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Interpreting Financial Results

Be aware of the impact of the economic crisis and recent accounting changes on financial ratios.

By Bridget Lyons, Rupendra Paliwal, and Danny Pannese, CPA, CVA

Since 2005, many companies, including those comprising the Dow Jones Industrial Average (DJIA), have experienced deterioration in common credit ratios, including the debt-to-equity and liability-to-equity ratios. At the same time, the current financial crisis has increased focus on credit analysis and credit metrics. Complicating credit analysis is the implementation of three Financial Accounting Standards Board (FASB) accounting pronouncements: Statement of Financial Accounting Standards (SFAS) No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—an amendment of FASB Statements No. 87, 88, 106, and 132(R)"; SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB No. 51"; and Financial Interpretation 48 (FIN 48), "Accounting for

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Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109." SFAS No. 158 and FIN 48 were issued in 2006 and SFAS No. 160 in 2007. Although they haven't garnered much attention, they have materially affected the balance sheets of many companies and have had a significant impact on common credit ratios and return measures, including return on equity (ROE).

In fact, SFAS No. 158 and FIN 48 continue to impact financial statements, so, as 2009 financial information is released, we recommend that financial professionals and investors interpret credit and return measures carefully. Further complicating the analysis of 2009 financial reports is SFAS No. 160, which was effective in 2009 for most companies. (See "Accounting for Noncontrolling Interests" on p. 53 for more information about SFAS No. 160.)

To learn more about the effects of all these factors, we examined the companies in the DJIA from 2005 through 2009 and analyzed the impact of SFAS No. 158 and FIN 48. Then we calculated financial ratios for each company and for the overall sample. The average ratios for the companies in our sample are shown in Table 1.

These ratios receive a great deal of attention from financial analysts and investors and frequently are used in designing loan covenants. The two credit metrics, debt to equity and liabilities to equity, deteriorate from 2005 to 2008 since the firms appear to be much more highly leveraged and then improve in 2009 as the relative level of debt falls. Average ROE moves between 20% and 23% from 2005 to 2008 before dropping dramatically in 2009. Return on equity is a common measure of profitability, so the ROE in Table 1 suggests that 2008 was an especially profitable year and that performance in 2009 was much weaker.

Here's a key question: Do these ratios reflect changes primarily in financial position and performance, or have accounting changes played a role?

We find that accounting changes have had a significant impact on the results.

Table 2 shows the average ratios for the companies in our sample after adjusting for implementation and ongoing compliance with SFAS No. 158 and FIN 48.

Let's take a deeper look at the effects of the accounting changes. Although we'll continue our discussion using references to SFAS No. 158, SFAS No. 160, and FIN 48, on July 1, 2009, the FASB formally adopted its *Accounting Standards Codification*™ (ASC) that superseded these and all other prior pronouncements of U.S. Generally Accepted Accounting Principles (GAAP), thus becoming the single official source of authoritative, nongovernmental U.S. GAAP and reorganizing the previous guidance under topics instead of single pronouncement numbers. The guidance that was originally in SFAS No. 158 is now under ASC Topics 715, *Compensation-Retirement Benefits*, and 958, *Not-for-Profit Entities*. Guidance originally in SFAS No. 160 is now under ASC Topic 810, *Consolidation*, and guidance under FIN 48 is now under ASC Topics 740, *Income Taxes*;

Table 1: Average Ratios for Sample Companies

	2005	2006	2007	2008	2009
Debt/Equity*	0.73	0.78	0.76	1.11	0.84
Liabilities/Equity**	3.20	3.48	3.58	3.77	3.09
Return on Equity**	20%	23%	21%	23%	14%

*Banks were excluded from the debt/equity ratio because the ratio isn't relevant for banks.
**This sample is composed of the firms in the Dow Jones Industrial Average as of January 2010, excluding The Home Depot and Microsoft because the accounting changes at these two firms weren't significant.

Table 2: Average Ratios After Adjustments

	2005	2006	2007	2008	2009
Debt to equity – as reported	0.73	0.78	0.76	1.11	0.84
Debt to adjusted equity (no adj. req. for 2005)	**0.73**	**0.66**	**0.82**	**0.87**	**0.87**
Liabilities to equity – as reported	3.20	3.48	3.58	3.77	3.09
Liabilities to equity – adjusted (no adj. req. for 2005)	**3.20**	**3.06**	**3.84**	**3.20**	**3.14**
Return on equity – as reported	20%	23%	21%	23%	14%
Return on equity – adjusted (no adj. req. for 2005)	**20%**	**21%**	**23%**	**19%**	**14%**

Table 3: Average Adjustment

	2007	2008	2009
Average Adj. to OCI for Pension OPEB in millions of $	900	(3,413)	23
Average change in Value of Pension Assets	7.8%	(21.3)%	20.8%

Table 4: IBM—Key Values

in millions of $	2005	2006	2007	2008	2009
Retained earnings	44,734	52,432	60,640	70,353	**80,900**
Other Comprehensive Income	(2,016)	(8,901)	(3,414)	(21,845)	**(18,830)**
Total Equity	33,098	28,506	28,470	13,465	**22,637**
Net income	7,934	9,492	10,418	12,334	**13,425**
Debt	22,641	22,682	31,093	33,925	**26,100**
Liabilities	72,650	74,728	91,962	96,058	**86,267**
Adj. to OCI for initial adoption of SFAS No. 158		(9,498)	4,678	(14,857)	**1,838**

805, *Business Combinations*; and 835, *Interest*. Any changes to the Codification are made via Accounting Standards Updates (ASU). All the pertinent information about the Codification can be found at the FASB's website at www.fasb.org under the heading "Standards."

SFAS No. 158

The accounting for defined pension and postemployment benefits has long been controversial. SFAS No. 158, which was approved in September 2006 and was effective for most firms that year, requires full balance-sheet recognition of the net pension liability (or asset). Companies with year-ends after December 15, 2006, had to show the funded status of defined pension and other postemployment benefits on the balance sheet. Since most firms with such plans hadn't fully funded the plans, particularly in terms of other postemployment benefits (OPEB), implementation of SFAS No. 158 generally led to an increase in liabilities and a reduction in equity. On average, our sample firms reported a decline of about 7% in equity in 2006.

Adjusting for the impact of SFAS No. 158 indicates that the three ratios we examined provided somewhat misleading information for 2006 since debt to equity and liabilities to equity actually improved rather than deteriorated and return on equity showed only a marginal improvement.

The implementation of SFAS No. 158 isn't a one-time adjustment because ongoing compliance with the Statement continues to significantly impact equity values through adjustments to other comprehensive income. During 2007, most companies had relatively high asset returns so reported positive adjustments to other comprehensive income and a corresponding increase in equity. The reverse occurred in 2008 as the value of pension assets at most firms dropped dramatically, leading to large drops in other comprehensive income and total equity. In 2009, the average adjustment to other comprehensive income for pension and other postemployment benefits was relatively small, so there isn't much of a difference between the reported and adjusted ratios.

We found that, for our sample firms, the average adjustment to the other comprehensive income component of equity related to SFAS No. 158 was significant over the 2006-2009 period (see Table 3).

FIN 48

Financial Interpretation 48 was released in July 2006 to provide more transparency in reporting and to enhance comparability across firms. It includes a statement that says that, upon adoption, firms must record any effect of a change in reserves for uncertain tax benefits as an adjustment to shareholders' equity. The adoption of FIN 48, in 2007 for most firms, led to adjustments in equity

Table 5: IBM—Adjusted Ratios

	2005	2006	2007	2008	2009
Debt to equity – as reported	0.68	0.80	1.09	2.52	1.15
Debt to adjusted equity		**0.60**	**1.31**	**1.20**	**1.25**
Liabilities to equity – as reported	2.19	2.62	3.23	7.13	3.81
Liabilities to equity – adjusted		**1.72**	**4.09**	**2.87**	**4.24**
Return on equity – as reported	24%	33%	37%	92%	59%
Return on equity – adjusted		**25%**	**44%**	**44%**	**65%**

related to reserves for uncertain tax benefits, which impacted the firms' credit ratios. For example, IBM adopted the provisions of FIN 48 on January 1, 2007. The cumulative effect of adopting the Interpretation was a decrease in tax reserves and an increase of $117 million to the January 1, 2007, retained earnings balance. In our sample, the firms were almost evenly split between positive and negative adjustments to equity.

Case Study: IBM

So how does the accounting work? Let's look at an analysis of IBM over the 2006-2009 period. Key values are provided in Table 4.

Note that, at IBM, retained earnings increased from 2005 to 2006 but that debt was flat over this period. From a credit perspective, this is a positive trend. Still, the debt-to-equity and liabilities-to-equity ratios at IBM increased significantly (see Table 5). We also see a significant increase in return on equity from 2005 to 2006. These ratios reflect, in part, implementation of SFAS No. 158, which led to a reported adjustment to other comprehensive income of $9.498 billion and recognition of the full value of pension and OPEB liabilities on the balance sheet. Again, the FIN 48 impact on IBM was $117 million in 2007.

If we adjust for the implementation of SFAS No. 158 by "undoing" the accounting transactions related to implementation, IBM would have reported the "adjusted" ratios (no adjustment required for 2005) shown in Table 5.

At IBM, the apparent deterioration in credit metrics and improvement in return on equity from 2006 through 2008 can be attributed in large part to the adoption of SFAS No. 158. The adjusted ratios are less volatile over time.

Implications

Accounting changes can lead to one-time impacts on financial statements and ratios when implemented and should be considered in financial analysis by investors, analysts, rating agencies, and creditors. Perhaps more important for forward-looking analysis, however, is the impact of ongoing implementation of these accounting changes.

The debt-to-equity, liabilities-to-equity, and return-on-equity ratios for the DJIA firms we examined were impacted significantly by market conditions but also by implementation of SFAS No. 158 and, to a lesser extent, FIN 48. This may have led to a perceived deterioration of creditworthiness. Further, some firms may have faced a situation where bond and loan covenants were triggered, leading to serious consequences. When there's a technical default in a loan covenant, this can lead to the loan becoming payable upon demand, restricted ability to pay dividends, and the potential for a qualified audit.

In addition to the implementation of these accounting changes, ongoing compliance with SFAS No. 158 continues to significantly impact equity values through adjustments to other comprehensive income. As noted earlier, this ongoing compliance resulted in significant positive impact on other comprehensive income in 2007 and a significant negative impact in 2008. In 2009, pension asset values rose significantly.

A key consideration is that when profitability and market ratios deteriorate because of market conditions, the impact of SFAS No. 158 generally has an impact on other comprehensive income that worsens credit metrics in bad times and strengthens these metrics in good times. This

Accounting for Noncontrolling Interests

Effective for reporting in 2009, SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements," addresses the accounting for noncontrolling interests in a subsidiary and for the deconsolidation of a subsidiary.

◆ SFAS No. 160 aligns the accounting for noncontrolling interests more closely with the reporting by firms reporting under International Financial Reporting Standards (IFRS).

Key Features:

◆ SFAS No. 160 requires that the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and **presented in the equity section of the balance sheet**. In the past, these interests were often referred to as minority interest and were displayed within the liability section of the balance sheet or in between the liability and equity sections.

◆ On the income statement, the amount of consolidated net income attributable to the noncontrolling interest must be presented clearly, and the income attributable to the parent also must be shown. Prior to SFAS No. 160, income attributable to the noncontrolling interest could be shown as an expense or deduction.

◆ The Statement also provides guidance on changes in parent ownership interest and accounting for deconsolidation.

Implications:

◆ **The book value of equity will increase** because the noncontrolling interest is now included in total equity.

◆ **The market-value-of-equity-to-book-value-of-equity ratio is meaningless without careful calculation** since if the book value of equity is calculated using total shareholders' equity, it includes both the controlling (parent) and noncontrolling interest, but the market value of equity includes only the equity of the parent or controlling interest.

◆ **Return on equity must be calculated carefully** using net income attributable to the parent and equity of the parent (only) or total net income and total equity.

◆ **Liability-to-equity ratios may change**, especially if the firm included minority interest in the liability section of the balance sheet in prior years.

was the rationale for changing SFAS No. 157, "Fair Value Measurement," during the recent crisis. It was argued that SFAS No. 157 forced banks to write down asset values to extraordinarily low values even when those assets weren't for sale. Then the FASB issued the following clarification on SFAS No. 157: "FSP FAS 157-4 relates to determining fair values when there is no active market or where the price inputs being used represent distressed sales. It reaffirms what Statement 157 states is the objective of fair value measurement—to reflect how much an asset would be sold for in an orderly transaction (as opposed to a distressed or forced transaction) at the date of the financial statements under current market conditions. Specifically, it reaffirms the need to use judgment to ascertain if a formerly active market has become inactive and in determining fair values when markets have become inactive." This clarification helped financial institutions avoid further write-downs of asset values and the need for additional capital.

The takeaway? Financial analysts, investors, and creditors need to carefully interpret ratios and measures, including debt to equity, liabilities to equity, and return on equity. Financial ratios used in loan covenants should be clearly designed and defined, and, in some cases, equity may be more meaningfully defined as adjusted for certain changes in other comprehensive income. **SF**

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