

Business

Translate Business Description

In the 10k businesses are required to write a description of their business, this should usually be simple and if I can't easily translate this into Real English then the business isn't that simple and should be put into the 'too-hard' pile.

Customers, Suppliers

I haven't read a lot on how to analyze these two yet, but I do know that if there are too few of them it is bad for the company. Here I will check the amount of suppliers and customers.

Risks

The Company also has to write about potential risks in the 10k, I'll go over non-generic risks and what potential they have of occurring.

Products

What differentiates this from the competition? Is it a repeat purchase product? If the company sells a product that needs to be purchased over and over again (like a razor) it's easy to create revenues, but if consumers only purchase the products every few years (like a car) then they may have trouble staying consistent.

Consistency

Because of my love for turnarounds this one will be loosely judged, I will want to have a few companies in my portfolio that have very consistent histories and easily predictable future earnings. But, I will also want to own a few companies that do not have a consistent history or no history at all and will probably turn-around.

High Returns

Finally, if the business has a repeat purchase product, a consistent history, hundreds of suppliers and customers, no real risks, but low returns on capital there is no reason to invest in it. I will look at returns on capital and margins.

Moat

Does it have a moat?

This may seem like one of the hardest things to find in investing, but it is inherently easy to find if a company has a moat.

A moat is just something that differentiates one's company from another and allows it to earn higher returns selling its products or services.

What is the moat?

This is harder to find, a company may have a great moat, but what is it? Do they offer the lowest price (eg Wal-Mart), are there barriers to entry in the industry (Waste Management), high switching costs (Adobe), does it have a great brand (American Express) or does it have a better quality product (Lexus).

Many companies have other variations of the above mentioned moats and many companies have multiple moats.

How long will it last?

This is the hardest thing to judge, and is usually a crapshoot.

Most technology companies rarely have a moat for long, because someone just has to come along and recreate their model.

But, some companies, like Coke, Gillette or American Express, have had moats for half a century with no signs of anyone coming close to them.

Estimating how long a moat will last is the most important part of business analysis because it tells the analyst how to structure his DCF and if he's right (like many investors were with Netflix when Wall St. thought they didn't have a moat) he gains a huge edge against Wall St. and will probably earn high returns.

Management

The next part of the series is management, some investors call this the most important of the analysis, it is the area where I have the least experience and have tripped up the most in the past.

I don't have any way of talking to management from any company, save the one for which my dad works, so my analysis will be only things that one can find on any computer.

I believe there are three distinct things to look for when evaluating management:

Integrity

Competence

Good Communication with Shareholders

Integrity

Integrity is of the utmost necessity for good management. If a shareholder can't tell if the management of his company is telling the truth, there is no need to have anything to do with that company.

I use a number of different measures to gauge management's integrity, gleaned from different sources that will be mentioned later.

Pay

This is a big one in the news, but I don't find it as big a deal as people like to make it. Yeah, CEOs make a truckload of money and the Average Joe doesn't, but I doubt the Average Joe paid in the same amount for education or worked the same amount of hours to get to the position where an Average CEO is. I also doubt the Average Joe has to run a multi-billion dollar business, with the public watching his every move.

That said I have nothing against the Average Joe, and do believe management can be overpaid.

If I get to this point in my analysis it's obvious management is not completely incompetent, and I believe they should make at least what the CEO of a competitor makes, maybe a little more because they run a good company, but if it's a huge premium there's something wrong.

Also, a company should not need to issue a ton of options to motivate employees, a little is fine, but excess amounts just breed bad ethical decision making. I'll also monitor options granted (it should stay under 2.5% of income, at the most) as a percent of income and share growth.

Restructuring

This includes all one-time charges, restructuring charges, limitless write-downs, etc.

If a company has a one-time charge every year, it is no longer a 'one-time' charge (I think that's from Thornton O'Glove).

Related-Party Stuff

Companies have to report any related-party transactions. Some of these are fine, and don't need to be worried about.

But, if the company is loaning excess amounts of money to the chairman's son for his business you should probably steer clear, because management obviously doesn't care about the shareholders' best interest.

Board of Directors

Look at who is sitting on the board of directors, if there are more than ten members or if many of them are politicians, members of the founding family or others with no business background you should probably pass.

Also, if the Chairman of the board is also the CEO it is unlikely the board will ask him any challenging questions.

Pension Fund Stuff

Michelle Leder calls this the best way to easily find if a company reports trustworthy numbers.

There are two things to look for regarding pension funds are they overfunded or underfunded and the expected return rate.

In the pension fund footnote the company reports their pension fund obligations and assets. If the assets are more than the obligations, they have an overfunded account, if the assets are less it is underfunded.

Both can be troublesome, if the fund is overfunded it could be inflating earnings, so look hard at earnings to find if it is. If it is underfunded it creates a drag on net income (look at General Motors, who has had possibly the worst pension fund management in history).

Companies also report the rate at which they expect their pension fund to grow. If this rate is too high (Robert Olstein says 6% should be the highest rate, because it includes fixed income and stocks) it shows the company has too aggressive accounting and adds to the net income amount, without adding cash.

Revenue

This part of the analysis is two-pronged: recognition and receivables.

How companies recognize revenue says a lot about how they do business. If they sell a product they may record revenue when the contract is signed to sell the product, when it would be better to record it when the cash is received after they ship the product. Checking how a company reports its

Also, if revenue is growing fast, but when you check accounts receivables they are growing just as fast there might be future trouble if the company is unable to collect the money it is owed.

Earnings

This is a quick one, if a company never falters in its earnings and always meets the target it is probably fudging earnings (General Electric did this a lot in the past).

Look at the past ten years of earnings, if there is never a drop in growth or if they always meet the target (you can find this on Yahoo Finance) be suspicious and look into how much of their earnings each year are actually cash.

Which is also part of this analysis, it is beneficial for an investor to compare the free cash flow (or owner's earning, or other cash flow measure) with the actual net income, if it varies (in either direction) by a lot the company is reporting income that it hasn't earned in actual cash.

Ownership

This is a very arguable criterion. A lot of people base their investment decisions on inside ownership, other claim it does not matter.

I believe a healthy amount of insider ownership aligns management's interest with that of the shareholders.

I also believe that when management owns part of a huge company it is hard to own a big percent of the shares. So I look at the absolute amount of a company management owns. If the CEO owns \$100 million worth of stock, but he runs a multi-billion dollar company, it won't show up as huge inside ownership, but he obviously has the shareholder's interest on his mind.

I also don't care much for insider buying or selling, no one knows the reasoning behind insider buys and sells, and in my mind it is a waste of time to try to figure them out.

Auditing

The last part of the integrity analysis is to check the auditing firm, if they are a no-name firm that doesn't seem likely to ask hard questions, one should view the financial statement with a grain of salt.

Competence

Expenses

I have a page in my spreadsheet that does a percent analysis for the income statement. It breaks down what percent of Revenue each expense accounts for.

If a company has lower margins than competition identifying the expense causing this is crucial to turn-around, if management seems ignorant of this, pass on the company.

Debt

It says in the Bible, "**The rich rules over the poor, And the borrower becomes the lender's slave (Proverbs 22:7).**"

Regardless, of one's religious beliefs it is obvious that one in debt will act differently than one funded strictly with cash.

The same goes for companies, if a company is focusing all its interest on how it will pay off its debt, it has no time left to figure out how to grow.

Look to see how debt a company has, and also find what percent it is paying on that debt in interest, if the interest payments alone account for a huge percent of income it is time to pass.

Returns

I repeat this over and over, but it is necessary, when analyzing each facet of a company. The amount of income a company can produce using its equity (or assets) is the best gauge for determining the validity of the company.

If management is unable to allocate its capital efficiently there is nothing else it can do correctly to make up for this and the you should pass on the company.

Also, coinciding with the last criteria I like to look at Return on Capital (income over equity plus long-term debt) and Return on Assets (income over assets) to find how much of a company's return on equity is produced using leverage: if a company is proficient at earning cash on its assets it should have no reason to borrow money, and should be internally funded.

Retained Earnings Contrasted to Market Cap

This is from Buffett's letters.

Basically, for every dollar in retained earnings (net income minus dividends) a company's market value should increase at least one dollar.

The hard thing is computing this; Quicken does it in its Buffett section, but only for company's with ten-years of stock price history.

It is true that a company needs a long history for this to be applicable, but I believe that could be five years, I'm developing a page for my spreadsheet that computes this.

That concludes the competence part, which is not very long, but management's competence should be obvious if it has a moat and good returns.

Shareholder Communication

This part is the one the I think is the least necessary. It's important for CEOs to be honest and let shareholders know what is going on.

But, I can also understand if management doesn't necessarily care about what Wall St. think so they report the bare minimum. For this reason I won't put as much weight on this part as the former two.

Earnings Reports

A lot can be found from a company's press release announcing their earnings.

First, you should look at the headline, if it is announcing the company's brilliant quarter and its strong growth, be cautious, but if it just says, "X Company reports Q4 earnings," be happy.

Next, is pro forma income check into how a company determines pro forma income, if it is excluding expense that need to be included in the running of the business or adding non-cash measures ignore the pro-forma earnings and be suspicious of everything else management says.

Also, if management reports their huge growth check to which numbers they are referring. If they are using pro-forma income as their growth measure and their net income didn't grow, or fell, they are most likely dishonest.

Finally, EBITDA is a popular measuring stick. I'm all for adding in non-cash expenses, but interest and taxes must be accounted for and if you add back D&A you need to subtract capital expenditures, or this will never be accounted for.

What they say and What they do

It is a very informative exercise to read over a bunch of years of annual reports and conference call transcripts and record all of management's promises and predictions to find what actually happened.

Financials

Analyzing the financials of a business is necessary to find how cash runs through a business and measure how a company's assets compare to its debt.

In this article I'll go over what to analyze in each of the two main financial statements, and how to find cash flow.

Income Statement

Margins

High margins are one of the best ways to judge how efficient a company is. They also help show who has the better competitive advantage, either by a better cost system or the

ability to price their goods higher.

I like to look at gross margins, operating margins (which are usually the best way to compare competitors so different tax rates don't skew the results), profit margins and cash flow margins.

Expenses

After looking at margins it is a necessity that one use a percentage analysis, this is done by dividing each expense by revenue to find where revenue is spent before it falls down to income.

It's also beneficial to find how expenses may change. Companies like Overstock have artificially low income numbers because their variable expenses can be leveraged in the future to allow more money to fall to the bottom line.

Growth

Growth fuels investor's returns. If a company can grow its earnings in double digits for multiple years it is likely to be undervalued.

I first like to focus on revenue growth, if a company will be growing income in the future based on more products sales, or if it grows income by reducing expenses anticipating revenue growth will allow you to find income growth.

Also, when evaluating past growth, if you expect growth to stay at its current level, make sure the growth rate is climbing.

Balance Sheet

Cash

I like to start with the assets and cash is the first thing I check.

First, check to make sure cash is growing, and also that it is a good percent of current assets.

Other Current Assets

As before mentioned check to make sure a company isn't growing its revenue on accounts receivables, if accounts receivables are growing faster than revenue you may want to pass.

A lot of inventory can be good or bad. If the company has a lot of finished goods inventory it can mean a drop in sales is near, but if the company has a lot works-in-progress inventory it can signal more revenue growth soon.

Watch for a lot of deferred tax assets, these only last so long.

Intangibles

These can also be positive or negative. Intangibles assets can provide a competitive advantage, but it should probably not be included in any valuation.

PP&E

PP&E is hard to judge and can be good if real estate was purchased a long-time ago, but equipment and other property can erode sometimes faster than management expects.

Debt

In general I frown upon long-term debt, but in some industries it is necessary, so it is best to look for companies with little debt relative to competitors instead of not investing in companies with debt period.

Also, as Steve (he commented on my management post) mentioned, a high accounts payable balance is not always a bad thing.

Many retailers can produce excess cash amounts by managing their working capital well and extending the amount of time they have to pay suppliers to a period longer than the time it takes them to collect from customers.

Cash Flow

There are innumerable amounts of ways to measure cash flow and almost every entry can be taken out or added into income to come up with a different amount, I will only go over four kinds here, but recommend reading non-stop to learn all the ways.

The four I will go over are:

Free Cash Flow

Owner's Earnings

Free Cash Flow to the Firm

Maintenance Vs Growth CapEx

Free Cash Flow

Free cash flow is simply Operating Cash Flow minus Capital Expenditures. This is good to use for quick comparisons to other company's valuations or to income, but I would not put much stock in it as companies can add a lot of crap to what determines operating cash.

Owner's Earnings

A more clean way to find cash flow, and Warren Buffett's method, is to add back non-cash charges like depreciation and then subtract the actual expense: capital expenditures.

This method helps more than free cash flow, but it does not take into account any changes in working capital. When a company increases accounts receivables its sales go up while it does not collect the cash, conversely they may account for expenses that they have yet to pay with accounts payables.

Free Cash Flow to the Firm

To account for these working capital changes you can use this method. It's the same as owner's earning, but the change in working capital is applied.

It is important to point out that when using net income to find real cash flow, you are using relatively unpredictable items, like interest, that are not related to the operations of the company. A way to correct this is to apply the tax rate to operating income and then add back noncash charges and subtract CapEx and investment in working capital.

Also, companies can't grow cash flow based totally on working capital changes forever so it is important to compare free cash flow to the firm with owner's earnings.

Maintenance Vs. Growth CapEx

Capital Expenditures is the cash paid out to invest in the company. It buys PP&E and other things to help the company sustain its growth.

Some companies have huge CapEx because they are trying to fund huge growth. Some analysts say that this high CapEx number punishes the company when its maintenance (what it would take to sustain the current earnings) CapEx would be lower.

They then advocate separating maintenance CapEx from growth CapEx to find the real cash flow.

Here's my position on this: If a company needs to spend money to grow, that's cash going out the door, regardless of whether or not its funding growth the company will not need in five or ten years.

So if you're going to separate the two to apply to numbers in the future more power to you, but if you separate them and then apply it to a multiple today I believe it is the inverse of what the initial goal was, to find the actual amount of cash a company made in the year. This is because even though a company could sustain its current operations with a lower CapEx number, it has chosen to grow instead and pretending it didn't spend that money to grow is an easy way to get mediocre returns.

Valuation

Valuing a business is how a successful investor can decide when to buy and when to sell great companies.

Before I start, I'd like to add that when doing my analysis I like to keep any valuation out of my head until the end, to keep myself from becoming biased, I don't even look at the stock price.

In this article the methods of valuations I will use are:

Target Price
Pabrai Multiple
Pabrai DCF
Matt Richey's DCF
Absolute P/E
Croesus Test
Reverse DCF
Liquidation Value
Valuation

Target Price

The first test is relatively simple, but not one that should be used without taking a spoonful or so of salt.

To find a target price, one projects revenue five years into the future, then converts that into income with a projected net margin, then after projecting the amount of shares five years out convert the income into EPS and finally apply a multiple where the business would likely trade.

This method shouldn't be used for valuation, but it helps to show how much the share price can rise with the expected growth and margin expansion.

Pabrai Multiple

In an interview Mohnish Pabrai said a business with no growth, but consistent cash flows should be valued at 10x cash flow plus excess capital, conversely a growing business should be valued at 12-15x cash flow plus excess capital.

This is the formula for excess capital: $\text{Excess Capital} = \text{Book Value} - \text{Fixed Assets} - \text{Goodwill} - \text{Working Capital Needed for Operations (2\% of Sales)}$

Pabrai DCF

In his first book Pabrai spends a chapter detailing how to use a DCF.

His use is a little off the usual, but it works. He recommends predicting ten years of cash flow, discounting it back to the future and then assuming the business would be sold for the excess capital at the end of the tenth year.

Matt Richey's DCF

Matt Richey is one of the mutual fund managers for whom I have the most respect. When he wrote for The Motley Fool he wrote an article on DCFs and was kind enough to send me his spreadsheet. The sheet allows for three different expected growth rates to find the best worst and most likely cases.

<http://www.fool.com/news/foth/2002/foth020917.htm?terms=matt...>

Absolute PE

This method is the newest one to me. It is found in Active Value Investing by Vitaliy Katsenelson.

The model uses a chart to determine a basic P/E using expected growth and dividend yield, and then applies the basic P/E to this formula:

Basic P/E x [1+(1 - Business Risk)] x [1+(1 - Financial Risk)] x [1+(1 - Earnings Visibility)]
The book shows the chart to use for basic P/E and how to determine the different risks, I encourage anyone who hasn't already to buy the book.

Croesus Test

The Croesus test is one of my favorite methods. It's comparable to the target price, but instead of entering earnings growth one enters in the dividend yield and the return they want over a certain number of years, and the P/E at the end, and the method tells them what earnings CAGR is needed to produce this return.

For more information on the math involved, I first read about this method in It's Earnings That Count.

Reverse DCF

In a DCF an analyst applies his expected growth rate to cash flow and then adds up the cash flows after discounting them back to the present. This tells the analyst what the value of the company is.

In a reverse DCF the current market value is inputted and the method shows what earnings growth is needed to support the current market value, this does not give a specific market value, but does give a general view on whether or not the stock is undervalued.

Liquidation Value

I first read about this in Seth Klarman's book (I won't link to it because it's like \$3,000 or something), he uses it to find what the bottom for a stock is potentially.

Though a company may have a certain liquidation value that does not mean the stock will never trade below that value (Sears Holding currently trades below liquidation value), just that an investor should not have long-term losses below it.

In liquidation value an investor should assume the full value for liabilities and for assets the following percent should be realized:

Asset	Percent%
Cash	100%
Marketable Securities	100%
Accounts Receivables	85%
Inventories	50%
PP&E	45%
Goodwill	0%
Deferred taxes	0%

I'd like to add to this that if a company owns its own real estate this should be taken 100% and if the market has gone up a conservative appreciation should be added.

Conclusion

I believe there are three crucial factors to apply in your conclusion:

Margin of Safety **Why it undervalued** **Catalyst**

Margin of Safety

Margin of Safety is at the top of any value investing strategy.

It's a very easy to understand concept: when buying shares in a company make sure they are worth more than you are paying.

The thing most debatable about margin of safety is how much of is needed. To guarantee future profits I like to look for companies that possess a 40% margin of safety between the current price and value, but for truly great companies I'd pay up to 80%, with the intention of holding them for a very long time.

Why is it Undervalued?

This question is usually found in the investigation of the company, but it needs to be restated in words, so an analyst can easily find how it will be changed.

This can be as simple as a company missing earnings or as extremely strange as a CEO reporting that Gross Margin will be down, even if that is extremely obvious and not something that one should worry about.

Catalyst

Many value investors choose to ignore this. I think it is one of the most important parts of investing, and making sure you haven't found a value trap.

These are usually easy to find, what will make the stock price reach the company's value? this can be as easy as continuing earnings growth, or more complex like a competitor raising its prices.

Buy or Sell

The last decision is when an analyst sums up all his research and decides whether to buy or sell.

To run a truly concentrated portfolio, I would suggest not buying a company unless the business is great and can be proved so by the financials, the management can run the business and allocate capital without the need of debt and there is a high margin of safety between the stock price and value.