

# A ROADBLOCK TO US ADOPTION OF IFRS IS LIFO INVENTORY VALUATION

Anne B. Fosbre, Georgian Court University  
Paul B. Fosbre, New Jersey City University  
Ellen M. Kraft, Richard Stockton College of New Jersey

## ABSTRACT

*A roadblock exists between International Financial Reporting Standards, (IFRS) and United States Generally Accepted Accounting Standards, (US GAAP) in the area of acceptable methods of inventory valuation. IFRS recognizes the First In First Out Method, FIFO, and the Weighted Average Method of Inventory Valuation as acceptable methods of inventory valuation. It does not recognize or allow the Last In First Out Method of Inventory Valuation, LIFO, as currently used in the United States. Canceling LIFO would require most large US companies to pay excessive amounts of additional income tax to the Internal Revenue Service, IRS. In order for the United States to adopt IFRS Accounting Standards, the elimination of LIFO would have to occur.*

**JEL:** M41, M48

**KEYWORDS:** IFRS, LIFO, FIFO, Inventory Valuation, LIFO Conformity Requirement

## INTRODUCTION

In 2006 the International Accounting Standards Board, (IASB) created the following objectives as stated in its International Financial Reporting Standards, (IFRS):

*To develop in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in various capital markets of the world and other users of information to make economic decisions (Alexander-Archer, 2008).*

It is apparent that acceptance by the US Securities and Exchange Commission to allow financial reporting of foreign registrants for US listings has been a crucial element in the IASB's acceptance as the global accounting standard setter. The IASB and the Financial Accounting Standards Board, (FASB) have, as a result, worked on convergence with an ultimate goal of a single set of standards and a conceptual framework common to both bodies (Alexander & Archer, 2008).

On November 21, 2008, the SEC published a roadmap toward the mandatory use of IFRS by U.S. issuers that could lead to IFRS among U.S. filers by the year 2014 (Fed. Reg. 70816, 2008). The SEC also finalized rules allowing the submission by foreign firms of financial statements prepared in compliance with IFRS, without reconciliation to U.S. GAAP (Fed. Reg. 70816, 2008).

In its executive summary, the SEC has clearly shown support for the international convergence of GAAP. For example, the Commission has long viewed reducing the disparity between the accounting and disclosure practices of the United States and other countries as an important objective for both the protection of the investors and the efficient use capital. The use of a single set of high quality globally accepted accounting standards by issuers will help investors understand investment opportunities outside the United States more clearly and with greater comparability than if those issuers disclosed their

financial results under a multiplicity of national accounting standards. The globally accepted standards will enable issuers to access capital markets worldwide at a lower cost. Moreover, the SEC has undertaken several measures to foster the use of International Financial Reporting Standards, (IFRS) as issued by the International Accounting Standards Board (IASB) and fully supports the efforts of the IASB and the Financial Accounting Standards Board (FASB) to convergence of their accounting standards (SEC release 33-8831, 2007).

The process of convergence of US GAAP with IFRS Standards has made a great deal of progress. Many issues remain to be addressed including the destiny of the LIFO Inventory Valuation Method. In general, the issue of LIFO Inventory Valuation is not on the list of active or research agendas of either the Financial Accounting Standards Board (FASB) for US GAAP or the International Accounting Board (IASB) for IFRS. However, Robert Herz, the chairman at FASB states that at some point the LIFO Valuation issue will have to be resolved (Herz, 2007). A recent exposure draft of the IASB, QC19, states that:

*Although a single economic phenomenon can be faithfully represented in multiple ways, permitting alternative accounting methods for the same economic phenomenon can diminish comparability and, therefore, may be undesirable” (IASB, 2008).*

FASB has also stated that it would disapprove creating a US variant of an IFRS rule (Denham, 2007). From an economic standpoint the IASB for IFRS and the FASB for US GAAP are both in agreement on the requirement for only one set of accounting rules in financial reporting.

## LITERATURE REVIEW

As early as 1919 the Treasury Department permitted taxpayers to use only First In First Out, FIFO and Average Cost methods of inventory valuation. The LIFO method of inventory was obtained from the Base Stock method of inventory accounting which originated in England in the middle of the nineteenth century. The Base Stock Method was also referred to as the Normal Stock Method (Peloubet 2000).

The Base Stock Method was developed from the concept that some businesses had to keep a constant level of inventory in order for the firm to operate normally. The Base Stock Method controlled sharp movements of inventory profits and losses. As items were sold, the cost was taken from the last items added to the inventory. The items were not removed from the Base Stock Inventory, which was left intact. During periods of rising prices profits were reduced and when a decline in prices occurred losses were reduced.

The LIFO Method is similar to the Base Stock Method. The cost removed when items are sold is the most recent addition. The cost of remaining inventory is the beginning inventory and additional items that follow. Thus, the cost of goods sold is reported on the income statement at current market prices and reduces profits accordingly (Cotter, 1935).

As early as 1903 the American Smelting and Refining Company was the first company to use the Base Stock Method in the United States. By 1921, 10% of United States Corporations were noted as using a cost record of earnings by using these inventory methods (Author Unknown, 1935).

The IRS required inventories to be valued at cost or at the lower of cost or market. Firms using LIFO or Base Stock Methods for inventories had to keep two sets of records, one for financial reports for stockholders and the other set for maintaining tax reporting (Cotter, 1935).

In a case before the Supreme Court involving the IRS v. Kansas City Structural Steel Company, the Court denied the propriety of the Base Stock and other methods in favor of the Internal Revenue's FIFO requirement (Peloubet, 2000).

The defeat of the Kansas City Structural Steel case with the Supreme Court motivated LIFO supporters to head to Congress for support (Peloubet, 2000). Leading the fight was a business journalist joined by a growing accounting profession (Peloubet, 2000).

As a result of the losses caused by the Depression of 1929, businesses opted for the FIFO Method. However, as the recovery from the Depression developed and prices began to rise, supporters of the Base Stock and LIFO methods returned. Since the U.S. Treasury and the U.S. Supreme Court rejected the Base Stock method but did not explicitly eliminate the LIFO method a battle ensued. Arundel Cotter, an editor of the *Wall Street Journal* campaigned in the court of public opinion by writing several books and articles in which he supported corporate America and the LIFO method of inventory valuation. To justify LIFO Inventory valuation, he argued that the creation of the Securities and Exchange Commission by the Roosevelt Administration was a demonstration of the need for accurate financial reports for stockholders and investors (Cotter, 1936). Some Accountants considered Cotter as a partner in the struggle to have LIFO recognized by Congress.

Government regulation by the Roosevelt Administration led to the Securities Act of 1933. The Securities and Exchange Commission created in the SEC Act of 1933, cooperated with the accounting profession and asked for their advice in creating securities laws (Berle, 1938).

In 1936 the merging of the American Institute of Accountants (AIA) and the American Society of Certified Public Accountants (ASCPA) created a national organization to fight government control. Accountants fought to shape accounting policies in income tax legislation and securities regulation. One of the first issues to be addressed was the Undistributed Profits Tax supported by the Treasury Department in 1936. The Undistributed Profits Tax required the use of the FIFO inventory method so consideration of the LIFO inventory was eliminated (Miranti, 1990).

Concerned with the backlash against the New Deal Program created by his administration, Roosevelt feared the intrusion of a tax reform program. As a recovery began to occur, he became less concerned with the opposition of business to his tax policies. However, in 1936 a fiscal emergency occurred because for World War I Veterans a bonus was created despite the fact that the president had vetoed it. As a result, the Treasury Department recommended the elimination of the existing corporate income tax replacing it with a tax on undistributed profits (Brownlee, 2004).

Strong opposition from corporate business resulted. In 1936 supporters of LIFO and those challenging the Undistributed Profits Tax appeared before Congress. Maurice E. Peloubet a CPA with Pogson, Peloubet, and Company formerly with Price Waterhouse and Company testified before Congress on the need for the LIFO method for pricing inventories (Moonitz, 1965). The Senate Finance Committee took no action, referring the proposal to the Treasury Department.

Citing the Supreme Court decision, the Treasury Department decided against adopting the method. A further reason presented was that taxpayers would switch from LIFO to FIFO as prices went up or down (Watson, 1937). It became very obvious that a regulation to reform the valuation of inventories would not come from the Treasury Department. Instead any regulation would have to come from Congress. In March 1938 the supporters of LIFO returned to Congress and reappeared before the Senate Finance Committee. At the same time a recession weakened the Roosevelt administration and faced opposition from Roosevelt's tax program by his own party. However, the Treasury Department rejected the adoption of the LIFO inventory stating that it would result in millions of lost revenue (Haas, 1938).

An attack on the Treasury's forecast was presented by George O May, senior partner with Price Waterhouse pointing out that Secretary Morgenthau of the Treasury Department had made errors in the figures used to support the Undistributed Profits Tax in 1936. The error caused Morgenthau to drop his support of the Undistributed Profits Tax (Congressional Record, 1938). Congressional leaders might have wanted to remind the Treasury Department that Congress dictates the tax policy and LIFO inventory was created.

### The Revenue Act of 1939

The INTERNAL REVENUE CODE under Sec.472 (a) provided for the authorization for the LIFO CONFORMITY requirement Sec.472 and (c) passed by Congress mandated that if LIFO was used for in determining taxable income for tax purposes, it must also be used in reporting financial statements. (Hoffman 2009). Both remain in existence today. The decision that LIFO would be required for both calculating income tax and for financial reporting was determined by a three member committee appointed in 1938 by the Treasury Department. The members included Carman G. Blough, Arthur Anderson and Company, formerly the first chief accountant of the Securities and Exchange Commission, SEC, Edward Kracke, Haskins and Sells, and Roy B. Kester, a Professor at Columbia University. The Committee's final recommendation was that companies should be allowed to use LIFO, provided they used it both for financial reporting and tax reporting (Cooper, 1996).

The Treasury department lawyers took into account the recommendations of the committee when drafting the LIFO legislation that became law in the Revenue Act of 1939. John Wanes, the new Under Secretary of the Treasury, stated to the Senate Finance Committee, that the Treasury had no objection to amending the law that was previously objected to. He also stated that the Treasury Department agreed to make the LIFO method available for income tax purposes to any taxpayer using the LIFO method in its financial accounting system. A motion was agreed to without objection. Congress authorized the use of LIFO for both income tax law and financial reporting with the passage of the Revenue Act of 1939 (Senate Finance Committee, 1939).

## **DATA AND METHODOLOGY**

### Reporting Example of How LIFO Decreases Taxes under Rising Prices

First In First Out Inventory Valuation, FIFO, uses the actual method of production in costing its products. LIFO does not follow the actual production of its products. LIFO instead retains the older inventory values on the balance sheet. In periods of rising prices LIFO results in higher costs and as a result lower profits than would occur under FIFO.

Consider the following example of FIFO and LIFO and the effect on Net Income with the use of either method. A firm selling shoes purchases five pairs of shoes at the following prices:

Pair	Cost Price
Pair #1	\$10
Pair #2	\$10
Pair #3	\$20
Pair #4	\$30
Pair #5	<u>\$30</u>
Total	\$100

The company sold three pair of shoes to a customer for \$100 each. The total of the sales is \$300. In the first example, FIFO inventory with respect to sales means that pairs #1, #2, and #3 were sold, the inventory consists of pairs #4 and #5. The resulting income statement is:

Sales of 3 pairs of shoes @ \$100		\$300
Cost of Goods Sold		
Purchases of 5 pairs of shoes	\$100	
Less FIFO Inventory	<u>60</u>	
Cost of Goods Sold		<u>40</u>
Net Income		<u>\$260</u>

The cost of goods sold is calculated to be \$40 after subtracting the FIFO inventory of \$60 from the \$100 purchase of the shoes. The net income is \$260.

LIFO Inventory (LIFO with respect to sales) means that pairs #3, #4, and #5 were sold; the inventory consists of pair #1 and pair# 2 and are at the top. If the LIFO inventory method is used the resulting income statement is:

Sales of 3 pairs of shoes @ \$100		\$300
Cost of Goods Sold		
Purchases of 5 pairs of shoes	\$100	
Less LIFO Inventory	<u>20</u>	
Cost of Goods Sold		<u>80</u>
Net Income		<u>\$220</u>

The cost of goods sold is calculated to be \$80 after subtracting the LIFO inventory of \$20 from the \$100 purchase of the shoes. The net income is \$220. Thus the FIFO income statement shows a lower cost of goods sold and higher net income. As a result of the higher net income, income taxes will also be higher using the FIFO method than would occur under LIFO. FIFO results in higher income taxes when goods are purchased at a higher price later in time. Hence, the argument that FIFO results in higher taxes is true under the assumption that goods purchased for sale in the future cost as much or more than goods held in inventory. Based on the assumption that energy prices will remain high because of the reliance on imported oil increasing prices of goods is tenable.

#### Effect of Switching to FIFO on Corporate Taxes

To determine whether income taxes increase in practice, rather than in theory, data of the impact of a FIFO adoption by companies was from reviewed from a Georgia Institute of Technology Study that was completed in 2008 (Mulford & Comiskey, 2008). The results of the study are listed in Table 1. The company name is listed in the first column of the table and taxes due after switching to FIFO as a part of IFRS convergence are listed in the second column of the table in millions of dollars. The increase in taxes ranged from \$2,000,000 to \$8,890,000 (Mulford & Comiskey, 2008). The companies that have the highest dollar increases in taxes are the petroleum refining companies that include Exxon Mobil, Marathon Oil Corporation, Valero Energy Corporation, and Sunoco. This study supports the hypothesis that switching to FIFO as part of IFRS convergence will have large tax increases for companies.

Further data about the FIFO and LIFO pre-tax income of the Petroleum Refinery Companies is shown in Table 2. The FIFO pre-tax income was higher than the LIFO pre-tax income for all of the companies. The average percent change was 48.7%. Sunoco had a 113.2% increase in pre-tax income when

switching to FIFO. The potential of the elimination of LIFO as a part of IFRS convergence reveals higher taxable income and a major increase in US income taxes for these companies (Mulford-Comiskey, 2008).

Table 1: Taxes Due for Corporations by Using the FIFO as Part of IFRS Convergence

Company	Taxes due on Switch Over to FIFO (millions)
A.K. Steel	16
Allegheny Technology	131
Applied Industrial Technologies	49
Carpenter Technology Corporation	175
Castle (A.M.) & Company	50
Eastman Chemical Corporation	179
Encore Wire Corporation	26
Exxon Mobil	8890
Friedman-Industries	2
Gorman-Rupp Company	16
Grainger Inc.	101
Graybar Electric	40
Hancock Fabrics	13
Holly Corporation	70
Longs Drug Stores	72
Marathon Oil Corporation	1,412
North American Galvanizing & Coating	3
Sifco Industries	2
Solutia Inc.	84
Spartan Stores	16
Standard Register Company	12
Starrett Company	10
Sturm, Ruger & Company	16
Sunoco	1354
Tennant Company	10
Tesoro Company	490
Twin Disk, Inc.	8
United Refining Company	22
Valero Energy Corp	2170
Winnebago Industries	12

*The impact of a FIFO adoption by Companies was reviewed from a study by Mulford & Comiskey, (2008). The data shows that companies will have taxes ranging from \$2,000,000 to 8,890,000 as a result of switching to FIFO inventory valuation as part of IFRS convergence (Mulford & Comiskey, (2008).*

Table 2: Percent Change in FIFO and LIFO Income for Petroleum Companies

Company	LIFO Pre-Tax Income	FIFO Pre-Tax Income	Percent Change In Pre-Tax Income
Exxon Mobil	\$70,474	\$79,974	13.5%
Holly Corp.	499	562	12.6%
Marathon Oil Corp	6,849	9,201	34.3%
Sunoco Corp.	1,409	3,004	113.2%
Tesoro Corp	905	1,535	69.6%
Valero Energy Corp	6,726	10,026	49.1%
Overall Average			48.7%

*Table 2 lists data from a study by Mulford & Comiskey, (2008) about the FIFO and LIFO pre-tax income of the Petroleum Refinery Companies. The FIFO pre-tax income is higher than the LIFO pre-tax income for all of the companies (Mulford & Comiskey, 2008).*

## RESULTS

In 2008 the AICPA reported that more than a third of the companies surveyed used a combination of cost flow assumptions. More than 65% used FIFO for a significant portion of their inventories. About 35% use LIFO. Less than 30% use weighted average or specific identification methods.

The industries with the greatest percentage of firms using LIFO include firms in the chemical industry and firms that manufacture industrial and farm equipment. Retailing firms use LIFO extensively. The

industries with the smallest proportions of firms using LIFO include technology based firms which experience decreasing production costs such as computer and other electronic equipment (AICPA, 2008).

The general impact of LIFO for income tax reporting in the United States becomes a momentous decision. In the 2007 tax reform proposal H.R.3970, the House Ways and Means Committee estimated that the provision to repeal LIFO for income tax reporting would raise approximately \$106 Billion in ten years. The Bill was not acted on by the full Ways and Means Committee (House Ways and Means Committee, 2007). If LIFO were repealed for United States income tax purposes, companies would have higher income taxes.

## **RECOMMENDATIONS**

For the last seventy years companies have had the benefit of LIFO Inventory valuation and as a result paid lower income taxes. In considering the destiny of LIFO, it is necessary to note that the objectives of the Internal Revenue Code and the objectives of financial reporting (GAAP) are not necessarily similar. Taxable income for income tax purposes does not have to be calculated in accordance with GAAP. Furthermore, GAAP does not have authority over US tax laws. However, it is the LIFO CONFORMITY REQUIREMENT that threatens the continued use of LIFO for income tax purposes. Thus, the creation of the LIFO CONFORMITY REQUIREMENT by the Securities and Exchange Commission, SEC has mandated that if LIFO is used in financial reporting, it must also be used in calculating income taxes.

A repeal of the LIFO CONFORMITY REQUIREMENT and a continuation of LIFO income taxes is a possibility, but it is highly unlikely. After seventy years of lower taxes, Congress is not likely to permit companies to continue with paying lower tax bills.

### President Obama's Tax Proposals

The Obama budget for 2010 would repeal the election to use LIFO for income tax purposes. Taxpayers that currently use the LIFO method would be required to write-up that is to revalue their beginning LIFO inventory to its FIFO value in the first taxable year beginning after December 31, 2011. This one time increase in gross income would be taken into account ratably over the first taxable year and the following seven taxable years. Repealing LIFO and making companies pay tax on the accrued difference between LIFO and FIFO inventory valuations would impose a substantial one time tax and a smaller permanent tax as long as prices are increasing. In HR3970 Ways and Means Committee Chair Charles Rangel proposed to allow firms to spread income from the initial adjustment from LIFO to FIFO over eight years. (Urban Institute and Brookings Institution, 2009). Already proposed is the elimination of the LIFO inventory valuation beginning in 2012 by the Treasury department (Kiplinger, 2009).

## **CONCLUDING COMMENTS**

The benefits of repealing LIFO and adoption of IFRS accounting standards will probably include financial statements that present higher figures. For example, balance sheets and income statements presenting better financial results will make companies more worthy of credit, expand opportunities for growth, help to create more jobs and as a result growth in the economy.

On a global basis, improved reporting consistency, enhanced global competition, and improved financial reporting transparency will occur. Many multinational companies will have cost savings because they will not have to report under several sets of standards (Lee & Smith, 2009). Congress will probably eliminate both the LIFO TAX RULE and the LIFO CONFORMITY REQUIREMENT and allow a period of several years to effect the change. With this action the roadblock for US adoption of IFRS will be removed.

## REFERENCES

- AICPA. (2008). *Accounting Trends and Techniques*. (62<sup>nd</sup> ed). AICPA.
- Alexander, D. & Archer, S. (2008). *International Accounting/ Financial Reporting Standards Guide*, Commerce Clearing House, Chicago, Illinois.
- Author Unknown. (1935, December 19). National Lead's Net Likely to be the Best Since 1929. *Wall Street Journal*, 9.
- Berle Jr, A.D. (1938). Accounting and the Law. *Accounting Review*, 9-10.
- Brownlee, W. E., (2004). *Federal Tax in America a Short History* (2<sup>nd</sup> ed.).
- Congressional Record. (1938).
- Cooper, W.D., Malone, C. P., & McFadden, C.F., Wade, G. (1996). Establishing the LIFO Conformity Rule. *The CPA Journal*, 6.
- Cotter, A. (1935, March 19). Inventories: Oil Industry Considers Last In First Out System to Level Out Earnings. *Wall Street Journal*, 6.
- Cotter, A. (1936, May 4). Revenue Bureau Does Not Recognize Two Accounting Methods of Easing Earnings. *Wall Street Journal*, 2.
- Denham, R., Chairman of the Financial Accounting Foundation and Herz, R., FASB Chairman: (2007, November 7) Letter to the SEC.
- Federal Register 70816. (2008, November 2). Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers. Retrieved February 21, 2010, from [www.sec.gov/rules/proposed/2008/33-8982.pdf](http://www.sec.gov/rules/proposed/2008/33-8982.pdf).
- Haas, G. C., Director of Research and Statistics, Treasury Department, (1938, April 21): Letter to Roswell Magill, Under Secretary of the Treasury.
- Herz, R., Chairman of the FASB. Before the Sub Committee on Securities, Insurance, and Investment Committee US Senate on IFRS Global Convergence Issues: FASB Organization Testimony Prepared Statement 2007: (2007, October 24).
- House Ways And Means Committee, HR 3970, (2007, October 29). Reduction and Reform Act of 2007. The bill was not acted on by the full Ways And Means Committee.
- IASB QC19 of Exposure Draft, (2008, May). An Improved Conceptual Framework for Decision-Useful Financial Reporting Information Chapter 2. Retrieved November 30, 2009, from IASB web site: [www.iasb.org/nr](http://www.iasb.org/nr).
- Lee, C. B. & Smith, L.M., (2009, November) Highlights of IFRS Research, *Journal of Accountancy*.



Miranti, P.J., (1990). *Accountancy Comes of Age. The Development of an American Profession, 1886-1940*. Retrieved November 30, 2009, from [www.business.rutgers.edu/files/miranti](http://www.business.rutgers.edu/files/miranti).

Mooitz, Maurice & Littleton, A.C. (1965). *Significant Accounting Essays*. Upper Saddle River, NJ: Prentice Hall.

Mulford, C.W. & Comiskey, E. E. (2008), LIFO as a Part of IFRS Convergence, December 2008

Peloubet, Maurice. (2000). *The Story of a Fortunate Man Reminiscences and Recollections of Fifty Years of Professional Accounting*. C Emerald Group Publishing Limit.

Report of Proceedings, HR 6851, (1939). Hearings held before the Senate Committee on Finance Session, 76<sup>th</sup> Congress, 96-97.

Urban Institute and Brookings Institution, (2009, March 16). Obama's 2010 Budget Proposals: YPC Tax Topics.

Watson, M. (1937). Letter from Tanner's Council to Roswell Magill, Under Secretary of the Treasury. Lawyers were Incorrect in Stating LIFO was Condemned by the Supreme Court. It was Base Stock that was Condemned. *Tax Lawyer*, 60 (32007).

## BIOGRAPHY

Dr. Anne Fosbre, CPA, is a professor of Accounting at Georgian Court University. She can be contacted at the School of Business, Georgian Court University, 900 Lakewood Ave., Lakewood, NJ, 08701. E-mail: [fosbre@georgian.edu](mailto:fosbre@georgian.edu).

Mr. Paul Fosbre, MBA, CPA, is an adjunct faculty member at New Jersey City University and is an accounting policy consultant. He can be contacted by E-mail: [paulfos@msn.com](mailto:paulfos@msn.com).

Dr. Ellen Kraft, is an Assistant Professor of Business Studies at Richard Stockton College of New Jersey. She received her Ph.D. from Auburn University, M.S.E from West Virginia University, and B.S.I.E. from Lehigh University. She can be contacted at the School of Business, Richard Stockton College of New Jersey, Box 195 Jimmie Leeds Rd. Pomona, NJ, 08240. E-mail: [Ellen.Kraft@stockton.edu](mailto:Ellen.Kraft@stockton.edu).