be accounted for under ASC 350 as an intangible, the obligation to return the asset could be viewed as a hybrid instrument with a debt host contract and payments linked to the fair value of the crypto assets. Accordingly, the borrower may need to assess whether bifurcation

of the embedded feature is required under ASC 815, *Derivatives and hedging*, with specific consideration given to whether the crypto assets could be net settled.

3.5 Initial Coin Offerings

An Initial Coin Offering (ICO) is a form of fundraising that harnesses the power of cryptographic assets and blockchain-based trading. An ICO allocates tokens instead of shares to investors. Each ICO will have unique terms and conditions. It is important for potential investors to review the whitepaper or underlying documents accompanying the ICO token offering, and to understand what exactly is being offered. In situations when rights and obligations arising from a whitepaper or their legal enforceability are unclear, legal advice might be needed to determine the impact of the terms.

ICOs might be considered to be securities by a securities regulator. As a result, issuers should understand the regulatory environment and the impact that it has on financial reporting.

Issuers of ICOs will need to determine the applicable accounting standard for the ICO token issued. This will depend on the nature of the ICO token issued, and the rights and obligations it provides to an owner. For example, the token may provide a right to cash (financial instrument) or a residual interest in the entity (equity), it may be in substance a contract with a customer (revenue transaction), or other GAAP may apply.

Similarly, investors in ICOs will need to assess the rights they obtain through the acquisition of the token to determine the applicable accounting as discussed in CA 2.

3.6 Not-for-profit entity crypto transactions

Not-for-profit entities (NFPs) may hold crypto assets for purposes of investment, to execute transactions with customers, or for other reasons. In most cases, NFPs follow the same accounting guidance for crypto assets as business entities. Differences may arise, however, if an NFP is holding the crypto asset as an investment. ASC 958-325 and ASC 954-325 provide guidance on accounting for investments in nonfinancial assets, such as intangible assets, when those assets are acquired for purposes of earning an investment return.

For NFPs, other than healthcare entities within the scope of ASC 954, *Health care entities*, measurement of nonfinancial investments that GAAP does not require to be measured at fair value is based on the portfolio-wide accounting policy selected for reporting investments, as explained in NP 9.3. The method selected (carrying value or fair value) must be consistently applied to all alternative investments within a portfolio. If a non-healthcare NFP elects the portfolio-wide fair value option, and holds crypto assets in an investment portfolio managed for total return (such as an endowment), then we believe the crypto assets should be carried at fair value.

For NFP healthcare entities, ASC 954-325-35-1 requires subsequent reporting of investments in nonfinancial assets at amortized cost subject to impairment considerations for property, plant, and equipment, consistent with those in ASC 360-10, *Property, plant, and equipment*. Since most crypto assets are indefinite lived, they would be reported at cost less any impairment recognized.

In some cases, a donor may contribute crypto assets to an NFP. ASC 958 requires that donated nonfinancial assets be measured at fair value at the date of the gift (see NP 7.4.2 for further information on measuring donations of noncash assets). Subsequent accounting for the contributed

crypto asset will depend on its use. If the donated crypto asset is held as an investment, the discussion above applies. Otherwise, the crypto asset should be accounted for as an intangible asset. In that case, the fair value of the crypto asset at the date of gift becomes its carrying value for purposes of subsequent measurement.

3.7 Accounting for obligations to safeguard crypto assets

Crypto assets may be held by a custodian for safekeeping on behalf of its customers. Arrangements for holding crypto assets can vary, but generally a contract, or terms and conditions, sets out the nature of the arrangement.

If a reporting entity determines that it has control of the crypto assets, the reporting entity records the crypto assets on its balance sheet based on the classification guidance in CA 1.2. The reporting entity will also reflect a corresponding liability to return the crypto assets, which will need to be assessed to determine whether it contains an embedded derivative under ASC 815, *Derivatives and hedging*.

The determination as to whether a reporting entity controls, and therefore should record an asset and a related liability for crypto assets it holds on behalf of its customers, will require the use of judgment based on the facts and circumstances. In determining whether to reflect crypto assets on- or off-balance sheet, a reporting entity may need to consider the following factors, among others:

- The nature of the rights and obligations of the parties defined under legal or regulatory frameworks, or under the terms of a contract
- The rights of the customers to the crypto assets held on their behalf in the event the custodian files for bankruptcy
- The ability of the customer or custodian to transfer, loan, pledge, or encumber the crypto assets
- The ability of the customer to access the private key or transfer the crypto assets to another wallet at any time
- Which party bears the risk of loss as a result of fraud or theft
- Which party obtains the benefits of price appreciation and the impact of price depreciation
- The degree of segregation of crypto assets held on behalf of customers from crypto assets owned by the custodian
- The evidence of ownership of the crypto assets that are held on behalf of the customers (e.g., is the crypto in a separately named wallet or are there off-chain transaction records)

Following this evaluation, if a reporting entity determines it does not have control of the crypto assets, a reporting entity should evaluate whether it has an obligation to safeguard its customers' crypto assets under SAB 121.

3.7.1 SAB 121: scope

New guidance

In March 2022, the SEC staff released Staff Accounting Bulletin No. 121 (SAB 121), which addresses the accounting by a reporting entity that engages in activities in which it has an obligation to safeguard crypto assets held for its customers. SAB 121 requires a reporting entity that performs custodial activities, whether directly or through an agent acting on its behalf, to record a safeguarding liability and a corresponding asset at the fair value of the crypto assets safeguarded by the reporting entity for its customers.

Before applying SAB 121, we believe a reporting entity must first determine whether it has control of the crypto assets (see CA 3.7). A reporting entity that has control of crypto assets would not be in the scope of SAB 121 and would not record a crypto asset safeguarding obligation to safeguard its own crypto assets.

SAB 121 applies to reporting entities that safeguard their customers' crypto assets either directly or through the use of an agent (i.e., a sub-custodian). To illustrate the application of the guidance, SAB 121 provides an example involving a reporting entity operating a platform that allows users to transact in crypto assets. A "platform" is not a defined term and is not required for reporting entities to be in scope of the guidance.

We believe the following factors, among others, should be considered in assessing whether a reporting entity has an obligation either directly or through an agent acting on its behalf to safeguard a customer's crypto assets (not all factors are required, nor is any one factor determinative):

- *Business model:* Does the reporting entity describe its business model as one of safeguarding customers' crypto assets?
- *Customer relationship:*
 - Do the reporting entity's customers access information about their crypto assets through the reporting entity's platform, application, or website?
 - Would the customer expect the reporting entity to resolve issues or complaints?
 - Does the reporting entity have a contractual obligation or an obligation implied by customary business practices or published policies to safeguard the assets?
 - Does the reporting entity maintain the record keeping and statements that detail the customer's crypto assets?
- *Contractual terms with the customer:* Do the reporting entity's customers know that the reporting entity is utilizing a sub-custodian or are the terms and conditions silent regarding the use of sub-custodians (i.e., would the customer view the reporting entity as responsible for safeguarding the crypto assets)?
- *Contractual terms with the sub-custodian:* Is the account with the sub-custodian an omnibus wallet (which would indicate that the reporting entity is responsible for tracking crypto assets at the individual customer level) or segregated and set up at the individual customer level?

- *Cryptographic key information*: Does the reporting entity maintain cryptographic key information?

The analysis of whether SAB 121 applies should be performed on an entity-by-entity basis. As a result, more than one entity may be in scope related to custodial services of the same end customer's crypto assets.

Example CA 3-1 illustrates a scenario in which multiple entities would apply SAB 121.

EXAMPLE CA 3-1

Platform operator agreement with customers is silent on sub-custodian services

Company A provides its customers with a platform to transact in crypto assets and provides safeguarding services. In order to use the platform, customers sign a contractual agreement with Company A. The agreement is silent as to whether Company A uses a sub-custodian to safeguard the customers' crypto assets, and customers interact directly with Company A for any issues or complaints. Company A enters into an agreement with Company B to provide sub-custodial services and opens an account with Company B in its name for the benefit of its customers. Company B does not have any information about Company A's customers.

Does SAB 121 apply to Company A? Does SAB 121 apply to Company B?

Analysis

Yes, we believe that both Company A and Company B should recognize a SAB 121 safeguarding obligation and corresponding asset. Although Company A contracts with Company B as a sub-custodian to safeguard its customers' crypto assets, Company A still needs to evaluate whether it is in the scope of SAB 121. Company A owns the relationship with its customers on the platform, and customers interact directly with Company A for any issues or complaints. The customers are not aware that Company B is performing sub-custodial services for Company A. Moreover, Company A's account with Company B is an omnibus account in Company A's name and is not segregated by customer. Based on the foregoing considerations, Company A would likely conclude it is in the scope of SAB 121 and should recognize a safeguarding liability and a corresponding asset.

In addition, Company B should also assess whether it is in the scope of SAB 121. Company A is Company B's customer for sub-custodial services related to crypto assets; therefore, Company B should also recognize a safeguarding liability and a corresponding asset.

Question CA 3-1

Is SAB 121 applicable to all reporting entities?

PwC response

No. SAB 121 states that the interpretive guidance applies to:

- entities that file reports pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") (i.e., existing SEC registrants);

- entities that have submitted or filed a registration statement under the Securities Act of 1933 or the Exchange Act that is not yet effective;
- entities submitting or filing an offering statement or post-qualification amendment under Regulation A;
- entities subject to the periodic and the current reporting requirements of Regulation A; and
- private operating companies whose financial statements are included in filings with the SEC in connection with a business combination involving a shell company, including a special purpose acquisition company (SPAC).

Additionally, given historical practice of application of SAB Topics, we believe SAB 121 applies to:

- financial statements filed with the SEC under Regulation S-X Rule 3-05, *Financial statements of businesses acquired or to be acquired*; and
- financial statements filed with the SEC under Regulation S-X Rule 3-09, *Separate financial statements of subsidiaries not consolidated and 50 percent or less owned persons*.

Although SAB 121 is not required to be applied by private companies that do not meet any of the circumstances above, we encourage such private companies to consider whether they expect to meet any of these circumstances in the future. Private companies under US GAAP may elect to apply the guidance in SAB 121 voluntarily, and if so, should comply with all of the SEC's requirements set forth in SAB 121.

Question CA 3-2

How are "crypto assets" defined for purposes of applying SAB 121?

PwC response

A "crypto asset" is defined in SAB 121 as "a digital asset that is issued and/or transferred using distributed ledger or blockchain technology using cryptographic techniques." Accordingly, in addition to cryptocurrencies (e.g., bitcoin, ethereum), we believe SAB 121 applies more broadly to other crypto assets, including stablecoins, utility tokens, and non-fungible tokens (NFTs).

Question CA 3-3

Should a reporting entity that provides custodial services related to assets other than crypto assets similarly apply SAB 121?

PwC response

No. SAB 121 should not be applied by analogy to assets other than crypto assets that are safeguarded by a custodian. The SEC staff believes the custodial risks related to crypto assets are different from those of other custodial relationships. These risks include increased regulatory risks as a result of a limited regulatory environment over holding these assets, technological risks (e.g., safeguarding the crypto assets), and the lack of legal precedent due to the unique characteristics of these assets.

3.7.2 SAB 121: recognition and measurement

SAB 121 requires a reporting entity that performs custodial activities, either directly or through an agent acting on its behalf, to record a safeguarding liability and a corresponding asset. As there are unique regulatory and legal uncertainties with custodial activities related crypto assets, SAB 121 states that the safeguarding liability should be measured at the fair value of the crypto assets safeguarded by the reporting entity for its customers, and should be remeasured to fair value at each subsequent reporting date. Fair value has the meaning as defined in ASC 820, *Fair Value Measurements*.

Similarly, the corresponding asset should be measured at the fair value of the crypto assets safeguarded by the reporting entity for its customers and remeasured to fair value at each subsequent reporting date (i.e., measured on the same basis as the safeguarding liability). The nature of the corresponding asset is similar to an indemnification asset as described in ASC 805, *Business combinations*. Therefore, like an indemnification asset, a reporting entity would need to evaluate whether any potential loss events, such as theft, impact the measurement of the asset. In practice, we believe the corresponding asset will generally be measured at the same amount as the safeguarding liability unless there is a hack or other event that results in the destruction, loss, or theft of the crypto assets.

We believe the determination of the principal or most advantageous market (as discussed in ASC 820-10-35-5 through ASC 820-10-35-6C) should be the same for the recognition and remeasurement of the safeguarding liability and corresponding asset. See FV 4.2.2 for additional information.

3.7.3 SAB 121: derecognition

A reporting entity will need to evaluate when to derecognize a safeguarding liability previously recorded for custodial services of crypto assets. Generally, the safeguarding liability should be derecognized only when the reporting entity no longer has an obligation to safeguard the crypto assets. In many cases this may be straightforward; for example, a reporting entity would derecognize the safeguarding liability at the point in time when a customer is provided with the crypto assets that were safeguarded by the custodian.

For the corresponding asset, derecognition is likely to occur when the safeguarding obligation is relieved and derecognized (e.g., when the customer is provided with the crypto assets that were safeguarded by the custodian). However, in the event of destruction, loss, or theft, derecognition of the corresponding asset may occur sooner than the safeguarding liability.

3.7.4 SAB 121: other considerations

Insurance recoveries

A reporting entity may need to apply additional judgment when there is a loss event and the reporting entity purchased an insurance arrangement to cover the loss of crypto assets. We believe purchasing insurance rarely changes the primary obligation of the reporting entity in an event of loss and is not sufficient to derecognize the safeguarding obligation. Instead, a reporting entity should continue to recognize and measure the safeguarding obligation and separately account for the impact of the insurance policy (which should be accounted for separately from the corresponding asset). Refer to PPE 8.2.1 for guidance on recognition of insurance recoveries. The safeguarding liability would be derecognized when the obligation is relieved or the reporting entity is legally released from any claims or potential future claims.

Deferred tax accounting

The safeguarding liability and corresponding asset recorded in the financial statements create a related deductible temporary difference and taxable temporary difference, respectively. Therefore, the reporting entity should record a deferred tax asset related to the safeguarding liability and a deferred tax liability related to the corresponding asset. In practice, we believe the deferred tax liability will generally be measured at the same amount as the deferred tax asset. In accordance with ASC 740, both the deferred tax asset and deferred tax liability should be recorded and disclosed separately.

3.7.5 SAB 121: effective date and transition

SEC registrants are expected to comply with SAB 121 in the first interim or annual financial statements ending after June 15, 2022 (e.g., Q2 2022 for calendar year-end public companies). Such guidance is required to be applied retrospectively to the beginning of the fiscal year in which the interim or annual period relates (e.g., January 1, 2022 for calendar year-end public companies).

SAB 121 also applies to other entities, including but not limited to entities conducting an initial public offering and private operating companies entering into a business combination transaction with a shell company, including SPACs. Such guidance is required beginning with these entities' next submission or filing with the SEC with retrospective application as of the beginning of the most recent annual period ending before June 15, 2022 if the filing includes a subsequent interim period that reflects application of SAB 121. Alternatively, if the filing does not include a subsequent interim period that reflects application of SAB 121, then entities must apply the guidance retrospectively to the beginning of the two most recent annual periods ending before June 15, 2022.

SAB 121 requires transparent disclosure of the effects of the initial application of SAB 121 based on ASC 250-10-50-1 through ASC 250-10-50-3. Disclosures would include the nature and reason for the change. We generally would not expect disclosures to be required related to an impact to the income statement or net assets when the safeguarding liability and corresponding asset are recognized and measured at the same time and at the same amount.

Reporting entities should consider including disclosures required by SAB 74, Disclosure of the Impact That Recently Issued Accounting Standards Will Have on the Financial Statements of the Registrant When Adopted in a Future Period, in periods prior to adoption. SAB 74 disclosures would include:

- A brief description of the guidance, the adoption date, and the method of adoption; and
- The impact of adoption unless not known or reasonably estimable. In that case, a statement to that effect may be made.

Disclosure of other potential impacts is also encouraged (e.g., violations of debt covenants).

See FSP 30.11 for additional information on SAB 74 disclosures.

Chapter 4:
Fair value of crypto assets—
updated November 2022

4.1 Fair value measurement

The fair value of a crypto asset might be accounted for, or disclosed, in the financial statements. Fair value is defined in ASC 820, *Fair Value Measurement*.

Excerpt from ASC 820-10-20

Fair value: The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

ASC 820 establishes a framework for determining fair value. Fair values are divided into a three-level fair value hierarchy in accordance with ASC 820-10-35-37, as follows:

- **Level 1:** observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets
- **Level 2:** inputs other than quoted prices included in Level 1 that are observable for the asset or liability either directly or indirectly
- **Level 3:** unobservable inputs (e.g., a reporting entity's or other entity's own data)

Generally, ASC 820 gives precedence to observable inputs over unobservable inputs. ASC 820 prioritizes observable data from active markets, placing measurements using only those inputs in the highest level of the fair value hierarchy (Level 1). The lowest level in the hierarchy (Level 3) includes inputs that are unobservable, which may include an entity's own assumptions about cash flows or other inputs. In some cases, the inputs used to measure fair value may be categorized within different levels of the fair value hierarchy. In those cases, the determination of level is based on the lowest level of significant inputs used in valuation models. For example, if a valuation is not based on Level 1 inputs at the reporting date because there is not an active market, the value will need to be determined using a valuation model. The objective in such valuations should be to estimate what the exit price of the entity's position at the valuation date would be. See FV 4.5 for additional information on the fair value hierarchy.

It should be noted that the hierarchy level of a crypto asset might evolve over time. For example, it is possible that a crypto asset that was previously valued using Level 3 inputs might become traded in an active market, or vice versa.

ASC 820 contains a number of disclosure requirements related to the level of the measurement hierarchy that a fair value measurement falls into, as well as the measurement basis used in the financial statements. See FSP 20.3.1 through FSP 20.3.1.2 for additional information on disclosure requirements related to the fair value hierarchy.

4.1.1 Active market determination

The first step in considering the fair value of a crypto asset is to determine if an active market exists for that crypto asset at the measurement date (i.e., whether it is a Level 1 valuation).

Excerpt from ASC 820-10-20

Active market: A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

The accounting standards do not define specific thresholds that need to be exceeded with regard to frequency (such as active trading days) and volume (such as turnover ratio) to determine if an active market exists. As such, the determination is subject to judgment.

4.1.2 Principal market determination

In some cases, there might be several markets for a particular crypto asset that meet the definition of an active market, and each of those markets might have different prices at the measurement date. In these situations, ASC 820 requires a reporting entity to determine the principal market for the asset. The principal market is the market with the greatest volume and level of activity for the relevant crypto asset that the entity holding the crypto asset can access.

The principal market must be available to and accessible by the reporting entity. If there is a principal market, fair value should be determined using the price in that market.

To determine the principal market, the reporting entity needs to evaluate the level of activity in various markets. However, the entity does not have to undertake an exhaustive search of all possible markets in order to identify the principal or most advantageous market; it should take into account all information that is readily available. In the absence of evidence to the contrary, the market in which an entity normally transacts is presumed to be the principal market.

If there is no principal market, or the reporting entity does not have access to the principal market, fair value should be based on the price in the most advantageous market (i.e., the market in which the entity would maximize the amount received to sell an asset). The identification of the principal or most advantageous market is a single market, not an average across markets. See FV 4.2.2 for additional information on the determination of the principal or most advantageous market.

If a reporting entity holds a crypto asset that has restrictions on its sale, transferability, or use, the impact of the restriction on fair value depends on whether the restriction is a characteristic of that crypto asset or is a restriction specific to the holder. If the restriction is entity-specific and does not transfer in an assumed sale, the restriction would not be considered part of the unit of account, and therefore a market participant would not include the restriction in the fair value measurement of the crypto asset. However, if a restriction transfers with the crypto asset in an assumed sale, the restriction would generally be considered a characteristic of the crypto asset and therefore would be included by a market participant in determining the fair value measurement of the crypto asset. The assessment of whether a restriction is a characteristic of the asset, and as such a part of the unit of account, can be judgmental. See FV 4.8 for guidance on the fair value of restricted assets after adoption of ASU 2022-03, which provides guidance on the fair value measurement of equity securities subject to contractual sale restrictions that may be helpful by analogy.

If there is a Level 1 input (i.e., quoted price in an active market), that price should be used as fair value. There should not be any adjustment to reflect the size of the holding (e.g., blockage factor) of crypto assets (see ASC 820-10-35-36B). Rather, the fair value would be calculated as price multiplied by

quantity. See FV 4.7.1 and FV 4.7.1.1 for additional information on Level 1 measurements and blockage factors, respectively.

4.1.3 *Post-market close event*

As discussed in ASC 820-10-35-41C(b), events may occur after the close of a market but before the end of the measurement date. When that is the case, a quoted market price may not be representative of fair value on the measurement date. Reporting entities should establish and consistently apply a policy for identifying and incorporating events that may affect fair value measurements. Crypto markets often do not have a traditional market close and may operate continuously; therefore, reporting entities may need a process to obtain market prices through the end of the day as of the reporting date to assess fair value of the crypto assets. See FV 4.5.4.1 for additional information on the impact of post-market close events.

***Chapter 5:
Disclosure of crypto assets—
updated February 2023***

5.1 Disclosures related to crypto assets

Other than SAB 121 there is no authoritative guidance that specifically addresses the accounting for crypto assets, therefore reporting entities should consider disclosures based on the relevant accounting standard applied (e.g., indefinite-lived intangible, financial asset). See CA 3.7.1 for additional considerations related to the scope of SAB 121 and CA 5.2 for the SAB 121 disclosure requirements.

Figure CA 5-1 summarizes some of the more common topics for disclosure. However, this list is not exhaustive and will need to be tailored to develop disclosures that are specific to the entity and the relevant facts and circumstances.

Figure CA 5-1
Frequently required disclosures

Accounting guidance	Requirement	Additional information
<i>ASC 235, Notes to Financial Statements</i>	Disclosures should include the accounting policies and principles followed in accounting for the crypto assets and the method of applying them.	FSP 1.1.4
<i>ASC 275, Risks and Uncertainties</i>	Given the risks and uncertainties associated with certain crypto assets, reporting entities should consider the need for disclosures about the nature of the crypto asset activities they are undertaking, the use of estimates for fair value, and any vulnerabilities due to concentration of risk due to a lack of diversification.	FSP 24
<i>ASC 350, Intangibles – Goodwill and Other</i>	When an impairment is recognized on crypto assets accounted for as intangible assets, include a description of the circumstances leading to the impairment, the amount of the impairment, the caption in the income statement that includes the impairment loss, and the segment in which the impaired asset is reported.	FSP 8.8
<i>ASC 606, Revenue from Contracts with Customers</i>	To the extent the crypto transaction is classified as a sale to a customer, include the relevant revenue disclosures, tailoring as appropriate based on whether the entity is a principal or agent.	FSP 33
<i>ASC 820, Fair Value Measurement</i>	When the crypto asset is a financial asset, include the relevant disclosures for an instrument that is recorded at fair value on a recurring basis. For crypto assets that are recognized as intangible assets, include the fair value disclosure for assets recorded at fair value on a non-recurring basis.	FSP 20

Accounting guidance	Requirement	Additional information
ASC 855, <i>Subsequent Events</i>	Reporting entities may need to disclose significant subsequent events related to crypto assets, such as significant changes in the value of the crypto assets after period end or significant changes in the amount or nature of the crypto asset transactions.	FSP 28
Additional considerations for SEC registrants	<p>Regulation S-X Article 5 requires registrants to separately state each class of intangible asset that is in excess of 5% of total assets. The amount of significant additions or deletions related to these assets should be disclosed in a footnote.</p> <p>Registrants should also consider additional disclosures outside of the financial statements, including any material information that may be necessary to ensure the financial statements are not misleading. In meeting their disclosure obligations, registrants should consider disclosures related to the description of the business, risk factors, and management's discussion and analysis. For additional information and illustrative examples of comments, refer to the <i>SEC's Sample Letter to Companies Regarding Recent Developments in Crypto Asset Markets</i>.</p>	<p>Regulation S-X Article 5-02</p> <p>Securities Act Rule 408 and Exchange Act Rule 12b-20</p>

5.2 SAB 121: presentation and disclosure

SAB 121 requires disclosures in the footnotes and elsewhere in the filing to address the nature and amount of crypto assets the reporting entity is responsible for safeguarding for its platform users. The disclosures should be disaggregated to disclose each significant crypto asset, including any vulnerability due to concentrations in accordance with ASC 275-10-50. See FSP 24.3.4 for additional information.

In accordance with ASC 235-10-50, the accounting for the crypto asset safeguarding liability and corresponding asset should also be described in the footnotes to the financial statements. See FSP 1.1.4 for additional information.

The reporting entity should also consider disclosure of which party is responsible for recordkeeping and safeguarding the crypto assets, as well as the entity that holds the cryptographic key information. Such entities may include the reporting entity, its agent, or another third party depending on the custodial arrangements.

Question CA 5-1

How should the crypto asset safeguarding liability and corresponding asset be classified on a reporting entity's balance sheet?

PwC response

It depends. We believe the nature of the relationship between the customer and the reporting entity is generally such that the customer has the ability to request withdrawal of the crypto assets and thus terminate the crypto asset safeguarding liability at any time. Accordingly, we believe this on-demand, short-term nature requires the reporting entity to classify both the safeguarding liability and corresponding asset as current on its balance sheet. This is consistent with the guidance on presenting a classified balance sheet in ASC 210. See FSP 2.3.4 for additional information.

Question CA 5-2

How should changes in the fair value measurement of the crypto asset safeguarding liability and corresponding asset be presented within the income statement?

PwC response

The crypto asset safeguarding liability and corresponding asset are measured at each reporting date at the fair value of the crypto asset that the reporting entity is responsible for safeguarding for its customers. We believe the changes in the fair value of the safeguarding liability and corresponding asset can be presented in the same line item in the income statement. Generally, we believe the changes in the fair value of the safeguarding liability and corresponding asset will net to zero, unless there is a hack or other event that affects the fair value of the corresponding asset.

Question CA 5-3

How should the initial recognition and subsequent remeasurement of the crypto asset safeguarding liability and corresponding asset be presented within the statement of cash flows?

PwC response

ASC 230-10-05-2(c) requires noncash investing and financing activities to be disclosed in the statement of cash flows. As the balance sheet classification of the crypto asset safeguarding liability and corresponding asset is current (see Question CA 5-1) and of an operating nature, the reporting entity would not need to disclose the noncash activity of the initial recognition or subsequent changes in the crypto asset safeguarding liability and corresponding asset. Furthermore, given the general statement of cash flow guidance in ASC 230 provides limited guidance on applying the indirect method and SAB 121 does not address statement of cash flow presentation, we believe a single-line presentation in the reconciliation to net income (i.e., the net effect of revaluing the safeguarding liability and the corresponding asset) would be acceptable.

Given that the crypto asset safeguarding liability and corresponding asset are measured at the fair value of the crypto assets safeguarded by the reporting entity for its customers and remeasured to fair value each reporting period, reporting entities will also need to include the disclosures required by ASC 820.

Question CA 5-4

How should the fair value measurement of the crypto asset safeguarding liability and corresponding asset be classified within the fair value leveling hierarchy?

PwC response

ASC 820, establishes a framework for determining fair value. Fair values are divided into a three-level fair value hierarchy in accordance with ASC 820-10-35-37. Level 1 is the highest level of the fair value hierarchy and is based on observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets. However, while there may be quoted prices in active markets for certain underlying crypto assets, no such markets exist for the safeguarding liability and corresponding asset (which are separate from the underlying crypto assets). Accordingly, we believe the fair value measurement of the crypto asset safeguarding liability and corresponding asset should not be classified within Level 1 given they are measured indirectly using the fair value of the underlying crypto assets being safeguarded for customers. Generally, we believe the fair value measurement of the safeguarding liability and corresponding asset would be classified within Level 2 unless they are measured using unobservable inputs (in which case, they would be classified within Level 3). See CA 4.1 for additional information on the fair value hierarchy.

5.3 *Disclosures related to crypto lending*

The AICPA updated its guidance on the accounting for crypto asset lending as outlined in the AICPA's Digital Assets Practice Aid. See CA 3.4 for additional information.

As part of the updated guidance, Question 25 of the AICPA's Digital Assets Practice Aid provides examples of disclosures that may be applicable to the lender. Disclosures may include, but are not limited to, the following:

- The terms, risks, and nature of the lending arrangements
- How management evaluates and monitors risk exposure (e.g., credit risk)
- If collateral is required, the type and amount of collateral, whether additional collateral is required to be pledged, and the collateral management policies implemented by the lender, such as how it can liquidate the collateral in the event of borrower default
- Disclosures using the principles of ASC 326, such as factors used to develop expected credit losses including, but not limited to:
 - information about the credit risk characteristics of the borrowers and lending arrangements, both quantitative and qualitative
 - changes in the allowance for expected credit losses, such as current period provisions and write-offs and, if applicable, recoveries of previous write-offs
 - crypto loans that are delinquent and how the status of such loans past due is determined
- Any vulnerability due to concentrations using the principles in ASC 275

- If the lending arrangement involves a related party, the disclosures in ASC 850, *Related Party Disclosures*
- Disclosures in ASC 820 related to measuring the crypto asset loan receivable