

SFNet Education On Demand

Inventory Appraisals Module

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Introduction



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Goals

Upon Completion of this Module you will have an understanding of the following:

- Basic Valuation Terms & Definitions.
- Professional Associations and Appraisal Standards as they apply to inventory appraisals
- Common Inventory Related Value Concepts
- Typical inventory Appraisal Report Contents
- Theory and Application of the Three Approaches to Value as they apply to Inventory Appraisals
- Other Inventory Specific Valuation Issues and Topics

Basic Valuation Terms & Definitions.

- **80/20 Rule:** The “80/20 rule” is an adaptation of Pareto’s Principle, first promulgated by Vilfredo Pareto, an early twentieth century Italian economist. The “80/20 rule” asserts that 80% of the sales are generated by 20% of the inventory.
- **A-B-C:** “A” typically will designate high value, fast moving items; “B” will indicate medium value and activity items; and “C” will designate low value or slow moving items. Cycle counts are typically conducted on “A” items multiple times per year, on “B” items fewer times and “C” items at least once annually.
- **Cost Methodology:** Cost Methodology is the accounting principle by which The Company computes and reports the value of the inventory. Inventory accounting methodologies include FIFO (First In, First Out), LIFO (Last In, First Out), Standard, Weighted Average, Specific Identification, Lower of Cost or Market, or a hybrid of these methods.



Basic Valuation Terms & Definitions.

- **Eligible Inventory:** Inventory identified by The Client that is to be valued in the appraisal process; the total inventory less the ineligible inventory.
- **Exit Strategy:** The identified plan of execution to dispose of the inventory. It includes consideration of the method of sale and resources needed to execute the plan.
- **Going Out of Business (GOB):** This is a wind-down process of disposing of the inventory through an orderly liquidation utilizing normal sales channels. It typically involves the operation of the business using a limited number of The Company's employees to receive and fill orders for a limited period, without inventory replenishment or the intent of the continuation of operations.
- **Ineligible Inventory:** Inventory identified by The Client that is to be excluded from the appraisal due to reasons of accessibility, potential recovery difficulties, or other factors.



Basic Valuation Terms & Definitions.

- **Initial Markup:** initial markup (IMU) measures the amount of potential profit in the retail price of inventory. It is the difference between what an item costs from the vendor and what the retail price is that consumers pay.
- **Inventory Classes and Categories:** A logical breakdown of the inventory into classifications based on common physical or value characteristics. Classes often are denoted between Raw Materials, Work-in-process, and Finished goods, with further categorization tracked at the product, commodity, or other level.
- **Inventory Shortage/Overage:** Variance between the quantity or cost of the inventory recorded in the perpetual records when compared to an actual physical count of the inventory on hand.
- **Inventory Turnover:** Number of times annually that an item in inventory will be sold based on historical demand. It is the ratio of quantity sold per year vs. the number of units on hand.



Basic Valuation Terms & Definitions.

- **Inventory:** Inventory is a portion of a company's personal property, that is purchased to produce goods, supply operations, or held for resale or leasing, and that are capitalized on the balance sheet as inventory. Typically it consists of raw materials, materials used or consumed by a business, items in transition/work in process, and finished goods. It would not normally include mineral rights or reserves and stumpage. It can include removable nursery stock, but would not normally include seasonal crops. Spare parts and rental assets are sometimes considered inventory.
- **Mass Appraisal:** The systematic appraisal of groups of properties as of a given date using standardized procedures and statistical testing.
- **Manufacturing Inventory:** Inventory held by a manufacturer, most commonly delineated into raw materials, work-in-process, and finished goods.



Basic Valuation Terms & Definitions.

- **Personal Property:** The portion of a Company's property that is not real or intangible property. Although often considered to be synonymous with machinery and equipment, inventory is legally considered personal property.
- **Retail Back:** A method of valuing a product using the retail selling price as a starting reference point.
- **Retail Inventory:** Inventory owned and sold by a retailer, held in either a retail store, or in distribution center, with the intention to sell that inventory through a retail sales channel.
- **Stock Keeping Unit (SKU):** An identifier for a specific product in the inventory; often also referred to as a material identification number (MID) or part number.



Basic Valuation Terms & Definitions.

- Valuation Tiers: Some valuation firms refer to the sales of certain inventories sold to various customers in a liquidation as Tier I, Tier II, and Tier III sales. Typically, Tier I sales would be to the existing customer base based on current activity and would capture sales that would likely naturally occur within the liquidation sale term without significant discounting. Tier II sales would typically be additional product sold to existing customers, new customers, competitors, brokers, or others who would be buying prime goods that were not excess, obsolete, truly surplus, or scrap and would be receiving significant discounts as an inducement to purchase these goods within the liquidation sale term. Tier III sales would typically encapsulate the balance of the inventory remaining to be sold.



Basic Valuation Terms & Definitions.

- Weeks/Months of Supply: A method of measuring turnover, expressed as the number of weeks' or months' worth of supply that a company has in finished goods inventory based on the historical rate of sales; utilized as an indicator of an individual item's attractiveness. A low number of weeks or months on hand is usually a positive factor affecting value.
- Weighted Gross Margin: The weighted gross margin of an inventory is the gross margin generated by all the inventory on hand at a point time, assuming all the units on hand were sold at the gross margin indicated at the SKU level. The weighted gross margin may differ from the overall gross margin of the sales generated by a company over a period of time as the composition of the overall aggregate items sold will likely be different than the composition of the inventory on hand at a point in time.



Basic Valuation Terms & Definitions.

- Wholesale: Sale price an intermediate distributor or wholesaler of product would sell at to other businesses. Often will require a commercial account and or minimum purchase thresholds in order to purchase at a wholesale level.
- Wholesale Inventory: Inventory intended to be sold through a wholesale distribution channel. These items may have originated as manufacturing inventory and may be sold to a retailer at which point it would be considered retail inventory.
- Workout (Buildout) Analysis - An analysis that considers the estimated revenue and expenses associated with the limited operation of The Company to complete the raw materials and/or work-in-process to a finished goods status prior to sale under the definition of value employed for the appraisal. A buildout analysis is typically outside of the scope of an inventory appraisal, unless requested by The Client.
- Work-in-process (WIP): Inventory that is in the process of being completed and is typically not in a saleable state.



Associations, Oversight, Standards, Organizations.

- Please Refer back to Module 1 as the same associations would apply.
- From the perspective of American Association of Appraisers (ASA), inventory is considered part of the machinery and technical specialties discipline.
- In USPAP, Standards 5 through 8 would apply
 - (5) Mass Appraisal Development
 - (6) Mass Appraisal Reporting
 - (7) Personal Property Appraisal Development
 - (8) Personal Property Appraisal Reporting



Quiz 1



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Quiz 1: Basic Terms, Definitions, Associations, and Standards

1. Weeks of Supply is a way to express...
 - a) Value
 - b) Quantity On-Hand
 - c) Turnover
 - d) Margin
2. Weighted Gross Margin is more accurate the gross margin.
 - a) True
 - b) False
3. What is considered inventory?
 - a) All personal property
 - b) Assets held for sale
 - c) Assets held for sale or rental and or purchased for use or consumption
 - d) Coal bearing ore on a mine face
4. USPAP does not have an inventory designation.
 - a) True
 - b) False

Quiz 1: Answers

1. Weeks of Supply is a way to express...
 - c) Turnover – See Slide 9 – “A method of measuring turnover, expressed as...”
2. Weighted Gross Margin is more accurate than gross margin.
 - b) False – Weighted gross margin shows the profitability of a select grouping of inventory at a point in time; gross margin shows the profitability of a Company’s sales over a period of time, regardless of what is in inventory at any point in time
3. What is considered inventory?
 - c) Assets held for sale or rental and or purchased for use or consumption – See Slide 7 – “Inventory is a portion of a company’s personal property, that is purchased to produce goods, supply operations, or held for resale or leasing, and that are capitalized on the balance sheet as inventory.”
4. USPAP does not have an inventory designation.
 - b) False – See Slide 10 – “From the perspective of American Association of Appraisers (ASA), inventory is considered part of the machinery and technical specialties discipline.”

Common Value Concepts



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Definitions of Value: Recap from Module 1

- Fair Market Value (Retail - exchange) (FMV)
- Fair Market Value-Installed, In-Place (Retail In-Place) (FMVIP)
- Fair Market Value-Installed, in-Continued Use with an Earnings Analysis (Retail in Place and in Use) (FMVICU)
- Fair Value (FV)
- Orderly Liquidation Value (OLV-NOLV)
- Liquidation Value in-Place (LVIP-OLVIP-NOLVIP)
- Forced Liquidation Value (FLV-ASV)
- Salvage Value
- Scrap Value

Deeper Dive into Fair Value

- As noted in the prior module: Fair Value is the method of valuing business assets (and liabilities) for financial reporting in line with accounting practices as established by the Financial Accounting Standards Board (FASB).
- It is defined as: “The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”
- The Valuation premise can be either “in exchange” or “in use.” The appraiser is expected to use the valuation approach which yields the highest value, regardless of what use intended by the Newco for the assets.
- As noted in Statement of Financial Accounting Standards No. 157 (FAS157) – “Application to Assets”: “A fair value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible, and financially feasible at the measurement date. In broad terms, highest and best use refers to the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used. Highest and best use is determined based on the use of the asset by market participants, even if the intended use of the asset by the reporting entity is different.”

Common Fair Value issues

- Fair Value is used when inventory assets are purchased when a business is sold or reorganized in some sort of bankruptcy proceeding
- It is often referred to as purchase price allocation as the intended use of the valuation is to use it as a mechanism by which to allocate the purchase price.
- It is also referred to as “Fresh Start Accounting” as is used to revalue the assets after a bankruptcy event.
- It is the portion of the total Company sale proceeds that can be ascribed to the inventory.
- If the assets have a lower value, goodwill, which will typically be amortized over 30 years is created and will be established on the “Newco” balance sheet.
- If all the assets associated with the sale (including the inventory) have a higher value than the overall company sale value, the transaction is considered a bargain purchase and value of the assets in excess of the overall purchase price, will be taxable.
- The Fair Value of inventory is often higher than the cost of the inventory as most costing under GAAP is at the lower of cost or market and Fair Value of inventory would be at market. This would be the case more often for finished goods and work-in-process than raw materials.
- From an inventory perspective the highest and best use will typically be when the prospective purchaser would be purchasing the entire inventory with the intent of resuming production and or distribution of the product in a consistent way to the prior entity.

Fair Value Methodology

- FV was originally addressed by the FASB in FAS141, then FAS157, and most recently in an Accounting Standards Codification 805 (ASC805).
- For inventory the FASB has provided the following guidance:
 - Finished goods and merchandise at estimated selling prices less the sum of (a) costs of disposal and (b) a reasonable profit allowance for the selling effort of the acquiring entity
 - Work-in-process at estimated selling prices of finished goods (estimates of “cost to complete” are added to the WIP to arrive at this figure) less the sum of (a) costs of disposal and (b) a reasonable profit allowance for the completing and selling effort of the acquiring entity based on profit for similar finished goods
 - Raw materials at current replacement costs

Differences between Fair Value and Fair Market Value

- The nuance in the definitions may affect value; while FV always assumes highest and best use, FMV may be either in exchange or in use.
- As an example if we are valuing bulk wine of Vineyard A in a fair value scenario, we would assume that that wine would be completed and bottled and sold under the brand name of Vineyard A. However in a FMV in exchange scenario we would consider the market value of like bulk wine in the market and not consider the finished value of that bulk wine within the context of the current sales value of that wine sold by Vineyard A. As such in this instance the FV of the bulk wine would be higher than the FMV in exchange of the bulk wine.
- If we considered this same bulk wine under a FMV in place valuation scenario, it is likely the value would be consistent to the FV.

OLV via a Going out of business (GOB) sale

- While the definition of value would essentially be the same as in an OLV, a GOB sale is typically only utilized for retail inventory assets, and assumes that the inventory would be disposed of through the company's retail stores in the a similar fashion to how they are sold under normal sales conditions.
- Inventory located at the Company's distribution centers would either be shipped to and sold through the retail stores, or sold through existing or new wholesale channels.
- Inventory sold through other Omni-channel methods, including websites, subscription programs, catalogs and other methods would potentially continue to be sold through those channels, diverted to stores, or sold via wholesale channels depending on the expected net recoveries in each channel.
- A GOB sale will typically be divided into two phases:
 - Phase 1: Sales continue as per somewhat normal operating conditions, while the liquidator takes progressively takes charge of each store or channel, develops a liquidation sales strategy, adjusts headcount, inventory levels, discounting, advertising, and other practices.
 - Phase 2: A Wind-down phase where the stores and channels are condensed, the inventory locations and physical layouts are collapsed as the inventory levels decrease, discounts are continually adjusted, store fixtures are marketed for sale and sold, closing dates for inventory locations and lease rejection notices are sent, and employees are terminated

Nuances of a GOB sale

- The appraisal will typically be conducted on an equity basis as opposed to a fee for services basis.
- As a result most GOB appraisals are not USPAP compliant.
- GOB sales often are subject to seasonality variations due to the nature of retail and holiday seasons
- The inventory would be liquidated under a court-authorized retail GOB/store closing advertising theme, which would convey the extraordinary circumstances, value, and urgency. This would apply to general advertising and store signage.
- A GOB sale is a net value proposition, whereby operating expenses including payroll and occupancy, would be included as a liquidation expense.
- All non-direct expenses associated with the liquidation sale would be paid for by the Company; these would typically include severance pay, accrued vacation pay, maintenance and repairs, and other non-direct expenses. Additionally, certain fees associated with workout costs and related administrative procedures would not be included.
- A typical Retail GOB sale will liquidate the assets to the customer base through the retail stores in 60-90 day period (can be longer or shorter)
- Inventory will be sold using GOB signage and using a progressive discount structure that is bifurcated by category

Quiz 2



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Quiz 2: Common Value Concepts

1. Fair Value is commonly referred to as...
 - a) An in-place valuation concept
 - b) An in-exchange valuation concept
 - c) Purchase Price Accounting
 - d) A Fresh Valuation Method
2. GAAP Coast is typically higher than FV.
 - a) True
 - b) False
3. The FMV in-exchange for an inventory would typically be higher the FMV in-place?
 - a) True
 - b) False
4. A GOB sale appraisal would typically be USPAP compliant
 - a) True
 - b) False

Quiz 2: Answers

1. Fair Value is commonly referred to as...
 - a) Purchase Price Accounting
2. GAAP Cost is typically higher than FV.
 - b) False – As GAAP cost is typically stated at the lower of cost or market, and FV considers the value of finished goods and work-in-process on a completed basis assuming the sell to existing customers at margin, less completion and disposal cost, FV is typically higher than GAAP cost.
3. The FMV in-exchange for an inventory would typically be higher the FMV in-place.
 - c) False – Inventory being sold in-exchange would not benefit from being sold in place to existing customers and under any branding it is currently being sold under.
4. A GOB sale appraisal would typically be USPAP compliant
 - b) False – A GOB appraisal is typically completed on an equity basis. As such the appraiser has an interest in the property being appraised, which is not allowed per USPAP.

Types of Appraisal Reports



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Types of Appraisal Reports

- Appraisal Report
- Restricted Appraisal Report
- Refer back to Module 1
 - The essential difference between these two options is in the content and level of information provided. The Appraisal Report is more self-contained and provides thorough explanations for the benefit of multiple users, while the Restricted Appraisal Report is truncated and primarily intended for a single user (the client).

Typical Content of an OLV Inventory Appraisal

- Executive Summary
 - Brief Company Overview
 - Gross and Net Values
 - Sales Term
 - Major Assumptions
 - Change in Value issues
- Main Report
 - Appraisal process
 - Liquidation Strategy
 - Inventory Composition
 - Collateral Monitoring
 - Company Overview
 - Industry Overview
 - Field Visits
 - Liquidation Assumptions
 - Disclaimers and Representations
 - Appraisal Statements
- Exhibits
 - Gross and Net Values
 - Comparison
 - Inventory by Class
 - Inventory by Category
 - Inventory Reconciliation
 - Financial Statements, TTM/LTM Sales, COGS, Inventory Levels
 - Gross Margin Reconciliation
 - WOS by Category
 - WOS by SKU
 - Aging
 - Customers, Vendors
 - Inventory by Location

Theory and Application of the Approaches to Value



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The Three Primary Valuation Approaches

- Comparable Sales (Market)
- Cost Approach
- Income Approach
- Refer back to Module 2

Cost Approach Concept

- The Cost Approach is a set of procedures in which an appraiser derives a value indication by estimating the current cost to reproduce or replace the personal property, deducting for all depreciation, including physical deterioration, functional obsolescence, and external or economic obsolescence.
- As most (but not all) inventory is new physical depreciation and or wear is not normally an issue with inventory. Depreciation includes loss in value due to physical deterioration as well as functional and economic obsolescence.
- Functional obsolescence, which is when an item's usefulness is diminished due to a newer product may apply. Functional obsolescence is the decreased capacity of the item to perform the function for which it is intended in terms of current standards and specifications. Functional obsolescence may stem either from a deficiency within the items such as poor design or outmoded style or may result from super-adequacy or over-design.
- In addition, external or economic obsolescence, also referred to as trend related obsolescence may apply as well when an item becomes less desirable due to shifts in style, trends, (bell-bottoms, Ugg Boots, plaid shirts, etc.), and or technological trends (DVD versus VHS). Economic obsolescence represents a loss in value from factors outside the item appraised, such as a depressed market for the end product. These factors generally are characterized as “negative external forces,” which have an effect upon the item appraised.

Cost Approach Methodology

- The Cost Approach is most often utilized as the primary value indicator since it often fails to quantify the inherent loss in value under liquidation conditions. Comparisons are sometimes made to recent cost data when comparable sales are not found under the appraisal concept.
- Valuing inventory by the cost approach:
 - Replacement cost new
 - Less Physical Depreciation
 - Less functional and external and economic related obsolescence
 - Less Discount for duress (if a liquidation value)
 - Less Discount for Removal (if in-exchange valuation approach)
 - Less Sales Expenses (if a net value scenario)

Sales Comparison Approach Concept

- The Sales Comparison or Comparable Sales Approach is a set of procedures in which an appraiser derives a value indication by comparing the inventory being appraised to similar assets that have been recently sold or are currently available for sale, applying appropriate units of comparison, and making adjustments based on the elements of comparison to the sale prices of the comparable. Marketability of each item is also a determinant of value. Marketability, as a measure of demand, is approximated through recent sales under similar sale conditions. Where actual sales are not available, relationships are often established based upon asking prices for comparable items, with subsequent adjustments for similar sale conditions.
- When valuing finished goods inventory as recent sales history or orders data may be accessed this is typically the favored approach to valuing most finished goods.
- In addition, work-in-process can also be valued using the sales comparison approach assuming that the cost and time to complete the work-in-process into a finished goods is considered.
- Raw Materials can be valued using the sales comparison approach as well assuming that comparable sales data relevant to the raw materials is available to the appraiser

Sales Comparison Approach Methodology

- The Sales Comparison Approach is the most often approach utilized by inventory appraisers.
- Valuing inventory by the Sales or Sales Comparison approach:
 - Selling prices new
 - Less Physical Depreciation (for used or second quality inventory only)
 - Less Direct Disposal Costs (shipping, other logistics, commissions, royalties, etc.)
 - Less discount for duress (if a liquidation value)
 - Less other sales expenses (if a net value scenario)

Income Approach Concept

- The Income Approach is a set of procedures in which an appraiser derives a value indication for income-producing assets by converting anticipated benefits into value. This conversion is accomplished either by
 - (1) capitalizing a single year's income expectancy or an annual average of several years' income expectancies at a market derived capitalization rate or capitalization rate that reflects a specified income pattern, return on investment, and change in value of the investment or
 - (2) discounting the annual cash flows for the holding period and the reversion at a specified yield rate.
- The Income Approach is not typically applied when estimating liquidation values of inventory, although it can be a factor when rental inventories are considered.

Raw Materials under a Fair Market Value Scenario

- For valuing raw materials under a fair market value scenario, we would apply the cost approach and value the inventory at current replacement cost, less and adjustment for physical, functional, and economic obsolescence's as they apply, less a discount for removal (if an in-exchange scenario applies).
- For the purpose of the example, we will assume we are valuing 1,000 net tons (NT) of metallurgical grade coal that is owned by a steel mill and that is located at their yard in the Midwest U.S. and that originally cost \$380 per NT delivered.
- We will start with the replacement cost new of the coal which is reported to be approximately \$400 per NT delivered according to the company's latest invoices and market reports.
- As the inventory is new and not excessively aged and reported to be of a quality that matches the market grade and how it was purchased, no adjustment for physical depreciation will be made.
- We will assume for the purpose of this valuation that or FMV concept is an in exchange valuation, so the material will need to be adjusted for removal as the buyer of the materials would buying the materials FOB Midwest Mill as opposed to buying it on a delivered basis. For the purpose of the valuation the cost to ship the material to buyer's works (also located in the Midwest U.S.) would be \$40 per NT (includes outbound shipping and loading and handling). As result the FMV in exchange of this metallurgical coal would be \$400 (RCN) less \$40 for removal or \$360 per NT FMV.

Raw Materials under an OLV Scenario

- For valuing raw materials under an OLV scenario, we would apply the cost approach and value the inventory at current replacement cost, less and adjustment for physical, functional, and economic obsolescence's as they apply, less a discount for duress, less a discount for removal, less sales expenses.
- For the purpose of the example, we will assume we are valuing same 1,000 NT of metallurgical grade coal as in the prior example.
- We will start with the replacement cost new of the coal which is again \$400 per NT delivered.
- As the inventory is new and not excessively aged and reported to be of a quality that matches the market grade and how it was purchased, no adjustment for physical depreciation will be made.
- The material will again need to be adjusted for removal and the cost to load and ship the material to the buyer's works would be the same \$40 per NT.
- In addition for OLV a discount for duress would need be applied. In this case we will apply a discount of 5% of delivered market price. OLV discounts can be higher and lower depending on the period of time it takes to market the product, the volatility and normal level of gross margin and the price elasticity associated with the product. In the case of coal, while the market is volatile, the marketing time to sell the product would be very short and the price elasticity would be very high due to coal being a commodity.
- In addition, the occupancy, labor and other costs associated with liquidating the inventory would need to be considered and included as discount to the final value.

Raw Materials under an OLV Scenario (continued)

- In total, the value of the raw material metallurgical coal would be as follows:
 - Replacement Cost New - \$400
 - Less Physical Depreciation - \$0
 - Less Removal Costs - \$40 per NT We will start with the replacement cost new of the coal which is again \$400 per NT delivered.
 - Less Discount for Duress - \$18 per NT (Net FOB value of material paid {\$360} times 5.0% discount)
 - Less Liquidation Expenses - \$40 per NT (calculated based on liquidating a single steel mill facility with approximately \$25 million inventory in total inventory on hand, allocated proportionately based on the total gross proceeds of the inventory. Liquidation expenses would typically include labor, occupancy, freight out, or sales expenses, liquidator labor, and liquidator's commission, among other costs).
- The total OLV would equal \$302 per NT or 79.5% of the company's cost basis.

Finished Goods under a Fair Market Value Scenario

Finished Goods under a OLV Scenario

Quiz 3



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Quiz 3: Theory and Application of the Approaches to Value

1. What topic is typically covered in an inventory appraisal?
 - a) Test Count results
 - b) Cost Test Results
 - c) Accounts receivable Aging
 - d) Liquidation Assumptions
2. What characteristic are **not** associated with Functional Obsolescence.
 - a) The decreased capacity of the item to perform the function for which it is intended in terms of current standards and specifications.
 - b) Functional obsolescence may stem either from a deficiency within the items such as poor design or outmoded style or may result from super-adequacy or over-design.
 - c) Functional Obsolescence represents a loss in value from factors outside the item appraised, such as a depressed market for the end product.
3. The income approach is the most commonly used valuation approach by inventory appraisers.
 - a) True
 - b) False
4. The Sales Comparison valuation approach would need to consider functional and economic obsolescence.
 - a) True
 - b) False

Quiz 3: Answers

1. What topic is typically covered in an inventory appraisal?
 - d) Liquidation Assumptions
2. What characteristic are **not** associated with Functional Obsolescence?
 - c) “Functional Obsolescence represents a loss in value from factors outside the item appraised, such as a depressed market for the end product.” This is actually considered **economic obsolescence**, not functional.
3. The income approach is the most commonly used valuation approach by inventory appraisers.
 - c) False – The most commonly used approach to value for finished goods inventory is the sales comparison approach, the cost approach is used for raw materials. The income approach is seldom used by inventory appraisers. An example of inventory that might consider the income approach would be rental inventory.
4. The Sales Comparison valuation approach would need to consider functional and economic obsolescence.
 - b) False – The sales price assuming the item being appraised is an exact match for the item being sold should already take the functional and economic obsolescence of the item into account, so no further adjustment needs to be made for these factors.

Inventory Specific Valuation Issues



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Valuing inventory at a categorical level versus at a specific item level

- Inventory is often grouped into categories of like items.
- Many inventories have multiple thousands of stock keeping units (SKUs) on hand.
- Inventory can be valued on a category level or by item.
- Valuation at the category level requires that the valuation metrics for the grouping are consistent enough on a compositional level that the valuation is reliable at this level.
- This methodology is most reasonable when the category has a consistent unit of measure, and even demand across the category.
- It is helpful to know the potential collective sales or market price of the category, derived at the item level.
- With any grouping consistently there tends to be a concentration of sales and inventory levels based on the 80/20 rule. As a result valuing inventory at a categorical level may mask slow moving inventory that is within a category due to this tendency.
- As a result of this issue, valuation at the category level, is ideally paired with other analytics that also considers activity, demand, gross margin, age, and other characteristics at the item level.
- With very large inventories it is not practical to value all inventory at the item level. When completing valuations at the category level, a certain level of line item level analysis and research work should be concentrated on the larger inventory SKUs in all categories, to ensure that the categorical valuation is sound on a sample basis.

Differences between an Inventory Appraisal and a Field Exam

- What an inventory appraisal covers:
 - Valuation of the inventory.
 - Turnover and slow moving analysis of the inventory at the SKU level.
 - Complete gross margin analysis of the finished goods inventory at the SKU level.
 - Gross margin reconciliation to income statement
 - Marking the raw materials to market based on invoices, market pricing resources, and market research.
 - Reconciliation of the inventory to the balance sheet/general ledger.
 - Application of inventory reserves based on Field Exam or borrowing base certificate.
 - Liquidation expense analysis.
- What a field exam typically covers re inventory:
 - Partial audit of the inventory, including test counts.
 - Turnover and slow moving analysis of the inventory at the SKU level.
 - Sales invoice testing.
 - Cost test of raw materials.
 - Reconciliation of the inventory to the balance sheet/general ledger.
 - Construction of the BBC and recommendation of inventory ineligibility and BBC reserves.
 - Implementation of Rent Reserve.

Ineligibles

■ Common

- WIP – Not Saleable as-is
- Seconds – Of questionable value
- Slow moving and or obsolete - Of questionable value
- Offsite with no Bailee agreement – May not be able to repossess
- Consigned Inventory - May not be able to repossess or definitively Identify
- Inventory at overseas Location outside of the US, Canada, Great Britain, Holland, and Australia – May not be able to repossess
- Inventory at facilities with a low overall threshold of value – Inventory amounts deemed not worthy of monitoring and advancing against
- Packaging and Supplies - Inventory amounts deemed not worthy of monitoring and advancing against
- Non Inventory – Items included in the perpetual reports that are not actual inventory assets

■ Less Common

- Rebate Cost Components – the ineligible amount will reflect the excess value recognized as cost above the amount an item cost net of the rebate.
- Overhead Cost Components – Sometimes deemed ineligible especially if they are not specifically allocated to the FG detail
- Shrink ineligible – often treated as a reserve as opposed to an ineligible – used to adjust for expected physical variances in the perpetual balances.
- Tools and Consumables and other non-production related inventory – electively deemed ineligible in certain instances. These items are typically not saleable to customers, but often do have some residual value
- Private Label Goods - electively deemed ineligible in certain instances. These items if not sold to the contracting customer may be difficult or legally impossible to sell to other entities
- Marketing items, displays, samples, etc. – These items would typically have a lower or questionable value. In the case of samples, they may be located offsite with the sales people.
- Licensed Product without a license to sell
- Custom and / or customer specific product not backed by a purchase order
- Inter-company profit cost components
- Other purchasing or manufacturing cost variances, or other costing related ineligibles.

Work-in-process Conversion

■ When is a Conversion Justified

- When an existing customer requires/needs/has ordered the product and actively wants it and will pay in advance for it.
- When there is a significant quantity of WIP on hand that is almost finished or where the cost/benefit ratio of finishing it is favorable.
- Look for WIP that is in a finished form but just needs packaging or light manufacturing, assembly, kitting or other non-intense and low expertise forms of work to complete.
- Remember that there is risk in anything so the projections need to be very favorable for a buildout. If the buildout is only marginally more favorable than the as-is recovery, it should not be considered.
- When there are no (or very few) additional supplies or materials required to finish the product.
- Remember it may be difficult to get additional supplies from the existing customer base.
- The cost of additional items may be higher than normal due to the quantities required.
- The lead-time to acquire additional supplies may extend your liquidation period and lower your net recovery.

■ When is it Questionable

- When the process is complex.
- Has significant environmental liability associated with it.
- Requires significant additional purchases.
- Requires a significant amount of expertise and technical knowledge.
- When the product has a single customer and a firm PO for the In-process item is not on hand.
- When the Sales history of items that are not customer specific does not support a buildout.
- Where the process will take a long time and extend the liquidation period significantly.
- Where there is a lot of product liability associated with the finished product.
- Where a difficult union is involved.
- Where a difficult landlord is involved.
- Where the lead-time for additional raw materials is extensive.
- When the lender involved would not actually liquidate that way
- When you do not have a personal guarantee.

Offsite inventory

- Offsite inventory can be appraised, but the appraiser will need to consider (1) if the location of the inventory affects its value and (2) if there are any expenses involved in removing the inventory in an “in-exchange” or liquidation value scenario.
- In a FMV or FV scenario it is typical that an appraisal will assume that all offsite inventory is accessible with no issues or extraordinary expense. In a liquidation scenario offsite inventory is more problematic. There are several types of offsite inventory each of which has unique considerations to take into account:
 - Consignment – The liquidator will need access to the consignment inventory. If the inventory is not segregated adequately at the consignment site there may be multiple Uniform Commercial Code (UCC) filings that covers the inventory and may interfere with the liquidator. If the inventory is not sold through the consignment arrangement, the inventory will need to be retrieved and the cost of consolidation of the inventory considered in the liquidation expenses.
 - Outside Processors and Warehouses - It may be necessary to satisfy any outstanding payables to an outside processor for any encumbrances that may have been assigned to the Company’s inventory. A delay in the availability of this type of inventory for any reason, including unresolved legal issues, outstanding accounts payable disputes, mechanics’ liens, inventory count issues or other unknown logistical problems, could affect the gross proceeds collected for the sale of this type of inventory, the time period of the overall liquidation, and/or the overall expenses of the liquidation. As a result, it is not unusual for secured parties to reserve for any outstanding payable amount owed insure the potential possession of this inventory in a liquidation.
 - Other Locations – Customers, vendors, in-transit, Transload, etc. – Again issues in terms of access to the inventory are paramount, and need to be addressed in the appraisal through and extraordinary assumption or expense related adjustments.

Monitoring

- Inventory is excellent collateral for asset-based lenders, though it's critical to understand all the issues surrounding the asset, including the key collateral monitoring factors.
- The most common factors that are recommended for monitoring are as follows:
 - Mix - The overall mix in inventory between classifications (i.e., raw materials, work-in-process and finished goods) will impact the overall value, as each class of inventory typically generates different liquidation values in relation to cost. Low-recovering inventories (slow-moving, excess, obsolete, aged and so on) can become a disproportionate part of the overall inventory overtime, or the proportion of these classes may shift over time
 - Turnover - A company's inventory typically consists of items that are consumed in the production of items and/or items that are sold in the normal course of business. General historic sales or usage demand on the inventory would provide some indication of the relative demand for the inventory in the marketplace, which should be related to the overall liquidation value.
 - Ageing - Any deterioration in the age of the inventory could be a sign of deteriorating market conditions, a high rate of cancelled orders and/or the company's inability to keep its inventory current. An increased buildup of aged inventory could indicate the need to adjust the liquidation valuation rates of the inventory, as aged inventory likely will have lower recovery rates than inventory that is less aged.
 - Cost Basis/Market Price Fluctuation - The cost basis of the inventory should be monitored carefully because a significant fluctuation could materially affect the liquidation value as a percentage of the inventory cost.
 - Gross Margin - Gross margins can be monitored from the company's financial income statements or other types of gross margin reports. A decline in gross margin typically provides an early warning of a decline in demand and/or the pricing strength of an inventory.
 - Other Key Areas: Key Customers, Industry/Economy, Proprietary Inventory, Regulatory and Compliance

Quiz 4



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Quiz 4: Inventory Specific Valuation Issues

1. What is required for a categorical valuation to be reliable?
 - a) The inventory in the category must all have the same valuation characteristics.
 - b) The sales or demand trends should be consistent across the category.
 - c) The collective sales price of the category is known or the gross margin potential of all items in the grouping is consistent.
 - d) All of the Above.
2. A field exam typically covers which tasks?
 - a) Gross margin reconciliation to income statement.
 - b) Partial audit of the inventory, including test counts.
 - c) Marking the raw materials to market based on invoices, market pricing resources, and market research.
 - d) Reconciliation of the inventory to the balance sheet/general ledger.

Quiz 4: Inventory Specific Valuation Issues (continued)

3. Is this a favorable or unfavorable characteristic for determining if a WIP conversion should be considered?

“When there is a significant quantity of WIP on hand that is almost finished or where the cost/benefit ratio of finishing it is favorable.”

- a) Favorable
- b) Unfavorable

4. Slow moving or obsolete inventory is often deemed ineligible.

- a) True
- b) False

Quiz 4: Answers

1. What is required for a categorical valuation to be reliable?
 - d) All of the Above.
2. A field exam typically covers which tasks?
 - b) Partial audit of the inventory, including test counts.
3. Is this a favorable or unfavorable characteristic for determining if a WIP conversion should be considered? “When there is a significant quantity of WIP on hand that is almost finished or where the cost/benefit ratio of finishing it is favorable.”
 - a) Favorable
4. Slow moving or obsolete inventory is often deemed ineligible.
 - b) True