How to Invest: Research and Valuation Process

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Here is the process I follow which is rooted in the Graham and Dodd approach:

Search

I usually scan for ideas reading print media such as the Wall Street Journal, Barrons, and websites such as Google Finance and blogs looking at 52-wk lows lists looking for headlines that just spell "bad news" and articles that may lead to ideas with catalysts, event driven ideas and sometimes macro-event driven ideas.

I'll use screens if I don't find anything in the headlines. If something peeks my interest a bit, I'll try to gather more news and get an idea as to what is happening with the company, look at historical highlights, pull some efficiency, liquidity ratios and some basic numbers to look for consistency and I'll think about the risks to the current situation a company is in and decide if I could potentially profit off the situation.

If I think I can profit off the situation, I'll really do some due diligence.

Analysis

Financial Reports and Statements

At this point, I would grab at least the last three years of annual reports, 10K/Q's, 8-K's, proxies, conference calls transcripts and sometimes trade journals or magazines for additional information not included in the public documents.

Of all those documents, I start out with reading the three annual reports usually starting with the oldest and work up to the most current report to quickly scan the highlights to look for consistency and also get a "story" of the company leading up to the current year.

I'll read the letter to shareholders (while taking it like a grain of salt of course) and scan for negative results or problems and again look for consistency in what the management has said and if they followed through on on-going issues.

Next, I'll quickly breeze through the auditor's report (again taking it with a grain of salt) and look for problems that they found with the accounting or any mentions of change in accounting methods, uncertainties, specific disclosures and going-concern problems.

Management Discussion & Analysis

If anything catches my eye, I'll look for more info on that in the MD&A, financial statements and notes to the financial statements for explanations about any issue.

After reading the auditor's report, I'll read the Management's Discussion and Analysis (MD&A), and sometimes I'll have the 10K in my hand to read more about an issue discussed in the MD&A as SEC filings tend to have more detail. With the MD&A, I'll read about how they recognize revenue (this is important for my own valuation purposes — garbage in/garbage out), restructuring charges, impairments to assets, pension plans to get an idea how they are financing it for their employees (this can be really helpful for the future financial landscape of the company), read about environmental and product liabilities in the case that if there is a problem in the future, the company can weather any future financial burden from liabilities.

I'll also look at compensation to see how management is compensating themselves as it can be foretelling of a possible scandal such as dating back stock-options at below market rates and it will also show if they are shareholder friendly.

In addition, I read the discussion about sales increasing or decreasing and get an explanation, read about the company's product lines (I usually try to match that with the reviews and feedback of customers), read about economic, market and sometimes political conditions that may have an impact on the company's performance.

I'll read about operational aspects such as distribution systems, R&D and changes to products to improve performance or appearance and how much they are spending on R&D and cost controls, manufacturing capacity and associate that with capacity utilization. I'll also read about acquisitions and expansion plans to see if it makes sense and also how they will finance its current and new debt and effect cash going forward.

Lastly, I finish up the MD&A by looking for liquidity information. I want to see what they say about its cash position and its ability to pay its bills to see if it makes rational sense.

Scanning the Proxies

From there, I'll quickly scan through the last three years worth of proxies just to get an idea of the board makeup, insider ownership, related party transactions and also see how management responds to shareholders. After reading the proxies, I'd want to see if there are any changes to any SEC filings via the most current 8-K.

Occasionally, I'll look at the 13-D just for curiosity to see what major shareholders I am up against as someone smarter with more information could be on the other side of the trade with me or it could be an institution that can move a stock in either direction because of charter reasons and I could possibly take advantage of that.

After the first phase of going through the Annual Reports and SEC Filings, I usually have a comfortable idea as to what the company does, it's key drivers, how they make money and if it's profitable and organic, how they allocate capital and at what targeted return and if they can and have met it.

Phase 2 Analysis

My second phase is to get an idea of the market perception, general consensus and concerns of the company. I do this by reading the last five conference call transcripts (if available) and go to the company website and view any company presentations (if available).

I'll read blogs, forums and email journalists who wrote articles about the company and get an idea as to what the general market thinking is. I do this to get a general idea of what the "crowd" is thinking or doing because it allows me to identify if the "herd mentality" is present and also this tells me if a possible mispricing may exist because of irrationality in the air.

After I get an idea of what the general market view is and if they are irrational or not which could lead to a possible mispricing, I do a bit of scuttlebutt research to try to confirm the mispricing. I will contact suppliers and try to probe them on their experience with working with the company and how they feel about them.

I also contact the actual stores to try to confirm issues discussed in the annual reports and SEC filings. I also contact the actual stores of the competition to get their views on the company. If I have trade magazines, I will try to contact authors for their views and any other details related to the company. It's usually by this point that I'll know that

(1) management is attuned to what's really happening on the ground and
(2) management is able and honest and
(3) an indicator of a mispricing is now really possible.

The only issue with contacting people is that it is more of a waiting game and sometimes people are not cooperative.

After I have completed the first and second phase of due diligence on the subject company, I will do the same research on the competition which usually is three to four companies ranked by market position. After I have completed the same research on the competition, I'll have a mental picture of the viability and economic value of the industry and who would likely be the winners and losers this way I'll know who or what to handicap.

Then I do one last bit of scuttlebutt research and contact the investor relations department of all the companies and if possible executive management (subject to availability) and probe them on how they view the competition by asking them questions like

- if you were to merge with one competitor, who would it be and why?
- if you could buy one subsidiary of your competitor, who would it be and why?
- if you were given one wish where you could destroy a company, who would it be and why?"
- if you had the chance to trade places with the executive of a competing company, who would it be and why?

Asking these questions gives me an idea as to who is the real top dog of the industry.

After completing phase one and two, I will perform valuation exercises which is phase three.

My valuation methodology is rooted in the modern Graham and Dodd approach so I work with asset values, earnings power value (EPV) and view growth as either a margin of safety or buying it for free.

Here's how I do it.

Stock Valuation – Asset Values

Note that a lot of the tedious task involved in stock valuation such as finding and plugging in numbers can be performed automatically with the **stock valuation calculator**.

I start with what kind of industry the business is in. If the industry is depressed or unsustainable, I will value the business at liquidation. This involves making necessary adjustments to the balance sheets from the top going down based on what I think assets will go for in a firesale or for scrap.

I will usually mark liabilities at book value and take that number and subtract it from my calculation of assets and get a net asset value or otherwise called liquidation value. The rule is to buy the security at 2/3of that. Also, using liquidation value gives me a floor for the stock price if I think it can rebound from distress or bankruptcy.

To me, the floor of a price is more important than the top on price. Preservation of capital is key in this.

If the industry is viable and not going away, then I'd want to value it at a reproduction cost. Because of the nature of capitalism which really is creative destruction, the company making boat loads of money will attract competition. A person or institution with lots of money can start up the same business to compete with the incumbent. The entrant will have to assess what it would cost to start up and maintain the same business.

That cost is known as reproduction cost.

To get reproduction cost, again I have to make adjustments to the balance sheet starting with assets from the top going down this time based on what it would cost to make identical assets as the incumbent.

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Making adjustments is dependent on the type of account on the balance sheet:

- For cash accounts, there is no adjustment needed as they are marked-to-market and represent fair value.
- As for accounts receivable, the rule is to add bad debt allowances and adjust for collections to get a realistic value of accounts receivable.
- Inventory is valued at FIFO basis and if the firm is using LIFO, then add LIFO reserve to the balance sheet number.
- With Property, Plant & Equipment, the adjustment is made on case-by-case bases, but the general adjustment is made with the original cost plus any adjustments such as previous comparable sales of similar PPE.
- When working with intangibles or goodwill, there is no adjustment number as intangibles or goodwill is based on the product portfolio and research and development. Since there is no replacement cost, I can use one of three ways to figure out a conservative book value estimate: (1) is to look at previous deals of a similar brand and see the acquisition price, (2)could also add up the costs of R&D spending attributable to the product or brand created from conception to deliverable or (3) add up the costs of three years worth of marketing and sales expenditures.
- As for deferred taxes, if the company is going to have a profitable year, perform a discount to present value calculation on the cash to be paid in the future for taxes or if the company is going to generate losses, push the payment further out into the future and do a discount to present value calculation as well.
- Lastly, for long term liabilities, there is no calculation to be done as it is marked at book value, unless otherwise, account for any new issues of debt. Then take the total liabilities and subtract from total assets and I get reproduction cost or reproduction value.

Stock Valuation – Earnings Power Value (EPV)

Earnings Power Value also known as just Earnings Power is I think a better way to analyze stocks as other forms of valuation such as discounted cash flow or present value calculations that relies on the rate of growth and cost of capital assumptions many years into the future. The thing I don't like about the word assume is that if you break it apart, what you would get is “ass-u-me”. Assume makes an ass out of you and me. Making assumptions about a company is in my opinion not something to lean on for reliability even if we apply a higher margin of safety. Basically, how can anyone predict the future?

EPV uses a very basic equation which is (adjusted earnings) x (1/cost of capital) and it assumes no growth and it relies on the judgment that current and extractable earnings while leaving the business intact are expected to be sustainable and consistent from the operations of the business. But before we can start the equation, we have to clean up earnings and come up with a cost of capital.

Income Statement Adjustments

(1) We start with operating earnings or EBT/EBIT and make an adjustment to allow for the business cycle and it’s cyclicality affects by taking a 7-year average of operating earnings, which includes at least one economic downturn (basic economics assumes one downturn every decade) and apply it to the current year’s net sales.

Note: Although at the peak of a business cycle, adjustments reduces earnings and in a cyclical trough, the adjustment raises earnings, I prefer just to get an average because the assumption of economics implies a cyclical downturn.

(2) Deduct the 7-year average of non-recurring charges or normalize these expenses to reflect their economic nature (if applicable).

(3) Multiply the adjusted operating earnings by the 7-year average corporate tax rate usually somewhere between 30-33%

(4) Add depreciation of the most recent year. This depreciation is already calculated in the statement of cashflows by the accountants, but it does not take into consideration of any advancements in technology or manufacturing efficiencies which can have an effect on lower capital goods prices or it can have an effect in an inflationary environment where reproduction costs is higher.

This means we have to adjust this accounting depreciation to a true measure of depreciation by using maintenance capital expenses (CAPEX).

(5) Calculating Maintenance Capex

- A. Calculate the Average Gross Property Plant and Equipment (PPE)/sales ratio over 7 years
- B. Calculate current year’s increase in sales
- C. Multiply PPE/Sales ratio by increase in sales to arrive to growth capex
- D. Maintenance CAPEX is the capex figure from the cash flow statement less growth capex calculated above, which is the true depreciation for the company

(6) Once we have deducted the true (adjusted) depreciation from steps 1-4, we then have to come up with a cost of capital estimation (R). Because of one of the cardinal rules of Value Investing which is that income streams of companies and the operations themselves should be extremely predictable and consistent, simply choosing a rate like the federal bond rate (seen as risk-free) plus 2% is good enough. I tend to use a range of rates from 6% to 12% depending on what I feel is realistic for the company or average.

(7) Once I have both the adjusted earnings figure and my chosen cost of capital rate, I can perform the equation.

Earnings Power Value = Adjusted Earnings X 1/R, where R = Cost of Capital

or

Earnings Power Value = Distributable Cash Flow X 1/R, where R = Cost of Capital

(8) It's at this point now that I have both the Asset Value and the Earnings Power Value, that I can tell if management is creating value for shareholders.

If EPV is higher than Asset Value, then it is said that management is creating value and the company is operating at a competitive advantage. If the reverse is true, then management is destroying shareholder value by earning less than the value of the assets and the company operates at a competitive disadvantage.

This difference between the EPV and Asset Value is known as the franchise value. This can also be expressed in per share values.

(9) If I find that the company is operating with a competitive advantage and management is creating value for shareholders, I am now at the point where I want to compare the EPV with the market price. But before I can make any comparison, I have to make one final adjustment.

That is to subtract out any corporate debt and add in cash in excess of operating requirements.

EPV + Cash/Debt Adjustment

(10) After adding in the cash/debt adjustment to EPV, then I would express EPV in per share value by dividing it by the amount of shares outstanding.

Then I can compare the EPV/per share to the market price. If the market price is below the EPV/per share, then the stock appears to be undervalued by the market.

Thesis

After completing my research, analysis and valuation in this fashion, I'll have a picture of what the company does and how it makes money.

I'll know if management is consistent, able, whether they are shareholder friendly and if management is really in sync with things happening on the ground. I'll know how the accounting is done and if they fudged some numbers. I'll have an idea as to what the general risks are to the company, how it affects cash and whether these things can be minimized. I'll see the market perception of the company and I can decide to go either against them or hold off on the investment. I'll see what their competitors thinks about the company and it will either change the way I think about the company, reinforces my conviction about the company or fill in holes on my analysis of the company.

The way I think about my valuation exercises is that I was using reliable earnings to come up with a conservative estimate of intrinsic value and if management is creating shareholder value.

I'll have an idea where the margin of safety lies or know how to apply a margin of safety because I've read cases where people slapped a blanket margin of safety to a valuation and their estimates became way off that they missed out on some really smokin' deals — basically an error of omission. And doing this type of valuation gives me a range of values without having to use assumptions about growth into the future. And since I don't just value just the one company, I value the basket of companies since I have already done the homework on the basket, I could just wait for one of those stocks to get beaten up and pounce on them with vigor or if I want I could buy the basket if the industry had gotten beaten up for some irrational reason.