### The Investment Process Workflow

- 1. **Our job is to find attractive trade ideas**. Doing so in a repeatable way requires a strong process.
  - We use the coverage approach to help us focus our time and efforts. Coverage is the process of organizing companies along their business line and developing a workflow to understand how companies are positioned within the space.
  - Some industries are a coverage group, but most need to be broken down into a specific vertical. For example, breaking up "Media" into "ad tech" and "streamers".
     When you build your coverage list, include companies from other sectors and industries if they compete in your vertical. E.g., AMZN should show up in coverage of e-commerce, hyperscale/csp, and streaming.
- 2. **We began with a limited set of companies** within 2-3 verticals to start. We have expanded from 25 names to 100+, and our long-term goal is to cover the entire global technology sector.
  - Initiating coverage on an industry requires a bottom-up and top-down process. The
    top-down part is done by reading industry research, industry surveys, gathering a
    list of key words, etc.
  - The bottom-up part requires an initiation on each stock we cover. This is labor intensive and is part of our "ramp" process, where we read (at minimum) item 1 & 7 on the 10-k, last 4 earnings press releases & call transcripts, guidance commentary, and investor day presentations.
  - Our goal is to understand what the business does (where you can describe it in 1 sentence) and what the goalpost for the company is. E.g. A company's investor day deck states "we are targeting \$10bn in ARR by 2027" or "we plan to increase production to 100k units by 2030". This is a must have -- it's the "fundamental bet" of a company.
  - Beyond that, we analyze the company's <u>product-market fit</u> (how good is the
    product, what makes it different), <u>industry dynamics</u> (how exposed is it to
    competition, themes, its value chain, etc.), and the <u>strategic operating plan of
    management</u> (company's goals/opportunity and how management plans to get
    there). We use leading productivity and notetaking tools to help us in this process.
- 3. After industry (and company) initiations, we draft "earnings previews/reviews" notes. In the note, we describe how each company did (vs. their own guidance and vs. the street at minimum), what drove performance (commentary from management), guidance (including what assumptions are baked in, e.g. "our guidance of \$200mn sales next

quarter assumes macro remains soft"), and our updated view on metrics (through the forecast period).

- We aim to draw "themes" we are seeing e.g. "coffee chains are seeing higher coffee bean prices but have been successful at passing it through to the consumer".
- 4. **Now let's get to modeling**. Before we model an individual company, we build a "vertical dashboard" to track KPIs, things that impact companies across the vertical, and important industry trends. E.g., Smartphone shipments, market dare data, coffee bean prices.
  - For individual company modeling focus on 2 primary things: an earnings process that allows for a quick update and assessment, and a valuation module.
  - Yes, we build a <u>3 statement model</u> because we need to do all sorts of analysis for scenarios (more on this later). The more data we have the better but starting off with 3-yr historical annual data + last 2 full years of quarters is our normal starting point. Our forecast period at minimum is 5 years out. Both AlphaSense and bamsec have great tools to speed up this process (takes me about 3 min per period per statement, so for 3yr = ~30min, for 8 quarters ~70 min). I always compare my forecast to guidance and the street for each period I forecast, and include analytics such as q/q, y/y, average q weight, seasonality (ave q %), and 2-year stack.
  - I typically start forecasting at the annual level and then calibrate to the quarterly level. E.g. "company's strategy means they can realize 15% y/y.. seasonally most of their growth happens in q4". My first approach to valuation aims to be simple and useful, so I use multiples.
  - Valuation does not happen in a vacuum -- the multiple is a proxy for the
    denominator in the Gordon growth/DCF model "(r-g)". To understand how r and g
    have changed, compare the chg in rates for r, for g I look at the trend of estimate
    revisions through the period. I also compare the chg to peer estimates vs. co's. If
    there's no chg to the premium/discount the company is trading on vs. peers then I
    can quickly determine if valuation reflects an idio concern.
  - My view is that when the multiple is trading below the average, since the last report period or last information release, it may suggest the market is expecting a lower metric and vice versa. To simplify things, I start with the average multiple or simply the last print as my baseline of what the multiple should be.

#### 5. How do I find trade ideas?

Step 1: I go back to my framework of product-market fit, industry dynamics, and strategic operating plan and begin to read sell side research. I pay close attention to the arguments per sell side analyst and their metric forecast. I then lay out the information to understand the spectrum of views, typically a sheet in my company model excel workbook. I look to identify the critical factors and what I think would make the sell side analyst change their view. E.g. Bofa Analyst thinks Snowflake billings will reaccelerate because of improving SMB trends. Now I know if SMB trends get worse, that analysts estimate will likely move lower.

- <u>Step 2</u>: I get hyper focused on those critical factors and do everything I can to understand them at the same level or better than the sell side analyst.
- <u>Step 3</u>: I conduct <u>scenario analysis</u> to understand how changes in the critical factors would roll up into sales, ebitda, eps.
- Step 4: I then find what scenario (or mix of scenarios) is the most likely outcome and what the "path of monetization" looks like. The stock will tend to trade around the midpoint of the most likely outcomes. I "buy at value" when the stock is underestimating the odds of my outcome, but ultimately the payoff is in being right about the actual outcome. The path of monetization is the upcoming events that will provide the information that will prove or disprove my thesis. That could be the upcoming earnings, an investor day event, 2-3 quarters down the line ("factory won't come online until next year, so it's a q4 story"), or even years out. Step 4 requires good judgement I'm a big fan of @PTetlock's book Superforecasting.

And that's it for the general process! Some other tips are to write up ideas in memo format to get feedback, have a routine for checking news, and use a set date during the week for estimate revision updates. I am always looking to improve the process and if you have any tips or feedback, I'm very interested in hearing it!

Quick comment re: sell side – I am not "trading" vs. sell side, however, they're a useful proxy for the "arguments" and "math" (the scenarios) <u>that the buy side</u> are considering too. It's not so simple as just having a view vs. <u>consensus</u>, but it should start there.

## Modeling

"Start with learning how to model 3-statements. There are lots of training programs that can teach you that (e.g. <u>Wall Street Prep</u>, <u>BIWS</u>, etc.). From there, learn how to model the quarter (<u>Gutenberg Research - Crowdsourced Earnings Modeling Community</u> his book is probably the best reference for this style).

At this point, you now need to learn how to model companies within the vertical or sector you cover. In software, find a book on SaaS modeling (Barclay's has a guide which is extremely helpful for beginners too). For energy, it is going to be something else. Focus on is how to model revenue and costs within your space.

At the company level, you will draft a revenue build from the company's earnings press release or regularly released investor package (presentation or data file, etc.). This workflow is specific, but the lessons you have learned in the vertical/sector revenue build side will help you understand how the company's KPIs roll up into revenues, margins, etc. Analysts who cover the stock will know the company's lore and where to find new information. For example, AMZN's RPO is

published in the 10-Q in a sentence -- this is a major KPI that AMZN will trade on, and it's not laid out to you on a silver platter. Expect each individual company to have its own unique workflow. There are some parts that get harder, e.g. a company may provide a data point only on call backs (when IR/mgmt calls sell side or key buy side investors after the earnings call)."

### **Scenarios**

"For the co, you may have a few scenarios outlined: (1) ad spend rising materially, (2) normalized ad spend, and (3) weaker ad spend. Each scenario will have an associated "path of data". For example, in scenario 1 you would expect ad spending data to increase each month or qtr. Assuming no one knows the future and no incremental info is available, the stock will roughly trade at the midpoint between the three scenarios, which is reflected in consensus estimates. If you think scenario 1 is going to be hit, then you price that scenario on today's (consensus) multiple.

As you go through the week, some news/eco data/commentary may shift your understanding. E.g. This week you have a call with a channel partner who sells ad space to the retail channel. The partner comments that he's seeing ad spend decelerate right now, but generally thinks things will be "okay". This commentary tracks to scenario 2. As you get more info that tracks towards a thesis, you will begin to have a view and build conviction in it.

Doing the work beforehand allows you to have a good understanding of what the path of data needs to be for a thesis to succeed. For example, if economic data is strong then you should expect that scenario 3 is underpriced (because lower odds of weaker ad spend when eco data is strong).

Here's a basic illustration of how this works in the real world:

1. You establish a base case view from management. For example, Nutanix <u>CEO is guided</u> to 20% ARR CAGR by FY26 in their November Investor Day presentation. The street initially thought the outlook was conservative and estimated closer to a 27%+ CAGR; but after their last earnings, revised it down to the ~20% the company guided to:



- 2. They had a strong beat & raise to end CY 23, with ARR of 30%. However, their CQ1 24 report came in a bit softer, which means those upside (right-tail) estimates needed to come back down (unless you think last fq had seasonal chunkiness that should be seen-through).
- 3. The NTM multiple rerated lower after earnings, but you think multiple can expand modestly back to ~40x from 35ish due to strong execution and ARR growth on track. The multiple above 40x would need to see a reacceleration beyond the terminal ARR implied by guidance (20% CAGR).
- 4. Your read throughs and research would need to narrow in on why last fq was soft (slower new logo wins), whether the company can see reacceleration w/o lots of new logos (can expansion alone drive higher ACV/ARR?), how does macro factor into this (if macro flips, is upside back on the table?), and was the 30%+ scenario contingent upon VMware displacement (share gains from VMW shedding customers) or can it happen w/o?
- 5. Data points are incremental if they add insight to those questions (critical factors)."

# **Exposure**

"An analyst picked a stock last year that returned 10%. Pretty good right? Well, let's see...

- 10% = 4.5% (10yr) + 21.5% (SPX return 10yr) 16% (alpha is negative here)
- This portion of return is called the "beta": 4.5% (10yr) + 21.5% (SPX return 10yr). The error (difference between beta return and actual return) is called the alpha.

On a portfolio basis, the analyst went long that stock and went short a stock that returned -5%.

Portfolio return = 15%

• If you are market neutral, then the betas cancel out. E.g. +4.5% +21.5% - 4.5% -21.5% = 0%; So alpha = 15%. That's pretty good!

The ratio of long and short exposure is measured in two primary ways: cash delta and beta delta.

- Cash delta = stock price \* units = cash delta
- Beta delta = cash delta \* beta"

"Market neutral investors try to have a beta delta of close to 0. That means the return they get are "pure alpha" -- purely from security selection.

It's okay to factor tilt if it comes from a bottom-up process; e.g. portfolio exposure +/- 5-10% on a factor vs. beta delta. But that's not "vibes" and the problem with this sort of thinking is that you are always behind the curve. Much better to think in ex-ante terms and let your net positioning speak for you. From there you can determine if you are comfortable with the risk or not."

"A stock has many sources of returns -- e(r) = <u>risk free rate</u> + beta(<u>ERP</u>) + beta(factor1)...+beta(factor\_infinity) + idiosyncratic return (<u>standard error</u>)

Your "net exposure" refers to the contribution of non-idio sources of returns. A "high net" means you have a view (or want participation from) additional factors. A "low net" means you are trying to extract just the idio (+/- some tilting).

So, on a gradient, a low net strategy's return is more dependent upon stock picking skills, while a higher net is going to incorporate sector, thematic, and factor tilts in returns."

## **Valuation**

"The right way to think about valuing a stock is by seeing the multiple as a short-hand of a DCF. If a stock price = metric X multiple, then the multiple represents the (r-g) segment.

If a company historically trades around 10x EBITDA, then (given the paper above) that tells us something about the markets implied view of the growth rate of the company. So at "market equilibrium" investors are generally willing to pay for the growth rate of a metric of a stock at the "terminal"/mature point. This is easier to assess on companies that have not seen a fundamental change in its story recently -- e.g. more mature companies or ones that are in year-2 of say a 5-year product ramp, because the valuation will reflect visibility on that 5-year target.

For example, the company in year 2 might still have -ve EBITDA but is expected to generate \$500mn (30% margin) by year-5, and at that point should grow around 10% per year for the foreseeable future. If you calc the ev/sales today it might trade on a 5x of NTM, but closer to a 1x

on the 5-year estimate. Do the waterfall and you get to what the market is implying. Then you can check to see whether you agree with that or not.

In my (humble) opinion, valuation is not about an analytical process to arrive at a price. It is about decomposing price into a metric you can then use to determine if reasonable or not, and then apply to your scenario of a metric.

I can't really determine whether a stock is trading expensive or not unless I really understand the range of scenarios the market is pricing and know how recent information has tracked into those scenarios.

Better way to think about multiples is that they are stationary in the long run (at least hypothetically). Equity multiples are very sensitive to changes in interest rates -- not the Fed actually changing policy, but surprise in the Feds forward guidance (big reratings on equities happen when the Fed surprises the forward curve). For single stocks, look at your stock vs. peers and analyze the premium/discount to peers to determine if something idio is occurring."