

Why LIFO Repeal Is Not the Way to Go

by Alan D. Viard

Alan D. Viard of the American Enterprise Institute for Public Policy Research responds to a recent special report advocating repeal of last-in, first-out inventory accounting.

Date: Nov. 7, 2006

Full Text Published by **taxanalysts**[®]

Why LIFO Repeal Is Not the Way to Go

Alan D. Viard is a resident scholar at the American Enterprise Institute for Public Policy Research.

Copyright 2006 Alan D. Viard. All rights reserved.

* * * * *

In a recent article, Edward D. Kleinbard, George A. Plesko, and Corey M. Goodman argue that last-in, first-out inventory accounting gives an undue tax preference to inventories and should be eliminated as a permissible tax accounting method.¹ Economic analysis reveals, however, that LIFO promotes tax neutrality by taxing inventories at roughly the same effective rates as other tangible business capital.

Unfortunately, the authors fail to recognize that inventories, no less than plant or equipment, are productive capital investments. As a result, they are untroubled by the prospect that, in the absence of LIFO, inventories would be taxed more heavily than plant and equipment, which benefit from accelerated depreciation. In their words, "Congress rationally could have decided to encourage the investment in productive plant or equipment [through accelerated depreciation], to increase the productivity of American businesses and the collective wealth generated by the economy. As practiced, however, LIFO inventory accounting appears to encourage, through a tax subsidy, the systematic accumulation of inefficient levels of inventory."²

That statement reflects a presupposition that plant and equipment are productive and that inventories are not. The authors could, equally well, have embraced the opposite presupposition and said, "Congress rationally could have decided to encourage the investment in productive inventories [through LIFO], to increase the productivity of American businesses and the collective wealth generated by the economy. As practiced, however, accelerated depreciation appears to encourage, through a tax subsidy, the systematic accumulation of inefficient levels of plant and equipment."

The second statement would make no less, and no more, sense than the first. Inventories, plant, and equipment are different types of capital. Each of them requires an investment by firms and each generates a return in the form of increased revenue or cost reductions. Firms would not hold any type of capital that was unproductive. Firms hold inventories, as they hold plant and equipment, to make their operations more profitable.

To be sure, firms minimize their inventory holdings, in the sense that they avoid holding inventories that would not contribute to profitability. But, they minimize their plant and equipment holdings in precisely the same sense. Profit-maximizing firms impartially shun excess capacity, excess equipment, and excess inventories.

If there were no taxes, firms generally would choose an efficient amount of capital and would also allocate it efficiently between inventories and other assets. Economic efficiency requires that the tax system distort those decisions as little as possible. Ideally, the tax rate on the returns to capital should be zero, to ensure an efficient level of capital investment.³ If the returns to capital are taxed at a positive rate, however, all types of capital should face the same effective tax rate. Although the positive tax rate results in an inefficiently small capital stock, the rate uniformity causes that stock to be allocated efficiently among the various types of capital.

If different types of capital are taxed at different effective tax rates, the allocation of capital is distorted and output is reduced. If inventories face a lower effective tax rate than other forms of capital, firms are induced to hold inventories, even when other assets would yield higher before-tax returns. Conversely, if inventories face a higher effective tax rate than other forms of capital, firms are induced to hold other assets, even when inventories would yield higher before-tax returns.

The relevant question, therefore, is whether LIFO promotes or impedes tax neutrality. In other words, does LIFO yield an effective tax rate on inventories higher or lower than, or the same as, the effective tax rates on other types of capital? Before looking at the economic evidence that answers this question, it is useful to address a few related points raised by the authors.

The authors correctly note that the use of first-in, first-out accounting would (approximately) tax the full nominal return from inventories and that LIFO allows part of the nominal return to escape taxation.⁴ Taxing the full nominal return on inventories would result in tax neutrality, however, only if other types of capital were taxed on their full nominal return. That is clearly not the case. Although depreciation allowances for plant and equipment are based on nominal historical costs, accelerated depreciation counteracts the taxation of inflationary gains. Moreover, most intangible capital expenditures, such as advertising, are treated still more generously, as they are expensed rather than depreciated. Similarly, the imputed rental on owner-occupied housing is exempt from income tax.

In view of the tax relief given to other types of capital, it is difficult to understand the authors' complaint that LIFO is an "underinclusive" inflation-immunization program that applies to "only one class of assets," "an ad hoc and selective solution," and an "ersatz basis indexation scheme available only to some taxpayers in some businesses."⁵ To be sure, the tax provisions affecting inventories differ in form from the tax provisions affecting other capital and they may have been adopted by Congress for a different subjective purpose. But, those differences shed no light on the relevant question: Are inventories taxed at higher or lower rates than other types of capital?

The authors seem to suggest that LIFO is inherently more generous than accelerated depreciation because LIFO offers permanent or indefinite deferral of tax liability while accelerated depreciation offers only temporary deferral.⁶ But, that distinction also does not resolve the relevant question. The present-value tax reduction provided by a deferral depends

on its size as well as its duration. At a 5 percent annual interest rate, for example, a permanent \$5 tax deferral and a one-year \$100 tax deferral have the same economic effect because they both reduce the present value of tax by \$5.

Any temporary deferral can be replaced by a (smaller) permanent deferral, and any permanent deferral can be replaced by a (larger) temporary deferral, with no change in the present-value tax reduction and hence no change in real economic effects. Indeed, it is well established that expensing an investment offers the same present-value tax savings as exempting its returns, even though expensing is a temporary tax deferral and exemption is a permanent tax deferral.

Again, the relevant question is whether inventories are taxed more or less heavily than other types of capital. That question cannot be answered by looking at the form of the tax provisions affecting each type of capital or at why they were adopted or at the duration of any tax deferrals they offer.⁷ It can be answered only by comparing effective tax rates, which measure the ratio of the present value of taxes to the present value of before-tax returns. The effective tax rate incorporates the effects of all relevant tax provisions and reflects both the size and duration of any tax deferrals.

In a 1993 study Don Fullerton and Marios Karayannis computed effective tax rates under 1990 law, which generally resembled current law in terms of the relative treatment of different types of capital.⁸ Because Fullerton and Karayannis assumed that all firms use LIFO accounting, their results facilitate an evaluation of that method. At a 5 percent inflation rate, they found that in the corporate sector the total effective tax rates (including federal, state, and local corporate, personal, and property taxes) were 49 percent for inventories, 50 percent for buildings, and 46 percent for machinery. The effective tax rate on owner-occupied housing was 26 percent.⁹ Although Fullerton and Karayannis did not compute the effective tax rate for corporate investment in intangible capital, their assumptions imply that the rate would have been less than 30 percent.

While the exact numbers depend on Fullerton's and Karayannis's specific assumptions, the qualitative results are robust. The bottom line is that, even under LIFO, inventories receive no better treatment than buildings and machinery. The benefits that inventories receive from LIFO are matched by the benefits that buildings and machinery receive from accelerated depreciation. Moreover, corporate investments in all three types of tangible capital are taxed more heavily than corporate investment in intangible capital, which is expensed, and owner-occupied housing, which is exempt from income tax.

Those tax-rate computations demonstrate that LIFO does not give inventories preferential treatment. That evidence refutes the authors' contention that LIFO causes a "significant source of economic distortion" because it "privileges investment in some asset classes over others" and that LIFO repeal is merely the elimination of a "special-interest tax break" and a "loss of preferential treatment."¹⁰ It similarly contradicts their claims that "LIFO functions as just another preferential tax break available only to some taxpayers" and that "by removing a tax subsidy for one form of capital investment, LIFO repeal will lead to a more efficient allocation of capital across the economy."¹¹ On the contrary, LIFO repeal would lead to a less efficient allocation by taxing inventories more heavily than other capital.

The problem with current law is not the availability of LIFO, but the fact that many firms' inventories remain subject to FIFO and are therefore taxed more heavily than other types of

capital.¹² One step toward correcting that problem would be to repeal the LIFO book-tax conformity rule in section 472(c) and reg. section 1.472-2(e). That rule induces some firms to use FIFO for tax accounting and thereby subject their inventories to inefficiently high taxation because they wish to use FIFO for financial accounting. Conversely, it induces other firms to use LIFO for financial accounting, when FIFO might better serve that function, solely to avoid inefficiently high inventory taxation. The LIFO conformity rule makes no more sense than would an accelerated-depreciation conformity rule or a section 179 conformity rule.

This analysis indicates that LIFO generally advances economic efficiency by preventing inventory from being taxed more heavily than other types of capital. It is true, though, that LIFO may not be the best way to achieve that goal.

The authors identify a specific shortcoming of LIFO. The protection against excessive inventory taxation provided by LIFO is effectively conditioned on the firm's inventories not declining, since any decline triggers the liquidation of a LIFO layer containing goods attributed to past low-cost purchases. The authors do not indicate how prevalent that problem is; presumably, it is less common when firms use dollar-value LIFO with broad inventory pools. The authors demonstrate that some firms have inefficiently added to inventories at year-end to avoid LIFO liquidation. Although the application of antiabuse doctrines has presumably reduced those practices, it has surely not eliminated them.¹³

But, even if LIFO is an imperfect method of preventing excessive inventory taxation, it should not be scrapped without an acceptable replacement. Stated simply, a method that occasionally induces firms to hold too much inventory to avoid LIFO liquidation is much less distortionary than a method that prompts all firms to hold too little inventory by systematically taxing inventories more heavily than other capital.¹⁴

Nonetheless, a method that protected against excessive taxation without requiring maintenance of inventory levels would clearly be preferable. Indexed FIFO might fill that role. Similarly, indexed depreciation over economic lifetimes would probably be better than accelerated depreciation. Those policies could be accompanied by indexation of interest income and expense and capital gains.

The best reform, however, would be a move to consumption taxation. Under a VAT, a "flat tax," or a Bradford X tax, all business costs would be expensed, including expenditures to acquire inventory, plant, and equipment and intangible capital expenditures. Setting aside state and local taxes, all business capital would face an effective tax rate of zero, ensuring neutrality within the business sector, neutrality between business capital and owner-occupied housing, and neutrality between investment and consumption. Moreover, the complications of capitalization, depreciation, amortization, and inventory accounting would be eliminated.

Until such sweeping reforms are adopted, we should at least ensure that no type of capital is singled out for heavier taxation simply because some observers view it as unproductive. We should strive to keep our imperfect tax system as neutral as possible, allowing the allocation of capital to be determined by market forces.

FOOTNOTES

¹ Edward D. Kleinbard, George A. Plesko, and Corey M. Goodman, "Is It Time to Liquidate

LIFO?" *Tax Notes*, Oct. 16, 2006, p. 237, *Doc 2006-20617 [PDF]*, 2006 TNT 200-29 .

² *Id.* at 239.

³ A long-standing, but fallacious, argument asserts that the returns to capital should be taxed at the same rate as labor income. That argument fails to recognize that capital is produced by labor. With a zero tax rate on the returns to capital, capital investment and consumption are taxed uniformly because the labor tax applies equally to the production of investment and consumption goods. The choice between investment and consumption is therefore undistorted.

⁴ Kleinbard et al., *supra* note 1, at p. 241.

⁵ Kleinbard et al., *supra* note 1, at 241-242.

⁶ *Id.* at 240-241.

⁷ The relevant question also cannot be answered by looking at whether the various provisions are consistent with the realization principle, a topic to which the authors devote some attention. *Id.* at 241.

⁸ Don Fullerton and Marios Karayannis, "United States," in *Tax Reform and the Cost of Capital: An International Comparison*, eds. Dale W. Jorgenson and Ralph Landau (Washington: Brookings Institution, 1993), pp. 333-367.

⁹ Fullerton and Karayannis, Table 10-13, p. 360.

¹⁰ Kleinbard et al., *supra* note 1, at 252.

¹¹ *Id.* at 241.

¹² Patric H. Hendershott, "Tax Changes and Capital Accumulation in the 1980s," in *The Effects of Taxation Upon Capital Accumulation*, ed. Martin Feldstein (Chicago: University of Chicago Press, 1987), pp. 259-290. Hendershott found, under the assumption that 70 percent of inventories are subject to FIFO, that inventories were the most heavily taxed type of capital under pre- 1986 law and that they therefore made up an inefficiently small fraction of the capital stock.

¹³ Kleinbard et al., *supra* note 1, at 246-247.

¹⁴ On a less convincing note, the authors also fault LIFO for forgiving tax on inventory gains that are due to increases in the relative price of the firm's goods, Kleinbard et al., *supra* note 1, at 241. But, because LIFO also denies a deduction for inventory losses that are due to reductions in the relative price of those goods, little distortion is likely to result, at least when there are no trends in relative prices. The tax treatment of plant and equipment has a similar shortcoming because depreciation schedules do not reflect relative price changes for those assets.