



# Inventory

## Handbook

**US GAAP**

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# Contents

Foreword.....	1
About this publication.....	2
1. Executive summary.....	4
2. Scope and recognition.....	7
3. Initial measurement.....	20
4. Subsequent measurement.....	92
5. Presentation and disclosure.....	110
Index of changes .....	130
KPMG Financial Reporting View .....	131
Acknowledgments.....	133

# Inventory in a changing economic environment

Although inventory is a key financial reporting metric for many entities, the Codification does not provide a significant amount of detailed accounting guidance. Therefore, an entity needs to apply judgment in accounting for inventory using existing principles and methods.

The accounting principles and methods for inventory are mostly unchanged over the last several decades. However, business practices have evolved in response to changes in the economic environment and competitive landscape. Many entities have shifted their distribution models to follow changes in consumer behavior – e.g. brick and mortar stores have closed as entities move to online platforms. Changes in business practices can require an entity to make critical judgments about the application of the inventory principles in today's financial reporting environment.

Our objective with this Handbook is to help you make those critical judgments. We expand beyond the basics of inventory accounting with insights, examples and perspectives based on our years of experience in this area. We navigate scope and recognition; deconstruct initial measurement (including cost flow assumptions); examine subsequent measurement (including impairment considerations); and outline presentation, disclosure and reporting considerations.

We hope you will find this Handbook to be a useful tool in accounting for inventory.

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## About this publication

The purpose of this Handbook is to assist you in applying the standard on inventory, Topic 330, and the requirements of other standards that affect the accounting for inventory.

### Organization of the text

Each chapter of this Handbook includes excerpts from the FASB's Accounting Standards Codification® and overviews of the relevant requirements. Our in-depth guidance is explained through Q&As that reflect the questions we are encountering in practice. We include examples to explain key concepts.

Our commentary is referenced to the Codification and to other literature, where applicable. The following are examples:

- 330-10-15-2 is paragraph 15-2 of ASC Subtopic 330-10.
- CON 8.E17 is paragraph E17 of FASB Concepts Statement No. 8.
- S-X Rule 5-02.6(b) is Rule 5-02.6(b) of SEC Regulation S-X.
- FR-205.02c is paragraph 02c of section 205 of the codified SEC Financial Reporting Releases.
- SAB Topic 11.F is SEC Staff Accounting Bulletin Topic 11.F.
- AFRIG.II.F.2 is section II.F.2 of the Division of Corporation Finance: Frequently Requested Accounting and Financial Reporting Interpretations and Guidance.
- TQA 2140.12 is section 2140.12 of the AICPA's Technical Questions and Answers.
- LIP.6-12 is section 6-12 of LIFO Issue Paper issued by the AICPA in 1984.
- IRC §472(c) is section 472(c) of the Internal Revenue Code of 1986.
- T-Reg. §1.472-2(e) is section 1.472-2(e) of the US Treasury regulations.

### September 2024 edition

The September 2024 edition of our Handbook includes a new section in [chapter 3](#) on inventory exchange transactions. It also includes new and updated interpretations of other inventory issues. New sections, Questions, Examples and other items added are identified throughout the Handbook with \*\* and items that have been significantly updated or revised are identified with #.

### Abbreviations

We use the following abbreviations in this Handbook:

COGS	Cost of goods sold
FIFO	First in, first out
IMU	Initial markup
IPO	Initial public offering

LCM	Lower of cost or market
LIFO	Last in, first out
LIP	LIFO Issues Paper
MD&A	Management's Discussion and Analysis
NFP	Not-for-profit entity
NRV	Net realizable value
PP&E	Property, plant and equipment
RIM	Retail inventory method
SG&A	Selling, general and administrative
WIP	Work-in-process

# 1. Executive summary

The methods and practices of accounting for inventory have been well established for many years. Accounting and reporting guidance for inventory is found in Topic 330 as well as SEC rules and regulations and AICPA publications.

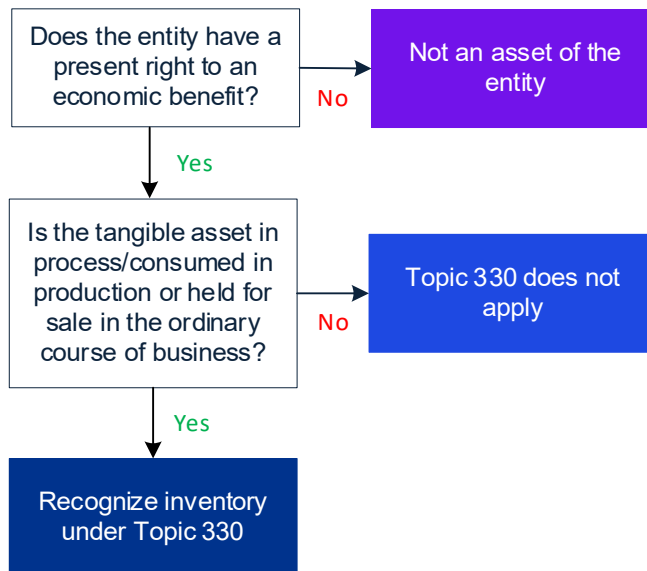
## Scope and recognition

A tangible asset is in the scope of Topic 330 when it meets the definitions of an asset (present right to an economic benefit) and inventory (which depends on the reasons an entity is holding the asset).

An entity generally obtains the economic benefit of a tangible asset when it obtains legal title to the asset. Further, a tangible asset meets the definition of inventory when it is:

- held for sale in the ordinary course of business (finished goods);
- in process of production for such sale (WIP); or
- to be currently consumed in the production of goods or services to be available for sale (raw materials).

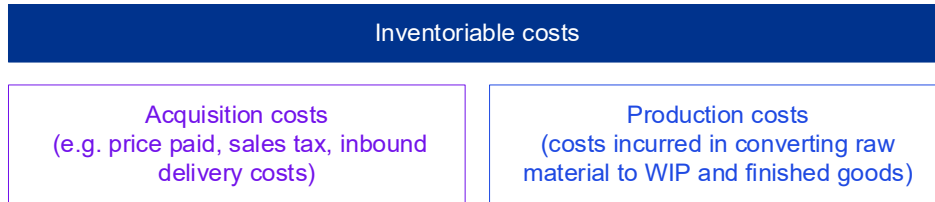
If a tangible asset is in the scope of Topic 330, it is recognized as inventory using the initial measurement principles discussed in [chapter 3](#). The following decision tree depicts the analysis for determining whether to recognize a tangible asset as inventory.



Read more: [chapter 2](#)

## Initial measurement

The primary basis of accounting for inventory is cost, which generally is the sum of direct and indirect expenditures and charges incurred to bring the inventory to its existing condition and location. 'Inventoriable costs' are capitalizable and fall into two broad categories.



An entity assigns inventoriable costs to inventory using one of several cost flow assumptions.

<b>Specific identification</b>	Identifies inventory items by the cost of each item on hand as well as the cost of each item sold. This cost flow assumption is generally practicable when there are unique items in inventory, such as jewelry.
<b>Average cost</b>	Uses the average cost of a pool of assets available for sale during the period. It is more practical than other cost flow assumptions in computing COGS and ending inventory for similar items.
<b>First-in, first out (FIFO)</b>	Assumes inventories first produced or acquired are the first ones sold (i.e. the oldest inventory is sold first).
<b>Last-in, first-out (LIFO)</b>	Assumes inventories first produced or acquired are the last ones sold (i.e. the newest inventory is sold first).
<b>Retail inventory method (RIM)</b>	Calculates a retail store's total ending inventory by using the cost-to-retail price ratio (i.e. reverse markup procedure).

Certain cost flow assumptions allow different approaches or computational techniques. The primary objective is to select the assumption that most clearly reflects periodic income, matching the costs of sales with the related revenues.

Read more: [chapter 3](#)

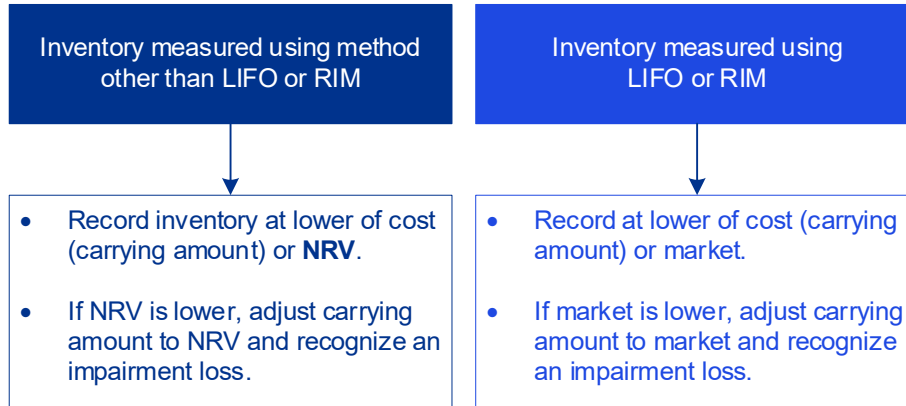
## Subsequent measurement

Inventory is generally measured at cost until it either becomes impaired or is sold or otherwise disposed of.

The primary accounting consideration when subsequently measuring inventory is whether the inventory has been impaired. Inventory is tested for impairment at

each reporting date, at a minimum. To test for impairment, an entity chooses a unit of account based on a reasonable grouping of inventory, applied either directly to each item (i.e. an item-by-item approach) or to a grouping of items.

Inventory is impaired when its carrying amount exceeds either NRV or market, depending on the cost flow assumption used.



Read more: [chapter 4](#)

## Presentation and disclosure

There are several required presentation formats and disclosures relating to inventory. These requirements are not just in Topic 330, but also in other Codification Topics and SEC Reg S-X.

The major classes of inventory (e.g. finished goods, WIP, raw materials) are typically separately presented on the balance sheet or disclosed in the notes. Information disclosed includes the basis for stating inventory and any change in that basis, cost elements, cost flow assumptions, significant estimates and impairment losses.

An entity that uses LIFO has additional disclosure requirements, such as the requirement to disclose:

- the amount of income realized from a LIFO liquidation; and
- any material excess of replacement or current cost over the reported LIFO value.

Such an entity also may disclose non-LIFO information ('supplemental non-LIFO disclosures'), but such disclosures cannot imply that the non-LIFO earnings are the entity's 'real earnings'.

Read more: [chapter 5](#)



## 2. Scope and recognition

### Detailed contents

New item added in this edition \*\*

#### 2.1 How the standard works

#### 2.2 Scope: Determining whether an asset is inventory

##### Questions

- 2.2.10 When is an asset considered inventory?
- 2.2.11 Are precious metals considered inventory? \*\*
- 2.2.12 Are samples distributed for advertising and promotional purposes considered inventory? \*\*
- 2.2.20 When are spare parts classified as inventory?
- 2.2.30 How does an entity account for changes to the classification of assets as inventory?

##### Example

- 2.2.10 Spare parts under a maintenance agreement

#### 2.3 Recognizing inventory

- 2.3.10 General considerations
- 2.3.20 Consignment arrangements
- 2.3.30 Bill-and-hold arrangements

##### Questions

- 2.3.10 When does an entity initially recognize inventory?
- 2.3.20 At what point does an entity obtain the economic benefit of inventory?
- 2.3.30 When does title transfer?
- 2.3.40 When can life sciences entities recognize prelaunch inventory as an asset? \*\*

##### Examples

- 2.3.05 Accounting for prelaunch inventory \*\*
- 2.3.10 Consignment arrangement
- 2.3.20 Bill-and-hold arrangement

#### 2.4 Derecognizing inventory

##### Questions

- 2.4.10 When does an entity derecognize inventory in a sale transaction?
- 2.4.20 Does an entity derecognize inventory in a product financing arrangement? \*\*

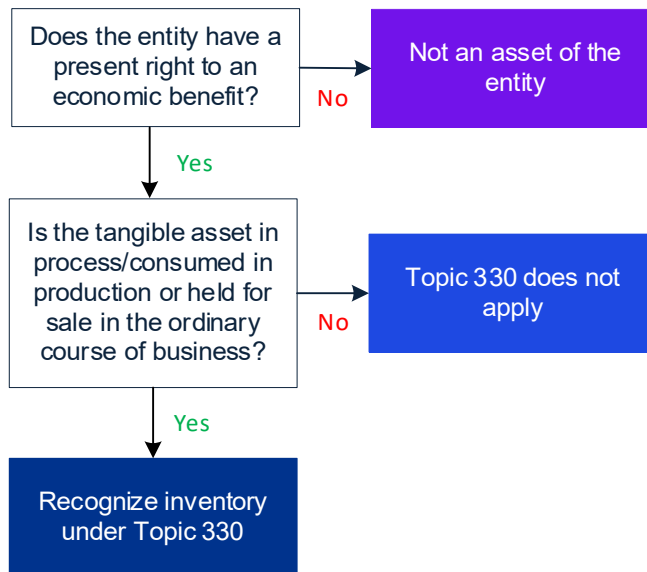
## 2.1 How the standard works

Tangible assets are in the scope of Topic 330 when they meet the definitions of an asset (present right to an economic benefit) and inventory (which depends on the reasons an entity is holding the asset).

An entity generally obtains the economic benefit of a tangible asset when it obtains legal title to the asset. Further, a tangible asset meets the definition of inventory when it is:

- held for sale in the ordinary course of business (finished goods);
- in process of production for such sale (WIP); or
- to be currently consumed in the production of goods or services to be available for sale (raw materials).

If a tangible asset is in the scope of Topic 330, it is recognized as inventory using the initial measurement principles discussed in [chapter 3](#). The following decision tree depicts the analysis for determining whether to recognize a tangible asset as inventory.



## 2.2 Scope: Determining whether an asset is inventory



### Excerpt from ASC 330-10

**05-1** The **Inventory** Topic addresses the accounting principles and reporting practices applicable to inventory.

**05-2** An inventory has financial significance because revenues may be obtained from its sale, or from the sale of the goods or services in the production of which it is used. Normally such revenues arise in a continuous repetitive process or cycle of operations in which goods are acquired, created, and sold, and further goods are acquired for additional sales.

**05-3** Thus, the inventory at any given date is the balance of costs applicable to goods on hand remaining after the matching of absorbed costs with concurrent revenues. This balance is appropriately carried to future periods provided it does not exceed an amount properly chargeable against the revenues expected to be obtained from ultimate disposition of the goods carried forward. In practice, this balance is determined by the process of pricing the articles included in the inventory.

**10-1** A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues.

> Overall Guidance

**15-1** The Scope Section of the Overall Subtopic establishes the pervasive scope for the **Inventory** Topic.

> Entities

**15-2** The guidance in the Inventory Topic applies to all entities, with the following qualifications.

**15-3** The guidance in this Topic is not necessarily applicable to the following entities:

- a. Not-for-profit entities (NFPs)
- b. Regulated utilities

### 20 Glossary

#### Inventory

The aggregate of those items of tangible personal property that have any of the following characteristics:

- a. Held for sale in the ordinary course of business
- b. In process of production for such sale
- c. To be currently consumed in the production of goods or services to be available for sale.

The term inventory embraces goods awaiting sale (the merchandise of a trading concern and the finished goods of a manufacturer), goods in the course

of production (work in process), and goods to be consumed directly or indirectly in production (raw materials and supplies). This definition of inventories excludes long-term assets subject to depreciation accounting, or goods which, when put into use, will be so classified. The fact that a depreciable asset is retired from regular use and held for sale does not indicate that the item should be classified as part of the inventory. Raw materials and supplies purchased for production may be used or consumed for the construction of long-term assets or other purposes not related to production, but the fact that inventory items representing a small portion of the total may not be absorbed ultimately in the production process does not require separate classification. By trade practice, operating materials and supplies of certain types of entities such as oil producers are usually treated as inventory.

**Reseller**

Any entity that purchases another vendor's products for resale, regardless of whether that entity is a distributor or wholesaler, a retailer, or other type of reseller.

**Vendor**

A service provider or product seller, such as a manufacturer, distributor, or reseller.

Topic 330 generally applies to inventory held by all entities, but other US GAAP may apply to inventory of NFP entities in the scope of Topic 958 and regulated utilities in the scope of Topic 980. Inventories of agricultural producers and cooperatives from the point of harvest apply additional guidance in Subtopic 905-330. [\[330-10-15-2 – 15-3\]](#)

The first issue an entity addresses is which of its assets are inventory.

**Question 2.2.10**

When is an asset considered inventory?

**Interpretive response:** An asset is inventory if it is a tangible asset that is: [\[330-10 Glossary\]](#)

- held for sale in the ordinary course of business;
- in process of production for such sale; or
- to be currently consumed in the production of goods or services to be available for sale.

While entity-specific, the following are common major categories of inventory included in a typical manufacturer's inventory.

<b>Raw materials</b>	<i>Available to be consumed directly</i> in the production of goods or services to be available for sale.
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<b>Supplies</b>	<i>Available to be consumed indirectly</i> in the production of goods or services to be available for sale.
<b>WIP</b>	<i>In process of production</i> for sale.
<b>Finished goods and merchandise</b>	<i>Held for sale</i> in the ordinary course of business.



**Question 2.2.11\*\***  
Are precious metals considered inventory?

**Interpretive response:** It depends on the intended use of the precious metals by the entity. Precious metals (e.g. gold and silver) are inventory if they are held for sale in the ordinary course of business or are used in the production of a good for such sale. In contrast, precious metals are not inventory if they are purchased as a long-term investment or an inflation hedge.

Section 3.3.50 discusses when inventory, including precious metals, can be stated above cost.



**Question 2.2.12\*\***  
Are samples distributed for advertising and promotional purposes considered inventory?

**Background:** Some entities frequently distribute samples of product free of charge to potential customers for advertising and promotional purposes (e.g. trial sizes of beauty products). These samples may be either manufactured in-house or purchased externally.

**Interpretive response:** No, samples provided to retail customers are not recognized as inventory because they typically are not intended for sale or in process of being produced for sale in the ordinary course of business. [330-10 Glossary]

However, when a manufacturer sells products to a retailer and the retailer subsequently distributes these products to customers free of charge, the products are treated as the manufacturer's inventory until they are transferred to the retailer. This is because the products are intended for sale in the manufacturer's ordinary course of business to its customer, the retailer.



### Question 2.2.20

When are spare parts classified as inventory?

**Interpretive response:** Spare parts (e.g. reusable and returnable parts and consumable lubricants) are classified as inventory when they will be consumed directly in the production of goods or services to be available for sale. [TQA 2140.12]

If the spare parts do not meet the definition of inventory, they are accounted for under Topic 360 if they meet the definition of PP&E.



### Example 2.2.10

Spare parts under a maintenance agreement

ABC Corp enters into a three-year maintenance agreement with DEF Corp, an unrelated entity, to provide maintenance and service for specialized equipment leased by DEF to third parties. The maintenance agreement requires ABC to maintain a pool of spare parts for the equipment. ABC uses these parts to fulfill its obligation under the contract and does not use the spare parts in other aspects of its operations.

Under the maintenance agreement, parts can be repaired, replaced with other repaired parts, or replaced with new parts at ABC's discretion. Most of the spare parts are of a repairable nature, and ABC anticipates replacing the parts and refurbishing them at its cost as part of its supply of refurbished parts. Under the terms of the maintenance agreement, the refurbished parts can be used in the future.

In this example, ABC classifies the spare parts as inventory because they are consumed directly in the production of goods or services to be available for sale.



### Question 2.2.30

How does an entity account for changes to the classification of assets as inventory?

**Interpretive response:** An entity may need to reclassify assets after their acquisition in the period the entity's intended use of the assets changes.

#### **Inventoried assets no longer meet the definition of inventory**

If inventoried assets no longer meet the definition of inventory because they are converted to other uses, the entity transfers their carrying amount from inventory to the appropriate balance sheet account (often PP&E). Because this reclassification is due to a change in facts, there is no change in accounting method or estimate and no correction of an error under Topic 250 (accounting changes and error corrections). Therefore, the change is prospective from the date of the transfer of the carrying amount.

If the assets transferred out of inventory are classified as PP&E, they are depreciated and subject to the requirements of Topic 360. See KPMG Handbook, [Impairment of nonfinancial assets](#), for additional guidance on impairment considerations.

For example, an entity may produce commercial vehicles to be sold to an end customer. However, after production, a specific vehicle is identified to be used as a delivery vehicle. The vehicle's carrying amount is reclassified from inventory to PP&E and depreciated under the requirements of Topic 360.

#### Other assets become inventory

If other assets held by an entity (typically PP&E) become inventory, their carrying amounts are transferred to the inventory account. The change is prospective from the date of the transfer of the carrying amount.

For example, an entity that sells commercial vehicles as part of its normal operations determines that a demonstration vehicle (recorded in PP&E) is no longer needed for demonstration. It refurbishes the vehicle and identifies it as a vehicle available for sale to customers. The vehicle's carrying amount is reclassified from PP&E to inventory. The entity would cease depreciation on the vehicle at the point that it is initially accounted for under Topic 330.

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## 2.3 Recognizing inventory

### 2.3.10 General considerations

Once the criteria for inventory capitalization are met, inventory is recognized, which is the subject of this chapter. See [chapter 3](#) for the items and amounts to be capitalized.



#### Question 2.3.10

When does an entity initially recognize inventory?

**Interpretive response:** Topic 330 does not provide specific guidance on when to initially recognize inventory. We believe inventory should not be recognized unless it meets the essential characteristics of an asset outlined in the FASB's Conceptual Framework, which are: [\[CON 8.E17\]](#)

- it is a present right; and
- the right is to an economic benefit.

The combination of those two characteristics allows an entity to obtain the economic benefit and control others' access to that benefit.

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### Question 2.3.20

At what point does an entity obtain the economic benefit of inventory?

**Interpretive response:** In the absence of specific guidance, we believe an entity generally obtains the economic benefit of inventory and associated risks of loss when it obtains legal title to the inventory. Generally, once an entity has obtained legal title, the inventory meets the essential characteristics of an asset (see [Question 2.3.10](#)) because the transfer of legal title typically gives the entity access to economic benefits to:

- manufacture and sell the inventory in the ordinary course of business, exchange it, or use it to secure or settle debt; and
- control others' access to it.

Generally, an entity obtains the economic benefits upon the transfer of legal title. However, transfer of legal title is not the sole indicator as to when an entity obtains the benefit of an asset.

- In some circumstances, an entity may record inventory as an asset before obtaining legal title. For example, this happens when legal title is retained by the vendor to reduce the risk of collectibility, but the entity has the ability to obtain economic benefits from the asset. See [section 2.3.30](#) for bill-and-hold arrangements.
- A vendor retaining a right of first refusal to repurchase the inventory from an entity through the purchase agreement may indicate that the entity has not obtained the economic benefit of the inventory even though it holds title.



### Question 2.3.30

When does title transfer?

**Interpretive response:** Title transfers from the seller to the buyer based on the terms of the purchase contract as well as the laws of the jurisdiction governing the purchase contract. Depending on the terms of the purchase contract, title could transfer concurrent with the shipment or receipt of inventory, upon receipt or payment of invoice, or at some other point within the purchasing process defined within the contract.

The most common international trade terms are Incoterms® Rules, which the International Chamber of Commerce (ICC) publishes. However, entities that ship goods within the US must adhere to the Uniform Commercial Code (UCC).

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**Question 2.3.40\*\*****When can life sciences entities recognize prelaunch inventory as an asset?**

**Background:** Life sciences entities often start producing pharmaceutical and medical device products before regulatory approval to sell. This approach, necessitated by the lengthy, intricate manufacturing processes, helps prepare for the commercial launch. The produced items are commonly referred to as prelaunch inventory, pre-approval inventory, or inventory awaiting approval. If regulatory approval is not obtained, the produced items generally have no alternative future use.

**Interpretive response:** Prelaunch inventory cannot be recognized as an asset until it meets the definition of an asset (see [Question 2.3.10](#)). Under this definition, an asset represents a present right to an economic benefit. The economic benefit of prelaunch inventory is uncertain because the entity cannot sell the prelaunch inventory without regulatory approval. Therefore, additional scrutiny is required to determine if there is a present right to the economic benefits or whether the entity has to wait until it obtains regulatory approval to recognize the inventory as an asset. [\[CON 8.E16\]](#)

To determine if prelaunch inventory represents a present right to an economic benefit, an entity considers the specific facts and circumstances of the entity obtaining regulatory approval for the product. In some situations, inventory is not recognized as an asset until regulatory approval occurs because the level of uncertainty prohibits the entity from concluding there is a present right to an economic benefit. In other instances, an entity may conclude there is a present right to an economic benefit before regulatory approval. Determining the point at which there is a present right to an economic benefit involves significant judgment. Factors to consider include, but are not limited to:

- the specific nature of any outstanding safety, efficacy, manufacturing, marketing or labelling issues, and their impact on the product's economic benefit;
- the expected timing of regulatory approval;
- the entity's history of receiving regulatory approval for similar products and/or indications;
- the risk of patent infringement or other litigation challenges upon receiving approval;
- market factors that could negatively affect the commercial success of the product – e.g. competing drugs in the same disease space, pricing pressures, government policies, access to managed care formulary;
- advisory panel reviews and correspondence with the regulatory agency (e.g. FDA, EMEA) about the product's safety and efficacy; and
- the product's shelf life.

In our experience it is difficult to conclude that prelaunch inventory is a present right to an economic benefit before an entity is able to review complete trial data and results (e.g. before Phase 3 trials are completed for a new pharmaceutical product) because key safety, efficacy and feasibility issues have not been resolved.

If, after evaluating these and any other relevant factors, an entity concludes the product embodies a present right to an economic benefit, the prelaunch inventory is recognized as an asset (i.e. capitalized as inventory). However, the entity continues to assess whether the product embodies a present right to an economic benefit. If at any time regulatory approval casts doubt on whether the product results in a present right to an economic benefit, the entity impairs the inventory; [chapter 4](#) discusses subsequent measurement. In most cases, the carrying amount is reduced to zero because the product cannot be sold commercially without regulatory approval.

In contrast, supplies acquired (e.g. certain raw materials) to support an ongoing clinical trial are expensed as an R&D cost in the period incurred unless the supplies have an alternative future use. See section 2.3 of KPMG Handbook, [Research and development](#).

See [Question 5.3.70](#) for the disclosure requirements for prelaunch inventory.

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### Example 2.3.05\*\* Accounting for prelaunch inventory

#### Scenario 1: Asset recognized

Pharma Corp currently markets three approved products and has developed a new drug in the same disease area, which is yet to receive FDA approval. The new drug application is filed on January 1, Year 5, and accepted by the FDA on February 28, Year 5. Final regulatory approval is expected within six to nine months.

To prepare for the drug's commercial launch, Pharma plans to manufacture 100 batches of prelaunch inventory starting in March, Year 5, before final regulatory approval. If regulatory approval is not obtained, the product has no alternative future use. Pharma concludes that final regulatory approval is expected based on its historical experience with similar products, positive results from its Phase 3 clinical trials and correspondence with the FDA about the product's safety and efficacy. In addition, the newly developed drug has a five-year shelf life, and all prelaunch inventory is expected to sell before expiration.

Because Pharma expects final regulatory approval will be received and that the product will be sold before expiration, it concludes that the prelaunch inventory represents a present right to an economic benefit. Therefore, it recognizes the product as inventory. However, it also reassesses its conclusion at each reporting period until regulatory approval is obtained. Lastly, it describes its accounting for prelaunch inventory in the notes to its financial statements (see [Question 5.3.70](#)).

### Scenario 2: Asset not recognized

Pharma Corp is a precommercial biotech that has developed its first drug. To prepare for the drug's commercial launch, Pharma plans to manufacture 100 batches of prelaunch inventory, before final regulatory approval. If regulatory approval is not obtained, the product has no alternative future use. During the Phase 3 clinical trials, Pharma had extensive correspondence with the FDA regarding the product's safety and efficacy and Pharma believes the risks associated with the FDA's concerns have not been sufficiently addressed until the results of the Phase 3 trial are known.

Pharma concludes that it does not have a present right to an economic benefit and expends the cost of the prelaunch inventory because of the amount of risk remaining related to the product's safety and efficacy given that it has no prior history of receiving regulatory approval.

Based on these facts and circumstances, Pharma will not recognize any product inventory until final regulatory approval is obtained. If regulatory approval is obtained, Pharma will provide specific disclosures about the impact on its gross margins from selling the previously expensed inventory (see [Question 5.3.70](#)).

## 2.3.20 Consignment arrangements

Under the typical consignment arrangement, a vendor delivers goods to an entity that acts as a dealer, reseller or distributor of the vendor for sale to an end customer. However, the vendor retains the rights to the economic benefits of the goods until they are sold to a third party; see section 7.5.20 of KPMG Handbook, [Revenue recognition](#). Because the vendor retains the rights to the economic benefits of the goods until they are sold to a third party, the entity does not recognize the goods received from the vendor as an asset.



### Example 2.3.10 Consignment arrangement

Vendor enters into a 60-day contract to ship 1,000 watches to Customer's stores. Customer is obligated to pay Vendor when a watch is sold to an end customer. During the 60-day period, Vendor has the contractual right to require Customer to either return the watches or transfer them to another retailer. Vendor is also required to accept the return of the watches.

Customer determines the rights to obtain the economic benefit and control others' access to the economic benefit is not transferred on delivery because:

- Vendor can require that the watches be transferred to another retailer at any time before Customer sells them to an end customer; and
- Vendor can require the return of the watches.

As such, the arrangement between Vendor and Customer is a consignment arrangement and Customer does not recognize the receipt of watches as an asset.

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### 2.3.30 Bill-and-hold arrangements

Bill-and-hold arrangements occur when a vendor bills a customer for a product but retains physical possession of the product until it is transferred to the customer at a future point in time; see section 7.5.30 of KPMG Handbook, [Revenue recognition](#). This might occur to accommodate a customer's lack of available warehouse space for the product or delays in production schedules.

While the vendor retains physical possession of the product, this does not preclude a customer from having a present right to obtain the economic benefit of the product that is still physically possessed by the vendor. This is because the customer can request delivery of the goods to its facility or direct the goods to one of its customers without restriction from the vendor. These facts indicate that the customer has a present right to obtain the economic benefit of the product.



#### Example 2.3.20 Bill-and-hold arrangement

Customer enters into a contract to acquire widgets from Vendor. Customer is awaiting completion of a manufacturing facility and requests that Vendor hold the widgets until the facility is completed. No delivery date is specified.

Customer pays Vendor the nonrefundable transaction price and Vendor agrees to hold the widgets until Customer requests delivery. The widgets are complete and segregated from Vendor's inventory and are ready for shipment. Vendor transfers title to Customer.

Customer concludes that the widgets meet the definition of an asset (see [Question 2.3.10](#)) because it has obtained the rights to the economic benefits of the widgets even though they are still physically possessed by the vendor. Therefore, Customer recognizes the widgets as its inventory.

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## 2.4 Derecognizing inventory



### Question 2.4.10

When does an entity derecognize inventory in a sale transaction?

**Interpretive response:** Topic 330 does not provide specific guidance on the derecognition of inventory in a sale transaction; however, the objective of Topic 330 is to match the cost against the applicable revenue in a way that best reflects periodic income.

For inventory sold in contracts with customers, an entity applies Topic 606 to determine when a performance obligation is satisfied, and at that point the inventory is derecognized. [Chapter 3](#) discusses cost flow assumptions and the amount of costs to be derecognized, and chapter 7 of KPMG Handbook, [Revenue recognition](#), discusses when an entity satisfies a performance obligation.

[Chapter 4](#) discusses when inventory may be impaired or derecognized for other reasons – e.g. damage/ physical deterioration, obsolescence, changing market conditions.

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### Question 2.4.20\*\*

Does an entity derecognize inventory in a product financing arrangement?

**Background:** A product financing arrangement is a transaction in which an entity (the sponsor) sells inventory and agrees to repurchase it from the buyer at a future date for a repurchase price equal to the original sale price plus carrying and financing costs. The distinguishing characteristic of a product financing arrangement is that in substance it represents a secured borrowing rather than a revenue-producing transaction or supply agreement. [\[470-40 Glossary\]](#)

**Interpretative response:** No. The sponsor accounts for a product financing arrangement under Subtopic 470-40, with the product remaining as inventory on the balance sheet and the related obligation being recognized as a liability. The sponsor continues to assess the inventory for impairment, which may be affected by the length of time of the arrangement, the nature of the inventory, its use and other factors (see [chapter 4](#) on subsequent measurement). For further discussion on product financing arrangements, see section 3.7.40 of KPMG Handbook, [Debt and equity financing](#).

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## 3. Initial measurement

### Detailed contents

New item added in this edition \*\*

Item significantly updated in this edition #

#### 3.1 How the standard works

#### 3.2 Inventoriable costs

3.2.10 Overall

3.2.20 Consideration received from a vendor

#### Questions

3.2.10 What are examples of direct acquisition costs included in inventory?

3.2.15 How is acquisition cost determined when the purchase price includes different types of inventory? \*\*

3.2.20 Are tariffs and other import fees included in the cost of inventory?

3.2.30 Are costs related to pre-acquisition activities included in the cost of inventory?

3.2.40 Are indirect acquisition costs included in the cost of inventory?

3.2.50 What is included in the production costs of inventory?

3.2.60 What is excluded from capitalized production costs of inventory?

3.2.70 Are costs to store inventory, such as warehousing costs, included in the cost of inventory?

3.2.80 Are outbound shipping and handling costs capitalizable?

3.2.90 Are there specific considerations for an entity in the retail industry when determining cost of inventory?

3.2.100 Are interest costs included in the cost of inventory?

3.2.110 How are fixed and variable production overhead costs allocated to inventory?

3.2.120 Are unallocated fixed overhead and other abnormal costs capitalized in the cost of inventory? #

3.2.130 Are asset retirement obligations (AROs) included in the cost of inventory?

3.2.140 To which types of consideration from a vendor does Subtopic 705-20 apply?

3.2.150 Is consideration received from a vendor included in the cost of inventory?

- 3.2.160 When is a rebate or refund not probable and reasonably estimable?
- 3.2.170 What is a systematic and rational approach for recognizing a markdown allowance from a vendor under the retail inventory method?
- 3.2.180 How are changes in an estimated cash rebate or refund accounted for?

**Examples**

- 3.2.05 Allocation of fixed overhead production costs based on normal capacity \*\*
- 3.2.10 Inventory spoilage from naturally occurring contaminants and batch failures

**3.3 Cost flow assumptions**

- 3.3.10 Average cost
- 3.3.20 First in, first out (FIFO)
- 3.3.30 Last in, first out (LIFO)
- 3.3.40 Retail inventory method (RIM)
- 3.3.50 Inventories stated above cost
- 3.3.60 Interim financial reporting
- 3.3.70 Accounting changes

**Questions**

- 3.3.10 When is the specific identification cost flow assumption used?
- 3.3.20 How is standard costing applied?
- 3.3.30 Can subsidiaries in a consolidated entity use different cost flow assumptions to calculate inventory cost?
- 3.3.40 How is the average cost flow assumption applied?
- 3.3.50 What are the benefits of applying LIFO?
- 3.3.60 Are there incremental financial reporting and disclosure requirements when applying LIFO?
- 3.3.70 Can an entity apply LIFO for only a specific portion of its inventory?
- 3.3.80 What are the application choices an entity makes when applying LIFO?
- 3.3.90 What are the acceptable approaches for applying LIFO?
- 3.3.100 How is the specific goods LIFO approach applied?
- 3.3.110 How is the dollar value LIFO approach applied?
- 3.3.120 How are dollar value LIFO pools determined?

- 3.3.130 What considerations are important for establishing dollar value LIFO pools?
- 3.3.140 How are new inventory items added to existing dollar value LIFO pools?
- 3.3.150 What is the nature of past SEC enforcement actions regarding the application of LIFO?
- 3.3.160 What quantity of inventory is used to determine the price of a LIFO inventory increment?
- 3.3.170 How does an entity price the current year LIFO increment?
- 3.3.180 Do all LIFO liquidations affect year-end financial reporting requirements?
- 3.3.190 How has the SEC staff evaluated the transfer of LIFO inventory to a non-LIFO subsidiary?
- 3.3.200 How is RIM applied?
- 3.3.210 How is inventory shrinkage computed under RIM?
- 3.3.220 Are there other variations of RIM used by retailers?
- 3.3.230 When can inventory be stated above cost?
- 3.3.240 Is a LIFO liquidation that is expected to be temporary recorded during an interim reporting period?
- 3.3.250 How is the expected cost of replacement of a liquidated LIFO base recorded on the balance sheet?
- 3.3.260 How does an entity account for a LIFO liquidation that occurs during an interim reporting period and is not expected to be restored by year-end?
- 3.3.270 How does an entity applying LIFO determine COGS during an interim reporting period?
- 3.3.280 Are standard cost variances that are expected to be temporary recorded during an interim reporting period?
- 3.3.290 Can an entity change its cost flow assumption to account for inventory?
- 3.3.300 What factors should be considered when determining whether a change in cost flow assumptions is appropriate?
- 3.3.310 Can an entity change how it applies LIFO?

**Examples**

- 3.3.10 Weighted average inventory costing
- 3.3.20 Calculation of FIFO inventory costing
- 3.3.30 Specific goods approach
- 3.3.40 Dollar value approach – double extension technique
- 3.3.50 Dollar value approach – link chain technique



- 3.3.60 Retail inventory method
- 3.3.70 Changing cost flow assumptions – LIFO to FIFO

**3.4 Inventory exchange transactions \*\***

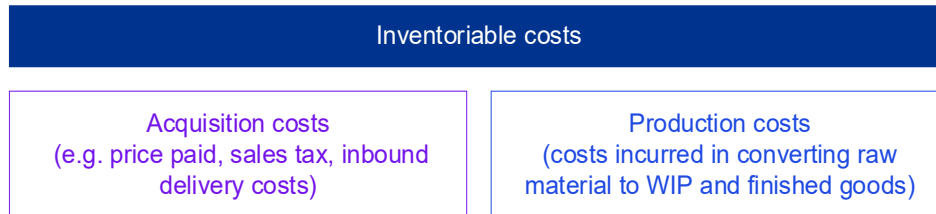
- 3.4.10 Overview
- 3.4.20 Combining transactions
- 3.4.30 Carryover basis accounting
- 3.4.40 FASB examples

**Questions**

- 3.4.10 What types of inventory exchange transactions are considered to be in the same line of business and to facilitate sales to customers or potential customers?
- 3.4.20 When is monetary consideration (boot) significant enough to result in the transaction being accounted for as a monetary instead of a nonmonetary transaction?
- 3.4.30 When are two or more inventory purchase and sale transactions with the same counterparty considered a single exchange transaction in Topic 845?

## 3.1 How the standard works

The primary basis of accounting for inventory is cost, which generally is the sum of direct and indirect expenditures and charges incurred to bring the inventory to its existing condition and location. 'Inventoriable costs' are capitalizable and fall into two broad categories.



An entity assigns inventoriable costs to inventory using one of several cost flow assumptions.

- Specific identification
- Average cost
- First in, first out (FIFO)
- Last in, first out (LIFO)
- Retail inventory method (RIM)

Certain cost flow assumptions allow different approaches or computational techniques. The primary objective is to select the assumption that most clearly reflects periodic income, matching the costs of sales with the related revenues.

## 3.2 Inventoriable costs

### 3.2.10 Overall



#### Excerpt from ASC 330-10

##### > Cost Basis

**30-1** The primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset. As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location. It is understood to mean acquisition and production cost, and its determination involves many considerations.

**30-2** Although principles for the determination of **inventory** costs may be easily stated, their application, particularly to such inventory items as work in process and finished goods, is difficult because of the variety of considerations in the allocation of costs and charges.

**30-3** For example, variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities. However, the allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity refers to a range of production levels. Normal capacity is the production expected to be achieved over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. Some variation in production levels from period to period is expected and establishes the range of normal capacity.

**30-4** The range of normal capacity will vary based on business- and industry-specific factors. Judgment is required to determine when a production level is abnormally low (that is, outside the range of expected variation in production).

**30-5** Examples of factors that might be anticipated to cause an abnormally low production level include significantly reduced demand, labor and materials shortages, and unplanned facility or equipment downtime.

**30-6** The actual level of production may be used if it approximates normal capacity. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production shall be decreased so that inventories are not measured above cost. The amount of fixed overhead allocated to each unit of production shall not be increased as a consequence of abnormally low production or idle plant.

**30-7** Unallocated overheads shall be recognized as an expense in the period in which they are incurred. Other items such as abnormal freight, handling costs, and amounts of wasted materials (spoilage) require treatment as current period charges rather than as a portion of the inventory cost.

**30-8** Also, under most circumstances, general and administrative expenses shall be included as period charges, except for the portion of such expenses that may be clearly related to production and thus constitute a part of inventory costs (product charges). Selling expenses constitute no part of inventory costs. The exclusion of all overheads from inventory costs does not constitute an accepted accounting procedure. The exercise of judgment in an individual situation involves a consideration of the adequacy of the procedures of the cost accounting system in use, the soundness of the principles thereof, and their consistent application. General and administrative expenses ordinarily shall be charged to expense as incurred.

> Purchases and Sales of Inventory with the Same Counterparty

**30-16** For a discussion of the initial measurement of inventory purchased from an entity to which it also sells inventory in the same line of business, see paragraphs 845-10-55-10 through 55-26.

> Costs Resulting from Share-Based Payment Transactions

**30-17** See paragraph 718-10-25-2 for a discussion of share-based payment capitalized as a part of inventory.

> Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed

**30-18** See Sections 985-20-25 and 985-20-35 and paragraphs 985-20-55-2 through 55-3 for a discussion of accounting for the costs of producing and acquiring computer software, including software that is marketed as part of a product or process.

> Costs to Fulfill a Contract with a Customer

**30-20** See paragraphs 340-40-25-5 through 25-8 and paragraphs 340-40-35-1 through 35-6 for the accounting for the costs to fulfill a contract with a customer if those costs are not in the scope of another Topic.

> Indirect Contract Costs by Government Contractors

**30-21** See paragraph 912-20-25-1 for the accounting for indirect contract costs by government contractors.

• > Costs Capitalized to Inventory for Tax Purposes

**55-3** The following provides guidance as to whether the types of costs that are required to be allocated to inventories for tax purposes under the Uniform Capitalization Rules for Inventory under the Tax Reform Act of 1986 would be capitalizable under generally accepted accounting principles (GAAP) and, if so, whether the costing method required for tax purposes is a preferable method for purposes of justifying a change in accounting principle.

**55-4** The fact that a cost is capitalizable for tax purposes does not, in itself, indicate that it is preferable, or even appropriate, to capitalize that cost for financial reporting purposes. Certain of the additional costs that are required to be capitalized for tax purposes may also be capitalizable for financial reporting purposes, depending on factors such as the nature of the entity's operation and

industry practice. That determination, however, can only be made after an analysis of the individual facts and circumstances.

- > Capitalizing into Inventory the Service Cost Component of Pension and Other Postretirement Benefit Costs

**55-6A** The service cost component of net periodic pension cost and net periodic postretirement benefit cost is the only component directly arising from employees' services provided in the current period. Therefore, when it is appropriate to capitalize employee compensation in connection with the construction or production of an asset, the service cost component applicable to the pertinent employees for the period is the relevant amount to be considered for capitalization.



### Excerpt from ASC 718-10

#### > Recognition Principle for Share-Based Payment Transactions

**25-2** An entity shall recognize the goods acquired or services received in a share-based payment transaction when it obtains the goods or as services are received, as further described in paragraphs 718-10-25-2A through 25-2B. The entity shall recognize either a corresponding increase in equity or a liability, depending on whether the instruments granted satisfy the equity or liability classification criteria (see paragraphs 718-10-25-6 through 25-19A).

**25-2A** Employee services themselves are not recognized before they are received. As the services are consumed, the entity shall recognize the related cost. For example, as services are consumed, the cost usually is recognized in determining net income of that period, for example, as expenses incurred for employee services. In some circumstances, the cost of services may be initially capitalized as part of the cost to acquire or construct another asset, such as inventory, and later recognized in the income statement when that asset is disposed of or consumed. This Topic refers to recognizing compensation cost rather than compensation expense because any compensation cost that is capitalized as part of the cost to acquire or construct an asset would not be recognized as compensation expense in the income statement.

The primary basis of accounting for inventory is cost; see [section 3.3.50](#) for limited exceptions when inventory can be stated at above cost. This requires an entity to capitalize 'inventoriable costs', which are "expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location." [\[330-10-30-1\]](#)

Inventoriable costs encompasses two broad categories of costs: [\[330-10-30-1\]](#)

- acquisition costs; and
- production (conversion) costs – i.e. costs of converting raw materials into WIP and finished goods.



### Question 3.2.10

What are examples of direct acquisition costs included in inventory?

**Interpretive response:** Acquisition costs comprise those costs necessary to bring an article to its existing condition and location. These direct costs include: [\[330-10-30-1\]](#)

- price paid for the goods;
- taxes paid upon acquisition (e.g. sales taxes); and
- inbound delivery costs (e.g. shipping and handling) to transfer goods from the seller to the entity.



### Question 3.2.15\*\*

How is acquisition cost determined when the purchase price includes different types of inventory?

**Interpretive response:** We believe the total purchase price should be allocated to the different types of inventory acquired based on a systematic and rational approach.

We believe one acceptable allocation approach is to use the relative fair values of the individual types of inventory. This approach involves determining the fair value of each type of inventory acquired in the transaction at the acquisition date and then allocating the total purchase price proportionally based on the relative fair values of each type of inventory. Any changes to the fair value of the inventory items after the acquisition does not impact the initial allocation of the purchase price.

For example, assume an entity acquires two different types of inventory, type A and type B, for a total purchase price of \$80,000. The fair value of type A is \$60,000 and the fair value of type B is \$40,000 (total fair value of \$100,000) at the acquisition date. The entity would allocate purchase price of \$48,000 ( $60\% \times \$80,000$ ) to type A, and \$32,000 ( $40\% \times \$80,000$ ) to type B.



### Question 3.2.20

Are tariffs and other import fees included in the cost of inventory?

**Interpretive response:** Yes. The cost of inventory includes expenditures either directly or indirectly incurred to bring an article to its existing condition and location. We believe the costs required to procure goods overseas and deliver them to the entity's fulfillment center or manufacturing facilities should be capitalized and included in inventory. This includes tariffs on the inbound purchase of inventory, which are considered a direct cost and contribute to bringing the inventory to its existing condition and location. [\[330-10-30-1\]](#)



### Question 3.2.30

Are costs related to pre-acquisition activities included in the cost of inventory?

**Interpretive response:** In the absence of detailed guidance in Topic 330, we believe it is acceptable to analogize to Subtopic 350-40, which identifies the internal-use software costs that are capitalized. The guidance distinguishes between costs incurred during the preliminary project stage (not capitalized) and those incurred during the application development stage (capitalized). [350-40 Glossary, 350-40-25-1 – 25-5]

**Costs incurred in the preliminary project stage are expensed as incurred and likely include the activities listed**

- Making strategic decisions to allocate resources between alternative projects
- Determining performance requirements
- Inviting vendors to perform demonstrations of how their software will fulfill an entity's needs
- Exploring alternative means of achieving specified performance requirements
- Determining that the technology needed to achieve performance requirements exists
- Selecting a vendor

When applying this guidance by analogy to acquiring inventory, we believe costs associated with an entity's inventory procurement decisions and vendor selection should not be capitalized to the cost of inventory. Instead, we believe they should be expensed as incurred by analogy to preliminary project stage costs in Subtopic 350-40. However, costs directly associated with acquiring the inventory should be capitalized. See [Questions 3.2.10](#) and [3.2.40](#) for direct and indirect acquisition costs, respectively.



### Question 3.2.40

Are indirect acquisition costs included in the cost of inventory?

**Interpretive response:** Yes. Indirect acquisition costs, such as some of the costs of a purchasing department may be capitalized. If the same individuals are involved in the actual acquisition of inventory and other activities, we believe an entity should create a process to systematically allocate costs.

However, while inventoriable costs arguably should include an allocable portion of indirect acquisition costs, it may not be feasible to objectively determine and allocate an amount to the remaining inventory. Therefore, in practice, indirect acquisition costs are generally considered a period cost and not included in the cost of inventory. [TQA 2140.01]

[Question 3.2.90](#) discusses specific considerations for the retail industry.



**Question 3.2.50**  
What is included in the production costs of inventory?

**Interpretive response:** We believe the costs of production or conversion include:

- all direct costs such as labor, material consumed and direct overheads; and
- an allocation of fixed and variable indirect production overheads.

Examples of fixed and variable indirect production overhead costs		
Facilities	Production	Labor
<ul style="list-style-type: none"> <li>• Utilities</li> <li>• Rent</li> <li>• Insurance</li> <li>• Depreciation</li> <li>• Repairs and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Indirect materials and supplies</li> <li>• Quality control</li> <li>• Depreciation of assets used in production</li> <li>• Amortization of intangible assets (such as patents) used in production</li> <li>• Repairs and maintenance of production equipment</li> </ul>	<p>Salaries and wages, including taxes, as well as associated employment benefits such as workers compensation, profit-sharing, life and medical insurance, service cost component of pension costs, and share-based compensation costs for direct and indirect employees involved in or necessary for production or conversion of the inventory</p>

Inventory production or conversion costs can vary by entity based not only on the entity’s industry but also on whether those costs are incurred, directly or indirectly, in the production or conversion process. Therefore, an entity must evaluate its specific facts and circumstances when determining which costs are included in the costs of production or conversion of inventory. [\[330-10-30-2\]](#)



**Question 3.2.60**  
What is excluded from capitalized production costs of inventory?

**Interpretive response:** We believe inventoriable costs generally do not include costs associated with the following activities because they are not directly or indirectly related to the production process:

- research and development;
- selling, marketing and advertising;
- general and administrative costs – e.g. headquarters-related expenses and executive compensation; and



- unallocated fixed overhead and other abnormal costs (see [Questions 3.2.110](#) and [3.2.120](#)).

Research and development costs are expensed in the period incurred unless the asset (e.g. certain raw materials) has an alternative future use. See section 2.3.20 in KPMG Handbook, [Research and development](#).

Although under most circumstances general and administrative expenses are expensed as incurred, it may be appropriate to capitalize a portion of such costs that are clearly related to production. [Question 3.2.40](#) discusses indirect acquisition costs. [[330-10-30-8](#)]

[Question 3.2.50](#) discusses the types of costs that are typically included in the production and conversion of inventory.

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### Question 3.2.70

Are costs to store inventory, such as warehousing costs, included in the cost of inventory?

**Interpretive response:** It depends. The term 'cost' is the value of the consideration given to acquire an asset, which includes the expenditures and charges directly or indirectly incurred to bring the asset to its existing condition and location – e.g. acquisition and production costs, which include warehousing and storage costs. [[330-10-30-1](#), [TQA 2140.01](#)]

However, while inventoriable costs arguably should include an allocable portion of the warehousing costs, it may not be feasible to objectively determine and allocate an amount to the remaining inventory. Therefore, in practice, warehousing costs are generally considered a period cost and not included in the cost of inventory. [[TQA 2140.01](#)]

[Question 3.2.90](#) discusses specific considerations for the retail industry.

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### Question 3.2.80

Are outbound shipping and handling costs capitalizable?

**Interpretive response:** Generally, no. We believe the costs associated with the outbound delivery of inventory from a warehouse to customers generally should not be included in the cost of inventory. The classification of these costs is driven by entity-specific factors such as the shipping terms, when control of the inventory transfers to the customer, whether the activities are considered a performance obligation in Topic 606, and whether the accounting policy in Topic 606 to account for these activities as fulfillment costs is applicable and elected by the entity. This most commonly results in shipping and handling costs being expensed directly as cost of sales. If control of inventory is transferred to the customer after shipping, entities may capitalize shipping and handling costs.

We believe classifying the cost of shipping and handling activities as cost of sales is an acceptable income statement presentation because they are considered fulfillment activities.

If before the adoption of Topic 606 an entity historically presented shipping and handling costs in another income statement line item such as SG&A, the SEC staff does not object if the entity either (1) maintained its historical presentation or (2) changed its classification to cost of sales upon adoption of Topic 606. However, if prior to adoption of Topic 606 an entity presented these costs as cost of sales, it would not be appropriate for the entity to change its classification to another income statement line item.

The SEC staff encourages entities that classify significant shipping and handling costs outside of cost of sales to continue to provide disclosure about these costs and where they are presented in the income statement. [\[2017 AICPA Conf\]](#)

For further discussion and guidance on the accounting for shipping and handling activities and costs, see section 4.2.60 in KPMG Handbook, [Revenue recognition](#).

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### Question 3.2.90

Are there specific considerations for an entity in the retail industry when determining cost of inventory?

**Interpretive response:** Yes. The SEC staff noted through informal guidance that a retail entity may capitalize off-site warehousing costs and warehouse-to-store-distribution costs in inventory. However, a retail entity is not permitted to capitalize purchasing department costs and in-store warehousing costs.

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### Question 3.2.100

Are interest costs included in the cost of inventory?

**Interpretive response:** Generally, no. If inventory is routinely manufactured or produced in large quantities on a repetitive basis, interest costs are not capitalized as part of inventory. [\[835-20-15-3\]](#)

However, interest costs are capitalized as part of the cost of inventory if they are: [\[835-20-15-3, 15-5\]](#)

- incurred through a financing arrangement to procure raw materials for use in the production process; and
- related to qualifying assets constructed or produced as discrete projects that are expected to take considerable time to construct or produce and entail substantial expenditures.

The capitalization period begins and continues as long as expenditures for the asset have been made, activities are in progress that are necessary to get the asset ready for its intended use, and interest costs are being incurred.

[835-20-25-3]



### Question 3.2.110

How are fixed and variable production overhead costs allocated to inventory?

**Interpretive response:**

#### Variable production overhead costs

Variable production overhead costs are allocated to each unit of production based on the actual use of the production facilities. [330-10-30-3]

#### Fixed production overhead costs

Fixed production overhead costs are allocated to inventory based on the 'normal' capacity of the production facility, which will vary by entity based on business and industry factors. Normal capacity is the production expected to be achieved over a number of periods under an entity's normal circumstances. It is typically expressed as a range of production level to account for expected variation in production levels from period to period – e.g. loss of capacity resulting from planned maintenance that may only occur in certain specified periods. Judgment is required in determining the range of normal capacity. [330-10-30-3 – 30-4]

When an entity's production facility is operating below the range of normal capacity (i.e. operating at an abnormally low production level), the fixed overhead costs allocated to each production unit are not increased (see [Question 3.2.120](#)). When an entity's production facility is operating above the range of normal capacity (i.e. operating at an abnormally high production level), the amount of fixed overhead allocated to each production unit is decreased so that inventories are not measured above cost. [330-10-30-6]



### Question 3.2.120#

Are unallocated fixed overhead and other abnormal costs capitalized in the cost of inventory?

**Interpretive response:** No. Unallocated fixed overheads due to abnormally low production or an idle plant, along with other abnormal costs, are not capitalized in the cost of inventory. Instead, they are period costs that are expensed in the period incurred. [330-10-30-7]

'Other abnormal costs' may include wasted materials, such as unanticipated spoilage, or certain redundant costs. Unanticipated spoilage refers to costs of raw materials that become damaged or unusable during the production process. In contrast, costs associated with anticipated spoilage that are an inherent part

of the production process are capitalized because these costs are part of the expenditures incurred in bringing an item to its existing condition and location.

Redundant costs are those that are not typically part of the supply chain or production process. This includes abnormal freight and handling costs. For example, freight costs incurred to relocate inventory due to an unexpected warehouse shutdown are expensed as incurred. [330-10-30-7]

An increase in direct acquisition costs, such as incurring higher costs when acquiring inventory, does not typically represent abnormal costs.

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### Example 3.2.05\*\*

#### Allocation of fixed overhead production costs based on normal capacity

Food Corp, a food processor, typically produces between 900 and 1,100 tons of finished food products each month. For the purpose of allocating fixed overhead production costs, Food Corp determines its normal capacity to be 1,000 tons per month. The fixed overhead production costs amount to \$700,000 per month or \$700 per ton based on normal capacity.

#### Abnormally low production

During a period of unplanned maintenance, portions of Food Corp's plant were idle for several months, resulting in a production level of only 600 tons per month. To allocate fixed overhead production costs, Food Corp does not increase the amount allocated to each ton. As a result, \$420,000 ( $\$700 \times 600$  tons) is included in the cost of inventory, while the remaining unallocated amount of \$280,000 ( $\$700,000 - \$420,000$ ) is recognized as an expense in the period incurred.

#### Abnormally high production

Food Corp experienced a surge in demand due to a trendy new diet, leading to an increase in production levels to 2,000 tons per month. To prevent inventory from being measured above cost, Food Corp decreases the fixed overhead production costs allocated to each ton using the abnormally high production levels. Therefore, the amount of fixed overhead production cost allocated to each ton of inventory is \$350 ( $\$700,000 \div 2,000$  tons).

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### Example 3.2.10

#### Inventory spoilage from naturally occurring contaminants and batch failures

Food Corp, a food processor, has inventory that comprises the following:

- raw materials;
- WIP as the food goes through the cooking process; and
- finished goods.

Raw materials are screened for naturally occurring contaminants before starting the cooking process and are destroyed if any contamination is identified. Historically, 15% of all raw materials contain naturally occurring contaminants.

The WIP is processed in batches. WIP batch failures may occur when foreign objects from the processing facility fall into the food, an electricity failure occurs, or the batch does not meet nutritional specifications. If a WIP batch failure occurs, the batch must be destroyed.

During the period, Food Corp purchased 100 pounds of raw materials to be used in production that contained normal amounts of contamination. In addition, Food Corp experienced WIP batch failures during production due to a foreign object falling into the machinery.

Food Corp includes the purchased cost of all 100 pounds of raw materials in the cost of inventory produced. Inventory spoilage as a result of naturally occurring contaminants is included in the cost of the inventory because it is an inherent part of the food production process, and the cost is part of the expenditures incurred in bringing an article to its existing condition and location. In this example, Food Corp purchases 100 pounds of raw materials to have 85 pounds of usable raw materials because, on average, 15% of raw materials contains a naturally occurring contaminant.

In contrast, the WIP batch failures are a result of abnormal circumstances and therefore are treated as wasted materials or unanticipated spoilage and accounted for as current period charges.



### Question 3.2.130

#### Are asset retirement obligations (AROs) included in the cost of inventory?

**Background:** AROs are legal obligations associated with the retirement of a long-lived asset that results from the acquisition, construction, or development and / or the normal operation of the long-lived asset. An entity will recognize the fair value of a liability for an ARO in the period in which it is incurred if it can make a reasonable estimate of fair value. The recognition of an ARO liability results in an asset retirement cost that is capitalized to the related asset.

[410-20-15-2, 25-4 – 25-5]

**Interpretive response:** AROs incurred as a consequence of the production of inventory in a particular period are not part of the cost of inventory but are added to the carrying amount of the related PP&E. The subsequent depreciation of that ARO cost is over the asset's estimated remaining useful life. If the PP&E is used in the manufacturing of inventory, the related depreciation is included in the production overheads allocated to inventory. [410-20-25-4 – 25-5, 35-8]

### 3.2.20 Consideration received from a vendor



#### Excerpt from ASC 705-20

##### > Accounting for Consideration Received from a Vendor (Supplier)

**25-1** Consideration from a **vendor** includes cash amounts that an entity receives or expects to receive from a vendor (or from other parties that sell the goods or services to the vendor). Consideration from a vendor also includes credit or other items (for example, a coupon or voucher) that the entity can apply against amounts owed to the vendor (or to other parties that sell the goods or services to the vendor). The entity shall account for consideration from a vendor as a reduction of the purchase price of the goods or services acquired from the vendor unless the consideration from the vendor is one of the following:

- a. In exchange for a distinct good or service (as described in paragraphs 606-10-25-19 through 25-22) that the entity transfers to the vendor
- b. A reimbursement of costs incurred by the entity to sell the vendor's products
- c. Consideration for sales incentives offered to customers by manufacturers.

##### • > Consideration in Exchange for a Distinct Good or Service

**25-2** If the consideration from a vendor is in exchange for a distinct good or service (see paragraphs 606-10-25-19 through 25-22) that an entity transfers to the vendor, then the entity shall account for the sale of the good or service in the same way that it accounts for other sales to **customers** in accordance with Topic 606 on revenue from contracts with customers. If the amount of consideration from the vendor exceeds the **standalone selling price** of the distinct good or service that the entity transfers to the vendor, then the entity shall account for such excess as a reduction of the purchase price of any goods or services acquired from the vendor. If the standalone selling price is not directly observable, the entity shall estimate it in accordance with paragraphs 606-10-32-33 through 32-35.

##### • > Consideration Is a Reimbursement of Costs Incurred to Sell the Vendor's Products

**25-3 Cash consideration** represents a reimbursement of costs incurred by the entity to sell the vendor's products and shall be characterized as a reduction of that cost when recognized in the entity's income statement if the cash consideration represents a reimbursement of a specific, incremental,

identifiable cost incurred by the entity in selling the vendor's products or services. If the amount of cash consideration paid by the vendor exceeds the cost being reimbursed, that excess amount shall be characterized in the entity's income statement as a reduction of cost of sales when recognized in the entity's income statement.

• > Consideration for Sales Incentives Offered to Customers by Manufacturers

**25-4** Manufacturers often sell their products to **resellers** who then sell those products to consumers or other end users. In some cases, manufacturers will offer sales discounts and incentives directly to consumers—for example, rebates or coupons—in order to stimulate consumer demand for their products. Because the reseller has direct contact with the consumer, the reseller may agree to accept, at the point of sale to the consumer, the manufacturer's incentives that are tendered by the consumer (for example, honoring manufacturer's coupons as a reduction to the price paid by consumers and then seeking reimbursement from the manufacturer). In other instances, the consumer purchases the product from the reseller but deals directly with the manufacturer related to the manufacturer's incentive or discount (for example, a mail-in rebate).

**25-5** Although the reseller often benefits from the vendor's direct-to-consumer incentives as a result of increased sales volume, the reseller generally has no control over which consumers or consumer groups participate in the incentive programs. Because the manufacturer reimburses the reseller for the value of the discount provided to the consumer, the reseller's gross margin on the product is the same regardless of whether or not the consumer purchases the product with the manufacturer's incentive.

**25-6** The issue is whether consideration received by a reseller from a vendor that is a reimbursement by the vendor for honoring the vendor's sales incentives offered directly to consumers shall be recorded as a reduction of the cost of the reseller's purchases from the vendor and, therefore, characterized as a reduction of cost of sales under the guidance in paragraph 705-20-25-1.

**25-7** For purposes of this guidance, the phrase *vendor's sales incentive offered directly to consumers* is limited to a vendor's incentive that meets all the following criteria:

- a. The incentive can be tendered by a consumer at resellers that accept manufacturer's incentives in partial payment of the price charged by the reseller for the vendor's product.
- b. The reseller receives a direct reimbursement from the vendor (or a clearinghouse authorized by the vendor) based on the face amount of the incentive.
- c. Terms of reimbursement to the reseller for the vendor's sales incentive offered to the consumer must not be influenced by or negotiated in conjunction with any other incentive arrangements between the vendor and the reseller but, rather, may be determined only by the terms of the incentive offered to consumers.
- d. The reseller is subject to an agency relationship with the vendor, whether expressed or implied, in the sales incentive transaction between the vendor and the consumer.

**25-8** An entity with sales incentive arrangements that meet all of the criteria described in paragraph 705-20-25-7 shall not account for consideration received from a vendor as a reduction of the purchase price of the goods or services acquired from the vendor and shall consider the guidance in Topic 606 on revenue from contracts with customers. Sales incentives that do not meet all of the criteria in paragraph 705-20-25-7 shall be accounted for as a reduction of the purchase price of the goods or services acquired from the vendor.

**25-9** See paragraphs 705-20-25-10 through 25-11 for guidance on the presentation of a rebate pursuant to a binding agreement.

> Accounting for Certain Consideration Received from a Vendor

**25-10** A rebate or refund of a specified amount of cash consideration that is payable pursuant to a binding arrangement only if the entity completes a specified cumulative level of purchases or remains a customer for a specified time period shall be recognized as a reduction of the cost of sales based on a systematic and rational allocation of the cash consideration offered to each of the underlying transactions that results in progress by the entity toward earning the rebate or refund provided the amounts are **probable** and can be reasonably estimated. If the rebate or refund is not probable and cannot be reasonably estimated, it shall be recognized as the milestones are achieved.

**25-11** The ability to make a reasonable estimate of the amount of future cash rebates or refunds depends on many factors and circumstances that will vary from case to case. However, any of the following factors may impair an entity's ability to determine whether the rebate or refund is probable and can be reasonably estimated:

- a. The rebate or refund relates to purchases that will occur over a relatively long period.
- b. There is an absence of historical experience with similar products or the inability to apply such experience because of changing circumstances.
- c. Significant adjustments to expected cash rebates or refunds have been necessary in the past.
- d. The product is susceptible to significant external factors (for example, technological obsolescence or changes in demand).

**25-12** Changes in the estimated amount of cash rebates or refunds and retroactive changes by a vendor to a previous offer (an increase or a decrease in the rebate amount that is applied retroactively) are changes in estimate that shall be recognized using a cumulative catch-up adjustment. That is, the entity would adjust the cumulative balance of its rebate recognized to the revised cumulative estimate immediately. Entities shall consider whether any portion of the cumulative effect adjustment affects other accounts (inventory, for example), in which case only a portion of that adjustment would be reflected in the income statement.

## 20 Glossary

### Cash Consideration

Cash payments and credits that the customer can apply against trade amounts owed to the vendor. In addition, as indicated in Section 718-10-25, consideration in the form of share-based payment awards is recognized in the



same period or periods and in the same manner (that is, capitalize versus expense) as if the entity had paid cash for the goods or services instead of paying with or using the share-based payment awards. Accordingly, guidance with respect to cash consideration is applicable to consideration that consists of equity instruments.



### Question 3.2.140

To which types of consideration from a vendor does Subtopic 705-20 apply?

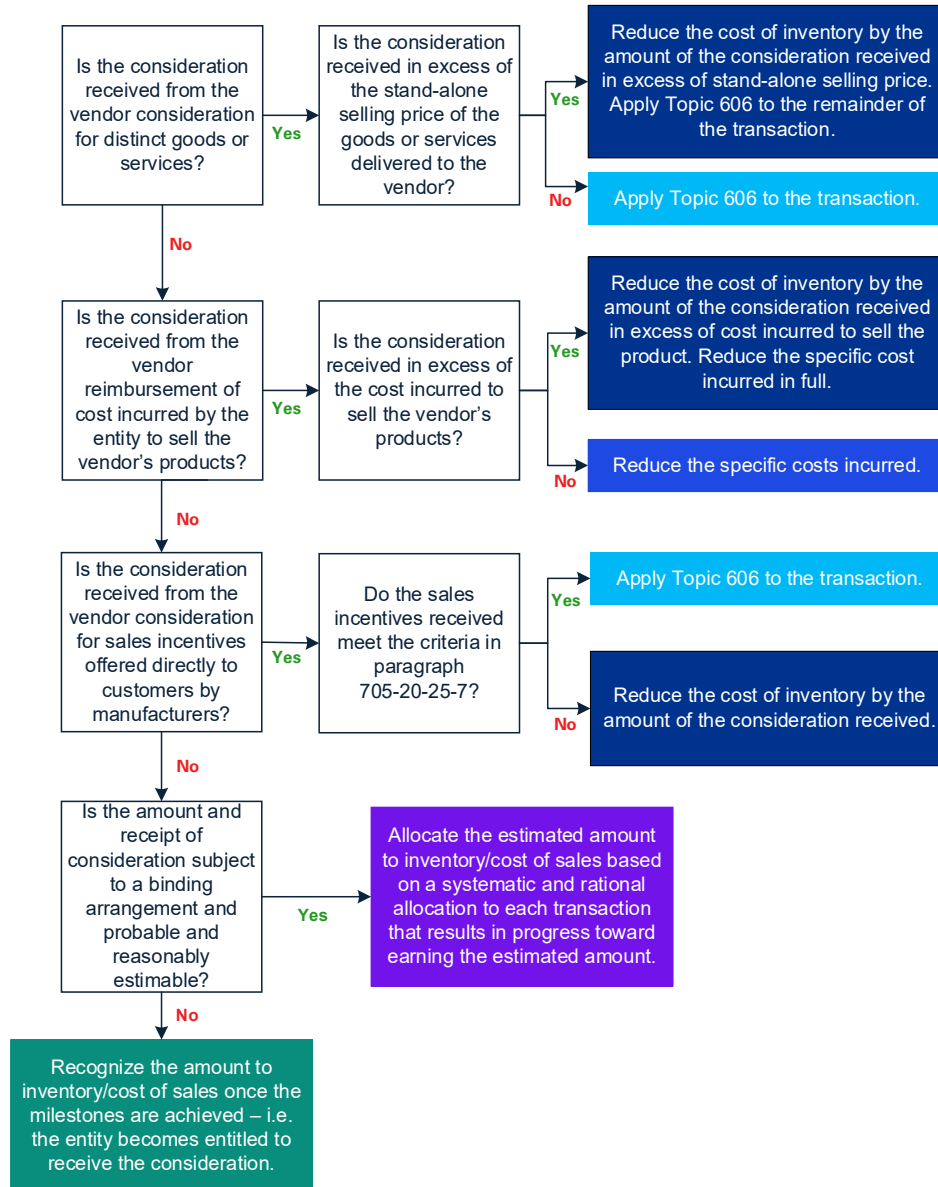
**Interpretive response:** Consideration an entity receives or expects to receive from a vendor includes cash and 'other consideration' that the entity can apply to amounts owed to the vendor. 'Other consideration' includes credit, coupons, vouchers, rebates, refunds, sales incentives, discounts, price reductions and equity-based instruments. [705-20-25-1, 25-10, 705-20 Glossary]



### Question 3.2.150

Is consideration received from a vendor included in the cost of inventory?

**Interpretive response:** It depends. Consideration received from a vendor is generally a reduction of the purchase price of the goods purchased from the vendor unless the consideration relates to one of the exceptions described in Subtopic 705-20. The following decision tree summarizes when an entity recognizes a reduction of inventory or cost of sales.



See KPMG Handbook, [Revenue recognition](#), for further discussion on Topic 606.



### Question 3.2.160

When is a rebate or refund not probable and reasonably estimable?

**Background:** When an entity concludes that the consideration received from a vendor should be accounted for as a reduction of the purchase price of the related goods, the entity must determine when to recognize that reduction. The timing depends on whether the consideration is subject to a binding arrangement and probable and reasonably estimable. [705-20-25-10]

**Interpretive response:** Whether a rebate or refund is probable and reasonable estimable requires judgment based on the relevant facts and circumstances. However, the presence of any of the following factors may make it difficult to conclude that a rebate or refund is probable and reasonably estimable: [705-20-25-11]

- purchases occurring over a relatively long period of time;
- lack of historical experience with similar arrangements or experience has limited predictive value to current arrangement;
- significant historical adjustments to expected cash rebates or refunds; or
- susceptibility of product to significant external factors (e.g. technological obsolescence or changes in demand).



### Question 3.2.170

What is a systematic and rational approach for recognizing a markdown allowance from a vendor under the retail inventory method?

**Background:** A retailer may use the retail inventory cost flow assumption to determine inventory cost and COGS. This assumption is based on the retail value of the inventory on hand, adjusted for markdowns related to items such as promotional pricing, special sales, damaged merchandise and style changes. A markdown allowance, also referred to as a price protection allowance, is an amount paid by a vendor to a retailer in exchange for the retailer's temporary or permanent reduction in the retail selling price of its inventory. See [section 3.3.40](#) for additional discussion.

**Interpretive response:** Topic 330 does not provide guidance on the accounting for markdown allowances under the retail inventory method (see [section 3.3.40](#)). While paragraph 705-20-25-10 describes a volume-based refund arrangement, practice has historically applied the concepts of 'binding arrangement' and 'systematic and rational recognition' to the timing of recognition of vendor markdown allowances in the income statement.

We believe there are two acceptable accounting policy options. Each option reflects a different view of the economic substance of the vendor markdown allowance. We believe the accounting policy option selected should be applied consistently for similar arrangements. The options are as follows:

- **Vendor support for retailer markdowns.** The markdown allowances are considered reimbursements for markdowns taken by the retailer that constitute a form of vendor support for the retailer's gross margins earned in connection with sales of merchandise – i.e. as price or margin protection from the vendor. As a result, the markdown allowances are reflected immediately in gross margin.
- **Reimbursement of the cost of the inventory.** The markdown allowances are considered a reimbursement of the cost of the inventory, not as margin protection. That is, the allowances represent a reduction of the vendor's

prices. As a result, the markdown allowances are recognized in accordance with the pattern of the retailer's inventory turnover.

The markdown allowance under either view is ultimately presented as a reduction of cost of sales consistent with the guidance in paragraph 705-20-25-1.



### Question 3.2.180

How are changes in an estimated cash rebate or refund accounted for?

**Interpretive response:** A change in estimate occurs if either the estimated amount of a cash rebate or refund changes or a retroactive change to the binding agreement results in an increase or a decrease in the rebate or refund amount. The effect of the change in estimate is recognized through a cumulative catch-up adjustment – i.e. the cumulative balance of the rebate or refund is recognized immediately. [705-20-25-12]

If the goods to which the rebate or refund relates have not been sold, the cumulative catch-up adjustment impacts inventory instead of being recognized immediately in the income statement. [705-20-25-12]

## 3.3 Cost flow assumptions



### Excerpt from ASC 330-10

#### > Determination of Inventory Costs

**30-9** Cost for inventory purposes may be determined under any one of several assumptions as to the flow of cost factors, such as first-in first-out (FIFO), average, and last-in first-out (LIFO). The major objective in selecting a method should be to choose the one which, under the circumstances, most clearly reflects periodic income.

**30-10** The cost to be matched against revenue from a sale may not be the identified cost of the specific item which is sold, especially in cases in which similar goods are purchased at different times and at different prices. While in some lines of business specific lots are clearly identified from the time of purchase through the time of sale and are costed on this basis, ordinarily the identity of goods is lost between the time of acquisition and the time of sale.

**30-11** Accordingly, if the materials purchased in various lots are identical and interchangeable, the use of identified cost of the various lots may not produce the most useful financial statements. This fact has resulted in the general acceptance of several assumptions with respect to the flow of cost factors such

as FIFO, average, and LIFO to provide practical bases for the measurement of periodic income.

**30-12** Standard costs are acceptable if adjusted at reasonable intervals to reflect current conditions so that at the balance-sheet date standard costs reasonably approximate costs computed under one of the recognized bases. In such cases descriptive language shall be used which will express this relationship, as, for instance, "approximate costs determined on the first-in first-out basis," or, if it is desired to mention standard costs, "at standard costs, approximating average costs."

**30-13** In some situations a reversed mark-up procedure of inventory pricing, such as the retail inventory method, may be both practical and appropriate. The business operations in some cases may be such as to make it desirable to apply one of the acceptable methods of determining cost to one portion of the inventory or components thereof and another of the acceptable methods to other portions of the inventory.

**30-14** Although selection of the method should be made on the basis of the individual circumstances, financial statements will be more useful if uniform methods of inventory pricing are adopted by all entities within a given industry.

> Consistency Required

**30-15** While the basis of stating inventories does not affect the overall gain or loss on the ultimate disposition of inventory items, any inconsistency in the selection or employment of a basis may improperly affect the periodic amounts of income or loss. Because of the common use and importance of periodic statements, a procedure adopted for the treatment of inventory items shall be consistently applied in order that the results reported may be fairly allocated between years.

An entity may determine the cost of inventory using one of several cost flow assumptions. The primary objective is to select the assumption that most clearly reflects periodic income, matching the costs of sales with the related revenues. [\[330-10-30-9\]](#)

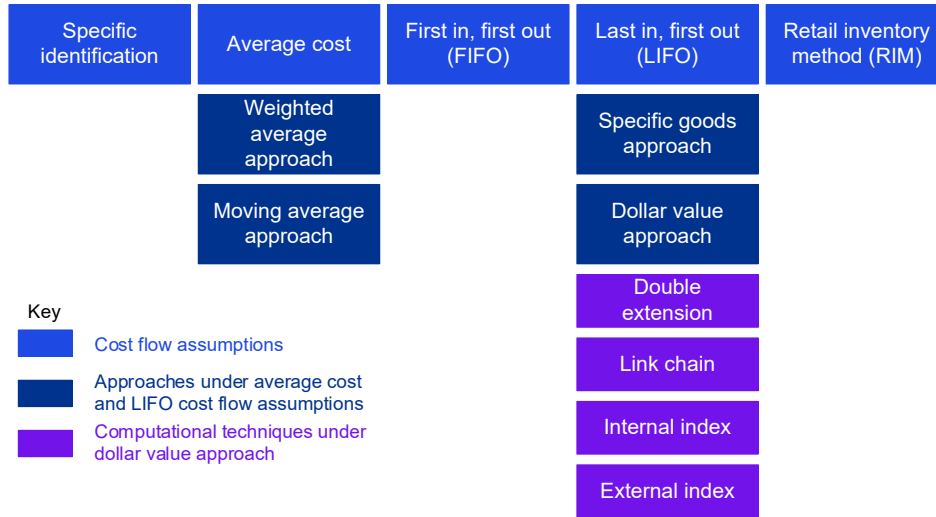
The question and sections noted below explain the following cost flow assumptions.

<b>Specific identification (Question 3.3.10)</b>	Identifies inventory items by the cost of each item on hand as well as the cost of each item sold. This cost flow assumption is generally practicable when there are unique items in inventory, such as jewelry.
<b>Average cost (section 3.3.10)</b>	Uses the average cost of a pool of assets available for sale during the period. It is often more practical than other cost flow assumptions in computing COGS and ending inventory for similar items.
<b>FIFO (section 3.3.20)</b>	Assumes inventories first produced or acquired are the first ones sold (i.e. the oldest inventory item is sold first).
<b>LIFO (section 3.3.30)</b>	Assumes inventories first produced or acquired are the last ones sold (i.e. the newest inventory item is sold first).

<b>RIM (section 3.3.40)</b>	Calculates a retail store's total ending inventory by using the cost-to-retail price ratio (i.e. reverse markup procedure).
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In certain circumstances, it may be appropriate to use different inventory cost flow assumptions for different types of inventory. Once a cost flow assumption is selected, it must be applied consistently period over period. [330-10-30-15]

Different approaches or computational techniques may be applied to cost flow assumptions as depicted in the diagram below.



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### Question 3.3.10

When is the specific identification cost flow assumption used?

**Interpretive response:** The specific identification cost flow assumption is generally practicable and more clearly reflects periodic income and the matching of costs to sales when there are unique items in inventory that can be identified individually. This is typically used for high-value items such as cars, jewelry, or artwork.

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### Question 3.3.20

How is standard costing applied?

**Background:** Generally, an entity will establish a standard cost for a product based on a budget or forecast prior to the start of the fiscal year that encompasses the entity's expectation of the unit cost of the product inclusive of material, labor, and overhead costs. An entity may choose to use standard costing when applying a cost flow assumption.

**Interpretive response:** To use standard costs, an entity adjusts those costs at reasonable intervals so that at each balance sheet date, they reasonably approximate costs computed under one of the cost flow assumptions. [330-10-30-12]

An entity should continuously monitor and determine whether adjustment to the standard cost of the product is necessary based on actual costs incurred versus expected (i.e. favorable or unfavorable variances). At a minimum, at each balance sheet date for inventory on hand, when variances between actual costs incurred and standard cost are identified (whether favorable or unfavorable), these normal variances are capitalized to ensure standard cost approximates actual inventory cost under one of the cost flow assumptions. [330-10-30-12]

For example, if inventory turns two times a year (i.e. every six months), an entity would capitalize the variances associated with the last six months of the year when applying the FIFO cost flow assumption. This is because six months of inventory remain on the balance sheet at period end and the last six months of variances represent the inventory cost under a FIFO cost flow assumption.

See [Questions 3.2.110](#) and [3.2.120](#) and [Example 3.2.10](#) for discussion of the accounting differences between normal and abnormal variances. See [Question 3.3.280](#) for discussion of reporting standard cost variances at interim reporting dates.

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### Question 3.3.30

Can subsidiaries in a consolidated entity use different cost flow assumptions to calculate inventory cost?

**Interpretive response:** Yes. A parent and its consolidated subsidiary may use different cost flow assumptions to cost inventory as long as the assumptions are acceptable under US GAAP and disclosed in the financial statements. For example, a parent may use the FIFO cost flow assumption to determine its inventory cost while one of its' subsidiaries may use an average cost assumption to determine its inventory cost. See [section 3.3.70](#) for a discussion of accounting changes, including changes in cost flow assumptions. [TQA 2140.11]

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## 3.3.10 Average cost



### Question 3.3.40

How is the average cost flow assumption applied?

**Interpretive response:** In practice, there are two approaches for applying the average cost flow assumption.

<b>Moving average</b>	<p>Recompute the cost per inventory unit after the manufacture or purchase of each item (i.e. adding actual cost incurred for each unit manufactured or produced) and recompute cost per unit for each sale based on the last moving average price per unit.</p> <p>This approach depends on detailed cost accounting records and use of a perpetual inventory tracking system because every new purchase changes the cost.</p>
<b>Weighted average</b>	<p>Accumulate all costs of similar items purchased or manufactured during the current period and divide that amount by the number of those items. Add the resulting weighted average cost to the beginning inventory and use the resulting average cost to determine ending inventory and COGS. See <a href="#">Example 3.3.10</a>.</p>

### Example 3.3.10

#### Weighted average inventory costing

This example illustrates the weighted average approach (numbers may be rounded).

	Q1	Q2	Q3	Q4
Inventory units on hand at beginning of period (A)	0	2,000	8,000	11,000
Inventory value/unit at beginning of period (B)	\$0	\$10.00	\$11.18	\$11.64
<b>Inventory value at beginning of period (C) = (A) × (B)</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$89,440</b>	<b>\$128,040</b>
First purchase-units (D)	5,000	10,000	10,000	5,000
First purchase-cost/unit (E)	\$10.00	\$11.00	\$12.00	\$13.00
<b>First purchases-cost (F) = (D) × (E)</b>	<b>\$50,000</b>	<b>\$110,000</b>	<b>\$120,000</b>	<b>\$65,000</b>
Second purchase-units (G)	5,000	5,000	0	5,000
Second purchase-cost/unit (H)	\$10.00	\$12.00	\$0	\$14.00
<b>Second purchases-cost (J) = (G) × (H)</b>	<b>\$50,000</b>	<b>\$60,000</b>	<b>\$0</b>	<b>\$70,000</b>
Total purchase-units (K) = (D) + (G)	10,000	15,000	10,000	10,000
<b>Total purchase-costs (L) = (F) + (J)</b>	<b>\$100,000</b>	<b>\$170,000</b>	<b>\$120,000</b>	<b>\$135,000</b>



	Q1	Q2	Q3	Q4
Goods available for sale- units <sup>1</sup> (M) = (A) + (K)	10,000	17,000	18,000	21,000
Goods available for sale- cost <sup>1</sup> (N) = (C) + (L)	\$100,000	\$190,000	\$209,440	\$263,040
<b>Goods available for sale-weighted average cost/unit (O) = (N) ÷ (M)</b>	<b>\$10.00</b>	<b>\$11.18</b>	<b>\$11.64</b>	<b>\$12.53</b>
Sales-units (P)	8,000	9,000	7,000	16,000
COGS/unit (Q) = (O)	\$10.00	\$11.18	\$11.64	\$12.53
<b>COGS<sup>2</sup> (R) = (P) × (Q)</b>	<b>\$80,000</b>	<b>\$100,620</b>	<b>\$81,480</b>	<b>\$200,480</b>
Inventory units on hand at end of period (S) = (M) – (P)	2,000	8,000	11,000	5,000
Inventory value/unit at end of period (T) = (O)	\$10.00	\$11.18	\$11.64	\$12.53
<b>Inventory value at end of period<sup>3</sup> (U) = (S) × (T)</b>	<b>\$20,000</b>	<b>\$89,440</b>	<b>\$128,040</b>	<b>\$62,650</b>
Notes:				
1. Goods available for sale = beginning inventory + purchases during the period.				
2. COGS = number of units sold × weighted average cost/unit of goods available for sale.				
3. Inventory value = number of units on hand × weighted average cost/unit of goods available for sale.				

### 3.3.20 First in, first out (FIFO)

Under the FIFO inventory cost flow assumption, an entity charges the costs of the oldest items in inventory to COGS. Therefore, the costs of the items in ending inventory are the most recent purchases.

In periods of inflation, FIFO results in the lowest costs charged to COGS and the highest costs recorded on the balance sheet. FIFO tends to match the physical flow of goods more closely, especially when spoilage or obsolescence is a concern.

### Example 3.3.20

#### Calculation of FIFO inventory costing

This example illustrates FIFO (numbers may be rounded).

COGS is computed as follows: [beginning inventory + purchases] – ending inventory. Alternatively, COGS can be computed based on the FIFO cost flow assumption where an entity charges the costs of the oldest items in inventory to COGS.

	Q1	Q2	Q3	Q4
Inventory units on hand at beginning of period (A)	0	2,000	8,000	11,000
Inventory value/unit at beginning of period (B)	\$0	\$10.00	\$11.63	\$12.00
<b>Inventory value at beginning of period (C) = (A) × (B)</b>	<b>\$0</b>	<b>\$20,000</b>	<b>\$93,000</b>	<b>\$132,000</b>
First purchase-units (D)	5,000	10,000	10,000	5,000
First purchase-cost/unit (E)	\$10.00	\$11.00	\$12.00	\$13.00
<b>First purchases-cost (F) = (D) × (E)</b>	<b>\$50,000</b>	<b>\$110,000</b>	<b>\$120,000</b>	<b>\$65,000</b>
Second purchase-units (G)	5,000	5,000	0	5,000
Second purchase-cost/unit (H)	\$10.00	\$12.00	\$0	\$14.00
<b>Second purchases-cost (J) = (G) × (H)</b>	<b>\$50,000</b>	<b>\$60,000</b>	<b>\$0</b>	<b>\$70,000</b>
Total purchases-units (K) = (D) + (G)	10,000	15,000	10,000	10,000
<b>Total purchases-cost (L) = (F) + (J)</b>	<b>\$100,000</b>	<b>\$170,000</b>	<b>\$120,000</b>	<b>\$135,000</b>
Sales-units (M)	8,000	9,000	7,000	16,000
Inventory units on hand at end of period (N) = (A) + (K) – (M)	2,000	8,000	11,000	5,000
Inventory value/unit at end of period (see calculation below) (O)	\$10.00	\$11.63	\$12.00	\$14.00
<b>Inventory value at end of period (see calculation below) (P) = (N) × (O)</b>	<b>\$20,000</b>	<b>\$93,000</b>	<b>\$132,000</b>	<b>\$70,000</b>

	Q1	Q2	Q3	Q4
COGS/unit (see calculation below) (Q)	\$10.00	\$10.78	\$11.57	\$12.31
<b>COGS (see calculation below) (R) = (M) × (Q)</b>	<b>\$80,000</b>	<b>\$97,000</b>	<b>\$81,000</b>	<b>\$197,000</b>

The inventory value at end of period (O) in each quarter is determined as follows:

Q1 value of ending inventory	Units	Value/Unit	Total
Units represented by most recent purchase	2,000	\$10.00	\$20,000
<b>Total</b>	<b>2,000</b>	<b>\$10.00</b>	<b>\$20,000</b>
Q2 value of ending inventory	Units	Value/Unit	Total
Units represented by most recent purchase	5,000	\$12.00	\$60,000
Units represented by 2 <sup>nd</sup> most recent purchase	3,000	\$11.00	33,000
<b>Total</b>	<b>8,000</b>	<b>\$11.63</b>	<b>\$93,000</b>
Q3 value of ending inventory	Units	Value/Unit	Total
Units represented by most recent purchase	10,000	\$12.00	\$120,000
Units represented by 2 <sup>nd</sup> most recent purchase	1,000	\$12.00	12,000
<b>Total</b>	<b>11,000</b>	<b>\$12.00</b>	<b>\$132,000</b>
Q4 value of ending inventory	Units	Value/Unit	Total
Units represented by most recent purchase	5,000	\$14.00	\$70,000
<b>Total</b>	<b>5,000</b>	<b>\$14.00</b>	<b>\$70,000</b>

COGS (R) can be computed using an alternative calculation based on the FIFO cost flow assumption where an entity charges the costs of the oldest items in inventory to COGS as follows.

Q1 COGS	Units	Value/Unit	Total
Beginning inventory units are sold first	0	\$0	\$0
Units represented by oldest purchase (first out after beginning inventory sold)	5,000	\$10.00	50,000
Units represented by 2 <sup>nd</sup> oldest purchase	3,000	\$10.00	30,000
<b>Total</b>	<b>8,000</b>	<b>\$10.00</b>	<b>\$80,000</b>

Q2 COGS	Units	Value/Unit	Total
Beginning inventory units are sold first (2 <sup>nd</sup> oldest purchase in Q1)	2,000	\$10.00	\$20,000
Units represented by oldest purchase (first out after beginning inventory sold)	7,000	\$11.00	77,000
<b>Total</b>	<b>9,000</b>	<b>\$10.78</b>	<b>\$97,000</b>
Q3 COGS	Units	Value/Unit	Total
Beginning inventory units are sold first and include the following:			
Units represented by oldest purchase in Q2 (within Q3 beginning inventory)	3,000	\$11.00	\$33,000
Units represented by 2 <sup>nd</sup> oldest purchase (within Q3 beginning inventory)	4,000	\$12.00	48,000
<b>Total</b>	<b>7,000</b>	<b>\$11.57</b>	<b>\$81,000</b>
Q4 COGS	Units	Value/Unit	Total
Beginning inventory units are sold first and include the following:			
Units represented by 2 <sup>nd</sup> oldest purchase in Q2 (within Q4 beginning inventory)	1,000	\$12.00	\$12,000
Units represented by oldest purchase in Q3 (within Q4 beginning inventory)	10,000	\$12.00	120,000
Units represented by oldest purchase (first out after beginning inventory sold)	5,000	\$13.00	65,000
<b>Total</b>	<b>16,000</b>	<b>\$12.31</b>	<b>\$197,000</b>

### 3.3.30 Last in, first out (LIFO)



Excerpt from SAB Topic 5.L

#### LIFO Inventory Practices

**Facts:** On November 30, 1984, AcSEC and its Task Force on LIFO Inventory Problems (task force) issued a paper, "Identification and Discussion of Certain Financial Accounting and Reporting Issues Concerning LIFO Inventories." This paper identifies and discusses certain financial accounting and reporting issues related to the last-in, first-out (LIFO) inventory method for which authoritative

accounting literature presently provides no definitive guidance. For some issues, the task force's advisory conclusions recommend changes in current practice to narrow the diversity which the task force believes exists. For other issues, the task force's advisory conclusions recommend that current practice should be continued for financial reporting purposes and that additional accounting guidance is unnecessary. Except as otherwise noted in the paper, AcSEC generally supports the task force's advisory conclusions. As stated in the issues paper, "Issues papers of the AICPA's accounting standards division are developed primarily to identify financial accounting and reporting issues the division believes need to be addressed or clarified by the Financial Accounting Standards Board." On February 6, 1985, the FASB decided not to add to its agenda a narrow project on the subject of LIFO inventory practices.

**Question 1:** What is the SEC staff's position on the issues paper?

**Interpretive Response:** In the absence of existing authoritative literature on LIFO accounting, the staff believes that registrants and their independent accountants should look to the paper for guidance in determining what constitutes acceptable LIFO accounting practice.<sup>7</sup> In this connection, the staff considers the paper to be an accumulation of existing acceptable LIFO accounting practices which does not establish any new standards and does not diverge from GAAP.

The staff also believes that the advisory conclusions recommended in the issues paper are generally consistent with conclusions previously expressed by the Commission, such as:

1. Pooling-paragraph 4-6 of the paper discusses LIFO inventory pooling and concludes "establishing separate pools with the principal objective of facilitating inventory liquidations is unacceptable." In Accounting and Auditing Enforcement Release 35, August 13, 1984, the Commission stated that it believes that the Company improperly realigned its LIFO pools in such a way as to maximize the likelihood and magnitude of LIFO liquidations and thus, overstated net income.

2. New Items-paragraph 4-27 of the paper discusses determination of the cost of new items and concludes "if the double extension or an index technique is used, the objective of LIFO is achieved by reconstructing the base year cost of new items added to existing pools." In ASR 293, the Commission stated that when the effects of inflation on the cost of new products are measured by making a comparison with current cost as the base-year cost, rather than a reconstructed base-year cost, income is improperly increased.

**Question 2:** If a registrant utilizes a LIFO practice other than one recommended by an advisory conclusion in the issues paper, must the registrant change its practice to one specified in the paper?

**Interpretive Response:** Now that the issues paper is available, the staff believes that a registrant and its independent accountants should re-examine previously adopted LIFO practices and compare them to the recommendations in the paper. In the event that the registrant and its independent accountants conclude that the registrant's LIFO practices are preferable in the

circumstances, they should be prepared to justify their position in the event that a question is raised by the staff.

**Question 3:** If a registrant elects to change its LIFO practices to be consistent with the guidance in the issues paper and discloses such changes in accordance with FASB ASC Topic 250, Accounting Changes and Error Corrections, will the registrant be requested by the staff to explain its past practices and its justification for those practices?

**Interpretive Response:** The staff does not expect to routinely raise questions about changes in LIFO practices which are made to make a company's accounting consistent with the recommendations in the issues paper.

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<sup>7</sup> In ASR 293 (July 2, 1981) see Financial Reporting Codification §205, the Commission expressed its concerns about the inappropriate use of Internal Revenue Service (IRS) LIFO practices for financial statement preparation. Because the IRS amended its regulations concerning the LIFO conformity rule on January 13, 1981, allowing companies to apply LIFO differently for financial reporting purposes than for tax purposes, the Commission strongly encouraged registrants and their independent accountants to examine their financial reporting LIFO practices. In that release, the Commission acknowledged the "task force which has been established by AcSEC to accumulate information about [LIFO] application problems" and noted that "This type of effort, in addition to self-examination [of LIFO practices] by individual registrants, is appropriate..."

The LIFO inventory cost flow assumption was adapted from the US federal income tax code. Its objective is to match an entity's most recently incurred costs with current revenues by recording COGS based on the most recently acquired or produced products (i.e. the LIFO objective). Therefore, an entity matches the costs of the most recent purchases or manufactured products against revenue, meaning that the older values of the items in inventory remain on the balance sheet.

The Treasury regulations contain a significant amount of guidance on how to apply the LIFO cost flow assumption for tax purposes. In contrast, there is only limited authoritative guidance in the financial accounting literature. However, an AICPA Task Force published a comprehensive, nonauthoritative Issues Paper in 1984 that contains useful recommendations and other information on applying LIFO: *Identification and Discussion of Certain Financial Accounting and Reporting Issues Concerning LIFO Inventories* (Nov 30, 1984).

Although the conclusions of the Task Force in the LIFO Issues Paper are nonauthoritative, they are widely followed in practice. The SEC "staff believes that registrants and their independent accountants should look to the [issues] paper for guidance in determining what constitutes acceptable LIFO accounting practice." This paper is the reference for many of the points below and is referred to as 'LIP'. [\[SAB Topic 5.L\]](#)



### Question 3.3.50

What are the benefits of applying LIFO?

**Interpretive response:** In inflationary periods, the use of LIFO results in higher current costs charged to COGS and lower costs included in ending inventory. In such an economic environment, an entity may believe that the LIFO cost flow assumption results in a better matching of current costs with revenues.

For income tax purposes, an entity may prefer LIFO in an inflationary period because it generally increases the COGS deduction thereby reducing taxable income and related income taxes. It also defers the tax on the unrealized price appreciation related to the lower costs in ending inventory.

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### Question 3.3.60

Are there incremental financial reporting and disclosure requirements when applying LIFO?

**Interpretive response:** Yes. There are specific limitations on the use of LIFO, different approaches that can be applied, and incremental disclosure requirements for the cost flow assumption.

The Treasury regulations have a conformity requirement that requires the basis of accounting for inventory to be consistent between financial reporting and income tax purposes if LIFO is used for income taxes. However, while the conformity requirement generally requires the use of LIFO for both financial reporting and tax reporting, it does allow entities to use different LIFO computational techniques for each – e.g. dollar value-internal index for book and dollar value-external index for tax. [IRC §472(c), T-Reg §1.472-2(e)]

[Question 3.3.90](#) discusses the acceptable approaches for applying LIFO, and [Question 3.3.120](#) discusses specific limitations for wholesalers and retailers when determining LIFO pools. [Section 5.4](#) discusses the LIFO-specific disclosure requirements.

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### Question 3.3.70

Can an entity apply LIFO for only a specific portion of its inventory?

**Interpretive response:** It depends. US GAAP allows an entity to have different cost flow assumptions for different components of inventory (i.e. material, labor, overhead) or at a subsidiary or inventory product level if the cost flow assumptions used are disclosed. [330-10-30-13]

However, the AICPA Task Force determined that there should be a rebuttable presumption that if an entity wants to apply LIFO, it should apply LIFO for its

entire inventory. That presumption can be rebutted if there is a valid business purpose for using LIFO for only a portion of inventory. [LIP.3-7]

One accepted business purpose for partial application of LIFO is the expectation that only a portion of the inventory may experience significant price changes, such as the material component of inventory. Further, the components of inventory in an entity's various divisions may differ significantly. Other accepted business reasons for not applying LIFO for some inventories include: [LIP.3-5]

- anticipated significant reductions in those inventories;
- greatly fluctuating levels of certain inventories;
- statutory financial reporting requirements for operations outside the US; and
- non-recognition of LIFO for tax purposes outside the US.

See [Question 3.3.30](#) for additional discussion on subsidiaries in a consolidated entity using different cost flow assumptions to calculate inventory cost.



### Question 3.3.80

What are the application choices an entity makes when applying LIFO?

**Interpretive response:** LIFO is a generic concept that describes the cost flow assumption of inventory for financial reporting purposes.

There are three broad steps in applying LIFO.

<b>Step 1: Select the overall approach</b>	In practice, there are two acceptable approaches to applying LIFO (see <a href="#">Question 3.3.90</a> ).
<b>Step 2: Select a computational technique if the dollar value approach is used</b>	There are four computational techniques under the dollar value approach (see <a href="#">Question 3.3.110</a> ).
<b>Step 3: Determine the number and content of the LIFO pools</b>	See <a href="#">Question 3.3.100</a> for pools under the specific goods approach and <a href="#">Questions 3.3.120</a> and <a href="#">3.3.130</a> on establishing pools and a list of considerations under the dollar value approach.





### Question 3.3.90

What are the acceptable approaches for applying LIFO?

**Interpretive response:** In practice, there are two acceptable approaches to applying LIFO: [LIP.1-11]

- the specific goods approach (see [Question 3.3.100](#)); and
- the dollar value approach (see [Question 3.3.110](#)).

Both approaches are consistent with the LIFO objective and, when applied consistently, may be used for financial reporting purposes. The selected approach does not need to be disclosed. [LIP.2-5, 2-9]

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### Question 3.3.100

How is the specific goods LIFO approach applied?

**Interpretive response:** Changes in the quantity of individual types of inventory determine whether inventory 'layers' have increased or have partially been liquidated. Under this approach, quantities of inventory are measured in terms of the number of units of a specific item where, if appropriate, items of similar nature can be combined and 'pooled' together. Therefore, each item or group of very similar items is in effect treated as a separate inventory pool. [LIP.1-12]

While the specific goods approach is generally considered the easier LIFO approach to understand, in practice it is only used when entities have a limited inventory given the need to calculate at the specific inventory item level. Inventory quantities within a pool are measured in terms of physical units (e.g. pounds, tons, bushels, barrels) of individual items. [LIP.2-1]

In the year LIFO is first applied, an entity determines the opening inventory cost of each item by dividing the total inventory cost for those items by the total number of units. If the number of units increases in the following year, the increment is priced at the cost of the incremental units acquired or produced. If the number of units decreases and a LIFO layer is liquidated, the decrement is removed in reverse order of its accumulation. [LIP.2-1]

The specific goods approach is very dependent on detailed inventory records and costing systems to track individual inventory items (or similar item pools) and their associated costs. Record keeping costs may be burdensome for entities with many different products or frequent technological changes in product lines. The specific goods approach also results in many inventory liquidations, which increases income in the year of liquidation when unit costs have increased because the entity charges prior year LIFO costs (not current year costs) to COGS for the cost of the inventory units deemed to be disposed. [LIP.2-1]

[Example 3.3.30](#) illustrates the specific goods approach.

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**Example 3.3.30**  
Specific goods approach

This example illustrates how to calculate ending inventory under LIFO using the specific goods approach.

December 31	Quantity on hand	Current year cost / unit	End-of-year inventory value under LIFO
Year 1 (base year)	100	\$10	\$1,000
Year 2	200	12	2,200
Year 3	275	14	3,250
Year 4	250	16	2,900
Year 5	75	18	750
Year 6	175	20	2,750



**Question 3.3.110**  
How is the dollar value LIFO approach applied?

**Interpretive response:** The dollar value approach uses dollars as the unit of measurement, not quantities of specific goods. Under this approach, similar inventory items are grouped by pools and priced in terms of each pool's aggregate base year cost. Base year cost is the amount of current year inventory converted to its cost in the year that LIFO was adopted. The entity compares the results with each pool's aggregate base year cost as of the end of

the prior year and determines whether each pool's inventory level increased or if a portion was liquidated. [LIP.1-13]

The dollar value approach avoids many of the specific goods approach's disadvantages (see [Question 3.3.100](#)). This is because it measures inventory quantities by fixed dollar equivalents or base year costs instead of quantities and prices of specific goods. Similar items of inventory are aggregated into inventory pools and increases (increments) or decreases (decrements) in each pool are identified and measured in terms of the total base year cost of the inventory in the pool, instead of physical base year quantities of individual inventory items. [LIP.2-2]

There are four acceptable computational techniques for applying the dollar value approach. [LIP.1-13]

<b>Double extension</b>	The current and base year costs of each item in inventory are multiplied or extended by the units on hand at the current reporting date.
<b>Link chain</b>	The base year cost of ending inventory is determined by applying a cumulative index to the dollar value of the ending inventory. The cumulative index is determined based on the relationship of the current year prices to those of the prior year (based on either double extension or internal index) multiplied by the prior year's cumulative index. This results in each year's index being characterized as a link in a chain of indexes back to the base year.
<b>Internal index</b>	The base year cost of ending inventory is determined by applying an index to the dollar value of the ending inventory; the index is based on a sample of current year costs to base year costs of those items in inventory; the sample is usually determined by statistical methods.
<b>External index</b>	The dollar value of ending inventory at current year prices is restated to approximate the base year prices using an appropriate index determined by a third party, such as the Bureau of Labor Statistics Index.

### Example 3.3.40

#### Dollar value approach – double extension technique

This example illustrates how to calculate ending inventory under LIFO using the dollar value approach – double extension technique.

	Year 1	Year 2	Year 3	Year 4	Year 5
Price-change index <sup>1</sup>	1.00	1.10	1.16	1.20	1.215
Priced at cost which is current at applicable year-end	\$10,000	\$13,200	\$16,240	\$16,800	\$16,400

	Year 1	Year 2	Year 3	Year 4	Year 5
Priced at base year cost <sup>2</sup>	10,000	12,000	14,000	14,000	13,500
LIFO inventory	10,000	12,200 <sup>3</sup>	14,520 <sup>3</sup>	14,520 <sup>3</sup>	13,940 <sup>3</sup>
Notes:					
1. Computed by a comparison (double extension) of specific inventory items at base year prices and at current year-end prices.					
2. Determined by dividing ending inventory at year-end costs by the price-change index.					
3. The LIFO inventory computations are as follows.					
<b>Year 2</b>	<b>Inventory value</b>		<b>Calculation</b>		
Base		\$10,000			
Year 2 layer		2,200		(12,000 – 10,000) × 1.10	
<b>Total</b>		<b>\$12,200</b>			
<b>Year 3</b>	<b>Inventory value</b>		<b>Calculation</b>		
Base		\$10,000			
Year 2 layer		2,200		(12,000 – 10,000) × 1.10	
Year 3 layer		2,320		(14,000 – 12,000) × 1.16	
<b>Total</b>		<b>\$14,520</b>			
<b>Year 4</b>	There has been no change in the inventory at base year prices; therefore, the LIFO inventory balance is the same as Year 3 and no new LIFO layer is created.				
<b>Year 5</b>	<b>Inventory value</b>		<b>Calculation</b>		
Base		\$10,000			
Year 2 layer		2,200		(12,000 – 10,000) × 1.10	
Year 3 layer		1,740		(Year 3 layer of 2,320 – \$580) <sup>4</sup>	
<b>Total</b>		<b>\$13,940</b>			
Note:					
4. The \$580 reduction in this layer from the previous year is computed by applying the price-change index for Year 3 (the newest inventory layer) to the difference between beginning (Year 4) and ending (Year 5) inventories at base year prices [(\$14,000 – 13,500) × 1.16 = \$580].					

## Example 3.3.50

### Dollar value approach – link chain technique

This example illustrates how to calculate ending inventory under LIFO using the dollar value approach – link chain technique (numbers are rounded).

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Inventory priced at current costs	\$10,000	\$12,000	\$15,000	\$16,000	\$14,000	\$16,000
Price index for year <sup>1</sup>	1.00	1.10	1.20	1.15	1.08	1.10
<b>Note:</b> 1. Obtained by taking a statistical sample of inventory items from ending inventory and pricing them at both beginning and end of year costs. For example, in Year 2 the following results might have been obtained: $\frac{\text{Sample priced at Year 2 costs} = 1,100}{\text{Sample priced at Year 1 costs} = 1,000} = 1.10$						

The entity determines inventory at the end of each year as follows.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ending inventory at current prices (A)	\$10,000	\$12,000	\$15,000	\$16,000	\$14,000	\$16,000
Price index for year (B)	1.00	1.10	1.20	1.15	1.08	1.10
Cumulative Index <sup>1</sup> (C)	1.00	1.10	1.32	1.52	1.64	1.80
Ending inventory at base prices (D) = (A) ÷ (C)	\$10,000	\$10,909	\$11,364	\$10,540	\$8,540	\$8,872
Increment base price (E) <sup>2</sup>		\$909	\$455			\$333
LIFO increment (F) = (E) × (C)		\$1,000	\$600			\$600
LIFO liquidation				\$(1,006) <sup>3</sup>	\$(2,054) <sup>4</sup>	
LIFO balance <sup>5</sup>	\$10,000	\$11,000	\$11,600	\$10,594	\$8,540	\$9,140
<b>Composition of LIFO layers</b>						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 1 layer	\$10,000	\$10,000	\$10,000	\$10,000	\$8,540	\$8,540
Year 2 layer	-	1,000	1,000	594	-	-
Year 3 layer	-	-	600	-	-	-

Composition of LIFO layers						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 4 layer	-	-	-	-	-	-
Year 5 layer	-	-	-	-	-	-
Year 6 layer	-	-	-	-	-	600
<b>Total</b>	<b>\$10,000</b>	<b>\$11,000</b>	<b>\$11,600</b>	<b>\$10,594</b>	<b>\$8,540</b>	<b>\$9,140</b>

**Notes:**

- Cumulative index represents all year-to-year indices to date. The following shows the calculation of the indices by year:  
 Y1: 1.00  
 Y2:  $1.00 \times 1.10 = 1.10$   
 Y3:  $1.00 \times 1.10 \times 1.20 = 1.32$   
 Y4:  $1.00 \times 1.10 \times 1.20 \times 1.15 = 1.52$   
 Y5:  $1.00 \times 1.10 \times 1.20 \times 1.15 \times 1.08 = 1.64$   
 Y6:  $1.00 \times 1.10 \times 1.20 \times 1.15 \times 1.08 \times 1.10 = 1.80$
- Increment at base price is determined by comparing current year ending inventory at base prices to prior year ending inventory at base prices.
- Because ending inventory at base prices for Year 4 of \$10,540 is lower than the prior year (Year 3) of \$11,364, a liquidation has occurred in Year 4. Because ending inventory at base price exceeds the base layer of \$10,000, that layer remains intact. The remaining \$540 ( $\$10,540 - \$10,000$ ) is within the Year 2 layer and does not exceed the Year 2 layer at base prices. The increment of \$540 over the base layer is multiplied by the index for Year 2.  
 $\$540 \times 1.10 = \$594$   
 Therefore, only \$594 of the Year 2 layer remains resulting in an ending LIFO balance of \$10,594 comprised of \$10,000 of the base layer and \$594 of the Year 2 layer. The difference between the Year 3 LIFO balance of \$11,600 and Year 4 LIFO balance of \$10,594 represents the LIFO liquidation of \$1,006.
- Because ending inventory at base prices in Year 5 is lower than the prior year (Year 4), another liquidation has occurred in Year 5. Because only part of the base layer remains, it is valued at base year cost. The difference between the Year 4 LIFO balance of \$10,594 and Year 5 ending inventory LIFO balance of \$8,540 represents the LIFO liquidation of \$2,054.
- LIFO balance is prior year LIFO balance plus current year increment or less current year liquidation.



### Question 3.3.120

How are dollar value LIFO pools determined?

**Background:** The term ‘pooling’ describes the grouping of inventory items under a dollar value approach when determining increases or decreases in the aggregate of base year costs of the pool. [Question 3.3.130](#) includes example considerations that are used to establish pools of inventory.

**Interpretive response:** It depends. We believe an entity should establish its inventory pools following its business activities and base them on valid business purposes. [LIP.4-6]

In our experience, most manufacturing entities use the natural business unit approach in the Treasury regulations to determine LIFO pools. This approach generally comprises the entity's entire production capacity integrated vertically within one product line, or two or more related product lines – including procuring the raw materials, processing the raw materials and selling the produced goods. [T-Reg §1.472-8(b)(1)-(2)]

For example, an automobile manufacturer may have only one natural business pool. If the same automobile manufacturer manufactured paint for sale to customers, the paint would probably be a separate pool. In contrast, if the manufactured paint was only used in the manufacture of automobiles, the paint would be included in the automobile natural business pool.

Entities can also apply a multiple pool approach instead of a natural business unit approach. In fact, wholesalers and retailers are required to use the multiple pool approach for tax purposes, unless the IRS gives consent to use the natural business unit approach. Under the multiple pool approach, each pool generally consists of a group of inventory items that are substantially similar – considering the types of raw materials used, processing operations applied, use of the items, etc. [T-Reg. §1.472-8(b)(3)]



### Question 3.3.130

What considerations are important for establishing dollar value LIFO pools?

**Interpretive response:** An entity considers the following when establishing pools of inventory under the dollar value approach. [LIP.4-1]

- natural business divisions for internal management;
- operating segments as determined under US GAAP;
- economic activities;
- separate and distinct production facilities;
- separate accounting records for each business unit;
- substantially similar products or inventory items;
- major product lines;
- types or classes of goods; and
- selected groupings of types or classes of products or inventory items.

The objective of LIFO pooling is to group inventory items by matching the most recently incurred costs to current revenues, considering the manner in which the entity operates. It is not feasible to prescribe specific items used when determining an entity's inventory pools. Instead, an entity establishes its inventory pools following its business activities and bases them on valid business purposes. However, selecting pools to facilitate inventory liquidations is not a valid business purpose. [LIP.4-6]

The number of pools affects LIFO liquidations and other aspects of the LIFO cost flow assumption in a way that could lead to nonrecurring credits to income and potential concerns about whether earnings are being manipulated. For example, the greater the number of pools, the greater the opportunities for liquidations. The liquidation of a LIFO pool typically increases income in the year of liquidation because the entity charges prior year LIFO costs (not the current year costs) to COGS. [LIP.4-2]

The existence of a separate legal entity is sometimes a consideration when determining a LIFO inventory pool. However, to prevent earnings manipulation, the existence of a separate legal entity cannot be the sole justification for a LIFO inventory pool. Instead, the justification would require the existence of a separate legal entity together with one or more other valid business purposes. [LIP.4-10]

An entity is not required to disclose the considerations used to establish inventory pools. [LIP.4-13]

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### Question 3.3.140

How are new inventory items added to existing dollar value LIFO pools?

**Background:** When an entity adds a new item, the pricing index can be distorted if the item's current cost is used as the base year cost. This would in effect result in an entity retroactively reducing the cumulative LIFO index for the pool, which would change the current year LIFO adjustment. [LIP.4-14]

**Interpretive response:** Because of the potential for distortion, different methods have been developed to price new items. But first an entity has to determine whether an item is actually a new item.

#### Identifying new items

Because the identification of a new item is very fact specific, a common definition is not feasible. However, determining when an item represents a new one for financial reporting purposes should include the following considerations. [LIP.4-21]

- A new item is a raw material, product or cost component not previously present in significant quantities in the inventory.
- The materials or products of a new item should not be commingled physically with other materials or products so that its identity is lost, and have qualities (physical and/or chemical) significantly different from items already in inventory.
- Fungible items mixed with items already in the inventory pools ordinarily would not be considered a new item.
- Changes in the market value of an item or the purchase of a virtually identical item from a different supplier does not make the item a new item.



[Question 3.3.150](#) discusses the SEC's guidance about the designation of a new item.

### **Assigning a cost to new items**

The cost of the new item is determined using an appropriate method that is consistent with the LIFO objective of matching most recent costs with revenues and that considers the computational technique for calculating the dollar value approach (see [Question 3.3.110](#)).

### ***Base year reconstruction method***

When using the double extension or an index computational technique to calculate the dollar value approach, the base year cost of the new item added to the pool is determined by reconstructing the base year cost. Reconstructed cost is what the items would have cost had they been acquired in the base period. If an entity uses the link chain technique of computing the dollar value LIFO approach, reconstructing the cost is not necessary because this technique provides a result that would approximate the reconstruction. [[LIP.4-22, 4-27](#)]

The base year cost can be estimated if the cost is not otherwise objectively determinable. In making that estimate, the IRS requires entities to use a reasonable approach to determine what the base year cost of a new item would have been in the inventory pool. Some entities may use a published vendor price list, vendor quotes or general industry indexes to determine the reconstructed base year cost. For financial reporting purposes, the use of a published vendor price list would take precedence over the use of vendor quotes, and the use of vendor quotes would take precedence over the use of general industry indexes. [[LIP.4-27, 4-31 - 4-33](#)]

If an entity adopted LIFO many years ago, a reasonable estimate of base year costs may be difficult. This might occur, for example, if: [[LIP.4-34](#)]

- there has been a dramatic change over the years in the items constituting a pool, and the cumulative index no longer represents the price relationship among the items in the pool currently and when LIFO was adopted; or
- there have been changes in the number of pools since LIFO was adopted.

In these situations, an entity may use the substitute base year method (described below) to estimate the base year cost of a new item for financial reporting purposes. [[LIP.4-37](#)]

### ***Substitute base year method***

Under the substitute base year method, the entity chooses a substitute or updated base year to represent the original base year and determines changes in the dollar value of the pool. Usually, the entity chooses the earliest base year as the substitute year because that method derives from the tax requirements about changes in LIFO. Once chosen, the entity retains the older LIFO layers, but expresses the indexes as a percentage of the updated base year. After updating the base year, it makes a similar calculation using costs of the updated base year and applies the lower indexes to retain the older layers or to measure the amount of decrement or liquidation. [[LIP.4-34](#)]

### **Unit cost and cost component methods**

If the entity applying LIFO manufactures the inventory, identifying new items or determining the base year cost of those items presents additional difficulties. This can occur if there are production efficiencies, inventory styles change frequently or there is technology obsolescence. In practice, two methods – the unit cost method and the cost component method – assist manufacturers in making a reasonable estimate of base year costs as changes occur in the inventory pool. Both methods are appropriate for financial reporting purposes, although the cost component method may be preferable in some situations. [LIP.4-49]

Under the unit cost method, the entity measures changes in the index by the weighted average increase or decrease in the unit cost of raw materials, WIP and finished goods inventory. However, the entity does not disaggregate the inventory from the underlying materials, labor and overhead content of the items in inventory. It determines the index by double extending the base year cost of all or a representative number of items in inventory. It then applies the resulting index to the full dollar value of ending inventory to determine base year cost for the full inventory. [LIP.4-38 - 4.39]

Under the cost component method, the entity measures changes in the index by the weighted average increase or decrease in the costs of the materials, labor and overhead components in ending inventory. (These cost components are not considered under the unit cost method.) The entity determines the index by matching the current year costs of the material, labor and overhead components with the base year or beginning of year costs of the same inventory cost components if it uses the link chain technique. Similar to the unit cost method, it then applies the resulting index to the full dollar amount of ending inventory to determine base year or beginning of year cost for the entire inventory. [LIP.4-38, 4.40]

The cost component method may be advantageous for a manufacturer that has significant WIP, significant changes in its production capacity utilization or production efficiencies, inventory style changes, or inventory-related technological changes. The cost component method is preferable for such entities when determining base year costs of a new item, unless they reconstruct base year costs. [LIP.4-41]

An entity is not required to disclose the method used to price new items in its LIFO inventory in the financial statements. [LIP.4-30]



#### **Question 3.3.150**

**What is the nature of past SEC enforcement actions regarding the application of LIFO?**

**Interpretive response:** The SEC has previously instituted enforcement actions against a number of registrants regarding their application of LIFO.

A key area of the SEC's focus has been the designation of a new product or new item. The SEC has noted instances in which entities incorrectly designated

preexisting inventory items as new products on the basis of insignificant and sometimes arbitrary differences in attributes. These items designated as new products were recorded at current costs, which increases income because the effects of rising prices on the cost of new items are measured under the double extension technique to the dollar value approach by using the current cost as the base year cost instead of a reconstructed base year cost. Inventory of the new product is recorded at the current costs while amounts recognized in COGS reflect the lower cost of the preexisting inventory items. [FR-205.02a - 02a.i]

The following examples cited by the SEC illustrate instances when it took exception to a registrant's designation of a new item.

- Company A treated an item as a new product merely because the production of that item was shifted from one plant to another. The change in the item's manufacturing location and costs associated with its manufacture were given as the major justifications for the new product treatment.
- Company B designated part of its nickel inventory as a new product because it contained cobalt. Although cobalt did not preclude the use of the nickel in the manufacture of stainless steel, the presence of the cobalt content caused a modification in the manufacturing process and resulted in lower quality steel. The SEC focused on the apparent contradiction inherent in income being increased simply because a particular inventory commodity contained a physical property making it less valuable.
- Company C's policy was to treat iron ore obtained from different mine locations as distinct inventory products, arguably because of differences in chemical composition. However, the SEC objected when Company C increased pre-tax earnings simply by designating the mixture of three different kinds of iron ore as a new product and recording it at current cost. [FR-205.02a.i]



### Question 3.3.160

What quantity of inventory is used to determine the price of a LIFO inventory increment?

**Interpretive response:** There are two basic approaches permitted by the Treasury regulations, which entities can apply to determine the price of an inventory increment:

- the acquisition or production cost of the quantity (when using the specific goods approach) or dollars (when using the dollar value approach) of the increment; and
- the acquisition or production cost of the quantity (when using the specific goods approach) or dollars (when using the dollar value approach) equal to the ending inventory.

In practice, the IRS has required entities to use the second approach in certain circumstances because it tends to provide a broader pricing base and tends to lessen the effect of abnormal costs that might be associated with using a

smaller quantity for this purpose. However, for purposes of financial reporting, the price used to determine the LIFO increment is based on the acquisition or production cost of the quantity of goods (when using the specific goods approach) or dollars (when using the dollar value approach) of the increment only as the cost associated with the purchase of quantities in excess of the increment (i.e. using ending inventory balance) is less relevant under the LIFO concepts. [LIP.2-20]

An entity is not required to disclose the approach used to price its inventory increments. [LIP.2-23]

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### Question 3.3.170

How does an entity price the current year LIFO increment?

**Interpretive response:** The Treasury regulations permit three basic approaches to pricing LIFO increments to determine current year purchases. [LIP.2-10, 2-15]

<b>The order of acquisition price (first purchase price)</b>	Increment pricing is based on the acquisition cost of the first purchase during the period.
<b>The most recent acquisition price (latest purchase price)</b>	Increment pricing is based on the acquisition cost of the latest purchase during the period
<b>The average purchase price</b>	Increment pricing is based on the average acquisition cost of all purchases during the period

Using the order of acquisition price or the first purchase price approach generally results in charging the first acquisition price to inventory and the latest acquisition costs to COGS. Therefore, it is considered the most compatible with the LIFO objective for financial reporting purposes. However, any of the three pricing approaches, when consistently applied, may be used for financial reporting purposes. [LIP.2-15]

An entity is not required to disclose the approach used to price its current purchases for LIFO. [LIP.2-23]

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### Question 3.3.180

Do all LIFO liquidations affect year-end financial reporting requirements?

**Background:** A LIFO liquidation occurs when the ending inventory in a pool is less than its beginning-of-year level. This causes prior year LIFO costs and not the current year costs to be charged to COGS. A LIFO liquidation can occur under either the specific goods approach or the dollar value approach. [LIP.5-1]

**Interpretive response:** Yes. The LIFO liquidation may be voluntary or involuntary and temporary or permanent. Regardless of why the liquidation

occurs, it affects the financial reporting requirements of an entity using the LIFO cost flow assumption.

### Temporary decrease

If an entity experiences a LIFO liquidation in an inventory pool and intends to replace the inventory levels after year-end, it would not be appropriate to adjust for the effects of prior year LIFO costs being included in COGS. For example, it would not be appropriate to establish a replacement reserve to offset the effects of the LIFO liquidation in the income statement. [LIP.5-15]

### Involuntary decrease

An entity may experience an involuntary decrease in the level of ending inventory – e.g. resulting from a labor stoppage or a raw material shortage. Even if the entity plans to increase the inventory levels after the year-end, it is not appropriate to defer the effects on income resulting from the LIFO liquidation at year-end. [LIP.5-20]

[Section 3.3.60](#) discusses interim financial reporting of LIFO liquidations.

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### Question 3.3.190

How has the SEC staff evaluated the transfer of LIFO inventory to a non-LIFO subsidiary?

**Interpretive response:** The SEC staff addressed a registrant question about the transfer of LIFO inventory to a newly formed subsidiary that would not use LIFO to price the inventory.

In that case, an entity had excess raw material commitments and intended to sell the excess supply but not before the end of its fiscal year. The entity asked whether the SEC staff would object if it established a newly formed, non-LIFO subsidiary to hold and sell the excess inventory. The transfer of inventory would take place mid-year and would not result in the physical movement of the excess inventory. The entity would accomplish the transfer by a bookkeeping entry only.

The entity's inventory levels decreased because of other conditions and the net effect of the transfer further decreased the LIFO inventory, which caused an additional decrement and a substantial increase in income from the LIFO liquidation. The SEC staff expressed concern that considerable income was derived from a bookkeeping entry only. The SEC staff notified the company that it did not consider the proposed transaction acceptable because the transaction was contrary to the economic substance of the situation. [FR-205.02b]

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## 3.3.40 Retail inventory method (RIM)

Some entities in the retail industry use RIM to determine inventory cost and COGS. RIM, sometimes referred to as the reverse markup method, is used to

approximate the cost basis of inventory by using a cost-to-retail ratio (commonly referred to as a 'cost complement') based on the inventory's current market retail prices.



**Question 3.3.200**  
How is RIM applied?

**Interpretive response:** The focus of RIM is on the value of the total dollars in inventory, not on an approximation of the physical flow of goods. It uses the adjusted retail value of the inventory on hand (i.e. ending inventory at retail) to estimate the cost of ending inventory and is computed as follows.

The ending inventory at retail is converted to a cost basis by applying a specific average cost-to-retail ratio for each inventory group. Inventory groups may be assigned based on types of merchandise, brands, departments etc. and reflect inventory with similar cost-to-retail ratios and turnover characteristics. The purpose of assigning inventory to groups is to ensure that an appropriate cost-to-retail ratio is being used to convert the ending inventory at retail to a cost basis.

<b>Step 1: Determine average cost-to-retail ratio</b>	The cost-to-retail ratio is determined from the goods available for sale for the merchandise group based on an appropriate time period, depending on seasonality.
<b>Step 2: Determine adjusted retail value (i.e. ending inventory at retail)</b>	Ending inventory at retail is the retail value of the inventory on hand, adjusted for estimated shrinkage and markdowns related to items such as promotional pricing, special sales, damaged merchandise and style changes.
<b>Step 3: Convert ending inventory at retail to cost basis</b>	Multiply ending inventory at retail by the cost-to-retail ratio to determine inventory at cost.

The most common and key components of the RIM calculation include the following (not exhaustive).

<b>Purchases initial markup</b>	<ul style="list-style-type: none"> <li>Also known as the initial markup (IMU), it represents the difference between the initial sales price of the product and how much it costs to purchase. These purchase costs are generally reduced when the entity receives any vendor and price protection allowances, or cash discounts.</li> <li>For example, a purchase with a recorded cost of \$50 originally marked at a retail amount of \$75 has an IMU of \$25. If the entity received a cash discount of \$5, this discount would reduce the purchase cost to \$45. An entity would not adjust the corresponding retail price.</li> </ul>
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<b>Markups (including cancellations)</b>	<ul style="list-style-type: none"> <li>• A markup represents an increase to the original retail price whereas a markup cancellation is a reduction in the amount of a prior markup.</li> <li>• For example, a purchase that cost \$50 is originally marked at a retail amount of \$75. If the retail price is increased to \$80, the markup is \$5 and the IMU remains \$25.</li> </ul>
<b>Sales</b>	<ul style="list-style-type: none"> <li>• Represents the retail value of sales during the period, net of returns and is a reduction to retail inventory on hand.</li> </ul>
<b>Markdowns (including cancellations)</b>	<ul style="list-style-type: none"> <li>• A markdown represents either a permanent or temporary decrease to the original retail price usually made to accelerate the sale of slow-moving inventory, meet pricing of competition, or one-time sales (e.g. holiday promotional events) whereas a markdown cancellation is a reversal of a prior markdown.</li> <li>• Temporary markdowns are promotional in nature to support the marketing efforts of an entity. These types of markdowns are recorded as a reduction in inventory at the time an item is sold. Examples include holiday/weekend sales on products that would then return to their regular retail price following the promotional period.</li> <li>• Permanent markdowns reflect a clearance event of items that are damaged or at the end of their selling season. In contrast to temporary markdowns, permanent markdowns are recorded as a reduction to the on-hand inventory at the time the decision is made to reduce the selling price and do not return to the original retail prices.</li> </ul>
<b>Shortage / shrinkage</b>	<ul style="list-style-type: none"> <li>• Represents inventory reductions due to loss, damage, theft, spoilage, or receiving errors. <a href="#">Question 3.3.210</a> discusses shortage/shrinkage.</li> </ul>

### Example 3.3.60

#### Retail inventory method

This example illustrates how to calculate ending inventory and COGS under the conventional approach to RIM.

	Cost	Retail
Beginning inventory	\$3,100	\$5,000
+ Purchases	4,500	7,800
+ Markups (including markup cancellations)	-	250
<b>= Goods available for sale</b>	<b>\$7,600</b>	<b>\$13,050</b>
<i>Retail reductions:</i>		
Sales		\$5,250
Markdowns		500

	Cost	Retail
Shortage / shrinkage		250
<b>Total retail reductions</b>		<b>\$6,000</b>
Cost-to-retail ratio		58.2% <sup>1</sup>
Ending inventory	\$4,103 <sup>3</sup>	\$7,050 <sup>2</sup>
COGS	\$3,497 <sup>4</sup>	
Gross margin	\$1,753 <sup>5</sup>	
Notes:		
1. Goods available for sale at cost (\$7,600) ÷ goods available for sale at retail (\$13,050) = the cost-to-retail ratio (58.2%).		
2. Goods available for sale at retail (\$13,050) – total retail reductions (\$6,000) = ending inventory at retail (\$7,050).		
3. Ending inventory at retail (\$7,050) × the cost-to-retail ratio (58.2%) = ending inventory at cost (\$4,103).		
4. Goods available for sale at cost (\$7,600) – ending inventory at cost (\$4,103) = COGS (\$3,497).		
5. Sales (\$5,250) – COGS (\$3,497) = gross margin (\$1,753).		



### Question 3.3.210

How is inventory shrinkage computed under RIM?

**Interpretive response:** In practice, an inventory shrinkage rate is calculated under RIM based on inventory shrinkage as a percentage of retail sales. We believe that an appropriate shrinkage rate can be calculated only after performing a complete physical inventory count at period-end (or a date other than period-end) or cycle counts (i.e. complete physical count at different store locations at various times throughout the year).

Therefore, we believe an entity should include as a reduction to its adjusted retail value an estimate for shrinkage at each reporting date based on actual historical shrinkage rates. These rates should be periodically updated based on actual shrinkage determined after each physical inventory count. We believe an entity should also consider other developments that may indicate historical averages need to be adjusted – e.g. if there have been recent spikes in theft.



### Question 3.3.220

Are there other variations of RIM used by retailers?

**Interpretive response:** Yes. Some retailers use a retail LIFO method to determine inventory values and COGS. In retail LIFO, an entity converts retail dollars to cost using a cost-to-retail ratio like RIM but that ratio differs because



this method uses an inventory base-year and layers like LIFO – i.e. changing prices are attributed to current purchases and not beginning inventory.

Under this method, an entity is attempting to match the costs of the most recent purchases against revenue, meaning the older values of the items in inventory remain on the balance sheet. Other retail entities may apply RIM differently than the conventional method shown in [Example 3.3.60](#), including how they determine the cost-to-retail ratio and account for changes in prices (e.g. markdowns and mark-ups).

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### 3.3.50 Inventories stated above cost



#### Excerpt from ASC 330-10

##### > Stating Inventories Above Cost

**35-15** Only in exceptional cases may inventories properly be stated above cost. For example, precious metals having a fixed monetary value with no substantial cost of marketing may be stated at such monetary value; any other exceptions must be justifiable by inability to determine appropriate approximate costs, immediate marketability at quoted market price, and the characteristic of unit interchangeability.

**35-16** It is generally recognized that income accrues only at the time of sale, and that gains may not be anticipated by reflecting assets at their current sales prices. However, exceptions for reflecting assets at selling prices are permissible for both of the following:

- a. Inventories of gold and silver, when there is an effective government-controlled market at a fixed monetary value
- b. Inventories representing agricultural, mineral, and other products, with all of the following criteria:
  1. Units of which are interchangeable
  2. Units of which have an immediate marketability at quoted prices
  3. Units for which appropriate costs may be difficult to obtain.

Where such inventories are stated at sales prices, they shall be reduced by expenditures to be incurred in disposal.

While there are two exceptions in Topic 330 that allow certain inventory to be stated above cost, precious metals are no longer sold in the US in a government-controlled market with a fixed monetary value. Therefore, the ability to report any inventories, including precious metals, at above cost is subject to the three criteria noted in paragraph 330-10-35-16(b). [\[330-10-35-15 – 35-16\]](#)

[Chapter 4](#) discusses the subsequent measurement of inventory.



### Question 3.3.230

When can inventory be stated above cost?

**Interpretive response:** From a practical perspective, it is very rare that inventory will satisfy either exception in Topic 330 to be stated above cost. For example, there are three criteria in the second exception that the units of inventory must satisfy before they can be stated above cost: [\[330-10-35-16\(b\)\]](#)

- they are interchangeable units;
- they have immediate marketability at quoted prices; and
- their appropriate costs may be difficult to obtain.

We believe it would be rare for all of the criteria to be satisfied. The SEC staff has noted that the third criterion, in particular, can be satisfied only in rare circumstances. This is because few, if any, registrants would be unable to approximate costs due to the current sophistication of cost accounting systems and models. [\[AFRIG.II.F.2\]](#)

In addition, the SEC staff has indicated that it believes that the immediate marketability and unit interchangeability requirements are not met if inventory is WIP and not yet in marketable form – e.g. precious metals still subject to additional refining or smelting. AICPA guidance also states that the second exception in Topic 330 does not apply to industrial applications because the precious metal is used in the manufacturing process instead of held for immediate sale. [\[TQA 2140.08\]](#)

The SEC staff permits certain inventories to be stated above cost. These exceptions are very limited and are based on specific accounting guidance in the relevant literature. The current exception relates to entities that qualify to apply the provisions of Topic 905 (agriculture).

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## 3.3.60 Interim financial reporting



### Excerpt from ASC 330-10

**35-23** See paragraph 270-10-45-6 for a discussion of practices used in determining costs of inventory on an interim basis.



### Excerpt from ASC 270-10

**45-6** Practices vary in determining costs of inventory. For example, cost of goods produced may be determined based on standard or actual cost, while cost of inventory may be determined on an average, first-in, first-out (FIFO), or last-in, first-out (LIFO) cost basis. While entities generally shall use the same

inventory pricing methods and make provisions for writedowns at interim dates on the same basis as used at annual inventory dates, the following exceptions are appropriate at interim reporting dates:

- a. Some entities use estimated gross profit rates to determine the cost of goods sold during interim periods or use other methods different from those used at annual inventory dates. These entities shall disclose the method used at the interim date and any significant adjustments that result from reconciliations with the annual physical inventory.
- b. Entities that use the LIFO method may encounter a liquidation of base period inventories at an interim date that is expected to be replaced by the end of the annual period. In those cases the inventory at the interim reporting date shall not give effect to the LIFO liquidation, and cost of sales for the interim reporting period shall include the expected cost of replacement of the liquidated LIFO base.
- c. Inventory losses from the application of the guidance on subsequent measurement in Subtopic 330-10 shall not be deferred beyond the interim period in which the decline occurs. Recoveries of such losses on the same inventory in later interim periods of the same fiscal year through market value recoveries (for inventory measured using LIFO or the retail inventory method) or net realizable value recoveries (for all other inventory) shall be recognized as gains in the later interim period. Such gains shall not exceed previously recognized losses. Some declines in the market value (for inventory measured using LIFO or the retail inventory method) or net realizable value (for all other inventory) of inventory at interim dates, however, can reasonably be expected to be restored in the fiscal year. Such temporary declines need not be recognized at the interim date since no loss is expected to be incurred in the fiscal year.
- d. Entities that use standard cost accounting systems for determining inventory and product costs should generally follow the same procedures in reporting purchase price, wage rate, usage, or efficiency variances from standard cost at the end of an interim period as followed at the end of a fiscal year. Purchase price variances or volume or capacity cost variances that are planned and expected to be absorbed by the end of the annual period, should ordinarily be deferred at interim reporting dates. The effect of unplanned or unanticipated purchase price or volume variances, however, shall be reported at the end of an interim period following the same procedures used at the end of a fiscal year.

While entities generally apply the same inventory pricing methods and provisioning at interim reporting dates as annual reporting dates, there are some exceptions provided in Topic 270. Those exceptions include: [\[270-10-45-6\]](#)

- the method used to determine COGS. See [Question 5.3.60](#) for disclosures when an entity uses a method to determine COGS for interim periods different from those used at annual inventory dates;
- recording LIFO liquidations (see [Questions 3.3.240](#) through [3.3.270](#));
- recording impairment losses (see [section 4.5](#)); and
- recording standard cost variances (see [Question 3.3.280](#)).

**Question 3.3.240**

Is a LIFO liquidation that is expected to be temporary recorded during an interim reporting period?

**Interpretive response:** No. If LIFO layers are expected to be replaced by the end of the annual period, the inventory at the interim reporting date does not reflect the LIFO liquidation, and COGS for the interim reporting period includes the expected cost of replacement of the liquidated LIFO base. [270-10-45-6(b)]

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**Question 3.3.250**

How is the expected cost of replacement of a liquidated LIFO base recorded on the balance sheet?

**Interpretive response:** The cost of replacement related to a temporary LIFO liquidation is recorded on the balance sheet as either: [LIP.8-9, 8-14]

- a deferred credit, with inventory reflecting the liquidation; or
  - a credit to inventory.
- 

**Question 3.3.260**

How does an entity account for a LIFO liquidation that occurs during an interim reporting period and is not expected to be restored by year-end?

**Interpretive response:** The effects of the liquidation are recognized in the interim period in which the liquidation occurs. However, if an entity uses the dollar value approach and determines its interim LIFO inventory by projecting the expected annual LIFO cost and allocating that projection to interim periods equally or in relation to certain operating data, the effect of the LIFO liquidation may be spread using the same approach the entity uses for determining LIFO costs. See [section 3.3.30](#) for further discussion of determining LIFO costs. [LIP.8-22]

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**Question 3.3.270**

How does an entity applying LIFO determine COGS during an interim reporting period?

**Interpretive response:** Two approaches are acceptable: [LIP.8-7]

- a specific interim period calculation of the LIFO effect based on year-to-date amounts; and
- a projection of the expected annual LIFO cost allocated to the interim periods equally or in relation to certain operating criteria.

These methods are acceptable if the application results in a reasonable matching of most recently incurred costs with revenues, considering the effects of changes in prices, operating levels and inventory mix. [LIP.8-7]



### Question 3.3.280

Are standard cost variances that are expected to be temporary recorded during an interim reporting period?

**Background:** Entities that use standard cost for determining inventory and product costs generally follow the same procedures in reporting variances between actual costs incurred and standard cost at the end of an interim period as those followed at the end of an annual reporting period. See [Question 3.3.20](#). [270-10-45-6(d)]

**Interpretive response:** It depends. If the cost variances are planned and expected to be absorbed by the end of the annual period, those variances are generally deferred at the interim reporting date. However, if the cost variances are unplanned or unanticipated, they are recorded at the interim reporting date in the same manner they would be at the end of an annual reporting period – i.e. expense or capitalize as appropriate. [270-10-45-6(d)]

[Questions 3.2.110](#) and [3.2.120](#) discuss the accounting for variances at the end of an annual reporting period.

## 3.3.70 Accounting changes



### Excerpt from ASC 330-10

#### > Accounting Changes

**35-19** Paragraph 250-10-55-1 explains that a change in composition of the elements of cost included in inventory is an accounting change and provides related guidance.

**35-20** The definition of **direct effects of a change in accounting principle** includes a change in inventory valuation methods as an accounting change.

#### 20 Glossary

##### **Direct Effects of a Change in Accounting Principle**

Those recognized changes in assets or liabilities necessary to effect a change in accounting principle. An example of a direct effect is an adjustment to an inventory balance to effect a change in inventory valuation method. Related changes, such as an effect on deferred income tax assets or liabilities or an impairment adjustment resulting from applying the subsequent measurement guidance in Subtopic 330-10 to the adjusted inventory balance, also are examples of direct effects of a change in accounting principle.



### Excerpt from ASC 250-10

- > Change in the Composition of Inventory Costs

**55-1** A change in composition of the elements of cost included in inventory is an accounting change. An entity that makes such a change for financial reporting shall conform to the requirements of this Subtopic, including justifying the change on the basis of preferability as specified by paragraphs 250-10-45-11 through 45-13. In applying the guidance in this Subtopic, preferability among accounting principles shall be determined on the basis of whether the new principle constitutes an improvement in financial reporting and not on the basis of the income tax effect alone.

- • > Justification for a Change in Accounting Principle

**45-11** In the preparation of financial statements, once an accounting principle is adopted, it shall be used consistently in accounting for similar events and transactions.

**45-12** An entity may change an accounting principle only if it justifies the use of an allowable alternative accounting principle on the basis that it is preferable. However, a method of accounting that was previously adopted for a type of transaction or event that is being terminated or that was a single, nonrecurring event in the past shall not be changed. For example, the method of accounting shall not be changed for a tax or tax credit that is being discontinued. Additionally, the method of transition elected at the time of adoption of a Codification update shall not be subsequently changed. However, a change in the estimated period to be benefited by an asset, if justified by the facts, shall be recognized as a change in accounting estimate.

**45-13** The issuance of a Codification update that requires use of a new accounting principle, interprets an existing principle, expresses a preference for an accounting principle, or rejects a specific principle may require an entity to change an accounting principle. The issuance of such an update constitutes sufficient support for making such a change.

Topic 330 references Topic 250 for guidance on accounting changes (e.g. change in accounting principle). KPMG Handbook, [Accounting changes and error corrections](#), discusses how to identify, account for and present various accounting changes and error corrections. See KPMG Handbook, [Accounting changes and error corrections](#), which includes the following examples related to inventory.

FASB Example 1: Retrospective Application of a Change in Accounting Principle	Section 3.3.50
FASB Example 2: Reporting an Accounting Change when Determining Cumulative Effect for All Prior Years is Not Practicable	Question 3.3.260
Change in policy to capitalize inventory supplies	Example 3.3.10

In addition to the overall guidance, below are inventory specific questions and examples.



### Question 3.3.290

Can an entity change its cost flow assumption to account for inventory?

**Interpretive response:** In certain circumstances, yes. An entity should consistently apply its cost flow assumption of determining inventory cost because a change in accounting for inventory is a change in accounting principle. [330-10-35-19, 250-10-55-1]

As with other voluntary changes in accounting principle, an entity must be able to justify that a change in an inventory cost flow assumption is preferable under the circumstances. Topic 250 requires disclosure of the nature of and justification for the change as well as the effects of the change for the period in which the change is made. [250-10-45-12, 50-1]

An SEC registrant may also be required to obtain a letter from its independent accountant indicating whether the change in accounting principle is preferable under the circumstances (preferability letter) and file a copy of the letter with the SEC. See section 6.2 of KPMG Handbook, [Accounting changes and error corrections](#), for additional guidance on preferability letters. [SAB Topic 6G.2.b]

See chapter 3 of KPMG Handbook, [Accounting changes and error corrections](#), for additional guidance on accounting changes.

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### Question 3.3.300

What factors should be considered when determining whether a change in cost flow assumptions is appropriate?

**Interpretive response:** We believe an entity may switch cost flow assumptions if the change is considered preferable. Factors to consider in evaluating whether a change in cost flow assumptions is preferable and an improvement in financial reporting include the following:

- impact on users of the financial statements;
- matching to the physical flow of inventory;
- matching of revenue and expenses in current and future periods;
- consistency with how the business is managed, including how operations are monitored;
- comparability with other segments, components, or regions of the entity;
- comparability with industry peers; and
- general economic trends (e.g. declining or increasing prices).

Because of the IRS conformity requirement, a change from LIFO to another cost flow assumption would also be required for income tax purposes. [IRC §472(c)]

See sections 3.3.20 and 6.2 of KPMG Handbook, [Accounting changes and error corrections](#), for additional guidance on preferability requirements and preferability letters, respectively.

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### Example 3.3.70

#### Changing cost flow assumptions – LIFO to FIFO

ABC Corp, a manufacturing entity, has historically applied LIFO to its domestic inventories, with all international inventories using FIFO. ABC is assessing whether a change in cost flow assumption from LIFO to FIFO is preferable. In making this determination, it considers the following factors:

- FIFO better matches the physical flow of inventory;
- FIFO better reflects the current value of inventory on the balance sheet;
- FIFO more closely reflects how the business is managed;
- changing to FIFO for the domestic inventories would align the domestic and international inventories; and
- FIFO is used by a majority of the entity's industry peers and is therefore more comparable.

Based on this assessment, ABC determines that a change in cost flow assumptions from LIFO to FIFO is preferable.

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### Question 3.3.310

#### Can an entity change how it applies LIFO?

**Background:** In adopting LIFO (see [section 3.3.30](#)), an entity: [LIP.9-16]

- selects a specific approach (either the specific goods or dollar value approach);
- selects a computational technique (double extension, link chain, internal index, external index); and
- determines the number and content of the LIFO pools.

Any change in these items is a change in the application of LIFO.

**Interpretive response:** It depends.

A change in accounting principle also includes the method of applying a principle. Therefore, a change in LIFO application is a change in accounting principle and must be preferable unless the change is necessitated by transactions or events substantially different from those previously occurring. [LIP.9-20, 250-10 Glossary]



An example of a change necessitated by transactions that would not require a preferability assessment is when an entity completes a business combination and adds LIFO pools related to the acquired entity. In that case the addition of LIFO pools would not represent a change in LIFO application.

## 3.4 Inventory exchange transactions\*\*

### 3.4.10 Overview



#### Excerpt from ASC 330-10

##### > Purchases and Sales of Inventory with the Same Counterparty

**30-16** For a discussion of the initial measurement of inventory purchased from an entity to which it also sells inventory in the same line of business, see paragraphs 845-10-55-10 through 55-26.



#### Excerpt from ASC 845-10

##### General

##### > Nonmonetary Exchanges

**05-6** Many nonmonetary transactions are exchanges of nonmonetary assets or services with another entity. Examples include the following:

- a. Exchange of product held for sale in the ordinary course of business (inventory) for other property as a means of selling the product to a customer.
- b. Exchange of product held for sale in the ordinary course of business (inventory) for similar product as an accommodation – that is, at least one party to the exchange reduces transportation costs, meets immediate inventory needs, or otherwise reduces costs or facilitates ultimate sale of product—and not as a means of selling the product to a customer.

##### > Transactions

**15-4** The guidance in the Nonmonetary Transactions Topic does not apply to the following transactions: ...

- j. The transfer of goods or services in a **contract** with a customer within the scope of Topic 606 on **revenue** from contracts with customers in exchange for noncash consideration (see paragraphs 606-10-32-21 through 32-24)

##### Purchases and Sales of Inventory with the Same Counterparty

**05-8** The Purchases and Sales of Inventory with the Same Counterparty Subsections provide guidance for situations in which an entity sells inventory to another entity from which it also purchases inventory to be sold in the same

line of business. The inventory purchase and sales transactions may be pursuant to a single arrangement or separate arrangements, and the inventory purchased or sold may be in the form of raw materials, work-in-process, or finished goods.

> Overall Guidance

**15-5** The Purchases and Sales of Inventory with the Same Counterparty Subsections follow the same Scope and Scope Exceptions as outlined in the General Subsection of this Subtopic, see paragraph 845-10-15-1, with specific transaction exceptions noted below.

> Transactions

**15-8** The guidance in the Purchases and Sales of Inventory with the Same Counterparty Subsections does not apply to inventory purchases and sales arrangements that are accounted for as derivatives in accordance with Topic 815 on derivatives and hedging.

**15-9** The Purchases and Sales of Inventory with the Same Counterparty Subsections do not address whether transactions that are reported at fair value qualify for revenue recognition. See the Exchanges Involving Monetary Consideration Subsection of Section 845-10-15 for guidance regarding the extent of boot (that is, net cash exchanged) that shall be considered when determining whether the inventory purchase and sales transactions are monetary or nonmonetary in nature.

### Exchanges Involving Monetary Consideration

**05-11** The Exchanges Involving Monetary Consideration Subsections provide guidance on the level of monetary consideration in a nonmonetary **exchange** that causes the transaction to be considered monetary in its entirety and, therefore, outside the scope of this Subtopic.

> Transactions

**25-6** An **exchange** of nonmonetary assets that would otherwise be based on recorded amounts but that also involves monetary consideration (boot) shall be considered monetary (rather than nonmonetary) if the boot is significant. Significant shall be defined as at least 25 percent of the fair value of the exchange. If the boot in a transaction is less than 25 percent, the pro rata gain recognition guidance in paragraph 845-10-30-6 shall be applied by the receiver of boot, and the payer of boot would not recognize a gain.

## 20 Glossary

### Exchange

An exchange (or exchange transaction) is a reciprocal transfer between two entities that results in one of the entities acquiring assets or services or satisfying liabilities by surrendering other assets or services or incurring other obligations.



## Excerpt from ASC 606-10

### > Transactions

**15-2** An entity shall apply the guidance in this Topic to all **contracts with customers**, except the following: ...

- e. Nonmonetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Topic would not apply to a contract between two oil companies that agree to an exchange of oil to fulfill demand from their customers in different specified locations on a timely basis. Topic 845 on nonmonetary transactions may apply to nonmonetary exchanges that are not within the scope of this Topic.

### 20 Glossary

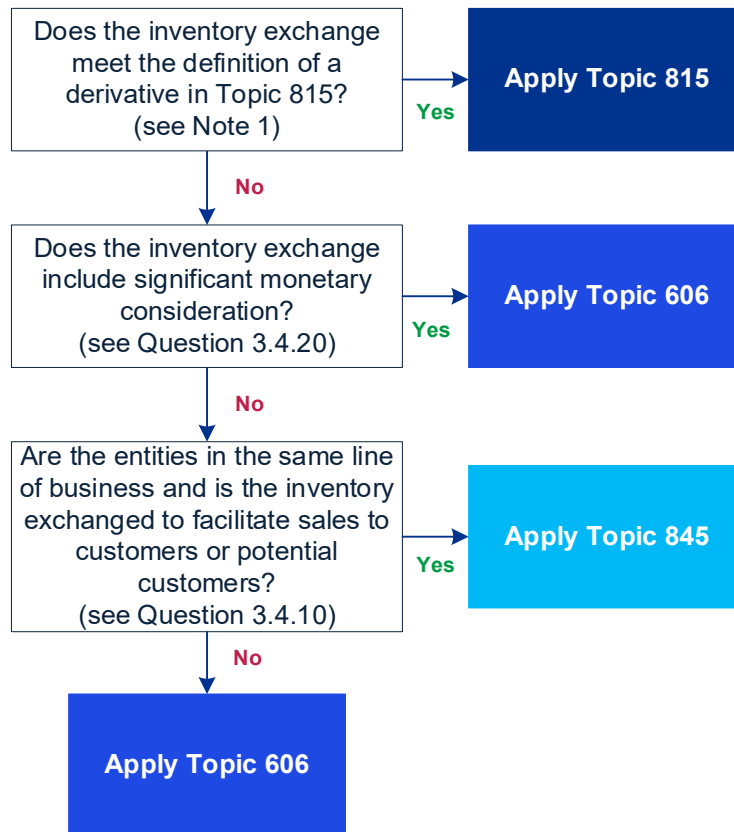
#### Customer

A party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration.

Topic 330-10 refers to Topic 845 for guidance on the accounting for certain types of inventory exchanges with a counterparty (under the heading 'Purchases and Sales of Inventory with the Same Counterparty'). These transactions typically entail a transfer of inventory held and sold in the ordinary course of business by one entity to another entity in a similar line of business. The purpose of these transactions is to help facilitate the transfer of inventory to customers, and they generally benefit both parties. [\[845-10-05-8\]](#)

Topic 845 inventory exchange guidance does not apply if the exchange meets the definition of a derivative in Topic 815. Further, Topic 845 scopes out an exchange that is in the scope of Topic 606. At the same time, Topic 606 explicitly scopes out nonmonetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers, which are in the scope of Topic 845. While this may appear to be a circular reference, the effect is that the Topic 845 guidance on inventory exchanges only applies when other guidance (e.g. Topics 606 or 815) does not apply. [\[845-10-15-8, 15-4\(j\), 606-10-15-2\(e\)\]](#)

The following decision tree summarizes the analysis to evaluate which guidance to apply to inventory exchanges.



Note 1: See chapters 2 and 3 of KPMG Handbook, [Derivatives and hedging](#), for guidance on evaluating whether inventory purchases and sales arrangements are derivatives in the scope of Topic 815.

### Other considerations

An entity also needs to determine whether two or more transactions with the same counterparty constitute a single unit of account for purposes of applying the inventory exchange guidance. See [section 3.4.20](#) for additional guidance.



### Question 3.4.10

What types of inventory exchange transactions are considered to be in the same line of business and to facilitate sales to customers or potential customers?

**Background:** After the adoption of Topic 606, most nonmonetary inventory transactions are in the scope of that Topic. However, paragraph 606-10-15-2(e) specifically scopes out nonmonetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers noting that Topic 845 may apply.

**Interpretive response:** This Topic 606 scope out only applies to nonmonetary inventory exchanges where both of the following elements are present: [\[606-10-15-2\(e\)\]](#)

- the exchange is for inventory in the same line of business; and
- the inventory is exchanged to facilitate sales to customers or potential customers.

The first element requires that the parties to the exchange be in the same line of business which implies there should be some degree of similarity between the inventory transferred and the inventory received. Examples in Topic 845 include oil companies exchanging different grades of oil, and car dealers exchanging different models of cars/trucks. While the inventory exchanged does not need to be identical, judgment may be required to determine if dissimilar inventory exchanged would be considered to be in the same line of business. [845-10-55-10 – 55-24]

The second element requires that the inventory exchanged is expected to be sold on to a customer or potential customer. Additional processing or transformation of the inventory can occur prior to the ultimate sale to the customer; however, this requirement is not met if the entity expects to use the acquired inventory in its own operations.

The underlying principle for this scope out of Topic 606 is that nonmonetary exchanges of inventory that are solely to facilitate sales to customers lack commercial substance or are for logistical or economic convenience (e.g. to reduce transportation costs). Therefore, any profit should be deferred until the sale to the ultimate customer, who is not a party to the exchange, occurs. This scope out avoids recognizing revenue twice for the same inventory (once for the exchange of inventory and then again for the sale of inventory to the ultimate customer). [ASU 2014-09.BC58]

We generally expect Topic 606 will apply to arrangements where an entity transfers finished goods for the receipt of raw materials or WIP to be used in its manufacturing process. These exchanges are not made to facilitate sales to customers for the entity transferring the finished goods. Instead, finished goods are outputs of an entity's ordinary activities such that the counterparty is a customer. In exchange for the finished goods, the entity receives noncash consideration in the form of raw materials or WIP. The entity would not apply the fair value guidance in Topic 845 (see [section 3.4.30](#)). [845-10-15-5]

In contrast, entities may exchange the same type of inventory within the same line of business (e.g. finished goods exchanged for finished goods) to facilitate sales to their customers. This type of exchange, if nonmonetary, is outside the scope of Topic 606 and in the scope of Topic 845 as it meets the required elements to be scoped out of Topic 606.

See KPMG Handbook, [Revenue recognition](#), Questions 2.3.120 and 2.3.125, for additional discussion of nonmonetary exchanges that are in the scope of Topic 606 as well as section 5.6 for guidance on accounting for noncash consideration in a contract with a customer.

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### Question 3.4.20

When is monetary consideration (boot) significant enough to result in the transaction being accounted for as a monetary instead of a nonmonetary transaction?

**Interpretive response:** The amount of the monetary consideration (boot) in an exchange dictates if an exchange is accounted for as a monetary or nonmonetary transaction. Topic 845 provides a bright line: if the boot is at least 25% of the fair value of the exchange, the exchange is considered monetary instead of nonmonetary and accounted for outside of Topic 845. For monetary transactions involving inventory, Topic 606 would apply. [845-10-25-6]

## 3.4.20 Combining transactions



### Excerpt from ASC 845-10

#### Purchases and Sales of Inventory with the Same Counterparty

> Transactions

**15-6** The guidance in the Purchases and Sales of Inventory with the Same Counterparty Subsections applies to all inventory purchase and sales arrangements, including the following transactions:

- a. Two or more inventory purchase and sales transactions with the same counterparty that are entered into in contemplation of one another and are combined
- b. Situations in which one inventory transaction is legally contingent upon the performance of another inventory transaction with the same counterparty. In these situations the two transactions are deemed to have been entered into in contemplation of one another and would be considered a single **exchange** transaction subject to the scope of the Purchases and Sales of Inventory with the Same Counterparty Subsections.

**15-7** The issuance of invoices and the exchange of offsetting cash payments is not a factor in determining whether two or more inventory purchase and sales transactions with the same counterparty shall be considered as a single exchange transaction subject to the scope of the Purchases and Sales of Inventory with the Same Counterparty Subsections.

**25-4** In situations in which an inventory transaction is not legally contingent upon the performance of another inventory transaction with the same counterparty, the following factors (referred to as indicators) may indicate that a purchase transaction and a sales transaction were entered into in contemplation of one another:

- a. There is a specific legal right of offset of obligations between counterparties involved in inventory purchase and sales transactions. The ability to offset the payable(s) and receivable(s) related to the separately documented

inventory purchase and sales transactions indicates that there is a link between them and, therefore, it is an indicator that the separately documented inventory transactions were entered into in contemplation of one another. This indicator is more relevant to settlement provisions relating to inventory purchase and sales transactions that are specifically identified (specified legal right of offset) by both counterparties than to inventory transactions that are netted as part of a master netting agreement that encompasses all transactions (inventory and noninventory) between the two counterparties.

- b. Inventory purchase and sales transactions with the same counterparty are entered into simultaneously. If an inventory purchase transaction is simultaneously entered into with an inventory sales transaction with the same counterparty that is an indication that the transactions were entered into in contemplation of one another.
- c. Inventory purchase and sales transactions were entered into at terms that were off-market when the arrangement was agreed to between counterparties. If an entity enters into an off-market inventory transaction with a counterparty, that is an indication that the transaction is linked to, and entered into, in contemplation of another inventory transaction with that same counterparty. This indicator may be more relevant for transactions with products that have readily determinable market prices, such as **exchange**-traded commodities, than for transactions with products that are subject to greater discretionary pricing.
- d. Relative certainty that reciprocal inventory transactions with the same counterparty will occur. An entity may sell inventory to a counterparty and enter into another arrangement with that same counterparty whereby that counterparty may, but is not contractually required to, deliver an agreed-upon inventory amount. If that counterparty chooses to deliver its product to the entity, the entity is obligated to purchase that product. The more certain it is that both inventory transactions will occur, the stronger the indication that the two inventory transactions were entered into in contemplation of one another.

None of the above indicators taken individually is determinative nor is the list all-inclusive.

In general, inventory transactions with the same counterparty are combined and accounted for as a single unit of account under Topic 845 if they are entered into in contemplation of one another. [\[845-10-15-6\]](#)



### Question 3.4.30

When are two or more inventory purchase and sale transactions with the same counterparty considered a single exchange transaction in Topic 845?

**Interpretive response:** There are two types of arrangements in which transactions with the same counterparty are considered to be entered into in contemplation of one another in Topic 845: [\[845-10-15-6\]](#)

- an arrangement in which an inventory transaction is legally contingent on the performance of another inventory transaction with the same counterparty; and
- an arrangement in which certain indicators suggests it is appropriate to combine the transactions.

Inventory transactions that are legally contingent on the performance of another inventory transaction with the same counterparty are considered to have occurred in contemplation of one another and therefore are considered a single exchange transaction subject to Topic 845. [845-10-15-6]

When an inventory transaction with a counterparty is not legally contingent on the performance of another inventory transaction with the same counterparty, Topic 845 provides indicators that if present suggest that inventory transactions are to be combined with the same counterparty. The indicators are: [845-10-25-4]

- there is a specific legal right to offset obligations between counterparties involved in inventory purchase and sale transactions;
- the inventory purchase and sale transactions are entered into simultaneously with the same counterparty;
- the inventory purchase and sale transactions are entered into at off-market terms; and
- there is relative certainty that reciprocal inventory transactions with the same counterparty will occur.

The issuance of invoices and the exchange of offsetting cash payments is not a factor considered in this determination. The indicators are not individually determinative, nor are they all-inclusive. Other facts and circumstances may influence the determination of whether the transactions are entered into in contemplation of one another. [845-10-15-7, 25-4]

See Subtopic 845-10's Examples 1 and 2 in [section 3.4.40](#) for examples of combining transactions.

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### 3.4.30 Carryover basis accounting



#### Excerpt from ASC 845-10

##### **Purchases and Sales of Inventory with the Same Counterparty**

**25-5** If two or more inventory purchase and sales transactions are combined for the purposes of applying the guidance in this Subtopic, an entity shall apply the guidance in paragraphs 845-10-30-15 through 30-16.

**30-15** A nonmonetary **exchange** whereby an entity transfers finished goods inventory in exchange for the receipt of raw materials or work-in-process inventory within the same line of business is not an exchange transaction to facilitate sales to customers for the entity transferring the finished goods, as



described in paragraph 845-10-30-3(b), and, therefore, shall be recognized by that entity at fair value if both of the following conditions are met:

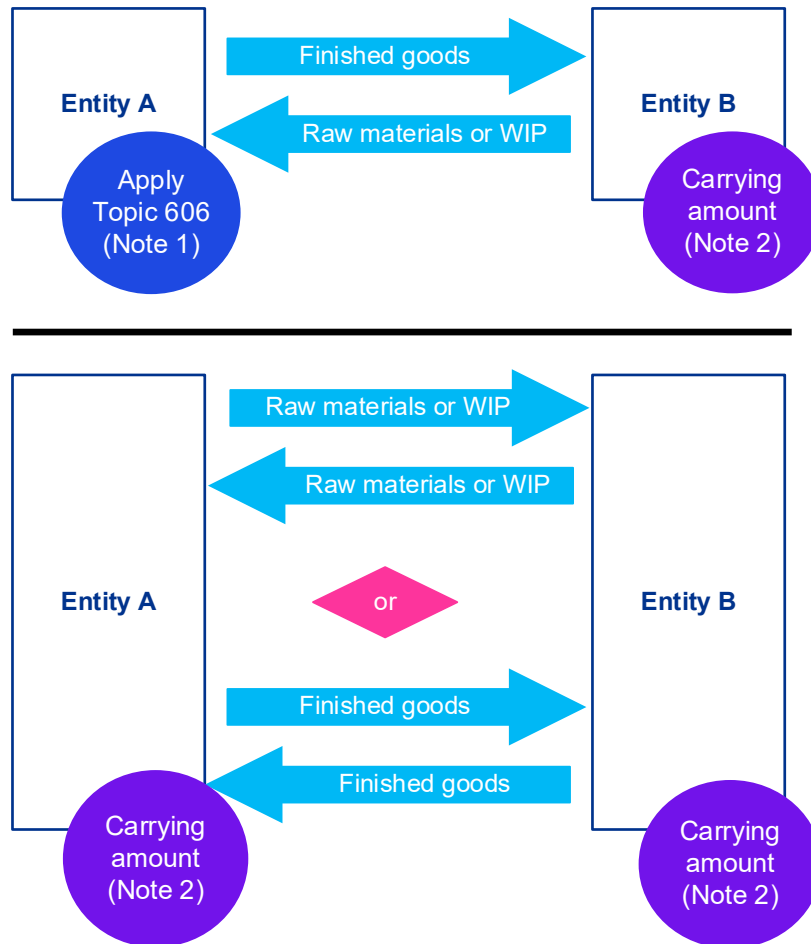
- a. Fair value is determinable within reasonable limits.
- b. The transaction has commercial substance (see paragraph 845-10-30-4).

**30-16** All other nonmonetary exchanges of inventory within the same line of business shall be recognized at the carrying amount of the inventory transferred. That is, a nonmonetary exchange within the same line of business involving either of the following shall not be recognized at fair value:

- a. The transfer of raw materials or work-in-process inventory in exchange for the receipt of raw materials, work-in-process, or finished goods inventory
- b. The transfer of finished goods inventory for the receipt of finished goods inventory.

**45-1** The classification of inventory as raw materials, work-in-process, and finished goods for purposes of the Purchases and Sales of Inventory with the Same Counterparty Subsections shall be the same classification that an entity uses for external financial reporting purposes.

The following diagram illustrates potential nonmonetary inventory exchange transactions and the guidance that applies (diagram assumes transaction is not accounted for as a derivative in the scope of Topic 815).



Note 1: Paragraph 845-10-30-15 requires fair value accounting when an entity transfers finished goods inventory for raw materials or WIP inventory. However, we believe it would be rare for an entity to apply this fair value guidance to an inventory exchange because inventory exchanges like those described are generally in the scope of Topic 606 or Topic 815 and therefore outside the scope of Topic 845. The non-cash consideration guidance in Topic 606 or the fair value guidance in Topic 815 would therefore apply. [845-10-30-15]

Note 2: Inventory exchanges with the same counterparty in the same line of business to facilitate sales to customers or potential customers for which Topic 845 applies are accounted for on a carryover basis – i.e. the inventory received is recognized at the carrying amount of the inventory transferred. [845-10-30-16]

An entity is required to use the same classification of inventory as raw material, WIP and finished goods for this assessment as it uses for external financial reporting purposes. [845-10-45-1]

### 3.4.40 FASB examples

The following excerpts reproduce the examples in Topic 845 illustrating some of the concepts in this section using two industries.

- Example 1: Inventory transactions between oil entities
- Example 2: Inventory transactions between auto dealers



### Excerpt from ASC 845-10

#### Purchases and Sales of Inventory with the Same Counterparty

##### > Illustrations

**55-10** The application of the indicators (see paragraph 845-10-25-4) depends on the relative facts and circumstances and requires significant judgment. The assessment of that judgment in a given fact pattern is based on the assumed facts; accordingly, judgment will vary in differing fact patterns.

- > Example 1: Sale and Purchase of Inventory Between Two Oil Entities

**55-11** This Example illustrates the following:

- Whether the described transaction shall be viewed as a single **exchange** transaction as discussed in paragraphs 845-10-25-4 through 25-5
- Whether the nonmonetary exchange of inventory within the same line of business shall be recognized at fair value as discussed in paragraphs 845-10-30-15 through 30-16.

**55-12** Oil Entity A produces heavy crude oil (dense, viscous crude oil) in California and has refining operations in other parts of the United States including West Texas. Given its supply-chain management needs, Entity A would like to acquire West Texas intermediate crude oil in the most cost-efficient manner.

**55-13** As part of its analysis in determining the most cost-efficient approach to acquiring West Texas intermediate crude oil, Entity A uses the following available information regarding the current oil needs (demand) and excess oil capacity (supply) of the various oil entities.

Entity	Demand/Location	Supply/Location
Entity A	West Texas intermediate crude oil/Texas	Heavy crude oil/California
Entity B	Heavy crude oil/California	Sweet crude oil/Oklahoma
Entity C	Sweet crude oil/Oklahoma	West Texas intermediate crude oil/Texas

**55-14** Entity A enters into an arrangement to sell Entity B a specified quantity of its California production and enters into a separate arrangement at the same time to purchase a specified quantity of Entity B's sweet crude oil production in Oklahoma. Also at the same time, Entity A enters into an arrangement to sell Entity C the sweet crude oil in Oklahoma purchased from Entity B, and enters into a separate arrangement at the same time to acquire a specified quantity and quality of West Texas intermediate crude oil from Entity C for its West Texas refining operations.

**55-15** Entity A issues invoices and purchase orders for each transaction and each is gross-cash settled at market prices. Although the quantities differ, there is an insignificant difference in total value of oil being exchanged in each transaction. Entity A would not sell its inventory to Entity B or Entity C without an understanding that the counterparty will perform. Entity A considers all crude oil to be the same class of inventory (that is, raw materials) for purposes of financial reporting. Entity A does not account for these arrangements as derivatives; therefore, the guidance in Subtopic 815-10 is not applicable.

**55-16** Based on an evaluation of the circumstances, Entity A's inventory purchase and sales transactions with Entity B were entered into in contemplation of one another because the sole purpose of selling inventory was to procure inventory from the same counterparty in the most cost-efficient manner. While it is a matter of judgment as to whether Entity A entered into its inventory purchase and sales transactions with Entity B in contemplation of one another, certain factors support this assessment. For instance, the transaction to sell inventory was entered into simultaneously with the transaction to purchase inventory. In addition, the sole purpose of selling heavy crude oil inventory is to facilitate the purchase of sweet crude oil inventory. Although the purpose of a transaction is not explicitly identified as an indicator in the consensus guidance, it is nevertheless relevant to the assessment of whether the inventory transactions were entered into in contemplation of one another. While the inventory transactions were not settled on a net basis nor were they entered into at off-market prices, the other indicators, together with the specific facts and circumstances described above, provide persuasive evidence that the transactions were entered into in contemplation of one another. Therefore, although each transaction was separately documented and gross-cash settled at market prices, the inventory transactions should be deemed a single exchange between Entity A and Entity B for purposes of applying the guidance in the Purchases and Sales of Inventory with the Same Counterparty Subsections. From the perspective of Entity A, an analysis of the inventory purchase and sales transactions between Entity A and Entity C would result in the same conclusion as the analysis of the transactions between Entity A and Entity B.

**55-17** Entity A would recognize the single exchange transactions with both Entity B and Entity C at carryover basis because, from Entity A's perspective, the same class of inventory (raw materials for raw materials) was surrendered and received.

• > Example 2: Sale and Purchase of Inventory Between Auto Dealers

**55-18** This Example illustrates the following:

- a. Whether the described transaction shall be viewed as a single exchange transaction as discussed in paragraphs 845-10-25-4 through 25-5
- b. Whether the nonmonetary exchange of inventory within the same line of business shall be recognized at fair value as discussed in paragraphs 845-10-30-15 through 30-16.

**55-19** Dealer A in Suburb X has an excess inventory of cars relative to near-term expected demand and does not have enough pickup trucks to meet near-term expected demand. Dealer B in Suburb Y has an excess inventory of

pickup trucks and not enough cars to meet near-term expected demand. Dealer A negotiates an arrangement to sell a specified number of cars to Dealer B and, although not committed to do so, Dealer B may deliver pickup trucks of equivalent value at wholesale prices to Dealer A. Dealer A must purchase pickup trucks from Dealer B if Dealer B chooses to deliver the trucks the following week. Historically, Dealer B has always delivered the trucks to Dealer A under these types of arrangements. At the time Dealer A delivers its cars to Dealer B, Dealer A believes Dealer B will ship the trucks the following week. Each transaction is separately documented and gross-cash settled at wholesale prices on the date of delivery.

**55-20** Based on an evaluation of the circumstances, Dealer A's inventory sales transaction was entered into in contemplation of a reciprocal inventory purchase transaction from Dealer B because, as a condition of selling inventory to Dealer B, Dealer A must accept delivery of trucks from Dealer B at a later date, if Dealer B chooses to make such a delivery. Consistent with past history, when Dealer A enters into this kind of arrangement with Dealer B, Dealer A fully expects to purchase the trucks. Therefore, the sale of the cars should be considered combined with the purchase of the trucks.

**55-21** While it is a matter of judgment as to whether Dealer A entered into its inventory sales transaction in contemplation of the inventory purchase transaction, certain factors support this assessment. For instance, a transaction to sell cars to Dealer B was entered into with an anticipated transaction to purchase trucks from Dealer B (if Dealer B chooses to deliver the trucks) simultaneously. Even though the transaction to purchase trucks depended on whether Dealer B chose to deliver, Dealer A believed that there was a high degree of certainty that Dealer B would deliver. In addition, because the inventory pricing is at wholesale, it indicates that these transactions were not on the same terms as transactions with their typical retail customers. While this last factor is not related to a specific indicator (see guidance in paragraph 845-10-25-4), it is relevant in assessing the nature of the relationship between Dealer A and Dealer B in the context of the purchase and sales transactions. While Dealer A and Dealer B did not agree to net-settle the inventory transactions, the expectation of a reciprocal purchase transaction from Dealer B in the context of the relationship between Dealer A and Dealer B indicates that the sale transaction by Dealer A to Dealer B was entered into in contemplation of the purchase transaction from Dealer B. Therefore, although each transaction was separately documented and gross-cash settled, these inventory transactions should be deemed a single exchange for purposes of applying the Purchases and Sales of Inventory with the Same Counterparty Subsection of Section 845-10-30.

**55-22** When evaluating the inventory transactions as a single nonmonetary exchange, Dealer A would recognize the transactions at carryover basis because the same class of inventory is being exchanged (finished goods exchanged for finished goods).

## 4. Subsequent measurement

### Detailed contents

New item added in this edition \*\*

#### 4.1 How the standard works

#### 4.2 Overview

##### Questions

- 4.2.10 When is inventory tested for impairment?
- 4.2.20 What evidence may indicate that inventory is impaired?
- 4.2.30 What impairment methods apply?

#### 4.3 The unit of account

##### Questions

- 4.3.10 When testing inventory for impairment, what is the appropriate unit of account?
- 4.3.20 How is LIFO inventory grouped into units of account?

#### 4.4 Testing methods

- 4.4.10 Lower of cost and NRV method
- 4.4.20 LCM method

##### Questions

- 4.4.10 Are sales incentives included in expected selling price when calculating NRV?
- 4.4.20 What are reasonably predictable costs for completion, disposal and transportation when calculating NRV?
- 4.4.30 Are selling costs included when calculating NRV?

##### Example

- 4.4.10 Contract approval and customary business practice

#### 4.5 Restoration of previously written down inventory value

##### Questions

- 4.5.10 Can inventory previously impaired be restored to its original historical cost?
- 4.5.20 Is an impairment recorded for temporary declines in market value or NRV?

##### Example

- 4.5.10 Impairment recovery in subsequent periods \*\*

**4.6 Other considerations**

- 4.6.10 Consideration payable to a customer
- 4.6.20 Third-party contributions
- 4.6.30 Hedged inventory
- 4.6.40 Purchase commitments
- 4.6.50 Subsequent events
- 4.6.60 Foreign currency

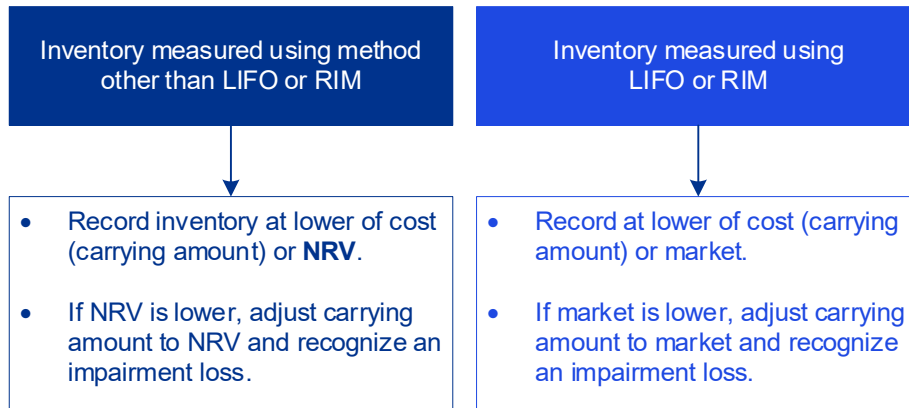
**Questions**

- 4.6.10 How is inventory sold below cost accounted for when contributions are received from other parties for the difference?
- 4.6.20 Are losses as a result of firm purchase commitments evaluated similarly to on-hand inventory?
- 4.6.30 Are all subsequent events affecting inventory valuation recognized subsequent events?

## 4.1 How the standard works

Inventory is generally carried at cost until it either becomes impaired or is sold or otherwise disposed of.

The primary accounting consideration when subsequently measuring inventory is whether the inventory has been impaired. Inventory is tested for impairment at each reporting date, at a minimum. To test for impairment, an entity chooses a unit of account based on a reasonable grouping of inventory, applied either directly to each item (i.e. an item-by-item approach) or to a grouping of items. Inventory is impaired when its carrying amount exceeds either net realizable value (NRV) or market, depending on the cost flow assumption used.





## 4.2 Overview



### Excerpt from ASC 330-10

**35-1A** The subsequent measurement of **inventory** depends on the cost method and is different for the following:

- a. Inventory measured using any method other than last-in, first-out (LIFO) or the retail inventory method (see paragraph 330-10-35-1B)
- b. Inventory measured using LIFO or the retail inventory method (see paragraphs 330-10-35-1C through 35-7).

If inventory becomes impaired, its carrying amount is reduced by the impairment loss. There is specific guidance in Topic 270 for subsequent measurement of inventory in interim periods (see [section 4.5](#)).



#### Question 4.2.10

When is inventory tested for impairment?

**Interpretive response:** Inventory is tested for impairment when evidence exists that the value of the inventory is less than its cost. At a minimum, we believe inventory should be reviewed for evidence of impairment as of each reporting date (i.e. annual and interim). [330-10-35-1B – 35-1C]

Impairment charges are generally recorded in the period the impairment occurs. There is an exception for temporary declines during interim periods (see [Question 4.5.20](#)). [330-10-35-1B – 35-1C, 35-4, 55-2]



#### Question 4.2.20

What evidence may indicate that inventory is impaired?

**Interpretive response:** The following are examples of evidence that may indicate inventory is impaired: [330-10-35-1B – 35-1C]

- damage/physical deterioration;
- obsolescence;
- changes in price levels;
- market conditions; and
- customer attrition.



**Question 4.2.30**  
What impairment methods apply?

**Interpretive response:** It depends on the inventory cost flow assumption used (see [section 3.3](#)). [330-10-35-1A]

<b>Inventory measured using a method other than LIFO or RIM</b>	Lower of cost and NRV method. Record inventory at the lower of cost (carrying amount) and NRV (see <a href="#">section 4.4.10</a> ). [330-10-35-1B]
<b>Inventory measured using LIFO or RIM</b>	Lower of cost or market (LCM) method. Record inventory at the lower of cost (carrying amount) or market value (see <a href="#">section 4.4.20</a> ). [330-10-35-1C]

## 4.3 The unit of account



Excerpt from ASC 330-10

> Subsequent Measurement Guidance Applicable to All Inventory

**35-8** Depending on the character and composition of the inventory, the guidance in paragraphs 330-10-35-1A through 35-7 that is applicable to the inventory being measured may properly be applied either directly to each item or to the total of the inventory (or, in some cases, to the total of the components of each major category). The method shall be that which most clearly reflects periodic income.

**35-9** The purpose of reducing the carrying amount of inventory is to reflect fairly the income of the period. The most common practice is to apply the applicable subsequent measurement guidance separately to each item of the inventory. However, if there is only one end-product category, the application of the applicable subsequent measurement guidance to inventory in its entirety may have the greatest significance for accounting purposes. Accordingly, the remeasurement of individual items may not always lead to the most useful result if the market value (for inventory measured using LIFO or the retail inventory method) or net realizable value (for all other inventory) of the total inventory is not below its cost. This might be the case, for example, if selling prices are not affected by temporary or small fluctuations in current costs of purchase or manufacture.

**35-10** Similarly, where more than one major product or operational category exists, the application of the applicable subsequent measurement guidance to the total of the items included in such major categories may result in the most useful determination of income. When no loss of income is expected to take place as a result of a reduction of cost prices of certain goods because others

forming components of the same general categories of finished products have a market value (for inventory measured using LIFO or the retail inventory method) or net realizable value (for all other inventory) equally in excess of cost, such components need not be adjusted to the extent that they are in balanced quantities. Thus, in such cases, the guidance on subsequent measurement may be applied directly to the totals of the entire inventory, rather than to the individual inventory items, if they enter into the same category of finished product and if they are in balanced quantities, provided the procedure is applied consistently from year to year.

**35-11** To the extent, however, that the stocks of particular materials or components are excessive in relation to others, the more widely recognized procedure of applying the guidance on subsequent measurement to the individual items constituting the excess shall be followed. This would also apply in cases in which the items enter into the production of unrelated products or products having a material variation in the rate of turnover. Unless an effective method of classifying categories is practicable, the rule shall be applied to each item in the inventory.

**35-12** See paragraphs 330-10-30-9 through 30-14 for guidance on inventory pricing methods.



### Question 4.3.10

When testing inventory for impairment, what is the appropriate unit of account?

**Interpretive response:** It depends. An entity chooses the unit of account based on a reasonable grouping of inventory, applied either directly to each item (i.e. an item-by-item approach) or to a grouping of items. This requires an entity to consider its specific facts and circumstances to determine the most appropriate unit of account for clearly reflecting periodic income. [330-10-35-8]

While there can be significant judgment involved based on an entity's specific facts and circumstances, in practice the following are the units of account that may be appropriate: [330-10-35-9 – 35-12]

- item-by-item;
- product line;
- similar product relationships; or
- total inventory.

We believe that when there is an identified product obsolescence or product discontinuation, an item-by-item approach for the affected inventory is generally most appropriate.



### Question 4.3.20

How is LIFO inventory grouped into units of account?

**Interpretive response:** It depends. An entity chooses a unit of account based on a reasonable grouping of inventory (see [Question 4.3.10](#)). [LIP.6-12]

One natural grouping of LIFO inventory is the LIFO pool (see [Questions 3.3.100](#) and [3.3.120](#)). We believe that if an entity has more than one pool, aggregating similar pools into a single unit of account may be appropriate. For example, similar pools may exist and be aggregated into one unit of account if the pools represent similar product lines or an integrated product relationship. [LIP.6-17]

In contrast, if the pools are not similar, we believe they should not be aggregated into a single unit of account. In addition, an item-by-item approach is generally used when there is identified product obsolescence or a discontinuation of products (see [Question 4.3.10](#)). [LIP.6-12, 6-18]

#### Specific unit of account issue with LIFO increments

An entity using LIFO decides whether to apply the LCM method to increments in a pool or to the total cost of the pool. This issue is highly dependent on an entity's facts and circumstances. [LIP.6-23]

For example, if the market value for the units in inventory declines below the cost associated with current increments but not below the total cost of the LIFO pool, the entity generally determines the LCM of the total inventory costs in the pool. However, based on an entity's specific facts and circumstances (e.g. if it expects to liquidate current increments in the following year), the entity may record a lower LCM adjustment for the current increments. [LIP.6-23]

## 4.4 Testing methods

### 4.4.10 Lower of cost and NRV method



#### Excerpt from ASC 330-10

> Inventory Measured Using Any Method Other Than LIFO or the Retail Inventory Method

**35-1B** Inventory measured using any method other than LIFO or the retail inventory method (for example, inventory measured using first-in, first-out (FIFO) or average cost) shall be measured at the lower of cost and **net realizable value**. When evidence exists that the net realizable value of inventory is lower than its cost, the difference shall be recognized as a loss in earnings in the period in which it occurs. That loss may be required, for

example, due to damage, physical deterioration, obsolescence, changes in price levels, or other causes.

> Loss Due to Sales Incentive

**35-13** The offer of a sales incentive that will result in a loss on the sale of a product may indicate an impairment of existing inventory under this Subtopic.

## 20 Glossary

### Net Realizable Value

Estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

Inventory measured using any cost flow assumption other than LIFO or RIM (e.g. FIFO, average cost) is tested for impairment using the lower of cost and NRV method. [330-10-35-1B]

If NRV is less than the inventory's carrying amount, an impairment has occurred for the difference. This can occur for a number of reasons, including damage, physical deterioration, obsolescence and changes in price levels. [330-10-35-1B]

There are two elements to inventory's NRV: [330-10 Glossary]

- estimated selling price in the ordinary course of business (e.g. not in a liquidation sale); less
- reasonably predictable costs of completion, disposal and transportation.



### Question 4.4.10

Are sales incentives included in expected selling price when calculating NRV?

**Interpretive response:** Yes. NRV is the estimated selling price of the inventory in the ordinary course of business less reasonably predictable costs of completion, disposal and transportation. Therefore, an entity considers sales incentives when estimating the expected selling price of the inventory. Because a sales incentive decreases NRV, it increases the potential for impairment. [330-10-35-13]



### Question 4.4.20

What are reasonably predictable costs for completion, disposal and transportation when calculating NRV?

**Interpretive response:** While Topic 330 does not identify which specific costs to include, we believe an entity should generally include costs necessary to make the sale in the ordinary course of business.

Costs of completion include all inventoriable costs incurred in the production or conversion of inventory to be available for sale (see [section 3.2](#)). Costs of

disposal and transportation include shipping and handling costs expected to be incurred to transport the inventory to the customer's location.

We believe a portion of the indirect overhead costs (e.g. general and administrative expenses and depreciation) that clearly relate to the production of inventory generally are inventoriable costs and should be included in calculating NRV. [330-10-35-1B, 30-8]



### Question 4.4.30

Are selling costs included when calculating NRV?

**Interpretive response:** We believe an entity should select an accounting policy, to be consistently applied, for the treatment of selling costs. Selling costs are not inventoriable costs, so they are not included in the costs of completion.

However, by its very nature, NRV is intended to calculate the value that will be retained by the entity as a result of the sale of its inventory. [330-10-30-8]

In the absence of specific guidance under US GAAP, some entities refer to IFRS® Accounting Standards to form a basis for their accounting policy. We have observed diversity in practice. Some entities include only direct selling costs, such as commissions on sales in NRV. Other entities include both direct and indirect selling costs. The latter approach is consistent with IAS 2 (inventories).

## 4.4.20

### LCM method



#### Excerpt from ASC 330-10

> Inventory Measured Using LIFO or the Retail Inventory Method

**35-1C** A departure from the cost basis of pricing inventory measured using LIFO or the retail inventory method is required when the utility of the goods is no longer as great as their cost. Where there is evidence that the utility of goods, in their disposal in the ordinary course of business, will be less than cost, whether due to damage, physical deterioration, obsolescence, changes in price levels, or other causes, the difference shall be recognized as a loss of the current period. This is generally accomplished by stating such goods at a lower level commonly designated as **market**.

**35-2** The cost basis of recording inventory ordinarily achieves the objective of a proper matching of costs and revenues. However, under certain circumstances cost may not be the amount properly chargeable against the revenues of future periods. A departure from cost is required in these circumstances because cost is satisfactory only if the utility of the goods has not diminished since their acquisition; a loss of utility shall be reflected as a charge against the revenues

of the period in which it occurs. Thus, in accounting for inventories, a loss shall be recognized whenever the utility of goods is impaired by damage, deterioration, obsolescence, changes in price levels, or other causes. The measurement of such losses for inventory measured using LIFO or the retail inventory method shall be accomplished by applying the rule of pricing inventories at the lower of cost or market. This provides a practical means of measuring utility and thereby determining the amount of the loss to be recognized and accounted for in the current period.

**35-3** The rule of lower of cost or market is intended to provide a means of measuring the residual usefulness of an inventory expenditure. The term market is therefore to be interpreted as indicating utility on the inventory date and may be thought of in terms of the equivalent expenditure which would have to be made in the ordinary course at that date to procure corresponding utility.

**35-4** As a general guide, utility is indicated primarily by the current cost of replacement of the goods as they would be obtained by purchase or reproduction. In applying the rule, however, judgment must always be exercised and no loss shall be recognized unless the evidence indicates clearly that a loss has been sustained. There are therefore exceptions to such a standard. Replacement or reproduction prices would not be appropriate as a measure of utility when the estimated sales value, reduced by the costs of completion and disposal, is lower, in which case the realizable value so determined more appropriately measures utility.

**35-5** Furthermore, when the evidence indicates that cost will be recovered with an approximately normal profit upon sale in the ordinary course of business, no loss shall be recognized even though replacement or reproduction costs are lower. This might be true, for example, in the case of production under firm sales contracts at fixed prices, or when a reasonable volume of future orders is assured at stable selling prices.

**35-7** Because of the many variations of circumstances encountered in inventory pricing, the definition of **market** is intended as a guide rather than a literal rule. It shall be applied realistically in light of the objectives expressed in this Subtopic and with due regard to the form, content, and composition of the inventory. For example, the retail inventory method, if adequate markdowns are currently taken, accomplishes the objectives described herein. It is also recognized that, if a business is expected to lose money for a sustained period, the inventory shall not be written down to offset a loss inherent in the subsequent operations.

## 20 Glossary

### Market

As used in the phrase lower of cost or market, the term market means current replacement cost (by purchase or by reproduction, as the case may be) provided that it meets both of the following conditions:

- a. Market shall not exceed the **net realizable value**
- b. Market shall not be less than net realizable value reduced by an allowance for an approximately normal profit margin.

Inventory measured using LIFO or RIM is tested for impairment under the LCM method. This means inventory is impaired when its market value is less than its carrying amount. [330-10-35-1C]

Market represents current replacement cost, which is the cost to purchase or reproduce the inventory. Further, the market value used to determine whether inventory has been impaired must fall between a specified ceiling and floor. [330-10 Glossary]

- **Ceiling:** market cannot exceed NRV (see section 4.4.10).
- **Floor:** market may not be less than NRV reduced by an allowance for an approximately normal profit margin.

### Example 4.4.10

#### Contract approval and customary business practice

This example illustrates how to apply the LCM method, the evaluation of market value under the LCM method and the relationship of replacement cost as compared to the ceiling and floor.

Inventory unit				
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Carrying amount (cost)	\$1.00	1.00	1.00	0.45
Market (current replacement cost)	0.55	0.65	0.45	0.40
NRV (ceiling)	0.60	0.60	0.60	0.60
NRV less normal profit margin (floor)	0.52	0.52	0.52	0.52
<b>LCM</b>	<b>0.55<sup>1</sup></b>	<b>0.60<sup>2</sup></b>	<b>0.52<sup>3</sup></b>	<b>0.45<sup>4</sup></b>

Notes:

1. Because replacement cost falls between the ceiling and floor, inventory is written down to replacement cost.
2. Replacement cost exceeds NRV (the ceiling). Because replacement cost (market) must fall between NRV and NRV less a normal profit margin, inventory is written down to NRV.
3. Replacement cost is less than NRV less normal profit margin. Because replacement cost (market) must fall between NRV and NRV less a normal profit margin, inventory is written down to NRV less normal profit margin.
4. Because carrying amount (cost) is less than NRV and NRV less a normal profit margin, no write down of inventory is necessary.



## 4.5 Restoration of previously written down inventory value



### Excerpt from ASC 330-10

#### > New Cost Basis

**35-14** In the case of goods which have been written down below cost at the close of a fiscal year, such reduced amount is to be considered the cost for subsequent accounting purposes. Paragraph 270-10-45-6 provides guidance for preparing interim financial statements.

#### • > Market Decline in Interim Period

**55-2** If near-term price recovery is uncertain, a decline in the market value (for inventory measured using LIFO or the retail inventory method) or **net realizable value** (for all other inventory) of inventory below cost during an interim period shall be accounted for consistent with annual periods, except as described in paragraph 270-10-45-6.



### Excerpt from ASC 270-10

#### • > Costs Associated with Revenue

**45-6** Practices vary in determining costs of inventory. For example, cost of goods produced may be determined based on standard or actual cost, while cost of inventory may be determined on an average, first-in, first-out (FIFO), or last-in, first-out (LIFO) cost basis. While entities generally shall use the same inventory pricing methods and make provisions for writedowns at interim dates on the same basis as used at annual inventory dates, the following exceptions are appropriate at interim reporting dates: ...

- c. Inventory losses from the application of the guidance on subsequent measurement in Subtopic 330-10 shall not be deferred beyond the interim period in which the decline occurs. Recoveries of such losses on the same inventory in later interim periods of the same fiscal year through market value recoveries (for inventory measured using LIFO or the retail inventory method) or net realizable value recoveries (for all other inventory) shall be recognized as gains in the later interim period. Such gains shall not exceed previously recognized losses. Some declines in the market value (for inventory measured using LIFO or the retail inventory method) or **net realizable value** (for all other inventory) of inventory at interim dates, however, can reasonably be expected to be restored in the fiscal year. Such temporary declines need not be recognized at the interim date since no loss is expected to be incurred in the fiscal year.



## Excerpt from SAB Topic 5.BB

**Inventory Valuation Allowance**

**Facts:** FASB ASC paragraph 330-10-35-1 (Inventory Topic), specifies that: "[a] departure from the cost basis of pricing the inventory is required when the utility of the goods is no longer as great as its cost. Where there is evidence that the utility of goods, in their disposal in the ordinary course of business, will be less than cost, whether due to physical deterioration, obsolescence, changes in price levels, or other causes, the difference shall be recognized as a loss of the current period. This is generally accomplished by stating such goods at a lower level commonly designated as market."

FASB ASC paragraph 330-10-35-14 indicates that "[i]n the case of goods which have been written down below cost at the close of a fiscal year, such reduced amount is to be considered the cost for subsequent accounting purposes."

Lastly, the FASB ASC Master Glossary provides "inventory obsolescence" as one of the items subject to a change in accounting estimate.

**Question:** Does the write-down of inventory to the lower of cost or market, as required by FASB ASC Topic 330, create a new cost basis for the inventory or may a subsequent change in facts and circumstances allow for restoration of inventory value, not to exceed original historical cost?

**Interpretive Response:** Based on FASB ASC paragraph 330-10-35-14, the staff believes that a write-down of inventory to the lower of cost or market at the close of a fiscal period creates a new cost basis that subsequently cannot be marked up based on changes in underlying facts and circumstances.<sup>59</sup>

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<sup>59</sup> See also disclosure requirement for inventory balances in Rule 5-02(6) of Regulation S-X.

**Question 4.5.10**

Can inventory previously impaired be restored to its original historical cost?

**Interpretive response:** It depends. Although it is inappropriate to restore inventory value in subsequent fiscal years, an entity may reverse the impairment taken during the same fiscal year if: [270-10-45-6(c)]

- the market price of that inventory recovers; and
- the gains do not exceed losses previously recognized in the same fiscal year.

The SEC staff believes a new cost basis (carrying amount) is established at the close of a fiscal year when inventory is written down for impairment during the

fiscal year and cannot be marked up based on changes in underlying facts and circumstances in subsequent periods. [SAB Topic 5.BB]

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### Question 4.5.20

Is an impairment recorded for temporary declines in market value or NRV?

**Interpretive response:** It depends. Topic 270 permits an entity to not recognize an impairment in an interim period if the decline in market value or NRV can be reasonably expected to be restored in the same fiscal year. [270-10-45-6(c)]

We believe that if an entity has substantial evidence that the decline is temporary and that the market value or NRV will recover before the inventory is sold (e.g. seasonality), an impairment should not be recorded.

However, an entity should not defer inventory losses from market declines beyond the interim period in which the decline occurs if a near-term price recovery is uncertain. [330-10-55-2]

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### Example 4.5.10\*\*

Impairment recovery in subsequent periods

This example illustrates how to apply the guidance on impairment recoveries. ABC Corp sells electronic components and costs its inventory using the FIFO inventory costing method. ABC had no impairments in the first half of 20X3.

#### Impairment in 20X3 Q3

ABC held inventory at an original cost of \$10,000. During the third quarter, ABC experienced unexpected pricing challenges in the electronic components market which is expected to continue for the foreseeable future. ABC assesses its inventory for impairment and determines the NRV of the inventory is \$7,000. Because the cost (\$10,000) exceeds NRV (\$7,000), and no reasonable expectation of NRV restoration in the fiscal year exists, ABC recognizes an impairment loss of \$3,000 in Q3.

#### Recovery in 20X3 Q4

In the fourth quarter, market conditions improve due to new import/export controls, easing some of the pricing challenges ABC faced for its electronic components. The NRV of the inventory increases to \$9,000. While the cost (\$10,000) still exceeds the NRV (\$9,000), ABC recognizes a recovery gain of \$2,000 (\$9,000 - \$7,000) in Q4, reflecting the improved NRV. If the NRV had increased to \$11,000, ABC would be limited to a \$3,000 recovery gain, which is the amount of the impairment loss previously recognized in Q3.

### Recovery in 20X4 Q1

In the first quarter of the subsequent fiscal year 20X4, market conditions improve further, and the NRV of the inventory increases to \$10,000. However, because the inventory recovery occurs in its subsequent fiscal year, ABC cannot recognize a recovery. At the end of fiscal year 20X3, ABC has a new cost basis of \$9,000 for the inventory. Therefore, for 20X4 Q1, ABC compares the new cost of \$9,000 to the NRV of \$10,000. Because the cost is lower, ABC does not record an impairment loss and inventory is stated at \$9,000.

## 4.6 Other considerations

### 4.6.10 Consideration payable to a customer



#### Excerpt from ASC 330-10

> Accounting for Consideration Payable to a Customer

**35-21** See paragraphs 606-10-32-25 through 32-27 for a discussion of consideration given by an entity to a **customer**.

Consideration payable to a customer can affect the impairment assessment of inventory. Such consideration not only includes cash amounts that an entity pays, or expects to pay, to the customer but also credits or other items (e.g. a coupon or voucher) that can be applied against amounts owed to the entity.

Consideration payable to a customer is ordinarily accounted for as a reduction of the transaction price, unless the payment is in exchange for a distinct good or service. The reduction in transaction price will normally affect an entity's market/NRV assessment. Section 5.7 in KPMG Handbook, [Revenue recognition](#), discusses how to account for consideration payable to a customer. [606-10-32-5]

### 4.6.20 Third-party contributions



#### Question 4.6.10

How is inventory sold below cost accounted for when contributions are received from other parties for the difference?

**Background:** An entity (e.g. an NFP entity) may intentionally sell inventory at a price less than cost with agreements in place for the loss on sale to be covered by cash contributions from donors or other parties.

**Interpretive response:** Inventories are subsequently measured at: [\[330-10-35-1A\]](#)

- lower of cost and NRV if the inventory is measured using any method other than LIFO or RIM; or
- LCM if the inventory is measured using LIFO or RIM.

We believe the fact that the difference between sales proceeds and cost is covered by contributions does not change the requirements of Topic 330 and any difference between the carrying amount of the inventory and NRV/market should be considered an impairment. [\[TQA.6140.01\]](#)

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## 4.6.30 Hedged inventory



### Excerpt from ASC 330-10

> Subsequent Measurement Guidance Applicable to All Inventory

**35-7A** If inventory has been the hedged item in a fair value hedge, the inventory's cost basis for purposes of subsequent measurement shall reflect the effect of the adjustments of its carrying amount made pursuant to paragraph 815-25-35-1(b).

The carrying amount of a hedged item is adjusted for a change in fair value in the hedged item attributable to the hedged risk. This adjustment is referred to as a basis adjustment. For inventory, the basis adjustment remains part of the inventory's cost basis until the inventory is sold. When the inventory is sold, its entire carrying amount (including the basis adjustment) is recognized as the cost of the item sold in determining earnings. [\[815-25-35-1\(b\), 35-8\]](#)

Section 8.4 of KPMG Handbook, [Derivatives and hedging](#), discusses the subsequent accounting for basis adjustments for inventory subject to a fair value hedge.

## 4.6.40 Purchase commitments



### Excerpt from ASC 330-10

> Purchase Commitments

**35-17** A net loss on firm purchase commitments for goods for inventory, measured in the same way as are inventory losses, shall be recognized in the accounts. The recognition in a current period of losses arising from the decline in the utility of cost expenditures is equally applicable to similar losses which are expected to arise from firm, uncancelable, and unhedged commitments for the future purchase of inventory items.

**35-18** The utility of such commitments is not impaired, and hence there is no loss, when the amounts to be realized from the disposition of the future inventory items are adequately protected by firm sales contracts or when there are other circumstances that reasonably assure continuing sales without price decline.



### Question 4.6.20

Are losses as a result of firm purchase commitments evaluated similarly to on-hand inventory?

**Interpretive response:** Yes. When measuring the net loss on a firm purchase commitment, an entity evaluates the purchase commitment as if the inventory was on hand. This means the entity applies the inventory impairment models (see [sections 4.2 and 4.4](#)) as of the measurement date. [\[330-10-35-17\]](#)

The market value or NRV of the inventory subject to the purchase commitment is determined. If the inventory's market value or NRV is less than the cost of the purchase commitment, the entity has incurred a loss for the difference (see [section 4.4](#)). Conversely, no loss is incurred if the inventory's market value or NRV exceeds the cost of the purchase commitment. [\[330-10-35-17\]](#)

## 4.6.50 Subsequent events

Topic 855 addresses the recognition and disclosure of subsequent events. Subsequent events are events or transactions that occur after the reporting date (i.e. balance sheet date) but before financial statements are issued or are available to be issued. [\[855-10 Glossary\]](#)

Subsequent events are categorized into two broad types. [\[855-10 Glossary\]](#)

#### Recognized events (Type 1)

- Events or transactions that provide additional evidence about conditions that existed at the reporting date.
- Require adjustment to the financial statements to reflect the impact of events or transactions, and possible specific disclosures.

#### Nonrecognized events (Type 2)

- Events that provide evidence about conditions that did not exist at the reporting date but arose subsequent to that date.
- May require disclosure in the notes but the financial statements are not adjusted.

See chapter 9 of KPMG Handbook, [Financial statement presentation](#), for additional information on the recognition and disclosure of subsequent events.



### Question 4.6.30

Are all subsequent events affecting inventory valuation recognized subsequent events?

**Interpretive response:** No. We believe the entity needs to consider the nature and timing of the event or transaction providing new information about the inventory estimate and how the estimate is derived – e.g. methodology and assumptions used. See Question 9.4.10 of KPMG Handbook, [Financial statement presentation](#), for additional information.

#### Information relates to conditions that existed at the reporting date

If the information relates to conditions that existed at the reporting date, the new information represents a recognized subsequent event. Topic 855 requires that subsequent events affecting the realization of assets, such as inventories, be recognized when those events represent the culmination of conditions that existed over a relatively long period of time. For example, an entity is aware of a significant decrease in a product's selling price that will take effect after the reporting period ends. The price reduction is known as of the reporting date and supported by sales occurring in the subsequent events period. The entity includes the price reduction in determining the inventory's NRV as of the reporting date. [\[855-10-55-1\]](#)

#### Information relates to conditions that changed after the reporting date

If the information relates to conditions that changed after the reporting date, including changes in market conditions, the new information represents a nonrecognized subsequent event. An example is if, after the reporting date, a competitor launches a new product that disrupts the market and decreases the inventory's NRV.

However, such changes may require the entity to reevaluate whether all conditions existing at the reporting date were adequately considered. For example, changes in sales volumes and prices in the subsequent events period may provide insights about the reliability of forecasts used to measure the inventory's NRV at the reporting date. See Question 9.4.60 of KPMG Handbook, [Financial statement presentation](#), for additional information on changes in market conditions. [\[855-10-25-3\]](#)

## 4.6.60 Foreign currency

The guidance on subsequent measurement of inventory requires special application when an entity's functional currency is not the local currency, and the entity does not maintain the books of record in the functional currency. The first step is to remeasure inventory measured at cost in local currency to historical cost in the functional currency (i.e., remeasure using historical exchange rates). Then, inventory as stated at cost in the functional currency is evaluated for impairment under the subsequent measurement guidance using the functional currency. See paragraphs 3.051 and 3.052 of KPMG Handbook, [Foreign currency](#), for additional information. [\[830-10-55-8\]](#)

# 5. Presentation and disclosure

## Detailed contents

New item added in this edition \*\*

### 5.1 How the standard works

### 5.2 Presentation

#### Questions

- 5.2.10 Are the SEC rules and regulations on inventory presentation and disclosure relevant to nonpublic entities?
- 5.2.20 When is inventory separately presented in the financial statements?
- 5.2.30 When is slow-moving inventory classified as a noncurrent asset?
- 5.2.40 Is spare parts inventory classified as a current asset?
- 5.2.45 Is inventory pledged as collateral under a long-term loan agreement classified as a current asset? \*\*
- 5.2.50 How are inventory impairment losses presented and disclosed?
- 5.2.60 Is consigned inventory presented separately on the balance sheet?

#### Example

- 5.2.10 Classification of slow-moving inventory

### 5.3 Disclosures

#### Questions

- 5.3.10 Is inventory pricing a common significant accounting policy required to be disclosed?
- 5.3.20 How are significant estimates regarding inventory disclosed?
- 5.3.30 What are the disclosures when an entity recognizes inventory impairment losses?
- 5.3.40 How are inventory cost elements disclosed?
- 5.3.50 How are the inventory cost flow assumptions disclosed?
- 5.3.60 Are disclosures required when an entity uses a method to determine COGS for interim periods different from that used at annual inventory dates?
- 5.3.70 What specific disclosures are needed for prelaunch inventory of life sciences companies? \*\*



## 5.4 LIFO-specific disclosures

### *Questions*

- 5.4.10 What are the specific disclosure requirements for LIFO inventory?
- 5.4.20 Are supplemental disclosures for non-LIFO information permitted?
- 5.4.30 Are disclosures required for LIFO liquidations?
- 5.4.40 How are the effects of a LIFO liquidation on income measured?

## 5.1 How the standard works

There are several required presentation formats and disclosures relating to inventory. This chapter discusses the requirements in the FASB Codification as well as SEC rules and regulations. For the relevancy of SEC rules and regulations to nonpublic entities, see [Question 5.2.10](#).

Presentation/disclosure item	Relevant guidance	Reference
Losses on firm purchase commitments	Topic 330	<a href="#">Section 5.2</a>
Major classes of inventory	SEC S-X Rule 5-02	<a href="#">Question 5.2.20</a>
Impairment losses	Topic 330 (notes) Subtopic 220-20 (income statement)	<a href="#">Question 5.2.50</a>
Consigned inventory	SAB Topic 13	<a href="#">Question 5.2.60</a>
Basis for measuring inventories and any change in that basis	Topic 330 Subtopic 210-10	<a href="#">Section 5.3</a>
Inventory measured above cost	Topic 330	<a href="#">Section 5.3</a>
Inventory measured at sales price	Topic 330	<a href="#">Section 5.3</a>
Inventory exchanges	Topic 845	<a href="#">Section 5.3</a>
Long-term contracts or programs	SEC S-X Rule 5-02	<a href="#">Section 5.3</a>
Inventory pricing significant accounting policy	Topic 235	<a href="#">Question 5.3.10</a>
Significant estimates	Topic 330 Topic 275	<a href="#">Question 5.3.20</a>
Inventory cost elements	SEC S-X Rule 5-02	<a href="#">Question 5.3.40</a>
Inventory cost flow assumptions	SEC S-X Rule 5-02	<a href="#">Question 5.3.50</a>
Excess of replacement or current cost over the reported LIFO value <sup>1</sup>	SEC S-X Rule 5-02	<a href="#">Question 5.4.10</a>
Income from LIFO liquidation <sup>1</sup>	SAB Topic 11.F	<a href="#">Question 5.4.30</a>
<p>Note:</p> <p>1. In addition to the required LIFO disclosures, entities may include additional supplemental non-LIFO disclosures (see <a href="#">Question 5.4.20</a>).</p>		

KPMG Handbook, [Financial statement presentation](#), discusses various presentation and general disclosure requirements included in the codification and other broad topics and SEC regulations. In addition to that overall guidance, below are inventory specific questions and examples.

## 5.2 Presentation



### Excerpt from ASC 330-10

#### > Losses on Firm Purchase Commitments

**50-5** The amounts of net losses on firm purchase commitments accrued under paragraph 330-10-35-17 shall be disclosed separately in the income statement.



### Excerpt from ASC 210-10

#### > Classification of Current Assets

**45-1** Current assets generally include all of the following: ...

- b. Inventories of merchandise, raw materials, goods in process, finished goods, operating supplies, and ordinary maintenance material and parts.



### Excerpt from Regulation S-X Rule 5-02

#### **Balance Sheets**

The purpose of this rule is to indicate the various line items and certain additional disclosures which, if applicable, and except as otherwise permitted by the Commission, should appear on the face of the balance sheets or related notes filed for the persons to whom this article pertains (see § 210.4-01(a)).

#### 6. *Inventories.*

(a) State separately in the balance sheet or in a note thereto, if practicable, the amounts of major classes of inventory such as:

- (1) finished goods;
- (2) inventoried costs relating to long-term contracts or programs (see paragraph (d) of this section);
- (3) work in process;
- (4) raw materials; and
- (5) supplies.

If the method of calculating a LIFO inventory does not allow for the practical determination of amounts assigned to major classes of inventory, the amounts of those classes may be stated under cost flow assumptions other than LIFO with the excess of such total amount over the aggregate LIFO amount shown as a deduction to arrive at the amount of the LIFO inventory.



### Question 5.2.10

Are the SEC rules and regulations on inventory presentation and disclosure relevant to nonpublic entities?

**Interpretive response:** Yes. Although the SEC rules and regulations technically apply only to SEC registrants, they are conceptually consistent with the requirements in the Codification, and therefore may be relevant to nonpublic entities. When they clarify Codification requirements, we believe they should be applied by all entities in the absence of specific Codification guidance. Further, when they go beyond the Codification requirements, they can constitute common or leading practice for nonpublic entities. We believe it is particularly important for a nonpublic entity to apply these rules and regulations if it plans to become a public company in the short- to medium-term. This is because when filing an IPO registration statement, an entity needs to comply with SEC rules and regulations, including Reg S-X Rule 5-02.

[Section 5.3](#) discusses the SEC disclosure requirements that nonpublic entities need to consider.

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### Question 5.2.20

When is inventory separately presented in the financial statements?

**Interpretive response:** SEC registrants are required to state separately in the balance sheet or in a financial statement note, if practicable, the amounts of major classes of inventory such as: [\[S-X Rule 5-02.6\(a\)\]](#)

- finished goods;
- inventoried costs relating to long-term contracts or programs;
- work-in-process;
- raw materials; and
- supplies.

This requirement applies regardless of the cost flow assumption a registrant uses to determine its inventories. However, if the registrant's application of LIFO does not allow for the practical determination of amounts assigned to major classes of inventory, the amounts of those classes may be measured under cost flow assumptions other than LIFO. In that case, the excess of this total amount over the aggregate LIFO amount is shown as a deduction to arrive at the amount of the LIFO inventory. [\[S-X Rule 5-02.6\(a\)\]](#)

Topic 210 does not require an entity to present a classified balance sheet or to separately present or disclose individual balance sheet amounts (e.g. inventory) in excess of certain quantitative thresholds. However, Reg S-X Rule 5-02 requires SEC registrants to separately present individual balance sheet amounts that exceed certain quantitative thresholds on the balance sheet or in

the notes (e.g. any amount > 5% of total current assets). See relevancy of Reg S-X Rule 5-02 to nonpublic entities in [Question 5.2.10](#).

See sections 3.2 and 3.3 of KPMG Handbook, [Financial statement presentation](#), for additional guidance on inventory presentation matters.

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### Question 5.2.30

When is slow-moving inventory classified as a noncurrent asset?

**Interpretive response:** Inventory is generally classified as a current asset. However, we believe an entity should classify slow-moving inventory as a noncurrent asset to the extent the inventory is not reasonably expected to be sold or consumed during its normal operating cycle, which is usually one year. [TQA 2140.13, 210-10 Glossary, 210-10-45-1b]

We believe slow-moving inventory should be reviewed for impairment as of each reporting period-end (see [Question 4.2.10](#)).

See section 3.3.20 of KPMG Handbook, [Financial statement presentation](#), for additional guidance on how the operating cycle is determined.

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### Example 5.2.10

Classification of slow-moving inventory

ABC Corp manufactures parts, and its inventory includes certain slow-moving items not considered obsolete. ABC will continue to sell the slow-moving inventory on hand but does not anticipate manufacturing new parts for some time. Based on current sales estimates, ABC estimates that it has a three-year supply of slow-moving parts.

ABC classifies the portion of slow-moving inventory not reasonably expected to be realized in cash or sold or consumed during the next year (its normal operating cycle) as a noncurrent asset on its balance sheet.

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### Question 5.2.40

Is spare parts inventory classified as a current asset?

**Interpretive response:** We believe spare parts inventory should be classified as current if it is expected to be consumed over the next 12 months (or expected operating cycle if longer), with the remainder classified as noncurrent.

We believe spare parts inventory should be reviewed for impairment as of each reporting period-end (see [Question 4.2.10](#)).

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**Question 5.2.45\*\***

Is inventory pledged as collateral under a long-term loan agreement classified as a current asset?

**Interpretive response:** Yes. Typically, pledging inventory does not affect its classification as a current asset, provided the entity can use the inventory in current operations without any restrictions. If the inventory is pledged in such a way that it cannot be sold, it may not meet the definition of inventory.

See Question 3.3.90 of KPMG Handbook, [Financial statement presentation](#), for additional guidance on pledged assets.

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**Question 5.2.50**

How are inventory impairment losses presented and disclosed?

**Excerpt from ASC 220-20**

> Presentation of Unusual or Infrequently Occurring Items

**45-1** A material event or transaction that an entity considers to be of an unusual nature or of a type that indicates infrequency of occurrence or both shall be reported as a separate component of income from continuing operations. The nature and financial effects of each event or transaction shall be presented as a separate component of income from continuing operations or, alternatively, disclosed in notes to financial statements (see paragraph 220-20-50-1). Gains or losses of a similar nature that are not individually material shall be aggregated. Such items shall not be reported on the face of the income statement net of income taxes. Similarly, the EPS effects of those items shall not be presented on the face of the income statement.

**Excerpt from ASC 420-10**

- > Comments Made by SEC Observer at Emerging Issues Task Force (EITF)
- • > SEC Observer Comment: Classification of Inventory Markdowns and Other Costs Associated with Restructuring

**S99-3** The following is the text of SEC Observer Comment: Classification of Inventory Markdowns and Other Costs Associated with Restructuring.

Subtopic 420-10 states that costs associated with exit or disposal activities that do not involve a discontinued operation should be included in income from continuing operations before taxes. If a subtotal such as "income from operations" is presented, that Subtopic indicates that subtotal should include the amounts of exit or disposal costs. However, the guidance does not address

where within income from continuing operations or income from operations inventory markdowns associated with an exit or restructuring activity. The SEC staff recognizes that there may be circumstances in which it can be asserted that inventory markdowns are costs directly attributable to a decision to exit or restructure an activity. However, the staff believes that it is difficult to distinguish inventory markdowns attributable to a decision to exit or restructure an activity from inventory markdowns attributable to external market factors that are independent of a decision to exit or restructure an activity. Further, the staff believes that decisions about the timing, method, and pricing of dispositions of inventory generally are considered to be normal, recurring activities integral to the management of the ongoing business. Accordingly, the SEC staff believes that inventory markdowns should be classified in the income statement as a component of cost of goods sold.

**Interpretive response:** It depends. We believe inventory impairment losses should generally be presented as part of COGS as they represent changes in the carrying amount of inventory expected to be sold.

If the impairment loss is material and considered either unusual in nature or infrequent in occurrence, an entity may present the impairment as an additional COGS caption in the income statement. Additionally, Topic 330 requires impairment losses that are substantial and unusual to be disclosed in the notes to the financial statements. [220-20-45-1, 330-10-50-2]

It is not appropriate to classify inventory markdowns as an exit or disposal activity, even when the markdowns are costs directly attributable to a decision to exit or restructure an activity. The SEC staff believes inventory markdowns should be part of COGS and therefore included in gross profit or operating income if those subtotals are presented. Therefore, even if these inventory markdowns are material and unusual, we believe the subsequent measurement adjustments should be classified in COGS and separately disclosed in the notes to the financial statements. [420-10-S99-3]

However, if material, unusual, and infrequent impairment losses are also outside the entity's control due to events such as involuntary destruction caused by fire, flood, or other natural disaster, an entity may present those losses separately in the income statement. [420-10-S99-3]

See section 4.4.10 of KPMG Handbook, [Financial statement presentation](#), for additional guidance on how to determine when an item is unusual in nature or infrequent in occurrence.



### Question 5.2.60

Is consigned inventory presented separately on the balance sheet?

**Interpretive response:** Yes. We believe the SEC staff expects a registrant to report consigned inventory separately on the balance sheet as 'inventory consigned to others' or another appropriate caption. Consignment arrangements are discussed in [section 2.3.20](#).

## 5.3 Disclosures



### Excerpt from ASC 330-10

#### > Basis for Stating Inventories

**50-1** The basis of stating inventories shall be consistently applied and shall be disclosed in the financial statements; whenever a significant change is made therein, there shall be disclosure of the nature of the change and, if material, the effect on income. A change of such basis may have an important effect upon the interpretation of the financial statements both before and after that change, and hence, in the event of a change, a full disclosure of its nature and of its effect, if material, upon income shall be made. See paragraph 210-10-50-1.

#### > Losses from the Subsequent Measurement of Inventory

**50-2** Substantial and unusual losses that result from the subsequent measurement of **inventory** (see paragraphs 330-10-35-1A through 35-11) should be disclosed in the financial statements.

#### > Goods Stated Above Cost

**50-3** Where goods are stated above cost this fact shall be fully disclosed.

#### > Stating Inventories at Sales Prices

**50-4** Where such inventories are stated at sales prices, the use of such basis shall be fully disclosed in the financial statements.



### Excerpt from ASC 210-10

#### > Current Assets

**50-1** It is important that the amounts at which current assets are stated be supplemented by information that reveals, for the various classifications of inventory items, the basis upon which their amounts are stated and, where practicable, indication of the method of determining the cost—for example, average cost, first-in first-out (FIFO), last-in first-out (LIFO), and so forth.



### Excerpt from ASC 235-10

#### > Accounting Policies Disclosure

**50-1** Information about the accounting policies adopted by an entity is essential for financial statement users. When financial statements that are issued or are available to be issued (as discussed in Section 855-10-25) purport to present fairly financial position, cash flows, and results of operations in accordance with



generally accepted accounting principles (GAAP), a description of all significant accounting policies of the entity shall be included as an integral part of the financial statements. In circumstances where it may be appropriate to issue one or more of the basic financial statements without the others, purporting to present fairly the information given in accordance with GAAP, statements so presented also shall include disclosure of the pertinent accounting policies.

> What to Disclose

**50-3** Disclosure of accounting policies shall identify and describe the accounting principles followed by the entity and the methods of applying those principles that materially affect the determination of financial position, cash flows, or results of operations. In general, the disclosure shall encompass important judgments as to appropriateness of principles relating to recognition of revenue and allocation of asset costs to current and future periods; in particular, it shall encompass those accounting principles and methods that involve any of the following:

- a. A selection from existing acceptable alternatives
- b. Principles and methods peculiar to the industry in which the entity operates, even if such principles and methods are predominantly followed in that industry
- c. Unusual or innovative applications of GAAP.

> Examples of Disclosures

**50-4** Examples of disclosures by an entity commonly required with respect to accounting policies would include, among others, those relating to the following:

...

- d. Inventory pricing



### Excerpt from ASC 845-10

#### General

**50-1** An entity that engages in one or more nonmonetary transactions during a period shall disclose in financial statements for the period all of the following:

- a. The nature of the transactions
- b. The basis of accounting for the assets transferred
- c. Gain or losses recognized on transfers.



### Excerpt from Regulation S-X Rule 5-02

#### Balance Sheets

##### 6. Inventories.

- (b) The basis of determining the amounts shall be stated.

If cost is used to determine any portion of the inventory amounts, the description of this method shall include the nature of the cost elements included in inventory. Elements of cost include, among other items, retained costs representing the excess of manufacturing or production costs over the amounts charged to cost of sales or delivered or in-process units, initial tooling or other deferred startup costs, or general and administrative costs.

The method by which amounts are removed from inventory (e.g., average cost, first-in, first-out, last-in, first-out, estimated average cost per unit) shall be described. If the estimated average cost per unit is used as a basis to determine amounts removed from inventory under a total program or similar basis of accounting, the principal assumptions (including, where meaningful, the aggregate number of units expected to be delivered under the program, the number of units delivered to date and the number of units on order) shall be disclosed.

If any general and administrative costs are charged to inventory, state in a note to the financial statements the aggregate amount of the general and administrative costs incurred in each period and the actual or estimated amount remaining in inventory at the date of each balance sheet.

(c) If the LIFO inventory method is used, the excess of replacement or current cost over stated LIFO value shall, if material, be stated parenthetically or in a note to the financial statements.

(d) For purposes of §§ 210.5-02.3 and 210.5-02.6, long-term contracts or programs include (1) all contracts or programs for which gross profits are recognized on a percentage-of-completion method of accounting or any variant thereof (e.g., delivered unit, cost to cost, physical completion), and (2) any contracts or programs accounted for on a completed contract basis of accounting where, in either case, the contracts or programs have associated with them material amounts of inventories or unbilled receivables and where such contracts or programs have been or are expected to be performed over a period of more than twelve months. Contracts or programs of shorter duration may also be included, if deemed appropriate.

For all long-term contracts or programs, the following information, if applicable, shall be stated in a note to the financial statements:

- (i) The aggregate amount of manufacturing or production costs and any related deferred costs (e.g., initial tooling costs) which exceeds the aggregate estimated cost of all in-process and delivered units on the basis of the estimated average cost of all units expected to be produced under long-term contracts and programs not yet complete, as well as that portion of such amount which would not be absorbed in cost of sales based on existing firm orders at the latest balance sheet date. In addition, if practicable, disclose the amount of deferred costs by type of cost (e.g., initial tooling, deferred production, etc.).
- (ii) The aggregate amount representing claims or other similar items subject to uncertainty concerning their determination or ultimate realization, and include a description of the nature and status of the principal items comprising such aggregate amount.

- (iii) The amount of progress payments netted against inventory at the date of the balance sheet.

All entities are required to disclose the basis for measuring their inventories – e.g. FIFO, LIFO (see [section 3.3](#)) and any change in that basis. An SEC registrant also provides the basis for determining the amounts assigned to each inventory class. [330-10-50-1, S-X Rule 5-02.6(a)]



## Future developments

### Public business entities: Proposed inventory expense disclosures

On July 31, 2023, the FASB issued a proposed Accounting Standards Update, *Disaggregation of Income Statement Expenses*. The proposed ASU would require public business entities to disaggregate in the notes to the financial statements certain income statement captions, including cost of goods sold. The disaggregation disclosure would include items such as purchases of inventory, employee compensation, depreciation and intangible asset amortization.

For additional discussion of the proposed ASU, see KPMG Defining Issues, [FASB proposal: Disaggregation of income statement expenses \(DISE\)](#).



### Question 5.3.10

Is inventory pricing a common significant accounting policy required to be disclosed?

**Interpretive response:** Yes. Through disclosure, an entity identifies and describes the accounting principles used for inventory pricing and the method(s) of applying those principles (e.g. FIFO, LIFO, average cost, estimated average cost per unit) that materially affect the financial statements. Section 6.3.20 in KPMG Handbook, [Financial statement presentation](#), discusses the disclosure requirements for significant accounting policies. [235-10-50-1]



### Question 5.3.20

How are significant estimates regarding inventory disclosed?

**Interpretive response:** Measuring inventory, particularly for impairment, typically requires considerable estimation – e.g. evaluating whether the carrying amount of inventory exceeds either NRV or market value – depending on the cost flow assumption used. Other examples of inventory estimates that may be particularly sensitive to change in the near term include realizability of inventory subject to rapid technological obsolescence and costing estimates – e.g. inventory accounted for under RIM. [275-10-50-15]

Topic 275 (risks and uncertainties) requires certain disclosures for significant estimates if: [\[275-10-50-8\]](#)

- there is at least a reasonable possibility that an estimate will change in the near term after the financial statements are issued (or available to be issued); and
- the effect of the change in estimate would be material to the issued (or available to be issued) financial statements.

Disclosures for significant estimates include: [\[275-10-50-9\]](#)

- the nature of the uncertainty; and
- an indication that it is at least reasonably possible a change in estimate will occur in the near term.

The factors that cause the estimate to be sensitive to change may also be disclosed, but there is no requirement to do so. [\[275-10-50-9\]](#)

Subtopic 330-10's Example 1 (reproduced below) provides an example of a required disclosure of significant estimates regarding inventory. [\[330-10-55-8 – 55-13\]](#)



### Excerpt from ASC 330-10

#### > Disclosure of Significant Estimates

**50-6** See Example 1 (paragraph 330-10-55-8) for an illustration of the disclosure of significant estimates applicable to inventories as required by Section 275-10-50.

#### • > Example 1: Disclosure of Significant Estimates

**55-8** This Example illustrates the guidance in paragraph 330-10-50-6 regarding the disclosure of significant estimates related to inventory. Entity A manufactures high technology stereo equipment. In June 19X7, one of Entity A's competitors introduced a new model stereo system with the same features as Entity A's Model A. The competitor's version sells for significantly less than Entity A's suggested retail price for Model A. The introduction of this product resulted in a sharp decrease in the sales volume of Model A. As of December 31, 19X7, Entity A has accumulated significant inventory quantities beyond its normal short-term needs of its Model A system. Inventory for Model A (\$6 million) represents approximately 20 percent of Entity A's inventory at that date. The remaining 80 percent of Entity A's inventory consists of products experiencing only normal competitive pressures. Entity A has established provisions for obsolescence for this latter group of products in the normal course of business.

**55-9** Management has developed a program to provide substantial dealer incentives on purchases of the Model A, which it expects will result in the sale of this inventory in the near term. Because of the existing high profit margin on its stereo systems, Entity A would continue to earn a marginal profit on sales of the Model A under the new program. It is also reasonably possible, however,

that the program will not be wholly successful, and, accordingly, a material loss could ultimately result on the disposal of the inventory.

**55-10** The entity would disclose the following.

As of December 31, 19X7, some portion of \$6 million of inventory of one of the entity's products is in excess of Entity A's current requirements based on the recent level of sales. Management has developed a program to reduce this inventory to desired levels over the near term and believes no loss will be incurred on its disposition. No estimate can be made of a range of amounts of loss that are reasonably possible should the program not be successful.

**55-11** This situation meets the criteria for disclosure under paragraph 275-10-50-8 because circumstances that existed at the date of the financial statements, including the decreasing sales volume and excessive quantities of inventory of Model A, make it at least reasonably possible that management's plan to liquidate its excess inventory without a loss will be less than fully successful and that such an outcome would have a near-term material effect on the entity's financial statements.

**55-12** In this Example, Entity A discloses the existence of potentially excess quantities of inventory at the date of the financial statements and indicates that the uncertainty is expected to be resolved in the near term. The disclosure is intended to provide users with insight into management's assessment of recoverability of the cost of inventories existing at the date of the financial statements. Although disclosure of the \$6 million carrying amount of the inventory of Model A is not required because, based on the facts presented, \$6 million does not constitute a reasonable estimate of loss on the disposal of the inventory or the maximum amount in an estimated range of loss, disclosure of this amount is not misleading and may provide useful information.

**55-13** Discussion of Entity A's provision for obsolescence for the remaining 80 percent of its inventory is not required because it is not considered reasonably possible that additional material losses on this inventory will occur.



### Question 5.3.30

What are the disclosures when an entity recognizes inventory impairment losses?

**Interpretive response:** In addition to the disclosures required under Topic 330 for significant estimates (see [Question 5.3.20](#)), we believe entities should disclose the nature of inventory impairment charges and the reasons for them. Entities should also consider the risk and uncertainty disclosure requirements in Subtopic 275-10 (see chapter 7 in KPMG Handbook, [Financial statement presentation](#)).



### Question 5.3.40

#### How are inventory cost elements disclosed?

**Interpretive response:** An SEC registrant describes the cost elements capitalized in inventory if cost is used to measure the inventory – i.e. if the inventory has not been written down to market or NRV.

Elements of costs required to be disclosed include: [\[S-X Rule 5-02.6\(b\)\]](#)

- the excess of manufacturing or production costs over the amounts charged to COGS or delivered or in-process units;
- initial tooling or other deferred startup costs; and
- general and administrative costs.

If a registrant includes general and administrative costs in inventory (see [Question 3.2.60](#)), it must disclose the aggregate amount incurred in the period and the amount remaining in ending inventory. If it is impracticable to determine the actual amount of general and administrative costs remaining in ending inventory, registrants may disclose reasonable estimates of these amounts by assuming they will expense costs related to a particular contract proportionally (based on total contract value) over the life of the contract. In that case, we believe registrants should describe the assumptions used to develop these estimates. [\[S-X Rule 5-02.6\(b\)\]](#)

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### Question 5.3.50

#### How are the inventory cost flow assumptions disclosed?

**Interpretive response:** A registrant describes the method by which amounts are removed from inventory (e.g. FIFO, LIFO, average cost, estimated average cost per unit). The SEC provides specific guidance on disclosing the estimated average cost per unit method and the LIFO method (see [Questions 5.4.10](#) and [5.4.20](#) regarding LIFO disclosures). It does not prescribe how to make the disclosure for other methods. [\[S-X Rule 5-02.6b\]](#)

The specific guidance regarding the estimated average cost per unit method (see [section 3.3.10](#)) applies if this method is a basis to determine amounts removed from inventory under a total program or similar basis of accounting. In this case, a registrant discloses the principal assumptions it uses to apply the method – e.g. the aggregate number of units expected to be delivered under the program, the number of units delivered to date and the number of units on order. [\[S-X Rule 5-02.6\(b\)\]](#)

If a consolidated subsidiary uses a different cost flow assumption to cost inventory, a parent entity should disclose that fact in its consolidated financial statements. See [Question 3.3.30](#) for further discussion. [\[TQA 2140.11\]](#)

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### Question 5.3.60

Are disclosures required when an entity uses a method to determine COGS for interim periods different from that used at annual inventory dates?

**Background:** Topic 270 permits an entity to use a different inventory pricing method to determine COGS at interim reporting dates as compared to its annual inventory date. See [section 3.3.60](#) for further discussion. [270-10-45-6(a)]

**Interpretive response:** Yes. An entity discloses the method used at the interim date (e.g. estimated gross profit rates or other methods) and any significant adjustments that result from reconciliations to the annual physical inventory. [270-10-45-6(a)]

The SEC staff expects a registrant to disclose the components of inventory during interim periods even when a registrant uses the gross profit or some other method to determine COGS requiring a registrant to estimate inventory components as of an interim date. The SEC staff believes a registrant will be able to make reasonable estimates of inventory components based on its knowledge of its production cycle, the costs (labor and overhead) associated with this cycle, as well as the relative sales and purchasing volume. [SAB Topic 6.G]



### Question 5.3.70\*\*

What specific disclosures are needed for prelaunch inventory of life sciences companies?

**Interpretive response:** We believe an entity should include disclosures about its accounting for prelaunch inventory (see [Question 2.3.40](#)), including the facts and circumstances considered and the judgment applied in determining whether it has a present right to an economic benefit. The SEC staff has historically requested that entities provide more information related to capitalized inventory for which FDA approval has not been received.

Based on SEC comment letters, we believe an entity should consider disclosing the following for each product with significant costs capitalized in inventory prior to receiving regulatory approval.

- **Regulatory approval process:** nature and estimated timing of any contingencies that need to be resolved prior to obtaining FDA approval, the risks and uncertainties of obtaining FDA approval, and the estimated timing of obtaining approval.
- **Outstanding issues:** the specific nature of any outstanding safety and efficacy, manufacturing, and marketing or labelling issues and explanation of why those issues do not affect the conclusion that the entity has a present right to an economic benefit.

- **Remaining shelf life of each product:** factors supporting the expectation that the benefit will be realized for the inventory as of each balance sheet date presented, prior to the inventory's expiration.
- **Market acceptance:** the risks and uncertainties related to market acceptance of the product once approved and how that affects the realization of the asset.

In addition, if an entity sells inventory that was previously expensed, we believe it should disclose the related effect on its operating or other margin subtotals. See KPMG Handbook, [Research and development](#), for more information about life sciences research and development arrangements.

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## 5.4 LIFO-specific disclosures



### Excerpt from Regulation S-X Rule 5-02

#### Balance Sheets

##### 6. Inventories.

(c) If the LIFO inventory method is used, the excess of replacement or current cost over stated LIFO value shall, if material, be stated parenthetically or in a note to the financial statements.



### Question 5.4.10

What are the specific disclosure requirements for LIFO inventory?

**Interpretive response:** In addition to the disclosures discussed in [Question 5.3.50](#), a registrant discloses (if material) the excess of replacement or current cost over the reported LIFO value. This disclosure may be stated parenthetically on the face of the balance sheet or in the notes to the financial statements. [S-X Rule 5-02.6(c)]

In making this disclosure, the SEC permits an entity to use any US GAAP inventory method (e.g. FIFO, average cost) if the method used derives an amount that approximates current cost. These disclosures are referred to as non-LIFO disclosures (see [Question 5.4.20](#)). [S-X Rule 5-02.6(c), FR-205.02c]

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### Question 5.4.20

Are supplemental disclosures for non-LIFO information permitted?

**Interpretive response:** Yes. While the SEC staff has indicated concern with the nature of supplemental non-LIFO disclosures provided by entities using LIFO, we believe this does not preclude an entity from presenting this supplemental inventory information using a different basis.

Supplemental non-LIFO disclosures may include effects on the income statement and balance sheet and include certain pro forma effects of using LIFO. However, there are limitations on the nature of the supplemental non-LIFO disclosures that may be provided, with an overarching principle that when such supplemental disclosures are provided, the disclosures should not imply that the non-LIFO earnings are the 'real earnings' of the entity.

In presenting supplemental non-LIFO disclosures, some entities may want to include the effects of non-discretionary, variable expenses that would have affected the income statement or the statement of financial position, such as a profit-sharing arrangement. In providing non-LIFO disclosures, we believe an entity should include changes in non-discretionary, variable expenses if it is probable that the non-discretionary, variable expenses would have been different based on the supplemental information. Assessing probability is enhanced when such non-discretionary, variable expenses are based on a pre-determined formula. When such expenses are not based on a pre-determined formula, but it is probable that the variable expense would have changed based on the supplemental information, we believe the basis for determining the non-discretionary, variable expenses should be disclosed.

In addition to adjusting supplemental non-LIFO disclosures for the probable effects of non-discretionary, variable expenses, we believe the effects of income taxes also should be considered in such disclosures. The income tax effect in such disclosure should not be adjusted for any interest costs associated with losing the tax advantages associated with using LIFO.

The SEC staff has noted that the most troublesome non-LIFO disclosures relate to pro forma income information that assumes the FIFO method is used (e.g. implying that the FIFO earnings are the real earnings). The SEC staff does not believe that FIFO-based supplemental income disclosures by entities using LIFO are necessarily the best way to compare against those entities that do not use LIFO to determine inventory values. [\[FR-205.02c\]](#)

To better understand the supplemental non-LIFO disclosures, the SEC staff requires entities to:

- state clearly that the use of LIFO results in a better matching of costs and revenues;
- indicate the reason why the supplemental disclosures are provided; and

- present essential information about the supplemental income calculation that enables users of the financial statements to appreciate the quality of the information presented.

In addition, the SEC staff wants entities to avoid terminology such as 'LIFO reserve' or 'LIFO adjustment'. [FR-205.02c]

While supplemental non-LIFO disclosures are permissible, the SEC staff does not permit such disclosures in financial highlights, press releases or the shareholder letter in an annual report. Its reasoning is that an entity does not normally present analytical data in those formats and therefore the disclosures would not provide sufficient detail for a user to understand the supplemental data. Instead, any supplemental non-LIFO disclosures, are more appropriately included in the notes to the financial statements or in MD&A. [FR-205.02c]



### Question 5.4.30

Are disclosures required for LIFO liquidations?



### Excerpt from SAB Topic 11.F

#### LIFO Liquidations

**Facts:** Registrant on LIFO basis of accounting liquidates a substantial portion of its LIFO inventory and as a result includes a material amount of income in its income statement which would not have been recorded had the inventory liquidation not taken place.

**Question:** Is disclosure required of the amount of income realized as a result of the inventory liquidation?

**Interpretive Response:** Yes. Such disclosure would be required in order to make the financial statements not misleading. Disclosure may be made either in a footnote or parenthetically on the face of the income statement.

**Interpretive response:** Yes. The SEC staff expects a registrant to disclose the amount of income realized as a result of a LIFO liquidation – i.e. the liquidation of a LIFO layer (see [Question 3.3.180](#)). The disclosure can be either in the notes to the financial statements or in a parenthetical reference on the face of the income statement. An entity cannot report the effects of the liquidation as an extraordinary item, as an item that is unusual in nature, or infrequent in nature, or in any other special way in the income statement. [LIP.5-8, 5-11, SAB Topic 11.F]



### Question 5.4.40

How are the effects of a LIFO liquidation on income measured?

**Interpretive response:** The effects of a LIFO liquidation are measured by determining the difference between the actual COGS and what the COGS would have been had the inventory been reinstated under the normal method used to cost increments. [\[LIP.5-27\]](#)

When measuring the effects of a LIFO liquidation for disclosure, an entity does not reduce the effects of decrements in pools by the effects of increments in other pools (i.e. netting is not allowed). [\[LIP.5-31\]](#)

If a LIFO liquidation occurs because of the sale or disposal of a long-lived asset or assets (i.e. a disposal group as defined in Section 360-10-20), the effects of the LIFO liquidation are included in the gain or loss on the disposition of the disposal group. [\[LIP.5-37\]](#)

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# Index of changes

This index lists the significant additions and changes made in this edition to assist you in locating recently added or updated content. Items that have been significantly updated or revised are identified with # and new items are identified with \*\*.

## 2. Scope and recognition

### Questions

- 2.2.11 Are precious metals considered inventory? \*\*
- 2.2.12 Are samples distributed for advertising and promotional purposes considered inventory? \*\*
- 2.3.40 When can life sciences entities recognize prelaunch inventory as an asset? \*\*
- 2.4.20 Does an entity derecognize inventory in a product financing arrangement? \*\*

### Example

- 2.3.05 Accounting for prelaunch inventory \*\*

## 3. Initial measurement

- 3.4 Inventory exchange transactions \*\*

### Questions

- 3.2.15 How is acquisition cost determined when the purchase price includes different types of inventory? \*\*
- 3.2.120 Are unallocated fixed overhead and other abnormal costs capitalized in the cost of inventory? #

### Example

- 3.2.05 Allocation of fixed overhead production costs based on normal capacity \*\*

## 4. Subsequent measurement

### Example

- 4.5.10 Impairment recovery in subsequent periods \*\*

## 5. Presentation and disclosure

### Questions

- 5.2.45 Is inventory pledged as collateral under a long-term loan agreement classified as a current asset? \*\*
- 5.3.70 What specific disclosures are needed for prelaunch inventory of life sciences companies? \*\*

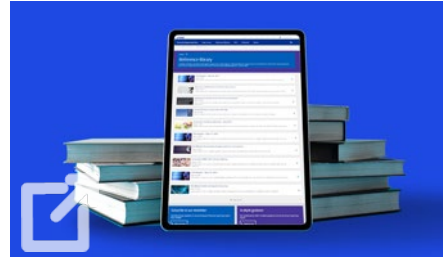
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- Bankruptcies
- Business combinations
- Business combinations (SEC reporting)
- Climate risk in the financial statements
- Consolidation
- Credit impairment
- Debt and equity financing
- Derivatives and hedging
- Discontinued operations and held-for-sale disposal groups
- Earnings per share
- Employee benefits
- Equity method of accounting
- Fair value measurement
- Financial statement presentation
- Foreign currency
- GHG emissions reporting
- Going concern
- IFRS® compared to US GAAP
- Impairment of nonfinancial assets
- Income taxes
- Internal control over financial reporting
- Inventory
- Investments
- Leases
- Long-duration contracts
- Reference rate reform
- Research and development
- Revenue recognition
- Revenue: Real estate
- Revenue: Software and SaaS
- Segment reporting
- Service concession arrangements
- Share-based payment
- Software and website costs
- Statement of cash flows
- Tax credits
- Transfers and servicing of financial assets

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