TESTIMONY OF
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Chairman Grassley, Ranking Member Baucus, members of the Committee, thank you for inviting me to testify at today's hearing on current issues in corporate taxation. My testimony will primarily deal with the last-in, first-out (LIFO) inventory method, but I will also briefly address two additional issues: the possibility of increased conformity in financial and tax accounting, and the effectiveness of current disclosures of tax information by publicly-traded corporations.

Inventory accounting

An important thing to keep in mind about inventory accounting is that it may have little or no relation to the underlying physical flow of goods. Inventory accounting methods are *cost-flow assumptions,* and, with some exceptions, will have no direct relation to the underlying management of physical inventory. Rather, the purpose of an inventory accounting method is to provide an appropriate measure of costs to match to a period's revenues in order to determine profit.

Consider three basic inventory accounting methods typically described in an accounting textbook: specific identification, first-in first-out (FIFO), and last-in first-out (LIFO). Under specific identification, each item in inventory has a cost associated with it, and when a particular item is sold, the firm reports the costs associated with the purchase or manufacture of that

particular item. This method seems intuitive because it generates cost-flows that match physical flows, but this method creates other problems. First, depending on the number of items a business carries, record keeping could be quite burdensome. Second, if identical items in inventory were purchased at different times and at different costs, management can manipulate the amount of profit on each sale by choosing a higher or lower priced inventory item to deliver to the customer.

The FIFO method eliminates the ability to pick and choose costs associated with each sale; items are assumed to be sold in the order in which they were purchased. In other words, the oldest item in inventory is always the next one sold. While this description implies that the oldest items *physically* in inventory are sold first, the FIFO method merely allocates the oldest inventory *costs* to the item sold. Businesses with perishable inventories may also physically manage items on a FIFO basis (for example, placing milk with the earliest expiration date in the front), but for businesses with nonperishable inventories (e.g., a gravel pile) the order of physical delivery is irrelevant.

LIFO recognizes costs in the reverse order of FIFO: the most recent purchases are assumed to be the items sold first. If prices are rising over time, firms using LIFO will report higher cost of sales, and correspondingly lower profit, relative to firms using FIFO.

The difference in the amounts of income reported using FIFO or LIFO is offset in the value of inventory a business reports on its balance sheet. Since a firm that uses FIFO expenses its oldest costs first, the value of inventory at the end of the year will be closer to current replacement cost. By contrast, since LIFO assumes that the most recent purchases are sold first, the inventory on a firm's books will be understated (assuming inflation) compared to its current replacement cost. To provide better information about the value of LIFO inventories to

shareholders, financial statements provide supplemental disclosures on the difference between the LIFO cost of inventory as reported on the balance sheet and what its value would be under FIFO or current cost. This difference is referred to as the *LIFO reserve* or *inventory valuation allowance*. The value of the LIFO reserve represents the cumulative amount of additional costs that have been expensed by the firm because of the choice of LIFO over its alternatives.

To maximize reported profit, the choice of an inventory method seems rather straightforward: choose the method that allows the firm to recognize the least amount of cost in each period. If firms face increased costs over time, FIFO is the obvious choice because the oldest (smallest) costs will be subtracted from current sales in order to determine profit. However, this inventory decision is complicated by the tax code's allowance of LIFO for tax reporting purposes, provided that the firm also uses LIFO for financial reporting purposes.[1] Given the choice to choose an inventory accounting method that reduces tax liabilities, even with the consequences of reporting lower earnings to shareholders, many firms find the tax benefits dominate.

Use of LIFO

The choice of an inventory accounting method need not be the same for all inventory that a firm has - some of a company's inventory could be valued using LIFO while the remainder is valued using FIFO or another method. Figure 1 shows the trend in the use of LIFO among the largest publicly-traded firms over the past 40 years. The solid line in Figure 1 shows that the use

[1]The use of LIFO for income tax purposes goes back to the Revenue Act of 1938, when LIFO was allowed for a small number of narrowly defined industries, and some type of book-tax accounting conformity rule has existed since the Revenue Act of 1939 expanded LIFO's availability. A brief history can be found in W.B. Johnson and D.S. Dhaliwal, 1998, "LIFO Abandonment," *Journal of Accounting Research* 26: 236-272.

of LIFO by these large firms for at least part of their inventory rose dramatically during the mid 1970s (a period of high inflation) and peaked in the early 1980s at just under 70 percent. Since then, the use of LIFO has steadily declined, and at the end of 2004 about 40 percent of the largest firms use LIFO for some of their inventory.

The dashed line in Figure 1 reports the percentage of these largest firms that use LIFO for a majority of their inventory. Similar to the use of LIFO for any portion of inventory, the use of LIFO by firms for a majority of inventory increased throughout the 1970s and early 1980s, reaching a peak of 43 percent in 1985. As seen in the trend for companies with any LIFO usage, the percentage of firms using LIFO for a majority of their inventories has also steadily declined, and was 21 percent of the sample at the end of 2004.

Table 1 provides an industry breakdown of LIFO use for the years 2003 and 2004 (corresponding to the top line in Figure 1). For 2004, 16 of the 49 industry groups reported no LIFO inventories. At the other extreme, four industries reported more than 80 percent of sample companies using LIFO for some portion of their inventories: chemicals (85 percent of companies), furniture (80 percent), general merchandisers (90 percent), and metals (80 percent).

These numbers on the use of LIFO in Figure 1 and Table 1 are based on reviews of the financial statements of 600 of the largest 1,000 publicly-traded corporations and may not be representative of the corporate sector as a whole. An analysis of an electronic database of the financial statements of publicly traded firms found approximately 5,000 companies with inventories. Of those 5,000, only 8.7 percent reported a LIFO-reserve, suggesting that even among publicly-traded, inventory-holding firms, the use of LIFO is not widespread.

While publicly-traded firms represent the vast majority of economic activity, they are only a small fraction of all corporations: approximately 9,000 firms are publicly-traded,

compared to more than 5 million corporate tax returns filed in 2002. Because of limited data on the characteristics of non-public firms, the use of LIFO by the rest of the corporate sector is hard to estimate, but it is believed to be fairly small. Treasury's 1984 tax reform study ("Treasury I") reported that 95 percent of taxpayers use FIFO.

The advantages and disadvantages of LIFO

Financial reporting advantages

The reporting advantage LIFO provides is its matching of current inventory costs to the current sales of a firm. As a result, the information provided to investors in a firm's income statement allows for the evaluation of a firm's current performance on the basis of both current sales prices and the current economic cost to the firm of generating those sales. While this creates the problem of understating the value of inventory on a firm's balance sheet, the disclosure of the LIFO reserve allows investors to adjust inventory numbers to what they would be under an alternative cost-flow assumption. This disclosure is particularly important when investors and other financial statement users want to compare LIFO firms to non-LIFO firms. Such comparisons are both common and necessary, given that the majority of firms do not use LIFO. Because of its importance, the method to convert LIFO-valued costs and inventories to FIFO is universally covered in accounting classes and textbooks (the information necessary to convert FIFO or other inventory costs to LIFO is not available). However, both the need to covert LIFO-based numbers to alternative bases, and the common use of inventory methods other than LIFO, suggest that the advantage of LIFO-based measures of current cost in an income statement may not be large.

Tax advantages

The primary advantage of LIFO, however, is the tax benefit that LIFO provides firms experiencing increasing input prices. By allowing firms to deduct current rather than historic costs to determine their profits, firms that benefit will elect to use LIFO, while others will use another inventory method. For electing firms, LIFO provides an indefinite deferral of profits that would otherwise be reported. Indeed, since the effect of LIFO-conformity is to require companies to report *lower* earnings to their shareholders, the tax benefits to the firms that use LIFO must be larger than the sum of the administrative cost incurred to maintain LIFO inventory records and any costs they might incur through lower reported profits. Given that analysts and other sophisticated users of financial statements can "undo' the LIFO cost assumption, it is not clear that the financial markets are necessarily worse-off, and some evidence suggests that LIFO earnings may be perceived as having higher quality.[2]

Figure 2 provides information on the magnitude of the tax benefits of deferral generated by LIFO, based on a tabulation of data of publicly-traded firms from 1975 to 2004. The LIFO reserve, which represents the cumulative dollar amount of the difference between the cost of sales under LIFO and the costs under an alternative inventory method, is shown by the gray bars and corresponds to the left axis of the graph. Similar to the pattern in Figure 1, the dollar value of the LIFO reserve peaked in the early 1980s and has generally fallen since. For the last year for which data is readily available, 2004, the aggregate value of the reserve is nearly $60 billion. This $60 billion represents the cumulative amount of additional tax deductions that firms have claimed relative to what their deductions would have been if they had not used LIFO.

[2]See L. Revsine, D.W. Collins, and W.B.Johnson, Financial Reporting and Analysis 3rd edition, 2002 (Pearson Prentice Hall, 2002), especially pp 470 - 472.

The solid line in Figure 2 shows the amount of the LIFO reserve as a percentage of the inventories reported by LIFO firms and corresponds to the right axis of the graph. Similar to the LIFO reserve, this percentage peaked in the early 1980s, and has declined over the past 20 years. At the end of 2004, the aggregate LIFO reserve equaled approximately 15 percent of the value of inventories. In other words, for the average firm, the reported value of inventories was 15 percent lower than it would have been if the firm had used current cost. The LIFO reserve as a percentage of the reported value of inventories can vary substantially by firm and industry. For example, in its FY2005 10-K filing, Exxon reported inventories of $7.8 billion, but noted that the replacement cost of the inventory was an additional $15.4 billion. In other words, the balance sheet value of inventory was only about 1/3 of its market value, and the LIFO reserve was approximately 200% of the value of reported inventories.

With respect to LIFO repeal, the $60 billion aggregate LIFO reserve reported in Figure 2 represents the amount of additional net income publicly-traded firms would report on their tax returns if a tax change required them to recognize this reserve as income. This amount would be reduced to the extent firms had net operating loss carry forwards. Assuming that this income would be taxed at an average rate of 30 percent, this implies a potential revenue gain of approximately $18 billion before credits. By contrast, the JCT estimated the revenue effect of the LIFO provision in H.R. 4297, affecting only oil companies, to be $4.3 billion.

Financial reporting disadvantages

While use of LIFO may create some benefits to financial markets by providing an income statement based on current costs, the use of LIFO raises other concerns related to inventory

management.[3] Because a firm knows both the current cost of purchasing or producing items for inventory and the (presumably) lower cost of selling an item out of existing inventory, firms have a greater opportunity to manage the earnings they report to their shareholders. If a firm wants to report higher earnings, it can choose to sell from existing (lower cost) inventory rather than acquire or produce new inventory. The LIFO conformity requirement may be a deterrent in this instance, because reporting higher earnings to shareholders will also result in higher taxable income.

Alternatively, the use of LIFO has raised concerns that firms may have an incentive to hold more inventory than is optimal because of the tax costs of reducing their inventory levels. Firms may have an incentive to purchase unneeded inventory to avoid recognizing the additional taxable income that would result from selling inventories valued at less than the current market price.

If the financial reporting benefits of LIFO were perceived as significant, that is, having current costs in the income statement were superior to costs generated by other available inventory methods, then we would expect to see more widespread use of LIFO by U.S. firms than revealed in Figures 1 and 2 and Table 1. Further, if there were significant financial reporting benefits from LIFO, we would also expect to see it used in other countries. However, the U.S. is clearly in the minority in allowing LIFO for financial reporting purposes. In contrast to U.S. generally accepted accounting procedures (GAAP), International Accounting Standards (IAS) generally prohibit the use of LIFO. Given the trend to harmonize international accounting

[3]For a review of the literature on the effects of taxes on financial reporting and other decisions see D. A. Shackelford, and T. Shevlin, "Empirical tax research in accounting," *Journal of Accounting and Economics* 31: 321-387.

standards, it is not clear that LIFO will remain an acceptable method for U.S. financial reporting purposes, and, given the requirement of LIFO conformity, for tax reporting purposes. In these circumstances Congress could repeal the LIFO conformity requirement and allow firms to use LIFO for tax reporting only, but doing so would create additional administrative complexity, as well as increased book-tax reporting differences. Since many companies that use LIFO for external reporting purposes do not use it for internal decision making (such as pricing or compensation), allowing LIFO for tax purposes in the absence of LIFO-conformity would appear to generate no benefit other than the deferral of income taxes by LIFO firms.

An analysis of the process leading up to the IAS position on LIFO reveals a number of important factors.[4] First, contrary to arguments that LIFO provides a better matching of cost in the income statement, the only public comment letters supporting LIFO came from countries in which the method was allowed for tax purposes. Further, with the exception of firms receiving a tax benefit from LIFO, none of the response letters argued that LIFO provided any financial reporting benefit. Second, contrary to the assumption that the U.S. delegation would oppose any limitation on LIFO, the U.S. delegation supported its elimination.

Book-Tax Conformity

Since the 1999 Treasury report on tax shelters, the disparity in both the levels and growth rates of book and taxable income has been looked at as possible evidence of the growth in tax shelters. One approach that has been suggested to deter the use of tax sheltering behavior, and

[4]See D.A. Guenther and M. Hussein, 1995, "Accounting standards and national tax laws: the IASC and the ban on LIFO," *Journal of Accounting and Public Policy* 14, 115-141.

enhance compliance generally, is to increase the extent to which book and taxable income conform, if not converge to one accounting system.

I do not agree that more book-tax conformity is always more desirable, and I advise caution in considering these proposals. Tax and financial accounting serve related, but distinct, functions, and the measure of income for one cannot be assumed to be the appropriate measure for the other. LIFO, as discussed above, has book-tax conformity, but it is not clear that there is much of a financial reporting benefit gained by it, or, alternatively, that, in the absence of a tax benefit, any firm would adopt LIFO for financial reporting purposes. Such a conclusion goes to the heart of an economic analysis of the tax system: if a tax system were neutral, firms would make the same decisions in the presence of the tax as they do in its absence. Given that few firms might use LIFO in the absence of the tax benefit, the economic benefits of LIFO need to be very large to justify its presence in the tax code. The additional conformity requirement only increases the distortions that LIFO may cause.

Some aspects of the tax code, such as depreciation, have objectives that are clearly at odds with financial reporting objectives and should not conform. Others, such as the cost of exercised stock options, were correctly recognized as an expense to a firm for tax purposes, and should have been recognized as an expense for book purposes years ago. Traditionally, the development of tax policy has not fully considered the financial reporting aspects of tax changes. This is clearly no longer true. Going forward, I think it will be useful for all those involved in developing business tax policy to consider the effects of proposed tax changes on firms' financial statements, and in particular, to identify situations where the benefits of a particular activity should only be allowed when there is conformity, as well as those situations when conformity is not desirable. In cases where conformity is not desirable there may still be benefits to greater

disclosure. Balancing the financial markets' needs for information with any potential benefits and costs of conformity is not an easy task, but the financial reporting effects of tax changes may be as important as any tax effect.

Disclosure

An important factor in being able to understand the role of taxes on a firm's operations is knowing the amount of taxes paid and the other tax attributes of a firm. I had the honor of testifying before this committee on the release of the Joint Committee on Taxation's Investigative Report on Enron, and I stated at that time that I was not convinced full public disclosure of corporate tax returns is warranted. I am still not convinced. However, I remain convinced that more and better disclosure of tax information could be achieved with little, or no, additional administrative or economic cost to the firm.

The new Schedule M-3, with its reconciliation of financial statement income to taxable income, and a detailed accounting of temporary and permanent differences, will provide important information to the IRS, and I commend the Commissioner and the IRS and Treasury staff for their efforts. Financial accounting reports, however, have not provided significant new information about the tax characteristics of firms to their investors. I still believe that more detailed information about taxes needs to be included in corporate financial reports.

At the time of the Enron hearing, I suggested that any debate on the public disclosure of corporate tax return information should begin with the idea of disclosing the information on what has now become the M-3. Although the final version of the M-3 contains a level of detail far beyond what I considered likely to be required, public disclosure is still worth considering. From a competitive perspective, any concern that these disclosures would harm a company

should be considered only to the extent to which new information goes beyond the detail a firm should be providing under GAAP.

Thank you, again, for the opportunity to be here today. I look forward to the further discussion of these issues.

Table 1
Companies Reporting Use of LIFO, by Industry

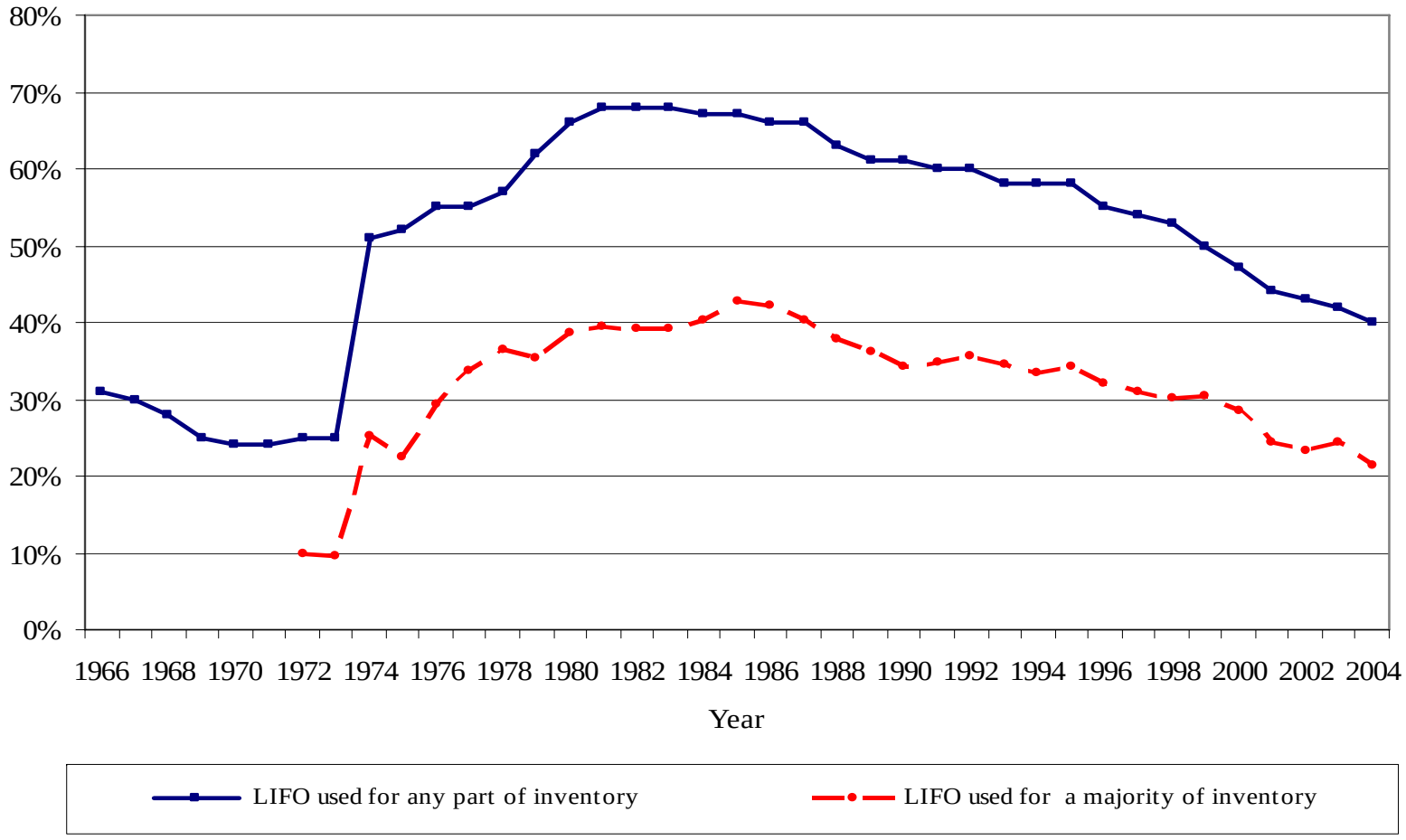
	2004		2003	
	No.	**%**	**No.**	**%**
Advertising marketing	-	-	-	-
Aerospace	5	29	5	29
Apparel	7	47	7	50
Beverages	4	40	4	40
Building materials, glass	5	63	6	75
Chemicals	23	85	24	83
Computer and data services	-	-	-	-
Computer peripherals	-	-	-	-
Computer software	-	-	-	-
Computers, office equipment	1	9	1	9
Diversified outsourcing services	-	-	-	-
Electronics, electrical equipment	13	31	12	29
Engineering, construction	1	8	1	9
Entertainment	-	-		-
Food	12	52	12	50
Food and drug stores	13	81	11	73
Food services	-	-	-	-
Forest and paper products	14	70	16	80
Furniture	8	80	8	67
General merchandisers	9	90	9	82
Health care	-	-	-	-
Homebuilders	-	-	-	-
Hotels, casinos, resorts	-	-	-	-
Industrial and farm equipment	25	69	26	74
Medical products and equipment	3	23	4	31
Metal products	15	79	17	81
Metals	12	80	12	86
Mining, crude-oil production	2	14	3	23
Miscellaneous	1	17	2	22
Motor vehicles and parts	9	60	10	59
Network communications	-	-	-	-
Petroleum refining	11	79	12	92
Pharmaceuticals	4	40	4	40
Publishing, printing	9	43	11	55
Rubber and plastic products	4	57	5	83
Scientific, photographic, and control equipment	5	26	5	25
Semiconductors	-	-	-	-
Soaps, cosmetics	3	43	3	38
Specialty retailers	6	33	5	29
Telecommunications	-	-	-	-
Temporary help	-	-	-	-
Textiles	3	75	3	60
Tobacco	3	50	3	50
Toys, sporting goods	-	-	-	-
Transportation equipment	2	50	2	50
Trucking, truck leasing	-	-	-	-
Waste management	-	-	-	-
Wholesalers	7	44	8	42
Total companies	**239**	**40**	**251**	**42**

These totals are based on a review of the financial statements of 600 companies selected from the Fortune 1000. For each year, the first column gives the number of companies reporting some use of LIFO, and the second column expresses that as a

percentage of reviewed companies in that industry. Source: Iofe., Y. And M.C. Calderisi, eds, 2005, *Accounting Trends & Techniques, 59th Edition*, (New York, NY: AICPA), pp. 169-170.

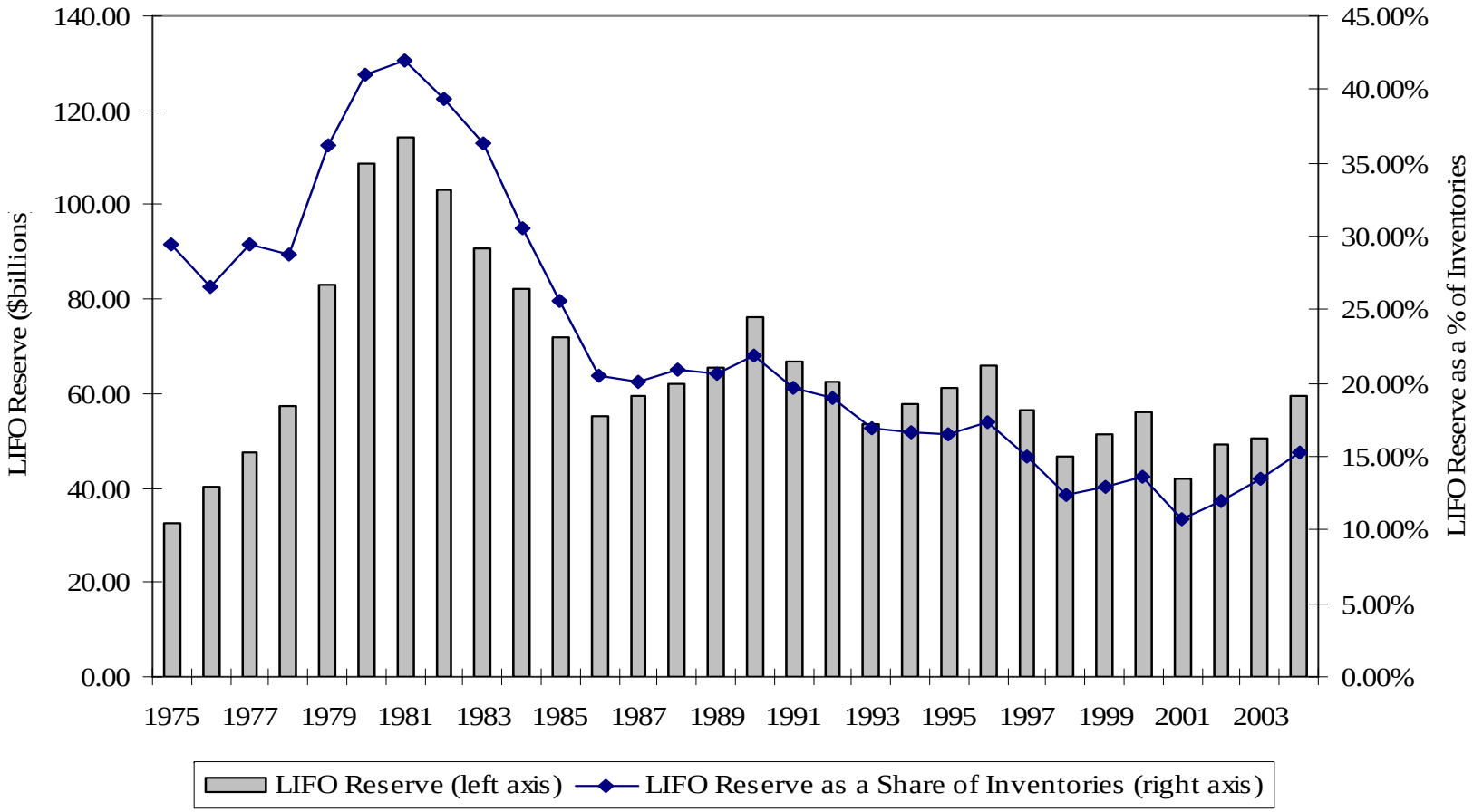
Figure 1

Use of LIFO by the 600 Largest Firms as Reviewed by *Accounting Trends*



Source: *Accounting Trends & Techniques*, various years.

Figure 2
Significance of LIFO Reserves



Source: author's calculations.