What Is The Best Way To Learn Accounting?

December 12, 2012

http://www.gurufocus.com/news/201254/what-is-the-best-way-to-learn-accounting#

CSInvesting: *I highly recommend that if you are new to investing, reading everything you can at www.gannononinvesting.com. If you want a step-by-step testing approach go to http://www.accountingcoach.com. Buy an intermediate level accounting text with a workbook with problem sets and an answer key. Take tutorials: https://www.khanacademy.org/science/core-finance/accounting-and-financial-stateme*

The best way to learn accounting is not by reading books. **The best way to learn accounting is by reading 10-Ks.** This gives you real-world examples of accounting concepts. Today I'm going to talk about some of those concepts. And try to use examples of real companies.

Let's start with depreciation. Depreciation is one of the most important concepts you will deal with as an investor. Depreciation causes much of the difference between reported earnings and cash flow. What matters in investing is not reported earnings. What matters is cash flow.

Cash flow is defined in many different ways. You will hear a lot of talk about EBITDA. That is a measure of pretax and pre-interest cash flow. EBITDA is most often compared to enterprise value. Enterprise value includes the value of the company's equity and its debt. It is an estimate of how much it would cost to buy the entire company without paying any premium.

A lot of studies have shown that enterprise value to EBITDA is one of the best price metrics to use when picking stocks. It is probably the best gauge of how cheap or expensive a stock is. Control owners often use EBITDA as a better measure of earnings.

They do this because EBITDA reflects cash flow rather than reported earnings. And because EBITDA reflects cash flow before interest and taxes. Control owners can add debt to a company's balance sheet. This changes the amount of interest and taxes owed.

Many investors believe using EBITDA is wrong. They are right in that EBITDA greatly overstates economic earnings. However, the solution is not to use reported earnings. For some companies reported earnings are not a good estimate of owner earnings. Owner earnings are equal to free cash flow after paying to maintain a company's competitive position.

That is the key concept to keep in mind as an investor. Your focus should always be on owner earnings. Owner earnings means cash flow. It does not mean reported earnings. And it does not mean EBITDA. It means free cash flow. But it does not mean free cash

flow as you see it reported on many financial websites.

The free cash flow number you see reported is often cash flow from operations minus capital expenditures. Why is this not the best measure of owner earnings?

When a company is not growing but it is maintaining its competitive position free cash flow, owner earnings will basically be equal. But when a company is growing very quickly, free cash flow may be very low and yet owner earnings may be high. A good example of this is **CARBO Ceramics (CRR)**. Over the last 30 years or so CARBO Ceramics produced very little free cash flow. However, the value of the company has increased in the high double-digit percentage over those decades.

As a result, investors in CARBO Ceramics have made a lot of money. That means owner earnings have been big. And it means owner earnings have been positive. And yet free cash flow has often been close to zero.

How can that be? The answer is that CARBO Ceramics' competitive position has improved over the years. The company's market share has increased. The amount of the overall proppant market that goes to CARBO Ceramics products has probably quadrupled within the last 20 years or so.

So owner earnings have been positive because the company has grown. If the company had not been growing and free cash flow had been close to zero, then owner earnings would be zero. Owner earnings should be considered a hypothetical number.

The best way to think about owner earnings is to imagine what free cash flow would be if the company stayed in place. Free cash flow shows you what the company actually produced in free cash last year. That's not really the number you want. The number you want is the economic profit of the business that would be available to owners. Many companies reinvest much of their earnings. Not just much of the reported earnings. But much of their owner earnings.

When looking at owner earnings you want to consider what form those earnings come in. In the case of CARBO Ceramics they do not come in the form of free cash flow. What does that mean?

It means CARBO Ceramics increases its sales every year. The increase comes in the form of bigger receivables, bigger inventories and more property, plant and equipment. In other words comes in the form of asset growth. That is common for growing companies.

A few companies produce lots of free cash flow even when they grow. A good example of this is a software business like **Microsoft (MSFT)**. Other good examples are advertising agencies like **Omnicom (OMC)**. And database companies like **Dun & Bradstreet (DNB)**. Many companies with intangible assets that are produced internally have high free cash flow. So you should not be surprised to find that a company

like **Dolby (DLB)** has a lot of free cash flow (*go to http://www.sec.gov/edgar.shtml and dowload the 10-K and see if you agree with the author that Dolbe has copious cash flow)*

But there are other kinds of companies that also produce a lot of free cash flow.

One company that produces a lot of free cash flow that I've been looking at recently is **Western Union (WU)**. Western Union is a financial services company. For most financial services companies the idea of free cash flow is meaningless. Many people write to me in emails talking about the free cash flow a bank or insurer produces. That is a bad thing to focus on.

Why? It is bad to focus on the free cash flow produced by banks and insurers because those companies can increase free cash flow today by making mistakes they will pay for tomorrow. An insurer can increase free cash flow today as it is shown on the cash flow statement by making promises that will cost a lot in the future. Both banks and insurers have reported earnings that depend heavily on the assumptions those companies are making. Other kinds of companies do some of the same assumption making.

A good example of a non-financial company that has to make assumptions is a movie studio. Let's talk about DreamWorks. **DreamWorks Animation (DWA)**produces movies. DreamWorks Animation does not distribute movies. The movie distribution business is shorter term. The movie production business is longer term. And the movie production business depends a lot on assumptions. It depends on assumptions when making the movie. And it even depends on assumptions when reporting earnings after a movie has been released.

You can see this in the accounting rules used by these companies. DreamWorks explains that it carries film inventory on its books. Inventory at most companies consists of products that will be sold within the next year. There are some exceptions. But inventory is normally a liquid asset. Inventory at a film studio is not a liquid asset.

DreamWorks accounts for film inventory much the way most companies account for inventory. But that is only true when inventories are put on the books. Film inventories are put on the books at cost. The one difference is that the inventory can include capitalized interest. This is not an important factor for DreamWorks because the company does not borrow.

Inventory is normally recorded at cost. This is true whether the inventory is bread on a grocery store shelf, a diamond in a jewelry store, or a movie that is entirely intangible. Now the question becomes how the company accounts for the value of that inventory over time.

Ideally inventory is sold at a much higher price than cost. It's important to remember that the inventory that is shown on company's books at least under GAAP accounting which is what is used in the U.S. will be the cost of that inventory. Let's take the example of a grocery store. A grocery store might spend $1 to buy and shelve some product. That product will probably be sold for about $1.33. When you look at the store

shelf you see $1.33. However, when you look at the company's balance sheet you see $1. When the product is sold the company records gross profit to the extent that the retail price of the product exceeded the cost.

Gross profit is an important concept at many companies. I want to stress that inventory is recorded at cost. A normal profitable business should routinely sell inventory for much higher than the value shown on its balance sheet. In fact many companies go year after year after year without having negative gross profit. The company that has a gross loss is usually in very serious trouble. It is normal for a company to have a gross loss only in the very early stages of the business. And even then only in the case of companies that are going to rely on a huge scale to make a profit in the future.

From the perspective of understanding a business rather than a company and its financial structure the key numbers you want to focus on are sales, gross profit and EBITDA.

You always want to compare these numbers to something else. A lot of people compare gross profit and EBITDA. In other words they take gross profit and divide by sales to get the gross margin. And they take EBITDA and divide by sales to get the EBITDA margin. Those are both important numbers. But they're not the most important numbers. The most important number is a return on capital measure.

How should you measure **return on capital?** If we put aside the issue of how companies are financed and focus on the business itself the number that will matter most to you is EBITDA divided by invested tangible assets. What are invested tangible assets?

Different companies will have different quirks. I mentioned DreamWorks. That is an unusual company. And it can be hard to measure return on capital there. Likewise companies like Microsoft and Dun & Bradstreet will have **deferred revenue** *(look it up in an accounting textbook if you don't understand the accounting concept!)***.** This complicates things because if you ignore deferred revenue you underestimate the return on capital of the businesses.

But for most companies the key balance sheet items are receivables, inventory and property. Those are the assets. The liabilities are accounts payable and accrued expenses. You want to net the sum of receivables, inventory and property against the sum of accounts payable and accrued expenses. This will give you an idea of how much capital is in the business.

You then want to look at gross profit divided by the difference between those invested assets and liabilities. And most importantly you want to look at EBITDA relative to the difference between those assets and liabilities.

Why do we net out the difference between the assets and liabilities of the operating business?

A business has owners. And it has creditors. We usually think about financial creditors. But when we look at a company independent of its debt, what we need to focus on are creditors that are owed money as part of the day-to-day business.

Most companies owe money to their employees. They owe this money at all times. Employees do work first and are paid later. They also owe money to suppliers. Supplies are shipped first and paid for later. These creditors provide some of the capital the business needs to operate. That is capital that owners like shareholders do not have to provide.

What if the accounts payable and accrued expenses are less than receivables, inventory, and property. Then the business will need capital from owners. Or it will need capital from banks. Or it will need capital from bond investors. In other words it will need financial capital.

It is best to start studying a company without leverage. Some companies use leverage all the time. A utility like a power company or a water company will not earn enough for its shareholders without issuing bonds. That is true. But investors first starting out in understanding accounting should focus on businesses before considering how they are financed. They should start with how business is run regardless of whether capital is coming from bond investors or stock investors.

They should also focus on cash flow rather than reported earnings. That is why I want to talk about sales, gross profit and EBITDA relative to invest capital.

What is a good return on investment? That is one of the biggest reasons investors look at accounting. They want to find a business that earns a good return on capital.

It is important that the return on be good in most or all years. You need to go back at least 10 years to understand a business. With EDGAR you can often go back 15 years. You should do that.

Important numbers to consider are sales relative to receivables, inventory and property. And sales relative to net tangible assets. The net tangible assets are approximated at most companies by receivables plus inventory plus property minus accounts payable minus accrued expenses. The higher sales are relative to net tangible assets the lower margins can be in the company can still make money. The reason a company like **Costco (COST)** can operate with such low margins is because it has high sales relative to net tangible assets.

If a company has low sales relative to net tangible assets like Amorim Cork does in Portugal or many jewelry stores do it will need to have very high margins. Some companies that have a lot of assets always have high margins even when they have poor returns on capital. A cruise company like **Carnival (CCL)** has very high EBITDA margins even in bad years. The same is true of a railroad. That is not what you should

focus on. It is not important that they get a good return on sales. It is important that they get a good return on assets.

When can you be sure that a company has a good return on assets? Here is a rule of thumb. If a company routinely earns a 20% EBITDA return on net tangible assets, the business is good enough for you to invest in for the long run. But it is critical that you remember that a company which earns more than 20% in most years but lost money in any year may have a mediocre performance over the long run. In other words you want to see median returns and minimum returns that are as close to your ideal of 20% or higher in terms of EBIT up. Where does the number 20% come from?

An unleveraged company with a 20% EBITDA return is likely to be able to deliver double-digit returns to shareholders. That is why a 20% EBITDA of return is a good cut off.

But it is most useful for companies that have consistent EBITDA returns.

That's where you start. You start with the EBITDA returns. Then you can think about how closely EBITDA is related to owner earnings.

At a company like Western Union EBITDA translates into free cash flow at a very high rate. The only depreciation and amortization at Western Union has to do with write offs of bad past acquisitions. Or with signing bonuses. Western Union capitalizes signing bonuses.

Some companies build new stores and new factories. Western Union does not do that. Western Union has a network of agents. Those agents already have bank branches and post offices and convenience stores and the physical stuff you need to be a Western Union agent. So all Western Union needs to do is sign them up. The investment that Western Union makes is a signing bonus.

So if Western Union pays $800 as a signing bonus to get a new location for the next five or seven years they will amortize that signing bonus over those five or seven years. That means they take $800 and instead of expensing it in year one they spread it out at a rate of anywhere from say $200 to $100 a year depending on how close it is to, say, a four-year contract or how close it is to being, say, an eight-year contract.

That is amortization. You may see it described differently at different companies. The truth is that amortization, depreciation and depletion are all really the same thing. They are just different terms for the same idea. Do not get hung up on which word is used. You often see amortization used for intangibles like movies. And you will see depreciation used for tangible things like machines. Depletion may be used for natural resources. They all amount to the same thing.

Whether we are talking about depreciation, or amortization, or depletion we're talking about taking a one-time cash outlay and spreading it over many years as an expense.

The classic example that I use over and over again is a cruise ship. A cruise ship may last 20 or 25 years. And even after it has been used for 20 or 25 years it will not simply be scrapped. It will be sold. So a cruise ship has a residual value. And it has a useful life of many, many years.

Those are the key concepts to understand with depreciation. You want to look in the accounting notes for a description of useful life and residual value. There are also different methods for how to spread the expense over the years.

An example is the difference between how Carnival accounts for depreciation and how DreamWorks handles film amortization. Carnival spreads the expense evenly. It uses a straight-line method. DreamWorks uses the ultimate revenue approach. They match revenue against expenses. That works except when they have a flop. When they have flops they have to write off immediately. So expect to see a write down of Rise of the Guardians real soon.

Why does this matter? It doesn't really matter that much. You shouldn't focus on reported earnings. Analysts tend to focus on reported earnings. The media definitely focuses on reported earnings. Don't do that. I want you to focus on cash flow. So you need to look at the ways that reported earnings masks cash flow. You don't want to have an estimate of what earnings will be next year. That's not necessary.

Carnival and **Royal Caribbean (RCL)** are similar businesses. And yet if you read their explanation of how they handle depreciation carefully you will see it is not identical. You will also see this with companies like railroads. Not every railroad has to use the same approach to depreciating assets. And not every cruise company has the same approach to depreciating their assets. They will even disagree on issues like useful life.

This is important. It means that Royal Caribbean may sometimes be depreciating 4% of their ships each year while Carnival may be depreciating 5%. If each company is generating sales of only about 40% of the value of their ships we are talking about ships with a book value of about 2 ½ times sales. In other words a 1% difference in depreciation per dollar of book value of property each year would correspond to a 2.5% difference in margin each year.

So if you focus on reported earnings a tiny difference in depreciation of say a 20-year useful life versus a 25-year useful life could cause you to miss a 2.5% difference in margin. You could look at the two companies and see one company has a margin of 12.5% and the other company has a margin of 10%, and you would think the company with a 12.5% margin is more profitable. But if the company with a 12.5% margin has estimated useful life for their ships that is just five years greater then actually there is no difference in cash flow. There is only a difference in reported earnings. And that difference is based on an arbitrary decision about useful life.

In other words, if you do not understand accounting you will not understand that you are giving credit to one company over another simply on the basis of trusting managements'

estimates of how long they can use a ship.

This kind of thing is common in many situations. And that is the way to use accounting. You want to use it not as a guide to exactly what is right and wrong. You want to understand it as you would understand a written language.

In other words you don't want to have some exact idea what depreciation is or should be in every situation. Instead you want to understand how the depreciation affects reported earnings and cash flow. And you want to understand the difference between economic reality and management estimates. Most importantly you want to take nothing for granted. You want to understand where every part of your own estimates of a company's value comes from.

The danger in not understanding accounting is that you will incorporate ideas without analyzing them critically. You will incorporate ideas like the useful life of a ship without ever thinking about the useful life of a ship. You may never read that note on depreciation. But you will take those margins and make assumptions based on them. But those margins themselves make assumptions based on the useful life. So you need to go and look for what data makes up the data you are using.

That is the most important part of accounting. It is not about right or wrong. I can't tell you exactly what the earnings-per-share of Royal Caribbean should be. And I can't tell you exactly what the earnings-per-share of Carnival should be. I can look at why the earnings are what they are. I can look at how they would be different if they made different assumptions. And I can give you my take on what assumptions I think are reasonable. More importantly, I can make conservative estimates of economic reality and I can restate reported earnings in terms of a conservative economic reality as I see it.

That is what you are really looking to do. You don't need to know what reported earnings will be. You need to know what a conservative estimate of future owner earnings will be. And the way to do that is to break down the headline numbers you find in a company's earnings.

How do you do that? Try to be like an investigator. Write down questions you have. If a company's receivables look particularly high or low, go and read the note on receivables. The notes to the financial statements are critical. I can't stress this enough. You always need to read the notes to the financial statements. You always want to read the entire 10-K. And you need to take notes. The notes you take should mostly be questions.

In other words, when you are looking at the depreciation line you should be thinking what assumptions are they making about useful life? And you should be thinking how does that match what actually happened in the past. For example, you can go back into the past annual reports for Royal Caribbean and see the age of their ships. You can see what they sold ships for when they were done with them. You can test estimates of the

future against the past.

If you listen to conference calls you hear a lot of estimates. You should ignore this. You should instead go back into the past to make estimates about the future. If you want to consider what kind of capital spending will be needed to keep a fleet in a certain shape you should go back to what they spent on ships in the past. You should adjust it for inflation. You should consider that as the average life of the fleet gets older its earning power may be worse. Certainly its attractiveness will be lower to customers. You should think the way an investigator or journalist would think.

The metaphor of a reporter is a good one. That is really the way to tackle accounting. It is very important that you not get hung up on right and wrong. That's the mistake most people make when they look at accounting. They try to decide what is correct and incorrect. That's not really the way to use accounting. The way to use accounting is to literally think of it as a language. It is to analyze a financial statement the way you would analyze a written statement. You would not be focused on some ideal. You should be focused on the gist of what was being said and how it was being said and what wasn't being said.

There are good books on accounting. But they will not help most people who need help with accounting. Because they are theoretical. And at best they will give you some idea of what you'll face the real world. But it is much better to simply go out and read a 10-K every day. You can't help but learn accounting if you read a 10-K every day. If you read 10-K every day and read it critically taking notes and especially asking questions you will become much better at understanding accounting than most investors.

It is that simple. **You should stop looking for books on accounting. And you should start learning accounting the way you would learn a language by immersing yourself in it.**

[url=mailto:[email]geoff@gannononinvesting.com[/email]]Ask Geoff a Question[/url]

Discuss this story