# Marquette Law Review

Volume 44 Issue 3 Winter 1960-1961

Article 5

1961

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# **Repository Citation**

Richard J. Weber, *Inventory Problems Under the Federal Income Tax*, 44 Marq. L. Rev. 335 (1961). Available at: https://scholarship.law.marquette.edu/mulr/vol44/iss3/5

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# COMMENTS

# INVENTORY PROBLEMS UNDER THE FEDERAL INCOME TAX

Inventories have traditionally been the source of some of the most difficult tax accounting problems. A businessman holding merchandise for resale, or a firm engaged in the production of goods is faced with the problem of computing taxable income at the end of each tax period. Of what significance is an inventory in the calculation of taxable income? Is an inventory necessary in all types of business? In cases where inventories are taken, what is to be included in the inventory and what items, if any, can be excluded? At what price should an item be included in the ending inventory when the cost of the item changes due to market fluctuations during a period or over a number of accounting periods? And, finally, assuming the price of an item can be ascertained, which specific items composing the total number of items available for sale during a period have been sold, and which items remain to be inventoried? These and other related problems will be examined briefly and an attempt will be made to determine the position taken by the taxing authorities concerning them.

# I. Inventories as a Device for Determining Gross Income from Sales

Since the tax rates apply only to taxable income, the latter term should be sharply distinguished from the term "gross income" and from the term "gross profit". Taxable income is defined in the Internal Revenue Code as gross income minus allowable deductions.<sup>1</sup> Thus, under this definition the first step in computing tax liability is to determine gross income. With reference to gross income Regulation 1.63-3 (a) provides:

In a manufacturing or mining business, "gross income" means the total sales, less the cost of goods sold, plus any income from investments and from incidental or outside operations or sources. Gross income is determined without subtraction of depletion allowances based on a percentage of income, and without subtraction of selling expenses, losses, or other items not ordinarily used in computing cost of goods sold. The cost of goods sold should be determined in accordance with the method of accounting consistently used by the taxpayer.

Instead of the term "gross income" as used in this regulation, the term "gross profit" or "gross margin" is employed by accountants to indicate a figure which represents the excess of the selling price over the cost

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<sup>&</sup>lt;sup>1</sup> Int. Rev. Code of 1954, §63(a). Deductions allowed under Section 162 in order to reduce gross income to taxable income are selling and administrative expenses—sometimes referred to as expenses of doing business.

of the goods sold. Notice that the definition of gross income in the regulation consists of more than just the excess of selling price over the cost of the goods sold. Gross income is equal to gross profit (margin) "plus any income from investments and from incidental or outside operations or sources." Hence, a determination of gross profit is the first step in the calculation of a businessman's gross income.<sup>2</sup> After the gross profit figure is ascertained, certain extraneous income which does not represent income derived from the sale of goods is added to gross profit and the total represents gross income.

The gross profit figure is determined by deducting the cost of goods sold during the year from the net sales for the same year. Generally few problems are encountered in calculating the net sales figure. However, a determination of the cost of goods sold figure involves three elements: (1) the inventory at the beginning of an accounting period; (2) the merchandise purchased or produced for sale during the period; and (3) the inventory on hand at the end of an accounting period. The beginning inventory will correspond identically with the closing inventory of the previous period. However, where an inventory for the close of the preceding year has, for some reason or other been misstated, the taxpayer, with the permission of the Commissioner of Internal Revenue and within the exercise of his administrative discretion, can adjust the inventory.3 Purchases during the period can be determined from invoices and accounting records. The determination of the ending inventory will be taken up in detail later.

To illustrate the method accountants normally apply in order to arrive at the gross profit figure and to illustrate the significant part played by inventories in this determination, assume that a retail merchant has, during an accounting period, taken in thirty thousand dollars on the sale of his merchandise; that one thousand dollars worth of the merchandise sold had been returned. Assume also that the same merchant carried a three thousand dollar beginning inventory; that he purchased, during the year, goods costing twenty-one thousand dollars, and his ending inventory was four thousand dollars. His gross profit (margin) is to be computed in the following manner:

<sup>&</sup>lt;sup>2</sup> The income tax forms adhere more closely to accounting terminology. Schedule C of form 1040 (sole proprietors return) applies the term "gross profit" in line 10, to a figure which represents the difference between "total receipts" (line 1) and cost of goods sold. The term "total receipts," however, encompasses more than just income derived from sales since schedule C is used to report income derived from business or profession. Form 1120 (corporation tax return) uses the term "gross profit" in line 3 and the term "gross receipts less returns and allowances" in line 1. Form 1065 (partnership tax return) uses the gross profit term in line 3, while in line 1 two terms—"gross receipts" or "gross sales"—are employed, less returns and allowances, in order to determine "net receipts" or "net sales."
<sup>3</sup> Swift Manufacturing Co. v. U.S., 12 F. Supp. 453 (Ct. Cl. 1935).

<sup>&</sup>lt;sup>3</sup> Swift Manufacturing Co. v. U.S., 12 F. Supp. 453 (Ct. Cl. 1935).

Total sales	\$30,000.00	
Less returned sales	1,000.00	
Net Sales		\$29,000.00
Cost of goods sold:		•
Beginning inventory	3,000.00	
Purchases	21,000.00	
Cost of goods available for sale		
Ending inventory	4,000.00	
Cost of goods sold		20,000.00
Gross profit on sales	• • • • • • • • • • • •	\$ 9,000.00

Notice that the cost of goods sold is calculated by subtracting the ending inventory from a figure which represents the beginning inventory and purchases during a period.

It should also be noted that a large inventory at the end of an accounting period will have the effect of increasing the gross profit for the year, while a large beginning inventory for the period has a tendency to reduce gross profit. Consequently a very large ending inventory will produce a large profit only for a current period and will have a converse effect when used as the beginning inventory for the subsequent accounting period. In the illustration the inventory at the end of the period exceeds the beginning inventory by one thousand dollars. Consequently the gross profit, gross income, and taxable income will all be one thousand dollars greater as a result. Thus, included in the inventory on hand is a one thousand dollar gain for which the taxpayer must account in the payment of taxes. A question immediately arises as to the cause of the inventory gain. If the ending inventory contains approximately the same number of items included in the beginning inventory, it is conceivable that the gain is "unrealized" in the form of increased prices due to an inflationary market. It thus becomes apparent that a taxpayer who wishes to minimize his tax burden will select a method of valuation of his inventory which will yield a low ending inventory. The extent to which the taxpayer is legally authorized to reduce the price of the ending inventory relative to current market prices is taken up under sections IV and V.

## II. WHO MUST KEEP INVENTORIES

The Internal Revenue Code contains a general rule for determining which taxpayers are required to keep inventories but delegates discretion to the Commissioner in applying the rule.

Whenever in the opinion of the Secretary or his delegate the use of inventories is necessary in order clearly to determine the income of any taxpayer, inventories shall be taken by such taxpayer on such basis as the Secretary or his delegate may prescribe as conforming as nearly as may be to the best accounting practice in the trade or business and as most clearly reflecting the income 4

The Commissioner has taken the position that a beginning and ending inventory is necessary in order to correctly reflect taxable income "in every case in which the production, purchase, or sale of merchandise is an income-producing factor."5

Since both the code and the position taken by the Commissioner place major emphasis upon a clear reflection of income, a question arises concerning the significance of inventories in making an accurate ascertainment of a taxpayer's income during a taxable year. Why are inventories needed in order to correctly reflect income? To illustrate the distortion of taxable income which occurs as a result of failure to maintain a beginning and ending inventory, consider the following hypothetical figures:

Actual net sales for the current period	\$40,000.00
Merchandise on hand at the beginning of the period .	5,000.00
Purchases during the period	30,000.00
Merchandise on hand at the end of the period	9,000.00
Selling and administrative expenses actually	
incurred during the period	8,000.00
Income actually received in payment of accounts	
receivable from sales	25,000.00
Selling and administrative expenses actually paid	
during the period	2,000.00
Money paid during the period to merchandise	
suppliers	23,000.00

In the first situation assume that the taxpayer keeps no inventories and maintains no records whereby he is able to accrue items of income. The only method of computing taxable income available in such a situation is the cash receipts and disbursements method of accounting.<sup>6</sup> A taxpayer employing a pure cash basis reports no income from sales on account until the actual collections are received. Similarly no expense is deducted until the expenditure is actually paid out.<sup>7</sup> Thus under this method purchases are regarded as costs chargeable against income in the period in which payment is made, and no consideration is given to inventories. Taxable income for the taxpayer in the above illustration

<sup>4</sup> Int. Rev. Code of 1954, §471.

<sup>&</sup>lt;sup>5</sup> Treas. Reg. §1.471-1.

<sup>&</sup>lt;sup>1</sup> Ireas. Reg. 91.471-1.
<sup>6</sup> Greengard v. Commissioner of Internal Revenue, 29 F. 2d 502 (7th Cir. 1928).
<sup>7</sup> In Consolidated Asphalt Co., 1 BTA 79 (1924) the court held that accounting on the cash method means that taxable income is determined by including all of the gross income actually received and deducting only the amounts actually paid out.

using a pure cash receipts and disbursements method of accounting is computed as follows:

Income actually received in payment of accounts receivable from sales
Deduct:
Expenses actually paid out during the period \$ 2,000.00 Money paid to merchandise suppliers
during the period 23,000.00 25,000.00
Taxable income

Notice that in spite of an inventory increase during the period of \$4,000.00, the taxpayer's taxable income is zero under the cash basis of accounting. This is also true in spite of the fact that the right to receive a \$40,000.00 item of income accrued to the taxpayer during the current period. Here the taxpayer is able to build up a large inventory during a particular accounting period without having to pay a tax on the inventory gain. He can then defer payment on the merchandise received to a subsequent period and balance payment of the merchandise against income received from customers on account, thereby reducing his taxable income in a period when his gross income would ordinarily be large enough to put him in a higher tax bracket. The taxpayer's return under the cash receipts and disbursements method fails to reflect income clearly for the current period since the cost of goods sold during the period-which is calculated through the use of inventories-is not ascertained, and, consequently, there is no matching of the selling price of merchandise sold with the cost of the same. However, it is conceivable that, in a particular type of business, where the taxpayer sells merchandise for cash and pays for goods as they are purchased, and where there is a rapid turnover of merchandise, the cash receipts and disbursements method will clearly reflect income for a period. In the latter instance expenses would also be paid when they are incurred and merchandise on hand at the end of a period would not be substantially in excess of the beginning inventory.

In a second situation assume that the taxpayer described above employs the cash method of accounting but at the same time maintains beginning and ending inventories. A distortion in taxable income will still exist since no accounting is made during a current period for other items which affect gross profit, such as sales, accounts receivable, and accounts payable. Notice the difference in taxable income under this situation as opposed to a pure cash receipts and disbursements method. Income actually received in payment of

accounts receivable from sales	\$25,000.00
Cost of goods sold:	
Beginning inventory \$ 5,000.00	
Purchases 30,000.00	
Goods available 35,000.00	
Ending inventory 9,000.00	
Cost of goods sold	26,000.00
Gross profit (loss)	$\overline{(1,000.00)}$
Deduct:	
Selling and administrative expenses paid	2,000.00
Net loss	$(\overline{3,000.00})$
	·

Through the use of inventories the cost of goods sold during the period was calculated and the latter figure was "matched" with actual receipts during the period. This matching of receipts from customers on accounts receivable with the cost of merchandise sold currently, is obviously not a valid calculation which will clearly reflect income for the current period, since included in the \$25,000 receipts there are undoubtedly payments made on accounts receivable from sales made in prior periods. Moreover, since actual sales during the current period were \$40,000 it is imperative to charge the total cost of these sales against the \$25,000 actually collected.

A third possibility is to match the cost of goods sold during a particular taxable period with the net sales for the same period whether or not the items sold have been paid for. Also, expenses incurred during the period are deducted from gross profit whether or not these expenses have been actually paid. This method is known as the accrual basis of accounting. In Owen-Ames-Kimball Company<sup>8</sup> the court held that, the accounting system is on the accrual method where income is taken into consideration when earned, even though not received in cash, and expenses are considered as soon as incurred, whether paid or not. Thus, under the accrual system, we have a "matching" of income and expenses and an inventory gain over a period will be reflected in gross income for the same period. Applying the figures in the above illustration using the accrual basis of accounting, we have the following:

Net sales	\$40,000.00
Less cost of goods sold:	
Beginning inventory \$ 5,000.00	
Purchases	

85 B.T.A. 921 (1926).

Goods available	35,000.00	
Ending inventory	9,000.00	
Cost of goods sold		26,000.00
Gross Profit		14,000.00
Deduct:		
Selling and administrative expenses in	curred	8,000.00
Taxable income	•••••	\$ 6,000.00

Notice that under the accrual basis the taxable income figure represents the sum total of operations for one particular taxable period. All obligations incurred during the period as well as all rights derived therefrom have been considered in making a determination of the taxpayer's income.

A compromise between the cash basis and the accrual basis of accounting forms the nucleus for another possibility. When a taxpayer's method of keeping accounts is a combination of the latter two methods, he is using what is designated as a "hybrid" method.<sup>9</sup> This method employs the accrual method in accounting for items that affect gross income, such as sales, purchases, accounts receivable, and accounts payable, and uses the cash method in deducting operating expenses. Notice the effect on taxable income when this method is used.

Net sales	\$40,000.00
Cost of goods sold (same as under the accrual basis)	26,000.00
Gross profit	14,000.00
Selling and administrative expenses actually paid out	
Taxable income	\$12,000.00

Notice that even with the use of inventories and a matching of sales with the cost of sales, there is a distortion of taxable income in the amount of \$6000, i.e. income has been reported in a current period which should properly be deferred to a subsequent period. Since \$6000 worth of expenses which were incurred during the current period are deferred to the period in which they are actually paid out, it cannot be said the "hybrid" method as applied in the illustration clearly reflects income for a particular period. However, in situations where operating expenses are incurred and paid at relatively uniform intervals the "hybrid" method will result in a fair approximation of taxable income for a period and will eliminate the necessity of maintaining additional accounting records for the purposes of accruing these items.

<sup>&</sup>lt;sup>9</sup> The hybrid method is authorized by the Commissioner in his Regulations for periods beginning after 1953. See Int. Rev. Code of 1954 §446(c)(4); Treas. Reg. §1.446-1(c)(iv).

Regardless of what accounting method is used the same income and the same deductions are allowable. The difference between the methods consists principally in the time for reporting income. The cash method is more likely to follow economic swings since the amount of income actually taken in during a depressed period is likely to be somewhat less than that received during a normal period or during an inflationary trend. The accrual method, on the other hand, will show an item of accrued income during a depressed period when people are likely to buy on credit, if they buy at all.

The Commissioner has taken the position that, "in any case in which it is necessary to use an inventory the accrual method of accounting must be used with regard to purchases and sales<sup>10</sup> unless otherwise authorized under subdivision (ii)."11 Subdivision (ii) indicates that the Commissioner will allow a deviation from the accrual method when the method used by the taxpaver accords with generally recognized and accepted income tax accounting principles and is consistently used by the taxpayer. However, as was indicated earlier, generally acceptable income tax accounting principles place major emphasis upon a clear reflection of income for a current period. Thus it is difficult to conceive of a situation in which the use of inventories is an essential factor in making a determination of net income, and the use of the accrual system is not essential.<sup>12</sup> In Herberger et al v. Commissioner of Internal Revenue<sup>13</sup> the petitioner was in the business of purchasing and selling cucumbers and other materials and supplies and selling pickles. The court held that since the purchase and sale of these items was an income-producing factor, in order to reflect net income correctly, it was necessary to take inventories of merchandise on hand at the beginning and end of each taxable year and to use them in computing net income. Petitioner did so take and use such inventories. "Therefore no method of accounting in regard to purchases and sales correctly reflected their income except the accrual method."14 In Omah MacDonald15 where a furniture store proprietor kept his books on the cash receipts and disbursements basis while buying and selling new and used furniture on the cash and installment basis, principally the latter, the Commissioner determined that the accrual method of accounting with the use of an inventory more accurately reflected net income. The Commissioner after

<sup>&</sup>lt;sup>10</sup> Treas. Reg. §1.446-1 (c) (2).

<sup>11</sup> Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.
<sup>12</sup> Note that the regulation requires the use of the accrual method only "with regard to purchases and sales . . ." when inventories are required. This is further authority for the use of the "hybrid method."
<sup>13</sup> 195 F. 2d 293 (9th Cir. 1952).
<sup>14</sup> Id. at 295; also in the recent case of Charles F. Bennett and Vada Bennett, 30 T.C. 114, 121 (1958) the Tax Court stated ". . . where . . . inventories are a factor in determining net income, the use of an accrual system of accounting is monthom." is mandatory." <sup>15</sup> P-H Tax Ct. Mem. ¶49,053 (1949).

redetermining the taxable income of each of petitioner's stores for the years 1942 and 1943 under the accrual method, increased the taxable income of both stores for 1942 and 1943 in the amounts of \$14.471.34 and \$2,714.26. Of this increase it was shown that \$4,379.97 was the value of petitioner's inventory at the end of the calendar year 1942 which the Commissioner was allowed to add to petitioner's taxable income for that year for the purpose of computing taxes. It was shown that for the year 1942, petitioner suffered an inventory decrease in the amount of \$221.99 which the Commissioner deducted from petitioner's reported taxable income. However, over the same two-year period, petitioner failed to accrue income on sales, which it had made on the installment basis, in the amount of \$12,980,20, Petitioner kept memoranda books of inventory prepared semi-annually for the purpose of local tax, insurance and credit. The values shown were not reflected in any other accounting record used by petitioner in determining its taxable income. While petitioner's total taxable income over a six-year span would be approximately the same whether the cash basis or the accrual basis were employed, the court takes the position that income tax laws are based on the concept that profits and losses should be allocated to their proper annual accounting periods and that it is apparent from this record that income has been assigned to a different taxable period under the cash method than it would have been under the accrual method.

In Welb v. U.S.<sup>16</sup> the taxpayer operated a chicken hatchery, hennery, feed mill and farm, and bought grain and other feed ingredients, and sold chickens and eggs. In the years prior to 1946 the Commissioner accepted taxpayer's returns based upon the cash method of accounting where no inventory was kept. The taxpayer realized income in 1945 and in previous years on which he did not pay taxes, because such income was invested in inventory items the costs of which were deducted from gross receipts for such years. The Commissioner required the taxpayer to switch to the accrual method of accounting and to take up the inventory profits in the year 1946. The court said: "The fact that the Commissioner accepted plaintiff's returns on the cash basis in prior years is immaterial, and does not preclude the Commissioner from making the adjustment away from such improper accounting method in the taxable year."17

The Code<sup>18</sup> authorizes the use of methods other than the accrual and cash receipts methods. Even though inventories are maintained by the taxpayer, their use is not mandatory in the calculation of income if another method satisfies the "clear reflection of income concept."19

<sup>&</sup>lt;sup>16</sup> 103 F. Supp. 551 (N.D. Iowa, 1952).
<sup>17</sup> Id. at 554.
<sup>18</sup> INT. REV. CODE OF 1954, §446(c).
<sup>19</sup> Theodore H. Beckman, 8 B.T.A. 830 (1927); Glenn v. Kentucky Color and

While at first glance it might appear from the Code<sup>20</sup> that the Commissioner has broad discretion in determining whether or not the taxpayer is required to maintain an inventory, a closer examination reveals that the Commissioner's discretion is somewhat limited within the bounds of the "clear reflection of income" concept. If the taxpaver can show that a method of computing taxable income more clearly reflects income than the method prescribed by the Commissioner, the taxpayer will prevail. However, in all cases, the taxpayer has the burden of proving that the Commissioner's action in requiring the use of inventories, or in changing the taxpayer's inventory method, was arbitrary or capricious and an abuse of discretion.21 The case of Finance and Guaranty Co. v. Commissioner<sup>22</sup> citing Lucas v. Kansas City Structural Steel Co. said: "... a heavy burden of proving that the Commissioner's action was plainly arbitrary rests upon the taxpayer."23

# Businesses where inventories are not required (or permitted)

As indicated earlier, inventories must be used in every business in which the "production, purchase, or sale of merchandise is an incomeproducing factor."<sup>24</sup> A question arises as to what businesses are encompassed by this category. Are there any types of business firms in which the production, purchase, or sale of merchandise is an income-producing factor but in which inventories would not correctly reflect taxable income so that their use would be inappropriate? Generally in cases where merchandise turnover is relatively slow, i.e., where the taxpaver normally holds the merchandise over several tax accounting periods, and where the valuation of the items fluctuates rapidly so that market values frequently fall below cost, inventories are inappropriate. In such a situation a temporary reduction in market values below cost would be reflected in a lower taxable income in the form of reduced inventory values.<sup>25</sup> Since the reduction is only temporary, a revaluation at the end of each accounting period would have the effect of distorting a taxpayer's income from one period to the next. This is especially true since the gains and losses in inventory due to market fluctuations would be totally unrealized. Perhaps the best example of a business of this nature is the real estate trade where lands held for resale by a dealer in real estate are not permitted to be inventoried.26 In the case of Atlantic Coast

Chemical Co., 186 F. 2d 975 (6th Cir., 1951); Stanford R. Brookshire, 31 T.C. No. 1157 (1959); Drazen, 34 T.C. No. 109. (1960).

<sup>20</sup> Subra note 4.

<sup>&</sup>lt;sup>21</sup> Lucas v. Kansas City Structural Steel Co., 281 U.S. 264,274 (1930).

<sup>22 50</sup> F. 2d 1061, 1062 (4th Cir. 1931).

<sup>&</sup>lt;sup>23</sup> See also Simon v. Commissioner of Internal Revenue, 176 F. 2d 230 (2d Cir. 1949).

<sup>24</sup> Subra note 4.

<sup>&</sup>lt;sup>25</sup> This analysis is based upon the assumption that the taxpayer employs the lower of cost or market concept in pricing his inventory. <sup>26</sup> See O.D. 848, 4 CUM. BULL 47 (1921).

Realty Co. the taxpayer, a real estate dealer, claimed the right to use an inventory of lands priced at market, where the market values were below cost. The Commissioner denied the right to inventory lands held for resale and pointed up a tax deficiency for the year 1918 in the amount of \$29,280.76. The court in upholding the Commissioner's position stated:

Income is not ordinarily determined by the fluctuation in value of property upward or downward during the continuation of the same ownership. Increment is not added to nor is a drop in value deducted from earnings until it has been realized by a sale, loss or other cognizable disposition of the property. . . .

Since petitioner sometimes holds lands for nine or ten years an inventory method would require a revaluation each year.27

The Atlantic case is a landmark decision in this area, and subsequent cases appear to accept the rule laid down without questioning its logic.28 A significant factor upon which the decision in the Atlantic case is based is the method of inventory pricing which was employed. The reason for the tax deficiency was a low ending inventory resulting from pricing of the lands at market values when they were below cost. This method, known as "lower of cost or market," will be taken up in more detail later. It would appear that the objection to the "fluctuation in value of property upward or downward during the continuation of the same ownership" could have been handled by eliminating one method of inventory pricing (cost or market, whichever is lower), rather than eliminating the use of inventories altogether. For example, fluctuations in income due to market changes would be eliminated, for all practical purposes, if the real estate dealer were compelled to inventory all lands held for resale at cost. The cost method would appear to eliminate the objections raised in Atlantic, and further, it would better satisfy the "clear reflection of income concept" because under the Atlantic rule an increase in the amount of land held for resale during a period is non-taxable as long as the lands held remain unsold.

Another type of business in which it has been held that inventories are not required is the mail order business where merchandise is shipped to customers on approval. In Dixie Manufacturing Co. the taxpayer was engaged almost exclusively in selling razors by mail order. Razors were sent to prospective purchasers on a ten-day free trial without inquiry as to the customers' financial standing. At the end of such free trial the "purchaser" could either return the razors or remit the price. Large numbers of razors so shipped were neither returned nor paid for. The taxpayer kept books on the cash basis taking no inventory, but when a razor was sent out a card record was made of the shipment. For all years except 1919 and 1920 the taxpayer kept card records only of

 <sup>&</sup>lt;sup>27</sup> 11 B.T.A. 416, 418-420 (1928).
 <sup>28</sup> W. H. Hay, 25 B.T.A. 96 (1932); Albert F. Keeney 17 B.T.A. 560 (1929).

the razors paid for, destroying the card records covering razors not paid for and razors returned. The court held that this was not the type of business in which an inventory is required stating:

It seems reasonable to believe ... that the taxpayer's cash receipts and cash disbursements measured with reasonable accuracy its income year after year. If there was any substantial difference between purchases of razors and shipments of razors, so that a substantial quantity of any razors remained in the inventory at the close of any year, that fact would be reflected in the succeeding year. From all evidence, however, it appears very doubtful if such was the case.29

The Dixie case hints that, in the case of mail order businesses, even though an inventory would more clearly reflect income when merchandise is shipped to prospective customers on approval, an inventory will not be required since the income not actually received in a current period will nevertheless be taken up in a subsequent period. If this assumption is correct it is questionable whether the Dixie case can be considered authority for all mail order businesses since the decision is contrary to the reasoning in other areas. The facts in the Dixie case fail to indicate that inventories were not possible. On the contrary, card records were kept of all shipments made. An ending inventory could have been computed rather easily by taking a physical count of all merchandise in stock and adding to this count the items, indicated by the card records, which were out on free trial but which had not been paid for. Perhaps it was the uncertainty of either payment of the merchandise or return of the same which prompted the court to render the decision that inventories are not required. The facts indicate that large numbers of razors were neither returned nor paid for. Thus there is rationale for the Court's position in the particular fact situation presented in the Dixie case since the inclusion of an item in inventory which will be neither paid for nor returned would certainly result in a distortion of taxable income.

Inventories in connection with floral operations, nurseries, or other agricultural operations present problems which in many instances make their use impracticable, or, in other cases, they are prohibited altogether.<sup>30</sup> The use of inventories in connection with these operations would doubtlessly result in reflecting profit and loss more equally over a number of periods, but a question arises as to whether or not such a method would more clearly reflect income for a particular period. The problem is to accurately determine at the end of each tax period the cost of an inventory which increases when the stock increases and which decreases under circumstances resulting from losses of stock due to any of the accidents which normally surround the growing of agricultural products. Increases

 <sup>&</sup>lt;sup>29</sup> Dixie Manufacturing Co., 1 B.T.A. 641, 648 (1925).
 <sup>30</sup> See J. Van Lindley Orchard Co., 2 B.T.A. 1084 (1925).

would be based upon an estimated cost of production. Thus gains would be taken as well as losses, based purely upon estimates, neither of which would have been realized. The problem of inventorying growing crops and plants, however, is not the same as the problem of inventorving lands. In the latter case it is a question of determining a valuation to be placed upon a commodity which is in a saleable state, whereas in the former an attempt is made to determine a valuation of a commodity which is still in a stage of development. The difference between the two types of valuation is that, in the case of lands, the cost has already been determined and if the cost figure is lower than market, the former figure is used as a valuation. In the case of growing plants or crops the valuation is more in the nature of a cost allocation based upon estimates of cost of production.

Farmers engaged in producing crops which take more than a year from the time of planting to the time of gathering and disposing, are not permitted to inventory these crops.<sup>31</sup> The same rule applies in the case of nurserymen who may not inventory their young trees,<sup>32</sup> and also florists who are prohibited from inventorving growing plants.<sup>33</sup> The reason for this prohibition is the fact that the amount and value of such plants and crops on hand at the beginning and end of the taxable year cannot be accurately determined. To attempt to place an arbitrary figure upon these commodities would have the effect of increasing ending inventories with a consequent increase in taxable income. This increase would be based purely upon estimates of costs, part of which may never be realized due to the uncertainty which surrounds the growing of plants and crops.

A method of computing taxable income which is ultimately realized from the sale of these growing crops is available to the farmer.<sup>34</sup> If the crop takes more than a year from planting to time of gathering, the income therefrom may be computed upon the crop-cost basis. In Amling-De Vor Nurseries, Inc. v. U.S. the court stated:

The fundamental difference between the inventory method of accounting for income and the crop-cost method may be briefly stated. In the inventory method, production costs are initially charged to inventory and are later written off as costs of goods sold, as the inventory is reduced either by sales or by a downward adjustment to reflect a decline in market value below cost. In the

<sup>&</sup>lt;sup>81</sup> I.T. 1368, I-1 CUM. BULL 72 (1922). Notice that even in cases where a farmer reports his income on the accrual basis of accounting, he is not entitled to employ the use of inventories of growing crops in computing taxable income. As indicated earlier no inventories are used at all under the cash basis of accounting. <sup>32</sup> Ibid.

 <sup>&</sup>lt;sup>33</sup> O.D. 995, 5 Cum. Bull. 63 (1921).
 <sup>34</sup> The cash receipts and disbursements method of computation is always available to the farmer. In addition another method known as the "farm-price method" can be employed. The latter method is taken up later.

crop-cost method, production costs of each crop are initially charged to deferred crop-costs and are written off as the cost of operations only as such crop is sold.35

I.T. 1368<sup>36</sup> in authorizing the use of the crop-cost basis states: "but in any such case the entire cost of producing the crops must be taken as a deduction in the year in which the gross income from the crop is realized."

An issue arises as to when, if at all, growing plants and crops can be inventoried. There is no prohibition against a farmer, nurseryman, or florist inventorying livestock or plants and produce which is in a "marketable stage known"37 providing adequate records are maintained to enable a proper classification. The proper basis to be used in any event depends upon the facts in the particular case.38

### III. WHAT SHOULD BE INCLUDED IN INVENTORIES

As indicated earlier, the Commissioner has a certain amount of discretion in determining whether or not an inventory is necessary in order to clearly calculate taxable income. An issue arises as to whether the Commissioner has the same discretion in determining what items shall be included in the ending inventory. Stated differently, does the Commissioner have discretion as to what shall be included in the cost of goods sold, since the latter are costs which would be inventory had the goods not been sold? One should keep in mind also that the cost of goods available for sale minus the cost of goods sold equals the ending inventory. One theory is that the inclusions in the cost of goods sold is a matter of income tax accounting in which the Commissioner is given discretion. In Montreal Mining Co.39 the court said: "The determination of the valuation of inventories, including therein all items entering into the basis and approval of the accounting system used, is expressly confided to the Commissioner." Neither the Commissioner nor the taxpayer is permitted to act arbitrarily,40 however, thus raising an issue as to the need of some rule or standard which can be applied. Reiling states that "even administrative discretion must have a reasonable rule to apply."41 However, the latter authority fails to suggest such a "reasonable rule." Several general rules have been suggested by taxing authorities and through judicial decision.

<sup>35 139</sup> F. Supp. 303, 304 (N.D. Calif. 1956).

<sup>36</sup> Supra note 31.

<sup>&</sup>lt;sup>37</sup> O.D. 995 supra note 33.

<sup>&</sup>lt;sup>38</sup> I.T. 1673, II-1 CUM. BULL. 30 (1923); Also see C. E. Clark [42,098, P-H Memo BTA.

<sup>&</sup>lt;sup>39</sup> 2 T.C. 688, 694 (1943).
<sup>40</sup> Riverside Manufacturing Company v. U.S., 1 U.S.T.C. ¶361, 67 Ct. Cls. 117 (1929); *cert. den.*, 279 U.S. 863.
<sup>41</sup> Reiling, "Practical Legal Aspects of Tax Accounting", 30 "Taxes" 1028, 1037 (1952).

One of the suggested rules is the so-called "title concept." The Commissioner has taken the position that "merchandise should be included in the inventory only if title thereto is vested in the taxpayer."42 If the "title concept" is the determining factor it becomes necessary to ascertain whether title has passed under the applicable law of sales.43

The law is not clear, however, whether or not the passage of title is the controlling factor in all situations. In the case of U.S. v. Amalgamated Sugar Co.44 the court held that the guestion of title entered only as a factor in determining the rights of the parties for the purpose of measuring the liability of the seller for taxable gain. The court in U.S. v. Utah-Idaho Sugar Co. seemed to feel that as long as the contract of sale created a present binding and enforceable obligation on the part of the taxpayer and the purchaser of a fixed amount of sugar at a specified price "it is wholly unnecessary to determine whether the contracts passed title before segregation and shipment when measured by the rights of the parties in a replevin, attachment, execution, or other cognate action."45 The chief source of confusion appears to lie in cases involving contracts for the purchase and sale of fungible goods. Since fungible goods are not separated or segregated so as to be appropriated at the time the contract is entered into, the earlier cases were reluctant to apply the "title concept." Instead they held that title, for the purpose of inventory, passes as soon as the contracting parties become mutually obligated under the contract, notwithstanding the fact that title had not passed for other purposes. The primary factor is the manifest intention of the parties to any given transaction.<sup>46</sup> To ascertain intention of the parties regard must be had to the usages of the trade and circumstances of the case.47 Perhaps the earlier cases could be explained by employing a "mutual intention to be bound" concept rather than a strict "title concept" when formulating a general rule applicable in this area.

As a further indication that passage of title is not always the con-

<sup>42</sup> Treas. Reg. §1.471-1.

 <sup>&</sup>lt;sup>43</sup> Freas. Reg. 81.471-1.
 <sup>43</sup> Kelley v. U.S., 27 F. Supp. 570 (D. Mass., 1939), Brown Lumber Co., Inc., v. Commissioner, 35 F. 2d 880 (D.C. Cir. 1929); Haas Bros. v. McLaughlen, 39 F. 2d 381 (9th Cir. 1930); Monroe Cotton Mills, 6 B.T.A. 172 (1927); Jagerson Fuel Co., 24 B.T.A. 871 (1931); I.T. 2001, III-1 Cum. Bull. 57 (1924); I.T. 1692, III-1 Cum. Bull. 61 (1923).

<sup>44 72</sup> F. 2d 755 (10th Cir. 1934).

<sup>&</sup>lt;sup>44</sup> 72 F. 2d 755 (10th Cir. 1934).
<sup>45</sup> 96 F. 2d 756, 759 (10th Cir. 1938); see also B. B. Todd, Inc., 1 B.T.A. 762 (1925); Bardi Steel Products Corp., 14 B.T.A. 209 (1928).
<sup>46</sup> Hatch v. Oil Co., 100 U.S. 124 (1879); see also Uniform Sales Act, §18.
<sup>47</sup> Pacific Grape Products Co. v. Commissioner, 219 F. 2d 862 (9th Cir. 1955) where uniform contract adopted by canning industry providing that shipments of ordered goods withheld at the purchaser's request should be filled and paid for on Dec. 31, was by trade practice and custom considered by canners to give them the right to the selling price on Dec. 31 and that title passed at that give them the right to the selling price on Dec. 31 and that title passed at that time. The usage and custom referred to became part of the contract and bound both canners and buyers. (This case involved the sale of fungible goods also).

trolling factor in making a determination of the cost of goods sold the regulations provide that:

... a taxpayer engaged in a manufacturing business may account for sales of his product when the goods are shipped, when the product is delivered or accepted, or when title to the goods passes to the customer, whether or not billed, depending upon the method regularly employed in keeping his books....<sup>48</sup>

Thus the Commissioner has taken the position that a taxpayer can accrue income on sales irrespective of the passage of title to the purchaser. This is a somewhat anomalous position which the Commissioner appears to have taken in view of the "clear reflection of income concept." It is difficult to conceive of a situation in which a taxpayer accrues income from a sale failing to release title to the purchaser, while at the same time the method of accounting employed clearly reflects income. It is possible for a taxpayer to ship merchandise or deliver a product and yet retain title to the same. If an entry is made on the seller's books crediting "sales" and debiting an account receivable there must be a companion entry, assuming for purposes of illustration that the taxpayer is employing the perpetual inventory method, debiting an account labeled "cost of goods sold" and crediting "inventory." To illustrate the discrepancy resulting from a failure to make the latter entry assume the following figures:

Inventory (beginning balance)\$5,000.00
Sale on January 2nd\$2,000.00
Cost of the January 2nd sale\$1.500.00

The proper entries under a perpetual inventory system to account for the sale are as follows:

Account receivable	\$2,000.00
Sales	\$2,000.00

This entry accrues the item of income (sale) recording the name of the customer to whom the sale was made. The companion entry under the perpetual system which records the cost of the item sold when the sale is made is as follows:

Cost of goods sold	
Inventory	\$1,500.00

If the taxpayer were to close his books at this point, his gross profit would be computed as follows:

Sales	\$2,000.00
Less: Cost of goods sold	1,500.00
Gross profit on sales	500.00

48 Treas. Reg. §1.446-1 (c) (ii).

Assuming that the taxpayer retained title to the merchandise but made the entry crediting "sales," his gross profit at this point would be \$2,000.00 instead of \$500.00. Obviously the two thousand dollar figure fails to match the sales figure with its cost so that the "clear reflection of income" concept has been frustrated.

Under the periodic inventory system, which involves the taking of a physical count of the merchandise at intervals, the same result would accrue, i.e. the ending inventory would include all items of which the taxpayer holds title. Hence, the cost of goods sold would not include those items for which the sales entry had been made but for which the seller retained title.

The illustration assumes the sale of merchandise, the cost of which can be ascertained by the end of the taxable period. In the event that cost cannot be ascertained and matched with current sales, the income item should be deferred until costs of the same can be computed.

The writer has not found a tax case which indicates that any method other than the "title concept" has been employed in the case of a purchaser of merchandise. A purchaser will normally record a purchase when title thereto vests in him.<sup>49</sup>

The "title concept" appears to be sound for a seller providing the latter's entry accruing the income item is not made until the seller is actually divested of title to the same. At this point the purchaser would take the item into his inventory. This method appears to be the best method for making a clear determination of a taxpayer's income for a particular period.

Sellers will frequently ship merchandise to customers under a contract to repurchase the same if the buyer fails to sell the merchandise within a specified period of time. On such a "sale or return" arrangement, title vests in the buyer until such time as the goods are actually taken back by the seller. Since the buyer holds legal title to the merchandise, the seller cannot properly include the same in his inventory. The "sale or return" arrangement must be sharply contrasted with a "sale on approval." The latter involves a situation where the goods are delivered to the proposed purchaser but they remain the property of the seller until the buyer accepts them. Usually the price has already been determined and agreed upon, and the buyer's willingness to receive and test the goods is the consideration for the seller's undertaking delivery of the goods to the buyer. "These two transactions are so strongly delineated in practice and in general understanding that every presumption runs against a delivery to a consumer being a 'sale or return,' and against a delivery to a merchant for resale being a 'sale on approval'."50

<sup>49</sup> See supra note 42.

<sup>&</sup>lt;sup>50</sup> UNIFORM COMMERCIAL CODE, §2-236, footnote comment 1 (1957 ed. p. 116);

Assuming that a taxpayer does have title, which assets are to be included in the inventory at the close of the taxable period? The Commissioner has taken the position that ". . . the inventory should include all finished or partly finished goods and, in the case of raw materials and supplies, only those which have been acquired for sale or which will physically become a part of merchandise intended for sale. . . .<sup>351</sup>

Generally, in a manufacturing business if an article forms a part of the finished product or of the manufactured article, it is properly included in the company's inventory. This suggests immediately that raw materials, goods in process, and finished goods are three items which will necessarily be included in the inventory.

Few problems, if any, are encountered respecting the inclusion of raw materials in the inventory since raw materials are stored by the manufacturer for the purpose of converting them ultimately into the manufactured product. Costs can be ascertained from invoices through the use of one or more of the various costing methods subsequently discussed in this comment.

Difficulty arises in attempting to accurately determine, for inventory purposes, the costs allocable to goods in process of manufacture and finished goods. From the standpoint of the cost accountant, elements entering into the selling price of any manufactured article are: (1) direct labor, (2) direct materials, (3) manufacturing overhead, (4) selling and administrative overhead, and (5) profit. Of these five only the first three, namely, direct labor, direct materials, and manufacturing overhead constitute factory or manufacturing cost, and these are the only items which must be taken into account when inventorving finished goods and goods in process. A truly accurate estimate of the constituent costs of the latter two items cannot be made in the absence of a cost accounting system. Where no cost accounting system is employed, the taxpayer must attempt to estimate the three elements of cost from the best information obtainable. Cost estimates and calculation sheets form the basis for the inventory where the actual cost cannot be determined. A fairly accurate estimate of the cost of a finished item can be ascertained by applying an average cost figure of items manufactured in the immediately preceding period. However, goods in process are normally at various stages of completion when the estimate is attempted, which makes the task of ascertaining constituent costs of manufacturing a most difficult one.52

For interesting fact situations involving sales on approval and the title concept see Neal, Clark and Neal Co. v. Tarby, 99 Misc. 380, 163 N.Y.S. 675 (1917); Demos v. Stowe, 193 Va. 831, 71 So. 2d 186 (1952).

<sup>&</sup>lt;sup>51</sup> Supra note 42.

<sup>&</sup>lt;sup>52</sup> To illustrate the significance of these items in calculating the cost of goods sold assume the following:

#### COMMENTS

Items which are consumed in the production process such as factory supplies and small tool stores plus such thing as power and maintenance stores on hand, are includable in the ending inventory notwithstanding the fact that these items are not, technically, raw materials.53 The reason for their inclusion is the fact that they will ultimately become a part of the finished product. The latter items should be sharply distinguished from supplies used on the product in manufacturing operations but not entering into the product, and supplies not used in manufacturing the product but required for general shop purposes. These items which are not includable in inventory can be handled in one of two ways: Walton takes the position that these items are properly charged off as a factory expense when they are issued to the factory for use.<sup>54</sup> Kester takes a slightly different approach to the treatment of these items stating: "All items of this sort, necessary for the operation of business but not dealt in as stock in trade, are called 'expense assets.' The portions of these assets on hand at a given time, the use of which will be deferred to a later period are classified as 'deferred charges'."55

A third general rule for making a determination of items includable in the ending inventory is authorized by the Regulations and states: "... the inventory should include all finished goods ... and supplies ... which have been acquired for sale. ... "56 The term "sale" as applicable to this situation means one which produces some income. In general

Raw materials:	
Inventory, December 31, 1959\$ 19,301.00	
Purchases 128,926.00	
Total	
Inventory, December 31, 1960 20,101.00	
Materials used	128,126.00
Direct labor	180,200.00
Manufacturing expenses :	•
Indirect labor 12,640.00	
Heat, light, & power 12,640.00	
Insurance	
Property taxes	
Depreciation	
Total manufacturing expenses	<u>41,114.00</u>
Total cost of manufacturing	349,440.00
Add goods in process, Dec. 31, 1959	<u>11,263.00</u>
Total	360,703.00
Deduct goods in process, Dec. 31, 1960	10,680.00
Cost of goods manufactured	350,023.00
Add finished goods, Dec. 31, 1959	3,090.00
Total	353,113.00
Deduct finished goods, Dec. 31, 1960	3,410.00
Cost of goods sold	\$349,703.00
Subra note 42.	

53 Supra note

<sup>55</sup> Supra note 42.
<sup>54</sup> Walton, Advanced Accounting Lecture 23 at 6 (1943).
<sup>55</sup> Kester, R. B., Accounting Theory and Practice, vol. 1, at 12; Also see Burroughs Adding Machine Co., 9 B.T.A. 938 (1927); Spiegel, May, Stern Co. et al v. U.S., 37 F. 2d 988 (Ct. Cl., 1930).
<sup>56</sup> Supra note 42.

"sale" implies the motive of profit and it is essential that the taxpayer be engaged in a business before he can inventory goods. The business must be one in which the production, purchase and sale of goods is an income-producing factor. If the taxpayer gives the goods away or if he sells them at cost the merchandise should not constitute part of his inventory. In Francisco Sugar Co. v. Commissioner of Internal Revenue,<sup>57</sup> taxpayer, whose principal business was the manufacture of sugar in Cuba, in order to secure and maintain good will of those on whom it depended for part of its supply of cane, had found it convenient, and perhaps necessary to act as general merchant for their wants, holding in stock a large assortment of manufactured tools, building supplies, and other articles, which it sold to customers at cost. The Commissioner argued that these goods were held for sale as "an income-producing factor," since they were a necessary incident to the sale of sugar, which produced income. The court in holding that the supplies were not a part of the taxpayer's inventory said :58

As a whole, it is true that the business was one in which the production . . . of merchandise was an income-producing factor. Such goods are 'supplies on hand which have been acquired for sale' or they are 'finished goods', but we think that 'sale', as applicable to this situation, means one which produces some income.... In general, sale implies the motive of profit; to extend it to such a case as this is beyond its usual significance.59

One of the special fields in which items held may be included in inventory providing certain prescribed requirements are complied with is the securities business. A dealer in securities, if he qualifies as such, may compute his net income by including in inventory securities which he has on hand at the end of a tax accounting period. The Regulation provides as follows:

. . . For the purposes of this section, a dealer in securities is a merchant of securities, whether an individual, partnership, or corporation, with an established place of business, regularly engaged in the purchase of securities and their resale to customers; that is, one who as a merchant buys securities and sells them to customers with a view to the gains and profits that may be derived therefrom. If such business is simply a branch of the activities carried on by such person, the securities inventoried as provided in this section may include only those held for the purpose of resale and not for investment. Taxpayers who buy and sell or hold securities for investment or speculation, irrespective of whether such buying or selling constitutes the carrying on of a trade or business, and officers of corporations and members of

<sup>&</sup>lt;sup>57</sup> 47 F. 2d 555 (2d Cir. 1931). <sup>58</sup> Id. at 557.

 <sup>&</sup>lt;sup>35</sup> A. at 557.
 <sup>59</sup> Also see Gossett, Jas. P., 22 B.T.A. 1279 (1931); McCann, Richard L., 30 B.T.A. 102, 109 (1934); Watts v. Commissioner, 75 F. 2d 981 (2d Cir. 1935); Aluminum Co. of America v. U.S., 24 F. Supp. 811 (W.D. Pa. 1938).

partnerships who in their individual capacities buy and sell securities, are not dealers in securities within the meaning of this section 60

The Regulation makes provision for two basic requirements in order to qualify as a dealer in securities. The first of these requirements is an established place of business. Presumably this means that it is necessary to have some sort of physical facility such as an office where securities are bought and sold in order to qualify. The second requirement for qualification is that the dealer must be regularly engaged in the purchase of securities and their resale to customers with a view to the gains and profits that may be derived therefrom. In the case of Squire v. Denman<sup>61</sup> a bank maintained a separate department for sale of stocks and securities to the public to the same extent that it maintained a separate trust department. A separate ledger was kept for bonds of the bank which were held for resale and a separate ledger kept for the bonds of the bank held for investment. The court held that the bank was entitled to inventory the securities which are held for resale and which were on hand at the end of the taxable year. The court went on to say that the bank was a dealer in securities within the regulation but that infrequent and isolated dealings in corporate and municipal bonds with its depositors are not sufficient to constitute a bank a dealer in securities. In Pan American Bank and Trust Co.<sup>62</sup> the bank, in addition to being engaged in the general banking business, bought and held corporate stocks and bonds and municipal bonds as investments and also sold corporate and municipal bonds to its depositors. It also bought government bonds and sold them to its clients from patriotic motives. The bank's ledger contained a "Stocks and Bonds" account in which was recorded dealings in stocks and bonds held as investments, those purchased for resale, those which the bank had borrowed, and those which it had held previously as loan collateral. In support of its contention that it was a dealer in securities, the bank showed that during the year 1917 it made three sales of corporate and municipal bonds to its depositors. In 1918, sales of bonds were made to two of its depositors. During the same period the bank sold a large volume of government bonds. The court in holding that the bank was not a dealer in securities based its decision upon two grounds. In the first instance petitioner made no effort or attempt to separate its securities into classes such as those purchased for investment and those purchased and held for resale. All stocks and bonds held by the bank were pooled into one account. In addition the infrequent and isolated transactions in corporate and municipal bonds with depositors was not sufficient to constitute petitioner a dealer in securities. The sale of government "Liberty Bonds" in large volumes

<sup>&</sup>lt;sup>60</sup> Treas. Reg. §1.471-5. <sup>61</sup> 18 F. Supp. 287 (N.D. Ohio 1936). <sup>62</sup> 5 B.T.A. 839 (1926).

had no effect on the bank's status and did not constitute the type of transaction which would enable the bank to qualify.63

In Harriman National Bank v. Commissioner<sup>64</sup> the court adopted a liberal attitude in allowing a bank to inventory its securities and pointed out that the dispute is solely one of fact, namely, whether the evidence shows the petitioner to be a dealer. IT 256465 commenting on the Harriman decision states: "suggestion has been made that the case of Harriman National Bank v. Commissioner . . . operates to allow all banks to inventory their securities. With this suggestion this office cannot agree.... The decision in that case should not be regarded as a controlling precedent in the disposition of other cases of banks seeking to inventory their securities. . . ." The ruling goes on to urge a rigid compliance with the above outlined requirements and stresses the necessity of adhering to these requirements in order to be entitled to use the inventory method of computing income.

IV. INVENTORY PRICING

Before a valuation can be placed on the merchandise which is on hand at the end of an accounting period, the items which comprise the inventory must be properly priced in accordance with one or more of the acceptable bases recognized by accountants as conforming to proper accounting standards. The principal pricing methods are: (1) cost; (2) cost or market, whichever is lower; (3) selling price. In the following brief analysis of each of the three bases the writer will attempt to differentiate, where possible, the method applied to a manufacturing firm as opposed to the same method applied to a retail concern, or a dealer or wholesaler.

(a) Cost

The position taken by the Commissioner concerning the cost basis of pricing inventories for a non-manufacturing business is as follows:

Cost means: (a) In the case of merchandise on hand at the beginning of the taxable year, the inventory price of such goods. (b) In the case of merchandise purchased since the beginning of the taxable year, the invoice price less trade or other discounts, except strictly cash discounts approximating a fair interest rate, which may be deducted or not at the option of the taxpayer, provided a consistent course is followed. To this net invoice price should be added transportation or other necessary charges incurred in acquiring possession of the goods.66

66 Treas. Reg. §1.471-3.

<sup>&</sup>lt;sup>63</sup> See also Goldberg, Louis M., 9 B.T.A. 1355 (1928); Hamell, Alfred E., 30 B.T.A. 955 (1934). Other cases involving inventory of securities: Clinton Graham, 1 B.T.A. 775 (1925); Franklin Q. Brown, 9 B.T.A. 965 (1927); Clinton Gilbert, Jr., 20 B.T.A. 765 (1930); Adriondack Securities Corp., 23 B.T.A. 61 (1931); Northeastern Surety Co., 29 B.T.A. 297 (1933); Donander Co., 29 B.T.A. 312 (1933); Oil Shares, Inc., 29 B.T.A. 664 (1934); C. E. Wilson, 29 B.T.A. 1022 (1934); Estate of Harry Hall et al., 29 B.T.A. 1255 (1934).
<sup>64</sup> 43 F. 2d 950 (2d Cir. 1930).
<sup>65</sup> X-I CUM. BUIL. 106 (1931).
<sup>66</sup> Treas. Reg. \$1.471-3.

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Thus it is clear from the Regulation that the term "cost" includes more than just the bare purchase price. Items such as storage, transportation, freight, drayage, duties, expenses incurred in the aging process as well as certain other incidental costs incurred in placing an item on the shelf are authorized inclusions.

It has been suggested that the cost of operating a purchasing department be included as an element of cost in the inventory valuation. Two basic objections to such a procedure are raised by Finney and Miller as follows:

In the first place, it involves the allocation of general overhead to purchasing department and thus raises questions as to an equitable determination of the cost of operating the department. In the second place, such a procedure necessitates the apportioning of the purchasing cost to the various purchases during the period and to various classes of goods in the inventory at the end of the period, and questions arise as to an appropriate basis for the appointment of such costs.<sup>67</sup>

It should be noted that cash discounts may be deducted or included in the inventory at the option of the taxpayer, as long as a consistent course is followed. Traditionally accountants employ two principal methods of treating cash discounts. The first and perhaps the method employed in the majority of cases, is to deduct the cash discounts from purchases thereby reducing the cost of goods sold and, consequently, increasing gross profit and taxable income. Invoices would reflect the net purchase price, i.e. net after cash discounts, and this would be the price at which the goods would be included in the inventory. The second method is to credit the cash discount to a discount account. Purchases are not reduced by the cash discount which is included in the cost of goods sold. The obvious result is an increase in the cost of goods sold and a consequent reduction in gross profit. The ending inventory is not reduced by the cash discounts. However, the credit balance in the cash discounts account is included in income at the end of the taxable year thereby offsetting the effect of the inclusion of the discounts in cost of goods sold.

If the specific cost can be ascertained and matched with the item being inventoried, little or no problems are encountered in arriving at a cost figure. However, not all costs are easily applied to the particular goods on which costs are incurred. Thus it becomes necessary to pro rate on a percentage basis the total cost of a group of items over the individual items composing the group. This method, however, is oftentimes inaccurate since costs are usually not incurred in amounts exactly proportionate to the cost of the merchandise. Greater accuracy could be achieved by pro rating the cost items on each specific invoice to only

<sup>&</sup>lt;sup>67</sup> Finney and Miller, Principles of Accounting, Intermediate, at 351 (4th ed. 1956).

those items included in that particular invoice. However, additional expense to accomplish the latter, in many instances, would not be worth a slighter degree of accuracy which may be attained.

In the case of Commissioner v. Bullocks<sup>68</sup> the taxpayer adjusted his beginning inventory by adding the sum of \$119,882.00 consisting of discounts which had been allowed on the invoice price of goods purchased by the taxpaver and which were on hand at the beginning of 1927. The inventory value of goods remaining unsold at the end of 1927, as shown by the closing inventory included discounts to the amount of \$123,119.00. The Commissioner contended that the inclusion of the discounts in the opening inventory was improper since the taxpayer had, in previous years, deducted the cash discounts in arriving at his inventory cost figure. It should be noted that the inclusion of the discounts at the end of 1927 more than offset their inclusion in the beginning inventory so that the taxpayer's gross income was overstated by \$3,137.00. The court held that it was error to increase the cost of the inventory at the beginning of 1927 by the amount of trade discounts deducted from the closing 1926 inventory and it was also error to include the discounts in the ending 1927 inventory, and then directed that both inventories be reduced by the amount of the discounts which were added. The court placed special emphasis upon the need for consistency in this area.69

The option which is available under the Regulations is limited to strictly cash discounts which approximate a fair rate of interest. How do such cash discounts differ from ordinary trade discounts and when is the option available to the taxpayer? SM 528170 states:

It is impossible to lay down a general rule as to what discounts approximate a fair interest rate because of the many and divergent factors to be considered. Some of the elements to be taken into account in making this determination are prevailing interest rates in the particular locality, trade or business customs and practices, etc. Whether discounts such as 5 per cent 10 days, 2 per cent 30 days, may be deducted or not at the option of the taxpayer is to be determined largely in the light of local business practice. . . . The determination of whether such allowances are to be considered cash discounts . . . in order to reflect correctly the net income of the taxpayer thus resolves itself into a question of fact to be decided in the individual case.71

A taxpayer may deduct an average cash discount from the total inventory without making the specific deduction on each individual inventory item.<sup>72</sup> However, an arbitrary deduction of a fixed percentage

<sup>68 81</sup> F. 2d 1002 (9th Cir. 1936).

<sup>69</sup> See also Warfield-Pratt-Howell Co., 13 B.T.A. 305 (1928) (wholesale grocery firm).

 <sup>&</sup>lt;sup>70</sup> V-I Com. Bull. 17 (1926).
 <sup>71</sup> See also Montreal Mining Co., 2 T.C. 688 (1943).
 <sup>72</sup> Blumberg Bros. Co., 12 B.T.A. 1021 (1928); Holeproof Hosiery Co., 11 B.T.A. 547 (1928); Leedom and Worrall Co., 10 B.T.A. 825 (1928); Higgenbotham-

for discounts has been held not permissible. A taxpayer who had deducted seven per cent from the invoice price to compensate for discounts was prohibited by the court from reporting his net income after the discount deduction.73

The regulation<sup>74</sup> further provides for an addition to the net invoice price of "transportation or other necessary charges incurred in acquiring possession of the goods." No other expense is to be added to the invoice price in order to determine cost. All other expenses are properly deductible on the taxpayer's books as an expense of doing business. Money which had been paid for hauling, loading and freight after the taxpaver had acquired title to agricultural produce in the field was held to be part of the cost of the commodity for the purpose of pricing inventories.75 Also estimated expenses of hauling goods from a temporary storage facility to a more permanent storage were allowed to be added to the inventory for the purpose of ascertaining its cost.<sup>76</sup> In All Russian Textile Syndicate v. Commissioner<sup>17</sup> petitioner was a domestic corporation and a purchasing and exporting agent for its principal, a Russian organization, in Russia. Its only business was to purchase goods in this country and to forward the goods to its principal. In the course of its operations petitioner made certain expenditures in connection with, or incident to the purchasing and forwarding of goods for its principal and claimed the same as deductions on its return. The court held: ". . . the expenditures made by petitioner incident to purchasing and forwarding goods to its principal are a part of the cost to the principal of the goods so purchased, and, as such, are not deductible from petitioner's income."78

The costs of transportation incurred after merchandise has been acquired by the taxpayer and also costs of storage and drayage on goods stored by the taxpayer because of its own limited facilities constitute business expenses and thus not a part of the cost of inventories.79 The issue in each instance is whether or not the cost was incurred incident to the acquisition of the merchandise as distinguished from costs incurred after the merchandise had been acquired and placed on the shelves.

Customs and duties are incidental costs of acquisition and the

Bailey-Logan Co., 8 B.T.A. 566 (1927); James Edgar Co., 16 B.T.A. 120 (1929); Trorlicht-Duncker Carpet Co., 22 B.T.A. 466 (1931). <sup>73</sup> C. E. Longley Co., 4 B.T.A. 246 (1926).

<sup>74</sup> Supra note 60.

 <sup>&</sup>lt;sup>175</sup> Supra note 00.
 <sup>175</sup> John L. Denning and Co., P-H Tax Ct. Memo §48,277 (1948), modified without discussion of this point, 180 F. 2d 288 (10th Cir. 1950).
 <sup>176</sup> ARR 944, I-2 CUM, BULL 27 (1922); also see All Russian Textile Syndicate v. Commissioner, 62 F. 2d 614 (2d Cir. 1933).
 <sup>177</sup> 23 B.T.A. 1392 (1931).
 <sup>18</sup> Id. at 1394.
 <sup>18</sup> C. D. LETTA (60) (1025). McIntech Mills 0, P.T.A. 201

<sup>&</sup>lt;sup>79</sup> Geo. C. Peterson Co., 1 B.T.A. 690 (1925); McIntosh Mills, 9 B.T.A. 301 (1927); Northern Michigan Transportation Co., 3 B.T.A. 255 (1925).

purchaser is allowed an option of treating these items as a cost of inventory or as a business expense.80

The costing requirements for a manufacturing concern were briefly discussed under the heading "What should be included in inventory." The regulation provides as follows:

In the case of merchandise produced by the taxpayer since the beginning of the taxable year, (1) the cost of raw material and supplies entering into or consumed in connection with the product, (2) expenditures for direct labor, (3) indirect expenses incident to and necessary for the production of the particular article, including in such indirect expenses a reasonable proportion of management expenses, but not including any cost of selling or return on capital, whether by way of interest or profit.81

In certain lines of industry where a cost accounting system is not employed, an accurate determination of cost based upon the individual items of cost is for all practical purposes impossible. This is particularly true in industries where more than one product is manufactured or where more than one grade of the same product is produced by a common operation. A result can nevertheless be reached which fairly approximates the inventory.

... it is therefore necessary to approximate a cost value by using selling market prices as a starting point and reducing such selling market prices in each case by an amount sufficient to eliminate the element of profit.82

This method is also employed in situations where books have been so kept that the cost of each article sold was not ascertainable. An average percentage of gross profit on sales can be calculated. The selling price is then reduced by the latter percentage. If several lines of merchandise are sold, on which the average percentages differ, the gross profit of each class of merchandise should be computed separately.83

In certain lines of industry such as mining and manufacturing where the total cost of production is known, and where two or more products of a different selling value are produced by a uniform process, a method of allocating the total cost of production to the different products produced is authorized. This method pro rates the total cost of production to the items produced in proportion to their respective selling values. Thus where a by-product such as coke is produced when coal is used to produce gas, the cost of the coke is determined by dividing the selling price of the coke by a figure which represents the selling price of the gas plus the selling price of the coke. The total cost of production of the two products is then multiplied by the latter figure in order to determine the inventory cost of the coke.

 <sup>&</sup>lt;sup>80</sup> Lebolt and Co. v. U.S., 7 A.F.T.R. 9040 (1929).
 <sup>81</sup> Treas. Reg. §1.471-3 (c)
 <sup>82</sup> 0-844, 1 CUM. BULL. 59 (1919).
 <sup>83</sup> O.D. 25 1 CUM. BULL. 75 (1919).

Costs of goods out on consignment should be more properly determined by applying a cost figure to the consigned merchandise which is equal to the cost of the item in the year in which the item was produced if costing records permit. In Rockwood Pottery Co. v. Commissioner<sup>84</sup> the taxpayer protested the Commissioner's application of cost for the year 1926 to the entire inventory including goods out on consignment. The court held that the taxpaver's method of determining costs of consigned goods by apportioning such goods among the different manufacturing years upon the same basis shown by the stock at the factory reflected income more accurately than the Commissioner's method. Having no record of the dates of manufacture of a portion of goods on consignment, petitioner assumed that the percentage of goods on consignment manufactured in each year was the same as that which applied to goods on hand at the plant. Thus, in addition to an authorized per unit pro rating of costs to items produced and items purchased, inventory costs can be more accurately ascertained if an accurate record can be maintained of goods in the inventory or out on consignment, which were produced in a prior period so that costs of that period can be applied to the item rather than current costs.85

(b) Cost or market, whichever is lower

It should be noted that a taxpayer has the option, so long as he maintains consistency, to select a pricing method. One of the taxpayer's options is the cost basis. A second basis of inventory pricing is the "cost or market, whichever is lower" concept. The cost basis was discussed in subsection (a). The Commissioner defines the term "market" as follows:

(a) Under ordinary circumstances and for normal goods in an inventory 'market' means the current bid price prevailing at the date of the inventory for the particular merchandise in the volume in which usually purchased by the taxpayer, and is applicable in the cases—

(1) Of goods purchased and on hand, and

(2) Of basic elements of cost (materials, labor, and burden) in goods in process of manufacture and in finished goods on hand; exclusive, however, of goods on hand or in process of manufacture for delivery upon firm sales contracts (i.e. those not legally subject to cancellation by either party) at fixed prices entered into before the date of the inventory under which the taxpayer is protected against actual loss which goods must be inventoried at cost.

(b) Where no open market exists or where quotations are normal, due to inactive market conditions, the taxpayer must use

 <sup>&</sup>lt;sup>84</sup> 11 B.T.A. 470 (1928).
 <sup>85</sup> Also see Elgin National Watch Co., 17 B.T.A. 339 (1929); The Montreal Mining Co. *supra* note 75; Industrial Lumber Co., 20 B.T.A. 394 (1930); Ct. D. 559 XI-2 CUM. BULL 199 (1932).

such evidence of a fair market price at the date or dates nearest the inventory as may be available, such as specified purchases or sales by the taxpayer or others in reasonable volume and made in good faith, or compensation paid for cancellation of contracts for purchase commitments. Where the taxpayer in the regular course of business has offered for sale such merchandise at prices lower than the current price as above defined, the inventory may be valued at such prices less direct cost of disposition, and the correctness of such prices will be determined by reference to the actual sales of the taxpayer for a reasonable period before and after the date of the inventory. Prices which vary materially from the actual prices so ascertained will not be accepted as reflecting the market.

(c) Where the inventory is valued upon the basis of cost or market, whichever is lower, the market value of each article on hand at the inventory date shall be compared with the cost of the article, and the lower of such values shall be taken as the inventory value of the article.86

The regulation thus makes the purchase price or the replacement price on the date of the inventory the guide in fixing market value of the goods.<sup>87</sup> This market value is then compared with the cost figure of the same inventory, and the lower of the two figures is taken as the value of the taxpaver's inventory. Note that the regulation states that it is "the current bid price prevailing at the date of the inventory for the particular merchandise in the volume in which usually purchased...." In the case of Crown Manufacturing Co. v. Commissioner<sup>88</sup> the taxpayer, shortly prior to the date of taking its inventory of goods in process, had a general reduction in wages. The court held that in arriving at the market value of such goods, the item of labor should go into the computation at prices prevailing at the date of inventory. The restriction concerning quantity is also important since if it were omitted it is likely that inapplicable market values might be used.

In making a determination of the market value of the inventory and in comparing it with the cost of the same there are three ways of applying this basis: (1) each item can be listed separately and opposite the item will be listed the quantity, the cost per unit, and the market price per unit. In another column will be listed the total cost as opposed to the total market. The lower figure will be the one used. An example of this method is as follows:

		U	nit	То	tal	Lower of
Furniture :	<u>Q.</u>	Cost	Market	Cost	Market	Cost or Mkt.
Chairs		\$ 5.00	\$ 4.50	\$ 250.00	\$ 225.00	\$ 225.00
Tables		32.00	28.00	800.00	700.00	700.00
Desks		145.00	148.00	1,740.00	1,776.00	1,740.00
Lamps	30	28.00	30.00	840.00	900.00	840.00

<sup>86</sup> Treas. Reg. §1.471-4.
<sup>87</sup> A.R.R. 6016, III-1 CUM. BULL. 59 (1924).
<sup>88</sup> 12 B.T.A. 37 (1928).

Appliances:					
Washers 15	\$190.00	\$195.00	\$2,850.00	\$2,925.00	\$2,850.00
Dryers 14	225.00	219.00	3,150.00	3,066.00	3,066.00
Ironers 10	175.00	178.00	1,750.00	1,780.00	1,750.00
T.V. Sets 20	140.00	140.00	2,800.00	2,800.00	2,800.00
Lower of cost or	market				\$13,971.00

The second method which can be employed is to make a determination of the market value for a major category of inventory and compare it with the cost value of the same category:

		Unit		Total		Lower of
Furniture:	Q.	Cost	Market	Cost	Market C	Cost or Mkt.
Chairs	<u>Q.</u> 50	\$ 5.00	\$ 4.50	\$ <u>250.0</u> 0	\$ 225.00	
	25	32.00	28.00	800.00	700.00	
	12	145.00	148.00	1,740.00	1,776.00	
Lamps	30	28.00	30.00	840.00	900.00	
				\$3,630.00	<u>\$3,601.00</u>	\$3,601.00
Appliances :						
Washers	15	\$190.00	\$195.00	\$2,850.00	\$2,925.00	
	14	225.00	219.00	3,150.00	3,066.00	
	10	175.00	178.00	1,750.00	1,780.00	
T. V. Sets	20	140.00	140.00	2,800.00	2,800.00	
				\$10,550.00	\$10,571.00	\$10,550.00
Lower of cos	st or	market .				\$14,151.00

The third method of applying the lower of cost or market basis is a comparison of the total cost figures of the inventory with the total market figures in the following manner:

	Unit		To	Total	
Furniture: Q.	Cost	Market	Cost	Market C	ost or Mkt.
<u>Furniture:</u> <u>Q.</u> Chairs 50	\$ 5.00	\$ 4.50	\$ <u>250.</u> 00	\$ 225.00	
Tables 25	32.00	28.00	800.00	700.00	
Desks 12	145.00	148.00	1,740.00	1,776.00	
Lamps 30	28.00	30.00	840.00	900.00	
Appliances:					
Washers 15	\$190.00	\$195.00	\$2,850.00	\$2,925.00	
Dryers 14	225.00	219.00	3,150.00	3,066.00	
Ironers 10	175.00	178.00	1,750.00	1,780.00	
T.V. Sets 20	140.00	140.00	2,800.00	2,800.00	
			\$14,180.00	\$14,172.00	
Toman of post on	montrot				\$14 172 <b>0</b> 0

Lower of cost or market ..... <u>\$14,172.00</u>

There appears to be no objection to any one of the foregoing methods for making a determination of market value when utilizing the lower of cost or market basis. The regulation<sup>89</sup> provides that the market value of each article on hand shall be compared with the cost of the article, and the lower shall be taken as the inventory value of the article. However, it has been held that as long as each item is listed properly it is not necessary that each specific item be assigned a market

<sup>&</sup>lt;sup>89</sup> Treas. Reg. §1.471-4 (c).

value. It is sufficient if specific groups are reduced by such percentages as can be shown fairly to reflect market values.<sup>90</sup>

What is the reason for the lower of cost or market basis and what effect, if any, will such a basis have upon a taxpayer's total tax burden? Essentially the cost or market basis stems from the old accounting principle: "anticipate no profit and provide for all losses." When market prices of merchandise decline, it is normally presumed that the selling price of the same will also decline proportionately. Thus, as soon as the market price falls below the cost price of goods on hand, the holder of the inventory is allowed to value the inventory at the lower figure in order to "cushion" himself for a proportionate decline in the selling price thus "providing for all losses." Conversely, if the market price rises above the cost of an item in the inventory the taxpayer is allowed to value his inventory at the lower cost figure in order to keep from anticipating any profits.

Traditionally accountants have stressed conservatism and this stress was emphasized to its utmost in the balance sheet where valuations placed upon assets normally consisted in a well calculated conservative estimate keeping in mind the time-weary maxim "anticipate no profits and provide for all losses." Recently, however, the trend has been toward a greater emphasis upon the profit and loss statement and the swing has been away from the practice of placing major emphasis on the balance sheet. Thus the question arises as to whether or not this same conservatism previously practiced and reflected in the balance sheet is maintained in the profit and loss account. At first glance it would appear that the balance sheet has gained at the expense of the profit and loss account. Hence it becomes important to focus attention to the effects of the lower of cost or market basis on the profit and loss account. Undoubtedly a low ending inventory during a period will reflect conservatism not only in the balance sheet inventory account, but it will also reflect a conservative gross profit for a current period. The real issue appears to be whether or not the income for a subsequent period is substantially distorted as a result of low beginning inventory (which was the ending inventory for the immediately preceding period). If, for example, merchandise costing \$100,000.00 were on hand at the end of an accounting period and the market value of the same merchandise had dropped to \$90,000.00, the latter figure would be used for the purpose of pricing the inventory. Consequently the gross profit for the period will be \$10,000.00 less than it would have been had the inventory been priced at cost. Assuming the selling price remains the same, the gross profit in the next priod will be overstated by \$10,000.00 since the beginning inventory will be placed on the

<sup>&</sup>lt;sup>90</sup> S. G. Sample Co. v. Commissioner, 23 F. 2d 671 (5th Cir. 1928); Wood and Ewer Co. v. Ham, 14 F. 2d 995 (D. Me. 1926).

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books in the subsequent period at a figure identical with the closing inventory of the preceding period. Thus the taxpayer will be saddled with a greater tax burden in the latter period as a result of the shift to the lower market figure in computing the inventory in the former period. This burden, however, is somwhat offset by the fact that he has an equal option at the end of the latter period to value his inventory at the lower figure. It would appear that the gross profit of the taxpayer over a period of years would be more evenly distributed and would reflect a more accurate picture of operations as well as distribute the tax burden if the taxpayer were to adhere to a strictly cost basis of inventory pricing.

The foregoing illustration was based upon the assumption that selling prices remain constant throughout the decrease in market value of the merchandise or, if any, the decrease in the selling price was negligible as compared with the drop in the market value. It is probably more realistic to assume that a decrease in market value of merchandise will not be accompanied by an immediate drop in the selling price of the same and, in most instances, it is doubtful whether the decrease in market value will be accompanied by any decrease in selling price.

Since the lower of cost or market basis was originally conceived in order to cushion a taxpayer against a drop in selling price resulting from a drop in the market value of the goods, it would appear to be a sufficient protection to the taxpayer to reduce the value of his inventory only to the extent of a reduction in the selling price of the merchandise to be inventoried. The reduction below cost to this extent would be just enough to provide a break-even point for the consequent reduction in gross income as a result of lower selling prices.<sup>91</sup>

The "selling price" method of pricing inventories was mentioned earlier in connection with the cost basis of pricing. This method is essentially a means of ascertaining costs where material costs cannot be specifically allocated to joint products. The selling price of the merchandise becomes a convenient method for allocation of the costs of items produced. Meat packing and farming are two areas in which the selling price basis is frequently utilized.<sup>92</sup> Disposal costs along with an amount for profit should be deducted from the selling price in estimating total cost of the products produced.

<sup>&</sup>lt;sup>91</sup> In the case of Amor W. Sharp v. Commissioner, 224 F. 2d 920, 924 (6th Cir. 1955) it is stated: "... it is also well recognized that the method of valuing inventories at the lower of cost or market is an instance where the tax law permits the deduction of an unrealized loss, and is a recognized exception to the necessity of reflecting in income tax returns only closed transactions."

<sup>&</sup>lt;sup>92</sup> Notice how the "selling price method" differs from the "farm-price method" discussed in part IV (d) *infra*.

# V. Cost selection for inventory pricing

Identical items may be purchased or produced at different costs. Consequently the tax accountant must determine which costs apply to the items that remain in the inventory. When a method has been chosen for selecting the costs which are applicable to the goods in the inventory, all other costs apply to the goods which have been sold. Various cost-selecting methods are available to the taxpayer. The ones most commonly employed will be briefly discussed.

# (a) Specific identification

Perhaps the most obvious method of valuation occurs in cases where the good sold can be specifically identified as pertaining to specific purchases, such as automobiles or, in the manufacturing business, where production orders are maintained. The "specific identification" method requires the keeping of records of invoices or costing records. Logically it would appear that this method is sound. However, in the absence of costing records or invoices which specifically identify the item to be inventoried or in larger concerns, this method is often times impossible, or at least impracticable to apply.

# (b) Last invoice price

In businesses where there is a rapid merchandise turnover, a method of cost selection known as the "last invoice price" is employed. This method may closely approximate in result the specific identification method. However, under this method the entire inventory is valued at a unit price which is contained in the last invoice of merchandise purchased. This method is based upon the realistic assumption that goods are sold in the order in which they are purchased, i.e. that the goods on hand at the end of an accounting period consist of merchandise most recently purchased. Thus in businesses where merchandise turnover is very rapid and goods are sold in the order in which they are purchased, the "last invoice" method of valuation involves less work and minimizes costs of labor in valuing the inventory. However, where the amount on hand at the end of a tax accounting period exceeds in quantity the number of items last purchased, the excess is nevertheless inventoried at a per unit value equal to the cost in the last invoice. On a rising market current prices would be higher than earlier invoice costs. Consequently the ending inventory, under this method, would be excessive resulting in an inflated taxable income for a particular period. Contrariwise, on a falling market the inventory gain would be valued at the lower "last invoice price" thus producing a taxable income deficiency for a particular period. Since income was not clearly reflected in such a situation, it is unlikely that this method of valuation would be looked upon with favor by the taxing authorities. The writer has found no tax authority either condemning or condoning the use of this method.

# (c) Average cost

A third method of valuation is known as the "average cost" method. Accountants apply the "average cost" method in several different ways, each of which will yield a different result. The first way is more commonly called the "simple average" method and involves a simple arithmetic average of the unit prices. The unit prices of all the purchases during a period plus the per unit prices of items which were contained in the opening inventory are added together. This figure is divided by the number of purchases plus beginning inventory to arrive at an average cost per unit. Then the average per unit figure is multiplied by the number of items contained in the ending inventory, the result being the value of the ending inventory. It should be noted that this figure fails to take into consideration the size of the purchases. Hence a large purchase yielding a smaller per unit cost is given the same weight as a small purchase yielding a higher per unit cost.

A second average cost method is commonly known as the "weighted average" method. A total cost of all purchases and beginning inventory is calculated. This figure is divided by the total number of units in the beginning inventory plus purchases during the period. The resultant figure will be a weighted average unit cost. The inventory valuation is calculated by multiplying the latter figure by the number of items in the ending inventory. Note that this method assumes that the ending inventory contains some portion of each purchase throughout the period. Also, on a rising market the inventory costs will be lower since the valuation was based partly on lower figures from earlier purchases. On a falling market the inventory will be higher than current costs since the high earlier figures will pull the weighted average over the current cost figure.

A third "average cost" method is known among accountants as the "moving average" method. Under this method a new average cost is computed after each purchase. For example if the first purchase consisted of 200 units at \$1.00 per unit the moving average would be \$1.00. When a second purchase was made of 100 units at \$1.10 per unit the moving average would be calculated by dividing \$310.00 (200 units at \$1.00 plus 100 units at \$1.10) by 300 (total number of units in the inventory). Assume a sale at this point of 150 units. The moving average figure would be multiplied by the number of units sold to arrive at a cost of goods sold. This process of computing a new average cost figure is repeated after each purchase, each time adding the units purchased to the units contained in the inventory at the time of purchase. This figure is divided into the total amount in the inventory at the time of the purchase plus the invoice price of the purchase. Here again it should be noted that each moving average unit cost is in part of the cost of an item contained in each purchase

since the beginning of the period. Theoretically, at least, these earlier items should not enter into the cost of an ending inventory since they have been sold. Also the inventory would be valued at less than current costs on a rising market and conversely the value could be greater than current costs on a falling market.

Where a taxpayer was engaged in the lumbering business and took inventories on the cost or market, whichever is lower, basis, the Board of Tax Appeals rejected as inadequate the petitioner's method of ascertaining the cost figure. Petitioner employed the so-called average cost method in arriving at the cost of a board foot of lumber in the inventory. Petitioner determined the total cost of all lumber of all grades that had reached the same stage of manufacture and then divided that total by the total number of feet of all grades manufactured, the amount so ascertained being treated as the cost of a foot of lumber of any grade.93 This latter procedure fails to take into account the fact that a simple arithmetic average figure, while representing the mean cost of total production, does not reflect the true cost of a board foot of a specific grade of lumber which is in the inventory. The average may have been warped by a few grades of lumber having an extremely high cost.

In an early ruling<sup>94</sup> the taxpayer was a corporation employing the weighted average method in selecting costs allocable to materials on hand. The facts indicate that materials purchased were not currently consumed in manufacture, but were held for aging purposes anywhere from one to three years. The Commissioner refused to allow the taxpaver the use of the weighted average cost method. The ruling states:

The computation of net income upon such a basis results in an assignment of income to a year, not upon the basis of the transactions of the year, but upon the basis of transactions part of which spread over more than a year. To be strictly logical, such a method should, moreover, include a similar averaging of sales. . . An annual accounting period is a fundamental requirement of the federal income tax legislation, and every computation of taxable net income must be made in conformity therewith. This the average cost inventory method failed to do (in this particular instance), and its use cannot be approved as meeting the statutory requirement. The Advisory Tax Board is, therefore, of the opinion that the average cost inventory method does not conform to the requirements of the act. . . . "95"

However, the use of the average cost method has been upheld in a number of cases. In Eatonville Lumber Co. v. Commissioner<sup>96</sup> the petitioner had for several years computed its inventory at average cost

 <sup>&</sup>lt;sup>93</sup> Industrial Lumber Co. v. Commissioner, 58 F. 2d 123 (5th Cir. 1932).
 <sup>94</sup> T.B.R. 48, 1 Cum. Bull. 47 (1919).

<sup>&</sup>lt;sup>95</sup> Id. at 50.

<sup>96 10</sup> B.T.A. 232 (1928).

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or market, whichever was lower. The opening inventory for 1922 had been computed on the average cost basis. The court held: "To adopt the method now offered by petitioner would sacrifice consistency. This board has repeatedly held that consistency in inventory practice is of the highest importance. . . . We are not convinced that the method of inventory valuation offered by petitioner does not clearly reflect the income. . . . "97 In another early ruling by the Advisory Tax Board<sup>98</sup> it was held that in the case of the tobacco industry it has been demonstrated that no method more nearly approaching theoretical accuracy than the average cost method is practically possible. The committee recommended that this method of taking inventories of raw materials in the tobacco industry should be recognized and permitted.

Thus it would appear that the average cost method of valuation is recognized in specific instances for tax purposes. No mention is made in the cases or rulings concerning the method of average cost which is permissible. Presumably any one of the three methods mentioned earlier is permissible providing consistency is maintained and further that the company's income is fairly reflected by the method employed.

### (d) Farm-price and unit-livestock-price

As was pointed out earlier, farmers have an option of making their returns upon an accrual method instead of the cash receipts and disbursements method.<sup>99</sup> Assuming a farmer elects to base his return on the accrual method, how is he going to arrive at a fair valuation of his livestock and marketable farm products?100 Livestock raisers have an option of valuing livestock on either the so-called "farm-price method" or the "unit-livestock-price method" of valuation, while farmers inventorying marketable farm products may use the "farm-price method."

The Commissioner defines the "farm-price method" as follows:

(d) The farm-price method provides for the valuation of inventories at market price less direct cost of disposition. If this method of valuing inventory is used, it must be applied to the entire inventory except as to livestock inventoried, at the tax-payer's election under the 'unit-livestock-price method.'...<sup>101</sup>

Since the farm-price method is optional with the taxpayer, the Commissioner cannot require its use. The taxpayer if he so desires

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<sup>101</sup> Treas. Reg. §1.471-6 (d).

<sup>&</sup>lt;sup>97</sup> Id. at 235; The court cites Thomas Shoe Co., 1 B.T.A. 124 (1924); The Buss Co., 2 B.T.A. 266 (1925); Sinsheimer Bros. Inc., 5 B.T.A. 918 (1926).
<sup>98</sup> A.R.R. 18, 2 CUM. BULL 50 (1920).
<sup>99</sup> See Treas. Reg. §1.471-6 (c).
<sup>100</sup> The crop-cost method which was discussed earlier is one method available to the farmer for inventorying growing crops. The discussion here concerns the valuation of marketable farm produce.
<sup>101</sup> Treas. Reg. §1.471-6 (d).

can use actual cost in valuing his inventory.102 It is also important to ascertain whether or not the taxpayer qualifies as a farmer and is entitled to use the methods provided. In Moody-Warren Commercial Co. v. Commissioner<sup>103</sup> the petitioner undertook to inventory feeder lambs on hand at the end of the taxable year on the "farm-price method." The court refused to authorize the use of the "farm-price method" even though the animals were fed and increased in value while on feed. The latter fact in and of itself is not proof that the dealer is a farmer. The court held that: "Thousands of dealers in poultry, sheep, and other meat animals buy their stock in trade and feed for awhile in coops or yards and then slaughter or sell on the markets, but such activities are far removed from tilling the soil, either in person or by proxy of renters or sharecroppers."104

The Commissioner defines and authorizes the use of the "unitlivestock-price method" in the following manner:

(e) The "unit-livestock-price method" provides for the valuation of the different classes of animals in the inventory at a standard unit price for each animal within a class. A livestock raiser electing this method of valuing his animals must adopt a reasonable classification of the animals in his inventory with respect to the age and kind included so that the unit prices assigned to the several classes will reasonably account for the normal costs incurred in producing the animals within such classes. Thus, if a cattle raiser determines that it costs approximately \$15 to produce a calf, and \$7.50 each year to raise the calf to maturity, his classification and unit prices would be as follows: calves, \$15; yearlings, \$22.50; two-year olds, \$30; mature animals, \$37.50. The classification selected by the livestock raiser, and the unit prices assigned to the several classes, are subject to approval by the district director upon examination of the taxpaver's return.105

The election of the use of this method is binding upon all livestock raised and for whatever purpose the livestock is being used. Once the unit prices and classifications have been established by the taxpayer they must be consistently applied in subsequent periods and no changes in either the unit prices or the classification of the livesotck will be permitted without the approval of the Commissioner.<sup>106</sup>

A taxpayer employing the "farm-price method" desiring to adopt the "unit-livestock-price method" must obtain the approval of the Commissioner for the change. The "unit-livestock-price method," however, may be adopted by a taxpayer employing the lower of cost or market basis, without the Commissioner's approval.

 <sup>&</sup>lt;sup>102</sup> Estate of Cornelia Adair, 43 B.T.A. 384 (1941).
 <sup>103</sup> 29 B.T.A. 887 (1934).

<sup>104</sup> Id. at 891.

<sup>&</sup>lt;sup>105</sup> Treas. Reg. §1.471-6 (e). <sup>106</sup> Treas. Reg. §1.471-6 (f).

## (e) Retail method

For some businesses, such as retail department stores, it is difficult to determine actual cost figures for the vast variety of items in stock. A method of inventory valuation which is frequently employed by department stores and other retail establishments is the "retail method." It will be apparent from a brief analysis of this method that it is not suitable in the manufacturing business, since merchandise is not priced immediately for resale. Under the retail method items on hand are inventoried at their respective selling prices at the inventory date. Each class of goods or the goods inventoried in each department is reduced to their approximate cost by deducting from the aggregate retail price of the items, an amount which represents the average gross profit on these items. Stated differently, the ratio of the cost of the merchandise included in the opening inventory plus the cost of purchases during the year, to the total of the retail selling prices of merchandise in the opening inventory plus the retail selling prices of the goods purchased during the year, multiplied by the inventory at retail, results in a figure which represents the value of the inventory at cost.<sup>107</sup>

To illustrate the method of ascertaining the ratio of cost to retail in the manner in which accountants normally arrive at the valuation of inventory under the retail method assume the following figures:

	Cost	Retail
Beginning inventory	.\$ 18,000.00	\$ 27,000.00
Purchases during the period	. 192,000.00	273,000.00
Goods available for sale	. 210,000.00	300,000.00
(Ratio of cost to	<u></u>	
retail—70%)		
Sales		. 270,000.00
Inventory at retail		.\$ 30,000.00

The inventory at retail is reduced to cost by applying the ratio of cost to retail (70%) to the inventory at retail (\$30,000.000). The inventory valuation is 70% of \$30,000.00=\$21,000.00.

Note that the "retail method" is based upon the assumption that the margin of gross profit on all items inventoried is approximately the same percentage-wise. Where the percentage of gross profit for different classes of goods or for different departments is not the same, inventory costs cannot be determined by using a percentage of profit based upon an average of the entire business, but rather a percentage of gross profit should be computed for each department or for each class of goods. The selling price of the items in each department or class of merchandise is then reduced by the latter figure to arrive at <sup>107</sup> Treas. Reg. §1.471-8.

inventory valuations. The retail method is essentially a method of approximating the cost of merchandise at the end of the year. It is not permissable to include retail selling prices in the inventory valuation.<sup>108</sup>

Thus it appears that the "retail method" of valuation provides at least two advantages to the taxpayer: (1) It is possible to determine the approximate value of the inventory at any time without the necessity of taking a physical inventory, and (2) it is also possible to take a physical inventory at selling prices and reducing the selling prices to approximate cost and come up with an ending inventory without referring to specific invoices.

In the foregoing illustration no provision has been made for markups and mark-downs which normally modify the selling price of an item of merchandise. The term "mark-up" is applied to a situation where the selling price of an item is increased above the price at which the goods are originally offered for sale, while the term "mark-down" is applied to a situation where the original selling price has been lowered. A "mark-up cancellation" is a term applied to a case where the selling price of an item is reduced but not below the price at which the goods are first offered for sale. "Mark-down cancellations" is a term indicating an addition to selling price but which does not increase the selling price above the original retail price. It is customary to include "mark-ups" and "mark-up cancellations" but to ignore "mark-downs" and "mark-down cancellations" in computing the valuation of inventory by the retail method. The regulations authorize this practice stating "... Where mark-downs are not included in the adjustments, mark-ups made to cancel or correct mark-downs shall not be included; and the mark-ups included must be reduced by the mark-downs made to cancel or correct such mark-ups."109

The regulation,<sup>110</sup> however, provides that it is proper to take into account all mark-ups and mark-downs as well. Thus it appears proper to add the actual increase in such price which has been brought about by market conditions and by incorrect pricing when goods were put into stock. Mark-downs will be recognized where the procedure is proper and consistent. The goods marked down must be in proportion to current sales, to stock on hand, to mark-downs of corresponding months of the preceding year, or if evidence can be submitted as to market changes which have forced a reduction in retail prices to bring about a parity with the selling price of the same goods which have been purchased at reduced cost.<sup>111</sup>

Notice that "mark-ups" and "mark-downs" are included or excluded

<sup>&</sup>lt;sup>108</sup> Rev. Rul. 55-285, 1955-1 Сим. Вин. 69.
<sup>109</sup> Treas. Reg. §1.471-8 (d).
<sup>110</sup> Treas. Reg. §1.471-8.
<sup>111</sup> See Mim. 3077, II-1 Сим. Вин. 31 (1923).

only for the purpose of determining the ratio of cost to retail. If "mark-ups" were ignored in computing the ratio, the resultant percentage of cost to retail would be greater, thus producing a larger ending inventory when the higher ratio were applied to the inventory at retail. Hence the higher figure resulting as the ending inventory valuation would be the product of rising prices and would, in effect, be a valuation of the inventory at the higher market figures. On the other hand if "mark-ups" were included in computing the ratio, the smaller ratio would take cognizance of the increase in prices due to market increases and the valuation would then be based upon a ratio of actual retail prices.

Since "mark-downs" decrease the retail figure thus increasing the ratio of cost to retail, they are ignored in computing the ratio. This practice is consistent with the lower of cost or market concept.

In computing the inventory at retail, however, both "mark-ups" and "mark-downs" are included in order to arrive at a retail inventory figure. The total number of items composing the inventory is relatively unimportant since the retail method consists of converting all items of inventory to their dollar equivalent. The reduction of this "dollar equivalent" to cost yields a valuation of the inventory on the first-in, first-out basis.<sup>112</sup>

(f) Lifo and Fifo

Perhaps the most popular methods of selecting costs applicable to inventory items are based either on a flow of goods concept, i.e. goods are sold in the order in which they are purchased or manufactured, or upon a flow of costs concept which assumes that the most recent purchases are the costs which will be applied to the items sold and that the costs of goods produced earlier are the costs applicable to the items in the inventory. The former method is known as the firstin, first-out (fifo) method, while the latter is commonly referred to as the last-in, first-out (lifo) method.

For years the determination of the valuation to be placed upon an inventory permitted only one of two solutions: either the items in the inventory could be specifically identified with actual purchases or if this procedure was impossible due to the fungible nature of the merchandise, it had to be assumed that the most recent purchases were the items contained in the ending inventory which is the fifo method.

Lifo permits a taxpayer to assume that the items composing his

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<sup>&</sup>lt;sup>112</sup> For a more detailed discussion of the retail method and its application to inventories of retail dry goods dealers. see T.D. 3058, 3 Cum. Bull. 72 (1920); Mim. 3077, II-1 Cum. Bull. 31 (1923), amended in Mim. 4703, 1937-2 Cum. Bull. 78; I.T. 1219, I-1 Cum. Bull. 44 (1922); R. H. Macy and Co. v. U.S., 148 F. Supp. 377 (D.C.S.D. N.Y. 1957) rev'd. and remanded on other grounds, 255 F. 2d 884, 890 (2d Cir. 1958).

ending inventory are the same items contained in the beginning inventory. The regulations<sup>113</sup> provide for certain requirements incident to adoption and use of the lifo inventory method. A taxpayer pursuant to the adoption of lifo must file an application to use it, specifying "with particularity" the merchandise to which it will be applied. One of the most significant requirements incident to the adoption and use of lifo is that all merchandise inventoried under the lifo method shall be taken at cost regardless of market value. The "lower of cost or market" method cannot be used in connection with a lifo valuation.<sup>114</sup> In adopting lifo, goods in the inventory at the time of adoption will be priced using the average cost method. The aggregate value is determined pursuant to an inventory method which was authorized and employed by the taxpayer in a prior taxable year. When the inventory at the close of the year-using lifo-exceeds the beginning inventory of the same period, the excess shall be included in the closing inventory at costs using either the actual costs of goods most recently purchased (fifo), by reference to costs of merchandise purchased or produced during the period in order of acquisition or by reference to an average cost method. The latter requirements are for taxpayers engaged in the purchase and sale of merchandise. The regulation<sup>115</sup> gives an example of a retail grocer or a druggist or a miner selling his ore without smelting, as taxpavers who are likely to be affected by these requirements. Once the lifo method has been adopted by the taxpayer it must be adhered to in all subsequent years unless a change to a different method is approved by the Commissioner. In the event that the taxpayer is engaged in more than one business, the Commissioner may require the lifo method of valuing inventories for all the taxpayer's businesses when only one inventory is using lifo, if in the opinion of the Commissioner "the use of such method with respect to such other goods is essential to a clear reflection of income."116 However, with the approval of the Commissioner. a taxpayer who adopts the lifo method for a specified portion of his inventory may continue to take the remainder of his inventory for tax purposes on a cost or market basis, or on any of the number of basis which may be authorized.117

To illustrate the mechanics involved in using lifo and its comparison with fifo, assume the following figures:

<sup>&</sup>lt;sup>113</sup> Treas. Reg. §1.472-2.
<sup>114</sup> Treas. Reg. §1.472-2 (b).
<sup>115</sup> Treas. Reg. §1.472-2 (d).
<sup>116</sup> Treas. Reg. §1.472-2 (h) (i); For further requirements under lifo see Treas. Reg. §1.472-3 (time and manner of making election); Treas. Reg. §1.472-4 (adjustments to be made by taxpayer); Treas. Reg. §1.472-5 (revocation of election); Treas. Reg. §1.472-6 (change from lifo inventory method); §Treas. Reg. §1.472-7 (inventory of acquiring corporations).
<sup>117</sup> I.T. 3456, 1941-1 CUM. BULL. 201, 203.

Ending 1955 inventory: 1,000 units @ \$ .80 per unit\$800					
Purchases:         1956       1,000 units @ \$ .90         1957       600 units @ 1.00         1958       800 units @ 1.10         1959       500 units @ 1.20					
Sales:         Closing Inventory           1956         800 units @ \$ .95         1,200 units           1957         500 units @ 1.00         1,300 units           1958         700 units @ 1.20         1,400 units           1959         1,200 units         700 units					
Opening 1956: Lifo 1,000 un. @ \$ .80 <u>\$ 800</u> 1,000 un. @ \$ <u>.80 \$ 800</u>					
Closing 1956:       1,000 un. @ .80       800       1,000 un. @ .90       900         200 un. @ .90       .90       180       200 un. @ .80       900         \$ 980       \$ 980       \$ 1,000 un. @ .80       160					
Closing 1957:					
Closing 1958:         200         with the second se					
100 un. @ 1.10       110 $$\underline{\$1,190}$ $$\underline{\$1,480}$ Closing 1959:       700 un. @ .80       \$ 560 500 un. @ 1.20					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					

Under the lifo method it should be noted that a certain "inventory base" is constantly being maintained. This base will remain as long as subsequent purchases are equal to or exceed subsequent sales. As soon as total sales exceed purchases the lifo base will be invaded.

As a practical matter the physical units which were purchased and the cost of which compose the base valuation, have long since been sold in most instances when the taxpaying merchant rotates his stock. Even in the durable goods industry items are constantly being modified so that the earlier versions must be sold first. Hence the lifo method of valuation is far from being realistic as respects the physical movement of merchandise. The lifo method thus becomes a mere fiction having significance only as a matter of accounting for merchandise as distinguished from realistically representing the physical movement of goods in and out of the taxpayer's inventory. What then is the justification for its use? Advocates of the lifo method of valuation place major emphasis on the profit and loss account for a current period. Since lifo includes current purchase prices in the cost of goods sold, current costs are matched with current prices thus resulting in a more accurate picture of current operations. Thus if an item purchased fifteen or twenty years ago constituted a portion of the lifo base and were sold at current selling prices, the gross profit resulting therefrom would undoubtedly be much greater than the gross profit from a similar item purchased and sold in 1960. Proponents of lifo argue that current prices reflect current costs hence there should be a matching of current costs with current selling prices.

Opponents of the lifo method, on the other hand, argue that it is unrealistic to price an item in the inventory, for balance sheet purposes, at a remote cost not representative of current costs.

On a rising market, profits, under the fifo method, are necessarily plowed back into the inventory. Thus under fifo the high priced current items will be shown in the ending inventory instead of the lower priced earlier purchases under the lifo method. A portion of the gross profit during a period of rising prices would be in effect, an unrealized inventory profit which is indicative of an inflationary trend. The increased gross profits would have the effect of increasing the tax burden during these periods.

Chudson, in his comparison of the two methods indicates a preference for lifo stating:

The lifo procedure eliminates from the income reported profits and losses due to price fluctuations; it provides a ceiling over temporarily enhanced earnings and, later on, a cushion against the effects of receding business; it provides better comparative data on the status of the business and thus enhances managerial efficiency; it levels profits for tax purposes, and, if adopted when prices are lowest, it also lowers taxes.<sup>118</sup>

Thus it would appear that lifo is advantageous during periods of rising prices providing the lifo base was established at a time when prices were relatively low. Wider fluctuations should be noted in the fifo method of valuation. Observe, however, the result of disturbing the lifo base by selling a lifo-base item. As soon as the cost of sales includes an item in the lifo base a disproportionate gross profit will be realized in the period in which the base is invaded. This suggests that the taxpayer who is faced with liquidation will be paying an abnormal tax in the year of liquidation. The Code<sup>119</sup> provides for a measure of relief in this area.

Proponents of the fifo method of valuation insist that fifo is the only method of valuation which presents realistically the physical

<sup>&</sup>lt;sup>118</sup> Chudson, "The Pattern of Corporate Financial Structure," National Bureau of Economics Research 82 (1945).
<sup>119</sup> INT. Rev. Comp. or 1054 \$1221

<sup>&</sup>lt;sup>119</sup> INT. Rev. Code of 1954 §1321.

movement of the merchandise in and out of a taxpayer's stock and thus are willing to sacrifice the matching of current costs with current revenue in favor of the flow of goods approach. It is also argued that the lifo method penalizes businesses which did not start doing business at an earlier date when prices were lower and a minimum lifo valuation could be established. Thus lifo places a premium on age and discriminates against the taxpayer who is currently contemplating a fresh business start.

Fifo will also have a tendency to produce higher taxes in periods of rising prices. From an economic viewpoint this is a sound reason for favoring fifo. The earlier purchases will be the ones which will be included in the cost of goods sold. Since the economy is experiencing a rising market, the cost of goods sold will be proportionately less than the same goods sold under the lifo concept. Thus, since the gross profit is greater, a higher tax burden will be placed upon the taxpayer which, in turn, has a depressing effect upon the rising market.

Why the requirement that merchandise must be priced at cost when lifo is used? From what has been said it would appear that a taxpayer who has adopted lifo is given an opportunity to minimize his gross profit for a period because of the reduced valuation of his ending inventory. This lifo inventory was presumably acquired at a time when merchandise costs were low. Thus in subsequent periods the lifo taxpayer's inventory will be approximately the same at the end of each accounting period since the taxpayer will normally reduce his inventory down to, or close to the lifo base at the close of a taxable period. Unrealized gains in the form of price increases will not distort gross income. To allow the taxpayer the option of reducing inventory valuations below the already minimum cost in the lifo base as soon as "market" drops below "cost" would be going farther than the regulations intended.

# (g) Lifo and the Retail Method

It is permissible for taxpayers using the retail method of pricing inventories to also use lifo. As was pointed out earlier, the retail method of pricing an inventory reduces the selling price of merchandise on hand to approximate cost under *fifo*. Thus the resulting cost figures of the merchandise in the inventory under the retail method are the costs of items most recently purchased. The problem is to convert the current costs into costs of a like quantity of merchandise at the beginning of the period. The retailer using lifo must adjust the closing inventory for changes in prices. To illustrate, assume that the retail method yielded an inventory cost figure of \$22,000.00. Assume also that prices during the period increased 10% and that the beginning inventory was \$20,000.00. It is obvious that the \$22,000.00 ending in-

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ventory and the \$20,000.00 beginning inventory represents the same amount of merchandise. The initial step in converting to lifo is to divide the ending inventory by the proper index number which is 1.1% in the illustration. The U.S. Bureau of Labor Statistics computes and publishes a series of group index numbers of retail prices on a countrywide basis which are suitable for use by department stores and are acceptable to the Commissioner. The use of the indices of the Bureau is not mandatory; indices may be prepared by an individual taxpayer based upon his own data on prices and inventory quantities. The taxpayer is required, however, to submit adequate proof that the indices are reliable.<sup>220</sup>

The so-called "dollar value" method is perhaps the simplest method known to convert ending inventories to the lifo basis. The above illustration assumes that the ending inventory did not exceed the beginning inventory in terms of beginning inventory costs. Assume, however, that the January 1, 1959, inventory was \$20,000.00 (cost). On December 31, 1959, it is determined that the inventory in terms of January 1, 1959, costs is \$25,000.00. Consequently a quantity increase of \$5,000.00 in terms of January 1, 1959, costs has been experienced. This increase, however, must be adjusted for price changes during the period by a comparison of the ending inventory at ending inventory prices with ending inventory at beginning inventory prices. Assume, that the ending inventory on December 31, 1959, (cost) is \$30,000.00 while the same inventory in terms of January 1, 1959, costs is \$25,000.-00. Dividing \$30,000.00 by \$25,000.00 yields a factor of 1.2. In order to determine the valuation under lifo, the quantity increase of \$5,000.00 is multiplied by the factor, resulting in an inventory increase of \$6,000.00. The \$6,000.00 increase is added to the lifo base of \$20,000.00 resulting in an ending inventory under lifo of \$26,000.00 as compared to \$30,000.00 under the retail method which is the same as the valuation under the fifo method.

The initial authorization for the use of the "retail method" and lifo was granted in the landmark case of *Hutzler Bros. Co. v. Commissioner*<sup>121</sup> where the petitioner, a large department store, employed the "retail method" of computing inventory costs. Petitioner filed its return for the year ending January 31, 1942, using lifo. Selling prices of merchandise on hand were reduced to cost under the retail method. A further reduction of these costs to lifo was calculated which produced a closing inventory in the amount of \$1,166,237.50. Petitioner's closing inventory without the use of lifo amounted to \$1,319,287.29, a difference of \$153,049.79; the difference representing a tax saving to the petitioner.

<sup>&</sup>lt;sup>120</sup> Mim. 6244, 1948-1 Сим. Bull. 21; Also see Treas. Reg. §1.472-1. <sup>121</sup> 8 Т.С. 14 (1947).

The case of Basse v. Commissioner<sup>122</sup> followed the Hutzler decision and commented on the latter case as follows:

We there held that under the lifo method a physical matching of goods on hand in a given department at the end of the year with goods on hand in that department at the beginning of the year was not required and that a matching of dollar values of a department at the beginning and end of the year was sufficient to constitute compliance with the matching requirement of the statute. That holding was reached although admittedly the goods on hand at the beginning and and of the year generally differed considerably as to type, quality, and price.<sup>123</sup>

The retail method and lifo can now be employed without the necessity of determining the specific quantity of merchandise in the inventory. The aggregate "dollar value" of the items composing the inventory is the significant factor.

Since lifo requires the use of cost, the selling prices at retail of merchandise included in the beginning inventory and purchased during the year must be adjusted for mark-downs as well as mark-ups during the taxable year. This requirement is mandatory notwithstanding the taxpayer's previous practice respecting mark-downs under the retail method. This requirement is not applicable to retailers employing the retail method without the use of lifo.124

The fundamental purpose of the dollar method is to remove inflation from a going concern's base stock inventory. Proponents of the method argue that, a change in the physical items composing the inventory, such as the replacement of wool by synthetics, is no reason why inflation should be allowed to creep into inventories. A minimum investment in inventory is a continuing necessity and such an investment is in a real sense a fixed capital investment even though the actual items composig it changed. Accounting conventions recognize the necessity of not revaluing plant and equipment each year on the basis of current market prices. These conventions have therefore been supported as a means of treating basic inventory investments in a comparable manner.

RICHARD J. WEBER

<sup>&</sup>lt;sup>122</sup> 10 T.C. 328, 338 (1948). <sup>123</sup> Id. at 338.

<sup>&</sup>lt;sup>124</sup> Mim. 6244 *supra* note 120.