

Finding Conviction in a Complex World

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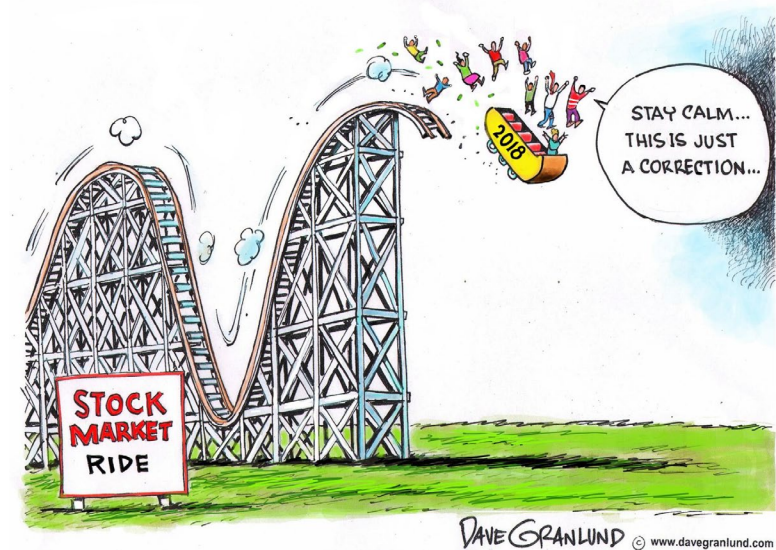
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Overview

The Problem: you can have a good idea and lose money before the idea has the chance to work. Alternatively you can end up a “bagholder” riding a sinking stock all the way down.

- **Part I:** The relationship between price and fundamentals. Decision making in an uncertain world.
- **Part II:** Simplification
- **Part III:** Position management



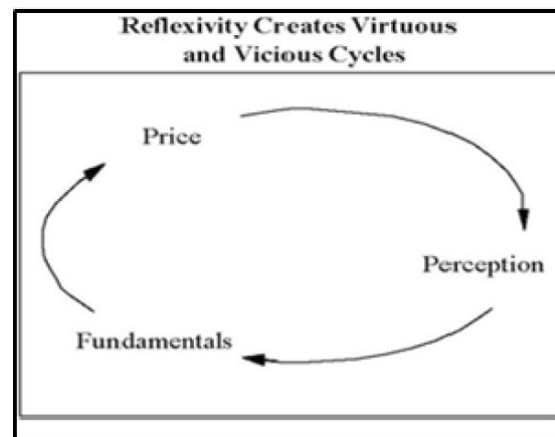
Part I: The relationship between price and fundamentals. Decision making in an uncertain world.

- Every investment is a hypothesis. Price action tells you if the hypothesis is wrong. Sometimes the market is wrong (right) and you are right (wrong). Our task is to figure out where the mistake is being made.



Reflexivity between Stock Prices and Fundamentals

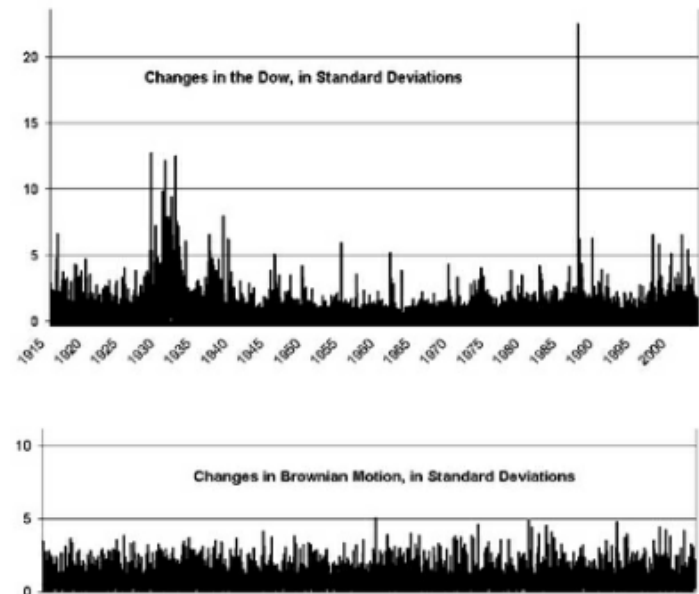
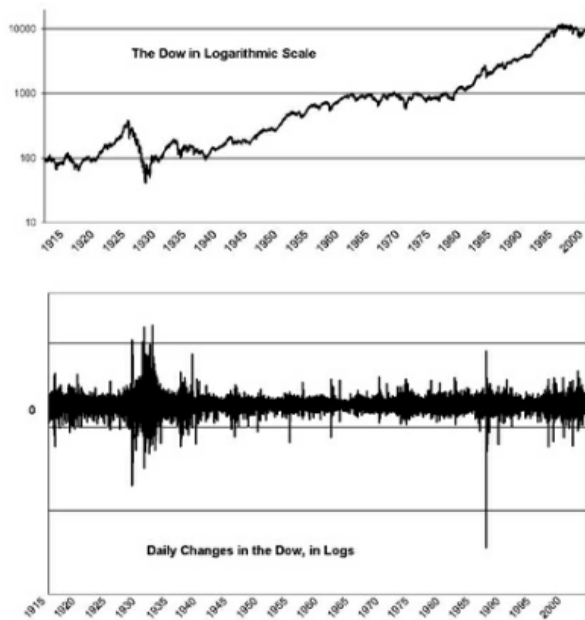
“a positive feedback process is self-reinforcing. It cannot go on forever because eventually the participants’ views would become so far removed from objective reality that the participants would have to recognize them as unrealistic. Nor can the iterative process occur without any change in the actual state of affairs, because **it is in the nature of positive feedback that it reinforces whatever tendency prevails in the real world. Instead of equilibrium, we are faced with a dynamic disequilibrium or what may be described as far-from-equilibrium conditions.** Usually in far-from-equilibrium situations the divergence between perceptions and reality leads to a climax which sets in motion a positive feedback process in the opposite direction.” -- George Soros



Source: <https://www.ft.com/content/0ca06172-bfe9-11de-aed2-00144feab49a>

The Distribution of Returns

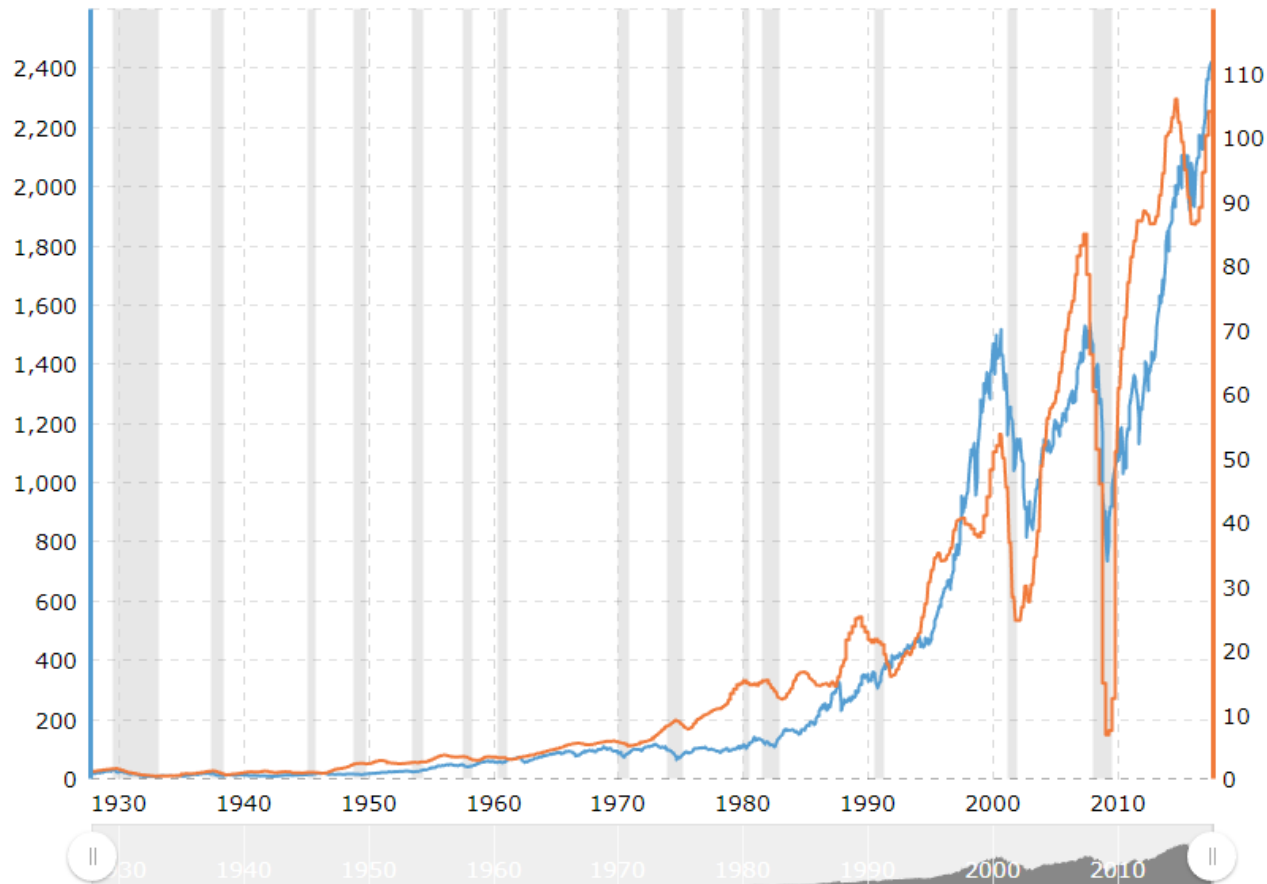
“Large changes, of more than five standard deviations from the average, happened two thousand times more often than expected. Under Gaussian rules, you should have encountered such drama only once every seven thousand years; in fact, the data showed, it happened once every three or four years.”



Source: Mandelbrot, Benoit. *The Misbehavior of Markets: A Fractal View of Financial Turbulence* (p. 93).

S&P Earnings vs Price Full History

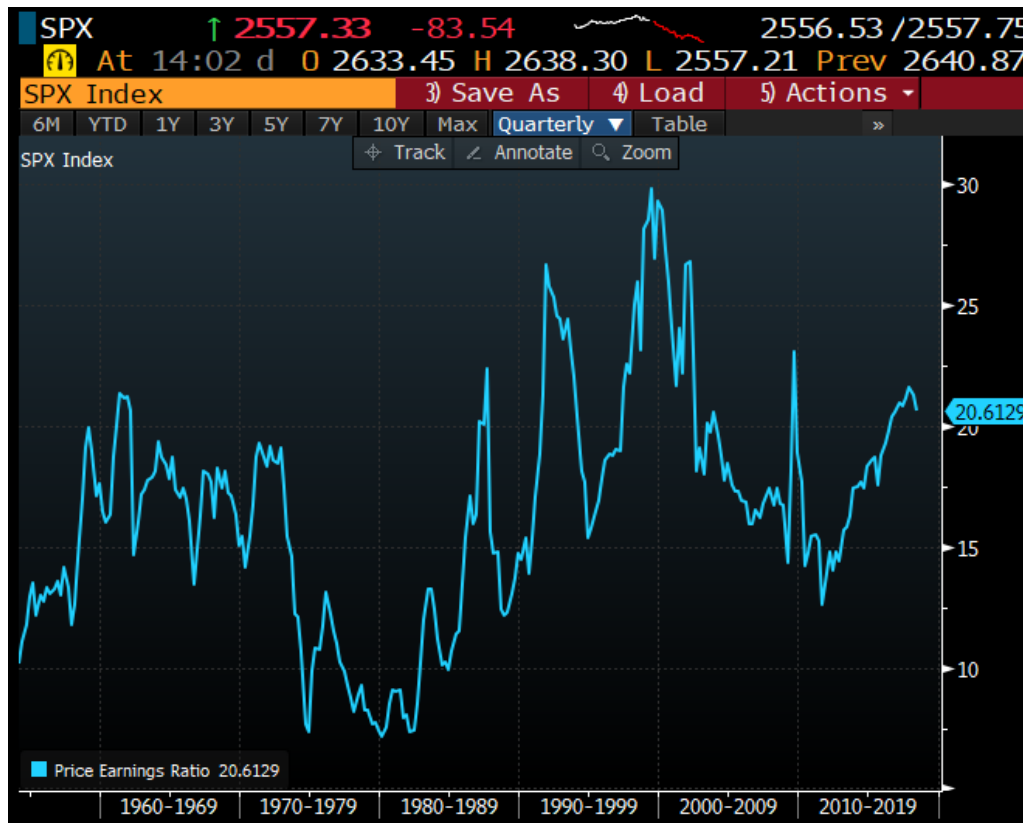
- “In the short run, the market is a voting machine but in the long run, it is a weighing machine.” – Benjamin Graham



Source: <http://www.macrotrends.net/1324/s-p-500-earnings-history>

The Wiggle Waggle

“To establish the right price for a stock, the market must have adequate information, but it by no means follows that if the market has this information it will thereupon establish the right price.” – Benjamin Graham



Source: Bloomberg

“Myopic Loss Aversion and the Equity Premium Puzzle”

- Shlomo Benartzi and Richard Thaler explain the entire equity risk premium as a result of the mismatch between the frequency in which people look at their results and the timeframe under which they invest.
- In other words, someone who says their timeframe is long-term, while checking their portfolio daily is exposed to behavioral forces.
- Sentiment in stocks and markets is pro-cyclical. The more stocks rise (fall), the more bullish (bearish) people get.
- If we want to be different and own things for the long-run, we need to put ourselves in position to hold our best ideas even when the news or the markets are working against us.



Source: <https://www.nber.org/papers/w4369>

Traits of the best performing fund managers of the decade, Mauboussin study:

1. "Portfolio turnover. As a whole, this group of investors had about 35 percent turnover in 2006, which stands in stark contrast to turnover for all equity funds of 89 percent. The S&P 500 index fund turnover was 7 percent. Stated differently, the successful group had an average holding period of approximately three years, versus roughly one year for the average fund."
2. "Portfolio concentration. The long-term outperformers tend to have higher portfolio concentration than the index. For example, these portfolios have, on average 35 percent of assets in their top ten holdings, versus 20 percent for the S&P 500."
3. "Investment style. The vast majority of the above-market performers espouse an intrinsic-value investment approach; they seek stocks with prices that are less than their value. In his famous 'Superinvestors of Graham-and-Doddsville' speech, Warren Buffett argued that this investment approach is common to many successful investors."
4. "Geographic location. Only a small fraction of high-performing investors hail from the East Coast financial centers, New York or Boston. These alpha generators are based in cities like Chicago, Memphis, Omaha, and Baltimore."

These all add up to a form of simplification and blocking out the noise that the stock market makes.

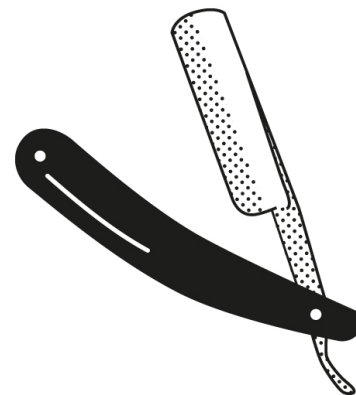
Part II: What does simplification look like?

- *"Entities should not be multiplied without necessity."* - Occam's Razor
- Our goal becomes finding the one variable in a company's drivers (both top and bottom line) that matters more than any other. If we can synthesize our entire thesis to just **one thing** we position ourselves to maximize conviction amidst the noise. That means when bad news or earnings hit a stock we can analyze the business in light of what really matters.



Ockham chooses a razor

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Example 1: PayPal Simplified

Txn Revenue = Active Accounts x Engagement x Average Txn Value x Take Rate

- All 4 matter. The Street has been obsessing with Take Rate since it is trending lower.
- Meanwhile 1 of these numbers matters far more than any other in both a qualitative and quantitative sense: **Engagement.**



Engagement is THE key

- The average user thinks about the company >3x as frequently on a monthly basis as they did 5 years ago. This increase in mindshare is important for how it influences the network effects operating within the business and forges a moat that will be impenetrable for the long run.
- **Engagement is the purest measure of the value active users are getting from PayPal.** When engagement is rising, PayPal's users are expressing the fact that PayPal's service is more valuable and more useful to them.
- The more frequently the average customer uses PayPal, the more valuable accepting PayPal becomes to the merchant side of the network. More engagement thus leads to more merchant uptake & more opportunities for users to engage.
- The more value each user gets out of PayPal, the more people who don't yet use PayPal end up seeing reasons to engage with the company. P2P helps here. Users thus become PayPal's biggest promoters.

	Today/Average Engagement	Double the Engagement
Transactions/customer	36.7	73.4
Dollars/transaction	60.66	60.66
Spend/year/customer	2226.22	4452.44
Revenue/active @ 2.38% take rate	52.98	105.97
Gross Margin / Customer 51.5%	27.29	54.57
(-) other costs	13	13
Taxes @ 25%	3.25	3.25
Post-tax profit	11.04	38.32
Customer Life (years)	10	10
Present Value of Pre-CAC profits	110.37	383.24
CAC	37.6	37.6
LTV:CAC	2.94	10.19
NPV @ 9% Discount Rate	\$33.23	\$208.35
IRR	27%	102%

Example 2: Roku Simplified

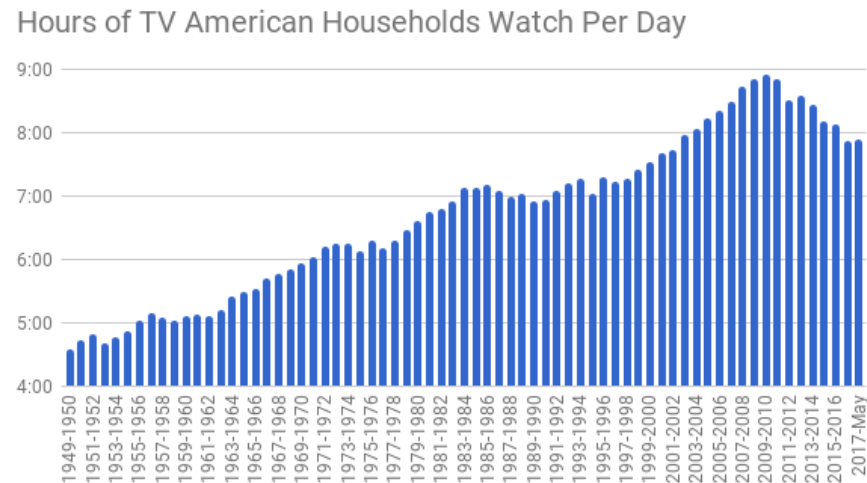
Platform Rev = Active Accounts x Streaming Hours/Account x (CPM/1000/min)

- All of these matter, but much like PayPal, one matters more than the others. Historically, much of the focus has been on how many active accounts Roku can get, but Streaming Hours/Account is becoming THE ONE.



Roku engagement and why it's important

- If you believe in the thesis that all TV will eventually be viewed through a connected TV, then it becomes clear how much leverage there is to the Streaming Hours/Active Account in particular.
- The average household watches nearly 8 hours of TV per day. Meanwhile at the end of 2018, the average Roku household watched 2.4 hours/day through the Roku OS.
- The growth in Streaming Hours/Active Household accelerated meaningfully in 2019 but still will only register approximately 3.3 Streaming Hours/Active Household.
- At 8 the economics of Roku look completely different.
- Streaming Hours are important qualitatively because it is the clearest indicator people who use Roku are getting value out of Roku. It can also give us conviction behind our LTV analysis because the more beholden a household is to an OS the harder it will be to displace.



Source: <https://www.theatlantic.com/technology/archive/2018/05/when-did-tv-watching-peak/561464/>

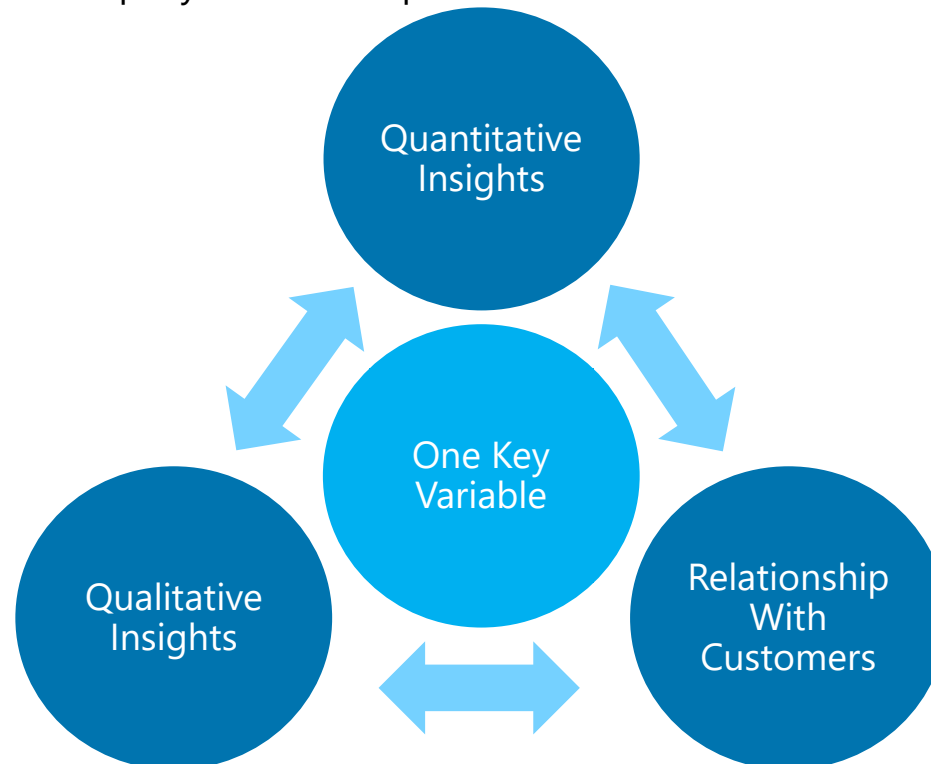
Example 3: Grubhub Simplified

- So far my examples have been on revenue drivers. These revenue drivers also have bottom line implications--they are the specific driver that boast the most margin leverage. In other words, they are where the unit economics are most scalable. This is an important point though it lead me a little astray in revisiting Grubhub.
- **Grubhub Revenue = active diners x engagement x AOV x take rate.**
- This is a familiar setup, but Grubhub had a wrinkle where take rate was moving meaningfully as the business transitioned from a pure marketplace to a hybrid where some orders were delivered turnkey.
- I simplified in asserting that if the company could reach EBITDA/Order parity between marketplace and turnkey, leaving the diner and restaurant agnostic to the kind of order, the business would be in great shape.



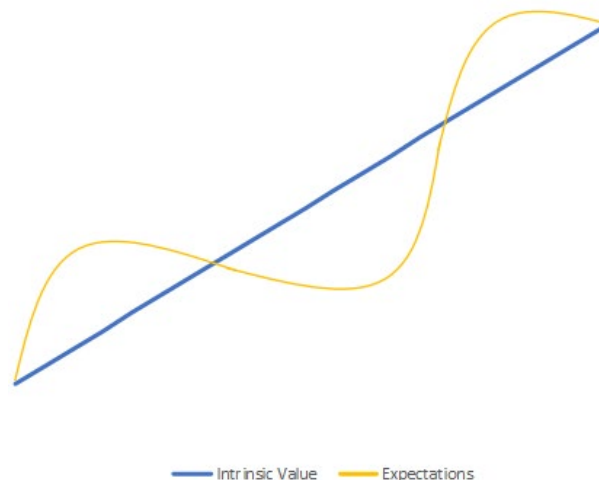
Simplification Gone Wrong

- The problem is how they reached parity: at a much lower level with other parts of the business going wrong.
- The qualitative element was lacking in my effort to simplify--it had no nexus to the customer experience and thus had little relevance for the ability for the company to generate revenue and the associated margin
- Rule: apply simplification only when there is true confluence between the qualitative and quantitative along with a nexus to the company's relationship with its customers.



Part III: Position management

- I've seen great traders with no fundamental insight position manage their way into tremendous profits.
- When position management works in tandem with fundamental insights you can enhance both your returns and risk profile.
- The most important thing is knowing when you are right.



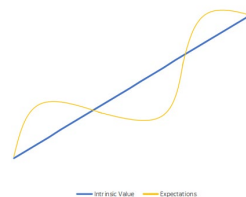
Being long-term

- To most people this means buying with little turnover and holding a security for three years or more.
- Acting long-term and thinking long-term can be different.
- The longer you follow a company, the deeper your insights get and the better feel you get for the drivers of the stock.
- Take advantage of your timeframe. Being long-term means you don't have to feel FOMO and you don't have to say "I missed it."
- Price and fundamentals will do their dance with one another and you as a long-term investor can patiently wait the right opportunities.



Valuation ebbs and flows

- Simplification requires we make as few decisions as possible. What I am not arguing for: trading around positions based on beliefs of high or low valuation.
- Value investors often speak of looking for a “Fat Pitch” but quality-oriented fundamental investors can do that while also wanting to own companies for their capacity to compound long-term. Compounding returns mean the weight and inertia of the company’s intrinsic ability to create value is your driver of returns, instead of multiple appreciation (not to say we don’t welcome multiple appreciation, but that should be gravy on top when it happens).
- What I am advocating: don’t feel pressured to buy all of your shares in a stock on day 1. As a long-term investor take advantage of your timeframe and afford yourself the opportunity. The right investments will compound over time and buying shares over the course of time should not have a meaningfully different IRR if your assessment of the ability to compound is correct.



Example of a setup: The Post Earnings Announcement Drift

- “Once a firm's current earnings become known, the information content should be quickly digested by investors and incorporated into the efficient market price. However, it has long been known that this is not exactly what happens. For firms that report good news in quarterly earnings, their abnormal security returns tend to drift upwards for at least 60 days following their earnings announcement. Similarly, firms that report bad news in earnings tend to have their abnormal security returns drift downwards for a similar period. This phenomenon is called post-announcement drift. ” Wikipedia
- There’s a lot of price anchoring in markets where the most recent prices exercise a degree of gravity despite catalytic fundamental news.
- Often times you can find a better risk/reward and IRR in a name you know when catalytically important news either accelerates your thesis or derisks it.

Tying it all together

- Remember: every investment is a hypothesis. It is price that tells us whether we are right or wrong, but price itself can be “wrong.”
- Simplify: find the “one key variable” that matters more than any other, both qualitatively and quantitatively.
- Focus: your modeling should be geared around understanding what moves the “one key variable.” Your scuttlebutt should be geared towards understanding how the company’s strategy and relationship with customers is geared around the “one key variable.”
- Follow: each quarter follow the trajectory of the one key variable. Look for inflections and analyze management’s commentary around it.
- Act: when meaningful gaps develop between the “one key variable” and the stock’s price, that is your signal to act.

Thank You

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