Brainteaser

- Suppose you are playing a hand of poker with one other person, and you bet $10 between pre-flop, the flop, and the turn
- Suppose the other person now bets another $10, what does your probability of winning the hand have to be in order for you to willingly call the bet?

Intro to Value Investing

December 5, 2016

What is value investing?

- “Buying a dollar for 50 cents”
- Price is everything – but the real key is understanding where something should be priced
- How do we do that?
  - The value investor answer is to understand the business and its opportunities as best as possible… better than everyone else
  - Only then can we understand the security mispricing

Value Process

Step One: Sourcing

- Screening
  - Easiest to screen by going on Bloomberg or resources on NYU VBL (ThomsonOne Banker, Morningstar)
  - Creativity is rewarded…traditional screening is dead, in my opinion
- Buzz
  - There is value to following news…trendy things will trade weird, need to understand why they do
- Through articles/friends

Business Analysis

Step Two: Understand the Business & Its Opportunities

- Understand each part of the business – how does it make money? Why does it make money? Will it continue to exist going forwards?
  - The "needs to exist" test
- What sorts of economics does this business enjoy?
  - Returns on capital? Cost of growth? Unit IRRs / Returns?
  - Economic Moat?
  - High fixed costs? Margin opportunities?
- Brand Value or Intellectual Property? Pricing Power?
- Is the management team good?

Business Analysis

Above all else, this is Detective Work

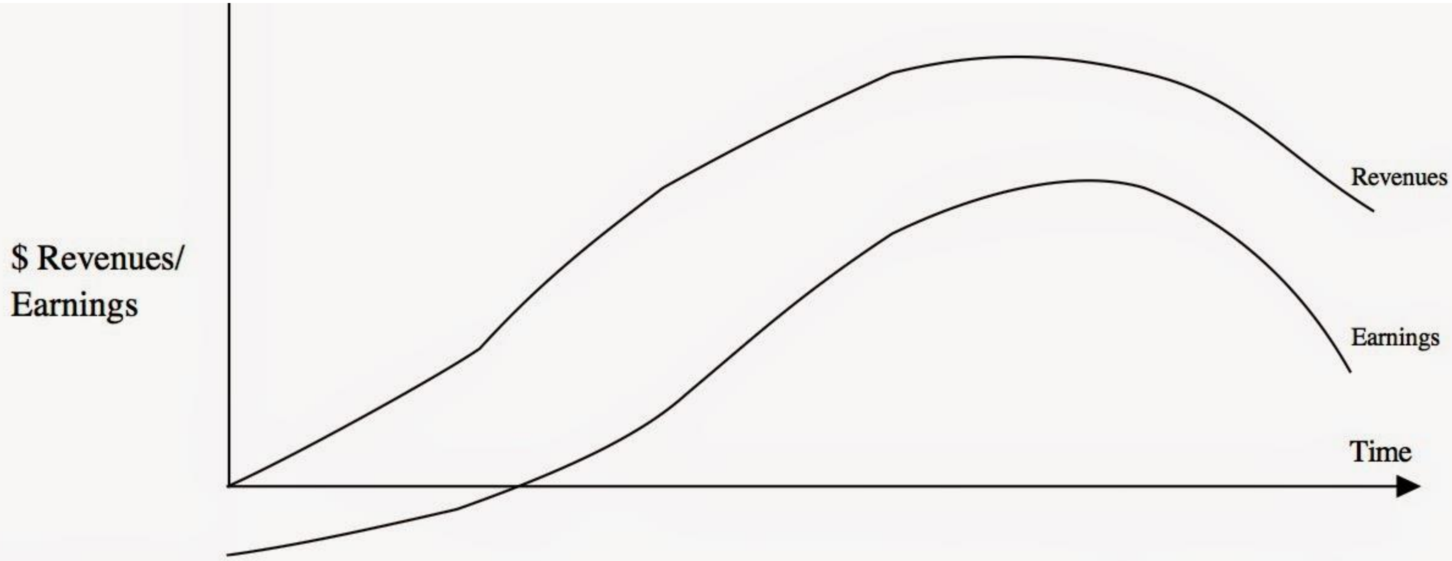
- Are there hidden assets or liabilities that are unclear?
  - Operating Leases, Pensions on the Liability Side
  - Real Estate, Intellectual Property on the Asset Side
- Are the assets under or overperforming?
  - Margin performance, earnings returns
  - Will they continue to perform the way they are?
- Do you understand the macro?
  - Oil Prices
  - Banks
- Read **Everything** – Financials, Presentations, Call Transcripts, 10-Qs, 10-Ks. You never know what you will find if you look, and patience / diligence will be rewarded

Industry Analysis

Step Three: Is this a good industry?

- How will it change going forward? Are competitors coming in? Why or why not?
- What stage of the business cycle is it in?
- Porter's 5 Forces
- Talk to the company and competitors if possible! Never hurts to learn more and they are often willing to answer investor questions

Stages of Business Cycle



	The Idea	*The Product/Service*	*The Business Model*	*The Harvest*	*The End Game*
Phase	See an exploitable market	Develop a product or service to exploit the market	Create a business model to generate profits on product or service	Run as an ongoing business	Manage decline
Focus is on	Market Potential, Survival	Product usage, Competition	Viability and Scalability of Business Model	Profitability & Sustainability	Asset liquidity, Cash flows & Survival
Pricing Metrics	Market size, Cash on hand, Access to capital	Number of users, User intensity	User engagement with business model, Revenues	Earnings (Levels, Margins & Returns)	Cash flows, Book Value
Pricing Multiples	EV/ Market Potential	EV/User	EV/Sales	PE & EV/ EBITDA	Dividend Yields, Price to Book

Before Valuation

Step Four: Careful Adjustments

- Getting to the right numbers
- Pro Forma adjustments to get normalized numbers
  - 1-time costs / gains
    - Litigation
    - Selling a business / buying one
    - Gain from the financial markets (commodity hedge)

Important Concepts!

True Value of Businesses

- What is the value of any business?
- How do we come up with a discount rate? What does that even really mean?
  - We'll come back to this later – just keep this in mind for now

Valuation

Step Five: Pricing

- Dozens of different methods:
  - Relative Value
  - DCFs / Scenario Analysis
  - Asset Valuation
  - Precedent Transactions
  - Liquidation Analysis
  - Whatever you can think of

Valuation

Step Five: Pricing

- DCF Valuation
  - Makes the most sense given our prior definition of business value – purest form of intrinsic valuation
  - You're essentially guessing the discounted cash flows that a company will produce into perpetuity
  - How do we do this in practice?
  - There's a need to break things down into drivers you can have an opinion on – not enough to just guess revenue growth
- What problems do you see?

Valuation

Step Five: Pricing

- Relative Value
  - Multiples – Price is King – EV/EBITDA, EV/EBIT, P/E
  - How do you decide the right one to use?
  - How do you decide fair value vs. comps?
  - Industry specific metrics - $ / kW, tangible book assets, etc.
- Theoretical explanation – can think of these as a measure of return, or as a sense for what the market prices risk at
- Industry relval is pertinent too – are regulated utilities more or less valuable than E&P companies?
- Precedent Transactions can give a sense of other people's perceived fair values – up to you to think of your own

Valuation

Step Five: Pricing

- Asset Valuation
  - Liquidation Value of the assets
    - Relevant in distressed cases
    - Requires haircuts / discounts
  - Precedent Transactions
  - Mini-Asset Level DCFs
  - Anything else you can think of?

Understanding Consensus

Step Six: Consensus

- Need to understand why something is priced where it is…if you can't explain why something is mispriced, you're probably missing something
  - Read research reports for a sense of what people focus on and what mistakes people make
- Better to be contrarian than consensus…why?
- Understand consensus positioning – This is **crucial** – tons of "right" pitches can trade the wrong way

Thesis

Step Seven: Formulate your thesis

- What your position is, what your possible upside is, and why the market is wrong
- Shouldn't be more than a few sentences – best investments are the ones that have a lot of upside for just a few reasons, as opposed to a bunch of things that need to go right
- Some examples:
  - Hidden Assets
  - Growth at a Reasonable Price
  - Discount to NAV
  - Market Overreactions

Risks

Step Eight: Know what Could Go Wrong

- There are ALWAYS risks to your investment thesis – the careful investor will understand what they are and how significant they are in magnitude
- Buying with a "margin of safety" to compensate
- Assumptions should be careful and conservative – think of best and worst possible cases, and always be weary of downside
- Scenario Analysis is fairly useful for painting the range of possible outcomes

Mentality

Probably what makes or breaks 80% of Investors

- What happens if your position goes down 50%?
  - Do you buy more? Do you sell? Do you wait?
  - Understanding **<u>why</u>** is key
- Need to disprove null hypothesis, as much as you need to prove your own
- Intellectual honesty is key
  - A failure to admit a mistake is liable to completely blow you up…stay humble, you will be emotionally tied to PnL, but you can't let that permanently impair your decision-making

Common Pitch Types

Traditional Longs

- Competitive Businesses with Barriers to Entry (Awesome Businesses that you want to hold forever)
- Smart Management Teams that will close a discount to NAV or strategically create value
- Extreme Hidden Value
  - Good Assets, Weird Accounting, Catalysts
- Hidden Opportunities
  - Margin Expansion / Cost Cutting, Income from a previously non-income producing asset
- The dirty, ugly, but cheap – bad businesses at an amazing price

Common Pitch Types

Traditional Shorts

- Structural businesses issues on the horizon
- Frauds / Accounting Gimmicks
  - Companies that are over-earning on the book but don't generate that much cash
- Companies with crazy high expectations, popular fads
- Sketchy sell-side coverage, pump & dumps
- Overleveraged companies

Common Pitch Types

Special Situations

- Event-driven:
  - Spin-offs, Carve-outs
  - Distressed / Turnarounds
  - Busted IPOs
  - Opportunities in credit
  - Merger-Arbitrage (Pennies in front of a steamroller)
  - Fallen Angels / Rising Stars

Questions?