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Chapter Title: The Accounting Bases for Valuing Inventories

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2. THE ACCOUNTING BASES FOR VALUING INVENTORIES

The many ways of valuing a physical stock constitute a serious problem in measuring and interpreting inventory statistics. Although accountants apply "generally accepted accounting principles," which represent standards developed by their profession, these provide only a broad framework or set of guidelines. It is impossible to set down in advance accounting rules that would cover every transaction made by large firms. One need only recognize the complexity of a General Motors with thousands of items in inventory at hundreds of locations purchased at various times and at different prices from thousands of suppliers with varying amounts of fabrication to realize that methods by which an aggregate value of inventory is achieved could not be prescribed routinely.

But this is only one of the difficulties. Firms keep records for various purposes. Management may need one or more sets of data for operations, control, and planning. Because these tend to be highly detailed, they must be aggregated for financial reporting to stockholders, and changes may be made in the way certain costs are treated or various flows are consolidated for financial reporting. Finally, still different data may be reported to the Internal Revenue Service for tax purposes. Differences between book (financial reporting) and tax profits are well known. For example, many financial statements to shareholders have a balance sheet entry for deferred income taxes. Further explanation is provided in accompanying notes, generally to call attention to accounting differences between reports to IRS and those to shareholders.

This chapter contains a discussion, in simplified theoretical terms, of ways accountants value inventories within firms. A hypothetical example is used to illustrate alternative inventory valuations calculated by methods acceptable to the accounting profession and to IRS. Some complexities are introduced to illustrate more difficult accounting problems, followed by a discussion of ways business firms actually value inventories. The distinction between textbook-type examples and fact is necessary because of many complications encountered in actual practice, especially by large firms.

Annual accounting methods are the focus of this chapter. Interim valuations (monthly, quarterly, semiannual) are discussed in later chapters as are other complications such as those associated with LIFO, the treatment of overhead and indirect production costs, and the treatment of long-term contracts.

INVENTORY VALUATION AND PROFIT

Methods by which inventory is valued are intimately related to computations of profits on sales since inventory values enter into calculation of cost of goods sold. Cost of goods sold, which is deducted from sales to arrive at gross profits on sales, is defined as opening inventory plus purchases of inventoriable goods minus closing inventory. For manufacturing firms the term "inventoriable goods" must be expanded to include inventoriable labor and overhead. To calculate net profit on sales or net income before taxes, other costs such as sales, administrative and interest expenses must also be subtracted from gross profits.

In discussing net income, accountants traditionally have focused on matching costs and revenues. Thus in discussing inventory pricing the Committee on Accounting Procedure of the American Institute of Certified Public Accountants (AICPA) states

> A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs and revenues.[1]

And further,

> ...the major objective in selecting a method [of cost determination] should be the one which, under the circumstances, most clearly reflects periodic income.[2]

The same language is used in Federal income tax regulations. It is specified in the Internal Revenue Code of 1954 that the method of inventory valuation used should "clearly reflect income." The phrase "clearly reflect income" appears again and again in IRS regulations relating to inventory.[3]

These expressions are of a legal and accounting nature rather than statements of economic principles. Although accountants

[1] American Institute of Certified Public Accountants, Committee on Accounting Procedure. Accounting Research Bulletin No. 43, Statement 2.
[2] *Ibid.*
[3] 26 U.S.C. 471 and 472.

are concerned with economic problems no less than economists, they traditionally have stressed practical applications. The objective here is to report on accounting methods and their effect on inventory statistics, and not to dwell on the economic principles involved in defining net income and valuing inventories in a fashion consistent with such definitions.

INVENTORY VALUATION METHODS

An inventory of merchandise purchased at a particular price may have a different value at a later date for a number of reasons. Prices at which comparable items can be purchased may have changed, some goods may have been damaged in the interim, and others may have become obsolete. There are other reasons why stock values could differ from purchase prices, but in all these cases there is no single, definitive technique for establishing inventory values.

In general, managements first decide the primary basis of valuation, among which may be (1) cost, (2) the lower of cost or market, or (3) market. In most instances they then choose a particular variant of the primary basis. The basis most appropriate for a firm depends on the nature of its business, the kind of markets in which it operates, its financial circumstances, accounting costs and other considerations. A key limitation, for tax purposes and under generally accepted accounting principles, is that a firm may not switch back and forth from one method of valuation to another during short time intervals. Optional variants are discussed below.

Cost Options

Most inventories are valued at cost; however, there are many ways of determining costs. Accountants may use one of several assumptions about the flow of costs–including FIFO, Average, LIFO, Specific or Standard–so long as the method used "reflects periodic income." These are illustrated below in a series of examples.

The figures in the basic example shown in table 2.1 could apply to a wholesale or retail firm. The differences in unit costs between beginning inventory and purchases, as well as among purchases, are very pronounced and are used only for purposes of exposition.

Table 2.1. **EXAMPLE 1: INVENTORIES AND SALES**

Item	Units	Unit Cost	Total Cost
Beginning inventory	4	2	8
Plus: 1st purchase	2	3	6
2nd purchase	3	4	12
3rd purchase	1	5	5
	10		31
Less: Sales	5		
Ending inventory	5		

FIFO–Under this method the flow of goods and their cost are assumed to proceed as though the earliest purchases are sold first, that is, the First goods In are the First goods Out (FIFO). It is likely that this is closest to actual physical flows in most businesses. Using the figures in table 2.1 the value of the closing inventory under FIFO would be as shown in table 2.2.

Table 2.2. **EXAMPLE 1: INVENTORY VALUATION WITH FIFO**

Item	Units Left	Unit Cost	Total Cost
From beginning inventory	0	2	0
From 1st purchase	1	3	3
From 2nd purchase	3	4	12
From 3rd purchase	1	5	5
Ending inventory	5		20

Cost of goods sold = 11 This is derived from tables 2.1 and 2.2 as

8 (Beginning inventory)
+23 (Purchases of 6 + 12 + 5)
−20 (Ending inventory)

= 11 { 4 units @ 2 = 8 plus
1 unit @ 3 = 3

For large or moderate-size firms, it is not always clear which goods are first in so some averaging can be expected. Because first in might refer to date of order placement, shipment by vendor, receipt in warehouse, or availability for sale, the term by itself is ambiguous in practice. It would be absurd, for example, for firms with several warehouses or retail stores in distant locations to observe on a minute-by-minute basis precisely what arrives first. Hence, some form of averaging or selection of first in must be made.

Average Cost–The accounting theory underlying the average cost rule is that the unit withdrawn should be charged out at the average cost of those in the stock. It may be that all units in inventory have an equal chance of being withdrawn at the time of a sale, although the actual unit sold cannot be identified.

Despite conceptual problems, the average cost method is widely used. For the first example, table 2.1, the average acquisition cost for goods in beginning inventory and goods purchased during the period would yield an average cost of 3.1 per unit (31 ÷ 10).

Example 1: Inventory Valuation with Average Cost

Ending inventory . . . . . = 15.5 (5 X 3.1)
Cost of goods sold also . . . . = 15.5 (8 + 23 − 15.5)

Obviously there are many ways in which an average cost of inventory might be calculated. A new average cost could be computed after each acquisition; then any withdrawals before

the next purchase would be charged to costs at the average cost. That is not practical so some grouping of the calculation by months or quarters generally is necessary in practical applications of the average cost method.

LIFO–The Last In, First Out method (LIFO) represents an attempt to make profits reflect current costs, especially in periods of rising prices, and to avoid time lags in cost deductions inherent in use of FIFO and average cost valuation methods. Under LIFO, the assumption is that the last units purchased are the first sold or charged to costs. Again, using the first example, with five units left in closing inventory, the value of the closing stock would be as shown in table 2.3.

Table 2.3. EXAMPLE 1: INVENTORY VALUATION WITH LIFO

Item	Units	Unit Cost	Total Cost
From beginning inventory	4	2	8
From 1st purchase	1	3	3
Total	5		11

Cost of goods sold = 20 This is derived as

8 (Beginning inventory)
+23 (Purchases of 6 + 12 + 5)
−11 (Ending inventory)

= 20 { 1 unit @ 5 = 5 plus
3 units @ 4 = 12 plus
1 unit @ 3 = 3

When inventories are depleted the reduction in physical units is priced not at current costs but at unit costs of an earlier year or years. Suppose a firm on LIFO had accumulated stocks in three successive years as in table 2.4.

Table 2.4. EXAMPLE 2: INVENTORY ADDITIONS AND LIFO VALUATIONS

Year	Units Added to Stock During Year	Unit Cost	Total Cost of Addition	LIFO Total
1	5	3	15	15
2	3	4	12	27
3	2	5	10	37

If one unit were depleted in the fourth year the value of inventory would be reduced by five; this is the product of one unit and the unit cost in year 3, which was the last period in which an addition was made. This would be the case even though unit costs of purchases may have risen to six. With the depletion of 1 unit, the value of inventory would fall to 32. If, however, 4 units were depleted, the value of inventory would be reduced by 18, reflecting 2 units at 5 each plus 2 units at 4 each. Total inventory would fall to a value of 19 and would consist of the 5 units added in the first year at a unit cost of 3 and the 1 remaining unit from the second year purchased at a cost of 4.

Under LIFO, matching current period sales and current period costs works fairly well when physical stocks are unchanged or rising, but does not work at all well when stocks are depleted. Under this circumstance the goal of matching current sales prices and current costs may be harder to achieve than with FIFO. Under FIFO, if the stock turnover period is 3 months, sales in the 12 months from January through December are matched with unit costs in 12 months ending in September. When there is depletion under LIFO, unit costs used to value declines in physical quantities may go back as much as two years if the depletion exceeds additions in the prior year. This was illustrated in the preceding paragraph.

Comparison of FIFO, Average Cost and LIFO–The results of applying FIFO, average cost and LIFO methods of inventory valuation are compared in table 2.5. Effects on gross profits are also shown. It is assumed each unit is sold at a price of 5 so sales for each of the 3 firms is 25. The number of physical units sold, purchased and in inventory is identical for each of the three methods of determining costs.

Table 2.5. EXAMPLE 1: COMPARISON OF FIFO, AVERAGE COST AND LIFO COST OF GOODS SOLD, PROFITS AND INVENTORY VALUATION

Method	Sales	Cost of Goods Sold	Gross Profit	Value of Ending Inventory
FIFO	25	11.0	14.0	20.0
Average cost	25	15.5	9.5	15.5
LIFO	25	20.0	5.0	11.0

Specific or Actual Cost–This method of valuing inventories (also known as specific identification) is used in two disparate circumstances: first, in wholesale and retail trade where costly items are involved (for example, automobiles, refrigerators, or furniture) and where it is possible to determine the specific flow of goods out of inventory. Use of assumptions such as first in, first out or last in, first out is not necessary because specific costs are known for each item sold by reference to purchase invoices or other records. Similarly, the closing inventory represents the sum of recorded costs for all items remaining in inventory. For example, it is easy to visualize an automobile dealer who maintains a card file or computer record listing the cost of each automobile in stock, and who simply totals these costs when an inventory value is needed.

Second, this method is used by some manufacturing firms producing goods with long production cycles under contract. All purchases or other inventoriable costs in connection with a specific contract are valued in inventory at actual cost without regard to any other contract. When shipment of the finished commodity is made to the customer the accumulated costs in inventory are charged to cost of goods sold.

Standard Cost—Standard costs and standard cost systems were developed early in the 20th century for production control purposes and have long been a feature of American industry. The standard cost method of valuing inventories grew independent of requirements for financial reporting. Accounting textbooks still treat the method as an aspect of management and control, but the standard cost method has in practice passed into the domain of financial statements. IRS has never listed it as an accepted method of valuing inventories but accounting authorities have recognized it, provided that standards are:

> . . . 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 [like FIFO or average].[4]

The distinguishing characteristic of a standard cost system is that unit costs are predetermined, that is, they reflect managements' judgments of what costs ought to be. A simple example is provided below.

Assume a manufacturing firm with one uniform product and with inputs of one material, one type of labor and two types of overhead cost. The last named might consist of annual rental for machines plus electricity for power. Assume that under a standard cost system, designed to serve both management and financial purposes, standard costs per unit of output are set in an attempt to anticipate average actual costs in the coming year. The firm estimates materials costs per unit based upon expected prices during the year and expected normal usage of materials per unit of output. Unit labor costs are similarly estimated to incorporate expected wages rates and fringe benefits and expected output per unit of labor input over the year; estimates of average unit costs of overhead are made. There are many ways of calculating overhead. (See chapter 10.) In this example it is assumed that electricity usage in kilowatts is directly related to machine time so only the price of the electricity must be estimated. The rental cost of machines is assumed to be a fixed annual amount. The unit cost of this rental will depend upon the estimated rate of output, which may reflect the average rate of capacity utilization in recent years. If sales are unusually poor and production is reduced, the rental cost per unit will rise and be higher than the estimate used in setting the standard.

Suppose that the standard unit cost of the final product was set at 10.50 and that 1,000 units were in inventory at yearend. A review of all applicable costs incurred during the year and units produced yields an actual average unit cost of 10.65 over the year. A basic issue is whether 10.50 or 10.65 should be used as the unit cost for the 1,000 units in inventory (for financial statements). To judge from the limited amount of information in the literature and conversations with accountants, most firms using standard cost for financial reporting (i.e., for balance sheets and income statements) will use the standard cost (10.50 in the above example) to value inventory, and will charge the variance—the difference between standard and actual—to cost of goods sold. A minority of firms would assign part of the variance to cost of goods sold and part to inventories.

The above is a simple hypothetical example of a manufacturing firm that attempts to estimate standard costs as the average of unit costs for the year. Among firms using standard cost for financial purposes, there are many variations in methods of establishing standards.

The manner in which standards are set and subsequently revised affects inventory statistics. Standards may be quite strict, representing some ideal situation, or quite loose, representing the most recent period's actual experience. The literature suggests that firms strive for a middle ground, reflecting attainable good practice.

Standard cost valuations usually embody forecasts, which are likely to be systematically inaccurate over the business cycle. In setting standards for materials, most firms attempt to project actual prices of purchases expected to prevail in the period under consideration. But, some firms simply utilize the latest actual unit costs—a form of naive forecast. Fixed charges per unit typically reflect some type of normal rate of capacity utilization, but many variants are possible. A characteristic of macroeconomic forecasting of the 1970's has been that the rate of inflation has been projected too low and physical production too high. To the extent this projection bias has also been made by firms, it may have caused substantial variances from standard costs.

The introduction of new standards each year has an impact on interpretations of changes in book value data. For instance, assume the ending inventory for December 31 of the prior year was stated at 9.30 per unit, and 10.50 per unit is set as the standard unit cost for the coming year. Then the reported change in the book value of inventories from December 31 to January 31 will be a combination of both a change in units in stock and a change in standard costs per unit. For all succeeding months the value of inventory will be actual units multiplied by the same cost per unit of 10.50, assuming that standard is retained as planned by the firm. Eleven monthly changes in the value of stock reported for statistical purposes will represent the change in stock in physical units multiplied by the standard unit cost. The change in the 12th month, say, from December to January, will embody a price change as well and will require an inventory valuation adjustment. More frequent changes in standards increase the possibility that monthly inventory changes will reflect adjustment in standards. This is examined in more detail in chapter 8, Interim Reporting.

[4] AICPA, *op. cit.*, Statement 4.

Inventory Valuation Methods Other Than Cost

The discussion so far has focused on cost methods of inventory valuation, but inventories are not always valued at cost. As was noted earlier, use of the lower of cost or market is a primary basis for inventory valuation and in a few industries a majority of firms always value their inventory at market.

Lower of Cost or Market—Most accounting theorists specify that the lower of cost or market should be the primary basis for inventory valuation on the principle that accounting rules should be conservative. Conservative in this context means that a loss (market value of inventory lower than cost) should be recognized when it occurs while a gain (market value exceeding cost) should be recognized only when it is realized, that is, when there is a transaction with a second party. By way of contrast, IRS specifies that the basis of valuation should be (1) cost or (2) the lower of cost or market.[5]

Accounting authorities like AICPA state that the "primary basis for accounting for inventories should be cost"[6] but 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 . . . This is generally accomplished by stating such goods at a lower level designated as market."[7]

To illustrate the effects of using the lower of cost or market option, the first example (table 2.1) is modified as follows:

After the final purchase of one unit at a cost of five, it is assumed: (a) the unit cost remains at five; alternatively, (b) the unit cost or market value drops to three at yearend. Assume further that a FIFO firm is determining its yearend stock. Under assumption (a) the market value of the stock is 25, which is higher than the FIFO cost of 20 as calculated in table 2.2. Hence, an inventory cost of 20 will be used by the FIFO firm because this value is lower than market. Under assumption (b) the replacement cost or market value at yearend is 15. This is considerably lower than the FIFO inventory cost and consequently is used for the value of the closing inventory.

It is important to note that use of a market value of inventory lower than cost raises the cost of goods sold and lowers profits from what would be reported if other valuation methods were employed. The Internal Revenue Service, on the other hand, permits the use of cost without regard to market as an acceptable method and insists upon it as condition for LIFO firms. There is, therefore, an inconsistency on this point between accounting authorities and IRS.

In addition, IRS specifies that a cost or market calculation should be made for "each article on hand."[8] Despite ambiguities surrounding the identification of a commodity IRS requires that if the cost or market option is used, valuations should be made at highly detailed levels of commodity specification. The example in table 2.6 illustrates the effect of aggregation on inventory valuation.

[5] 1.471-2(c) U.S. Income Tax Regulations.
[6] AICPA, *op. cit.*, Statement 3.
[7] AICPA, *op. cit.*, Statement 5.
[8] 1.471-4(c) U.S. Income Tax Regulations.

Table 2.6. **EXAMPLE 3: INVENTORY VALUATIONS WITH COST, MARKET, OR LOWER OF COST OR MARKET OPTIONS**

Commodity	Cost (FIFO)	Market	Lower of Cost or Market
A	10	12	10
B	5	4	4
Total	15	16	14

If A and B are treated as separate products, use of the lower of cost or market valuation would yield a total inventory of 14; if they are not differentiated in the calculation, the inventory value at cost, 15, would be lower than market.

In practice, a considerable amount of grouping is permitted under generally accepted accounting principles. AICPA indicates that the application of the lower of cost or market rule cannot be applied rigidly. It notes that while the most common practice is to apply the rule separately to each item, it may be applied to a firm's entire stock. The guiding AICPA principle is "fair reflection of income in the period."

The Retail Method—Use of the retail method of inventory valuation simplifies operational steps in obtaining values of inventories, especially for firms selling thousands of different items. It is used extensively by general merchandise stores and particularly by department stores. Under this method, the inventory first is written up to the retail selling price. All additions and subtractions through purchases, sales, markdowns etc. are stated in terms of retail sales values. At the close of an accounting period, the retail value of inventory is reduced by a calculated margin so the cost value of inventory can be obtained. This margin can be calculated using diverse approaches. There are three basic variants of the retail method. The first approximates cost; the second approximates the lower of cost or market; and the third is an approximation of dollar value LIFO. The first two variants are discussed in this chapter and consideration of the third is deferred until chapter 6.

Calculations for the cost and lower of cost or market retail methods with the same purchase data used in table 2.1, are shown in table 2.7. The timing of sales is modified from the first example and other assumptions are made so that essentials of the methods can be demonstrated. The highly simplified example is for a single commodity measured in units. The firm doubles its cost price to obtain retail price. The cost of merchandise is assumed to rise through the period. As the unit cost of purchases rises, the firm further marks up earlier purchases held in inventory to take into account the latest unit costs. These are shown on separate lines labelled "additional markups." Near the close of the period, the remaining inventory is marked down, and the retail price is reduced by 30 percent, from 10 to 7 per unit. Basic data appear in table 2.7 and calculations are shown in table 2.8.

The two variants in table 2.8 illustrate differences in the treatment of markdowns in calculations of margins or cost/retail

Table 2.7. RETAIL METHOD OF INVENTORY VALUATION: BASIC DATA

Item	Units	Unit cost	Total cost	Retail unit value	Retail value
Beginning inventory	4	2	8	4	16
First Purchase	2	3	6	6	12
Additional markup on 4 units	(X)	(X)	(X)	(X)	8
Total available at retail value	6	(X)	(X)	6	36
Second purchase	3	4	12	8	24
Additional markup on 6 units	(X)	(X)	(X)	(X)	12
Total available at retail value	9	(X)	(X)	8	72
Less sales	2	(X)	(X)	8	16
Total available at retail value	7	(X)	(X)	8	56
Third purchase	1	5	5	10	10
Additional markup on 7 units	(X)	(X)	(X)	(X)	14
Total available at retail value	8	(X)	(X)	10	80
Less sales	2	(X)	(X)	10	20
Total available at retail value	6	(X)	(X)	10	60
Less markdown on 6 units	(X)	(X)	(X)	(X)	-18
Total available at retail value	6	(X)	(X)	7	42
Less sales	1	(X)	(X)	7	7
Total available at retail value	5	(X)	(X)	7	35

X Not applicable.

Table 2.8. RETAIL METHOD OF INVENTORY VALUATION: CALCULATIONS FOR TWO VARIANTS

Item	Approximating cost		Approximating lower of cost or market	
	Cost value	Retail value	Cost value	Retail value
Beginning inventory	8	16	8	16
1st purchase	6	12	6	12
2nd purchase	12	24	12	24
3rd purchase	5	10	5	10
Additional markups	(X)	34	(X)	34
Less markdowns	(X)	-18	(X)	(X)
Total goods available for sale[1]	31	78	31	96
Less sales	(X)	43	(X)	43
Less markdowns	(X)	(X)	(X)	-18
Total ending inventory at retail trade	(X)	35	(X)	35
(Retail value multiplied by cost/retail value ratio[1])	(X)	.40	(X)	.32
Ending inventory at cost value	14	(X)	11	(X)

[1]Cost/retail value ratio equals cost value (31) divided by retail value (78) and cost value (31) divided by retail value (96).

ratios. In the method approximating cost, the cost/retail ratio is obtained after markdowns have been subtracted from the denominator. In the method approximating the lower of cost or market, the cost/retail ratio is obtained before subtraction of markdowns. Consequently, the ratio under the cost method will always be greater than that obtained under the lower of cost or market method. In the example, the former is 0.40 (rounded) and the latter, 0.32. The procedure insures that where markdowns are taken, the closing inventory will be valued at less than under the cost option. The results in table 2.8 can now be compared with those shown in table 2.5.

Table 2.9. **EXAMPLE 1: COMPARISON OF INVENTORY VALUATIONS WITH FIFO, AVERAGE COST, RETAIL COST AND RETAIL LOWER OF COST OR MARKET**

Method	Value of Ending Inventory
FIFO	20.0
Average cost	15.5
Retail method approximating cost	14.0
Retail method approximating lower of cost or market	11.0

These large differences occur, first, because in the FIFO and average cost cases there were no markdowns for end-of-season obsolescence, and second, because very large price changes were used in the example. In practice, unit cost changes of 5 to 10 percent might be more typical. Using the various methods would yield results clustered in a narrow range, and calculations made under the retail method approximating cost would be very close to those made under average cost.

Market Always—Some firms always value their inventories at market. This might mean that firms value inventories above cost on occasion and would seem to be contrary to the conservative principle discussed earlier. However, AICPA notes that there are instances when inventories may properly be stated above cost, and cites precious metals and other goods for which there is "inability to determine appropriate approximate costs, immediate marketability at quoted market prices, and the characteristic of unit interchangeability."[9] Basic agricultural commodities are the most important class of goods that are always valued at market. IRS has designated market valuation as an acceptable option in Revenue Ruling 74-227.

INVENTORY VALUATION PATTERNS

The relative importance of valuation methods discussed in this chapter can be seen in results of special surveys conducted by the Census Bureau. Through these surveys data were obtained on valuation methods used by manufacturers reporting in the M3 survey, by merchant wholesalers in the monthly wholesale trade survey, and by retailers in the annual retail trade survey. Each respondent was asked to separate by method of valuation, yearend 1975 inventories reported in the regular monthly survey. Results are shown in table 2.10 as percentages of the estimated total book value of inventories held in each sector.

Table 2.10. **PERCENTAGE DISTRIBUTION OF CENSUS INVENTORIES BY VALUATION METHOD, END OF 1975**

Method	Manufacturing	Merchant Wholesale	Retail
LIFO	33	16	[1]8
FIFO	29	35	20
Average cost	20	14	10
Actual or specific cost	7	21	29
Subtotal	89	86	67
Standard cost	9	–	–
Market	2	10	–
Lower than cost	1	3	–
Always market	1	7	–
Retail method approximating	–	–	32
Lower of cost or market	–	–	18
Cost	–	–	7
LIFO	–	–	[1]7
Other	–	3	2
Total	100	100	100

[1]Note that LIFO inventories in retail trade consist of two LIFO entries and amount to 15 percent.

Source: Bureau of the Census
Manufacturing: Supplement to M3 Survey
Merchant Wholesale: Supplement to Monthly Survey
Retail: Annual Retail Trade Survey

Four cost methods—FIFO, average cost, LIFO and specific cost—account for 89 percent of the value of stocks in manufacturing and 86 percent in wholesale trade. Market valuation appears to be of consequence only in merchant wholesaling, where valuations by firms always using market are much more important than market valuations used because they are lower than cost. According to Census surveys, discussed in chapter 7, 59 percent of farm product wholesaler stocks as of the end of 1975 were valued by firms always using market. In retail trade the retail method and the specific cost method appeared to be the dominant valuation techniques. Standard cost is a method applicable only in manufacturing.

Census Bureau procedures for estimating inventories are examined in the next chapter.

[9]AICPA, *op. cit.*, Statement 9.