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Demystifying LIFO: Towards Simplification of Inflation-Adjusted Inventory Valuation

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I. INTRODUCTION

The last in, first out (LIFO) method of inventory accounting has been available to taxpayers for more than 50 years.¹ The basic concept of LIFO is relatively simple: it reverses the normal assumed flow of costs (first-in, first-out or FIFO) by matching the costs of the latest purchases or production against current-year sales. During periods of rising costs, LIFO generally results in lower taxable income than the FIFO method because current-year increases in inventory costs are charged to cost of goods sold, rather than accumulated in ending inventory. Thus, LIFO provides protection from the effects on taxable income of rising inventory costs (hereinafter "inflation").

Like many other aspects of federal income tax law, the practical implementation of LIFO has often proved to be a complex task. Particularly difficult issues have arisen over the fundamental concept of measuring costs on a comparable basis over time for inventory affected by stylistic, technological, or other changes. The tax law currently lacks objective, determinate standards for ascertaining the proper LIFO cost of inventory items that change. Current standards rely on concepts of similarity, involving fine distinctions that are difficult to apply consistently and resulting in costly and burdensome controversies, with little promise of more determinate results. Moreover, efforts to simplify LIFO have not freed taxpayers from mystifying complexity in this area, as the available simplified methods are far from simple and are not viable alternatives for many taxpayers.

This article analyzes the complexities of measuring inflation in an environment of changing inventory composition. It argues that administrative feasibility, rather than precision, should be the guiding principle for reform in this area. Externally generated indexes of inflation, such as those currently produced by the Bureau of Labor Statistics (BLS), hold the greatest promise for meaningful simplification of LIFO while continuing to protect taxpayers from inflationary effects on income. Such indexes are readily available and they offer consistent, objective solutions to problems of changing inventory items that otherwise cause administrative uncertainty for taxpayers and the government.

Part I provides an overview of LIFO in the context of inventory accounting. Part II analyzes capital maintenance as a conceptual framework for measuring economic income in an inflationary environment, and places LIFO within that framework. Part III analyzes two basic approaches to implementing LIFO—specific goods and dollar-value—and explores sources

1. See Revenue Act of 1938, Pub. L. No. 554, ch. 289, § 22(d), 52 Stat. 447, 459 (allowing LIFO to certain industries only); cf. IRC § 22(d) (1939) (removing industry specific restrictions and making LIFO available to all taxpayers). The principal Code provisions authorizing the use of LIFO are presently in § 472.

of controversy within each approach caused by changes in inventory content. Part IV discusses efforts to simplify LIFO, and suggests further reforms to reduce administrative and compliance burdens while fulfilling the general purpose of the method. Part V provides a concluding perspective on the roles of simplification and precision in this context.

II. OVERVIEW OF LIFO CONCEPT

LIFO is perhaps best understood by first placing it within the broader context of inventory costing. Taxpayers required to maintain inventories² face several practical questions in computing taxable income: (1) what costs must be capitalized into inventories; (2) how should inventoriable costs be allocated among items purchased or produced during the year; and (3) how should such costs be allocated between the items purchased or produced during the year and items remaining on hand at year-end (ending inventory).³ Answers to the first two questions are generally found in section 263A, which is (mercifully) beyond the scope of this discussion. The answer to the third question—the value of ending inventory—depends upon the cost flow assumption adopted by the taxpayer. As discussed below, several cost flow methodologies are available, and each reflects a different approach to measuring income in an environment of changing inventory costs.

A. Cost Flow Methodologies

Taxpayers may choose from three cost flow methodologies: (1) specific identification; (2) first-in, first-out (FIFO); and (3) last-in, first-out (LIFO).⁴ LIFO and FIFO are often referred to as cost flow assumptions, as they do not necessarily track the actual movement of particular costs into and out of inventory. As a practical matter, specific identification is either impossible or undesirable for many taxpayers.⁵ The regulations seem to

2. In general, inventories are required “in every case in which the production, purchase, or sale of merchandise is an income-producing factor.” Regs. § 1.471-1.

3. See generally Stephen F. Gertzman, *Federal Tax Accounting* ¶¶ 6.06-.08 (2d ed. 1993).

4. See Regs. § 1.471-2(d). A fourth methodology—average costs—is also used in many industries, although it is neither expressly prescribed nor expressly prohibited by the Code or regulations. See Gertzman, *supra* note 3, ¶ 6.08[3]; 1 Leslie J. Schneider, *Federal Income Taxation of Inventories* § 2.02[1], [4] (1981). Some commentators have suggested that Regs. § 1.471-8 indirectly supports an average costing approach by allowing valuation based on average costs if the average is based on costs incurred during the taxable year. See Gertzman, *supra*, ¶ 6.08[3][a] & n.359, at 6-88 to 6-89, 6-91. However, the status of average costing is not without controversy, particularly where the so-called “moving average” method is used. See *id.* ¶ 6.08[3]; Schneider, *supra*, § 2.02[4].

5. The root of this impracticality or undesirability lies in the difficulty of tracking specific inventory items. As one financial accounting text explains:

recognize this practical reality, as they presume a FIFO cost flow where goods have been “so intermingled that they cannot be identified with specific invoices.”⁶ The vast majority of taxpayers with inventories use FIFO and LIFO.⁷

Under FIFO, the “[g]oods taken in the inventory . . . will be deemed to be the goods most recently purchased or produced, and the cost thereof will be the actual cost of the goods purchased or produced during the period in which the quantity of goods in the inventory has been acquired.”⁸ Thus, the first goods purchased or produced during the year are deemed to be the first goods sold, and the ending inventory is composed of the last goods purchased or produced during the current taxable year.

LIFO reverses the FIFO assumption. Inventory on hand at the close of the taxable year is comprised first of those items on hand in the beginning inventory and then, to the extent of any excess, items acquired during the taxable year.⁹ LIFO thus may result in a stratified inventory, composed of several annual inventory layers valued according to costs incurred during the period of acquisition.

B. Measures of Business Income Under FIFO and LIFO—A Simplified Example

FIFO and LIFO reflect fundamentally different approaches to the

It may be practical in a few situations in which units are costly and can be easily distinguished (for example, an automobile dealership), but in many complex manufacturing and retailing situations it is impossible to apply the specific identification method because the cost of each individual unit is not identifiable, and it is not known which specific units are sold. In addition, as volume increases, so does the cost of record keeping, and the method may become too expensive to use.

Loren A. Nikolai & John D. Bazley, *Intermediate Accounting* 351 (4th ed. 1988).

6. Regs. § 1.471-2(d). Even where the taxpayer has the ability to track specific invoices, the Service has generally not required taxpayers to use a specific identification method instead of FIFO. Schneider, *supra* note 4, § 2.02[3]. However, query the extent to which the increased use of bar coding and other electronic identification devices may increase the ability to track specific inventory items and thus affect the Service’s decision to respect taxpayer choice of FIFO over specific identification.

7. In a survey of annual reports of 600 selected industrial and merchandising companies, the American Institute of Certified Public Accountants [AICPA] reported that it was not unusual for a company to utilize more than one inventory method to determine total inventory cost. In 1991, 60% of the surveyed companies used LIFO and 70% used FIFO. About 33% used the average cost method and only 8.3% used another method, which was defined to include “specific identification, accumulated costs for contracts in process, and ‘current cost.’” See American Inst. Certified Pub. Accountants, *Accounting Trends and Techniques* 142 & tbls. 2.8, 2.9 (Jack Shohet & Richard Rickert eds., 46th ed. 1992).

8. Regs. § 1.471-2(d).

9. See IRC § 472(b).

measurement of business income during periods of changing inventory costs. In particular, they differ as to the time at which changes in the replacement costs of inventory—which during a period of rising costs is herein referred to generally as “inflation”—should be taken into account. Under FIFO, inflationary gains (the excess of current replacement costs over historical acquisition costs) are taken into income entirely in the current taxable year, whereas LIFO generally defers recognition of those gains until the inventory is deemed to be liquidated.

The following highly simplified example provides a useful starting point to explore the differences between LIFO and FIFO.¹⁰ Assume that a firm begins the year with 100 widgets costing \$1 each. During the year, the firm sells 100 widgets for \$2 each. At year-end, the firm purchases 100 more widgets for \$2 each. Assume further that the widget price increased because of inputs unique to widgets, so that this price increase has no measurable effect on the general price level within the economy as a whole. Gross profit computations for year one under LIFO and FIFO cost flow assumptions are shown below:

	<u>FIFO</u>	<u>LIFO</u>
Sales	\$200	\$200
Cost of Goods Sold:		
Beginning inventory	\$100	\$100
Add: Purchases	<u>200</u>	<u>200</u>
Cost of goods available for sale	\$300	\$300
Less: Ending Inventory	<u>200</u>	<u>100</u>
Cost of Goods Sold	<u>\$100</u>	<u>\$200</u>
Gross Profit on Sales	<u>\$100</u>	<u>\$ 0</u>

Under the FIFO method, the change in the cost of replacement goods during the period between purchase and resale is treated as realized gain for the current taxable year. The cost to replace the inventory sold during the taxable year is capitalized in the ending inventory account. Thus, the FIFO method produces net income of \$100, which represents gross profit realized from effectively liquidating the beginning inventory during the taxable year.¹¹

10. The example does not take into account such factors as changes in the general price level, changes in the quantity or nature of the inventory, and variations in methods of computing the LIFO value of the inventory. These complexities are addressed throughout the remainder of this article.

11. See Henry J. Aaron, *Inflation and the Income Tax: An Introduction*, in *Inflation and the Income Tax 13* (Henry J. Aaron ed., 1976) (analogizing FIFO to a tax on the increased liquidation value of the firm).

On the other hand, LIFO shifts the increased cost of replacement inventory to cost of goods sold, which in these circumstances results in no gross profit for the taxable year. LIFO thus defers recognition of gain from the initial inventory amount until that inventory is ultimately liquidated and not replaced. To illustrate the deferral until liquidation, suppose that the taxpayer in the example goes out of business in year two and liquidates the 100 widgets in ending inventory by selling them for \$2 each. The gross profit computations for year two are as follows:

	<u>FIFO</u>	<u>LIFO</u>
Sales	\$200	\$200
Cost of Goods Sold:		
Beginning inventory	\$200	\$100
Add: Purchases	<u>0</u>	<u>0</u>
Cost of goods available for sale	\$200	\$100
Less: Ending Inventory	<u>0</u>	<u>0</u>
Cost of Goods Sold	<u>\$200</u>	<u>\$100</u>
Gross Profit on Sales	<u>\$ 0</u>	<u>\$100</u>
Total Gross Profit on Sales Years 1 and 2	\$100	\$100

The final line in the table shows that the firm is ultimately subject to the same measure of taxable income over its life whether FIFO or LIFO is used. LIFO merely defers, but does not eliminate, the recognition of income (and ultimately, the imposition of income tax) caused by increases in the cost of items held in ending inventory. In this sense, LIFO differs from other proposals that would permanently exempt inflationary profits from taxation.¹²

III. CAPITAL MAINTENANCE AS A FRAMEWORK FOR MEASURING ECONOMIC INCOME

Ultimately, the tax law reflects political choices, which do not necessarily fit within any particular theoretical framework for measuring income.¹³ Practical difficulties in implementing economic measures of income sometimes call for concessions against theoretical accuracy. Neverthe-

12. For discussion of such proposals, see, e.g., Michael C. Durst, *Inflation and the Tax Code: Guidelines for Policymaking*, 73 Minn. L. Rev. 1217 (1989); David H. Safavian, *Indexing Tax Attributes for Inflation: Dispelling the Myths and Advocating Change*, 1995 Det. C.L. Rev. 109.

13. See Michael D. Rose & John C. Chommie, *Federal Income Taxation* 17 (3d ed. 1988). (“[A]t the legislative level, the tax law-making process is a political process, which assures that, at best, pure theory will be recognized only in dim outline in the Code itself.”); see also *Hellerman v. Commissioner*, 77 T.C. 1361, 1366 (1981) (“[N]either the Constitution nor tax laws ‘embody perfect economic theory.’”) (citing *Weiss v. Weiner*, 279 U.S. 333, 335 (1929)).

less, the distinction between income and capital has played an important role in shaping the contours of taxable income.¹⁴ A brief look at economic concepts of income may help to understand the measures of income under LIFO and FIFO.

A. *Income vs. Capital*

As commentators have noted, the Sixteenth Amendment's provision of the power to "lay and collect taxes on incomes . . . [b]y necessary implication . . . excludes the power to tax capital receipts."¹⁵ "Capital must be maintained before income can be measured."¹⁶ The distinction between income and capital has been described as follows:

Capital is perceived as a stock of wealth at an instant of time, while income is considered the flow of wealth in excess of that necessary to maintain a constant capital. Stated differently, capital represents the "tree," which should remain intact; income, the "fruit" on the tree, which can be consumed. We can also view capital as "the amount in the reservoir at any one time, and [income] as the amount flowing out of the reservoir during a period of time."¹⁷

Although capital maintenance is a benchmark for income measurement, the measure of income ultimately adopted is still subject to debate, in part because the nature of capital to be maintained is subject to different interpretations. Two general approaches may be applied to measure capital in an economic or accounting sense: one focuses on "financial capital" and the other focuses on "physical capital."¹⁸

B. *Financial Capital Maintenance*

Financial capital maintenance focuses on sustaining an equivalent value of investment in the firm over time.¹⁹ When this value is expressed

14. See Rose & Chommie, *supra* note 13, at 17 ("Arguably . . . the distinctions drawn historically between income and capital in more general economic theory and in trust law have contributed as much as anything to the development of the income concept for federal tax purposes.").

15. *Id.* at 21.

16. Robert Bloom & Araya Debessay, *Inflation Accounting* 89 (1984).

17. *Id.* at 90 (footnotes omitted) (quoting E.S. Hendriksen, *Accounting Theory* 142 (4th ed. 1982)).

18. See *id.* at 90-91; Financial Accounting Standards Board, *Statement of Financial Accounting Concepts No. 5: Recognition and Measurement in Financial Statements of Business Enterprises* ¶ 46-48 (1984).

19. Bloom & Debessay, *supra* note 16, at 92.

in terms of stable monetary units, this approach could be viewed as maintaining the same “economic power” of the enterprise, a concept that focuses on the change in the real market value of the firm before distributions to shareholders, eliminating nominal gains and losses resulting from changes in the general price level.²⁰ In the example above, which assumes (perhaps unrealistically) that the price of replacement widgets changes discretely without affecting the general purchasing power of the dollar, the firm may be considered better off at the end of year one by \$100. The firm’s only asset—inventory—is worth \$100 more than at the beginning of the year. Since the general purchasing power of the dollar is unchanged, the firm’s financial capital (and economic power) increased since the beginning of the year, reflecting economic income.²¹

Critics of this financial capital or economic power approach argue that the “profit” in this situation is not real economic income because it cannot be distributed to the owners of the firm without impairing the firm’s current level of operations.²² Unless the firm could obtain outside financing, a \$100 distribution to its owners (or to the government in the form of taxes) would leave only \$100 to reinvest in replacement inventory, enough to replace only 50 widgets. Thus, unless the firm could increase its efficiency so that it could continue the same level of operations with less inventory on hand, the firm’s business operations would effectively be cut in half. To avoid this result, critics argue that income should be measured based on the concept of physical capital maintenance, in which capital is viewed in a physical sense as the capacity to produce goods and services.²³

C. *Physical Capital Maintenance*

The rationale for a physical capital maintenance approach can be stated as follows:

20. See Joseph A. Pechman, *Federal Tax Policy* 177 (5th ed. 1987).

21. Although the FIFO method measures income accurately under the economic power measure in the example, it would not do so if general price level change had occurred during the year, in which case the increase in nominal value would not represent an increase in purchasing power. An adjustment for changes in the general price level would be necessary to reflect the same economic power of the firm. So-called indexed FIFO approaches have been proposed from time to time to adjust for the effects of inflation on inventory costs. See, e.g., *The President’s Tax Proposals to the Congress for Fairness, Growth, and Simplicity* 174-78 (1985); *Accounting: Further IRS Guidance Likely Next Year on “Indopco.”* IRS Official Says, *Daily Tax Rep.* (BNA) No. 218, at D-11 (Nov. 10, 1992) (discussing 1992 proposal by Bush Administration to index FIFO inventory values by consumer price index).

22. See Bloom & Debessay, *supra* note 16, at 94.

23. *Id.*

Firms produce certain goods or services. To ensure a firm's ability to produce such goods and services, at least at its present operating levels, it is necessary for the firm to maintain its prevailing physical operating capacity. This implies that the income should represent the maximum dividend that could be paid without impairing the productive capacity of the firm.²⁴

The physical capital maintenance concept thus seeks to preserve the business enterprise by measuring income during the firm's operational period as the amounts that could be distributed on a sustainable basis.²⁵ Taxation before liquidation of income resulting from increases in the value of inventory may be perceived as a tax on capital, rather than a tax on income.²⁶ The assumption that distributions must not impair current operations is consistent with the financial accounting assumption of the going concern.²⁷

In the example, the physical capital maintenance concept of income leads to the conclusion that the firm has no income in year one. It possesses the same asset—an inventory of 100 widgets—at both the beginning and end of the year.²⁸ All of the revenue from selling inventory was reinvested in replacement widgets, thus allowing the firm to continue operating at the same level. None of the revenue can be distributed to the owners without disrupting the firm's operations. Imposing an income tax on holding gains reflected on a FIFO basis in ending inventory would require that the firm either reduce its inventory or incur debt to pay the tax, thus inhibiting the formation of capital needed to continue its business.²⁹

24. *Id.* (footnote omitted).

25. See *id.* The distributable income is sometimes described as "sustainable income" since the firm is able to maintain its productive assets intact while making distributions of income to its owners. See *id.*

26. See Pechman, *supra* note 20, at 174 (discussing the analogous problem of historical cost depreciation).

27. Bloom & Debessay, *supra* note 16, at 95; see H. T. McAnly, *Recognizing Current Price Levels in the Profit and Loss Statement and in the Balance Sheet*, in *Dollar Value LIFO—Cost Accounting Concepts—Managements Services* 111, 120 (n.d.) ("[A] company cannot liquidate its inventory and stay in business. A working amount of inventory is as essential to the conduct of business as are other items of working capital and physical facilities.")

28. As discussed below, changes in items held in ending inventory can complicate this conclusion.

29. LIFO's contribution to the formation of business capital has been cited as a basis for expanding its availability. See generally House Comm. on Small Business, *Inventory Accounting as a Burden on the Capital Formation Process*, H.R. Rep. No. 1448, 96th Cong., 2d Sess. 5-13 (1980).

The example shows that LIFO tracks the general contours of the physical capital maintenance theory in the context of inventory investment.³⁰ Literature relating to the early development of LIFO reflects similar concern for physical capital maintenance. For example, H.T. McAnly, an early proponent of LIFO, viewed FIFO as deficient because it created "artificial profits" that were essentially part of the capital investment in the firm:

The use of the First-in, First-out basis may serve to deceive the investors through creating a false profit to the extent that a portion of the profit represents a revaluation of a continuing monetary investment in inventory. Therefore, it is rightfully claimed that the portion of the net income which represents the increase or decrease in profit brought about through the revaluation of a continuing investment in inventory under this First-in, First-out method is not income which has been earned and therefore available for distribution.³¹

In contrast, McAnly viewed LIFO as promoting a more realistic measure of income: "With LIFO everyone can speak of earnings and profits as meaningful positive enrichment rather than imaginary, theoretical or transient profits, resulting from mere fluctuations in the value of things we own."³²

Courts discussing LIFO also point to its basic purpose in terms of eliminating artificial profits created by inflation. As the Tax Court often repeats: "The theory behind LIFO is that income may be more accurately determined by matching current costs against current revenues, thereby eliminating from earnings any artificial profits resulting from inflationary increases in inventory costs."³³ Other courts have explained inflation-induced

30. Full analysis of the physical capital maintenance concept requires that assets other than inventory, including plant and equipment, also be taken into account. See Bloom & Debessay, *supra* note 16, at 94. This analysis focuses solely on inventory as a discrete component of physical capital.

31. H.T. McAnly, *Curbing the Effect of Our Erratic Dollar in Pricing Inventories and Providing for Depreciation*, in *Selected Writings on Accounting and Related Subjects* 60, 65 (n.d.).

32. H.T. McAnly, *A Need for Agreement on a Uniform Basis of Inventory Valuation*, in *Selected Writings on Accounting and Related Subjects* 87, 101 (n.d.).

33. *Amity Leather Prods. Co. v. Commissioner*, 82 T.C. 726, 732 (1984) (citing *Fox Chevrolet, Inc. v. Commissioner*, 76 T.C. 708, 723 (1981), acq. 1984-2 C.B. 1); see *Shasta Indus. v. Commissioner*, 52 T.C. Memo (CCH) 190, 195-96, T.C. Memo (P-H) ¶ 86,377 (1986) ("The theory of the LIFO method is generally that the determination of income may be more accurate if current costs are matched with current revenues, thereby eliminating any inflation-induced profit."); see also *Hamilton Indus., Inc. v. Commissioner*, 97 T.C. 120, 130 (1991) ("By matching the cost of the most recently purchased goods with current sales revenue, the LIFO convention removes from current earnings any artificial profits attributable

profit in terms of the inability to distribute such profits, which are needed to replace inventory that was sold.³⁴

Unfortunately, the practical realities of measuring economic income under a physical capital maintenance approach are much more complex than the simplified example suggests. The principal difficulty in applying the approach to inventory involves the criteria for measuring productive capacity—here, the inventory as a measure of that capacity—consistently over time. Commentators have suggested at least three different interpretations of physical productive capacity:

1. Maintaining identical or similar physical assets that the firm presently owns
2. Maintaining the capacity to produce the same *volume* of goods and services
3. Maintaining the capacity to produce the same *value* of goods and services.³⁵

to inflationary increases in inventory costs.”); *Oak Knoll Cellar v. Commissioner*, 68 T.C. Memo (CCH) 412, 420, T.C. Memo (RIA) ¶ 94,396 (1994) (using similar language).

34. For example, a district court judge stated:

Under the FIFO method the earliest historical costs are matched against current revenues and, to the extent that current costs exceed such historical costs, gross profit is overstated and distorted. Rather than being available totally for the payment of operating expenses, the repayment of debt, new investment, distribution to owners and the like, a portion of such ‘profit’ must be used merely to replace the inventory which was sold. It is this distortion of profit which may be substantially mitigated by the use of LIFO. The objective of the LIFO method is to match relatively current costs against current revenues in order to produce a more realistic gross profit.

William Powell Co. v. United States, 524 F. Supp. 841, 844-45 (S.D. Ohio 1981) (quoting Stephen F. Gertzman, LIFO: Current Problems and Needed Changes, 34 N.Y.U. Inst. on Fed. Tax. 234, 240 (1976)). Another statement of the idea:

If the taxpayer were to use the First In, First Out (FIFO) method, it would realize greater income earlier because lower priced goods are the first sold. However, that greater income would not account for the cost of replacing goods in inventory. Under LIFO, the higher income from the sale of lower cost, earlier-produced or purchased goods is deferred until the business depletes its prior-year inventory. LIFO allows the taxpayer to match current costs with current revenues more accurately, but usually it results in lower taxes. This is acceptable because the lower taxes on lower income is attributable to inventory inflation.

Kohler Co. v. United States, 95-2 U.S. Tax Cas. ¶ 50,600 (Ct. Cl. 1995).

35. Bloom & Debessay, *supra* note 16, at 94. These three alternatives are derived from a report submitted to the British parliament in 1975 by a committee chaired by F.E.P. Sandilands, Esq. Inflation Accounting Committee, *Inflation Accounting* ¶ 117, at 35 (1975) [hereinafter *Sandilands Report*].

For the inventory component of physical capital, the first two of these interpretations are most relevant.³⁶

The first approach—maintaining identical or similar physical assets—presents definitional questions that inhibit its practical implementation. Similarity is a matter of degree.³⁷ How many characteristics must be the same in order for the inventory assets to be similar? Stated differently, at what point should a change in the composition of inventory justify treating the firm as having liquidated its former inventory and entered into a new productive activity, requiring that taxes be imposed on deferred gains?

A requirement of physical similarity presents the potential for liquidations—and hence recognition of deferred holding gains—resulting from changes in the composition of inventory. If physical identity or similarity were required, inventory composition changes caused by such factors as variation in quality or stylistic or technological innovation could require frequent inclusions of holding gains in income.³⁸ That result is inconsistent with the underlying realities of a going concern—if a firm is to continue its operations, it must adapt its inventory to a changing environment. The firm's shift to different inventory items arguably does not put the firm in a position to make sustainable distributions to owners (or to the government in the form of taxes).

The second approach—maintaining the same volume of inventory without requiring physical similarity (or perhaps by applying a very general standard of similarity)—has the potential to avoid the effects of frequent liquidations imposed by the first alternative.³⁹ However, measuring volume

36. The third alternative, which focuses on maintaining capacity to produce the same value of goods, takes into account changes in the selling prices of goods. Bloom & Debessay, *supra* note 16, at 95. According to the Sandilands Report, this alternative “attempts . . . to take account of the fact that because of price changes the value of the company's products may be increasing while its physical inventory of productive assets may be static or decreasing.” Sandilands Report, *supra* note 35, ¶ 118, at 35. The report conceded that this approach, as well as the second approach focusing on volume, were “difficult to apply in practice.” *Id.* Since our income tax system permits only a cost basis for LIFO inventories, this approach focusing on value is not discussed here. See IRC § 472(b)(2).

37. Similar is defined as “having characteristics in common: very much alike” or “alike in substance or essentials.” Webster's Third New International Dictionary 2120 (1993).

38. For fungible commodities, units such as gallons, pounds, bushels, barrels, and the like may be easily compared over time. However, other items are not so easily quantified and compared. The time period over which inventory changes are measured could also affect the frequency of such liquidations. For example, if comparisons are made on a year-to-year basis only, subtle changes in composition might go unnoticed. However, over longer periods of time, the cumulative effects of these changes might be significant.

39. See Bloom & Debessay, *supra* note 16, at 95 (noting that this approach “accommodates technological improvements and in this respect is superior to the [interpretation requiring maintaining identical or similar physical assets]”).

on a comparable basis over time without resorting to physical units can be a formidable task.⁴⁰ Assume that in year one, a firm holds 100 widgets costing \$1 each, but in year two, the firm shifts its inventory investment by replacing 50 widgets with 25 gidgets, which cost \$2 each. If gidgets existed in year one and if the costs of widgets and gidgets have remained stable between years one and two, we could focus on the volume of inventory in dollars and conclude that the volume has not changed. However, if prices have changed, dollars from each year are not comparable measures of physical capital. Some adjustment to the dollar value is required to ensure comparability between periods. As discussed below, the dollar-value LIFO method makes such an adjustment possible, albeit with considerable complexity.

IV. USING LIFO TO IMPLEMENT THE PHYSICAL CAPITAL MAINTENANCE CONCEPT

The tax law recognizes two principal bases for LIFO inventory computations: specific goods LIFO and dollar-value LIFO.⁴¹ These methods implement, with varying degrees of effectiveness, the two interpretations of physical capital maintenance discussed above in Part II. Specific goods LIFO is derived from the first interpretation, which measures changes in inventory investment by focusing on similar inventory items. Dollar-value LIFO flows from the second interpretation, which measures changes in inventory investment by converting physical inventory measurements to dollars that are comparable between measurement periods. Both methods depart from a precise application of the physical capital maintenance concept due to the practical realities of implementing them in an environment of changing inventory content.

A. *Specific Goods LIFO*

The earliest LIFO methods focused on specific goods or raw material units as the basis for comparing inventory quantities over time.⁴² The

40. See Sandilands Report, *supra* note 35, ¶ 118, at 35 (noting difficulty of applying this concept).

41. Gertzman, *supra* note 3, ¶ 7.04[1]; Schneider, *supra* note 4, § 12.01.

42. See Gertzman, *supra* note 3, ¶ 7.04[2] (“The specific goods method is the simplest and oldest of LIFO systems”). The LIFO method is thought to have originated in the mid-1930’s as a financial accounting concept developed by the petroleum industry. See Raymond A. Hoffman & Henry Gunders, *Inventories* 184 (2d ed. 1970) (noting that “[u]se of the phrase ‘last-in, first-out’ appears to have started with committees representing the petroleum industry”).

However, the concepts inherent in the LIFO method may have originated earlier; LIFO is similar to the so-called base stock method, which used before that time. See *id.*; Schneider, *supra* note 4, § 9.01 (“The LIFO concept is not a recent innovation; in differing forms, it probably dates back to the origins of the income tax law and to the initial reporting

Revenue Act of 1938, which first authorized the use of LIFO for tax purposes,⁴³ restricted LIFO to raw materials inventories in the leather tanning and nonferrous metals industries.⁴⁴ In 1939, Congress removed the industry-specific restrictions so that, in theory, any taxpayer with inventories could use LIFO.⁴⁵ Although the first statutes did not prescribe a detailed system for implementing LIFO,⁴⁶ the Treasury issued regulations indicating

of inventories. The LIFO concept owes its development to another method of inventory valuation [the base stock method] that was used by some taxpayers in reporting their inventories under the earliest income tax statutes.”); 51 Harv. L. Rev. 1430, 1432 (1938) (characterizing 1938 legislation permitting LIFO in some industries as adopting the base stock principle). The base stock method has been described as follows:

Under the base stock inventory method the minimum quantity of raw materials or other goods without which management considers the operation cannot be continued, except for limited periods, is treated as being a fixed asset subject to constant renewal. The base quantity is carried forward at the cost of the original stock.

Hoffman & Gunders, *supra*, at 169. Schneider notes that the principal difference between the base stock method and LIFO is that “under the LIFO method, a normal or base quantity concept was discarded and the flow of all goods was simply reversed from first-in, first-out to last-in, first-out.” Schneider, *supra* note 4, § 9.01.

The base stock method thus seemed to be a crude attempt to implement the physical capital maintenance concept. See 51 Harv. L. Rev., at 1432 (“The advocates of the base stock principle do not challenge the soundness of reflecting inventory ‘gains or losses’ in income determination; they merely assert that insofar as a certain quantity of inventory is absolutely essential to the carrying on of a business, the reflection in the income account of changes in the value of that amount of inventory, even though the separate units have been sold and replaced, is as fallacious as including changes in the value of real estate or machinery.”); see also Gertzman, *supra* note 3, ¶ 7.02[2] (referring to the “base stock” and “reserve” methods as the “so-called normal stock methods” based on the premise that “a certain ‘normal’ quantity of inventory was generally required throughout the life of a business and thus should be valued as a fixed asset rather than on the basis of changing prices over the course of a business cycle”). However, the Treasury and ultimately the Supreme Court in *Lucas v. Kansas City Structural Steel Co.*, 281 U.S. 264 (1930), held that the base stock method was not acceptable for tax purposes. See generally Gertzman, *supra* note 3, ¶ 7.02[2]; Schneider, *supra* note 4, § 9.01; 51 Harv. L. Rev. at 1436-37.

43. See Revenue Act of 1938, Pub. L. No. 554, ch. 289, § 22(d), 52 Stat. 447, 459 (current version at IRC § 472).

44. Ironically, the petroleum industry, which was thought to have originated the “last-in, first-out” concept, was not included in the select group of taxpayers initially allowed to use LIFO. One commentator suggested that the narrow authorization of LIFO in the 1938 bill was the result of the Treasury’s concern that “drafting adequate safeguarding regulations” would be impossible if LIFO was “allowed indiscriminately to a wide group of taxpayers.” 51 Harv. L. Rev. 1430, 1431 (1938).

45. See IRC §22(d) (1939).

46. Section 22(d)(2) of the 1938 Act required that ending inventory consist of “[f]irst, those [items] included in the inventory as of the beginning of the taxable year (in the order of acquisition) to the extent thereof, and second, those acquired in the taxable year, in

that LIFO was feasible only for inventories that could be measured in common physical measuring units, such as tons, gallons, or yards.⁴⁷ This approach is now known as specific goods LIFO.⁴⁸

Under specific goods LIFO, the comparison of the total inventory investment from year to year is generally based on the physical similarity of "goods" in inventory.⁴⁹ The classification or grouping of similar goods is significant because each classification is effectively treated as a separate inventory.⁵⁰ As a result, shifts in the inventory composition can result in liquidations of some classifications or incremental increases in others.⁵¹ In these circumstances, the deferral of inventory profit required by the physical capital maintenance concept may terminate despite the need for continued inventory investment.

Specific goods LIFO thus reflects a more restrictive form of capital maintenance theory, providing only limited deferral of holding gains for

the order of acquisition." A similar statutory formula has continued throughout the history of the LIFO statute. See IRC § 472(b)(1).

47. See Schneider, *supra* note 4, § 9.03.

48. *Id.*

49. Section 472 and the regulations thereunder use the term "goods" to describe the inventory content. For example, § 472(a) and (b) both refer to use of the LIFO method for inventorying "goods." Similarly, Regs. § 1.472-1(a), (c) refers to "goods remaining on hand" and to a "class of goods." The term "goods" may not be intended as a technical limitation on the availability of the LIFO method. The regulations allow LIFO to be applied to raw material content of work in process and finished goods, Regs. § 1.472-1(c), and the Service has ruled that LIFO may be applied to intangibles, such as securities, Rev. Rul. 60-321, 1960-2 C.B. 166. Nevertheless, the IRS National Office has taken the position in that an "item" must be a "good." See I.R.S. T.A.M. 9405005 (Oct. 15, 1993). In the discussion below, the terms "goods," "items," and "costs" are used interchangeably. For a summary of the arguments favoring a definition of "item" that is not limited to "goods," see Gertzman, *supra* note 3, ¶ 7.04[3][e].

50. Gertzman refers to classifications or groupings of specific goods as "pools." Gertzman, *supra* note 3, ¶ 7.04[2]. Occasionally, the Service also uses this term to describe groupings of similar goods, see, e.g., Rev. Rul. 62-77, 1962-1 C.B. 80 (discussing change from specific goods to dollar-value LIFO using the same "pools"), as does the Tax Court, see *Oak Knoll Cellar v. Commissioner*, 68 T.C. Memo (CCH) 412, T.C. Memo (RIA) ¶ 94,396 (1994). However, the regulations appear to use the term "pooling" only in the dollar-value LIFO context. Compare Regs. § 1.472-1(d), (f) (referring to raw materials, groups, or classifications) with Regs. § 1.472-8(b) (referring to dollar-value LIFO pools). In any event, a specific goods "pool" is much narrower than a dollar-value "pool." See generally Schneider, *supra* note 4, § 13.01[2] (discussing the two pooling methods).

51. As noted above, an incremental increase in inventory quantity is effectively treated as a new investment, which is reflected at an amount approximating current cost. The regulations provide three principal alternatives for valuing increments, which focus on the costs of earliest acquisitions, latest acquisitions, or an average of acquisitions. See Regs. § 1.472-2(d)(1)(i)(a)-(c). Other methods may also be used if the taxpayer satisfies the IRS that they clearly reflect income. Regs. § 1.472-2(d)(1)(i)(d).

taxpayers affected by shifting inventory compositions. Moreover, it can be particularly difficult to administer for taxpayers with complex inventories or changing inventory compositions, due in part to the practical difficulties and uncertainties in properly grouping similar goods.⁵²

The regulations provide only limited guidance as to the grouping of similar goods,⁵³ much of which is found in the context of defining similar raw materials in connection with a specific goods LIFO election for raw materials or raw material content. First, the regulations provide the following general guidance:

For the purposes of this section, raw material in the opening inventory must be compared with similar raw material in the closing inventory. There may be several types of raw materials, depending upon the character, quality, or price, and each type of raw material in the opening inventory must be compared with a similar type in the closing inventory.⁵⁴

Significantly, the regulations adopt a standard of similarity, not identity. Moreover, the absence of detailed rules suggests that some flexibility is allowed in applying these standards of "character, quality, or price."

The regulations contain further examples illustrating that raw materials with different characteristics may sometimes be treated as a single classification:

52. See, e.g., *Oak Knoll Cellar v. Commissioner*, 68 T.C. Memo (CCH) 412, 420, T.C. Memo (RIA) ¶ 94,396 (1994) ("Because the specific-goods LIFO method requires the matching of physical units, practically speaking, it is only used as a method for valuing inventories in those industries with inventories which contain a limited number of items with quantities that are easily measured in units.") (quoting *Wendle Ford Sales, Inc. v. Commissioner*, 72 T.C. 447, 452 (1979)).

However, *Schneider*, while noting the impracticality of applying specific goods LIFO to complex inventories, states that he

is aware of taxpayers in a diverse range of industries who have successfully used the specific goods method for finished goods produced in complex manufacturing businesses. In these cases, the taxpayer typically has reduced its finished goods to some common denominator of fungibility and has maintained only a few separate specific goods categories.

Schneider, *supra* note 4, § 12.02[4]. However, *Schneider* also notes that these taxpayers are "vulnerable to challenge from the Service because the multiplicity of different finished products requires numerous separate specific groupings." *Id.* n.57.

53. See *Oak Knoll Cellar v. Commissioner*, 68 T.C. Memo (CCH) at 420.

54. Regs. § 1.472-1(d). By comparison, the dollar-value LIFO regulations on raw material content focus on whether raw materials are "substantially similar" in determining how raw materials should be pooled. See Regs. § 1.472-8(b)(3)(ii). The concept of pooling in dollar-value LIFO is discussed briefly *infra* Part IV.B.

In the cotton textile industry there *may* be different raw materials depending upon *marked* differences in length of staple, in color or grade of the cotton. But where different staple lengths or grades of cotton are being used at different times in the same mill to produce the same class of goods, such differences would *not necessarily require the classification into different raw materials.*⁵⁵

However, the parameters for similarity seem elusive. On one hand, “marked differences” (whatever that means) in some physical characteristics “may” require separate classification. On the other hand, materials with different characteristics do not “necessarily” require separate classification if the materials are incorporated into a common output.

Additional factors of “price and use” are illustrated in an example from the pork packing industry:

As to the pork packing industry a live hog is considered as being composed of various raw materials, different cuts of a hog varying markedly in price and use. Generally a hog is processed into approximately 10 primal cuts and several miscellaneous articles. However, due to similarity in price and use, these may be grouped into fewer classifications, each group being classed as one raw material.⁵⁶

Again, the standards for similarity of price and use are somewhat unclear, but they arguably recognize some latitude in grouping specific goods to implement LIFO in a dynamic product environment.⁵⁷

Case law and published rulings add little clarity to the interpretation and interrelationships of these factors.⁵⁸ In one case, the Service required

55. Regs. § 1.472-1(e) (emphasis added).

56. Regs. § 1.472-1(f). Here, “price” apparently refers to a market price for particular cuts, as presumably the cost to the packer is, in most cases, measured by the cost of the whole animal. The intended meaning of “use” is not clear, but it may refer to use by the packer in further processing, such as in wieners or sausage.

57. One commentator has observed: “It is noteworthy that meatpackers process hogs and cows into more finite products, such as individual steaks and other meat cuts. The example in the regulations seems to imply that the meatpacker need not treat these detailed products as its specific goods groupings.” Schneider, *supra* note 4, § 12.04[2].

58. See *id.* § 14.01[2][a] n.12 (“Unfortunately, most of [the] experience [in the determination of similar physical goods] is as a result of audits and is not officially recognized or published.”). In a recent Tax Court decision involving specific goods LIFO, the court observed: “The parties have not cited, and the Court has not found, any published opinion which directly addresses the appropriateness of a taxpayer’s grouping of items under the specific-goods LIFO method.” *Oak Knoll Cellar v. Commissioner*, 68 T.C. Memo (CCH) 412, 421, T.C. Memo (RIA) ¶ 94,396 (1994).

materials with relatively wide variances in grade and costs to be treated as the same materials for specific goods LIFO purposes.⁵⁹ In another ruling, the Service allowed refined petroleum products—defined as including “gasoline and various types of fuel oil”—to be in the same specific goods grouping.⁶⁰ However, it is difficult to extract principles from these decisions.

If a particular type of goods varies by grade and price, but the mix in grades and their corresponding prices stay relatively fixed over time, the grouping of goods with some differences in physical characteristics does no violence to the purpose of LIFO. Such groupings reduce the burden of separate computations for each narrow type of good and alleviate the impact of temporary liquidations caused by variations in the quantities on hand of each type. However, groupings of goods with varying physical characteristics, such as different quality grades, coupled with corresponding variations in cost creates the potential for inaccurate measures of the level of inventory investment over time. Such inaccuracy could either benefit the taxpayer (if the mix tends toward including more higher cost goods) or the government (if the mix tends toward including more lower cost goods).

In addition to the regulations’ standards for physical similarity, the Service has interpreted costing rules for determining the value of ending inventory⁶¹ to require separate groupings for otherwise similar goods based on the nature of the taxpayer’s business activities. In Revenue Ruling 79-290,⁶² the Service concluded that a taxpayer who discontinued its manufacturing and processing operations and, instead, purchased and distributed similar products could not continue to use the same specific goods groupings.

59. *John L. Denning & Co. v. Commissioner*, 7 T.C. Memo (CCH) 980, T.C. Memo (P-H) ¶ 48,277 (1948), remanded on other grounds, 180 F.2d 288 (10th Cir. 1950), where an inventory of broomcorn comprised of different grades, ranging in cost from \$91.50 to \$145.52 per 1,000 pounds, was treated as a single raw material classification. The taxpayer had purchased relatively greater quantities of the cheaper broomcorn grades during the taxable year, which resulted in an increment in the quantity of broomcorn on hand at year-end. The taxpayer sought to value this increment based on the acquisition cost of the cheaper grades, rather than the average cost of all purchases, which had been used to value increments in previous years. The Service required the taxpayer to continue its former method, which resulted in a valuation that was less advantageous to the taxpayer. On one hand, since the Service could have taken the position that the higher quality broomcorn had been liquidated, this case could stand for the proposition that broad ranges are acceptable. On the other hand, the principle that methods of accounting generally cannot be changed unilaterally could also explain the result. See *Schneider*, supra note 4, § 12.03[4] (citing *Denning* for the proposition that increment valuation methods must be applied consistently).

60. Rev. Rul. 79-290, 1979-2 C.B. 221. As discussed below, this ruling also introduced a separate criterion for specific goods groupings based on the business activity of the taxpayer. See *infra* notes 61-63 and accompanying text.

61. Regs. § 1.472-2(d).

62. 1979-2 C.B. 221.

The Service pointed out that the regulations have separate costing rules for manufacturers and for wholesalers or retailers. Apparently, the Service reasoned that this difference implied that manufacturing is a separate business activity from wholesaling or retailing, thereby justifying separate groupings.⁶³ In effect, the ruling finds that a change from manufacturing to wholesaling is sufficiently significant to treat the taxpayer as having liquidated its former inventory investment, thereby justifying the recognition of previously deferred holding gains. The ruling concludes that the taxpayer's income would be "distorted" if such holding gains were not recognized.⁶⁴

Although determination that a taxpayer has liquidated one business and started another may provide economic justification for ending the deferral of inventory holding gains, the legal basis for this conclusion does not readily appear in the LIFO statute or regulations. The taxpayer in the ruling closed a manufacturing and processing plant, but continued its selling activities.⁶⁵ It is difficult to articulate a sound basis for treating the inventory investment necessary for its selling activities as fundamentally different merely because the taxpayer changed its source of supply by discontinuing processing activities and purchasing similar products from others.⁶⁶ The investment in plant and equipment may have changed, but the inventory investment appears to be consistent.

These uncertainties in the standards for defining similar goods (and, if Revenue Ruling 79-270 is accepted, for defining similar business activities) presents a potential for substantial variation in the LIFO benefits obtained by taxpayers who elect specific goods LIFO. One commentator has observed:

[T]axpayers' practices and the Service's attitude toward grouping raw

63. The ruling also appears to be based on the fact that the dollar-value LIFO regulations require separate pools for wholesaling and retailing operations. These regulations provide in part: "Where a manufacturer or processor is also engaged in the wholesaling or retailing of goods purchased from others, the wholesaling or retailing operations with respect to such purchased goods shall not be considered a part of any manufacturing or processing unit." Regs. § 1.472-8(b)(2)(i).

64. Rev. Rul. 79-209, 1972-2 C.B. 221.

65. The ruling does not specify whether the taxpayer engaged in retailing activities before discontinuing its processing activities. However, even if it was only engaged in wholesaling, nothing in the regulations suggests that otherwise similar goods in a wholesaling operation must be grouped separately from those in a retailing operation. See Regs. § 1.472-2(d)(1)(i) (retail grocer, druggist, and miner selling ore without smelting or refining are all subject to same rules).

66. This ruling has been criticized as being inconsistent with the specific goods LIFO concept, which focuses on comparing goods, not business activities. See Schneider, *supra* note 4, § 12.04[2]. Schneider also takes the position that the specific goods regulations do not address the question of whether a purchased product and an identical produced product should be considered part of the same class of goods.

materials vary widely. In some areas of the country and in some industries, grouping of raw materials on a fairly broad basis appears to have been permitted by the Service, whereas in other areas of the country and in other industries, narrower groupings of raw materials have been required.⁶⁷

This variation may also create unequal treatment of taxpayers and is likely to increase tax administration costs for both taxpayers and the government.

A recent case, *Oak Knoll Cellar v. Commissioner*,⁶⁸ illustrates the potential burdens of satisfying the indeterminate standards of the regulations. In *Oak Knoll Cellar*, the Commissioner had proposed an adjustment rejecting a taxpayer's use of a single specific goods grouping for all wine costs and requiring a separate grouping for each varietal wine.⁶⁹ The Commissioner maintained this position in preparing for trial, even though representatives of the IRS District Office did not agree that separate poolings for each varietal wine were appropriate,⁷⁰ and a settlement proposal based on only two groupings (one for red wines and one for white wines) was made to an unrelated taxpayer that had also used a single pool for wine costs.⁷¹ Two weeks before trial, and nearly three years after the audit began, the Commissioner conceded the issue.⁷²

Although the taxpayer was a "prevailing party" and satisfied the exhaustion of administrative remedies requirement of Code section 7430, the court denied recovery of litigation costs to the taxpayer because it could not show that the Commissioner was unjustified in challenging its specific goods grouping.⁷³ The court found that "the appropriate scope of a specific-goods grouping is a complex question depending on the facts and circumstances of the particular taxpayer."⁷⁴ The court further noted that "[i]t may be reasonable for the Commissioner to pursue litigation that may tend to clarify the law, even though such litigation will be burdensome and expensive for the taxpayer, and even though the Commissioner's chances of success may be marginal."⁷⁵ Moreover, the court found that the Commissioner's discretion to ensure that the taxpayer's method clearly reflects income was itself an

67. Schneider, *supra* note 4, § 12.04[3].

68. 68 T.C. Memo (CCH) 412, T.C. Memo (RIA) ¶ 94,396 (1994).

69. *Id.* at 415. Varietal wines are based on the varieties of grapes from which they are made, such as Chardonnay, Cabernet Franc, Cabernet Sauvignon, or Merlot. *Id.* at 413.

70. *Id.* at 415.

71. Such a proposal was later made to the taxpayer in this case, who was represented by the same counsel as the unrelated taxpayer.

72. *Id.* at 416.

73. *Id.* at 420-21.

74. *Id.* at 420.

75. *Id.* at 421.

adequate basis for such a challenge to its specific goods groupings, even though the taxpayer alleged that it had applied its method consistently and that the method was consistent with practices in the wine industry and with GAAP. In these circumstances, the Commissioner's decision "to concede the cases rather than to litigate such a complex issue" was not unreasonable.⁷⁶

Oak Knoll Cellar illustrates the potential for both taxpayers and the government to expend considerable resources in deciding similarity issues that ultimately depend on particular facts and circumstances. Even if the case had been litigated to a decision, a principled basis for deciding this issue is not apparent, given the limited guidance in the regulations on tolerances for variation among specific goods. Moreover, the possibility that such a decision might resolve conflicts in other industries, or even within the same industry, is small, given variation among taxpayers and their practices. The grouping process seems to be further removed from any objective standard by the court's position that a taxpayer's conformance with grouping methods used in the wine industry and with GAAP is not sufficient to bar an adjustment by the Service. Ultimately, any departure from a standard of identity leaves a taxpayer vulnerable to challenge on audit, with uncertain results.

B. Dollar-Value LIFO

The dollar-value LIFO method alleviates many of the conceptual and administrative problems of the focus on specific physical goods. However, dollar-value LIFO presents its own administrative problems, many of which also involve comparing the characteristics of inventory or business activities from year to year.

1. *Historical Development.*—As the Tax Court has explained, dollar-value LIFO arose as a means to resolve practical difficulties of measuring quantities based on physical units under the specific goods method:

Under the specific-goods method, the physical quantity of homogeneous items of inventory at the end of the taxable year is compared with the quantity of like items in the beginning inventory to determine whether there has been an increase or decrease during the year. Because the specific-goods method requires the matching of physical units, practically speaking, it is only used as a method of valuing inventories in those industries with inventories which contain a limited number of items with quantities that are easily measured in units. In contrast to the specific goods method, the dollar-value method measures increases or decreases in

76. *Id.* at 423.

inventory quantities, not in terms of physical units, but in terms of total dollars. Thus, to determine whether there has been an increase or decrease in the inventory during the year, the ending inventory is valued in terms of total dollars that are equivalent in value to the dollars used to value the beginning inventory. Because it is not predicated upon the matching of specific items, use of the dollar-value method permits the application of the LIFO principle in those industries with complex inventories containing a vast number of items.⁷⁷

The dollar-value method's origins are generally traced to H.T. McAnly, who devised the method to expand access to LIFO.⁷⁸ McAnly explained:

To attempt to apply the principle of last-in, first-out to quantities of specific items in a company producing many different and rapidly changing items from many types of materials involving numerous fabricating operations, or engaged in jobbing or retailing many items of merchandise, not only would be a wholly impracticable procedure, but would not accomplish its underlying purpose of excluding fluctuations in value covering that portion of the aggregate inventory which is considered as a continuing investment therein. Yet companies with a wide variety of products are required to maintain continuing investments in inventories, and it would seem that they should be permitted to keep from increasing the aggregate valuation of their inventories in a period of rising markets through the use of the last-in, first-out principle, by reflecting only the increase over the beginning inventory (if such exists) at prices and costs occurring within the fiscal period.⁷⁹

According to McAnly, specific goods LIFO presents two main problems: first, the difficulty of comparing similar physical items due to product changes from year to year; and second, when a "new" item enters the inventory (i.e., an item dissimilar to those on hand in prior years), the resulting liquidations in "old" inventory items and increments in "new"

77. *Wendle Ford Sales, Inc. v. Commissioner*, 72 T.C. 447, 452 (1979), acq. 1980-2 C.B. 2 (citations omitted).

78. See Gertzman, *supra* note 3, ¶ 7.04[3]; Schneider, *supra* note 4, § 9.05[1].

79. H.T. McAnly, *Origin of the Dollar Value LIFO Method*, in *Selected Writings on Accounting and Related Subjects* 17, 18 (n.d.).

replacement inventory items do not fully effectuate the concept of physical capital maintenance.⁸⁰

In effect, McAnly recognized that the adapting of inventory content to changing technology, styles, tastes, or demands is not a replacement of old inventory with different inventory items—that is, is not a new investment that should trigger realization of deferred inventory gains. Instead, McAnly argued that a broader interpretation of LIFO was necessary to implement the physical capital maintenance concept in a dynamic inventory environment:

Regardless of whether or not the same quantities of specific items or the same items are in existence at the close of the year as were on hand at the beginning of the year, the last-in, first-out principle should be one of determining an aggregate valuation of an investment in inventory of related products on a basis that prevents the increasing of operating profits through writing up the valuation of the portion of the ending inventory investment which represents a continuing investment, as evidenced by the fact that it was in existence at the inception of the fiscal period. It appears only reasonable to explore the possibilities of its application's being broadly interpreted so as to cover the cost elements which are common to all products, and not literally interpreted as being confined to the movement of specific products whose costs are determined from these basic cost factors: material prices, occupational wage scales, and burden or expense rates.⁸¹

The dollar-value LIFO method proposed by McAnly has three key elements. First, inventory items are combined into “general related product groupings,” instead of treating each specific type of item as a separate grouping.⁸² Second, the dollar value of each such grouping is determined by pricing each item within the grouping at the price level at the beginning of the first year for which LIFO was elected (the “base year”) or, if the items

80. See *id.* at 20-21 (“If the term ‘units’ [in the specific goods LIFO regulations] is construed to mean units of specific product design, its application will be extremely limited not only because of the mechanics of its application but because the resultant valuation derived from its use on a specific product quantity basis may not reflect an equitable picture of earnings”); H.T. McAnly, *Curbing the Effect of Our Erratic Dollar In Pricing Inventories and Providing for Depreciation*, in *Dollar Value LIFO—Cost Accounting Concepts—Management Services* 60, 66 (n.d.) (if LIFO is applied to specific items instead of a group of related products, “income will not be clearly or correctly reflected”).

81. H.T. McAnly, *Origin of the Dollar Value LIFO Method*, in *Selected Writings on Accounting and Related Subjects* 17, 20 (n.d.).

82. *Id.* at 23-24. These groupings were later referred to as “pools.” See Regs. § 1.472-8(b).

did not exist at that time, at a cost constructed for the price level at that time.⁸³ Third, to the extent the base-year cost of inventory exceeds the base-year cost of the inventory for the prior year, an increment occurs, which is priced at current-year costs.⁸⁴ Decrements, on the other hand, are removed from sequential layers of increment in reverse chronological order.

The dollar-value regulations have adopted these same concepts, albeit in greater detail.⁸⁵ By referring to the "so-called 'dollar-value' method,"⁸⁶ the regulations appear to have incorporated the method developed by McAnly, which was being used by taxpayers when the regulations were adopted.⁸⁷

Although the dollar-value method eliminates the comparison of physical *quantities* of similar inventory items from year to year, the physical *composition* of inventory items is not ignored. First, characteristics of inventory items, and, in some cases, of business activities in connection with such items, are relevant in grouping items in pools.⁸⁸ Although a detailed discussion of pooling is beyond the scope of this article, dividing inventory into dollar-value LIFO pools is another source of complexity in LIFO for

83. H.T. McAnly, *Origin of the Dollar Value LIFO Method*, in *Selected Writings on Accounting and Related Subjects* 17, 23 (n.d.). Although McAnly refers to the beginning of the year, the example to which he refers involves the first year for adopting LIFO. The regulations generally refer to the first year for adopting LIFO as the "base year." See Regs. § 1.472-8(a). As discussed below, the regulations also authorize different methods of determining the LIFO value, some of which are based on pricing inventory items as of the beginning of the taxable year, while others are based on pricing as of the base year. See Regs. § 1.472-8(e).

84. H.T. McAnly, *Origin of the Dollar Value LIFO Method*, in *Selected Writings on Accounting and Related Subjects* 17, 23 (n.d.).

85. See Regs. § 1.472-8.

86. See Regs. § 1.472-1(l).

87. That tax provisions are often based on current business and accounting practices was apparently no surprise to McAnly, who observed: "Normally and naturally, the interpretation of legislative provisions follow, but rarely precede, business practice." H. T. McAnly, *A Practical Method of Keeping Inflation Out of Inventory Valuations*, in *Dollar Value LIFO-Cost Accounting Concepts—Management Services* 39 (n.d.); see *Beneficial Corp. v. United States*, 814 F.2d 1570, 1573 (Fed. Cir. 1987) ("It would be unreasonable to presume that Congress had adopted a statutory term, whose sole meaning was well established in the [accounting] field, in a manner contrary to that established meaning without explicit indication to that effect").

88. See Regs. § 1.472-8(b), (c). For example, manufacturers and processors must form inventory pools based either on "natural business unit" or "multiple pool" approaches. Regs. § 1.472-8(b)(1). A natural business unit "ordinarily consists of the entire productive activity of the enterprise within one product line or within two or more related product lines." Regs. § 1.472-8(b)(2)(i). Multiple pools "ordinarily consist of inventory items which are substantially similar." Regs. § 1.472-8(b)(3)(i). For wholesalers and retailers, pools are generally determined by "major lines, types, or classes of goods." Regs. § 1.472-8(c).

which only cryptic guidance is given in the regulations.⁸⁹ Because separate pools create a potential for increments and liquidations based on shifting content, it is questionable whether a requirement of more than one pool per taxpayer is consistent with the physical capital maintenance concept.⁹⁰

Second, in order to compare inventory quantities in terms of dollars, the ending inventory must be translated into dollar values equivalent to those of the base year. This translation into base-year dollars is typically made by applying a taxpayer-developed index of cost changes affecting its inventory.⁹¹ The computation of this index requires careful analysis of the characteristics of each inventory item to ensure a valid comparison between current-year and base-year costs. As discussed below, the degree of similarity allowed or required when comparing items to compute a LIFO index is controversial.

2. *Index Methods.*—The regulations authorize three principal methods for computing an internally developed index: “double-extension,” “index,” and “link-chain.”⁹² The problem of “new items”—items with different characteristics than those existing in a prior period—is common to each of these methods, although the extent of this problem may vary depending on the number of items and the time period involved in the computation.

a. *Double-Extension Method.*—The principal method for computing an internally developed price index is the “double-extension method.”⁹³ Under this method, the taxpayer prices all items in inventory at current-year and base-year costs, and computes the ratio (index) of the current-year cost to the base-year cost of all the items in ending inventory. The determination of the base-year cost of each item requires the taxpayer to

89. For example, with regard to multiple pooling, the regulations state in part: “In determining whether such similarity exists, consideration shall be given to all the facts and circumstances. The formulation of detailed rules for selection of pools applicable to all taxpayers is not feasible.” Regs. § 1.472-8(b)(3)(i). The scope of a “product line” for purposes of natural business unit pooling or of “lines, types, or classes” of goods is also not defined.

90. If more than one pool is required, each pool is effectively treated as a separate investment, since increments (representing new investments) and decrements (representing a liquidation of prior investments) are measured separately for each pool. As discussed above in connection with specific goods groupings, shifts in inventory composition are a questionable basis for discontinuing the deferred taxation of inventory holding gains. A single pool for each taxpayer would provide the greatest relief from the adverse effects of these shifts.

91. As discussed below, an index may also be developed from external sources.

92. See Regs. § 1.472-8(e)(1). A fourth method is the retail method, which requires externally generated indexes.

93. See *id.* (“A taxpayer may ordinarily use only the so-called ‘double-extension’ method for computing the base-year and current-year cost of a dollar-value inventory pool.”).

answer a practical question: What would the item in ending inventory have cost if it had been acquired in the base year?

Pricing each inventory item at the base-year cost presents a formidable task for a taxpayer with many different inventory items. As products or other inventory items change over time, the base-year cost may become increasingly difficult to determine. Thus, comparing similar items still presents a practical problem, albeit in determining prices instead of comparing physical quantities as under the specific goods method.

The regulations provide no explicit guidance for determining when a "new item" enters an inventory. As is discussed below, courts have taken different positions as to the scope of an item and the parameters for a "new item." However, if a new item exists, the regulations prescribe the following procedures for determining the item's base cost:

[T]he base-year unit cost of the entering item shall be the current-year cost of that item unless the taxpayer is able to reconstruct or otherwise establish a different cost. If the entering item is a product or raw material not in existence on the base date, its cost may be reconstructed, that is, the taxpayer using reasonable means may determine what the cost of the item would have been had it been in existence in the base year. If the item was in existence on the base date but not stocked by the taxpayer, he may establish, by using available data or records, what the cost of the item would have been to the taxpayer had he stocked the item. If the base-year unit cost of the entering item is either reconstructed or otherwise established to the satisfaction of the Commissioner, such cost may be used as the base-year unit cost in applying the double-extension method. If the taxpayer does not reconstruct or establish to the satisfaction of the Commissioner a base-year unit cost, but does reconstruct or establish to the satisfaction of the Commissioner the cost of the item at some year subsequent to the base year, he may use the earliest cost which he does reconstruct or establish as the base-year unit cost.⁹⁴

For a new item that existed on the base date, but was not then carried in the taxpayer's inventory, other sources for base-year price data may be available, such as price lists from suppliers.⁹⁵ Determining base year costs

94. Regs. § 1.472-8(e)(2)(iii).

95. See Schneider, *supra* note 4, § 14.01[5].

for such items might be time consuming, but not too difficult. For a new item that did not exist on the base date, guidance from the regulations is limited to allowing “reasonable means” to determine a hypothetical base-year cost. The scope of “reasonable means” has not been tested in the courts. Some commentators have suggested that published price indexes, such as those compiled by the Bureau of Labor Statistics, could be used for this purpose.⁹⁶ Engineering and cost estimates might also be used to break down a product into its cost components, and the costs of these components could be compared to similar costs in the base year.⁹⁷ Substituting the index for a similar item or items in the same pool has also been suggested.⁹⁸

For a taxpayer with many new items, the reconstruction process could prove daunting. The regulations suggest that reconstruction of base cost for new items is optional,⁹⁹ but the failure to reconstruct, in most cases, leads to a disadvantage because using the current-year cost as the base-year cost effectively treats the new item as having no inflation from the base year.¹⁰⁰ Thus, new items can effectively limit the benefits of LIFO. To the extent “reasonable means” is interpreted restrictively to require precision, it is likely to generate further controversies at the audit level. Moreover, since objective standards have not been provided for measuring reasonableness, and the taxpayer bears the burden of proving reasonableness, controversies are inevitable.¹⁰¹

b. *Index Method.*—The “index” method allows qualifying taxpayers to depart from the complete double-extension approach by double-pricing only a portion of the inventory. The regulations state:

Where the use of the double-extension method is impractical, because of technological changes, the extensive variety of

96. See Gertzman, *supra* note 3, ¶ 7.04[3][b]; Schneider, *supra* note 4, § 14.01[5].

97. Schneider, *supra* note 4, § 14.01[5]. However, as discussed below, the Service has challenged this approach to index computation. See *id.* (citing I.R.S. T.A.M. 9405005 (Oct. 15, 1993)).

98. Schneider, *supra* note 4, § 14.01[5].

99. The regulations phrase reconstruction in terms of whether the taxpayer is “able” to reconstruct. Regs. § 1.472-8(e)(2)(iii). Further, in the case of a new item not in existence in the base year, the regulations provide that the taxpayer “may” reconstruct the base cost, which suggests that reconstruction is voluntary. *Id.* Some commentators suggest that the voluntary nature of reconstruction should be used to the taxpayer’s advantage for an item that may have cost more in the base year. See Schneider, *supra* note 4, § 14.01[5].

100. Schneider, *supra* note 4, § 14.01[5].

101. Schneider, *supra* note 4, § 14.01[5] (“Revenue agents are finding it easy to assert a large deficiency in such [new item] cases by treating all new items as having a base-year cost equal to their current cost”).

items, or extreme fluctuations in the variety of the items, in a dollar-value pool, the taxpayer may use an index method for computing all or part of the LIFO value of the pool. An index may be computed by double-extending a representative portion of the inventory in a pool or by the use of other sound and consistent statistical methods. The index used must be appropriate to the inventory pool to which it is to be applied. The appropriateness of the method of computing the index and the accuracy, reliability, and suitability of the use of such index must be demonstrated to the satisfaction of the district director in connection with the examination of the taxpayer's returns.¹⁰²

The index method provides only limited relief from the burdens of double-pricing items because costs for sampled items must still be determined as of the base year. This can be difficult if the sampled items include "new items." Moreover, the Service has never established clear parameters for the "appropriateness" of the method or the "accuracy, reliability, and suitability" of the index. The potential for controversy clearly exists. As one practitioner has observed, "The propriety of a taxpayer's sample has come to be one of the leading audit issues. Nevertheless, official guidelines continue to be lacking."¹⁰³

c. *Link-Chain Method.*—A third method of constructing an internal price index—the "link-chain method"—differs from the double-extension method by focusing on annual changes in the cost of inventory items, rather than changes occurring between the current year and the base year. Under the link-chain method, an annual index is computed from the ratio of current-year cost to prior-year cost of the items in inventory, and this index is "linked" or multiplied by the indexes computed annually from the base year to compute a cumulative index, which represents the inflation in the ending inventory.¹⁰⁴ The link-chain method can also be combined with the sampling aspect of the index method, so that the annual index computation

102. Regs. § 1.472-8(e)(1).

103. Schneider, *supra* note 4, § 14.02[2][a].

104. According to the regulations, the "so-called 'link-chain' method" may be used only if "the taxpayer can demonstrate to the satisfaction of the district director that the use of either an index method or the double-extension method would be impractical or unsuitable in view of the nature of the pool." Regs. § 1.472-8(e)(1). By referring to the "so-called" method, the regulations apparently authorize approaches previously used by taxpayers. The Service has not provided a computational example of the method. For descriptions and illustrations of link-chain computation approaches, see generally Gertzman, *supra* note 3, ¶ 7.04[3][b][iii]; Schneider, *supra* note 4, § 14.02[3].

involves only a statistical sample or other representative portion of the inventory items.¹⁰⁵

By focusing on costs for the immediately preceding year, instead of base-year costs, the link-chain method may partially alleviate the difficulty of reconstructing costs of new items.¹⁰⁶ Finding the same item, or a similar item, for purposes of determining a prior period cost is more likely when successive years are involved. Further, to the extent that the same or a similar item cannot be found and the taxpayer is forced to use the current-year cost as the prior-year cost,¹⁰⁷ the taxpayer effectively loses the benefit of only one year's inflation. As one commentator has explained, "In effect, the assumption is made that the inflation inherent in the new item from the base date to the end of the prior year is equal to the inflation inherent in the taxpayer's ever changing inventory of other items throughout that same period."¹⁰⁸

This feature of the link-chain method, which attributes the cumulative inflation of the prior year to the items in ending inventory regardless of the actual inflation, can result in an overall measure of inflation that is not precise. To illustrate, assume that a taxpayer has an inventory of two items (*A* and *B*) that have a base-year cost of \$1. In the first two years of applying the LIFO method, the cost of item *A* increases by \$1 per year, while the cost of item *B* remains \$1. In the third year, the taxpayer discontinues item *A* and substitutes an extra item *B*, which still costs \$1 per unit. The link-chain computations are as follows:¹⁰⁹

105. See Gertzman, *supra* note 3, ¶ 7.04[3][b][iii]; Schneider, *supra* note 4, § 14.02[3]. Schneider also quotes from a nonpublic letter consenting to an accounting method change in which the Service recognized the use of sampling in conjunction with link-chain if sampling "can be shown to be satisfactory." Schneider, *supra* note 4, § 14.01[5]. The Tax Court also permitted a link-chain approach based on sampling in *Richardson Invs., Inc. v. Commissioner*, 76 T.C. 736 (1981). For a discussion of statistical sampling in connection with the LIFO method, see generally Darshan L. Wadhwa & William Horst, *Development of a LIFO Index with the Use of Statistical Analysis*, 42 *Oil & Gas Q.* 565 (1994).

106. Gertzman, *supra* note 3, ¶ 7.04[3][b][iii].

107. See Regs. § 1.472-8(e)(2), which provides guidance for reconstructing base cost. Although this guidance involves the double-extension method, it has been interpreted as applying to link-chain computations as well. See Gertzman, *supra* note 3, ¶ 7.04[3][b][iv].

108. Gertzman, *supra* note 3, ¶ 7.04[3][b][iii]. If a link-chain taxpayer can use the current-cost as the prior-year cost of a new item and thereby treat the item as having the cumulative inflation from the base year to the end of the prior year, a double-extension taxpayer arguably should be entitled to at least the same benefit in reconstructing the base cost of a new item that did not exist in the base year. However, according to Schneider, revenue agents often reject an approach which effectively gives the same inflation to new items as to other inventory items. Schneider, *supra* note 4, § 14.01[5].

109. In each year, the annual index is the ratio of the current-year quantity and cost of items *A* and *B* to the same quantity at the prior-year cost. The cumulative index is the

<u>Year</u>	<u>Quantities</u>	<u>Current Cost</u>	<u>Annual Index</u>	<u>Cumulative Index</u>	<u>Base Cost</u>
Base	1 A	\$1			
	1 B	<u>\$1</u>			
		\$2	----	1.000	\$2.000
19x1	1 A	\$2			
	1 B	<u>\$1</u>			
		\$3	1.500	1.500	\$2.000
19x2	1 A	\$3			
	1 B	<u>\$1</u>			
		\$4	1.333	2.000	\$2.000
19x3	0 A				
	2 B	<u>\$2</u>			
		\$2	1.000	2.000	\$1.000

As long as the mix of items *A* and *B* remains the same, as happens through year 19x2, the link-chain method produces the same result as the double-extension method. In each case, the base cost of one item *A* and one item *B* totals \$2. However, when a change in mix occurs in 19x3, the link-chain method produces a different result. Under the double-extension method, two item *B*'s have a total base cost of \$2 (two units at \$1 per unit), which is the same as the current-year cost. Thus, a double extension approach produces an index of 1.00, reflecting no inflation since the base year. However, the link-chain method attributes the cumulative inflation from the prior year to the items in ending inventory, resulting in an index of 2.00, a total base cost of \$1, and a partial liquidation of the taxpayer's investment in inventory.

The example is simplified and extreme. Most taxpayers do not experience such a dramatic change in mix in one year. Although the change in mix in this example favors the taxpayer, it could just as easily go against the taxpayer. A shift in inventory composition to include more inventory with a higher level of inflation (i.e., more item *A*'s instead of more item *B*'s) would cause the cumulative link-chain index to understate the total inflation in the pool. Nevertheless, the example further demonstrates the important point that the dollar-value LIFO regulations already reflect concessions to precision in order to accommodate the practical application of LIFO.

The example also assumes perfect knowledge of the composition and cost of inventory throughout the taxpayer's existence. As a practical matter, determining actual base-year costs for a taxpayer with a complex inventory including many new items is either technically impossible or unreasonably

product of the annual index and the cumulative index from the prior year. The base cost is the current cost divided by the cumulative index.

expensive. Indeed, the taxpayer presumably cannot adopt the link-chain method without demonstrating that the double-extension and index methods are impracticable.¹¹⁰ Thus, in many cases any lack of precision resulting from the link-chain method is not discoverable.

Even if information is available to compute the result under a double-extension method, a taxpayer arguably should not be required to recompute its inventory value under the more precise approach. The link-chain method is a method of accounting, which may be changed only with the Service's consent.¹¹¹ Moreover, the regulations state, "Any taxpayer may elect to determine the cost of his LIFO inventories under the so-called 'dollar-value' LIFO method, provided such method is used consistently and clearly reflects the income of the taxpayer in accordance with the rules of this section."¹¹² If the taxpayer obtained approval for the link-chain method, such an approach should be treated as clearly reflecting income regardless of any hypothetical differences in result as compared with the double-extension method.¹¹³

d. *Scope of an "Item."*—As discussed above, the index and link-chain methods may alleviate, but do not fully resolve, the practical problems of applying LIFO to inventories with new items. However, even the most liberal index computation approach—the link-chain method combined with a sampling approach—could prove administratively difficult if new items emerge on a frequent basis. The scope of an "item"—and the parameters for a "new item"—therefore merit careful attention.

A lower tolerance for differences in items results in more accurate cost comparisons, leading to a more accurate measure of inflation. However, a narrow definition of "item" may impose significant administrative costs or otherwise limit the effectiveness of LIFO, just as a narrow definition of goods creates difficulties in the specific goods LIFO context. On the other hand, although a broader definition of "item" may ease administrative burdens for

110. Regs. § 1.472-8(e)(1); see also Schneider, *supra* note 4, § 14.02[3][a] (discussing criteria used to justify use of link-chain method).

111. See IRC § 446(e); see also Schneider, *supra* note 4, § 14.02[3][a] (discussing method changes from double-extension to link-chain methods).

112. Regs. § 1.472-8(a).

113. However, recent decisions of the Tax Court cast doubt on whether compliance with the regulations is sufficient to satisfy the clear reflection of income standard. See, e.g., *Ford Motor Co. v. Commissioner*, 102 T.C. 87 (1994), *aff'd*, No. 94-1956, 1995 WL 710913 (6th Cir., Dec. 5, 1995); *Oak Knoll Cellar v. Commissioner*, 68 T.C.M. (CCH) 412, T.C. Memo (RIA) ¶ 94,396 (1994). See generally W. Eugene Seago, *When May the Commissioner Reject an Accounting Method Specifically Authorized by Regulations?* 64 Tax Notes 109 (July 4, 1994). Such decisions are troubling, as they appear to allow the Commissioner to measure clear reflection of income by reference to the method that most favors the government's position, even though the regulations provide a choice among methods.

some taxpayers, it could lead to inaccuracies in comparing costs between periods. Finding an acceptable compromise between these two positions has proved difficult.

As noted above, the regulations give no clear guidance as to the scope of an item.¹¹⁴ Few cases have squarely addressed this issue, and, not surprisingly, the courts have not developed a consistent approach to resolving it. In *Wendle Ford Sales, Inc. v. Commissioner*,¹¹⁵ the Tax Court considered the scope of an item in the inventory of an automobile dealer. At issue in the case was whether a 1975 Ford vehicle was a different item from a 1974 Ford vehicle, when the 1975 vehicle contained a catalytic converter and a solid-state ignition system not found on the 1974 model.¹¹⁶ The court phrased the issue as follows: "In more general terms, we must decide whether minor modifications in the composition of a product by a manufacturer require the retailer of that product to make yearly adjustments to the base-year cost of its dollar-value inventory."¹¹⁷

As a preliminary matter, the court determined that in the case of a retailer of goods, the term "item" in section 1.472-8(e)(2)(iii) of the regulations refers to a finished product, and not to the individual parts of the product.¹¹⁸ If the case had involved a catalytic converter and a solid state ignition entering an inventory of automobile parts, they "would constitute new 'items' entering the pool for the first time . . ."¹¹⁹ However, the court framed the item issue as involving vehicles, not their component parts.

The court's analysis relies heavily on the historical development of the dollar-value LIFO method as a practical means of implementing the LIFO concept for all taxpayers.¹²⁰ In light of this history, the court concluded that requiring an adjustment for "minor" product changes would be inconsistent with the fundamental nature of the dollar-value method:

[D]ollar-value LIFO affords the only practicable way of applying the last-in, first-out principle to inventories containing a wide variety of items. By eliminating the need to match

114. The Service has opened a regulations project (IA-REG-014-93) to provide guidance on the definition of "item," but the project remains incomplete. See Report By Office of Chief Counsel, Internal Revenue Service, On Regulations Projects Status and Disposition as of February 28, 1995, Daily Tax Rep. (BNA), Special Supplement Rep. No. 52, Mar. 17, 1995.

115. 72 T.C. 447 (1979).

116. *Id.* at 456.

117. *Id.*

118. *Id.* at 455. As discussed below, the court's rationale does not settle whether an "item" can be defined in terms of a cost component. See *id.* at 455-56.

119. *Id.* at 456 n.9.

120. *Id.* at 456-58.

specific goods in opening and closing inventories, and focusing instead on the total dollars invested in inventory, dollar-value LIFO necessarily ignores minor changes in the design of a product from year to year. This freedom from having to take into account minor technological changes in a product represents a major objective of the dollar-value approach.¹²¹

Noting that modifications to improve the quality and style of goods were a common feature of commercial life, the court recognized the practical impossibility of requiring a taxpayer to make “minor” adjustments in the cost of goods whenever such modifications occurred:

Where . . . the modifications in a product are relatively minor in nature, it would be unreasonable to have, and, in most instances, virtually impossible to comply with, a requirement that the retailer or wholesaler annually adjust its base-year cost to reflect these modifications. Indeed, this attention to detail is precisely the type of accounting for inventories that the dollar-value method was designed to eliminate.¹²²

The court recognized that at some point, product changes are sufficient to create a new item, thereby requiring an adjustment. It rejected the taxpayer’s argument that “a car is a car is a car,”¹²³ and agreed with the Commissioner that a car of the 1970’s was a different item from a car of the 1930’s.¹²⁴ However, just where the “new item” line would be crossed is not altogether clear. According to the court, the determination is to be made on a “case-by-case basis from an examination of all the relevant facts.”¹²⁵

In *Wendle Ford*, the burden on the taxpayer of implementing a narrower definition of an item was apparently an important factor, but the court also noted two other points in support of its conclusion. First, apart from reducing hydrocarbon and carbon monoxide emissions and improving the starting performance of the vehicle, neither part “had any appreciable effect on [the vehicles].”¹²⁶ Second, “the cost of a converter and a solid-

121. Id. at 458.

122. Id. at 459 (footnote omitted).

123. Id. at 460.

124. Id.

125. Id. at 459.

126. Id. at 459-60. The court found that “[n]either the converter nor the solid-state ignition appreciably affected the operating performance, efficiency, or value of the 1975 model vehicle when compared with the 1974 model vehicle.” Id. at 450.

state ignition together represent only an insignificant percentage of the total cost of the parts of an unassembled automobile."¹²⁷

Wendle Ford thus rejects a narrow view of an item for dollar-value LIFO purposes, and willingly sacrifices theoretical precision in favor of practical realities of implementing LIFO. This case also shows that facts needed to support a precise answer are not always available, making precision an illusory standard. Even if the court had concluded that the 1975 vehicle was a new item as compared to the 1974 vehicle, the amount of the correct adjustment is far from clear.

Moreover, that this case involved the taxpayer's first year of applying the double-extension method is also potentially significant. In the first year, the double-extension method reflects the same methodology as the link-chain method.¹²⁸ The court accepted the possibility that sufficient changes over time could create a new item under the double-extension method. However, year-to-year changes in the inventory of a taxpayer using the link-chain method could produce cumulative differences of the same magnitude as the double-extension method, but presumably with no adjustment.¹²⁹ No authority suggests that an item should be defined more narrowly if the link-chain method is elected. In short, *Wendle Ford* shows that LIFO indexes based on finished products are necessarily imprecise.

127. *Id.* at 460. The Commissioner had adjusted the base cost of inventory by \$80 per unit for catalytic converters and by \$50 per unit for ignitions, which was the average cost to the taxpayer's parts department. *Id.* at 451. The taxpayer had no other records indicating the change in cost of the vehicle attributable to these features. As the court pointed out, "It is even doubtful Ford Motor Co. could have isolated the particular additional cost, if any, of pollution control devices on the 1975 model vehicles." *Id.* at 450, n.2. If the cost of a car were considered to be the sum of its parts, excluding assembly costs, the record shows that a car would cost "approximately \$25,000[, which is] 4 or 5 times that of the dealer cost including labor costs for the same vehicle from the factory." *Id.* at 451. The taxpayer objected to the amount of the adjustment, as the cost on a part-by-part basis overstates the effect on base cost. *Id.* at 460 n.15. In deference to the taxpayer's position, the court apparently compared the proposed adjustment to the hypothetical cost of an unassembled vehicle. Assuming a total adjustment of \$130 compared to a factory cost of \$5,000, the variation is about 2.6%. When compared to an unassembled vehicle cost of \$25,000, the difference is about 0.52%.

128. As discussed above, the principal difference between index computation under the link-chain and double-extension methods is that the link-chain method involves double-pricing to the immediately preceding year, whereas the double-extension method involves double-pricing to the base year. In the first year, the base year and the preceding year are the same.

129. To illustrate, assume that the Service correctly identified the cost of the converter and ignition to be \$130 per vehicle, with an average vehicle cost of \$5,000. If an average of 2.6% of the vehicle cost were erroneously treated as inflation each year, the cumulative effect would be to understate ending inventory (and taxable income) by more than 29% over a 10 year period ($(1.026)^{10}=1.2926$).

As noted above, *Wendle Ford* dealt with the scope of an item in the inventory of a retailer. The application of this concept to a manufacturer was addressed in *Amity Leather Products Company v. Commissioner*,¹³⁰ which involved a manufacturer of leather goods using a double-extension, dollar-value LIFO method.¹³¹ The taxpayer carried on its manufacturing operations primarily in Wisconsin and New Mexico, and through subsidiaries, it had also done manufacturing in Puerto Rico.¹³² However, in 1975, it dissolved a Puerto Rican subsidiary and operated there as a division, pooling the division's inventory of billfolds manufactured in Puerto Rico with billfolds manufactured in the United States.¹³³

The Puerto Rican billfolds cost much less to produce,¹³⁴ but they were otherwise identical to those originating in the United States.¹³⁵ The taxpayer sought to treat the Puerto Rican billfolds as new items and to reconstruct their base cost.¹³⁶ In these circumstances, treating a lower cost billfold as a new item benefited the taxpayer, as the reconstructed base cost for the Puerto Rican billfolds resulted in a lower LIFO inventory value than reflected by the domestic billfolds. The Commissioner rejected this approach, arguing in part that the physical similarity should preclude any adjustment for new items.¹³⁷

The Tax Court recognized that this case presented the novel question of defining "item" for a manufacturer.¹³⁸ In analyzing this issue, the court made the following observations about "items" in a dollar-value pool:

The nature of "items" in a pool must be similar enough to allow a comparison between ending inventory and base-year

130. 82 T.C. 726 (1984).

131. *Id.* at 731.

132. *Id.* at 728-30.

133. *Id.* at 730.

134. *Id.* at 730, 739.

135. *Id.* at 739.

136. *Id.*

137. *Id.* at 739. The Commissioner argued that:

(1) the billfolds produced by Alpco division [in Puerto Rico] were indistinguishable from those produced in the United States and those produced by the Puerto Rican affiliates, (2) changes in cost to produce or acquire an item do not create a new item, and (3) petitioner had already selected as one item all men's billfolds, whether produced in the United States or in Puerto Rico.

Id. at 739. The latter point relates to an argument that the taxpayer's change of base-year cost for the putative new items was an unauthorized change in method of accounting.

138. *Id.* at 739-40. As discussed below, this position is significant because it also suggests that an item need not always be a finished product, as *Wendle Ford* had required in the case of a wholesaler or retailer.

inventory. Because the change in the price of an item determines the price index and the index affects the computation of increments or decrements in the LIFO inventory, the definition and scope of an item are extremely important to the clear reflection of income. *If factors other than inflation enter into the cost of inventory items, a reliable index cannot be computed.* For example, if a taxpayer's inventory experiences mix changes that result in the substitution of less expensive goods for more expensive goods, the treatment of those goods as a single item increases taxable income. This occurs because any inflation in the cost of an item is offset by the reduction in cost resulting from the shift to less expensive goods. Conversely, if changes in mix of the inventory result in the substitution of more expensive goods for less expensive goods, the treatment of those goods as a single item decreases taxable income because the increase in inventory costs is eliminated from the LIFO cost of the goods as if such cost increase represented inflation.

A narrower definition of an item within a pool will generally lead to a more accurate measure of inflation (i.e. price index) and thereby lead to a clearer reflection of income. At the same time, the method of inventory accounting must be administratively feasible and not unduly burdensome from the standpoint of each of the parties. Within limits of reasonableness, regulations governing LIFO inventory accounting have to be applicable across the board. Whether they achieve the best result in a particular fact situation is not controlling.¹³⁹

The court's analysis of the item question adopts a balancing approach, which measures the benefits of greater accuracy in measuring price changes with the administrative burdens of a restrictive definition of "item." This approach recognizes that a precise computation of a price index is an unrealistic expectation outside of a static inventory environment.¹⁴⁰ For example, as in *Wendle Ford*, taxpayers are allowed to ignore minor changes in products from period to period in order to make LIFO more feasible. Narrower and narrower definitions of "item" would ensure more accurate comparisons of costs between periods, assuming all items existed in the taxpayer's inventory. However, if new items arise, administrative feasibility

139. *Id.* at 733-34 (emphasis added).

140. Cf. David F. Bradford, *Untangling the Income Tax* 53 (noting that LIFO "provides a fair approximation to income, as long as inventories do not change much").

must be taken into account. A balancing is required, but clear standards for the weight of each competing value are difficult to ascertain.

The court's choice of example to illustrate its concern about accuracy—the substitution of “more expensive goods for less expensive goods”—is somewhat confusing. On one hand, to the extent the substitution of “more expensive goods” refers to a situation such as that in *Wendle Ford*, where additional features were added to a product which made it more valuable, the example is consistent with the common understanding of inflation. For example, product changes are factored out of external price indexes computed based on wholesale or retail prices, but mere changes in price are not.¹⁴¹

On the other hand, to the extent the substitution of “more expensive goods” refers solely to changes in cost, independent of any physical changes in the products, this raises some troubling prospects that may increase the indeterminacy of the LIFO method. As illustrated above, the LIFO method typically charges cost increases to cost of goods sold without any need to differentiate between items based on interperiod changes in costs. If items were differentiated solely on the basis of interperiod changes in their total cost, every item would effectively be a “new item.”

Such an interpretation—which would require a reconstructed base cost for every item affected by a price change—appears absurd. If the only data available to a taxpayer concerning an item is the total cost of that item, the reconstructed base cost for the new item is presumably the same as the base cost for the former item. Thus, whether the new item is differentiated or not makes no difference.¹⁴² However, to the extent that other data is available to distinguish the item, such as the source of purchase (in the case of a wholesaler or retailer) or the components of production costs (in the case of a manufacturer), a reconstructed base cost might be different than the base cost of the former item.¹⁴³

141. See Bureau of Labor Statistics, U.S. Dept. of Labor, Bulletin 2414, BLS Handbook of Methods 141-42 (1992) [hereinafter BLS Handbook] (discussing price index computation and impact of physical product changes and quality adjustments).

142. The reconstruction process is designed to answer the question of what the cost would have been had the new item been in existence in the base year. If cost is the only available information to differentiate the item from the physically identical item in the prior year, the taxpayer should use the same base cost as the physically identical product in the prior year.

143. For example, if base costs are determined from a supplier's price list, and products are differentiated by supplier because of different costs, the base cost from supplier X's price list might differ from the base cost from supplier Y's list. Commentators have expressed doubt about whether a mere change in source of supply should create a new item. See Schneider, *supra* note 4, § 14.01[4] n.146 (“[I]f the cost of a raw material varies because it was acquired from different sources, this cost difference alone should not normally be regarded as the cause of separate items being maintained.”) However, Schneider notes that the

The items in *Amity Leather* were physically identical, but their costs differed during the same time period because of differences in the manufacturing costs in the locations in which they were produced.¹⁴⁴ The taxpayer maintained records identifying the origins of its inventory items. In these circumstances, the court permitted the taxpayer to treat the otherwise identical products as different items. It contrasted the approaches of the Commissioner and the taxpayer as follows:

[Commissioner] would require petitioner to treat both the billfolds manufactured by it in Puerto Rico and those manufactured in the United States as the same item. This method, however, would lead to an inaccurate measure of any inflation or deflation. The Puerto Rican billfolds cost substantially less than the domestic billfolds to manufacture. [Commissioner's] method would result in the assumed or "constructive" substitution of less expensive goods for more expensive goods in the cost of goods sold computation, and any inflation in the cost of the domestic billfolds would be at least partially offset by the shift to the Puerto Rican billfolds in the LIFO valuation of the inventory. Further, because the ratio of billfolds manufactured in the United States in relation to billfolds manufactured in Puerto Rico in petitioner's inventory pool may change, and because it is likely that the rate of inflation in Puerto Rico may vary from the rate of inflation in the United States, [Commissioner's] method would continue to lead to an inaccurate measure of inflation in future years.

[Taxpayer's] method, on the other hand, of treating the [Puerto Rican] billfolds as a separate item from domestic billfolds is obviously a more narrow definition of the term "item." Under this approach, the impact of inflation on petitioner's inventory is more accurately eliminated, and its income is more clearly reflected.¹⁴⁵

The taxpayer was in the enviable position of arguing that a narrower definition of "item," reflecting different manufacturing cost characteristics of

Service has suggested in private rulings that "new items are created when the cost structure of products is materially altered by technological changes." *Id.*

144. The opinion does not set forth the basis for the cost differences costs between the United States and in Puerto Rico. However, differences in geographical location and local market conditions could create differences in virtually every element of cost.

145. *Amity Leather*, 82 T.C. at 740.

the Puerto Rican and domestic billfolds, was administratively feasible and resulted in lower taxable income. Unlike the taxpayer in *Wendle Ford*, which the court found should not be burdened by the process of ascertaining the cost effects of minor product changes, the taxpayer in *Amity Leather* had such cost data and utilized the data in its computations.

By letting the taxpayer define "item" more narrowly than otherwise would be required under *Wendle Ford*, the court in *Amity Leather* arguably reached the right result. The definition of an item is a method of accounting, which cannot be changed without the Service's consent,¹⁴⁶ but the taxpayer adopted this treatment for a new item, which is not subject to the restrictions of a former method of accounting.¹⁴⁷ Although the taxpayer happened to benefit from treating the Puerto Rican billfolds as separate items, future benefits from this method were not guaranteed. The taxpayer's method is consistent with the regulations and should be respected.¹⁴⁸ As in other tax planning contexts, the taxpayer is under no obligation to structure its affairs to pay the highest amount of tax or, as in this case, to get the lowest LIFO benefit.¹⁴⁹

Although *Amity Leather* reached a defensible result, the court's analysis creates unresolved questions about the circumstances in which a new item may arise, and whether a taxpayer must treat a change in cost as creating a new item. The Tax Court's subsequent decision in *Hamilton Industries v. Commissioner*,¹⁵⁰ raises similar questions, and creates further uncertainty about the scope of an item. *Hamilton Industries* involved the question of whether inventory purchased at a bargain price in the acquisition of a manufacturing business could be treated as the same item as inventory subsequently manufactured by that business.¹⁵¹ The purchase price allocated

146. *Hamilton Indus., Inc. v. Commissioner*, 97 T.C. 120 (1991).

147. The accounting method analysis of a new item could be tautological, as the failure to apply the existing method of accounting is premised on the determination that the item is "new."

148. But see *supra* note 113.

149. See *Helvering v. Gregory*, 69 F.2d 809, 810 (2d Cir. 1934), *aff'd sub. nom.*, *Gregory v. Helvering*, 293 U.S. 465 (1935) ("Any one may so arrange his affairs that his taxes shall be as low as possible; he is not bound to choose the pattern which will best pay the Treasury; there is not even a patriotic duty to increase one's taxes.").

150. 97 T.C. 120 (1991).

151. The taxpayer—*Hamilton Industries, Inc.*—was the successor in interest to *Mayline Company, Inc.*, and acquisitions of both companies were at issue. *Id.* at 120. *Mayline* acquired the assets of a manufacturer of drafting equipment and related furniture and accessories on April 29, 1975, and thereafter continued to operate the business. *Id.* at 122. *Mayline* elected LIFO for its taxable year ended April 30, 1975, when its inventory consisted only of the items acquired from the former manufacturer. *Id.* *Hamilton* acquired the assets of a manufacturer of laboratory and hospital case goods and furniture on June 28, 1982, and thereafter continued to operate the business. *Id.* at 123. *Hamilton* elected LIFO for its taxable

to the inventories was considerably below the FIFO value in the hands of the seller, reflecting discounts of 60 to 96 percent.¹⁵² The taxpayer elected LIFO, using a double-extension method and a single pool, and treated the price allocated to the acquired inventory as the base cost.¹⁵³

In subsequent years, the taxpayer's inventory records did not distinguish between the products produced after the acquisition and those purchased from the former manufacturer.¹⁵⁴ The taxpayer treated the purchased and produced products as the same items, and double-extended them at base costs which reflected the large discounts from the then-current costs at the time of the acquisition. As a result, as long as the taxpayer maintained the same or a greater inventory volume, the basis of this bargain purchase would be carried over to future years under the LIFO method, thereby deferring substantial profits on the bargain-purchased inventory.

The Commissioner challenged this practice, arguing that either (1) the subsequently produced inventory should not be included in the same pool as the inventory purchased from the former manufacturer or (2) even if they were pooled together, the difference in cost should require the purchased items to be distinct from the subsequently produced items.¹⁵⁵ Either position effectively denied deferral of gain under the LIFO method. If they were pooled separately, the purchased item pool would liquidate and the produced item pool would reflect a new base layer valued at current-year costs. If they were pooled together but treated as different items, and only produced items existed at year-end, the base cost of the produced items would have to be reconstructed. Reconstructing base costs using costs of production during the year would also cause the taxpayer to lose all (or substantially all) of the benefit of deferring the bargain element of the purchase, as the costs of production were considerably higher than the bargain purchase costs.

The court rejected the Commissioner's pooling argument, allowing the taxpayer to retain a single pool for both purchased and produced items. Although the regulations require a manufacturer with wholesaling or retailing operations to maintain separate pools for its manufacturing and reselling

year ended June 30, 1982, when its inventory "primarily" consisted of the items acquired from the former manufacturer. *Id.*

152. For Mayline, the FIFO value of the inventory in the hands of the seller was \$2,034,680.48, while Mayline allocated only \$79,028.32 of the purchase price to that inventory. *Id.* at 122. For Hamilton, the FIFO value of the inventory in the hands of the seller was \$16,566,320, while Hamilton allocated only \$6,550,262 of the purchase price to that inventory. *Id.* at 123.

153. *Id.* at 122-24.

154. *Id.* at 122-23. With regard to the Mayline inventory, the court specifically found that the products subsequently produced were identical to those purchased from the former manufacturer. *Id.* at 122.

155. *Id.* at 127.

activities,¹⁵⁶ the court had previously rejected an attempt to apply these regulations to inventory purchased in connection with a business acquisition and used to carry on a manufacturing business.¹⁵⁷ Although the bargain purchase issue was not raised in the earlier case, the court nevertheless found the situations indistinguishable, and therefore held for the taxpayer.¹⁵⁸

The taxpayer's victory on the pooling issue was pyrrhic, however, as the court agreed with the Commissioner that the purchased and produced inventory should be treated as separate items. In analyzing the item issue, the court first reiterated some principles about the item concept from *Wendle Ford* and *Amity Leather*:

In [*Wendle Ford*], we held that the concept of an item was flexible enough to include minor technical and stylistic changes made in a product over time. Furthermore, we have held [in *Amity Leather*] that the definition of the term must not be so narrow as to impose unreasonable administrative burdens upon taxpayers, thus rendering impractical the taxpayer's use of the double-extension method of dollar value LIFO inventory valuation.¹⁵⁹

In *Hamilton*, these principles seem to support the taxpayer's position, as the taxpayer did not maintain records that segregated purchased and produced items, and they were physically identical. However, the court dismissed the taxpayer's argument that separate accounting would be too burdensome, noting that "the difficulty petitioner faces is largely of its own making."¹⁶⁰ The court stated that the inventory purchased in connection with these business acquisitions "could have been tracked as it was liquidated by sales in the course of [taxpayer's] business."¹⁶¹ In other words, the court suggested that the taxpayer should have applied a specific identification method to its inventory, even though the regulations recognize that this is generally not possible.¹⁶² By failing to track these costs specifically, the taxpayer was forced to accept the Commissioner's assumption that the purchased goods were sold first and that all remaining inventory was

156. See Regs. § 1.472-8(b), (c); see also *Amity Leather Products Co. v. Commissioner*, 82 T.C. 726, 734-36 (1984).

157. *UFE, Inc. v. Commissioner*, 92 T.C. 1314, 1320, 1322 (1989). Some commentators have also questioned a literal interpretation of the requirement for separate wholesale/retail pools when a manufacturer purchases parts and uses them to effect incidental sales for replacement or warranty purposes. See Raymond A. Hoffman, *Inventories* 233 (1962).

158. *Hamilton Indus.*, 97 T.C. at 134-35.

159. *Id.* at 135.

160. *Id.* at 139.

161. *Id.*

162. See *supra* text accompanying note 5.

comprised of new items.¹⁶³ However, the assumption that the first items in inventory were sold first is contrary to the LIFO cost flow assumption.

The court looked to its previous decision in *Amity Leather* to justify distinguishing the purchased and produced inventory based on the differences in cost. According to the court, *Hamilton* presents the converse of the situation in *Amity Leather* in the sense that “more expensive” goods are substituted for “less expensive” goods, but the two situations are otherwise analogous.¹⁶⁴ First, the court asserted that the cost increases were something other than inflation:

The difference between petitioner’s base year inventory cost and inventory cost incurred after the acquisitions is not attributable to inflation, but rather to the artificially low value assigned base year inventory as compared to the cost of subsequently purchasing or producing such inventory at prevailing market prices. The consequence of permitting such replacement is an increase in the cost of goods sold, resulting in an understatement of petitioner’s income.¹⁶⁵

The basis for this determination is highly questionable, as the taxpayer’s practice appears inconsistent with the court’s own definition of inflation:

By matching the cost of the most recently purchased goods with current sales revenue, the LIFO convention removes from current earnings any artificial profits attributable to inflationary increases in inventory costs. The subject inflation is the rise in the taxpayer’s own inventory cost, not the overall increase of prices in the economy.¹⁶⁶

The cost increases affected by the LIFO method are the taxpayer’s own cost increases, not a measure of general changes in the price level. The LIFO method as applied by the taxpayer in *Hamilton* treated the “bargain” cost as its initial investment in inventory, and deferred recognition of any profit on that investment until that inventory was liquidated. This result is entirely consistent with the LIFO method and the physical capital maintenance approach to income measurement.

Nevertheless, the court viewed the taxpayer’s approach as failing to reflect income clearly. As the court correctly observed,

163. *Hamilton Indus.*, 97 T.C. at 140.

164. *Id.* at 136-37 (quoting *Amity Leather Products Co. v. Commissioner*, 82 T.C. 726, 733-34 (1984)).

165. *Id.* at 137.

166. *Id.* at 130 (citation omitted).

If petitioner were permitted to combine the bargain cost inventory with goods carried at higher cost, representing the current costs of production, petitioner could postpone recognition of the gain realized on disposal of the bargain cost inventory until such time as it decided to permit a liquidation of inventory, thus allowing such bargain cost to flow into cost of goods sold.¹⁶⁷

But, this is precisely the treatment that is allowed to taxpayers under the LIFO method.¹⁶⁸ Apparently, the court was most concerned with matching the bargain cost to the sales revenue from the goods in the year they were presumably sold:

In order to clearly reflect income, petitioner should be required to recognize the gain inherent in the bargain cost inventory at the time such gain is realized, rather than at a later time of petitioner's choosing. Such a requirement is in harmony with the matching principle which is at the heart of the inventory accounting rules. To hold otherwise would permit petitioner to include the cost increases attributable to the replacement of bargain cost inventory with inventory produced at prevailing market prices in the cost of goods sold as though such cost increases were attributable to inflation. The LIFO method was not intended to permit taxpayers to include in cost of goods sold cost increases attributable to the replacement of goods with low cost characteristics with goods possessing higher cost characteristics.¹⁶⁹

The matching principle applied by the court, which the court identified as "at the heart of the inventory accounting rules," is not the matching principle associated with the LIFO method. LIFO is intended to match current costs with current revenues, which in these circumstances is accomplished by the taxpayer's approach.¹⁷⁰

167. *Id.* at 138.

168. Curiously, the court analogizes the taxpayer's method to the "base stock" method, which it points out "is not a permissible method of tax accounting because it 'obscures the true gain or loss of the year and, thus, misrepresents the facts.'" *Hamilton Indus.*, 97 T.C. at 138 n.5 (quoting *Lucas v. Kansas City Structural Steel Co.*, 281 U.S. 264, 269 (1930)). LIFO has conceptual origins in the base-stock method, but the rejection of the base-stock method is hardly relevant to the validity of the taxpayer's LIFO method, which was authorized by statute long after the base stock method was disallowed. See *supra* note 42.

169. *Hamilton Indus.*, 97 T.C. at 138 (citing *Amity Leather*, 82 T.C. at 733-34).

170. See, e.g., *Hamilton Indus.*, 97 T.C. at 130 ("By matching the cost of the most recently purchased goods with current sales revenue, the LIFO convention removes from current earnings any artificial profits attributable to inflationary increases in inventory costs").

Further, the court's interpretation of *Amity Leather* as authority for disrupting the normal application of the LIFO method in these circumstances is troubling. In *Amity Leather*, the taxpayer chose to adopt a narrower definition of an item that was supported by its inventory records; in *Hamilton*, in contrast, the Commissioner forced a narrower definition on the taxpayer when no such records were available. *Amity Leather* should be restricted to allowing taxpayers to adopt narrower definitions of an item than otherwise required by the physical characteristics of goods. Otherwise, no principled basis exists for treating the changes in cost reflected in the taxpayer's inventory as anything other than inflation. This is evident from the *Hamilton* court's attempt to limit the extension of its decision to contexts other than a bargain purchase involving the entire base inventory:

We do not mean to suggest that every bargain purchase of inventoriable property will require the creation of new items within the dollar value LIFO pool, as occasional purchases concluded on advantageous terms are to be expected in the course of normal business activities. Moreover, where a taxpayer uses LIFO, the gain realized upon sale of such goods probably will be recognized within a short time, unless an increase in closing inventory prevents such bargain cost from flowing into cost of goods sold. Consequently, an isolated bargain purchase in the course of an ongoing business differs materially from the case where a taxpayer attempts to value its entire base-year inventory at bargain cost.

Creation of a new item for tax accounting purposes on the basis of differences in cost characteristics is required only where necessary to clearly reflect income, and the issue is to be resolved on a case-by-case basis.¹⁷¹

Hamilton has been roundly criticized by commentators,¹⁷² and it confirms taxpayers' worst fears about the indeterminacy of the item concept.

However, the Court of Federal Claims recently followed *Hamilton* in connection with a bulk purchase of inventory costing approximately 50% less

171. *Id.* at 139 n.6 (citations omitted).

172. See, e.g., Marc D. Levy, et al., *Hamilton Industries: Abusing the Clear Reflection Standard*, 54 *Tax Notes* 741 (Feb. 10, 1992); Larry Maples & Mark A. Turner, *Bargain Purchases of Inventory and Dollar Value LIFO: Hamilton Should Be Overturned!* 54 *Tax Notes* 1533 (Mar. 23, 1992); William L. Raby, *Tax Court Decision on Acquisition Inventory Sets Tax Time Bomb Ticking for Thousands of Businesses*, 52 *Tax Notes* 1393 (Sept. 16, 1991).

than otherwise identical manufactured items.¹⁷³ The court upheld the government's treatment of the bargain purchased inventory as an item separate from the manufactured inventory, based on the Commissioner's authority to ensure that the taxpayer's method of accounting clearly reflects income.¹⁷⁴ The standards for determining clear reflection in this context are amorphous as is reflected in the court's summary of the government's position:

Defendant concedes that a taxpayer frequently buying goods at a discount could treat those goods as the same items even though they may have different cost characteristics. The test, according to defendant's expert, should be whether the discount purchase occurs in the taxpayer's normal course of business. Cf. *Hamilton Industries*, 97 T.C. at 139 n.6 (suggesting that an occasional discount purchase "In the course of normal business activities" might not necessitate different item treatment). A taxpayer which buys discount goods once during the course of its business may not have to treat the items differently, depending on the quantity and the timing of the discount purchase. However, defendant maintains that goods obtained in a nonrecurring transaction of significant magnitude—a bulk purchase at a large discount—should be treated as different items from those subsequently manufactured or purchased. The outcome would depend on the circumstances of each taxpayer and transaction.¹⁷⁵

In these circumstances, the court agreed with the government that the taxpayer's application of the LIFO method, which would otherwise have deferred recognition of income from the sale of the bargain-purchased items until the LIFO inventory was liquidated, did not clearly reflect income: "While deferral of higher income is an acceptable result of the LIFO method of accounting, we cannot find that the method was intended to defer the flow of lower costs that are not the result of inflation."¹⁷⁶ However, neither the court nor the government explained why the bargain purchased items could not be used to measure inflation, while such items may be used for that purpose in other contexts. Variation in the amount of discount should not alter the characterization of "inflation" for purposes of the dollar-value LIFO method because the LIFO index is based on a change in the costs incurred

173. *Kohler Co. v. United States*, 95-2 U.S. Tax Cas. ¶ 50,600 (Ct. Cl. 1995).

174. *Id.*

175. *Id.*

176. *Id.*

by the particular taxpayer, not changes in the general price level or average changes for a commodity or industry.¹⁷⁷

Unfortunately, even if the ambiguous language in *Amity Leather* concerning the substitution of "more expensive goods" for "less expensive goods" is appropriately limited (i.e., by respecting a taxpayer's decision to adopt a narrower definition of an item than otherwise compelled by the physical characteristics of the inventory) and the facts and circumstances oriented approach in *Hamilton* is ultimately rejected, indeterminacy would still exist in connection with differences in physical characteristics of items. One further attempt to reduce complexity in determining the scope of an item must be briefly discussed: the use of cost components (raw material, labor, and overhead) as "items." Despite the effectiveness of this method in reducing the inherent complexity of the LIFO method for some taxpayers, the Service has raised questions about its validity and its future is uncertain.

e. *Cost Components as "Items."*—As discussed above, inventories of complex goods subject to frequent changes in style, quality, or content present a new item problem. To draw on a familiar example, consider the automobiles in *Wendle Ford*. Vehicles in each model year are affected by design or engineering changes, which change the composition of finished products. Moreover, individual vehicle content varies considerably, depending on body styles, options, and accessories, so that vehicle costs can vary widely, even within the same model. Furthermore, a significant portion of a manufacturer's inventory may be work-in-process composed of different types of materials and conversion costs at different stages of completion. Alternatively, consider a manufacturer producing goods on special orders from its customers. The finished products may be unique to each customer, but may involve similar materials and conversion costs.

In recognition of the practical difficulties inherent in computing a price index based on a product-oriented definition of "item," early formulations of the dollar-value LIFO method contemplated that a manufacturer could treat an item as including cost components, i.e., materials, labor, and overhead. For example, McAnly's original discussion of the origins of the dollar-value LIFO method contemplated that items could include cost components:

In place of visualizing the in-process and finished-product inventory of a manufacturing company as being comprised of quantities of product units varied in design,

177. See *infra* Part V, discussing simplified dollar-value LIFO methods that use externally generated indexes instead of indexes generated from the taxpayer's own cost experiences.

style, size, etc., let us consider this inventory as representing quantities of basic elements of cost—namely, various materials (regardless of their status or the type of the product in which they are contained) which have specific cost prices, and hours of manufacturing time that can be valued at various occupational wage rates, and burden or expense rates.¹⁷⁸

In other writings, it is clear that McAnly viewed cost components as essential to implementing dollar-value LIFO:

In as much as we are dealing with a means of valuing the total inventory investment so as not to affect profits with fluctuations in a fixed inventory investment (defined as the beginning-inventory investment to the extent that it is in existence in the closing inventory) it seems reasonable to suggest that the mechanics of application of this last-in, first-out principle to an inventory of a manufacturing concern should cover units of cost elements (materials and manufacturing time) with their attendant value factors (materials price levels, wage scales, etc.) if its underlying purpose is to be effectuated in the evaluation of any inventory.

Let us consider a broad interpretation of the last-in, first-out principle as applied to the cost elements representing the factors which are valued in the determination of individual product costs and through which the total inventory valuation is determined.¹⁷⁹

McAnly continued to advocate this concept of dollar-value LIFO throughout his career. In 1963, he wrote: “By using a basic dollar value as the common denominator, we can, therefore, easily apply the last-in, first-out principle, regardless of the complexity of the inventory. The objective is to express the ending inventory at the beginning-of-year price levels of materials, labor and overhead.”¹⁸⁰ Apparently, McAnly believed that the

178. H.T. McAnly, *Origin of the Dollar Value LIFO Method*, in *Selected Writings on Accounting and Related Subjects* 17, 19 (n.d.).

179. *Id.* at 22-23.

180. H.T. McAnly, *LIFO—Broad Application*, in *Selected Writings on Accounting and Related Subjects* 180, 183 (n.d.). McAnly notes that “[i]n some cases, it is practicable to extend the quantities on hand at the end of the year—of each raw material, production in process and finished product—at the beginning-of-the-year price levels.” *Id.* Thus, according to McAnly, the method was intended to accommodate the practical needs of the taxpayer. This is consistent with the broad goal of the 1939 Act of making LIFO available to all taxpayers. See generally Schneider, *supra* note 4, § 9.03 (discussing effect of 1939 Act).

dollar-value LIFO regulations, promulgated in 1961,¹⁸¹ allowed the method. Numerous other commentators have shared this view, as the cost components approach enjoyed widespread use by taxpayers, approval by commentators, and apparent acceptance by the Service both before and after detailed dollar-value LIFO regulations were promulgated.¹⁸²

181. T.D. 6539, 1961-1 C.B. 167. These regulations have continued in nearly identical form, with the only modifications being the addition of provisions to allow the expanded use of BLS indexes. See T.D. 7814, 1982-1 C.B. 84.

182. Extensive discussion of arguments supporting the component costing method are found in Gertzman, *supra* note 3, ¶ 7.04[3][e]; Schneider, *supra* note 4, § 14.01[2][b]. For examples of the acceptance of component costing throughout the history of dollar-value LIFO, see Montgomery's *Federal Taxes* 2-30 (Philip Bardes et al., eds., 37th ed. 1958) ("Many exponents of LIFO maintain that [the cost components method] will provide the most accurate results, and there appears to be a strong argument in support of such a position."); Montgomery's *Federal Taxes* 2-35 to 2-36 (Philip Bardes et al., eds., 38th ed. 1961) (same); Montgomery's *Federal Taxes* 2-34 to 2-35 (Philip Bardes et al., eds., 39th ed. 1964) (same); Raymond A. Hoffman, *Inventories* 225-31 (1962) (discussing example involving pooling by cost components, which reflects component costing); Raymond A. Hoffman & Henry Gunders, *Inventories* 275-82 (2d ed. 1970); C. Richard Cox & Carl L. Glassberg, *Lifo: "The Deflator"—A Current Review and Analysis*, 1 *Tax Adviser* 738, 746 (1970) (stating that pooling by cost components is a "commonly used technique for manufacturers which has received IRS acceptance in practice"); William R. Sutherland, *LIFO—an Analysis of Some Computational Procedures*, 9 *Tax Adviser* 4, 9-10 (1978) (stating that regulations contemplate either component or product costing; "component cost theory frequently has been used by taxpayers and has been accepted on audit by the IRS"); C. Paul Jannis, et al., *Managing and Accounting for Inventories* 216 (3rd ed. 1980) ("Labor is purchased in a manufacturing business in terms of hours, just as steel is purchased in terms of tons, and the inventory analysis may disclose that at the beginning of a period there was on hand the product of 1,500 direct labor hours and at the end of the period the inventory represents the fruits of 1,800 direct labor hours. The number of hours will, in many situations, be a better measure of the 'form utility' element of the goods on hand than the number of units of particular articles.").

However, some accounting theorists were critical of component costing because of the possibility for increased production efficiency to result in a lower LIFO inventory value for the same quantity of finished goods in ending inventory. See Edward J. Blakely & Peter H. Knutson, *L.I.F.O. or L.O.F.I.—Which?* 38 *Acct. Rev.* 75 (1963). Nevertheless, these authors accepted the validity of component costing for both tax and financial accounting purposes: "Although the technique of computing LIFO inventories on the basis of units of cost component appears well grounded in accounting theory and tax law, it may be considered fallacious by independent theorists." *Id.* at 82. Blakely reiterated his concern about component costing in a 1969 article. See Edward J. Blakely & Howard E. Thompson, *Technological Change and Its Effects on Dollar-Value LIFO*, *Mgmt. Acct.*, August 1969, at 33. Once again, however, that it was noted that component costing was "approved by both the American Institute of Certified Public Accountants and the Internal Revenue Code." *Id.* Further, the authors make clear that this article merely presents an academic commentary by independent theorists, and not the judgment of the profession as a whole: "The reader should be aware that this article in no way suggests how or what changes should be made in the application of the dollar-value LIFO inventory method. We ourselves believe, however, that in many instances the dollar-value LIFO method, as presently applied, is bad accounting." *Id.* at 36.

In spite of the use and acceptance of component costing, as further evidenced by the Service's 1976 training manual,¹⁸³ the Service apparently began to reassess component costing in 1979, when it issued a technical advice memorandum and then a general counsel memorandum critical of component costing.¹⁸⁴ Although the general counsel memorandum proposed a revenue ruling disallowing the use of component costing,¹⁸⁵ such a ruling was never issued. Component costing is still embroiled in controversy, however, with the Service's most recent pronouncement on the issue taking a similar position, requiring the taxpayer to change to a product cost method or otherwise adjust its method so that it does not "distort income."¹⁸⁶

The crux of the Service's criticism of component costing lies in potential differences between component costing and product costing in an environment of technological change.¹⁸⁷ To illustrate, consider a widget that requires \$3 to manufacture in the base year, consisting of one pound of raw material at \$1/pound, and two hours of labor at \$1/hour.¹⁸⁸ For simplicity, assume that no overhead costs are incurred. In the next year, assume labor has become more efficient, so that only one hour of labor is required to make the widget. If one widget remains on hand at year-end, the base-year cost under component costing is only \$2 (one pound of raw material at \$1/pound plus one hour of labor at \$1/hour).

By comparison, either of two answers is defensible under a product costing approach. First, if the widget is the same item, the base-year cost under product costing is \$3. This result may be appropriate under *Wendle Ford*, as the change in the item may be viewed as minor, requiring no adjustment. Alternatively, if the widget is a new item because of a difference in the structure of manufacturing costs, as suggested by *Amity Leather*, the base year cost could be reconstructed.

183. See Gertzman, *supra* note 3, ¶ 7.04[3][e] ("The use of component costing remained widespread after 1961 and was routinely reviewed by the IRS on audit and accepted by it. Indeed, the IRS Training Manual on LIFO, which was issued in 1976, made it clear that a manufacturer's election to use LIFO could be implemented in any of several ways, including the use of component costing.").

184. I.R.S. T.A.M. 7920008 (Feb. 12, 1979); G.C.M. 38478 (Aug. 25, 1980).

185. G.C.M. 38478 (Aug. 25, 1980).

186. See I.R.S. T.A.M. 9405005 (Oct. 15, 1993); see also Carol Conjura, *IRS Continues Challenge of the Components-of-Cost LIFO Method*, 25 *Tax Adviser* 356 (1994) (discussing T.A.M. 9405005).

187. See generally W. Eugene Seago, *The Components-of-Cost Approach to Dollar-Value LIFO Inventory Valuation*, 57 *Tax Notes* 117-18 (Oct. 5, 1992).

188. For purposes of this example, it is assumed that overhead or burden is assigned to inventory based on labor hours. However, other methods are available, such as labor dollars or machine hours. See Regs. §§ 1.471-11(d)(2)(ii), 1.263A-1(f)(3)(i).

The question of how to reconstruct the base-year cost appears to be a very important point of debate about component costing.¹⁸⁹ Essentially, the task of reconstruction involves determining what the item would have cost if it had existed in the base year (or in the prior year under a link-chain method).¹⁹⁰ On one hand, a physically identical widget was produced in the base year at a cost of \$3. Relying on technology of the base year (including labor efficiency), the base-year cost is \$3. However, this approach essentially ignores the difference that is deemed to create a new item in the first place; if the item is truly new, arguably the labor efficiency that created it should be treated as though it also occurred in the base year. Under this approach, the base-year cost is only \$2 (1 pound of raw material at \$1/pound and 1 hour of labor at \$1/hour), which is the same result as component costing.

Commentators have disagreed over whether the technology of the current-year or of the base period should be used in reconstructing the base costs of new items. On one hand, proponents of the base-year technology approach argue that the purpose of the LIFO method is frustrated by using the current-year technology, as it allows the taxpayer to deduct through cost of goods sold more than the replacement cost of current goods.¹⁹¹ On the other hand, proponents of using the current-year technology focus on the fact that, if technological changes are the cause of the new item, such changes should be treated as existing in the reconstruction period:

After all, using the old technology to reconstruct the base-year cost of the new item is tantamount to assigning to the new item the base-year cost of the old item. It makes no sense to compare the current-year cost of the new item with the base-year cost of the old item.¹⁹²

189. See I.R.S. T.A.M. 9405005 (Oct. 15, 1993) (“[T]he issue of whether technological change creates a new product requiring a reconstructed base-year cost is not the real point of contention. Assuming arguendo that even minor technological change creates a new item, the issue is not whether there should be a reconstructed base-year cost for the new item, but rather what that cost should be—and here is the crux of our disagreement with Taxpayer.”); Schneider, *supra* note 4, § 14.01[5].

190. See Regs. § 1.472-8(e)(2)(iii).

191. See Seago, *supra* note 187, at 119-20. Seago uses an example in which a taxpayer requires 10 hours to produce a quantity of goods in the base year, but because of government requirements, must use 15 hours to produce the same quantity in the following year. Focusing solely on labor costs at \$10 per hour in each year, Seago shows that current costs of \$150 could not be deducted against current revenues if the current-year conditions are used to reconstruct base cost. Conversely, Seago shows that if the hour requirements are reversed, the taxpayer would be allowed to deduct \$150, which is more than the \$100 incurred to replace the goods.

192. Schneider, *supra* note 4, § 14.01[5], at 14-60. Schneider suggests that perhaps the former technology should be used if new technology did not exist in the prior year.

Any evaluation of component costing based on hypothetical results under product costing must be put into proper perspective, however, because such comparisons must be made in the real world. An index computed under the product costing method is subject to considerable variation in results, depending on such factors as (1) whether product differences create new items, (2) the methodology for reconstructing base costs, and (3) whether changes in mix have affected results under the link-chain method. This potential for variation should be taken into account, and similar variation should be accepted under other approaches.

Another problem with using a product costing approach as a benchmark is that the necessary computational data may not be readily available to a taxpayer using component costing. Where taxpayers have developed accounting systems in reliance on component costing and component costing is the only practicable means of implementing the LIFO method, it may well be the best solution available to the problem of new items in the dollar-value LIFO context.¹⁹³

Component costing faces an uncertain future. Legislation proposed in 1994 would have disallowed it, but the proposal was not enacted.¹⁹⁴ Even if component costing is generally accepted, the tug of war between taxpayers and the government over the scope of an item will probably continue. For example, some commentators have raised questions as to whether average labor hours under the component costing method are truly comparable when differences in labor composition occur from year to year.¹⁹⁵ Overhead costs present additional complexities within the components of cost method, as changes in overhead composition from year to year could be deemed to create new items, raising complex questions as to whether and how costs should be reconstructed for prior periods.¹⁹⁶

However, focusing on whether the same technology exists in a prior year raises potentially vexing questions, as technological advances are often made by combining existing technology in new ways.

193. For example, although Seago criticizes component costing because he believes it does not properly deal with technological changes, he concludes that component costing should be available to taxpayers when product costing is impractical. See Seago, *supra* note 187, at 120-21. But see Gertzman, *supra* note 3, ¶ 7.04[3][e], at 7-55 (component costing properly takes into account technological changes); Schneider, *supra* note 4, § 14.01[5], at 14-60.

194. See Schneider, *supra* note 4, § 14.04[1].

195. See Seago, *supra* note 187, at 120.

196. *Id.* at 120. The simultaneous effects of changing the total labor hours because of labor efficiency or inefficiency, while also impacting the allocation base for overhead costs, present additional complexity in this area. To illustrate, assume a taxpayer incurs \$2 of overhead costs to manufacture one product, and that product requires two hours of labor to produce. If overhead is assigned based on labor rates, the overhead rate is \$1/hour. However, if labor becomes more efficient so that only one hour of labor is required, with the same amount of overhead, then the overhead rate will increase to \$2/hour. In reality, changes this

f. *Conclusion.*—Through the controversies over the scope of an item, the only constant theme has been the government's changing positions in response to variations in taxpayers' accounting systems. Understandably, each party has argued for either more detailed or more general definitions of an item when it has best served its position. *Wendle Ford's* guidance—to allow "minor" differences from year to year to ensure administrative feasibility of the LIFO method—is inherently unpredictable to implement. In *Amity Leather*, the government argued for a broader definition of an item and lost, where the taxpayer had maintained detailed information that allowed it to use a narrower definition. In *Hamilton Industries*, the government argued for a narrower definition of an item and won, despite the fact that the taxpayer did not maintain its inventory records on that basis. More recently, the taxpayer subject to TAM 9405004 argued for a narrow definition of an item by suggesting that new items could be created by any changes in the costs to produce the item, but the Service rejected this position, relying on *Wendle Ford*. Thus, from the taxpayer's perspective, the question of whether to apply a narrow or broad definition of an item seems to depend in significant part on the effects on tax liability.

Like the determination of the scope of similar goods under specific goods LIFO, the scope of items in the dollar-value LIFO method presents intractable problems. From the perspective of the Service, varying approaches create understandable concerns about whether changes in costs are being accurately measured. Given the large amounts invested in inventories,¹⁹⁷ even small percentage differences in LIFO computations can generate large dollar adjustments, creating considerable incentives for revenue agents to invest audit resources and to propose adjustments. The uncertainty of standards leaves taxpayers vulnerable to long and costly challenges from revenue agents, with threats of potentially large deficiencies. Moreover, variation in the application of these uncertain standards could lead to questions about the fairness of the system to particular taxpayers or to particular industries.¹⁹⁸

dramatic are unlikely to occur. To the extent only minor changes occur each year, *Wendle Ford* would suggest ignoring them to make computations practical for taxpayers. See *supra* text accompanying notes 117-129. However, such an indeterminate answer is not likely to reduce controversy in this area.

197. See David F. Bradford, *Untangling the Income Tax* 54 (1986) ("few seem to appreciate that inventories constitute nearly one-fourth of the reproducible assets of nonfinancial corporations in the United States" (quoting Board of Governors of the Federal Reserve System, April 1984)).

198. For example, special procedures are available for applying LIFO to the inventory of an automobile dealer which are not allowed for taxpayers in other industries. See Rev. Proc. 92-79, 1992-2 C.B. 457.

A more objective approach, one that avoids detailed comparison of inventory items, could reduce controversy and compliance burdens. More simplified, objective approaches to LIFO computations have been attempted. However, those efforts have achieved only limited success, in part because their availability is limited to certain groups of taxpayers, or they have attempted refinements that make them effectively unworkable. Simplification efforts are discussed below.

V. LIFO SIMPLIFICATION EFFORTS

Congress and the Service have taken several steps toward simplifying dollar-value LIFO. In 1981, Congress directed the development of a LIFO method based on externally generated indexes,¹⁹⁹ which is now prescribed in the regulations.²⁰⁰ In 1986, Congress revisited the issue of simplification, providing a simplified method for small businesses under section 474 of the Code.²⁰¹ The Service attempted further simplification for automobile dealers in 1992,²⁰² and other simplification legislation has been proposed from time to time. Unfortunately, the simplified methods are still too complex, reflecting an ideal of precision which is generally unworkable.

A. Legislative Background of Simplified LIFO Provisions

The House Committee on Small Business began a series of hearings in 1980 to "help simplify the tax law on accounting for inventories," which was viewed "as a way of easing the regulatory and inflationary burdens placed on small business."²⁰³ Focusing specifically on inventories, the committee found that the tax laws on LIFO were "vastly too complex for the small business person."²⁰⁴ The process of internally developing a LIFO index was considered "[o]ne of the primary reasons for the complexity of LIFO."²⁰⁵

199. Economic Recovery Tax Act of 1981, Pub. L. No. 97-34, § 235, 95 Stat. 172, 252 (enacting § 472(f)) [hereinafter ERTA 1981].

200. Regs. § 1.472-8(e)(3).

201. Tax Reform Act of 1986, Pub. L. No. 99-514, § 802, 100 Stat. 2085, 2348.

202. Rev. Proc. 92-79, 1992-2 C.B. 457.

203. Inventory Accounting as a Burden on the Capital Formation Process, 1980: Report of the Committee on Small Business, 96th Cong., 2d Sess. 4 (1980) [hereinafter Report on Inventory Accounting].

204. *Id.* at 8.

205. *Id.* at 10. Other reasons included difficulty in applying the pooling rules for wholesalers and retailers, which require pooling by major lines, types, or classes of goods, and the requirement that market writedowns be restored to income entirely in the year LIFO is adopted. See *id.* at 8-9.

Externally generated indexes could eliminate the accounting burden of double-pricing inventory and the controversies over the scope of an item by shifting the index computation task to the government agency generating the index.²⁰⁶ However, under the then-applicable law, only department stores using the retail method were generally permitted to use retail price indexes prepared by the Bureau of Labor Statistics (BLS).²⁰⁷ Other taxpayers, such as specialty stores, could use BLS indexes only if they could demonstrate the “accuracy, reliability, and suitability of such indexes.”²⁰⁸ The Service’s restrictive position on the use of BLS indexes was based on concerns over their statistical accuracy.²⁰⁹ The Committee pointed out that many commentators were critical of this quest for statistical accuracy, and some had even suggested using change in the general price level to alleviate the problems associated with detailed indexes.²¹⁰

In early 1981, the Service responded by issuing proposed regulations “to simplify the use of the dollar-value LIFO method so that the LIFO method could be used by more taxpayers and would be easier to use by taxpayers currently using the method.”²¹¹ These proposed rules expanded the availability of BLS indexes, which had formerly been limited to a special series of indexes developed for department stores (“Department Store Inventory Price Indexes”), to include the indexes published in the “CPI Detailed Report” or “Producer Prices and Price Indexes.”²¹² Congress responded approvingly by enacting section 472(f) of the Code, which directed the Treasury to “prescribe regulations permitting the use of suitable published governmental indexes in such manner and circumstances as determined by the

206. However, the agency generating the indexes must address the questions relating to the scope of an item and the effects of changes in item composition. See BLS Handbook, *supra* note 141, at 142-43 (discussing agency efforts to take into account changes in products and technology). Centralizing the responsibility for these issues should create a more consistent approach for affected taxpayers.

207. Report on Inventory Accounting, *supra* note 203, at 11. See Regs. § 1.472-8(e)(1) (“A taxpayer entitled to use the retail method of pricing LIFO inventories authorized by paragraph (k) of § 1.472-1 may use retail price indexes prepared by the United States Bureau of Labor Statistics”).

208. Report on Inventory Accounting, *supra* note 203, at 11. See Rev. Rul. 75-181, 1975-1 C.B. 150.

209. Report on Inventory Accounting, *supra* note 203, at 11-12. An IRS representative explained: “The *mix of goods* as well as the *inventory weights* assigned to the various classifications of goods may vary significantly from one type of taxpayer to another. We must resolve this problem before permitting any such extension [of BLS indexes to taxpayers other than retailers].” *Id.* at 11.

210. *Id.* at 12.

211. 46 Fed. Reg. 3912 (1981).

212. See *id.* at 757.

Secretary” for the purposes of implementing the LIFO method.²¹³ Final regulations were issued under this provision on March 1, 1982.²¹⁴

In addition to enacting section 472(f), Congress responded to two other concerns raised in the 1980 report. It added section 472(d) to the Code, which permits market writedowns restored to income as a result of electing the LIFO method to be spread over three years.²¹⁵ In addition, it added section 474, which allowed some small businesses to use a single LIFO pool, instead of multiple pools as may otherwise be required under the regulations.²¹⁶

In 1986, Congress attempted more comprehensive relief for small businesses by effectively repealing old section 474 and adding a new section 474, entitled “Simplified dollar-value LIFO method for certain small businesses.”²¹⁷ As indicated by the Joint Committee Staff, past simplification efforts for small businesses were inadequate:

The Congress believed . . . that the complexity and greater costs of compliance associated with the LIFO method, including the dollar-value LIFO method, discouraged some smaller taxpayers from using the LIFO method in accounting for their inventories. The Congress believed that the LIFO method should be simplified for smaller taxpayers so that the use of the method will be practical for all taxpayers.²¹⁸

As discussed below, although the simplified method in current section 474 may have alleviated complexities of LIFO for some small taxpayers, many taxpayers ineligible to adopt that method still have no meaningful alternative to internally generated indexes.

213. ERTA 1981, *supra* note 199, § 235, 95 Stat. at 252.

214. T.D. 7814, 1982-1 C.B. 84.

215. Previously, taxpayers that had taken market writedowns had to restore the writedowns entirely in the year they elected LIFO. Report on Inventory Accounting, *supra* note 203, at 15. This was thought to create an initial penalty that inhibited the election of LIFO. *Id.* at 23.

216. See ERTA 1981, *supra* note 199, § 237, 95 Stat. at 252-53. As to the pooling rules, see generally Regs. § 1.472-8(b). The Senate version of this bill would also have allowed taxpayers to elect to use the link-chain or indexing method “without showing that any other method of computing dollar-value LIFO inventory is unsuitable or impractical.” However, this provision was not included in the legislation as enacted. See H.R. Conf. Rep. No. 215, 97th Cong., 1st Sess. 226-27 (1981), reprinted in 1981 U.S.C.C.A.N. at 315-16.

217. Tax Reform Act of 1986, Pub. L. No. 99-514, § 802, 100 Stat. 2085, 2348.

218. Staff of Joint Committee on Taxation, 100th Cong., 1st Sess., General Explanation of the Tax Reform Act of 1986, at 482 (1987).

B. Inventory Price Index Computation (IPIC) Method

The regulations now have rules designed to allow computation of LIFO indexes based on consumer or producer price indexes developed by the Bureau of Labor Statistics (BLS). A taxpayer applying this method, which is called the "inventory price index computation method" (IPIC method),²¹⁹ must follow several steps to compute its LIFO index. In general, these steps involve (1) categorizing inventory, (2) assigning indexes, and (3) computing a composite index for each pool, which may involve two further adjustments: (a) applying a so-called "80% limitation" and (b) adjusting indexes to a cost price basis. Each of these steps is discussed below.

1. *Categorizing Inventory.*—The taxpayer must classify its inventory according to detailed listings in the "CPI Detailed Report" or in "Producer Prices and Price Indexes," which are published index series developed by BLS. Manufacturers, processors, wholesalers, jobbers, and distributors must classify their inventory according to categories in the "Producer Prices and Price Indexes" series ("PPI indexes"),²²⁰ which covers the output of the goods-producing sectors of the domestic economy.²²¹ Retailers using the retail method generally classify their inventory according to categories in the "CPI Detailed Report" series ("CPI indexes"),²²² which covers consumer goods and services.²²³

The taxpayer must choose "the most detailed index category which includes that specific inventory item."²²⁴ Again, the regulations refer to an "item" without defining it. As a practical matter, taxpayers must classify their

219. Regs. § 1.472-8(e)(3)(i).

220. See Regs. § 1.472-8(e)(3)(iii)(B), (C).

221. See BLS Handbook, *supra* note 141, at 141. The PPI index series was formerly known as the "Wholesale Price Index," reflecting its orientation toward commodities traded in markets other than retail markets, which are measured in the CPI index series. See *id.* at 176.

222. Regs. § 1.472-8(e)(3)(iii)(B), (C). Retailers using the retail method may select from the producer price index categories only if an appropriate index is not available in the consumer price index categories. Regs. § 1.472-8(e)(3)(iii)(C).

223. See BLS Handbook, *supra* note 141, at 176 ("The Consumer Price Index (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services"). "The eleven categories [of consumer goods] are food and beverages, housing maintenance and repair commodities, fuels (other than gasoline), house furnishings and housekeeping supplies, apparel commodities, private transportation (including gasoline), medical care commodities, entertainment commodities, tobacco products, toilet goods and personal care appliances, and school books and supplies." See Regs. § 1.472-8(e)(3)(iv).

224. Regs. § 1.472-8(e)(3)(iii)(B)(1). Presumably, this process reflects deference to the classifications of inventory in the taxpayer's own inventory accounting system.

inventory based on products, since the CPI and PPI index categories are oriented primarily toward products. However, the term “item” may mean something other than finished products if it includes raw materials and work-in-process, which are also subject to this method. Unfortunately, the regulations do not explain how work-in-process inventories are to be treated in this categorization process. Commentators have suggested that the best approach is to categorize work-in-process according to the finished product that will ultimately be produced.²²⁵ However, such treatment may not be accurate for products in various stages of completion, which have different material, labor, and burden content. Work-in-process could perhaps be broken down into its cost components,²²⁶ but this approach adds complexity.²²⁷

Legislation proposed in 1994 would have allowed taxpayers to apply BLS indexes based solely on finished goods composition.²²⁸ This approach would have eased the computation burden, but it raises practical questions. For example, some taxpayers have virtually no finished goods inventories because their products are sold upon completion. For these taxpayers, estimating inventory composition based on sales might be appropriate, although such a measure is potentially imprecise because different inventory turnover rates could affect the actual inventory mix.

2. *Assigning Indexes.*—Once the inventory items are categorized, the taxpayer must assign the appropriate BLS indexes to the inventory. BLS indexes are structured to include detailed categories that may be aggregated into more general categories. PPI categories are assigned commodity codes ranging from the most general (2-digit) to the most detailed categories (8-digit). To illustrate, consider the following PPI categories from Table 6 of the April 1995 Producer Prices and Price Indexes report:

225. Schneider, *supra* note 4, § 14.04[3]. Where different finished products can be made from work-in-process inventory, the treatment of work-in-process is even less clear. Possible treatments might include allocations based on production or inventory quantities of the applicable finished goods.

226. Schneider states that “categorization of the item based on its status as an in-process item might be permissible.” *Id.* However, it is unclear whether this suggests an explosion technique. Schneider suggests that exploding a finished product into component parts for purposes of assigning specific index categories, as discussed below in the second step, is inappropriate. See *id.*

227. BLS indexes might be applied to components of costs. For example, BLS collects data on wage rates, but the indexes are not part of the series referenced in the regulations. See BLS Handbook, *supra* note 141, at 42-50 (discussing wage rate surveys). BLS indexes may also be available for components of overhead, such as indirect labor, electricity, fuel, and various supplies. However, such an approach would not take into account changes in production volumes that ultimately affect the total cost of finished products.

228. See Schneider, *supra* note 4, § 14.04[3], n.201.

<u>Code</u>	<u>Description</u>
12	Furniture and durables
121	Household furniture
1212	Wood household furniture
121201	Living room furniture
12120101	Tables

The most detailed category, "tables," is included along with other items such as desks and chairs in the 6-digit category for "living room furniture," which in turn is included in the more general 4-digit category of "wood household furniture," and so on until indexes are aggregated at the two digit level. The CPI index categories are structured similarly, although they do not use numbered product codes.²²⁹

BLS determines indexes from price data collected for products at the most detailed category level and aggregates that data to compute indexes for more general categories based on weights determined for each category.²³⁰ For example, the weights for the PPI indexes, currently found in Table 12 of the annual Supplement to Producer Prices and Price Indexes,²³¹ reflect the percentage weight of each commodity in a composite PPI for "all commodities," which is used as a measure of inflation in the economy as a whole.²³²

A taxpayer uses these BLS indexes and BLS weights to assign indexes to inventory. Any category with 10% or more of the value of inventory in a LIFO pool is assigned that category's index.²³³ However, categories with less than 10% of the value of a pool must be aggregated until they reach the 10% level, or else they are combined in a miscellaneous category.²³⁴ Indexes for such aggregated or miscellaneous categories must be determined through a weighting process which utilizes the weights from BLS, rather than the values of the inventory in that category.²³⁵

229. See, e.g., Bureau of Labor Statistics, United States Department of Labor, CPI Detailed Report 11-15 (December 1994) (showing detailed expenditure categories under each general expenditure category).

230. See BLS Handbook, *supra* note 141, at 140.

231. See Schneider, *supra* note 4, § 14.04[3], at 14-130 to 14-131.

232. PPI weights are based on the value of shipments derived from information provided by the Bureau of Census and certain other sources. See BLS Handbook, *supra* note 141, at 146-47 (1992). CPI weights are based on estimates from a "Consumer Expenditure Survey," which provides data on consumer purchases over time. See *id.* at 178.

233. Regs. § 1.472-8(e)(3)(iii)(B)(1), (4); see Schneider, *supra* note 4, § 14.04[3], at 14-129.

234. Regs. § 1.472-8(e)(3)(iii)(B)(3); see Schneider, *supra* note 4, § 14.04[3], at 14-129.

235. See Regs. § 1.472-8(e)(3)(iii)(B)(3), (5). To illustrate, assume a taxpayer had wooden household tables and desks in inventory, each of which comprises 5% of the dollar value of a LIFO pool. According to Table 12 in the Producer Price Index, the BLS weight for

Using BLS weights instead of the taxpayer's actual inventory data effectively injects an element of arbitrariness,²³⁶ which has been criticized by commentators.²³⁷ Neither the proposed nor final regulations explain why this approach was adopted. If the purpose was simplification, it is doubtful any simplification was accomplished. Legislation proposed in 1994 would have eliminated the use of BLS weights, but it was not enacted.²³⁸

3. *Computing a Composite Index.*—After the indexes are assigned and weighted composite indexes are computed for any aggregated categories, the taxpayer must compute a composite index for the pool based on its actual inventory quantities for each applicable category. Thus, the index for those categories meeting the 10% threshold without aggregation are weighted by the value in that category; the composite index for any aggregated categories (computed by using BLS weights) is weighted by the total actual value of those categories to compute a composite index for the pool.²³⁹ Two additional adjustments further complicate this composite index computation: an adjustment to reflect only 80% of the inflation in the applicable BLS indexes (“80% limitation”), and an adjustment to restate BLS indexes on a “cost” basis (“cost adjustment”).

a. *80% Limitation.*—The 80% limitation is rooted in concerns about protecting the public fisc from taxpayers who select the IPIC method only when more advantageous than their current method. The preamble to the final regulations explains the rationale for this limitation:

Taxpayers experiencing a rate of inventory price inflation

tables (commodity code 12120101) is .026 and the weight for desks (commodity code 12120103) is .007. Bureau of Labor Statistics, U.S. Department of Labor, Producer Price Indexes 354 (1994). Converting these BLS weights to a percentage, the BLS weight for tables will be 78.2% (.026/.033), and the BLS weight for desks will be 21.8% (.007/.033). These percentages will be multiplied by the inflation in the applicable indexes to determine the composite index for this portion of the inventory pool.

236. For example, in the computations in note 235 above, the tables and desks were assigned respective BLS weights of 78.2% and 21.8% when the items should have been weighted equally (50%), since both comprise half of the goods that must be aggregated at the 10% level.

237. See Gertzman, *supra* note 3, ¶ 7.04[5][a][i], at 7-67 (“By using [BLS] weights, rather than the relative weights of the actual items in the taxpayer’s inventory, a potentially distorting and arbitrary result may occur.”); Schneider, *supra* note 4, § 14.04[3], at 14-131 (“The requirements for weighting indexes based on BLS weights, rather than the taxpayer’s own mix, is potentially a complex and burdensome requirement.”); C2 William Sutherland, *Inventories* ¶ 903.03 (CCH Tax Transactions Library 1988) (“The averaging process using BLS weights is complicated and the results are sometimes illogical in relation to the taxpayer’s own weights”).

238. See Schneider, *supra* note 4, § 14.04[3], at 14-129 n.201.

239. See Regs. § 1.472-8(e)(3)(iii)(B)(5).

lower than the published rate [i.e., the BLS index rate] would tend to choose the use of the published consumer and producer price indexes. Taxpayers experiencing a rate of inventory price inflation higher than the published rate would tend to choose to use a price index based on their own inventory price inflation experience. It was decided that the use of the consumer and producer price indexes prepared by the Bureau of Labor Statistics should not depend on whether a taxpayer's actual rate of inventory price inflation was relatively high or low. However, it was also decided that the use of overstated inflation rates to value LIFO inventory pools should be reduced to the extent possible consistent with the purposes of simplifying the use of the dollar-value LIFO method. . . . The 80 percent limitation is intended to be an alternative to computing an inventory price index based on the taxpayer's own inflation rate and is intended to be an appropriately conservative estimate that the taxpayer can use without regard to the inflation rate actually experienced by the taxpayer. However, since small businesses, as a practical matter, are unable to compute their own inflation experience and therefore do not have the opportunity to choose to use their own inflation experience, the Treasury decision modifies the 80 percent limitation and allows an eligible small business, as defined by section 474(b) of the Code, to use 100% of the percent change in the applicable indexes. All other taxpayers would be limited to 80 percent of the percent change in the applicable indexes.²⁴⁰

Because the BLS indexes are based on average price movements, some taxpayers are necessarily above or below average. However, given the complexity of the IPIC method computations, it is questionable whether a business with complex inventories could accurately predict whether the IPIC method would be advantageous. The burden of making computations under the IPIC method and under its own internal index computation method would tend to limit the degree of adverse selection of the IPIC method against the interest of the government.²⁴¹ Furthermore, past inflationary trends of

240. T.D. 7814, 1982-1 C.B. 84.

241. General comparisons or estimates may be possible. See Schneider, *supra* note 4, § 14.04[4] (advising taxpayers to compare their indexes with BLS indexes, but suggesting that the 80% limitation "will probably render the simplified LIFO method financially undesirable, except in unusual cases"). However, the full complexity of the method, including the "cost adjustment" discussed below, requires more extensive efforts for an accurate comparison.

particular taxpayers may not always be a valid predictor of whether the IPIC method would be advantageous in future years. Once elected, the IPIC method is a method of accounting, which can generally be changed only with the consent of the Commissioner, thus ensuring long term benefits of consistency for the government.²⁴² Proposed legislation in 1994 would have substituted a 95% limitation in lieu of the 80% limitation imposed under present law.²⁴³ While a 95% limitation is less restrictive, it is no more rational than the 80% limitation.

If a percentage limitation is retained, its scope merits some attention. Currently, the 80% limitation applies to a taxpayer other than an "eligible small business, as defined by section 474(b) of the Code."²⁴⁴ When these regulations were promulgated, section 474(b) defined an "eligible small business" as a taxpayer with average annual gross receipts not exceeding \$2 million during a three-year period ending with the current taxable year.²⁴⁵ However, a 1986 amendment to section 474 raised the average gross receipts standard for an eligible small business to \$5 million.²⁴⁶ The applicable definition should be clarified to avoid uncertainty.²⁴⁷ Further, the scope of a small business should be reevaluated in the current economic and technological climate.²⁴⁸

A second issue involving a percentage limitation involves the timing of the adjustment in relation to any "cost" adjustment that is required for taxpayers not on the retail method. Different results can be obtained depending on whether the 80% adjustment precedes or follows the "cost" adjustment, but the regulations provide no clear guidance on this point. The "cost" adjustment is discussed below.

b. *"Cost" Adjustment.*—The regulations contain only cryptic references to the "cost" adjustment: "If a retailer not using the retail inventory method selects an index from the *CPI Detailed Report*, the selected index must be converted into a cost price index. Manufacturers, processors, whole-

242. IRC § 446; Regs. § 1.472-8(e)(3)(v).

243. Schneider, supra note 4, § 14.04[1].

244. Regs. § 1.472-8(e)(3)(ii).

245. IRC § 474(b) (1986) (current version at § 474(c)).

246. See IRC § 474(c).

247. See Schneider, supra note 4, § 14.04[4] ("It is unclear whether this restriction will be coordinated with the new definition of a small business in IRC Section 474(c). . .").

248. It is not entirely clear that size should be the determining factor for whether a business deserves special treatment for LIFO purposes. For example, a small business with relatively few items might be able to compute a LIFO value much more easily than a larger business with many items. Moreover, to the extent that information technology such as bar coding becomes more widely available, some small businesses may have the same or even greater LIFO computation abilities as compared with their larger counterparts.

salers, jobbers and distributors, must convert selected indexes into cost price indexes.²⁴⁹ The rationale for this conversion is that the PPI and CPI indexes are based on selling prices, whereas the LIFO method should measure changes in inventory costs.²⁵⁰ In effect, the regulations assume that the taxpayer's selling prices will reflect the changes experienced in the market as a whole as measured by the BLS index, but that its costs may not reflect the same changes as in the market. To illustrate, assume a taxpayer in year one has one widget that costs \$1 and sells for \$2. Assume further that in year two, the widget costs \$1.50 to make (an increase of 50%), but the selling price is \$2.20 (an increase of only 10%). A BLS index measuring changes in selling prices will report inflation of only 10%. However, the taxpayer's costs increased by 50%. Unless an adjustment is made, the BLS index would understate the taxpayer's inflation in costs for this year. Conversely, if the selling price rose faster than the taxpayer's costs, the BLS index based on selling price would overstate the taxpayer's inflation.

Neither the regulations nor Revenue Procedure 84-57,²⁵¹ which was intended to provide guidance in implementing the IPIC method, addresses the specifics of making this adjustment. Revenue Procedure 84-57 provides an example in which the applicable CPI index for each year is multiplied by the complement of the taxpayer's gross profit percentage²⁵² in order to take into account varying profit margins for each year, and the adjusted indexes are determined by dividing the result for each year by the result from a base period.²⁵³ However, the example does not explain how the gross profit percentage is to be determined, or how the computations are to be applied for a taxpayer with multiple BLS index categories.²⁵⁴

249. Regs. § 1.472-8(e)(3)(iii)(C). Conversely, the regulations provide that "[i]f a retailer using the retail inventory method selects a price index from Producer Prices and Price Indexes, the selected index must be converted into a retail price index." *Id.*

250. See Schneider, *supra* note 4, § 14.04[2], at 14-127 n.406.

251. 1984-2 C.B. 496.

252. For example, if a gross profit percentage is 41.2%, the complement is one minus 41.2%, or 58.8%. See *id.* § 3.03.

253. Using the data from the widget in the example above, the computation looks like this:

	<u>Year 1</u>	<u>Year 2</u>
BLS Index	100.0	110.0
Gross profit % ((Sales-Cost)/Sales)	50%	31.82%
Cost % (1-gross profit %)	50%	68.18%
Adjusted price index (Step 1*Step 3)	50.0	75.0
Cost price index (Step 4/50.0)	100.0	150.0

254. The example in Rev. Proc. 84-57 states that the gross profit percentage is "[t]o be determined by the taxpayer for each index category on the basis of its own average for the tax year." 1984-2 C.B. 496, § 3.03. This could be interpreted as referring to the taxpayer's own overall average, or to the taxpayer's own average for a particular index category.

Commentators have differed in their interpretation of how this computation should be made. Some have taken a very restrictive approach, requiring the cost price adjustment to be done separately for each index category of goods, thereby implying separate gross profit computations for each item in inventory.²⁵⁵ Others have taken a more flexible approach, allowing the cost price adjustment to be done based on available data.²⁵⁶

Since the regulations were intended to provide a simplified method of implementing the LIFO method, it is difficult to justify a requirement that taxpayers determine gross profit margins for each index category. For many taxpayers, cost and sales data cannot be easily determined for each item in inventory. For example, an integrated manufacturer cannot easily determine the gross profit from particular parts which are incorporated into a finished product without making extensive assumptions about costs and transfer prices among its units.²⁵⁷ An analogous problem exists in state taxation of multi-state businesses, where separate accounting for the income attributed to operations in particular states has generally been rejected as impractical and unreliable.²⁵⁸ Separate computation of gross profit and cost price indexes

Elsewhere, in discussing application of the cost price adjustment to a retailer, Rev. Proc. 84-57 suggests that it is appropriate to compute gross profit ratios on a departmental basis, which is potentially broader than an individual index category. See *id.* § 3.03(1).

255. Schneider, *supra* note 4, § 14.04[2], at 14-127.

256. Gertzman states:

Although it is generally recognized that the conversion [to a cost price index] would occur by reducing the published price index by the taxpayer's gross profit margin, the determination of this gross profit margin for this purpose is unstated. Possible alternatives include the use of a single gross profit percentage developed for the taxpayer as a whole, use of a single gross profit percentage attributable to each pool, and, assuming the data is readily available, use of a separate gross profit percentage for each category of goods in ending inventory.

Gertzman, *supra* note 3, ¶ 7.04[5][a][i], at 7-67.

257. For example, in *Wendle Ford*, the court suggested that not even Ford Motor Company could know the cost of a catalytic converter added to a finished vehicle. *Wendle Ford v. Commissioner*, 72 T.C. 447, 450 n.2 (1979).

258. See generally 1 Jerome R. Hellerstein & Walter Hellerstein, *State Taxation* ¶ 8.03 (2d ed. 1993), which discusses three inherent defects in separate accounting. First, it is "fearfully expensive, since adequate underlying data cannot be furnished without maintaining the books of account in a manner that will show the details of the taxpayer's business operations, and transactions, broken down on a state-by-state basis." *Id.* at 8-29 to 8-30. Second, constructing imputed prices for goods transferred between branches or subsidiaries of the enterprise, or imputing a "reasonable profit" to such transfers, is difficult because of a lack of comparable data. *Id.* at 8-30. Third:

[Separate accounting] operates in a universe of pretense; as in Alice in Wonderland, it turns reality into fancy, and then pretends that it's in the real world. For the essence of the separate accounting technique of

for each index category should also be rejected in this context unless data is readily available.

In addition to the question of the scope of the cost price adjustment, a further issue not addressed in the regulations involves the standard for determining the sales and cost elements which go into the computation of gross profit. For example, should costs include all inventoriable costs required by section 263A of the Code? Or should costs determined for financial accounting purposes be sufficient? Again, a quest for further details here is possible, leading to further administrative burdens for taxpayers. As one commentator has observed:

In determining the level of detail required for purposes of making the cost conversion, taxpayers and tax practitioners should assume that agents will review the computations carefully, but agents should apply reason, common sense, and understanding in determining the acceptability of the cost conversion process. To the extent too much detail is required, the benefits of applying the simplified indexing method will be greatly reduced.²⁵⁹

It is important to keep a proper perspective on the cost price adjustment. At best, it takes into account a rough approximation of the effects of changing costs on the measure of inflation for particular taxpayers. However, since the method assumes that the taxpayer's selling prices are adequately reflected in the BLS index, its focus only on variation in costs is questionable. Much of the potential controversy over the mechanics of the cost adjustment could be avoided if the adjustment were eliminated entirely. Legislation proposed in 1994 would have eliminated the cost adjustment in connection with a simplified indexing method, but the proposal was not enacted.²⁶⁰

4. *Conclusions on IPIC Method.*—From the above discussion, it is evident that the IPIC method is neither simple, nor practical, nor entirely logical. Elimination of the BLS weighting component and cost price

dividing the income of a unitary business is to ignore the interdependence and integration of the business operations conducted in the various States, and treat them, instead, as if they were separate, independent, and nonintegrated.

Id. at 8-31 to 8-32. Similar or perhaps even stronger criticisms could be applied to requiring separate accounting of the gross profit generated from each item in inventory under a BLS indexing approach.

259. Gertzman, *supra* note 3, ¶ 7.04[5][a][i], at 7-67.

260. See Schneider, *supra* note 4, § 14.04[2], at 14-127 n.405.

adjustments, as proposed in 1994, would reduce its complexity. Moreover, increasing the measure of inflation closer to the actual levels measured by BLS inflation would further remove economic incentives to its application and possibly increase the number of taxpayers using the method. However, taxpayers would still face the practical problem of assigning inventory to detailed BLS categories.

Several approaches might simplify assigning inventories to BLS categories. First, all taxpayers might be allowed to use broader categories, such as the general categories from PPI or CPI indexes, as small businesses may do under section 474 of the Code: the fewer required categories, the easier the assignment task.

Second, taxpayers might be allowed to estimate the composition of inventory in the applicable product categories. For example, instead of evaluating inventory content each year, taxpayers might assign all inventory categories based on finished goods inventories, or perhaps even based on sales of finished goods. This would eliminate controversies over the treatment of work-in-process and raw materials, and could potentially reduce the need for detailed categorization efforts every year. To the extent estimates based on sales data might be inaccurate due to varying turnover rates, periodic evaluation of actual inventory content could limit the impact of any imprecision. To the extent that taxpayers must choose a method and follow it consistently, the possibility of manipulation and abuse should be limited.

Third, the present system of PPI and CPI categories for products could be replaced by other index series designed to reflect the inflation for particular industries. For example, BLS currently computes indexes based on the output of various industries, which might be adopted for particular taxpayers based on their industry classifications.²⁶¹ Industry-specific figures may not reflect the actual inflation of particular taxpayers due to variation in inventory composition, but these types of indexes may provide an acceptable compromise between detailed categories and an adjustment only for general price level changes. If more than one industry classification applies to a taxpayer, then methods of allocating inventories between such classifications would have to be developed, but these problems should not be insurmountable.

In any event, for BLS indexes to provide an effective alternative to internally-generated indexes, the Service and taxpayers must be willing to trade perceived accuracy (obtained by focusing on greater and greater detail) for more generalized approaches. Generalized approaches still perform the function of removing inflationary profits, but should be easier to administer

261. See BLS Handbook, *supra* note 141, at 146-47 (discussing indexes based on industry output defined by reference to Standard Industrial Classifications).

for both taxpayers and the government. In addition, a BLS indexing approach would presumably make a double-extension method possible, thus avoiding inaccuracies due to changes in inventory mix under the link-chain method.²⁶² Granted, the results under an approach using BLS indexes will not be precise for every taxpayer, but as discussed above, precision is an illusory goal. As courts have recognized in other tax contexts, “[t]he tax law and generally accepted principles of accounting recognize that substantial accuracy is the objective to be achieved and that in many situations exact determinations are neither practicable nor necessary.”²⁶³

C. *Simplified Dollar-Value LIFO Method for Certain Small Businesses—IRC Section 474*

The impracticality of applying the IPIC method was confirmed by the amendment of section 474 of the Code, which provided another simplified dollar-value LIFO method specifically for small businesses.²⁶⁴ Section 474 resolves the difficulty of assigning inventory to detailed BLS indexes by allowing taxpayers to apply very general index categories: for retailers using the retail method, any of the eleven general expenditure categories of the CPI, and for other taxpayers, any of the 2-digit classifications in the PPI.²⁶⁵ As noted above, this method is available only to an “eligible small business,” which is satisfied if the taxpayer’s “average annual gross receipts . . . for the [three] preceding taxable years do not exceed \$5,000,000.”²⁶⁶ Special rules apply to prevent controlled groups from circumventing the \$5 million limitation.²⁶⁷

Allowing general index categories eases administration of LIFO. However, detailed rules for applying the method under section 474 have not been promulgated,²⁶⁸ and there are practical questions that need to be addressed. For example, work-in-process inventories could be classified in more than one general category, and it is unclear whether raw materials are

262. See discussion *supra* Part IV.B.2.c.

263. *E.W. Bliss Co. v. United States*, 224 F. Supp. 374, 377 (N.D. Ohio 1963), *aff'd*, 351 F.2d 449 (6th Cir. 1965).

264. See Tax Reform Act of 1986, Pub. L. No. 99-514, § 802, 100 Stat. 2085, 2348-50, (amending IRC § 474).

265. See IRC § 474(b)(1)(A), (2).

266. IRC § 474(c).

267. See IRC § 474(d)(1).

268. See Report By Office of Chief Counsel, Internal Revenue Service, On Regulations Projects Status and Disposition as of February 28, 1995, Daily Tax Rep. (BNA), Special Supplement Rep. No. 52, at 5-16 (Mar. 17, 1995) (noting two open regulations projects under § 474: IA-REG-030-87 and IA-REG-031-87).

to be classified separately.²⁶⁹

Currently, section 474 also requires taxpayers to adopt separate pools for each corresponding PPI or CPI general classification,²⁷⁰ rather than the single pool allowed under the former version of section 474. The legislative history indicates that multiple pools were adopted "in order to avoid the construction of a weighted index specific to the taxpayer."²⁷¹ However, the use of relatively few general categories significantly reduces the weighting complexity. Moreover, given separate pooling requirements, inventory values for each category must be determined in any event. Thus, simplification is not achieved. The requirement for multiple pooling increases the opportunity for temporary liquidations of LIFO inventories, with a corresponding loss of the LIFO benefits. A single pool would provide much greater benefits to small businesses and increase simplicity.

D. *Alternative LIFO Method for Automobile Dealers*

Further evidence of the inadequacy of reforms in both the IPIC method and simplified LIFO under section 474 is found in Revenue Procedure 92-79,²⁷² which creates a third "Alternative LIFO Method" solely for taxpayers "engaged in the trade or business of retail sales of new automobiles or new light-duty trucks."²⁷³ By way of background, controversies over the scope of an item for automobile dealers continued after *Wendle Ford*, with the Service taking the position that options and accessories should be treated differently from the base vehicle.²⁷⁴ Many automobile dealers were audited, and industry groups and the Service cooperated to resolve the item issues by promulgating the so-called "Alternative LIFO Method."²⁷⁵

The stated purpose of the Alternative LIFO Method is simplifica-

269. To illustrate further, consider a manufacturer who purchases vans and customizes them by installing tables, luxury upholstery, electronic goods, and the like. The taxpayer's inventory might include leather, metal products, rubber and plastic products, and motor vehicles, all of which could be classified in separate BLS categories. Should this manufacturer be required to have separate pools for each category of materials? Or might that manufacturer be allowed to have a single pool for "transportation equipment," which is its end product sold to customers?

270. See IRC § 474(b)(1)(A).

271. Staff of Joint Comm. on Taxation, 99th Cong., 2d Sess., General Explanation of the Tax Reform Act of 1986, at 483 (Joint Comm. Print 1987).

272. 1992-2 C.B. 457.

273. *Id.* § 1; see *id.* § 3.03 (referring to Alternative LIFO Method as "[n]ew alternative method" in addition to IPIC, simplified LIFO under section 474, and general dollar-value LIFO methods).

274. See generally Schneider, *supra* note 4, § 14.01[3], at 14-38 to 14-39.

275. *Id.* § 14.03[1], at 14-40.

tion.²⁷⁶ This simplification is accomplished by defining the item used to compute an internal index by reference to the "manufacturer's base model code number," which is "almost always" part of the vehicle identification number on each dealer invoice.²⁷⁷ The "base vehicle cost" of the vehicles in ending inventory is used to compute the LIFO index using a link-chain approach without adjustment for any "options, accessories, or other costs" that may differ from year to year.²⁷⁸ The applicable index from comparing the base vehicle costs is also applied to the options, accessories, and other costs in the pool.²⁷⁹ Thus, the method assumes that other costs in the LIFO pool have the same inflation as the base vehicle. To the extent that manufacturers include more options and accessories as part of the base vehicle, this method allows dealers to treat the increased cost as inflation, a potential benefit.

However, the treatment of "new items" is less advantageous to taxpayers, and appears to compensate for any potential benefits.²⁸⁰ "New items" are created whenever the manufacturer changes the base model code, or effects a "change to the platform (i.e., the piece of metal at the bottom of the chassis that determines the length and width of the vehicle and the structural set-up of the vehicle) that results in a change in track width or wheel base."²⁸¹ If the "new item" existed in the prior year, but was not stocked by the dealer, the prior-year cost may be based on a manufacturer's price list.²⁸² However, if the "new item" did not exist in the prior year, the dealer must treat the current-cost as the prior-year cost,²⁸³ which effectively attributes no inflation to that item. According to Revenue Procedure 92-79, new models have a lifespan of five to seven years.²⁸⁴ Accordingly, the treatment of new items could result in dealers losing from 14-20% of the inflation that would otherwise result if they were permitted to reconstruct the base cost.²⁸⁵

276. Rev. Proc. 92-79, 1992-2 C.B. 457, § 4.01 ("The comprehensive Alternative LIFO Method is designed to simplify the dollar-value computations of automobile dealers.").

277. Id. § 4.02(3). For conversion vans, the definition of an item also includes "the most detailed conversion package designation." Id. According to one commentator, "the Ford Taurus Two-Door, Four-Door, Station Wagon, and SHO are each separate items." Schneider, *supra* note 4, § 14.01[3], at 14-40.

278. Rev. Proc. 92-79, 1992-2 C.B. 457, § 4.02(4).

279. Id.

280. See id. § 4.01 (describing new item treatment as "compensating sub-methods").

281. Id. § 4.02(5).

282. Id. § 4.02(7).

283. Id. § 4.02(6).

284. Id. § 4.01.

285. Assuming ratable inflation during a seven year period, one year would encompass approximately 14% (1/7) of the total inflation. Similarly, during a five year period, one year would encompass approximately 20% (1/5) of the total inflation.

The index computation approach under the Alternative LIFO Method is appealing to the extent that it produces an objective definition of an item, which is easier to administer and produces more consistent results than are otherwise available under the dollar-value LIFO method. Through this approach, taxpayers avoid burdensome computational requirements that might otherwise be imposed.²⁸⁶ The results are not precise, but they appear generally to achieve the purposes of the LIFO method by dealing with inventory cost increases.

However, the feasibility of this approach appears limited to retailers with relatively high-value items identified by model numbers. The Alternative LIFO Method does not solve all problems even for automobile dealers, as used vehicles and replacement parts are not covered by the method.²⁸⁷ Moreover, to the extent that manufacturers are in control of the definition of an item, adequate measures to prevent abuse may be needed.²⁸⁸ A method relying on BLS indexes is not subject to these limitations and concerns.

VI. CONCLUSION

The current approach to LIFO suffers from a common problem in the tax law, which is the "enormous complexity" of attempting precision.²⁸⁹ Precision can increase equity among taxpayers, and thereby enhance the perceived fairness of the tax law.²⁹⁰ However, precision can also impose heavy burdens on taxpayers seeking to comply with the law and on government efforts to monitor that compliance.²⁹¹

Precision is an illusory goal in the LIFO context. First, a theoretical benchmark for precision is difficult to define. While physical capital maintenance might appear to provide such a benchmark, its usefulness is

286. See Schneider, *supra* note 4, § 14.01[3], at 14-40 (noting that taxpayers who do not adopt the Alternative LIFO Method will be held to restrictive standards requiring adjustments for differences in equipment between otherwise similar models).

287. See Rev. Proc. 92-79, 1992-2 C.B. 457, § 5.01(2) (requiring a different method for parts & used vehicles).

288. It is interesting to note that some dealers have complained that "manufacturers sometimes change the model codes indiscriminately, thereby reducing the benefit of the ALM." Schneider, *supra* note 4, § 14.01[3] at 14-41 n.127. Other factors, such as marketing and consumer demands, may thus affect the assignment of model numbers more than the tax designs of the dealers.

289. See Hal Gann & Roy Strowd, *The Enormous Complexity of Being Fair*, 95 *Tax Notes Int'l* 52-12 (Mar. 17, 1995) ("[T]he principal cause of complexity [in the tax law] is the desire to measure taxpayers' liabilities with ever-greater precision.").

290. *Id.* These authors also suggest that precision can raise revenue without raising tax rates. However, this suggestion assumes that precision unilaterally favors the government, which is often not the case.

291. See *id.*

limited by the complexity of formulating a measure of changing physical capital that is truly comparable from period to period. Second, even if a theoretically precise method could be identified, the LIFO method relies heavily on the accounting information available to the taxpayer, which must accommodate practical needs. As one accounting theorist has observed,

Accounting practices are the accountant's instruments for measurement and communication. Some practices attain general acceptance because they enhance the accuracy of measurement or reduce equivocation in the information presented. Others are dictated by the structure of particular environments. All may reflect, to some extent, the demands of practicality, expediency, technical and economic necessity, compromise, and diverse other influences.²⁹²

As this theorist pointed out, "[t]he [LIFO] measurement, accomplished by *any* technique, approaches only imperfectly a successful matching of current inventory cost expirations against revenue."²⁹³ Neither the Code nor the regulations establish a particular method as a benchmark, which should counsel hesitation in determining that any method fails to clearly reflect income based on differences in results between methods.

External indexes have the potential to demystify LIFO by avoiding the indeterminacy inherent in an internal index computation. An external indexing method shifts the resolution of difficult issues created by changing technology and item content to the government agency generating the indexes, which should increase consistency in the measure of inflation applied in LIFO computations. If policymakers are able to avoid the tendency toward precision, which manifests itself in the multiplicity of indexes and complex cost adjustments, such a method should also reduce tax administration burdens for taxpayers and the government, providing meaningful simplification in an exceedingly complex area of law.

292. Peter A. Firmin, *Dollar-Value LIFO: Legitimate or Not?* 38 *Acct. Rev.* 270, 270 (1963).

293. *Id.* at 276-77.