

# US GAAP Conversion To IFRS: A Case Study Of The Balance Sheet

Peter Harris, New Institute of Technology, USA  
Liz Washington Arnold, The Citadel, USA

## ABSTRACT

*International Reporting Standards (IFRS) has become the required framework for most of the world financial market economies. In the United States, US Generally Accepted Accounting Principles (GAAP) is still required. However, plans are presently in place by the SEC to abandon US GAAP and to adhere to IFRS requirements by as early as the period ending December 31, 2014. This case study requires the student to transform a US GAAP presented Balance Sheet to IFRS and is most suitable for an Intermediary Accounting II and a Financial Analysis class at the graduate level.*

**Keywords:** US GAAP; IFRS; LIFO; Fair Market Value Accounting; Asset Impairment; Asset Revaluation; Balance Sheet

## INTRODUCTION

IFRS International Reporting Standards (IFRS) has presently been adapted by most countries that have a stock exchange. In the United States, however, companies report on several different principles-based methods, including but not limited to US GAAP and IFRS, which makes comparability, understandability and the presentation of financial data very difficult.

Much of the current financial crisis has been blamed on the inability to understand financial reporting and the ability to somehow circumvent rules due to the difficult and inconsistent accounting financial statement requirements.

The solution proposed by the SEC and other worldwide agencies is to have a single conforming set of accounting principles which every publically traded company in the world would adhere to in presenting financial information. The solution has been the adaption of IFRS and this action has been implemented by most countries worldwide, such as Europe, Canada, and Australia. This trend has also transformed to the education scene as professional examinations, such as the CPA and CFA exams, have materially incorporated IFRS into their curriculum.

The US is in the transformation stage and it is expected that IFRS will be in place by as early as 2014. As such, it is important to introduce IFRS accounting rules in the college curriculum and make it a major component of accounting classes. This case study takes a US GAAP-prepared Balance Sheet and, based on the facts of the case, requires students to prepare an IFRS-based Balance Sheet. It is important for the student to refer to our paper entitled “US GAAP Conversion to IFRS: A Case Study Of The Income Statement” (*Journal of Business Case Studies*, July/August 2012; Volume 8, Number 4) in doing this assignment to obtain a comprehensive understanding of IFRS rules. This case expands on the Income Statement and focuses on the Balance Sheet. The need to understand both US GAAP and IFRS rules is required to adequately address this case study.

**BACKGROUND**

AXE Corp, a publically-traded NYSE company (symbol AXEC), is a manufacturer of electrical light bulbs. Its main headquarters is based in Denver, Colorado, and the company has been operating since 1976. The company sells light bulbs to the retail market on a worldwide basis.

Their Balance Sheet and Income Statement for the Year Ending December 31, 2011 have been prepared using US GAAP. The controller would like to begin to see the effects of using IFRS on the Balance Sheet and has been assigned this task. The company would like to adapt IFRS by as early as next year as it is considering a new stock issue in the London Stock Exchange, which requires IFRS compliance.

**FINANCIAL STATEMENTS**

**Balance Sheet**  
(in 000's)  
As of 12/31/2011

<b>ASSETS</b>		<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	33,000	Accounts payable	20,000
Accounts Receivable	25,000	Accrued Expenses	15,000
Investments(AFS)	10,000	<u>Taxes payable</u>	<u>5,000</u>
<u>Inventory (LIFO)</u>	<u>50,000</u>	Total Current Liabilities	40,000
Total Current Assets	118,000		
<b>Property, Plant and Equipment</b>		<b>Noncurrent Liabilities</b>	
Assets (cost)	100,000	<u>Bonds payable</u>	<u>50,000</u>
Less:		Total Liabilities	90,000
<u>Accumulated Depreciation</u>	<u>(30,000)</u>		
	70,000	<b>Shareholders' Equity</b>	
<b>Intangible Assets</b>		Common Stock (\$1 par)	50,000
Trademark	5,000	<u>Retained Earnings</u>	<u>60,000</u>
<u>Goodwill</u>	<u>7,000</u>		
	<u>12,000</u>		<u>110,000</u>
Total Assets	<u>200,000</u>	Total Liabilities and Shareholders' Equity	<u>200,000</u>

**Income Statement**  
(In 000's)  
1/1/2011-12/31/2011

<b>INCOME FROM CONTINUING OPERATIONS</b>	
Sales	250,000
<u>Cost of Goods Sold</u>	<u>175,000</u>
Gross profit	75,000
Selling and Administrative Expenses (exclusive of Amortization and Depreciation)	<u>31,000</u>
Earnings before Interest, Taxes, Depreciation and Amortization	45,000
<u>Amortization and Depreciation Expense</u>	<u>10,000</u>
Earnings before Interest and Taxes	34,000
<u>Interest Expense</u>	<u>4,000</u>
Income before tax	30,000
<u>Tax Expense (30 %)</u>	<u>9,000</u>
Earnings from continuing operations and before Extraordinary Item	21,000
<b>EXTRAORDINARY ITEM</b>	
<u>Net loss from Hurricane (net of 4,500 taxes)</u>	<u>(10,500)</u>
Net Income	<u>10,500</u>

**ADDITIONAL INFORMATION**

1. AXE Corp. uses the LIFO method to account for its inventory. The LIFO reserve was \$15,000 at the beginning of the year and \$20,000 as of year-end.
2. Management has established that the fair market value of Property, Plant and Equipment as of 1/1/2011 is \$85,000, resulting in a \$5,000 increase above Book Value.
3. Upon review , management has established the following Fair Market Values for the presented assets as of 12/31/2011:  

Goodwill	10,000
Trademark	10,000
4. In 2010, there was a Goodwill impairment accounted for in the amount of \$3,000.
5. In 2008, there was a Trademark impairment of \$2,000.
6. Property, Plant and Equipment is depreciated over a 10-year period using the straight line depreciated method. There is no salvage value. Amortizable Intangible assets are amortized over a 5-year period using the straight line method. No salvage value is expected.
7. Investments include Available for Sale Securities (AFS) with a fair market value of \$10,000 as of 12/31/2011. The beginning-of-year value was \$7,000 of which \$2,000 is due to an exchange rate gain.
8. There are long-term contingencies of \$6,000 stemming from civil lawsuits. Legal council considers the payout slightly “more likely than not” but not highly probable.
9. The extraordinary loss was due to hurricane damage which is considered unusual and infrequent.
10. The effective tax rate for AXE is 30 percent.

**REQUIRED**

For each scenario above (1 to 10):

1. Identify the similarities and differences between the Balance Sheet effects of US GAAP and IFRS.
2. Record the differences above in journal entry form to satisfy IFRS rules.
3. Prepare an IFRS Balance Sheet for the 2011 calendar year.

**SOLUTIONS**

**Parts 1 and 2**

1. LIFO is not permitted under IFRS. As such, FIFO has to be used. The difference between the LIFO and FIFO Cost of Goods Sold is the difference between the beginning of the year and year-end differential in the LIFO Reserve. In this case, the difference will result in a decrease in Cost of Goods sold by virtue of a greater Inventory total under FIFO in the amount of \$ 5,000 (\$20,000 less \$15,000) (1A). Additionally, another \$15,000 additional inventory under FIFO should be recorded (1B), thus adding \$20,000 to the value of inventory (LIFO reserve amount). As such, the journal entries will be:

1A     Dr. Inventory 5,000  
          Cr. Cost of Goods Sold 5,000 - Income Statement

1B     Dr. Inventory 15,000  
          Cr. Deferred Income Tax 4,500  
          Cr. Retained Earnings 10,500

2. IFRS allows for Asset Revaluation for Property, Plant and Equipment and Intangible Assets. Both US GAAP and IFRS allow for asset impairment which is tested on an annual basis. IFRS allows for an asset reversal of impaired assets for all tangible and intangible long-term assets, excluding Goodwill. US GAAP allows for impairment, but once lowered, no reversal of impairment is allowed. In no circumstance may Property, Plant and Equipment assets or Intangible assets be written above its book value under US GAAP.

Resulting Accounting Treatment (US GAAP): The impairment loss for tangible and Intangible Assets is recorded on the income Statement and results in a lower carrying value on the Balance Sheet.

Resulting Accounting Treatment (IFRS): The loss is treated similar to US GAAP.

The write-up of tangible and intangible assets is recorded as comprehensive income - a Balance Sheet account in Shareholders' Equity, and not on the Income Statement. Finally, reversal of losses, up to the amount of the impairment, is recorded as a reduction in loss, which is a gain in the Income Statement and any excess is recorded as part of comprehensive income. Goodwill may not be reversed once impairment has occurred.

On 1/1/2011, the Property, Plant and Equipment assets were increased by \$5,000 above Book Value. For IFRS purposes, this results in an increase in the carrying value of these assets to Fair Market Value (2B) and a resulting increase of depreciation expense and Accumulated Depreciation of \$500 (\$5,000 divided by a 10-year useful life using the straight line depreciation method) (2A). The Adjusting entry then is:

2A     Dr. Depreciation Expense 500 - Income Statement  
          Cr. Accumulated Depreciation 500

2B     Dr. Property, Plant and Equipment 5,000  
          Cr. Shareholders' Equity - Surplus (Deficit) (Comprehensive Income) 5,000

The trademark had an estimated fair market value of \$10,000 as of year-end. IFRS allows the write-up of intangible assets above book value if fair market value exceeds book value. US GAAP does not allow for reversals of previously recorded impairments. Under IFRS, a previous impairment loss will be reversed to the Income Statement as a reduction/loss, which is, in effect, a gain, and any excess over that is recorded as Comprehensive Income - a Balance Sheet account in Shareholders' Equity (not on the Income Statement). The adjusting entry is:

2C      Dr. Trademark 5,000  
          Cr. Reversal of Impairment Loss - Trademark - Income Statement 2,000  
          Cr. Shareholders' Equity - Surplus (Deficit) (Comprehensive Income) 3,000

3.      Finally, there is no adjustment for Goodwill as both US GAAP and IFRS have similar treatment for this Intangible Asset. Also note that Trademarks and Goodwill are not amortizable Intangible Assets due to their indefinite useful life.

4.      Available For Sale Securities (AFS)

Both US GAAP and IFRS treat AFS securities similar in that they are reported at Fair Market Value at the Balance Sheet date. Any income or loss is part of comprehensive income (not Income Statement). The only difference, however, is that IFRS treats the foreign currency exchange gain or loss as an income (loss) item, which is reported in the Income Statement.

As such, \$2,000 of the increase in the AFS value, which relates to currency gain, is part of non-operating income. As such, the adjusting entry is:

4A      Dr. Shareholders' Equity - Surplus (Deficit) (Comprehensive Income) 2,000  
          Cr. Currency Exchange Rate Gain - Income Statement 2,000

5.      US GAAP and IFRS record a contingency loss when the loss is deemed to be probable. This definition of probable differs between the two groups. US GAAP defines probable as "likely", whereas IFRS defines probable as "more likely than not". The result is that IFRS is more conservative in recognizing contingency losses. In this situation, the loss is recorded for IFRS only, with a corresponding liability on the balance Sheet. US GAAP only requires disclosure in this situation. The adjusting entry, then, is:

5A      Dr. Contingency loss - Income Statement 6,000  
          Cr. Contingency Liability payable 6,000

6.      Extraordinary Items - US GAAP v. IFRS

IFRS disallows extraordinary gains (losses) and, as such, is not existent. Consequently, this item needs to be part of the non-operating income (loss) schedule of the Income Statement. The gross amount of the loss, in this case, is the net of tax loss of \$10,500 divided by .7 (1 less 30 percent tax rate), resulting in a loss from hurricane – before taxes of \$15,000.

We reclassify this loss from Extraordinary to Non-operating Income (loss).

7.      Income Statement Adjustment: US GAAP to IFRS conversion.

Please refer to P. Harris, L. Washington Arnold, US GAAP Conversion to IFRS: A Case Study Of The Income Statement (*Journal of Business Case Studies*, July/August 2012; Volume 8, Number 4) to see the effects and calculations of US GAAP conversion to IFRS for the Income Statement.

#### **ADJUSTING ENTRY (7)**

Dr. Income Summary 2,500  
Cr. Income Tax Payable – Current 750  
Cr. Retained Earnings 1,750

The difference in income between US GAAP and IFRS is 12,250-10,500, or a net income difference of 1,750. The income before tax is 2,500, or 1,770 divided by 1 less the tax rate of 30 percent (.7). The tax expense on

this difference is 750 and also represents a current liability tax payable account. Retained Earnings is increased due to the increased net income total.

### Part 3

**IFRS Balance Sheet**  
**Financial Statement - US GAAP - IFRS Reconciliation**  
**Balance Sheet (in 000's)**  
**As of 12/31/2011**

<b>ASSETS</b>	<b><u>US GAAP</u></b>	<b><u>ADJUSTMENTS</u></b>	<b><u>IFRS</u></b>
<b>Current Assets</b>			
Cash	33,000		33,000
Accounts Receivable	25,000		25,000
Investments (AFS)	10,000		10,000
Inventory	<u>50,000</u>	(1) 20,000	<u>70,000</u>
Total Current Assets	118,000		138,000
<b>Property, Plant and Equipment</b>			
Assets (cost)	100,000	(2) 5,000	105,000
Accumulated Depreciation	<u>(30,000)</u>	<u>(2) (500)</u>	<u>(30,500)</u>
	70,000		74,500
<b>Intangible Assets</b>			
Trademark	5,000	(3) 5,000	10,000
Goodwill	<u>7,000</u>		<u>7,000</u>
	<u>12,000</u>		<u>17,000</u>
Total Assets	<u>200,000</u>	<u>29,500</u>	<u>229,500</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
<b>Current Liabilities</b>			
Accounts Payable	20,000		20,000
Accrued Expenses	15,000		15,000
Taxes Payable-Current	<u>5,000</u>	<u>(7) 750</u>	<u>5,750</u>
Total Current Liabilities	40,000	750	40,750
<b>Non-current Liabilities</b>			
Bonds Payable	50,000		50,000
Taxes Payable-Noncurrent		(1) 4,500	4,500
Contingent Liability Payable	<u>0</u>	<u>(6) 6,000</u>	<u>6,000</u>
Total Current Liabilities	<u>50,000</u>	<u>10,500</u>	<u>60,500</u>
Total Liabilities	90,000	11,250	101,250
<b>SHAREHOLDERS' EQUITY</b>			
Common Stock (\$1 Par)	50,000		50,000
Surplus(Deficit)	0	(2)5,000 (3)3,000 (4)(2,000)	6,000
Retained Earnings	<u>60,000</u>	<u>(1) 10,500 + (7) 1,750</u>	<u>72,250</u>
Total Shareholders' Equity	<u>110,000</u>	<u>18,250</u>	<u>128,250</u>
Total Liabilities and Shareholders' Equity	<u>200,000</u>	<u>29,500</u>	<u>229,500</u>

**Balance Sheet – IFRS (in 000's)**  
**As of 12/31/2011**

ASSETS		LIABILITIES AND SHAREHOLDERS' EQUITY	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	33,000	Accounts Payable	20,000
Accounts Receivable	25,000	Accrued Expenses	15,000
Investments (AFS)	10,000	Taxes Payable - Current	<u>5,750</u>
Inventory	<u>70,000</u>	Total Current Liabilities	<u>40,750</u>
Total Current Assets	138,000		
<b>Property, Plant and Equipment</b>		<b>Non-current Liabilities</b>	
Assets (cost)	105,000	Bonds Payable	50,000
<u>Accumulated Depreciation</u>	<u>(30,500)</u>	Taxes Payable- Noncurrent	4,500
	74,500	Contingent Liability Payable	<u>6,000</u>
<b>Intangible Assets</b>		Total Non-current Liabilities	<u>60,500</u>
Trademark	10,000	<u>Total Liabilities</u>	<u>101,250</u>
<u>Goodwill</u>	<u>7,000</u>		
	3,000	<b>SHAREHOLDERS' EQUITY</b>	
<b>Total Assets</b>	<u>229,500</u>	Common Stock (\$1 Par)	50,000
		Surplus (Deficit)	6,000
		Retained Earnings	<u>72,250</u>
		<b>Total Shareholders' Equity</b>	<u>128,250</u>
		<b>Total Liabilities and Shareholders' Equity</b>	<u>229,500</u>

## CONCLUSION

IFRS is the future of worldwide financial reporting and should be included as a major part of any accounting and/or business curriculum in the US, as well as the rest of the world. This case illustrates a situation where a Balance Sheet is prepared using US GAAP as the basis and converting to IFRS for comparison purposes. In this case study, IFRS rules are discussed and key Balance Sheet similarities and differences between US GAAP and IFRS are addressed. We will follow up with other similar case studies that focus on an IFRS-prepared Cash Flow Statement from a US GAAP-prepared Financial Statement.

## AUTHOR INFORMATION

**Peter Harris** is a Professor and Chair of the Accounting and Finance department at the New York Institute of Technology. Previously, he has worked for Ernst and Young LLP. He is an author of over 40 refereed journal articles and has over 100 intellectual contributions. He has presented and continues to present seminars to nationally and globally audiences on topics relating to financial reporting and taxation. He is a member of several professional organizations. E-mail: [pharris@nyit.edu](mailto:pharris@nyit.edu) (Corresponding author)

**Liz Washington Arnold** is an Associate Professor of Accounting at The Citadel. She has over 25 years of corporate accounting experience and is an active member of various community and professional organization. Her research on Corporate Accounting Malfeasance and other topics appears in journals such as *Accounting and Taxation*, the *Southeast Case Research Association Journal*, and *Business Education Innovations*. She can be reached at The Citadel, 171 Moultrie Street, Charleston, SC 29445, E-mail: [liz.arnold@citadel.edu](mailto:liz.arnold@citadel.edu)

## REFERENCES

- Harris, P., L. Washington Arnold, US GAAP Conversion to IFRS: A Case Study Of The Income Statement (*Journal of Business Case Studies*, July/August 2012; Volume 8, Number 4).
- International Financial Accounting Standards (IFRS). IAS numbers: 2, 3, 36, 37, 38, 39.
- PWCoopers.org

4. Revise, Collins, Johnson, *Financial Reporting and Analysis*, 3rd Ed. Pearson, Prentice, Hall, 2004.
5. U.S Generally Accepted Accounting Principles (US GAAP). ASC Numbers: 320, 330, 360, 410, 985.
6. White, Sondhi, Fried, *The Analysis and Uses of Financial Statements*, 3rd Edition, Wiley, 2008.