THE RUSH TO LIFO:

IS IT ALWAYS GOOD FOR WOOD PRODUCTS COMPANIES?

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During 1974, the last-in, first-out (LIFO) inventory valuation method was adopted by many companies seeking to neutralize the impact of inflation on their financial statements. A tax partner of one major accounting firm estimated that up to 200 clients of his firm, including 30 big board companies, planned to switch to LIFO. According to another estimate, at least 100 of the 500 largest U. S. companies, including one of the leading wood products companies, considered changing to LIFO in 1974.

Arguments for LIFO

Although the reasons given would vary, financial executives of companies changing to LIFO would probably give the following principal advantages of LIFO:

1. During a sustained period of rising prices, the LIFO method ordinarily reports lower taxable income and, hence, lower taxes than the FIFO (first-in, first-out) or average cost methods. By depressing taxable income compared to taxable income that would be produced by FIFO and by average cost methods, the LIFO method also tends to reduce cash dividends where these are tied to reported
earnings. The result is a decrease in the firm's cash outflow, which could be a substantial amount for large companies and is especially significant during a period of high interest rates, as is presently the case. (For example, DuPont was expected to pay $150 million less in income taxes for the year 1974 because of the accounting change to LIFO costing.)

2. The LIFO method:
   - Partially compensates for changes in the price level and minimizes the effects of price fluctuations on earnings;
   - Presents a more conservative earnings picture in the income statement than the FIFO or the average cost methods;
   - Provides a firm with the opportunity to immediately influence net income by the timing of its purchases.*

3. The lower valuation assigned to LIFO inventories may be advantageous in determining the tax base for state and local franchise and personal property taxes.

Arguments Against LIFO

Financial executives of companies changing to LIFO would probably acknowledge the following principal problems with LIFO:

*For example, during inflationary periods, buying large amounts of inventory near the end of the tax year releases higher costs to the goods sold than would otherwise have been recorded using the FIFO or average cost methods, thus reducing taxable income and the impact of income taxes. Alternatively, earnings can be improved through planned inventory liquidations.
1. Since the LIFO method must be used for reporting to stockholders, if used for tax purposes, it can eventually result in an unrealistically low inventory value on the balance sheet compared to the current value of the inventory. While this may be conservative reporting, it can cause the company's balance sheet to be almost meaningless in reflecting realization values of current assets.*

2. The use of the LIFO method also tends to depress reported earnings per share compared to the FIFO or average cost methods. This could have the effect of reducing the market price for a firm's stock; or, in extreme cases, it could cause the firm to violate restrictions on retained earnings and on working capital placed upon it by lenders. It could also make the firm more vulnerable to a takeover because of lower earnings reported to stockholders. In addition, lower earnings reported under the LIFO method could result in reduced bonuses or other incentive arrangements for management.

3. As mentioned above, the sustained use of the LIFO method tends to reduce the carrying value of inventories in a company's balance sheet, which, in turn, has the effect of reducing total current assets and showing a lower current ratio than would be reported if the FIFO or average cost methods were employed. Likewise, inventory turnover can be distorted by the LIFO method. Since the LIFO method has the effect of increasing cost of goods sold and reducing the average inventory value during a

*This objection is partially overcome because replacement cost of LIFO inventories must be disclosed in a footnote to the financial statements for Securities and Exchange Commission filings. (FIFO cost disclosure of inventory amounts on the balance sheet is permitted by Internal Revenue Service Revenue Rulings 73-66 and 74-586 and replacement cost and current cost disclosure is permitted by Revenue Ruling 75-50.)
period of rising prices, it would tend to show an artificially high inventory turnover compared to FIFO and average cost methods.

4. When the inventory turnover is high, adoption of LIFO may not result in a significant decrease in earnings because cost of sales is usually close to market conditions regardless of the valuation used for inventories. This occurs since there is very little time lag from the purchase of inventory to its sale.

5. Some companies converting to LIFO may encounter additional administrative costs in installing, maintaining, and auditing a now more complex inventory pricing system.

6. The LIFO method carries with it these risks:
   - The price level could decline.
   - A company's inventory could be substantially depleted.

Both of these situations could have an adverse effect on a company's cash flow. For example, during a period of a declining price level, the LIFO method could charge lower prices to cost of goods sold currently than the FIFO or average cost methods, resulting in higher taxable income, higher income taxes, and perhaps higher dividend payments than under other inventory methods. Likewise, an involuntary liquidation of a company's inventory would cause the company to charge very low inventory costs to cost of sales, also resulting in higher income, income taxes, and dividends. This latter risk of involuntary inventory liquidation is fairly remote for wood products companies, because they typically carry large inventories and control much of their own supply.
7. A company using the LIFO method cannot write inventory down to market for tax purposes, if the value is lower than cost on the FIFO method. Because market valuation cannot be considered for LIFO for tax purposes, a company could pay higher taxes than if it were on the FIFO method. If a company has stockpiled inventories, as a number of wood products firms did in 1974 because of depressed sales, it may be that the net realizable value of the inventory is less than its cost on the LIFO method. If the buildup of inventory has exceeded reasonable expectations of demand, it may not be advisable to switch to the LIFO method.

8. The LIFO method is not intended to adjust for general price level changes. However, by matching the latest cost increase with revenue, LIFO will generally eliminate a substantial part of price level changes from income. As noted in the following exhibit, the impact on income is not reflected in the income statement as a separate item under either LIFO or FIFO.

<table>
<thead>
<tr>
<th></th>
<th>FIFO</th>
<th>LIFO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Unit Price</td>
</tr>
<tr>
<td>Sales</td>
<td>10,000</td>
<td>.22</td>
</tr>
<tr>
<td>Beginning Inventory</td>
<td>2,000</td>
<td>.10</td>
</tr>
<tr>
<td>Purchases</td>
<td>10,000</td>
<td>.15</td>
</tr>
<tr>
<td>Available for Sale</td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>Ending Inventory</td>
<td>2,000</td>
<td>.15</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>10,000</td>
<td>.14</td>
</tr>
<tr>
<td>Gross Profit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exhibit 1
In this example, the $100 increase in the cost of goods sold (attributable to the 2,000 units in ending inventory @ .05) is buried in the FIFO net income total of $600 and excluded in the LIFO net income figure of $500.

Analysis of Arguments, Pro and Con

Income taxes should be viewed by financial executives as a major expense, and since stockholders expect managers to earn as high a rate of return as possible, consistent with the long-range objectives of a company, the LIFO method should be considered as a way to minimize total cash expenses and to enhance cash flow. For most manufacturing companies that have significant inventories with a relatively long manufacturing cycle and slow inventory turnover, the LIFO method can cause a substantial reduction in income taxes during inflationary periods and, if income tax reduction is a major objective, the LIFO method should be considered. Furthermore, where there has been a historical trend of price increases (particularly with respect to raw materials) and the trend is expected to continue, LIFO should involve relatively little risk.

The objective of minimizing corporate income taxes is a compelling reason to adopt LIFO. However, an appraisal should be made as to the prospective tax savings compared to the effect of reduced earnings per share.

While LIFO does result in a closer matching of current costs and revenues, such matching may not fully reflect general price level changes. LIFO costs apply to a specific type of asset (such as lumber) and would only by coincidence represent the movements of the general price level. LIFO cost of sales reflects the most recent prices paid for the specific materials used. It may or may not be close to the current price of the material involved; for
example, seasonal buying may cause either inflated or depressed prices compared to normal replacement cost.

Adoption of LIFO reporting does not require restatement of prior years or a catch-up adjustment under APB 20, because its effect is prospective, not retroactive. However, this could destroy the comparability of prior years' earnings, particularly where the degree of inflation was substantial in the year of change.

The primary advantage of LIFO is tax deferment. Without the tax motivating factor, companies would not consent to a LIFO election. LIFO is not, however, without tax disadvantages for wood products companies. What are some of the unique situations of wood products companies where the election of LIFO could cause tax problems?

Special Tax Problems of Wood Products Companies in Using LIFO

"Capital Gains Trap"

Because of the provisions of section 631(a)\(^3\) of the Internal Revenue Code of 1954, a wood products company may find itself with capital gains income in excess of its taxable income. For example, assume Corporation X has $10,000,000 of capital gains resulting from its section 631(a) valuation. It has an ordinary loss of $1,000,000 from its manufacturing operations. Hence, its taxable income is $9,000,000 and its regular tax at 48 percent is $4,320,000. Its alternative tax, however, would be 30 percent of the entire capital gain of $10,000,000 or $3,000,000,\(^4\) and the company would pay this lesser amount. Consequently, there is no tax benefit available for the ordinary loss of $1,000,000—thus, the "capital gains trap."
If this company elected to use the LIFO method of accounting in a year in which it was in the capital gains trap, it would increase its ordinary loss unless it had alternative sources of ordinary income. The following exhibit compares the effects of electing LIFO versus FIFO in a period of rising timber values.

<table>
<thead>
<tr>
<th></th>
<th>FIFO Cost</th>
<th>LIFO Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
<td>Unit Cost</td>
</tr>
<tr>
<td></td>
<td>(in Feet)</td>
<td>(per MBF)</td>
</tr>
<tr>
<td>Beginning Log Inventory</td>
<td>5,000,000</td>
<td>$275,000</td>
</tr>
<tr>
<td>Logs Cut During Year</td>
<td>10,000,000</td>
<td>700,000</td>
</tr>
<tr>
<td></td>
<td>(4,000,000)</td>
<td>(220,000)</td>
</tr>
<tr>
<td>Sales During Year</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Ending Log Inventory</td>
<td>11,000,000</td>
<td>$755,000</td>
</tr>
</tbody>
</table>

*Cost valuation for tax purposes pursuant to section 631(a).

Exhibit 2

Cost of sales under LIFO is $60,000 greater than under the FIFO method. (In the example above, the ordinary loss wasted would increase from $1,000,000 to $1,060,000.) Obviously, a year in which the company is projecting or has established capital gains in excess of taxable income and has also experienced rising prices is not an appropriate year in which to elect the LIFO method.

**Cyclical Nature of the Industry**

LIFO is advantageous from a tax standpoint in a period of continually rising prices and costs. The nature of the industry is one of fluctuations in timber values. If a company elects LIFO as prices are rising and is subsequently faced with a downswing in timber values, the result could be a reduction in cost of sales (using LIFO as opposed to FIFO). For example, assume the timber values drop in the year following the year of the example in Exhibit 2:
<table>
<thead>
<tr>
<th>Volume in Feet</th>
<th>FIFO Cost</th>
<th>LIFO Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Cost (per MBF)</td>
<td>Total (per MBF)</td>
</tr>
<tr>
<td>1,000,000</td>
<td>$55,000</td>
<td>$55</td>
</tr>
<tr>
<td>4,000,000</td>
<td>280,000</td>
<td>70</td>
</tr>
<tr>
<td>6,000,000</td>
<td>420,000</td>
<td>70</td>
</tr>
<tr>
<td>11,000,000</td>
<td>755,000</td>
<td></td>
</tr>
<tr>
<td>3,000,000</td>
<td>120,000</td>
<td>40*</td>
</tr>
<tr>
<td>(9,000,000)</td>
<td>(560,000)</td>
<td>55</td>
</tr>
<tr>
<td>5,000,000</td>
<td>$260,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$615,000</td>
<td></td>
</tr>
</tbody>
</table>

*Cost valuation for tax purposes pursuant to section 631(a).

Exhibit 3

Use of LIFO could also pose problems deriving from the cyclical nature of the industry with respect to lumber. For example, the cost of producing lumber could be rising at the same time that the sales price of that lumber is increasingly difficult to maintain. A wood products company in need of additional ordinary tax writeoffs and considering the switch to LIFO should evaluate its lumber inventory on a lower of FIFO cost or market basis to compare it with LIFO cost.

Exhibit 4 illustrates the potential for the lower FIFO cost or market on lumber to actually produce higher cost of sales ($460,000) than LIFO cost $450,000). Electing LIFO under these circumstances would result in the "worst of both worlds" (tax and financial) as LIFO cost of $250,000 for lumber inventory must be used for tax purposes, while the inventory of $240,000 reflecting the write-down to market would be used for financial statement purposes.
Inventory Build Up and Future Tax Rates

As a general rule, it is not desirable for a company to elect LIFO in a year in which it has inventory on hand that exceeds its normal quantities and it expects income tax rates to rise in the near term.

For example, if a company's inventory of lumber and other wood products is in excess of normal amounts for any reason—such as a decrease in sales without comparable drop in production by year-end—a LIFO election may produce additional income in subsequent years when the excess inventory is sold and normal quantities are again on hand. Sales of the excess inventory would cut into the original LIFO base, which would be lower than FIFO cost and result in additional income through reduced cost of sales. Such a deferment of income is the basic advantage behind LIFO from a tax standpoint, but if taxes rise in subsequent years, higher taxes overall could result. (However, the present value of such years' tax cost should be compared with the current year's tax savings to realistically evaluate the LIFO election.)
Effect on DISC

Many wood products companies have formed Domestic International Sales Corporations (DISCs) to handle their exports of log and wood products to take advantage of the income deferral provision applicable to DISCs. (One-half of a company's export income plus 10 percent of certain expenses of the DISC can be put into a DISC, and one-half of this amount is eligible for tax deferment on a long-term basis.) Adoption of LIFO would defer tax on 100 percent of the decrease in inventory, 25 percent of which would have been deferred by the DISC provisions without adoption of LIFO.

Summary of Business Considerations in Adopting LIFO

The following are important business considerations to be studied before LIFO is adopted.

For Publicly-Held Companies

1. What are the inventory valuation methods of principal competitors? What will be the impact on the company's posture in the industry if its competitors are not on the LIFO method and, as a result, report more favorable earnings? To what extent will disclosure of a LIFO reserve minimize any adverse impact?

2. What is the depression in earnings from the change to the LIFO method estimated to be over the next several years? To what extent might these reduced earnings be reflected in lower stock prices?
3. What potential stockholder reactions, if any, might arise as a result of adopting LIFO?

4. What potential reaction from the financial community in general might result from:
   - Failure to adopt LIFO during periods of sharply rising prices (such as conservation of assets)?
   - Decision to adopt LIFO (i.e., failure to understand LIFO leading to accusations of managed earnings)?

5. Does the LIFO method improve reporting to stockholders?

For All Companies (closely-held and publicly-held)

1. What is the estimated impact on the company's income tax liabilities for the year of the change to LIFO and the pro forma effect on taxes for the subsequent three to five years? How do projected tax savings compare with the additional administrative cost of the LIFO method?

2. Will LIFO be used for internal evaluation of management performance? If LIFO is adopted for only a portion of total inventory, what effect will that have on comparability of executive performance?

3. What will be the impact on existing bonus and profit-sharing plan benefits as a result of adopting LIFO?

4. Will the adoption of LIFO have a detrimental effect on restrictive covenants in bond indentures or credit restrictions?
Section 631(a) provides an irrevocable election for the taxpayer to treat the cutting of timber owned or with a contractual right to cut as a sale or exchange if the taxpayer has owned the timber or held the contract right for more than six months before the beginning of the year. The gain or loss on the timber cut is measured by the difference between the fair market value of the standing timber at the beginning of the year and the adjusted basis for depletion of the timber.

Minimum tax would be insignificant.

Some economists believe increased energy prices will impose a lower standard of living upon us accompanied by reduced use of and lower prices for timber. Some believe that we are at the beginning of a deep recession with depressed timber and timber product prices.