BETTERINVESTING™
Rocky Mountain Chapter

APRIL 2012 e-NEWSLETTER

COMING EVENTS

>**StockTalk:** April 14th at Christ Church United Methodist, 9 – 10:30am. Stock to Study: LKQ Corp. (LKQX).

> **Spring Investors' Forum**: April 28th, 9am to 4pm, Guest speakers John Dierks and John Tufts

Presented by John Dierks:
> Dividends: The Forgotten Profit Maker
> What to Look for in an Annual Report
> Evaluating Management: Dissecting Pre-tax Profit Margin and Return on Equity

Presented by John Tufts
> Preparing for Retirement: Managing Your 401(k)s
> Using Morningstar to Evaluate Stocks and Mutual Funds

John Diercks is an instructor for his BetterInvesting Chapter and InvestED. He teaches financial classes and mutual fund workshops at local, regional, and national events. Currently, he is a director of the Central Pennsylvania Chapter of BetterInvesting and the treasurer of two investment clubs, including the Centre Region Model Investment Club. Prior to retirement, with advanced degrees in meteorology, John spent 26 years in the Air Force and 16 years as an instructor of meteorology at The Pennsylvania State University.

John Tufts is a Director on the BIVA Board, has been a National Volunteer since 2009 and is the Regional Manager for the Northwest Region, which includes the Rocky Mountain Chapter. He chairs the Recruitment Committee for the BI Online Training Team, has served on the BINC Marketing Committee and the BI Mutual Fund Education Committee. John was a Director in the Western Slope Chapter since 2005 and the President of the chapter from 2006 to 2010. He is a Director on the Rocky Mountain Chapter, a member of the Tuesday Traders Investment Club since 2003 and recently started an Investment Club with his family. A retired Army Master Sergeant, he was the Director of the Respiratory Therapy Department of the U.S. Army Burn Center and taught as a Clinical Instructor for Brooke Army Medical Center's Respiratory Therapy School. John holds a Bachelors Degree in Health Administration from Southwest Texas State University, Magna Cum Laude and is working as an Echocardiographer in Grand Junction, Colorado.

WHAT'S IT ALL MEAN???

Section 2 of the Stock Selection Guide (SSG) measures the quality of company managements in two ways. Section 2A shows the pre-tax profit margins (PTPM) for the past ten years. Section 2B shows Return on Equity (ROE) which is often overlooked because it can be more complicated to interpret. Let's take a look at ROE.

As discussed in the March newsletter, ROE helps explain how management can fund growth, pay a dividend, and buy-back stock.

But the ROE is actually a treasure trove of information about management performance and the level of confidence you can put in your SSG projections for the future.

Just as the number 10 can be factored into two factors, 2 and 5, such that when you multiply 2 and 5 you get

back 10, so the ROE can be factored into as many as five factors. Each factor can tell a tale about company performance. In this article, we will factor ROE into only two factors: Return on Assets (ROA) and Leverage. This is the easiest to understand and the breakdown is commonly found in the financial summaries by Morningstar and others. Here is the relationship:

- ROE = Return/Equity
- ROA = Return/Assets
- Leverage = Assets/Equity.

So I can multiply ROA and Leverage:

$$\frac{\text{Return}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Assets in the denominator of ROA cancels out Assets in the numerator of Leverage leaving only Return/Equity which is our definition of ROE.

A company's assets such as machinery, factories, trucks, cash in the bank, etc. are assets and those are used to create the revenue from which management derives profits. A high ROA means that management skillfully gets all the value possible out of the company assets.

How about Leverage? What is it and how does management use it wisely and skillfully?

Note that Leverage is NOT "% Debt to Total Capital" as that parameter appears on an SSG. Yet it is getting at the same thing. Leverage tells us to what degree management is using their borrowing power to increase the company's assets. With a solid ROA it makes sense to increase assets as much as possible consistent with the company's market size and ability to meet common human desires and needs. If management over-leverages by taking on too much debt, inconsistent with the power of assets to generate a good return, they may actually jeopardize company performance. Management must make darn sure the new assets generate more than enough new wealth to repay the debt with interest and generate more profits for the company.

Finally, let's get a good understanding of Leverage. Leverage is just Assets divided by Equity. But where does it say anything about debt? Don't we need to know the level of debt the company is carrying? Yes we do and Leverage tells us just that when we think about it a moment. Recall that Equity = Assets – Liabilities. When the company borrows money, two things happen. The assets increase (the borrowed money goes into the bank, machinery is bought, inventory is built etc.) and liabilities are increased by the same amount. Suppose the company borrows a million dollars and puts that money in their bank account. Assets increase by a million dollars but so do liabilities since the company is liable for that loan and must pay it back. But equity doesn't change since the increase in assets is negated by the increase in liabilities. So Leverage is an indirect measure of company debt.

When ROA and Leverage is increased, so is ROE. Watch to make sure management doesn't increase Leverage but decrease ROA. For a growing or even ROA, increasing Leverage can increase performance but not otherwise. This has always been the problem with interpreting the ROE. An increase in Leverage may well result in a harmful decrease in ROA but a seemingly beneficial increase in ROE as illustrated in the following example.

Suppose a company's ROA is 25% and there is no debt so the Leverage is 1 (assets equals equity so

Leverage = assets divided by equity = 1). Multiplying ROA by Leverage gives an ROE of 25% (25% times 1.0 is 25%). (NOTE: A debt free company's ROA is the same as its ROE)

Suppose management misreads the market and decides to expand production by borrowing money. They take on debt, increase Leverage to 1.25, and increase inventory for sale. They find they can't move that inventory at the old prices because the market can't absorb it. Now management is forced to reduce prices to get rid of all that inventory and ROA falls. Yet the ROE is increased to 30 (20% times 1.5). Looks good… they increased the ROE by increasing sales volume. But it was a bad move since they cut the ROA from 25% to 20% and increased liabilities by increasing debt. Our SSG Section 2B would show increased ROE as a good thing even though the company's finances were undermined to little purpose.

If you go to Morningstar and choose a company then click on "Key Ratios" you'll find ROE, ROA, and Leverage in the "Profitability" table. Here is an example for only two years:

Return on Assets %	12.34	13.58
Financial Leverage (Average)	1.30	1.30
Return on Equity %	15.74	17.66

Even though ROA times Leverage is equal to ROE, it varies in actuality since these factors are independently determined and may be averaged over different time intervals. But they should be very close. For example, in the first column, ROA is 12.34 and Leverage is 1.30. Multiplying, we get 16.05 which is very close to the ROE of 15.74 depicted in the table.

ToolKit6 tries rather ineffectually to deal with the ROE interpretation problem by introducing Section 2C which is "Debt to Equity". So you may see Section 2C increasing which means the company is taking on more debt and that may increase the ROE but you still can't tell if that's a good or bad thing. Additional research on your part is required.

To learn more about the proper interpretation of ROE, be sure to attend the *Spring Investors' Forum* on April 28th. Guest speaker John Dierks will dissect ROE by breaking ROA into two brand new factors. What are they and what tales do they tell? You'll have to attend the talk to find out. 🙂

REGISTER NOW!

TOOL TIPS

In ToolKit6, you can remove (cross out) an entire year of data in both section 2 and section 3 by clicking (deselecting) the year.

The current release of Toolkit 6 is 6.4.6. To find out the version of Toolkit that you are currently running, click on "Help" in the menu bar, and a dialog box will come up. Select "About Toolkit 6…." and another dialog box will be displayed with the version number. If you do not have your preferences to update the program automatically, you can manually update to the most current version by clicking on "Help" in the menu bar, and a dialog box will come up. Select "Check for Updates" and the program will update to the latest version.

WORDS OF WISDOM

"One of our most important rules is to buy stocks that trade at below-market P/E multiples. Academic studies, and our own, ranging over 65 years show that low P/Es and other contrarian strategies have consistently outperformed the market over time." - David Dreman, Chairman of Dreman Value Management, Forbes columnist, and author of "Contrarian Investing".