QUICK GUIDE TO KEY RATIOS

Don Gimpel – November 2014

Your assignment …

- Your assignment, if you so accept, is to serve as Financial Advisor (FA) to the poor widows and orphans of the greater Los Angeles area.
- If you screw up again, and they lose their savings, they will be hungry and homeless.
- You, because your fees are up front, will feel no pain and you will continue to support the fancy restaurants in Beverly Hills.
- All depends on you and “Key Ratios” as your analysis choice and you know nothing about them but this is your lucky day … .

This lecture is part of a series …

1. The basics of creative accounting.
2. Effective stealing from your own business.
3. Easy lessons in obfuscation for Money Managers and Investment Advisors: Drawing Graphs and Calculating Total Return.
4. Ethics and Morals for Financial Advisors (Short Course on “Suitability” vs. “Best Choice”).

Before we proceed, it's a good idea to check to see if you're my kind of audience.

- A company goes out of business if it doesn't show a profit after a few years. (Yes) (No)
- A company's stock is overvalued if its P/E Ratio is greater than 22. (Yes) (No)
- You have been stealing from your own company and want to invest the loot where you won't get caught by the IRS. How can this be done?
- You have been "taken" by a company and want to sue the owners and you've traced them down. Who has committed a crime and what crime is it?

I once gave a lecture …

- It was a long time ago that I gave a lecture titled "How to steal from your own business and not get caught."
- It was a curious lecture in that it was really an argument for not stealing or at least if you are so inclined, do it intelligently.
- That led me to a study on manipulating Balance Sheets and Income Statements, forensic accounting and "Key Ratios."

I used it to good advantage too …

I applied “Key-Ratio” analysis for bar inventory control and found that if you did it regularly and thoroughly, you could spot a single missing bottle and when your business is beginning to fail.

However, today’s talk is about using “Key-Ratios” to find out whether or not you should invest in a business.

So what are we going to do today?

Were going to learn about some key ratios that will make you a better investor if you are inclined to buy stock. Here's some issues:

1. What is the single most important metric to measure the investment value of a company and where do you find it?
2. How do you measure a manager's performance?
3. How do you gauge profitability?
4. How do you gauge a company's financial fitness and its ability to make money?

1. A measure of how efficiently a company uses its cash assets:

Name:	Cash Flow Indicator/**Free Cash Flow**
Use:	Possibly, the single most important ratio ahead of Earnings in measuring the investment quality of a company.
Ratio:	FCF/OCF= (1-Capital Exp./Operating Cash Flow)
Location:	1-(17/13)

2. The most conservative liquidity measure:

Name: Liquidity/**Cash Ratio**

Use: This is the most conservative liquidity measure and lets you know if the company is going to stay in business. If CR>1 it is considered poor asset utilization.

Ratio:

Cash Ratio = CashR = N/D

N = Cash & Equivalents + Invested funds

D = Current Liabilities

3. Measuring managements performance …

Name: Profitability/**Operating Profit Margin (OPM) or Net Profit Margin**

Use: 4 ratios that measure a company's ability to make money.

Source: See WolframAlpha.com

Calc.: This consists of 4 ratios:

(1) The Gross Profit Margin

(2) Operating Profit Margin

(3) Pre-tax Profit Margin

(4) Net Profit – the bottom line.

4. What is the key to gauging profitability

Name: Profitability/**Return on Capital Employed or ROCE**

Use: Measures how well management is using debt. It is a key factor in measuring profitability. ROCE should be >= company's borrowing rate.

Source: WolframAlpha.com

Ratio: Net Income ÷ Capital Employed
Capital Employed = Avg. Debt + Avg. Shareholders Equity

Location: $= (18) \div (11) + (12_{avg}) + (8_{avg})$

5. A company's ability to leverage debt …

Name:	Debt/**Debt to Equity Ratio, (DER)**
Use:	This is another leverage ratio and measures how much outsiders have committed as opposed to shareholders. The lower the better.
Ratio:	

6. Measuring a companies financial fitness:

Name:	Debt/**Capitalization Ratio (CapR)**
Use:	Measures a company's overall fitness and use of leverage. The lower the ratio, the better.
Source:	WolframAlpha.com
Ratio:	CapR = LTDebt/(LTDebt+ Shareholders Equity) = 12/(12+8)

7. A company's funding ability:

Name: Cash Flow/**CCCR or CAPEX+Cash Div. Ratio**

Use: Measures a company's ability to meet its obligations. The higher the ratio, the better. Measures a company's funding ability.

Ratio: 13/11, 13/17, 13/21, 13/(17+21)

Comment: "Free cash flow on steroids" and indicates high investment quality.

8. Ability to pay high dividends:

Name: Cash Flow Indicator/**Dividend Payout Ration (DPR)**

Use: Used for dividend paying companies. Look for constant or increasing ratios.

Source: WolframAlpha.com

Ratio: DPR = Div. Per Share/Earnings per Share (21/24)/18/24)

Comments: Generally cyclic from 0.3 to 0.6

9. Measuring a company's Profitability

Name:	Investment Valuation/**Price to Cash-Flow Ratio, PCF**
Use:	Measures the fraction of earnings available for dividends thus how well earnings support dividend payments. The smaller the better.
Availability:	WolframAlpha.com
Calculation:	= Dividends per common share/ Earnings per share.
Comment:	A ratio not easily manipulated.

10. How much are you willing to pay for earnings?

Name: Investment Valuation/**Price-Earnings Ratio, PE**

Use: Measures Over/Under valuation

Source: WolframAlpha.com

Formula: Stock Price/Earnings per share, 23/(18/24)

Comments: A stock can be considered overvalued when the ratio>32 and undervalued when <12.

See: Tricky, tricky, tricky

11. And the one that rules them all …

Name: Investment Valuation/**Price-Sales Ratio P/S**

Use: This ratio measures stock value. Generally, the higher the better.

Source: WolframAlpha.com

Ratio: Stock Price per Shares/Net Sales per share, 23/(16/24)

Comments: The “King of the Value Factors” according to James O’Shaughnessy. It consistently beats all others.

Tricky, tricky, tricky … EPS

Here's an example of just how tricky this business can be. What is meant by Earnings per Share?

There are two kinds of shares we can talk about; primary and diluted.

1. Primary shares are those issued and held by investors … they are "in the market" and can be traded.
2. Diluted shares is the number that can include all exercisable warrants, options, etc., if they were converted.

www.investopedia.com/articles/analyst/091901.arp?rp=i

Tricky, tricky, tricky … earnings

There are 5 major earnings classifications:

1. Reported or GAAP … that derived from generally accepted accounting principles.
2. Ongoing … normalized net income that excludes anything unusual.
3. Pro Forma indicates assumptions were made and typically excludes certain expenses or income.
4. Headline … that appearing in a company's press release.
5. Cash … Operating cash flow … usually divided by diluted shares outstanding … a purer number.

MORAL: Read the fine print.

Links

1. www.infinancials.com/
2. http://www.bizminer.com/products/analysis/industry/financial-ratios-profiles.php
3. http://index.about.com/index?gclid=CL_uo_Wcy8ECFZSPfgodwSYATQ&am=broad&q=key+financial+ratios&an=google_s&askid=4f8a7e
4. http://moneysoft.com/financial-analysis/?utm_source=google&utm_medium=PPC&utm_term=financial%2Banalysis&utm_campaign=FAC&gclid=CJilyL-dy8ECFUSBfgodwh0APw

2 more links

1. http://www.amazon.com/s/?ie=UTF8&keywords=key+financial+ratios&tag=googhydr-20&index=stripbooks&hvadid=19725509661&hvpos=1s5&hvexid=&hvnetw=s&hvrand=28140400026184498440&hvpone=&hvptwo=&hvqmt=b&hvdev=c&ref=pd_sl_98ghmsxg4o_b
2. www.wolframalpha.com "Key Ratios"

Summing up …

1. A set of key ratios good for one kind of business might not be good for another. For example consider the Utilities and Energy sectors which require huge amounts of capital.
2. Real winning companies have both the ability to borrow (5) and know how to use the money effectively (4).
3. You now know where to find most of the key indicators, what they mean in evaluating a company’s performance.

Where do you find this stuff?

BALANCE SHEET AND SHAREHOLDERS EQUITY

	ASSETS		QUICK GUIDE REFERENCE
	CURRENT ASSETS		
1	Cash & Cash equivalents	27	Cash & Cash Equivalents
2	Accounts Receivable		Accounts Receivable, Receivables
3	Inventory		
4	Prepaid expenses		
5	Securities, marketable		Securities, marketable
6	Other current assets		
	FIXED ASSETS		
15	Property, Plant and Equipment	17	Capital expenditures (fixed asset purchases)
	Goodwill		
	Other intangible fixed assets		
6	**TOTAL ASSETS**	19	Total Assets
	LIABILITIES AND SHAREHOLDERS EQUITY		
	CURRENT LIABILITIES		
8	Accounts Payable		
9	Current Income Taxes	34	Taxes payable
10	Current portion of bank loans	35	Notes payable
30	Short-term provisions		
32	Other		
33	Total Short-term Liabilities	11	Current short-term debt, Liabilities-current
	LONG TERM LIABILITIES		

More on where to find …

INCOME (PROFIT & LOSS) AND QUICK CASH FLOW STATEMENTS

	REVENUES	**QUICK GUIDE REFERENCE**
16	Net Operating Sales	Net sales
	Other Income	Interest Income
14	**TOTAL REVENUE**	Total revenue
9	**EXPENSES**	
36	Operating Total	Expenses, operating
37	Selling	Selling expense
38	G & A	General & Administrative Expense
	TOTAL EXPENSES	Total expenses
	EBITDA	Earnings before Interest, Taxes, Depreciation & Amortization
	SCHEDULED EXPENSES	
10	Interest	
	Depreciation and Amortization	
17	Pre-tax Profit	Pre-tax Profit
20	Taxes	
	TOTAL SCHEDULED EXPENSES	
18	**NET EARNINGS**	Net Earnings
	NOTES	
21	Cash dividends	
24	Average # shares outstanding in period	
23	Stock price at close of period	
22	Earnings per share growth	

Have you tried WolframAlpha.com

Fundamentals and financials:

Ratios ▼

P/E ratio	18
price / book	
price / sales	
price / free cash flow	
return on equity	+ 33.61%
return on assets	+ 18.01%
leverage	2.078
current ratio	1.08
debt / capital	0.2063
net profit margin	+ 20.1%

(based on last close price, 12-month sales and 12-month averages)