

## **Analyzing Financial Statements under IFRS – Opportunities & Challenges**

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*The FASB and the IASB have been working fervently to obtain a single set of quality global financial reporting standards. With this momentum, the road is now practically clear towards convergence. Despite its speed, convergence will raise a host of accounting issues for many parties who use financial statements to assess liquidity, solvency, market capitalization and profitability. We examine challenges emanating from convergence to the mandatory switch from the LIFO method. Further, we examine the impact of convergence on the analysis of financial statements, highlight challenges that will arise and make suggestions for users and preparers to understand and work with one set of global standards.*

### **INTRODUCTION**

One set of global accounting standards is fast becoming a reality. The policy initiative of whether to require or permit U.S. based companies to use international financial reporting standards received a considerable move forward on August 27, 2008 when the U.S. Securities & Exchange Commission (SEC) announced a proposed roadmap for full adoption of all public companies to transition from the U.S. Generally Accepted Accounting Standards (GAAP) to International Financial Reporting Standards (IFRS) beginning in 2014. Furthermore, early adoption and reporting under IFRS is allowed for some large multinational companies as early as 2010 ([www.IFRS.com](http://www.IFRS.com)). This action by the SEC was taken with the future vision that eventually all companies will use the same principles across all borders in order to unify the financial statements.

The major selling point for conversion to IFRS is that it will provide better financial reporting and financial statement data than currently provided by U.S. GAAP. IFRS is aimed at bridging the huge divide between the current standards and the desired and more harmonized standards in order to achieve the use of one set of comprehensive international financial reporting standards that hopefully will be superior to existing standards. Furthermore, the IASB contends that IFRS could offer comparability to investors in the international market and provide openness to managers' discretion in their decision to implement IFRS which are principles based as opposed to U.S. GAAP which is rules based.

The purpose of this paper is to focus on one major challenge that will be faced by financial analysts and other financial statement users as a result the required change in the inventory valuation method used. U.S. GAAP permits companies to elect first-in, first-out (FIFO), last-in, last-out (LIFO), or average cost to determine the value of their inventory. However, under IFRS, LIFO is prohibited. Thus, switching from to IFRS will mean that U.S. companies will not be able to use LIFO for inventory valuation.

Currently, more than one-third of U.S. companies use LIFO to value their inventories. The reason for this is that the LIFO method creates a lower taxable income than other inventory methods and thus results in a lower income tax liability for these companies. Since LIFO is not permitted under IFRS, then when companies switch from U.S. GAAP to IFRS, these companies will no longer be allowed to use LIFO. Hence, switching from LIFO to FIFO or some other inventory valuation method will result in a greater tax burden for U.S. companies and will also cause numerous other challenges. This will present a significant challenge to U.S. companies who presently use LIFO for at least a portion of their inventory valuation (Fink, 2008). It will also pose a significant challenge to financial statement users and those interested in analyzing a company's financial statements.

In this paper, an examination is undertaken of the impact that switching from LIFO to FIFO will have on the income statement, balance sheet and cash flows of U.S. companies and its implications for financial statement analysis. In doing so, we provide a discussion of the treatments for inventory valuation methods under U.S. GAAP as well as under IFRS. We also provide numerous examples to illustrate the impact of the switch on the income statement, balance sheet and cash flows and on the consequent analysis of financial statements of the respective companies. To this end, we examine the impact of the switch from LIFO to FIFO inventory valuation on selected financial analysis tools such as liquidity, activity, profitability and debt coverage ratios. We also briefly highlight some of the unresolved differences between U.S. GAAP and IFRS that could also potentially impact the analysis of financial statements. Finally, we make suggestions for initiatives that can be taken to minimize the adverse impact on U.S. companies and thus potentially ensure a smooth and seamless transition from U.S. GAAP to IFRS with respect to inventory valuation. Numerous examples are utilized for illustrative purposes.

## **INVENTORY VALUATION METHODS UNDER U.S. GAAP VS IFRS**

U.S. GAAP provides guidance regarding inventory valuation in ARB 43 and the IASB offers detailed guidance under IFRS in IAS 2. Inventories are defined as assets that a company intends to sell in the normal course of business, or is in production for future sale or used currently in production of goods to be sold. Thus, inventory can be defined as finished goods, work in process and raw materials. Additional inventory includes the costs of purchases, costs of conversion and other costs of bringing the inventories to their present locations and condition. IAS 2 also specifically allows capitalization of interest for those inventories that require a substantial period of time to bring to a saleable condition (Doupnik & Perera, 2009).

Although both U.S. GAAP (ARB 43) and IFRS (IAS 2) define inventory in a similar manner, there is some divergence with respect to valuation, impairment and disclosure. This divergence can greatly impact the income statement, balance sheet, cash flows and on the analysis of these financial statements of companies.

## **VALUATION OF INVENTORY**

To value inventory, various methods are used. Companies are allowed a choice of inventory valuation methods. Further, the inventory valuation method used does not always correspond to nor approximate the actual flow of inventory in a company, nor does U.S. GAAP or IFRS require them to be the same. The most common cost flow assumptions to value inventory under U.S. GAAP are LIFO, FIFO and average cost. However, IFRS only allows the use of FIFO and weighted average cost methods in determining the ending inventory balances and the cost of goods sold. It is therefore apparent that numerous U.S. companies will be affected with a repeal of LIFO for inventory valuation. It is also apparent that this switch from LIFO to FIFO or average cost will pose significant challenges to analysts and other financial statement users.

### **Last-in, First-out (LIFO)**

The LIFO method assumes that the units sold are the most recent units purchased. Thus the units that remain in inventory are the earlier units. In periods of rising prices, the cost of goods sold will be at the most current and hence the highest levels.

Thus LIFO will result in the higher cost of goods sold transferred to the income statement to match sales revenues in that period. This will result in a lower gross profit, a lower income, a lower tax base and a correspondingly lower tax liability than under FIFO. When inventory quantities decline during a period, then the out of date layers are liquidated and cost of goods sold will partially match non-current costs with current selling prices. This causes a distortion in the income statement. Many proponents of LIFO argue that it provides a better match of revenue and expenses and since sales reflect the most recent selling prices, then the cost of goods sold should also reflect the most recent purchases. However, the ending inventory balances shown on the balance sheet will be out of date because they reflect the older purchase transactions. Hence, these layers will be lower than the market replacement cost and will not accurately reflect the investment on the company's inventories.

### **First-in, First-out (FIFO)**

The FIFO method assumes that the units sold were the first to be acquired. Hence, the beginning inventory will be sold first, followed by purchases in their order of acquisition. As a result, in periods of rising prices, the cost of goods sold will include the lower priced goods and ending inventory will include the cost of the items most recently purchased. Thus, the ending inventory will reflect the most current market prices. However, this will result in higher reported income and higher taxes required to be paid to the taxing authority.

Under IFRS, a company switching to FIFO will reduce its cost of goods sold in the income statement because the carrying cost of the inventories used to record cost of goods sold will be several years old and hence lower than under LIFO. This will create a higher gross profit, higher net income and higher taxes than under the previously used LIFO inventory valuation. Notwithstanding this, FIFO will give a better indication of the value of the ending inventory on the balance sheet since the layers will be close to the market value of the newly purchased inventories.

### **Average Cost**

The average cost method assumes that the cost of goods sold and ending inventory consist of a mixture of all of the goods available for sale. Hence, the average unit cost applied to cost of goods sold and ending inventory is an average unit cost weighted by the number of units acquired at the various unit costs during the period. The income and its corresponding taxes will generally be between the LIFO and the FIFO inventory valuation methods.

## **IMPACT OF SWITCH FROM LIFO TO FIFO ON INCOME TAXES**

As a result of the prohibition of LIFO under IFRS, U.S. companies currently using LIFO will have to switch to FIFO or an acceptable alternative method to value their inventory. In periods of rising prices, as noted above, using the FIFO method will result in higher ending inventory and lower cost of goods sold. This will result in higher net income and corresponding higher taxes than under LIFO valuation used under U.S. GAAP. The following example is used for illustrative purposes.

**Example 1:** The Ace Widget Company (AWC) had 10 units in beginning inventory at a cost of \$90. During 2010, AWC experienced the following events:

- Event 1: Paid cash to purchase 20 units in inventory that cost \$20 per unit.
- Event 2: Paid cash to purchase 25 units of inventory that cost \$25 per unit.
- Event 3b: Recognized revenue on sales of 43 widgets at a price of \$35 cash per unit.
- Event 3b: Recognized cost of goods sold for the 43 widgets sold.

Event 4: Paid \$260 cash for operating expenses.

Event 5: Paid cash for income tax at a tax rate of 30 percent.

**TABLE 1**  
**COST OF GOODS SOLD-ENDING INVENTORY**  
**UNDER FIFO AND LIFO**

<b>Layer</b>	<b>FIFO</b>	<b>LIFO</b>	<b>Difference</b>
<b>Cost of Goods Sold:</b>			
Beg Inventory	10 x 9 = \$ 90		
Event 1	20 x 20 = 400	18 x 20 = \$360	
Event 2	13 x 25 = 325	25 x 25 = 625	
<b>Cost of Goods Sold (a)</b>	<b>43 = \$815</b>	<b>43 = \$ 985</b>	<b>\$170</b>
<b>Ending Inventory:</b>			
Event 2	12 x \$25 = \$300	10 x 9 = \$ 90	
		2 x 20 = 40	
<b>Ending Inventory</b>	<b>12 x \$25 = \$300</b>	<b>12 = \$130</b>	<b>\$170</b>

**TABLE 2**  
**NET INCOME-TAX EXPENSE DIFFERENCES**  
**UNDER FIFO AND LIFO**

	<b>FIFO</b>	<b>LIFO</b>	<b>Difference</b>
Sales (43 units x \$35)	\$1505	\$1505	\$ 0
-Cost of Goods Sold (a)	815	985	170
=Gross Margin	690	520	170
-Operating Expenses	260	260	0
=Operating Income before taxes	430	260	170
-Tax (30%)	129	78	51
<b>=Net Income</b>	<b>\$301</b>	<b>\$182</b>	<b>\$119</b>

As illustrated in the example above, the use of LIFO will result in a lower reported taxable income and hence a lower tax liability in the current period. With a taxable income of \$430 under FIFO, the corresponding tax expense is \$129, resulting in a net income of \$301. Whereas under LIFO, the taxable income is only \$260 with a corresponding tax expense of \$78, resulting in a net income of \$182. The difference between LIFO and FIFO in tax expense is \$51. This example clearly illustrates that in periods of rising prices, the tax is lower under LIFO than under FIFO. Due to this tax benefit, the LIFO method is generally preferred and as noted earlier, it is used by many U.S. companies.

However, it must be noted that taxes are not reduced permanently but are only deferred. Thus when the unit cost of inventory or the quantity of inventory subsequently declines, the reduced amount will be due and payable to the taxing authority. Since a dollar today is worth more than a dollar tomorrow, many companies prefer to use the LIFO method of inventory valuation even if it may have to be paid back in the future.

Currently, LIFO cushions and lowers the tax burden especially in periods of rising prices. As seen from the example above, the use of FIFO as an inventory valuation method will result in a \$170 higher ending inventory valuation and the same lower cost of goods sold than under LIFO. This will result in the recognition of higher reported profits and thus heavier tax burdens. This additional burden will greatly impact numerous business concerns that currently use LIFO, such as manufacturing companies and auto

parts companies where significant amounts of inventories are maintained and the typical flow of goods in these enterprises are typically LIFO. Undoubtedly, the endorsement of the IAS 2 in place of U.S. GAAP will also create adverse tax implications for other U.S. corporations. It will also create challenges for analysts and other users of the financial statements.

### **CREATION OF THE LIFO RESERVE**

Many companies use LIFO for external reporting and income tax purposes but maintain their internal records using FIFO, average or standard costing system. The reasons for this might include contractual obligations such as bonus and profit sharing plans tied to income, debt agreements with lenders as well as the use of FIFO for planning, control and decision making regarding product pricing. Some companies enter the results of the difference between the internal method and LIFO directly in the accounts as a contra account to inventory.

Companies that use the LIFO inventory costing method are also required to disclose the amount at which the inventories would have been reported if the FIFO method had been used. This difference between the LIFO inventory valuation method used for external reporting purposes and the FIFO or alternative method used for internal reporting purposes is the Allowance to Reduce Inventory to LIFO and is referred to as the **LIFO reserve or LIFO allowance**. Thus, the **LIFO reserve** refers to the amount by which a company's ending inventory account balance under LIFO differs from the FIFO or alternative costing method used internally for the same physical inventory.

Under IFRS, a business would be required to pay taxes on its existing LIFO reserve because it would be unable to use LIFO to protect itself from rising inventory costs. Under LIFO, the most recent (higher) costs of goods are expensed to the cost of goods sold, while the older (lower) costs remain in inventory. As a consequence of consistently increasing costs due to inflation, the balance in the LIFO reserve account will have a credit balance, in most cases. This credit balance will be used to offset costs reported for inventory, and therefore results in lower taxes. Further, under the current rules, if a U.S. company uses IFRS, they will need to reverse their LIFO reserves into income over a four (4) year period when the LIFO reserve maintains a credit balance. This will result in the recognition of higher income and hence additional tax liability.

In addition to the increased tax liability emanating from the recognition of higher income resulting from the required use of FIFO or average cost, the difference emanating from the LIFO reserve already on the books will also result in significantly higher tax burdens to U.S. companies. This will cause an increase in the company's tax liability but no additional income to pay for the additional tax. Undoubtedly, this will result in significant tax revenues for the U.S. Government but will result in significant penalties for U.S. companies. The switch from LIFO to FIFO will also require adjustments that would be reflected on the balance sheet and the income statement.

### **LIFO Conformity Rule**

While U.S. GAAP permits companies to elect FIFO, LIFO or average cost to determine inventory valuation, the U.S. tax regulations do not allow the use of LIFO for tax purposes unless it is also used for financial reporting purposes. This rule will prevent U.S. companies from using FIFO for financial reporting purposes under IFRS and then use LIFO for tax reporting purposes. This will therefore prevent U.S. companies from reporting higher income and simultaneously reaping the additional tax benefits. This could pose a significant challenge to U.S. companies when they change inventory methods from LIFO to FIFO or average cost and could materially affect their pre-tax accounting income.

### **IMPACT OF THE LIFO RESERVE**

A change in inventory valuation method is treated retrospectively. That is, once a company changes its inventory valuation method, it must adjust its financial statements for each prior period presented. The financial statement information about the prior periods must be on the same basis as the new valuation

method. Further, the company must also adjust the carrying amounts of assets and liabilities as of the beginning of the first year presented. Thus, when entities switch from LIFO under U.S. GAAP to FIFO under IFRS, the change is reflected retrospectively. Additionally, when a LIFO based company discloses the amount of the LIFO reserve, it is necessary to make adjustments to the balance sheet and the income statement.

The LIFO reserve created from the switch from LIFO to FIFO will also impact taxes, the balance sheet, the income statement and cash flows. Example 2 is shown below to illustrate this impact.

### Adjustments to the Balance Sheet

Based upon Revenue Procedure 2008-52, section 5.04, if the cumulative effect of the change from LIFO to FIFO under IFRS increases the company's tax liability, then the increase of income tax may be taken into account over four (4) years beginning with the year of change. Therefore, one-fourth (1/4) of increased tax would be treated as a current liability and the balance is a deferred tax liability (Bloom, Robert & Cenker, 2009). Hence, there are four (4) adjustments that are necessary on the balance sheet.

These are:

1. The ending inventories using FIFO under IFRS = Reported LIFO inventory under US GAAP + LIFO reserve.
2. Increase of income tax payable =  $\frac{1}{4}$  LIFO reserve x Tax rate (this assumes that the extra tax payment is spread over four (4) years).
3. Increase of Deferred tax payable =  $\frac{3}{4}$  x LIFO reserve x Tax rate.
4. Retained Earnings = Reported retained earnings under US GAAP + [LIFO reserve x (1-Tax rate)].

The result of switching from LIFO to FIFO will be threefold:

1. An increase in inventory.
2. An increase in current income taxes because of the effective increase in the income tax base.
3. An adjustment to retained earnings for the effect of the increase in net income.

**Example 2:** XYZ Company currently uses the LIFO method for inventory valuation. At the beginning of 2010, the company reports that the LIFO reserve is \$20 million. XYZ decides to voluntarily adopt IFRS in 2010. Since LIFO is prohibited under IFRS, then XYZ had decided to switch to the FIFO method. XYZ's income tax rate is 35%. The switch requires XYZ to restate Year 2010 beginning inventories to a FIFO basis for its balance sheet and income statement. The adjustments are made by the following accounting entry:

Dr. Inventory	20,000,000
Cr. Income tax payable	1,750,000
Cr. Deferred tax payable	5,250,000
Cr. Retained Earnings	13,000,000

This adjusting entry will reflect an increase in ending inventory of \$20 million for the XYZ Company, an increase in the current income taxes payable of \$1.75 million, an increase in deferred taxes payable of \$5.25 million and an increase in retained earnings of \$13.00 million. It is clear that both the switch from LIFO as well as the LIFO reserve will impact the balance sheet, the income statement and the statement of cash flows. These will clearly impact financial statement analysis.

### IMPACT OF SWITCHING TO LIFO ON FINANCIAL STATEMENT ANALYSIS

Financial statement analysis is the use of financial statements to analyze a company's current financial position and performance as well as to assess the future financial performance of the company. It is a critical and integral part of analyzing a business. It is also useful for the improvement of decision making.

In analyzing financial statements, all available information about a company's financial situation, its management, its plans and strategies and its business environment are considered and evaluated. It is important for the decisions of security analysts, investment advisors, fund managers, investment bankers, credit raters, corporate bankers, and individual investors (Wild, Subramanyam & Halsey, 2007). Financial analysis includes assessing the profitability, risk and sources and uses of funds. In performing financial statement analysis, a variety of tools are utilized. The most common tool is ratio analysis. Switching from LIFO to FIFO will impact many of the ratios and have implications on the financial assessment of the relevant company.

## RATIO ANALYSIS

Switching from LIFO under U.S. GAAP to FIFO under IFRS will have a significant impact on several aspects of the income statement, statement of retained earnings, balance sheet and statement of cash flows. Since one of the most significant impacts relate to the change in inventory method, the impact of the change in inventory valuation is considered relative to traditional ratio analysis. To this end, a consideration of the impact is examined on selected liquidity, activity, profitability and debt coverage ratios.

**Liquidity**, in terms of financial statements analysis, is defined as having enough money conveniently availability to pay bills when they become due and to take care of unexpected needs with cash (Needles, Jr. B. & Powers, M., 2010). A common measurement of liquidity is the **current ratio** which is defined as current assets divided by current liabilities. Current assets are the sum of cash and cash equivalents, accounts receivable, inventory, marketable securities, prepaid expenses, and other assets that could be converted to cash in less than one year (or the operating cycle, whichever is longer). Current liabilities are the sum of all money owed by a company and due within one year.

**Example 3:** The events previously used in Example 1 for the Ace Widget Company (AWC) are also utilized here for illustrative purposes. Suppose AWC in 2010 disclosed current assets of \$500 and current liabilities of \$250 before switching from LIFO to FIFO. In this case, AWC would report a current ratio of 2.00 to 1.00; that is, for every one dollar of current liabilities due within one year, AWC has two dollars of current assets available.

After changing inventory valuation methods to FIFO, ending inventory for 2010 would increase from \$130 as reported under LIFO to \$300 when reported under FIFO for a net increase in ending inventory of \$170. As a result of this change, AWC would disclose current assets of \$670 and current liabilities of \$250. Hence, AWC's current ratio would increase from 2.00 to 2.68 or 34%.

Another measurement of liquidity is the **current cash debt coverage ratio** which indicates whether the company can pay off its current liabilities from operations in a given year. The higher the current cash debt coverage ratio, the less likely a company will have a liquidity problem. For example, a ratio of near 1:1 is good in normal economic climates. This generally indicates that the company can meet all of its current obligations from internally generated cash flows (Kieso & Weygandt, 2010).

However, when using AWC's \$170 increase in ending inventory under FIFO as an example, the company's increase in inventory would appear on the statement of cash flows as a reduction in net cash provided by operating activities. This decline would reduce the current cash debt coverage ratio to a level of approximately 0.8:1.0. In this case, the measurement for liquidity has declined by a sizable or 20% margin.

**Activity ratios** are another indicator to consider when changing to FIFO. Activity ratios measure the number of times one variable moves in relation to another related variable. Cost of goods sold is related to inventory and increases as inventory is sold.

**The inventory turnover ratio** measures the number of times a company's average inventory is sold during an accounting period. It is calculated as cost of goods sold divided by average inventory. Using the events previously illustrated with AWC, the inventory turnover ratio in 2010 under LIFO would be

approximately 7.6 times (\$985 divided by an assumed average ending inventory of \$130). Given the switch to FIFO, the inventory turnover ratio would drop to 2.7 times (\$815 divided by an assumed average ending inventory of \$300). In this example, changing inventory valuations methods would lead to a significant or 65% decline in AWC's inventory turnover ratio.

The goal of many U.S. corporations is to show consistent increases in profits. **Performance or profitability indicators** measure how well or how poorly a company has performed in terms of its ability to generate profits or net income. Net income is revenues minus expenses incurred to generate such revenues. However, if expenses exceed revenues, the company would report a net loss instead of a net income. In evaluating the impact on profitability indicators due to a switch to LIFO, we examine **profit margin on sales, rate of return on assets and earnings per share (EPS)**. Each profitability indicator increased when inventory valuation is switched from LIFO to FIFO.

**Profit margin** on sales measures net income produced by each sales dollar. It is calculated as net income divided by net sales or net revenues (for service companies). Using the above data, AWC would report a profit margin of 12% in 2010 (\$182 divided by \$1,505) under LIFO. For each sales dollar earned in 2010, AWC may retain 12 cents as net income. However, under FIFO, AWC would report a profit margin of 20% (\$301 divided by \$1,505). Hence, switching to FIFO in 2010 would increase AWC's profit margin by 67%.

**The rate of return on assets** measures the net income produced by the company's average assets for the year. It is calculated as net income divided by average assets. Assuming total assets of \$1,300 for 2010, AWC would report a return on assets of 14% in 2010 under LIFO (\$182 divided by \$1,300). For 2010, each dollar of average assets for AWC generated 14 cents in net income. However, under FIFO, AWC would report a return on assets of 23% in 2010 (\$301 divided by \$1,300). Switching to FIFO in 2010 would increase AWC's return on assets by 64%.

Perhaps one of the most common measures of profitability of a publicly traded corporation is **earnings per share** or EPS. EPS indicates the income earned for each share of common stock (Kieso, Weygandt, 2010). In a basic calculation, EPS is net income divided the weighted average number of shares of common stock outstanding. Assuming AWC had 1,000 shares of common stock outstanding for 2010, AWC would report EPS of 18 cents (\$182 divided by 1,000) under LIFO. For 2010, 18 cents was earned for each share of common stock outstanding. However, under FIFO, AWC would report EPS of 30 cents in 2010 (\$301 divided by 1,000). Again, switching to FIFO in 2010 would increase AWC's EPS by 66%.

**The debt coverage ratios** indicate the company's ability to meet certain financial obligations. The times interest earned ratio indicates the company's ability to meet interest payments as they become due. It is calculated by dividing income before interest expense and income taxes by interest expense. Like the profitability indicators previously noted, the times interest earned ratio would increase given the increase in net income attributed to the switch from LIFO to FIFO. However, also as previously noted, the cash debt coverage ratio would decline since the increase in ending inventory would appear on the statement of cash flows as reductions in net cash provided by operating activities. This reduction would reduce the current cash debt coverage ratio.

A summary of each ratio discussed and its calculation is listed below:

**I. Liquidity:**

A. Current ratio:

Current assets / Current liabilities

Result: Increased due to higher inventory

B. Current cash debt coverage ratio:

Net cash provided by operating activities / Average current liabilities.

Result: Decreased due to higher inventory, holding all factors constant.

**II. Activity:**

A. Inventory Turnover:

Cost of goods sold / Average inventory

Result: Net Decrease – Decrease of cost of goods sold offset by higher average inventory, holding all factors constant.

### **III. Profitability:**

- A. Profit margin on sales:  
Net income / Net sales  
Result: Increased due to higher net income from lower cost of goods sold.
- B. Rate of Return on Assets:  
Net income / Average total assets  
Result: Net Increase - Increase from higher net income offset by higher average inventory, holding all factors constant.
- C. Earnings per share:  
Net income minus preferred dividends / weighted shares outstanding  
Result: Increased due to higher net income from lower cost of goods sold

### **IV. Coverage:**

- A. Times interest earned:  
Income before interest expense and taxes / Interest expense  
Result: Increased due to higher net income from lower cost of goods sold
- B. Cash debt coverage ratio:  
Net cash provided by operation activities / Average total liabilities  
Result: Decreased due to higher inventory, holding all factors constant

## **OTHER FACTORS IMPACTING INVENTORY**

When examining the impact of inventory valuation in the financial statements and on the ratios of companies, several other important factors must also be considered regarding the reporting of inventory under IFRS since they will also have significant implications for financial analysis. These are the requirements for impairment and disclosure.

### **Impairment of Inventory**

Companies are required to report their inventories at the lower of cost or market. The term “market” under U.S. GAAP is the median of the replacement cost with a ceiling, which is the net realizable value and a floor which is net realizable value reduced by a normal profit margin. However, under IFRS, market is defined as net realizable value which is defined as the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. IAS 2 allows this rule to be applied item by item or to pools of items. Application under U.S. GAAP or IFRS will provide similar results only when replacement cost is greater than net realizable value (Doupnik & Perera, 2009).

In the event that the cost of inventory valuation is higher than the market, then both U.S. GAAP and IFRS require that an impairment loss be recorded in the year of occurrence. However, U.S. GAAP does not allow for a reversal of an impairment loss subsequent to the year it is initially recorded. This means that only a downward adjustment is allowed under U.S. GAAP. However, IFRS allows both a downward adjustment and then requires an upward reversal if the selling price increases.

### **Disclosure**

Both U.S. GAAP and IFRS require disclosures for accounting policies with respect to inventory, the carrying amounts, any write-downs recognized as expense for the period, any reversal of write down to net realizable value (IFRS only), and carrying amounts of inventories pledged as security for liabilities and cost of goods.

## **ISSUES FOR FUTURE RESEARCH**

Although the work towards harmonization has been proceeding with considerable speed, it has raised a host of accounting issues for the standard setters and numerous challenges for multinational companies,

regulators, accountants, auditors, educational institutions, investors, potential investors, creditors and other financial statement users. These issues will present numerous opportunities for future research.

Jeffers, Greener & Penafiel (2008) note that some of the accounting issues and differences between IFRS and U.S. GAAP that have posed severe challenges to the convergence project relate to: 1) Financial statement presentation; 2) Intangible assets; 3) Other inventory issues; 4) Leases; 5) Earnings per share; 6) Financial Instruments such as derivatives and hedges; 7) Fair Value; 8) Business combinations and consolidation of financial statements, and many more.

The change in inventory valuation method will also have implications for other types of financial analysis such as Return on Investment (ROI) and Economic Value Added (EVA). The impact on these items must also be examined.

These issues could present opportunities as well as challenges for preparers and users of financial statements and could impact ratios and other financial statement analysis tools that are used to improve decision making regarding liquidity, activity, solvency and profitability of companies.

## **RECOMMENDATIONS**

Despite the many benefits associated with the conversion to one set of global standards, resolving the differences particularly with respect to inventory and its impact on ratio and other analysis of a company's financial statements will not be easy. Some suggestions to alleviate the negative impact of the switch from LIFO to FIFO that could possibly be utilized are discussed in the following paragraphs.

### **Continued Use of LIFO**

It is apparent that repeal of LIFO will pose numerous challenges to analysts and other financial statement users. It will also hurt many businesses in a wide array of industries. As a result, some opponents of IFRS suggest that alternatives be found which would iron out the differences between U.S. GAAP and IFRS and at the same time still maintain comparability. This suggestion is for the continued use of the LIFO alternative and accompanied by disclosures in the footnotes of the company's financial statements. This approach would allow for comparability between the U.S. and international financial statements without violating the LIFO conformity requirement under U.S. tax laws.

### **Restate Financial Statements**

If LIFO is repealed, U.S. companies will have no choice but to switch to some alternative inventory method, such as FIFO. An accounting change from LIFO to FIFO will cause the LIFO reserve to be included in income and taxed, either immediately or over a four year period. Furthermore, IFRS provides guidance for companies to restate their financial statements for only one year. To lessen the tax burden, perhaps the IRS should allow companies to restate their tax returns and file amended returns for the previous 3 years or more years. This may enable some companies to recuperate some of their benefits from using the LIFO method.

### **Capitalize and Amortize**

Companies should be allowed to capitalize tax expenses on the balance sheet and amortize it over a reasonable future period and allocate to tax expense each period. This will result in lower income and lower tax for U.S. companies.

## **CONCLUSION**

Undoubtedly, the transition to a single set of international financial reporting standards will be of benefit to the global capital markets. It will increase comparability of financial statements and provide a consistent reporting model for multinational companies. Operating in a single accounting environment will decrease the overall cost of capital and generate cost efficiencies for accountants, financial statement preparers and auditors. Despite the many benefits for many companies, the transition to IFRS will result

in many challenges. Of particular concern is the challenge emanating from the change from LIFO to FIFO or some other alternative inventory valuation method for many U.S. companies. This will result in higher reported income and hence higher tax bills for many U.S. companies. Furthermore, the impact of the taxes from the recognition of the LIFO reserve will be tremendous for companies. These factors will negatively impact the real net income of U.S. companies. It will also impact many aspects of the income statement such as cost of goods sold, gross margin, and income tax expense. Further, it will impact the balance sheet in the areas of inventory, deferred tax liability and total assets. It will negatively impact the statement of cash flows in actual cash provided from operating activities. These changes will undoubtedly distort the results of financial ratios and create confusion in the conclusions reached by financial analysis and other users of financial statements. These could lead to faulty decision making by decision makers.

Unquestionably, the switch from LIFO to an alternative inventory valuation method such as FIFO or average cost will provide additional opportunities but will also pose challenges to analysts, investors, creditors and other users of financial statements as they attempt to assess the liquidity, solvency, profitability and future prospects for companies and make prudent business decisions.

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