

# **Understanding LIFO**

(It isn't rocket science)

The LIFO Coalition  
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# What this is about

Various proposals have appeared during the past four years to repeal or substantially alter the LIFO inventory accounting convention.

- LIFO is an accounting method recognized by the Internal Revenue Code since 1939, which in §472 specifically allows use of the method.
- LIFO is used both for financial statement and tax purposes.
- LIFO is the most accurate means of determining inventory asset value and tax liability for certain businesses.
- For businesses adopting it, LIFO provides avoids taxation of phantom profits caused by inflation.
- LIFO repeal would tax the LIFO reserves. The reserves are neither cash nor other assets, nor any permanent device for avoiding tax on purchases of lower-priced goods and materials. LIFO reserves record the amount the business has reinvested in inventories affected by inflation.
- LIFO provides the same tax advantage for some taxpayer as the other common method, FIFO, provides for others. Both methods allow taxpayers to deduct the cost of their most expensive inventory purchases.
- As such, LIFO is not a tax shelter, tax avoidance scheme, or tax-planning gimmick, but rather, textbook accounting.

## “What *are* inventories?”

- Inventories are a device for measuring the financial condition of a business, created for the benefit of shareholders, lenders, the SEC and the IRS. (Plus, the business itself wouldn't know its financial condition without them.)
- Accounting rules require use of inventories if supplies and materials, or a stock of goods are an integral part of a business.  
*This means retailers, wholesalers, distributors, manufacturers, energy companies, newspapers, certain services businesses, and many others, both large and small.*
- Inventories match current costs against current revenues in computing the “Cost of Goods Sold”\*. The lower the inventory value, the higher the CGS, the greater the tax deduction.
- To this effect, inventories quantify the asset value of goods, supplies, and materials at the end of the year. Ending inventories represent how much is left, and at what value in order to go forward.
- And, by matching current costs against current revenues, inventories measure the net income (or loss) of a business, by reference to how much the business *spent* during the year.
- Note that inventories calculate costs; they are NOT about physically tracking *items*.

**\*Cost of Goods Sold = Opening Inventories, plus purchases during the year, minus ending inventories. This is to say, your costs and tax deduction equal what you started with, plus what you purchased, minus what you had left. If you had less left, that means you spent more, hence a bigger deduction.**

## The most common inventory “accounting conventions” or methods are LIFO and FIFO.

- “LIFO” means “Last-in-first-out.” The LIFO convention assumes that the inventories remaining at the end of the accounting year represent the costs of goods, supplies, and materials on hand at the beginning of the year or purchased earlier in the year. *I.e.*, You assume that you sold the new stuff as soon as you purchased it.
- The other most common inventory accounting convention is FIFO, or “First-in-first-out,” which assumes that inventories remaining at the end of the year represent the costs of goods, supplies, and materials purchased later in the year. *I.e.*, you assume that you sold stuff in the order you purchased it, beginning with stuff on hand at the beginning of the year.
- **Note:** In addition to LIFO and FIFO, inventory accounting conventions include a variety of other methods tailored to particular kinds of businesses, for which neither LIFO nor FIFO reflect financial results most accurately.

## Who likes LIFO and who likes FIFO?

- A business is more likely to adopt the LIFO convention if it **anticipates cost inflation\*** in goods, supplies or materials. If such costs are going up, then the LIFO convention is a more accurate means of establishing inventory value at the end of the year and of calculating net income.
- Businesses that adopt FIFO anticipate little inflation in the cost of goods, supplies or materials. Moreover, FIFO most accurately measures inventory value and net income **if costs are declining.**
- LIFO taxpayers are large, small and medium, from all parts of the Country.

\* *LIFO is similar in effect to accelerated depreciation for plant and equipment. Both factor inflation into calculation of net income. Otherwise, the government would get tax from phantom profits, not from true economic income. The phantom element comes from the simple fact that the business must replace inventory assets and depreciable plant and equipment. Both LIFO and accelerated depreciation recognize that a business is a continuing enterprise, regardless of the fact that it measures income annually.*

## **LIFO and FIFO come out the same place, but for different categories of taxpayers.**

Both LIFO and FIFO work in such a way that allows taxpayers adopting either to deduct the costs of the more expensive goods, supplies and materials they purchase during the year. Both kinds of taxpayers get an equivalent benefit.

- Recall that taxpayers adopting LIFO anticipate rising costs of goods, supplies and materials; and that FIFO taxpayers anticipate flat or declining costs for the inventory items they purchase for their businesses. Accounting rules and the Internal Revenue Code accommodate both LIFO and FIFO taxpayers in the same way, so as to reflect most accurately the values of inventories for each.
- That means lower inventory values at year end for both LIFO and FIFO businesses; and, as noted, the lower the inventory value, the higher the “Cost of Goods Sold”, which then deducted from revenues, means lower net income subject to tax.

**Put another way, both FIFO and LIFO assume that less expensive inventory remains on hand for calculation of taxable income:**

**FIFO Taxpayer**

- (1) Inventory prices **decreasing**;
- (2) FIFO method assumes that business sold the more expensive **(old)** stuff, leaving the less expensive **(new)** stuff;
- (3) That means lower inventory value than if the **old** stuff were included;
- (4) That means lower ending inventories;
- (5) That means less reduction in Cost of Goods Sold;
- (6) That makes Cost of Goods Sold higher;
- (7) Therefore, a **larger tax deduction and less tax.**

**LIFO Taxpayer**

- (1) Inventory prices **increasing**;
- (2) LIFO method assumes that business sold the more expensive **(new)** stuff, leaving the less expensive **(old)** stuff;
- (3) That means lower inventory value than if **new** stuff were included;
- (4) That means lower ending inventories;
- (1) That means less reduction in Cost of Goods Sold;
- (2) That makes Cost of Goods Sold higher;
- (3) Therefore, a **larger tax deduction and less tax.**

## A pertinent question.

The preceding slide shows how the rules work: You chose LIFO if your costs are increasing, which means lower inventory value at year-end. You chose FIFO if your costs are declining, which means lower inventory value at year-end. Each method produces financial statements that most accurately reflect the income of businesses in each situation. No gimmicks, no loopholes. Just sound accounting.

**So, where's the policy justification for repealing LIFO, causing those taxpayers to lose the advantage retained by the FIFO taxpayers?**

Plus, if LIFO is repealed, it will provide a windfall amount of tax revenue to the government at a time the LIFO businesses are:

- (1) struggling to maintain jobs and business operations during a recession\*, and,
- (2) seeing a new round of inflation on the horizon from increased budget deficits?

*\*Ditto, the FIFO taxpayers, of course.*

## What is the “LIFO Reserve” and what does it have to do with all this?

- A “LIFO reserve,” is actually misnomer. It’s merely an accounting entry that records the fact that the business would have additional income if it were to terminate its election to use the LIFO method. It isn’t a “reserve” in the way accounting rules typically use the term.
- The term “reserve” implies that the business has somehow set aside assets. But for the LIFO reserve, there is no pot of money other assets set aside with which to pay tax on the additional income if the business should terminate its LIFO election.
- **Rather, the LIFO reserve records the fact that a business “counted backward” in establishing ending inventories, taking into account the cost effect of inflation, matching costs to revenues, and thereby more accurately reflecting income. But, as a technical matter, some of the lower costs from earlier in the year remain uncounted, but liable to be counted in the future.**
- There’s no reserve for a FIFO taxpayer because the inventory costs are counted in chronological order. You count all the inventory costs for the year, beginning with opening inventory and then count the costs of purchases in order made. What you haven’t counted (used up) at the end of the year is ending inventory, which carries over as “opening inventory” for the new year. The FIFO business matches current inventory costs against current revenues without the backward counting to deal with inflation that is the purpose of LIFO. With FIFO, there are no costs not accounted for and no need for a reserve.

## **Put another way:**

**The LIFO taxpayer renews its inventories of goods, supplies and materials through purchases at higher costs, reflecting inflation. Instead of squirreling away money, the taxpayer has reinvested in the business. The LIFO reserve reflects how much.**

## **To take this a (necessary) step further:**

A LIFO reserve isn't for permanently removing those lower-cost inventory items from potential tax liabilities of the business. The lower-cost items will eventually get counted and be subject to tax, if:

- (1) The costs of goods, supplies and materials go down substantially.***
- (2) The business winds up and liquidates, selling all assets, to include inventory.***
- (3) The business changes its accounting convention from LIFO to FIFO\****

***\*Or under LIFO repeal, the government changes it for you!***

## How and why is the LIFO reserve counted?

***The costs of goods, supplies and materials go down substantially:*** In this case, the year-end inventory value increases, and the Cost of Goods sold goes down accordingly. Put another way, you are calculating net income and tax liability by taking into account the lower-cost stuff you purchased in prior years. In this event, the business “liquidates a layer” of the LIFO reserve, reflecting the decrease in costs for the current year. This is not uncommon. (BTW: The LIFO taxpayer isn’t exactly unhappy that its costs have gone down.)

***The business winds and liquidates, selling all assets, to include the inventory:*** It’s like the above, except that the business liquidates all the LIFO layers simultaneously. Thus, for a business on LIFO for a number of years, the final tax return takes into account those lower-priced inventory costs that LIFO held in abeyance through the “backward counting” since the business adopted the LIFO method.

***The business changes its accounting convention from LIFO to FIFO – to include involuntarily change under LIFO repeal:*** It’s as though the business sold the assets, as above, except actually, there is no sale and no sales proceeds. The LIFO reserve, which is to say all those layers, comes into income for the year that you go off LIFO. This can be a very big number, and . . .

**it is tax not covered by sales revenues – thus, tax but no dollars!**

**To expand upon the point: Under LIFO repeal, it's as though you sold all your assets, got none of the money but had to pay tax as though you did.**

- Repeal of LIFO would produce effects as though you sold the assets for tax purposes, but nobody gave you any money for them. Repeal triggers “recapture” of the LIFO tax reserve.\*
- Something happens that doesn't' very often with the income tax: Tax liability, but no sales revenue to cover it.
- LIFO repeal would provide windfall revenue to the government – and taxpayers would have problems coming up with the cash to pay the tax.

\*“Well,” one might ask, “For LIFO taxpayers isn't this their own fault? The reserve on their books let them know about the issue; didn't they dismiss the risk?” Any argument to this effect fails to take account of the fact that LIFO is statutory provision and structural element of U.S. tax law, in place for seventy years, after debate by the Congress in 1939. Businesses have been established, have continued and have expanded with reliance upon LIFO as a means of ameliorating the effects of inflation, and with an altogether reasonable assumption that any such structural element of the law would continue. Reliance upon LIFO is no less a reasonable assumption than continuing availability of depreciation of plant and equipment or deduction of wage expense.

## Coming up with the money isn't all that easy.

Businesses don't collect dollar bills; they *use* money to operate and expand the business. **(And expanding the business in spite of inflation is why LIFO exists in the first place.)** Because, businesses don't have a lot of cash lying around, they'd need to raise it to pay the tax liability from LIFO repeal. How?

- Borrow it (or try to) -- not so easy if the LIFO reserve is very large in comparison to other things on the balance sheet – like retained earnings/shareholders' equity or market capitalization. Difficult enough for publicly-traded businesses.
- And if closely-held, the business would go to its banker, and ask for a loan to pay tax that may be greater than net worth. The banker might prove “hesitant” to say the least. (Plus, changing the accounting method, albeit involuntarily, may already have triggered loan covenants.)
- In any event, a business may have no choices but to sell off assets, maybe a lot of them. And with the sale goes the cushion against recession, forfeiture of future revenues, market share, expansion plans, and lots of other things -- to include jobs and the contribution the business makes to the economy.

## So, where does this leave the (ex) LIFO business?

- With a tax bill that is essentially an assessment against the assets of the business (not against income), an assessment that well may exceed the capacity of the business to raise the cash in order to pay the tax.
- Assuming the business survives the tax, then it will have higher tax liability in subsequent years, also assuming (as is reasonable) that inflation in inventory costs continue.
- In many cases, especially with small and medium-sized businesses, the business is forced to sell off assets and liquidate (for the benefit of the federal\* fisc).
- \*And don't forget *state* business income tax.

## In summary

- LIFO is an accounting method, long in use, long recognized by the tax Code, long regarded as the most accurate way of measuring financial condition and net income for the kinds of businesses that adopt it. It isn't a gimmick, corporate loophole or anything "bad".
- LIFO taxpayers get the same benefit of deducting their higher-cost inventory as do FIFO taxpayers, which all the more shows that the LIFO method is fair to the government, and also shows that repeal of LIFO would be grossly unfair as a between the two kinds of taxpayers – add to it that inflation is likely to increase, so the former LIFO taxpayers are all the more disadvantaged.
- LIFO taxpayers include a very large, very diverse cross section of the economy, from every part of the Country, including both the very large as well as medium-sized and small, closely-held businesses. Nobody should think this won't hurt.
- Repeal would mean that LIFO taxpayers would have to find money to pay the tax by borrowing (if they actually can, in which case they may have to hock the business) or by selling off assets or selling the whole thing, which isn't a happy outcome for anybody, especially in this economy.
- There is no adequate way to split the baby on LIFO repeal: Spreading out the recovery period for recapture of the LIFO reserves is still tax without revenues, or "death by ten cuts"; as a practical matter (and maybe as a legal one) LIFO repeal that is limited to one or more groups won't work.

## Appendix 1

### LIFO and LIFO Reserves

Proposals to eliminate LIFO would raise business taxes in two ways. First, a business would see higher future taxes as they are unable to use LIFO to protect themselves from rising inventory costs. Second, they would be required to pay taxes on their existing "LIFO Reserves".

This second tax is especially troubling for companies that have used LIFO for a long period of time. To understand how the combination of time and inflation can create a large LIFO reserve, consider the following example. An S corporation maintains a consistent inventory of ten units. Every year, the business uses ten units for production and buys ten units to replace them. Units cost \$1 in year one and inflation is 3 percent per year.

**Inventory Purchases**

<u>Year</u>	<u>Number</u>	<u>Cost per Unit</u>	<u>Total Cost</u>
1	10	\$ 1.00	\$ 10.00
2	10	\$ 1.03	\$ 10.30
3	10	\$ 1.06	\$ 10.61
4	10	\$ 1.09	\$ 10.93
5	10	\$ 1.13	\$ 11.26
6	10	\$ 1.16	\$ 11.59
7	10	\$ 1.19	\$ 11.94
8	10	\$ 1.23	\$ 12.30
9	10	\$ 1.27	\$ 12.67
10	10	\$ 1.30	\$ 13.05

**LIFO Reserve**

<u>Year</u>	<u>Reserve</u>
1	0
2	\$ 0.30
3	\$ 0.61
4	\$ 0.93
5	\$ 1.26
6	\$ 1.59
7	\$ 1.94
8	\$ 2.30
9	\$ 2.67
10	\$ 3.05

The following conclusions are made clear from the example:

- In an inflationary environment, LIFO enables the business to match up its current inventory costs with its current income, producing a more accurate picture of its annual income.
- Even mild inflation results in the LIFO reserve exceeding 20 percent the businesses' inventory value in less than 10 years.
- The longer the business uses LIFO, the larger its reserves will be relative to its inventory. In year 25, the LIFO reserve is more than 50 percent of the business' inventory value -- again, under an assumption of 3 percent inflation.
- If LIFO were repealed, these reserves would be taxed at rates up to 35 percent, even though the reserves reflect nothing more than the impact of economic inflation on the value of the business' inventory over ten years.
- It is important to note that LIFO reserves are an accounting entry. They do not reflect real assets and, as this example shows, they can and do reflect illusory gains caused by economic inflation. Taxing businesses on the size of their LIFO reserves is both burdensome and unfair.

## Appendix 2

### Examples of LIFO Computation

- *Example One:* Assume that Company A must maintain \$2 million of inventory in order to operate its business. At the beginning of a taxable year, Company A acquires \$2 million worth of inventory. Company A sells the inventory, and at the end of the taxable year, pays \$2.1 million to acquire an equivalent quantity of inventory. Under the FIFO method, the extra \$100,000 cost of acquiring inventory would be included in taxable income in the current taxable year. Under the LIFO method, the extra cost of acquiring replacement inventory would not be included in taxable income in the current year.
- *Example Two:* Assume that Company B purchases 1,000 widgets at a cost of \$10 per unit and resells them for \$15 per unit. Assume that after other expenses, Company B earns a profit of 15 percent, or \$1.50 per unit. Further assume that the widgets increase in cost to \$11 per unit. In order to stay in business at the same level of operations, Company B must now purchase 1,000 widgets at \$11 per unit. If Company B is forced to use the FIFO inventory method, it would show a profit of \$1.50 per unit and pay tax on that \$1.50 per unit of profit. In that situation, where would Company B get the funds to pay for the \$1 per unit increase in the price of widgets in order to replace them? The \$1.50 per unit profit measured on a FIFO basis is a phantom profit if Company B must reinvest \$1 per unit of that profit to simply stay in business at the same level of operations. The LIFO method is intended to allow Company B to treat the \$11 per unit replacement cost of the widgets as its cost of goods sold in the initial sale, thereby giving a truer picture of the real economic profit on the transaction, which is \$.50 per unit instead of \$1.50 per unit.

These examples demonstrate how the FIFO method imposes taxes on inflationary (“phantom”) gains associated with the taxpayer’s investment in inventory, while the LIFO method is fairer because inflationary gains associated with inventory are taxed only as the taxpayer reduces its inventory levels. Under the FIFO method, during an inflationary period where the taxpayer’s cost of acquiring or producing inventory is increasing, the aggregate difference between the replacement cost of the taxpayer’s inventory and the original acquisition cost of the inventory is taxed entirely in the current taxable year. In contrast, under the LIFO method, the difference between the replacement cost of the taxpayer’s inventory and the acquisition cost of the inventory is taxed when the taxpayer liquidates its investment in inventory.