



## **Competitive Profiling with Financial Ratio Analysis**

**The single constant in business is finance. Getting the data is the easy part. Here are tips on how to work the numbers so they reveal something meaningful.**

Mark B. Johnson, Sr.

I believe simple financial analysis is the most under-utilized source of competitive intelligence. No other data can compare with the simple financial statement for sheer content. Here are several simple reasons financial profiling should be number one on your CI hit parade:

- Most of the data, at least for public companies, is free and public.
- Even private companies often report data.
- The accuracy of the data is audited, and scrutinized for accounting irregularities by the IRS, the SEC and others.
- Intentional misreporting is fraud and is therefore enforced by the SEC and the investment community.
- Under new SEC rules, the average investor has a right to the same information as the "insiders" and the large investment banks
- The detail is reasonably consistent between companies (at least within the same country) and can easily be compared between companies in the same industry.
- Read the 10-Q and 10-K reports carefully.
- The data companies report to the investment community will drive the decisions companies make with respect to their products.

In short: Financial results drive strategic decisions, and financial gain is the way those decisions are judged.

Through the technology bull market of the last few years, some market commentators questioned whether the time-tested financial rules had been repealed. Warren Buffet was confused by stocks that seemed to defy financial convention. The current financial turmoil now confirms that these rules can be bent or stretched, but cannot be ignored. Telecom and Internet firms are reminded of hard reality in greater numbers every day.

There are many reasons why financial information isn't more widely used. It is no silver bullet, but many analysts avoid financial analysis because they are intimidated by the complexity. Even so, the analysis isn't that complicated and the results can be powerful. You certainly do not need to have a Masters in Finance to obtain very useful information. Nor is it difficult to translate financial findings into strategic judgement. In this article, I attempt to simplify some financial analysis techniques into a step-by-step approach which you can easily adapt to your own industry and your own list of competitors.

## **STEP 1.**

### **Select a good list of competitors which are public.**

Five competitors is a fair number...10 is better. For my analysis, I used 20 competitors. Make sure to include your own company in the list. This will show you where you stand, and may help to indicate particular areas of success or failure in your own firm.

It is possible to do this analysis on private companies as well, but data is much harder to come by and the conclusions are much more elusive. To develop financial data on a private company, read Leonard Fuld's book "The New Competitor Intelligence" and take special note of chapter 9 on constructing a financial statement for private companies or divisions within a larger corporate parent.

Constructing financial data on a private company isn't foolproof, but it can be truly helpful. Another potential problem concerns foreign competitors. You must understand the unique financial reporting rules of other countries to make this comparison work. Unless the foreign competitor is critical to your analysis, it might be best to omit them.

If one competitor has recently announced bankruptcy or some other indication of financial distress, make a note of that circumstance. Competitors in bankruptcy or who have had large layoffs can indicate the dividing line between healthy companies and companies which may be in serious trouble.

Your list of competitors should be as closely comparable as possible in terms of product mix. For example, it is difficult to compare AT&T (NYSE: T) financials to those of a much smaller firm like McLeodUSA (NASDAQ: MCLD). They have a dramatically different product mix, and probably have considerable differences in overall capital structure. However, if they are competing in the same markets to sell similar products they will also face similar competitive issues and economic pressures. You must simply be aware of the differences between the firms, so you can add another dimension to your analysis if the results are not clear.

## **STEP 2.**

### **Choose the financial measures you will want to compare.**

For my analysis, I compared my target list of companies using data on:

- Liquidity
- Debt Load & Debt Coverage
- Tangible Net Worth
- Bankruptcy Risk
- Efficiency

While no single measure can reliably predict the health of a company, each measure can indicate important strengths and weaknesses. Failing one measure is probably not significant. However, failing several can indicate that a company has no place to turn. They have painted themselves into a corner, and escape will require a magician.

The specific financial ratios I recommend for each of these measures is shown in Table 1. These ratios are not the only ways to calculate the comparisons above, but are a good representative list. If you have other specific concerns, you can probably find (or concoct) a financial ratio that will do the trick. Consider reading a book on business valuation or financial ratio analysis.<sup>1</sup>

Once you have your list of companies and your financial measures, you can begin to gather the data. There are several free sources of financial information, but I would recommend either [marketguide.com](http://marketguide.com),

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<sup>1</sup> For example, see *Cross-Industry Analysis of Financial Ratios*, by J. Edward Ketz, Rajib K. Doogar and David E. Jensen.

10kwizard.com, or edgarscan.com. These sources all have options that permit easy download to popular spreadsheet programs.<sup>2</sup> Use the source you are comfortable with. Ease of use is important.

Make certain all the companies you are comparing have data available for the same period. If one company is reporting for 3<sup>rd</sup> quarter, while the rest are reporting for 2<sup>nd</sup> quarter, back up and use the 2<sup>nd</sup> quarter data to put all the companies on a comparable footing.

Table 1.

Suggested Financial Ratios	
Category	Ratio Calculation
<i>Liquidity</i>	Quick Ratio = (Cash + Marketable Sec. + AR) / Current Liabilities Current Ratio = Current Assets / Current Liabilities
<i>Debt Load &amp; Debt Coverage</i>	Total Debt to Long Term Debt = (Current + LT Debt) / (LT Debt) Cash Flow to Total Debt = (NI + Depreciation) / Total Debt Cash Flow to ST Debt = (NI + Depreciation) / ST Debt
<i>Tangible Net Worth</i>	Current Liabilities to Tangible Net Worth = (Current Liabilities) / (Owners Equity – Intangibles) Total Debt to Tangible Net Worth = Total Debt / Tangible Net Worth
<i>Bankruptcy Risk</i>	Net Working Capital to Total Assets = (Net Working Capital) / (Total Assets) Net Working Capital (NWC) = Current Assets – Current Liabilities
<i>Efficiency</i>	Capital Intensity = Revenue / Employee OR ?Revenue / ?Capital (the ? indicates change in Revenue or Capital between one quarter and another) Management Rate of Return = Operating Income / (Tang Fixed Assets + Net Working Capital)

Do not worry that financial data are only available a quarter or so in arrears. For that matter, don't hesitate to use the most recent annual results for all your comparisons, even if the data may be 6 or 9 months old as long as you can insure the data are for the same period. After all, only the annual reports are routinely audited. If companies could turn around their rotten financials that easily, the tech nightmare of this past year would not have happened and bankruptcy lawyers would make a lot less money.

<sup>2</sup> One feature I've never seen documented: If you use Internet Explorer, you can highlight an HTML data table, then cut and paste that data cell-for-cell into Excel. This doesn't work for Netscape, but it is still relatively easy to groom the data into a spreadsheet without retyping. This little-known Microsoft feature really speeds data entry.

### **STEP 3.**

#### **Rank the companies for each of the measures you are using.**

Taking Liquidity as an example, we would obtain the Quick Ratio for each of the companies being compared, then rank the companies from low to high. A low Quick Ratio indicates relatively less liquidity, while a higher ratio indicates more liquidity. If one company (Company X) has known financial difficulties, highlight them. Companies with less liquidity than Company X might face some problems.

I find it easiest to rank company data in separate tables for each financial measure and then graph the results. Use the method which seems to work best for you.

For some financial measures (like debt load), the lower number is a good thing. I tried in my own analysis to always rank measures from Bad to Good. In some instances, a large negative number or large positive number is bad, while something in the middle is safe. For each distinct financial measure, be very aware of the safe zones and the trouble zones, so your analytical conclusions are easily explained.

### **STEP 4.**

#### **Develop a "scoresheet" table**

You have made several ratio comparisons. The most useful results will be for companies with consistently good or bad results. In my own analysis of companies that scored negative ratings on 4 or 5 of my measures, I initially assigned a "skull and crossbones" symbol to indicate life-threatening injuries.

Companies with great cash flow, low debt, high revenue per employee, and good financial ratios across the board will be the ones who have the financial stability to expand, acquire, and generally mount a credible competitive threat. Companies with poor cash flow, high debt, low Net Working Capital, and low revenue per employee will generally have difficulty staying in business – let alone gaining market share.

This kind of analysis also indicates which companies can and cannot adequately fund ambitious construction programs, huge advertising campaigns, and accept short-term losses while they gobble up market

share. If you see a big announcement from a rival, you can use this analysis to estimate whether their new strategy will be successful.

## **STEP 5.**

**Consider which strategies would be appropriate for the financial conditions you observe. Do this for both the firms you are profiling as well as for your own firm.**

Some financial ratios carry a simple strategic message. Low liquidity requires increasing cash flow. High debt load and/or short term debt will limit additional funding, and make a company sensitive to interest rate fluctuations.

What would a company with inadequate cash flow do strategically to correct this? Answering this question will tell you what to expect from the firms you are analyzing. You must estimate the strategic options of the companies you are profiling, and have some idea what strategic countermeasures your firm should consider.

If these are the losers, who will be the winners? Getting an idea of the relative winners and losers in a market will give you an idea who is likely to be more aggressive, who will be more conservative, who will buy and who will be bought. The financial ratios we are considering will be important in answering these questions.

Companies can certainly surprise us with their strategic moves. The following guidelines may help in evaluating results from financial ratio analysis.

### **Liquidity Issues**

A cash flow shortfall severely handicaps a business. They can increase cash flow by stimulating sales with promotions, advertising, bundling or adding options, or by increasing sales force. While there is no easy way to predict these moves precisely, a thorough understanding of the business may give you some clues. In addition, it will be important to look at the other financial measures. Other problems may preclude some corrective measures, or other factors may mitigate some negative effects.

A company with strong cash flow relative to its peers will have correspondingly strong options available. They are in a much better position, and can more easily fund promotional efforts, fund mergers or territorial expansion. If the firm is overly cautious, they may find the

strong cash flow attracts a takeover bid. The acquiring company may feel they can use the strong cash flow from one business unit to fund other business units, which may not produce enough cash in the short run.

### **Debt Load & Debt Coverage**

The debt ratio measures how much the company relies on short-term debt to solve its business problems. A company with a high Total Debt/LT Debt ratio will have a relatively high percentage of short term debt in its financing, and will be much more sensitive to interest rate fluctuation.

High interest rates in mid-2000 provided a significant trigger for dot.com companies and competitive telephone companies to go bankrupt on a broad scale. High short-term debt is akin to operating a personal budget with "plastic." An over-reliance on credit cards can cripple the personal budget, and excessive short-term debt can cripple the corporate budget.

On the other hand, companies with very low levels of short-term debt, or total debt for that matter, will have a wider access to funding if they wish to pursue a market expansion. Strong cash flow and low debt is a particularly potent combination. A company with vision and an aggressive nature can generally parlay these strengths into a marketplace gain.

Looking at debt coverage indicates how fast cash flow would clear debt. If cash flow is negative, this ratio is a measure of the rate of blood loss. Cash flow issues become much more important when viewed along side of existing debts.

### **Tangible Net Worth**

Tangible Net Worth (TNW) is calculated by subtracting goodwill and other intangibles from total Owners Equity. While intangibles are perfectly good assets in some instances, they will be devilishly hard to liquidate in hard times. In addition, goodwill and intangibles can be a playground to hide many a management sin. If subtracting intangibles makes TNW negative, it is an important signal for the health of the business. Negative TNW is a bad sign unless there are some very good reasons for it.

The ratio of Current Liabilities to TNW indicates whether your business is creditor-funded, or investor-funded. A creditor-funded operation may well collapse if creditor funding is strained by economic conditions.

## **Bankruptcy Measures**

Net Working Capital (NWC), a very important measure, is the difference between current assets and current liabilities. It measures whether current operations are self-supporting. If cash and receivables are less than expenses and payables, then the enterprise is not sustaining itself. Consistent operating losses drain current assets. This is a bad sign for the health of the company.

The ratio of Funded Debt / Net Working Capital examines how rapidly a company can pay off its debt out of current operations. If the denominator of this ratio is small, the debt service will be difficult, especially if interest rates are rising.

From a strategic point of view, most companies believe they can sell themselves out of most business problems. In this case, stimulating sales to boost cash flow will not work if NWC is small or negative, because current operations are burning expense faster than they are producing cash. Stimulating sales will only accelerate the burn rate. Consequently, if NWC is small or negative, the company should CUT sales, preferably by cutting low-margin lines of business or eliminating non-profitable stores.

Other strategic options would include adding to cash reserves via retained earnings, and by selling additional stock. When stock prices are depressed, little is gained by selling additional stock. This will depress the stock price even further and will not raise much cash. Retaining earnings will cut dividends, and is likely to depress the stock price.

It is clear that low or negative Net Working Capital really leaves the management of a company few escape routes.

Strong Net Working Capital, however, will give management many strategic options. This will fuel strong cash flow and provide tidy operating margins. You can expect a company with good Net Working Capital to be more successfully aggressive because they have more room to move.

Another bankruptcy predictor is the Equity to Debt ratio (Common and Preferred Stock / Total Debt). This measures the amount that assets can decline, or debt can increase before the company becomes insolvent: a much more serious bankruptcy condition.

## **Efficiency**

It is a simple truth -- price wars are won by the firm with more capital-intensive cost structure. Marginal cost is lower because the cost of capital is spread over a larger number of units. Basic economic theory says in a competitive market that price equals marginal cost, so lower marginal cost should therefore produce a pricing advantage.

When demand falls, however, the labor-intensive firm is better able to cut costs. It's hard to lay off a new building or to downsize a sheet-metal press.

One proxy for capital intensity is Revenue per Employee. High revenue per employee indicates a relatively capital-intensive resource mix, and reflects healthy operating margins. Low revenue per employee indicates relatively labor-intensive resource mix, and means lower operating margins.

A more direct way of measuring capital intensity is to see how revenue changes compared to the capital stock.

Either way this is measured, the capital-intensive company is more likely to price aggressively. The more labor-intensive firm is more likely to increase its capital stock during an expansion.

## **STEP 6. Know Thyself**

Knowing where your own company's positioning throughout this analysis is very enlightening. You can answer these questions:

- Should you be the one to initiate price cuts or will this work in your competitor's favor?
- Will your competitor face more interest rate pressure than you?
- Will you have advance warning as to which strategies your competitor will try, and which will be successful?
- Will you have some indication what countermeasures you should recommend?

My last suggestion is to do your analysis thoroughly, then trust the results. It is difficult to stick your neck out, but highly rewarding. A little over one year ago, I presented an analysis based on these principles that

identified five companies with significant financial problems. Of the five, three are now bankrupt, and another has its stock trading at \$1.15. Having the courage to set strategy based on your recommendations will pay off.

Box 1

## Getting Started with Financial Analysis

The Securities and Exchange Commission (SEC) requires many different financial reports. You do not have to be a CPA to figure these out, however. The most significant reports for our purposes are called the 10-K (or Annual Report) and the 10-Q (Quarterly Report). Not only are these reports freely available from a number of online services, but the investor relations group for the company you are researching will almost always send these to you simply for the asking. These reports compare current annual or quarterly results to the results of previous years or quarters. The reports will contain basic financial data as well as management explanations. The 10-K is routinely audited, while the 10-Q is not.

The most important data in the 10-K or 10-Q reports are divided into three separate financial statements: Income Statement, Balance Sheet and Cash Flow Statement. Companies have a little flexibility in the level of detail in these tables, but most of the items are standard across all companies. Sometimes the reports are numbered 10-K-405, but this doesn't make any difference for our purposes.

The **Income Statement** is not unlike a summarized checkbook. It describes the amount of revenue received, the amount of expense generated, interest income, interest expense, cost of sales, etc. The net of revenue from all sources less expense and cost items is the amount of income. Taxes are subtracted from income to calculate net income.

The **Balance Sheet** is an inventory of financial holdings. The top of the Balance Sheet is reserved for assets, which generally increase the value of the company. Below the assets are the liabilities, which generally reduce the value of the company. The difference between the assets and liabilities is owners or shareholders equity.

The **Cash Flow** statement is also like a checkbook. It is designed to show in

a summarized form all the things that are either added to, or subtracted from, available cash. A business can be profitable without having cash, but it is difficult to pay the bills. Most companies that file for bankruptcy are technically profitable but cannot meet their obligations due to a shortage of cash.

All of the ratios in this article are from one of these financial statements, as summarized in the table below:

<b>Sources of Financial Measures</b>
<b>KEY:</b> <b>IS</b> = Income Statement <b>BS</b> =Balance Sheet <b>CF</b> =Cash Flow
Accounts Receivable (BS) Cash (BS) (Note: not the same as cash flow) Current Assets (BS) Current Liabilities (BS) Current or Short-term Debt (BS) Depreciation (IS) Goodwill and Intangibles (BS) Long-term Debt (BS) Marketable Securities (BS) Net Income (IS) Owners Equity (BS) Revenue (IS) Tangible Fixed Assets (BS) Total Debt (BS)

Box 2

### **Where To Get Financial Data**

[www.marketguide.com](http://www.marketguide.com) – (Free, requires registration, data copyrighted) This can be reached from Yahoo Finance, and many other financial sites. The tables are laid out in a nice friendly format, and the consistent formatting is useful when analyzing the data in a spreadsheet. Some ratios are already calculated for you, and they have a "Ratio Comparison" page that compares company ratios to the industry, market sector, and the whole stock market.

[www.10Kwizard.com](http://www.10Kwizard.com) (Subscription) This site is extremely useful, because you can search SEC filings for certain text. In addition, you can either download the entire 10-K or 10-Q report, browse through the report page by page, or jump directly to the section you want with a hyperlinked outline.

<http://edgarscan.pwcglobal.com/servlets/edgarscan> – (Free) Edgarscan is produced by PriceWaterhouseCoopers and has several unique and useful features. The data for a given company can easily be loaded into EXCEL or other spreadsheet program. Data can be viewed in a hypertext table, but if you click on the hyperlinked items (like REVENUE from the 10-K for 2000, for example), you are directed to the financial statement where that item appears.

<http://www.sec.gov/edgar.shtml> – This is the SEC website and it provides the full explanation of all the forms, filing requirements and government regulations which apply to financial reporting. There are also plenty of helpful educational materials.

[www.freeedgar.com](http://www.freeedgar.com) – (Free, though access to some features like EXCEL downloads and full text searching of filings now require a subscription) Edgar is the primary vehicle for the SEC making financial reporting data available to the public. Most other services derive from this source.

**Company websites and/or Investor Relations groups** – Most companies now make their quarterly and annual reports available in summary form on their websites. A call to the investor relations group (you'll find their phone number in almost all press releases) will usually get annual and/or quarterly reports mailed or e-mailed to you for free.

**Your own investment broker** – Often your broker will provide this kind of information free. I happen to use Charles Schwab, which provides me with a lot of free data and analysis.

Box 3

### **Where To Get More Information on Using Financial Ratios**

*The Vest-Pocket Guide to Business Ratios*, Michael R. Tyran, Prentice-Hall, 1992. Price \$19.95.

*Winning Business: How to Use Financial Analysis and Benchmarks to Outscore Your Competition*, Rich Gildersleeve, Gulf Professional Publishing

APPEARED IN  
Competitive Intelligence Magazine  
JANUARY/FEBRUARY, 2002 ISSUE

Company, 1999. Price \$32.95 (includes CD).

*Schaum's Quick Guide to Business Formulas: 201 Decision-Making Tools for Business, Finance, and Accounting Students*, by Joel G. Siegel, Ph.D; Jae K. Shim, Ph.D.; and Stephen W. Hartman, Ph.D, 1997. Price \$14.95.

[www.marketguide.com](http://www.marketguide.com) – Includes a free instruction section describing how to use the data in their reports.

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Mark Johnson worked for Southwestern Bell Communications for 22 years in a variety of positions including statistical research, demand analysis, market forecasting, cost studies, and as the SBC witness for competitive conditions in Oklahoma and Michigan. After leaving SBC, he was employed at MetaSolv Software as a competitive analyst. He received his bachelor's degree and master's of economics degree from Southern Illinois University in Edwardsville, and took post-graduate studies in economics at St. Louis University. He may be contacted by e-mail at [markjsr@swbell.net](mailto:markjsr@swbell.net).

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