



## LIFO Inventory Method Authoritative References and Principles

### 1) Tax Foundation Fiscal Fact No. 501 - The Tax Treatment of Inventories and the Economic and Budgetary Impact of LIFO Repeal: Published 02/09/2016

#### Key Findings:

- Under current law, businesses are not allowed to deduct inventory costs until the inventory is sold.
- There are three general methods by which companies may choose to calculate their inventory costs: First-in, First-out (FIFO); Last-in, First-out (LIFO); and Weighted-Average Cost.
- Requiring businesses to delay deductions of business expenses, such as inventories, understates the true costs of the expenses, overstates businesses' income, and leads to a higher tax burden. When prices are rising, LIFO moderates this over-taxation by providing faster write-offs than the other methods, closer to true costs.
- Lawmakers have recently targeted LIFO for repeal, either as a means to raise revenue or as a part of broader tax reform.
- According to the Tax Foundation's Taxes and Growth Model, the elimination of Last-in, First-out accounting for write-offs of future inventory would Reduce GDP by \$11.6 billion per year and end up reducing federal revenue by \$518 million each year.
- Unless a special provision were made, LIFO repeal would also retroactively tax a company's "LIFO reserve." This additional tax could hit cash-strapped companies particularly hard and could result in 50,300 additional job losses in the short run.<sup>1</sup>

#### Delaying Deductions Raises the Cost of Capital, but LIFO Partially Mitigates this Issue

The fact that businesses have to delay the deduction for certain business costs is one of the biggest deficiencies in our current tax code, one that discourages capital formation and reduces GDP.

Delaying cost recovery deductions in the tax code results in the overstatement of business costs, due to inflation and the time value of money. A \$10 deduction this year is worth several percent more, in present-value and inflation-adjusted terms, than a \$10 deduction next year, and is much more valuable than a \$10 deduction a decade from now.

Under current law, companies that purchase capital investments lose the value of the deductions due to their delay. Suppose a business purchases a \$1000 machine and is required to deduct it over five years (Table 1). The sum of the nominal deductions will be \$1000, but the sum of each year's present-value deductions will only equal \$809 (at a 5 percent discount rate and 2.5 percent inflation). Although the business spent \$1000 up front on the machine, it only ended up being able to deduct 80.9 percent of the value of its true cost.

**Table 1.**  
**Straight-Line Depreciation Deductions for a Five-Year Asset that Costs \$1000**

Year	0	1	2	3	4	5	Total
Capital outlay	\$1,000	\$0	\$0	\$0	\$0	\$0	\$1,000
Nominal value of deduction	\$0.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$1,000
Present value of deduction	\$0.00	\$186.05	\$173.07	\$160.99	\$149.76	\$139.31	\$809

Note: These calculations assume a 5 percent discount rate, 2.5 percent inflation, and straight-line depreciation.

<sup>1</sup> Pomerleau, K. (2016). The Tax Treatment of Inventories and the Economic and Budgetary Impact of LIFO Repeal. Tax Foundation, Fiscal Fact #501.



This same intuition holds for inventories. Suppose that instead of purchasing a \$1000 machine, the business purchases five units of inventory at \$200 apiece (Table 2). It then sells and replaces one unit of inventory a year and uses the FIFO method. Each year, the business is able to deduct the cost of each unit sold at its nominal purchase price of \$200 even though its replacement cost is slightly more due to inflation. By the end of the five-year period, the original \$1000 of inventory has been sold and the business has been able to deduct \$1000 in nominal terms. However, due to inflation and the time value of money, the present value of the deductions was only \$809, which would mean the real value of the business's taxable income would be \$191 higher, and its tax burden about \$67 higher (at a 35 percent tax rate). Another way to look at the problem is to note that the business had to pay \$1,078 to replace the \$1,000 of inventory.

LIFO partially offsets the delay in deductions because it allows for larger nominal deductions as businesses replace inventory, assuming that prices are rising. If the same company uses LIFO, it would deduct the cost of the replacement (last-in) inventory against its taxable income each year. In other words, the company's nominal deductions would be adjusted for inflation. As a result, the company's present-value deductions at the end of the five years is higher under LIFO (\$869) than it is under FIFO (\$809). This means that deductions under LIFO better reflect the real cost of inventories when prices are rising.

Table 2.

## LIFO Provides a Better Present-Value Cost Recovery than FIFO

Year	0	1	2	3	4	5	Total
<b>First-in, First-out</b>							
Inventory outlay (5 @ \$200)	\$1,000						\$1,000
Replacement inventory	\$0.00	\$205.00	\$210.13	\$215.38	\$220.76	\$226.28	\$1,078
Nominal value of deduction	\$0.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$1,000
Present value of deduction	\$0.00	\$186.05	\$173.07	\$160.99	\$149.76	\$139.31	\$809
<b>Last-in, First-out</b>							
Inventory outlay (5 @ \$200)	\$1,000						\$1,000
Replacement inventory	\$0.00	\$205.00	\$210.13	\$215.38	\$220.76	\$226.28	\$1,078
Nominal value of deduction	\$0.00	\$205.00	\$210.13	\$215.38	\$220.76	\$226.28	\$1,078
Present value of deduction	\$0.00	\$190.70	\$181.83	\$173.37	\$165.31	\$157.62	\$869

Note: These calculations assume a 5 percent discount rate, 2.5 percent inflation, and the replacement inventory's price increases at the same rate as inflation each year.

## LIFO Repeal Would Increase the Cost of Capital and Reduce the Long-Run Size of the Economy

Since LIFO provides companies a larger present-value deduction for inventory expenses during times of rising prices, its repeal would increase the cost of capital. As a result, businesses would invest less, which would result in a smaller economy. The smaller economy would result in 7,700 fewer full-time jobs and a \$53.3 billion smaller capital stock in the long run.

Table 3.

## Long-Term Effects of LIFO Repeal on Federal Revenue and GDP

GDP	-\$11.66 Billion
Annual Federal Revenue (Static)	\$1.82 Billion
Federal Revenue (Dynamic)	-\$518 Million
Capital Stock	-\$53.3 Billion
Full-Time Jobs	-7,700

Source: Tax Foundation Taxes and Growth Model, October 2015.



## Conclusion

The U.S. tax code currently allows businesses to choose the method by which they account for inventories. Repealing Last-in, First-out accounting moves the tax code further from neutrality and raises the cost of capital. As a result, it would reduce long-run GDP and jobs. LIFO repeal would fly in the face of one of the goals of tax reform, which is to allow businesses to fully and immediately expense any investments it makes, including inventories. Lawmakers who want to raise revenue in order to lower marginal tax rates should be careful not to distort and exaggerate taxable income in the process, and should focus on more efficient sources of revenue.

### 2) American Institute of Accountants Federal Taxation Committee Report Regarding the Proposed Revenue Act of 1938 Submitted to Senate Finance Committee - 09/01/1938

#### What is good accounting practice and what do accountants think on the subject?

The weight of accounting authority sanctions the use of the LIFO method in the industries to which it is appropriate. It is the consensus of opinion that in these industries it fairly reflects income. This is amply evidenced by the data submitted at the hearings before the Senate committee on finance in connection with the revenue bill of 1938. It is further evidenced by the fact that the method is widely used in these industries in keeping the corporate books and records, in preparing income and financial statements to stockholders, in reports to the New York Stock Exchange Commission, and for all other corporate purposes.<sup>2</sup>

### 3) Senate Finance Committee Hearing Statement by Maurice Peloubet, CPA Pogson, Peloubet & Co. Regarding the Proposed Revenue Act of 1938 - 03/19/1938

There can be no doubt that the last-in, first-out method is an approved accounting practice. Statements filed on this basis have been accepted by the Securities and Exchange Commission and the special committee on inventories of the American Institute of Accountants approved this method in a report dated May 7, 1936. In A Statement of Accounting Principles prepared by Professor Sanders of the Harvard School of Business, Professor Hatfield of the University of California and Professor Moore of the Yale University School of Law, the authors expressed their approval of last in, first out or similar methods. This study was prepared under the auspices of the Haskins & Sells Foundation, an organization formed for research into accounting matters, and was published by the American Institute of Accountants. The last-in, first-out method has been devised to eliminate the arbitrary feature of the normal-stock method and to retain at the same time those features of the normal-stock method which are based on correct theory and which correspond to actual business practices and operations.<sup>3</sup>

### 4) American Institute of Accountants Federal Taxation Committee Memorandum Regarding the Proposed Revenue Act of 1938 Filed with the Senate Finance Committee - 03/18/1938

During periods of rising prices, the first-in, first-out method of pricing inventories results in taxing business income that is in part necessarily absorbed in increased inventories and working capital... the last-In, first-out or replacement methods clearly fall within approved standard methods of accounting and are best suited to the needs of certain businesses. They should, accordingly, be granted recognition (Ibid, pg. 176).

2 Stempf, V. H., Clark, W. L., Councilor, J. A., Turner, C. L., & al, e. (1938). The last-in, first-out inventory method. *Journal of Accountancy* (Pre-1986), 66(000005), 310-313.

3 United States Congress. Senate. Committee On Finance. (1938) Revenue act of 1938: hearings before the Committee on Finance, United States Senate, Seventy-fifth Congress, third session, on H.R. 9682, an act to provide revenue, equalize taxation and for other purposes. March 17, 18, 19, 21, and 22, 1938. Washington: U.S. Govt. Print Off., 143-67, 175-6