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LEVERAGE RATIOS

19, October 2011

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Keywords: *debt, equity, assets, cash(flow), creditor*

Leverage Ratios

- **Provide a measure of a company's debt financing**
- **Calculated to determine a company's ability to pay off interest payments on outstanding debt, and other outstanding payments to creditors**

Leverage Ratios and PERFORMANCE ASSESSMENT

- **Leverage ratios are used by banks, brokers, financial analysts, government agencies, accountants, and potential creditors to:**

  - **Calculate interest rates for loans**
  - **Assess the company's ability to manage their debts and meet their financial obligations**
  - **Make decisions to provide new credit or extent existing credit arrangements; *credit: The agreed deferment of payment of a debt**

Types:

I. Capital Acquisition Ratio – reflects a company's ability to finance capital expenditures from internal sources; *acquisition: the purchase of an asset; the process of taking a controlling interest in a business.

$$\textbf{Capital Acquisition Ratio} = \frac{\text{Cash Flow From Operations- Dividends}}{\text{Cash Paid for acquisitions}}$$

A ratio of less than 1:1 (100 %) indicates that capital acquisitions are draining more cash from the business than it is generating.

II. Capital Employment Ratio - shows the amount of sales generated by the owner's investment in operations.
*Equity: refers to the money invested and owned by shareholders.

$$\textbf{Capital Employment Ratio} = \frac{\text{sales}}{\text{(Owners equity- non- operating assets)}}$$

III. Capital Structure - refers to the mix of a company's long-term debt, specific short-term debt, and total equity; The capital structure is how a firm finances its overall operations and growth by using different sources of funds.

The capitalization ratio and debt-to-equity ratio show how much a company is leveraged/indebted in terms of its capital.

A. Long-Term Debt/Capitalization Ratio

$$\textbf{Capitalization Ratio} = \frac{\textbf{Long-Term Debt}}{\text{Shareholder's Equity} + \text{Long Term Debt}}$$

***Capitalization** is a term used to describe a company's permanent or long-term capital, which consists of both its long-term debt and it shareholder's equity. **The capitalization ratio** is a very meaningful ratio because it shows the relationship between long-term debt and the company's total capital base, which consists of money from shareholders, and money from lenders.

There is no "right" amount of debt or capitalization ratio because leverage varies according to industry, a company's line of business, and its stage of development. Generally, a low level of debt and a high level of equity is an indication of financial fitness; a company who is too highly leveraged may experience difficulty with its relationship to creditors, its profitability (because of high interest rate payments), and its ability to pay financial obligations on time.

B. Debt-To-Equity Ratio

$$\textbf{Debt-To-Equity Ratio} = \frac{\text{Short-term Debt} + \text{Long-term Debt}}{\text{Shareholder's equity}} = \frac{\text{Total Liabilities}}{\text{Shareholder's equity}}$$

The **debt-to-equity** ratio measures the degree to which the company is financed by borrowed funds that must be repaid. This ratio also measures how much money a firm can safely borrow over long periods of time. A ratio above 1 or above 100% shows that a firm has more debt than owner's equity. To calculate a company's debt-to-equity ratio, you must divide the total liabilities, including long and short term by the owner's or shareholder's equity. A safe debt-to-equity ratio would be around 30%, though the average or normal debt-to-equity ratio has changed over time and is also contingent on economic factors.

Media stories:

"Loving Low Debt Leaders" – Forbes.com

In 2008, Microsoft had a market cap of $255 billion and a debt-equity ratio of 0%. Fastenal – the largest distributor of fasteners in the US and is a supplier of a variety of industrial supplies and tools – belongs in an industry where the average debt-to-equity ratio is just over 8 0%, and Fastenal's ratio is 0%. Makita is a Japan-based, global supplier of power tools; their product range includes drills, grinders, sanders, and portable woodworking tools. Makita has $8.1million in long-term debt, but this is much lower than its net current assets (current assets – current liabilities), which is valued at $2.08 billion – an indicator of conservative financing which can be attractive to investors.

http://www.forbes.com/2008/07/14/microsoft-makita-garmin-pf-ii-in_jr_0819guruscreen_inl.html

"BNP's Balance Sheet is Sound" – The Wall Street Journal

On the 28th of September, the Opinion pages of The Wall Street Journal wrote an article in response to a previous Opinion article calling into question the capital adequacy of French banks with reference to their leverage ratios. In the article, the writer states that BNP Paribas' leverage ratio for their commercial banking division is 22%, which is close to the average leverage ratio of American banks, which is 17%. But the article goes on to say that an approach based solely on quantitative information would be very limited, and that to get a proper understanding of the riskiness of a bank, one must take into account its risk profile and the asset quality of its balance sheet. For example, BNP Paribas has avoided countries where the housing market is overheated (marked inflation caused by increased demand not met with increased output); therefore, its mortgage loan portfolio is of high quality.

Case Study:
Financial Ratios of Blockbuster and Netflix

In the following case study Emilsen Holguin, the project manager for Academic Affairs at Excelsior College, compares Netflix to Blockbuster by expanding on many constituents that lead either their success or failure. She dedicated a full section to discussing the financial ratios of each company, based on the financial data from 2007 fiscal year.

She explains that, as evident by the financial data, Netflix is highly liquid and has more than enough solvency to cover expenses. She expands by adding that the debt equity ratio of Netflix is only 0.50, which consecutively shows that the company is credit worthy and that it has a strong balance sheet. The substantially low (0.008) long-term debt to equity ratio shows that the company has considerable capacity to borrow additional funds if needed. Lastly, she points out that Netflix, to top it all off, has been generating an impressive sales; $1.862 sales for each dollar of assets.

Blockbuster, on the other hand, has very low working capital (only 30.7), which poses as a result a significant challenge to cover its operating expenses. She sheds light to its debt to equity ratio (1.96), which indicates extreme debt and a weak balance sheet. This high long-term debt equity, expectantly, undermines the company's capacity to borrow additional funds. She concludes by stating that its' generating of $2.027 sales for each dollar assets is a good indication that its operating profit is very low.

This is a strong example that indicates how media forms can use financial ratios as a clear indication and reflection of whether a company is performing well or poorly. Evidently, Netflix is by far over running Blockbuster in terms of success.

http://www.excelsior.edu/media/oels/ePortfolio/student/emilsenholguin/E_HOLGUIN_Netflix_Case%20Study.pdf

Interesting and useful information

Leverage or debt ratios measure the degree to which a firm relies on borrowed funds in its operations. A firm that takes on too much debt could experience problems repaying lenders or meeting promises made to shareholders. In essence, something interesting and useful that we learned is that ***leverage ratios can tell you more about the company than the financial statements alone.*** Without a doubt, financial statements are important as they can tell what a company's assets and liabilities are, its profit or loss and even its cash flow, however, these leverage ratios can determine the actual performance of a company. By just examining hard numbers, a company may look like they are performing better than they actually are, thus giving the public an inaccurate view of the company.

We can get a better idea of how the company is truly performing by calculating these leverage ratios. If they are borrowing too much money from creditors and cannot pay it back, they will have a high debt ratio, which means that they are not performing well. What's interesting is that having a high debt ratio may not be such a negative sign, as these loans may be in the process of increasing a companies assets, such as expanding their land or buying new equipment to increase productivity and performance in the long run. These ratios are extremely useful in determining the amount of money that banks or creditors will loan the company in the future. Constantly having a high leverage ratio may hurt a firm's chance in getting or increasing their loans.

Useful Links:

- http://www.accountingformanagement.com/financial_statement_analysis_accounting_ratios.htm
- http://www.accountingformanagement.com/financial_statement_analysis_accounting_ratios.htm#Ratios%20Analysis
- http://www.accountingformanagement.com/financial_ratios_formulas.htm
- http://www.investopedia.com/terms/l/leverageratio.asp#axzz1ayq4qC1r
- http://financialratios.blogspot.com/2008/04/capital-acquisition-ratio.html
- http://www.bizwiz.ca/leverage_ratios.html
- http://www.businessdictionary.com/definition/solvency-ratios.html
- http://www.accountingformanagement.com/debt_equity_ratio.htm
- http://www.accountingformanagement.com/return_on_capital_employed.htm
- http://main.library.utoronto.ca/eir/EIRsubjectresults.cfm?subject=20
- http://www.excelsior.edu/media/oels/ePortfolio/student/emilsenholguin/E_HOLGUIN_Netflix_Case%20Study.pdf

Review Questions:

1.) A financial obligation owed by one party to another is?

a. Equity b. Credit c. Asset d. Debt

2.) What is the term for the group of financial ratios that are used to measure a company's debt financing?

a. Efficiency Ratios b. Liquidity Ratios

c. Leverage Ratios d. Profitability Ratios

3.) Which of these organizations do not collect financial data to assess leverage ratios?

a. TD Waterhouse b. Revenue Canada

c. Bank of Canada d. Canada Post

4.) Based on the popular case study by Emilsen Holguin on the financial data of 2007, which of these companies was highly liquid and had more than enough solvency to cover company expenses?

a. Blockbuster b. Netflix

c. Tim Hortons d. Molson Coors Canada

5.) Which of these words best completes this formula?

a. Equity b. Assets

c. Cash flow from Operations d. Outstanding debt

6.) Capital Employment Ratio does what?

a. Shows the amount of sales generated by the owners investment in operations

b. Shows the amount of liabilities generated by the owners investment in operations

c. Shows the amount of sales generated by the owners investment in assets

d. Shows the amount of sales generated by the owners investment in acquisitions

7.) A company's capital structure refers to which of the following?

a. Debt and equity b. Revenue and debt

c. Equity and assets d. Short term debt and long term debt

8.) Which of these words best completes this formula?

a. Shareholders' equity b. Dividends

c. Cash flow d. Total Assets

9.) Which of the following ratios shows the relationship between long-term debt and the company's total capital base?

a. Capital acquisition ratio b. Capital employment ratio

c. Debt-to-Equity Ratio d. Capitalization Ratio

10.) According to Forbes, in 2008 which of these companies was a low-debt leader?

a. Microsoft b. Lehman Brothers

c. Research in Motion d. American Express