Value Investing World

Investing Thoughts and Wisdom (mostly from others)

Current Compilation (Parts 1-29)

I have a file full of notes and excerpts from investors (and others) that I've collected over the years. In organizing that collection, I started the newsletter series as I was going through it all. This is the current compilation of that series. Any errors are likely my own errors in the compilation process, and not those of the original author/investor/thinker/etc. If you notice any errors, please let me know so that I can improve future editions. Thank you.

–Joe Koster (email: joe@sorfis.com)

Please note: Nothing here should be considered investment advice or the best way to invest. These are things I've saved as reminders and notes to myself that I've found helpful in the past, and think they are worth sharing in case any of you happen to get an insight from any of it.

Preparation. Discipline. Patience. Decisiveness.

"What the pupil must learn, if he learns anything at all, is that the world will do most of the work for you, provided you cooperate with it by identifying how it really works and aligning with those realities. If we do not let the world teach us, it teaches us a lesson." — Joseph Tussman

3-legged stool – **QUALITY (Business and People -- high return on capital with the ability to reinvest at high rates; and management that understands capital allocation), GROWTH (long runway of reinvestment at high rates of return),** ***and*** **VALUE (not necessarily just a low multiple….because a** ***true*** **compounder may look expensive but in reality be undervalued).**

Focus on downside first. Then expected returns without any change to multiple (dividend and repurchase yield + earnings-per-share growth). And thirdly, possible overall IRR's with potential multiple expansion or contraction.

"Far more money has been lost preparing for corrections than has been lost in corrections themselves." –Peter Lynch

"The best way to become poor quickly is to try to get rich quickly." –Mark Spitznagel

"You only have to be right on a very, very few things in your lifetime as long as you never make any big mistakes…An investor needs to do very few things right as long as he or she avoids big mistakes." –Warren Buffett

From Mark Yusko's Q2 2016 Letter: "Klarman's response to this phenomenon is, ***'while no one wishes to incur losses, you couldn't prove it from an examination of the behavior of most investors. The speculative urge that lies within most of us is strong; the prospect of a free lunch can be compelling, especially when others have already seemingly partaken.'*** That speculative urge is a psychological characteristic in all of us that we must fight in order to reach our full potential as great investors. B.F. Skinner did a great deal of work on trying to discern why human beings seemed hard-wired to want to speculate (gamble), and found that the behavior was linked to a concept called 'sporadic reinforcement.' In essence, by winning only occasionally, the desire to participate in that activity actually increases."

Other quotes on simplicity and avoiding mistakes:

"There's no magic to it…We haven't succeeded because we have some great, complicated systems or magic formulas we apply or anything of the sort. What we have is just simplicity itself." —Warren Buffett

"Our ideas are so simple that people keep asking us for mysteries when all we have are the most elementary ideas…There's nothing remarkable about it. I don't have any wonderful insights that other people don't have. Just slightly more consistently than others, I've avoided idiocy…It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent." —Charlie Munger

"It really is simple – just avoid doing the dumb things. Avoiding the dumb things is the most important." —Warren Buffett

Key Things to Think About Throughout the Process of Considering a New Investment…

What's the downside?

What's the case for having a reasonable expectation of making a 26% IRR (i.e. a double/100% return in 3 years, or a 2.5x/150% return in 4 years)? While the actual expected return can be less if there is adequate downside, you want there to be a reasonable chance it can produce this IRR.

If I need to get out of this because I am wrong, what will be the likely reason I was wrong on it (i.e. do a pre-mortem)?

Are you sure this is within your circle of competence? What work have you done? Do you understand how the company stands in its industry and versus its key competitors? And remember to never underestimate competition, and that high returns tend to attract competition 'like a moth to a flame', and this includes businesses and entrepreneurs that aren't even competitors yet.

Is my upside 3 times greater than my downside? (And since most investments can be down at least 50% due to the unknown unknowables, you need to really look hard for growing businesses

that you think will be worth about 2.5x where you are buying them over a 4-7 year period. And remember that growth can both create and destroy value, so it needs to be economically profitable growth).

"Your goal as an investor should simply be to purchase, at a rational price, a part interest in an easily-understandable ***business whose earnings are virtually certain to be materially higher five, ten and twenty years from now.*** *Over time, you will find only a few companies that meet these standards - so when you see one that qualifies, you should buy a meaningful amount of stock. You must also resist the temptation to stray from your guidelines: If you aren't willing to own a stock for ten years, don't even think about owning it for ten minutes. Put together a portfolio of companies whose aggregate earnings march upward over the years, and so also will the portfolio's market value." –Warren Buffett (1996 Letter to Shareholders*) [emphasis mine]

Is the business a good business?

- Does it earn high returns on capital?
- Does it have a long runway of reinvestment prospects? (Look for businesses that can at least double revenue per share in 10 years, and preferably businesses that can increase revenue per share 3-4x, with profit per share increasing even more.)
- Does it have a moat that protects those returns from competition and allows reinvestment to also occur at a high rate?
- Prefer a business that does not require a lot of capital to grow (i.e. not too capital intensive) where much of the growth will be due to the company's own actions (instead of relying on things like commodity prices, interest rates, etc.).
- The business needs to be in a Win-Win relationship with all six of its constituents to be sustainable over the long term (customers, suppliers, employees, owners, regulators, and communities).
- "A dreamy business offering has at least four characteristics. Customers love it, it can grow to very large size, it has strong returns on capital, and it's durable in time – with the potential to endure for decades. When you find one of these, don't just swipe right, get married." –Jeff Bezos

Does it have a good balance sheet?

- Is there a conservative level of debt (and preferably, no debt)?

- Are there any off-balance sheet liabilities that I need to account for (leases, pensions, options, etc.)?
- Is the balance sheet structured to allow the company to take advantage of unforeseen opportunities or market crises should they present themselves?
- You want a company that can control its own destiny and not depend on the kindness of strangers (for access to capital, debt rollovers, etc.).

Does it have good management?

- Look for "intelligent fanatics" who are owner-operators, and where the ownership was preferably gained through buying in the open market or from founding the company, as opposed to option grants where they got the upside without the corresponding downside risk.
- You want management teams with intelligence, integrity, and energy that pursue excellence in everything they do (products, people, etc.).
- Does management understand capital allocation? Management skill in allocating capital is *extremely* important.

Is it trading at a good price?

- Is there a significant margin of safety? You need margin for error, because you are bound to make plenty of errors over time. So always consider the question, what if I'm wrong?

Is this a good addition to a portfolio goal of having 6-12 mostly non-correlated positions (where a position may hold more than one stock if there is high correlation among certain ideas and they look about equally attractive to purchase together)?

When looking at a potential business, you need to take the mentality of buying the entire business, and retaining management. If you are buying the business as your only family asset and have to *keep these people running it*, how comfortable are you buying the business *at this price*? Make sure you are taking a fundamental, entrepreneurial view of the business and NOT an MBA/outside-investor-know-it-all type of view.

What are the 1-3 main things that will drive this business, and what data can I use to track them over time?

If you talk to management, see if you can get answers to the following:

- If you went away for 5 years and could only get updates on 1-3 business metrics to tell you how the business was doing, what would those key metrics be?
- (After assuring them their answer would be kept private…) If you had to buy the stock of any company in your industry, excluding your own, what company would it be, and why?

"Our strategy remains to own the best companies in worthwhile fields. Our companies retain an abundant potential for growth, an ability to withstand adversity, a lowish valuation, a low likelihood of the business becoming obsolete, and managements that have a record of creating franchises out of thin air. We don't focus excessively on stock prices, because we know that if our companies are gaining on competitors, building up cash and paying off debt, lowering their cost structures, and otherwise better positioning themselves for the next upcycle, we will eventually be pleased with the outcome." —Greg Alexander

****

Charlie Munger: "This is the way you win big in the world..." (via Peter Bevelin's *All I Want To Know Is Where I'm Going To Die So I'll Never Go There*):

Munger "Really big effects, lollapalooza effects, will often come only from large combinations of factors. For instance, tuberculosis was tamed, at least for a long time, only by routine combined use in each case of three different drugs."

"This is the way you win big in the world -- by getting two or three forces working together in the same direction."

Seeker "Since I have lost big, tell me more about how I can win big."

Munger "Extreme success is likely to be caused by some combination of the following factors:

a) Extreme maximization or minimization of one or two variables.

b) Adding success factors so that a bigger combination drives success, often in non-linear fashion, as one is reminded by the concept of breakpoint and the concept of critical mass in

physics. Often results are not linear. You get a little bit more mass, and you get a lollapalooza result.

c) An extreme of good performance over many factors.

d) Catching and riding some sort of big wave.

Seeker "What do you mean with 'big wave'?"

Munger "When...new businesses come in, there are huge advantages for the early birds. And when you're an early bird, there's a model that I call 'surfing' -- when a surfer gets up and catches the wave and just stays there, he can go a long, long time. But if he gets off the wave, he becomes mired in shallows...But people get long runs when they're right on the edge of the wave -- whether it's Microsoft or Intel or all kinds of people, including National Cash Register in the early days."

………………..

Stephen Hawking's Productive Laziness – By Cal Newport (Source):

In the 1980s, at the height of his intellectual productivity, Stephen Hawking used to head home from his office between five and six. He rarely worked later.

Here's how he explained his behavior to his PhD student Bruce Allen (now a professor at the Max Planck Institute for Gravitational Physics):

"Bruce, here's some advice: The problem with physics is that most of the days we don't make any major headway (on our projects). That's why you should do other stuff: listen to music, meet good friends. There's one exception to this rule: If you find a solution for a given problem, you work 24 hours a day and forget everything else. Until the problem is solved in its entirety."

………………..

Danny Kahneman on Persistence, as quoted by Morgan Housel:

On persistence: "When I work I have no sunk costs. I like changing my mind. Some people really don't like it but for me changing my mind is a thrill. It's an indication that I'm learning

something. So I have no sunk costs in the sense that I can walk away from an idea that I've worked on for a year if I can see a better idea. It's a good attitude for a researcher. The main track that young researchers fall into is sunk costs. They get to work on a project that doesn't work and that is not promising but they keep at it. I think too much persistence can be bad for you in the intellectual world."

………………..

Marathon Asset Management on corporate culture (from February 2015, via the book *Capital Returns*):

Marathon Asset Management's focus on management forces us to think about corporate culture

Corporate culture is constituted by a set of shared assumptions and values that guide the actions of employees, and encourage workers to act collectively towards a specific goal. Cultures both reflect the values, and are a prime responsibility, of management. Yet strong cultures can persist long after the careers of those who put them in place. Still, sceptics might ask, why should investors bother with something so ineffable, so intangible? Well, the evidence suggests that culture pays.

Marathon Asset Management: Corporate Culture and Performance

Perhaps the best known study of the subject is Corporate Culture and Performance by John Kotter and James Heskett. This work examines the relationship between corporate culture and company performance in over 200 firms during the 1980s. The authors asked employees their opinions of attitudes to customers and shareholders at competitor firms. Shares in companies exhibiting strong and positive cultures outperformed rivals by more than 800 per cent during the study period. Other studies which measure corporate culture according to how employees regard their own workplace have found a similar link between culture with market returns.

Kotter and Heskett's work established that strong cultures are liable to produce extreme outcomes, both exceptionally good and dreadfully bad. Positive cultures can take different forms. Perhaps the most commonly successful corporate trait is an emphasis is on cost control. Almost every firm periodically engages in bouts of cost-cutting. Exceptional firms, however, are involved in a permanent revolution against unnecessary expenses. In the early days of Admiral,

the British insurance company, employees wishing to use the printer were required to do a push-up in sight of the CEO. Another example of the corporate Scrooge is Fastenal, a US distributor of low value industrial products, which boasted the "cheapest CEO in America." There are legends of Fastenal executives being required to share hotel rooms at conferences. Company offices are said to be decorated with second-hand furniture. Frugal cultures may not sound attractive to employees, but when married to decentralised profit-sharing schemes they can work wonders. Between 1987 and 2012, Fastenal provided a return of over 38,000 per cent (excluding dividends,) better than any other company in the index. Take that, Bill Gates.

Cost-cutting is not the only successful cultural model. In fact, some firms have strengthened their cultures by spending more not less. The classic example is Costco, the discount retailer. Bucking the conventional retail model, Costco pays its staff more than the legal minimum wage – and far more than rivals. The average Costco employee makes in excess of $20 an hour, compared to average US national retail pay of less than $12 an hour. The company also sponsors healthcare for nearly 90 per cent of workers. Wall Street is constantly pressuring Costco to cut its wage bill, with the cacophony reaching a peak during the crisis of 2009. Instead, the company raised wages over the following three years. The return for this munificence is that Costco employees stay on longer, thus saving on training costs. Turnover for employees who have been with the company for more than one year is a paltry 5 per cent. Loyal employees are more likely to excel. Costco is regularly rated as excellent for customer service.

The point is that a strong corporate culture constitutes an intangible asset, potentially as valuable as a high profile brand or network of customer relationships. As Warren Buffett says of Berkshire Hathaway's family of businesses: "If we are delighting customers, eliminating unnecessary costs and improving our products and services, we gain strength… On a daily basis, the effects are imperceptible; cumulatively, though, their consequences are enormous. When our long-term competitive position improves as a result of these almost unnoticeable actions, we describe the phenomenon as 'widening the moat.' "

Marathon Asset Management – Story of a rotten culture: AIG

On the other hand, a rotten culture can be a firm's undoing. Look no further than AIG, one of the major disasters in the recent financial meltdown. Dominated for so long by an imperial CEO, Hank Greenberg, the global insurance developed in the words of one commentator "a culture of

complicity." Unthinking obedience, the lack of an "outside view," and an obsession with growth at any cost led to riskier and riskier positioning. Even as the end grew nearer, AIG executives proved incapable of recognizing the danger the company faced. In August 2007, the head of AIG Financial Products commented on his division's positions in the credit derivatives market: "It is hard for us, without being flippant, to even see a scenario within any kind of realm of reason that would see us losing one dollar in any of these transactions." Little more than a year later AIG announced a quarterly loss of $11bn, which largely derived from its Financial Products division.

Just as positive cultures take a number of different forms, so too can negative ones. An obsession with growing earnings occasionally results in outright fraud. In the 1990s, during the tenure of Al 'Chainsaw' Dunlap, the accounts of consumer appliance maker Sunbeam were concocted to meet aggressive earnings targets. In extreme cases, a poor corporate culture can have tragic consequences. In 2010, 29 miners were killed in an explosion at one of Massey Energy's coal mines. The US Labor Department investigation blamed a corporate culture that "valued production over safety" and fostered "fear and intimidation."

If a beneficial culture is a valuable intangible asset, and a corrosive one an existential threat, it becomes important to ask: how can an outside investor tell the difference? As with so much of investment, the process is one of piecing together incomplete and obscure pieces of evidence, gathered over time through meetings and research.

Some quantitative measures can be helpful: staff loyalty and inside share ownership are liable to be higher at firms in which employees believe in what they are doing. Corporate incentive schemes say a lot about the firm's culture. Is management being greedy? What performance metrics are valued – growth for its own sake or customer satisfaction? What do employees think? Opinions can be unearthed through websites such as glassdoor.com (a sort of TripAdvisor for companies). We are constantly looking out for signs of management extravagance and vanity. Danger signs include expensive executive travel (a corporate jet is liable to elicit groans), too numerous pictures of the CEO in the annual report, and dandyish attire.

There are numerous examples of successful cultures among our portfolio companies. The empowerment of branch managers that promotes responsible banking at Sweden's Svenska Handelsbanken, for instance. Reckitt Benckiser, another holding, fosters an entrepreneurial spirit among its senior managers. Yet even if a strong culture is instilled in a company, it can take

many years for its full effects to play out. That may be beyond Wall Street's limited investment horizon. Long-term investors, however, would be wise to take heed.

………………..

Phil Fisher's 15 Points, via Morningstar (Source):

All good principles are timeless, and Fisher's famous "Fifteen Points to Look for in a Common Stock" from *Common Stocks and Uncommon Profits* remain as relevant today as when they were first published. The 15 points are a qualitative guide to finding superbly managed companies with excellent growth prospects. According to Fisher, a company must qualify on most of these 15 points to be considered a worthwhile investment:

1. Does the company have products or services with sufficient market potential to make possible a sizable increase in sales for at least several years? A company seeking a sustained period of spectacular growth must have products that address large and expanding markets.

2. Does the management have a determination to continue to develop products or processes that will still further increase total sales potentials when the growth potentials of currently attractive product lines have largely been exploited? All markets eventually mature, and to maintain above-average growth over a period of decades, a company must continually develop new products to either expand existing markets or enter new ones.

3. How effective are the company's research-and-development efforts in relation to its size? To develop new products, a company's research-and-development (R&D) effort must be both efficient and effective.

4. Does the company have an above-average sales organization? Fisher wrote that in a competitive environment, few products or services are so compelling that they will sell to their maximum potential without expert merchandising.

5. Does the company have a worthwhile profit margin? Berkshire Hathaway's BRK.B vice-chairman Charlie Munger is fond of saying that if something is not worth doing, it is not worth doing well. Similarly, a company can show tremendous growth, but the growth must bring worthwhile profits to reward investors.

6. What is the company doing to maintain or improve profit margins? Fisher stated, "It is not the profit margin of the past but those of the future that are basically important to the investor." Because inflation increases a company's expenses and competitors will pressure profit margins, you should pay attention to a company's strategy for reducing costs and improving profit margins over the long haul. This is where the moat framework we've spoken about throughout the Investing Classroom series can be a big help.

7. Does the company have outstanding labor and personnel relations? According to Fisher, a company with good labor relations tends to be more profitable than one with mediocre relations because happy employees are likely to be more productive. There is no single yardstick to measure the state of a company's labor relations, but there are a few items investors should investigate. First, companies with good labor relations usually make every effort to settle employee grievances quickly. In addition, a company that makes above-average profits, even while paying above-average wages to its employees is likely to have good labor relations. Finally, investors should pay attention to the attitude of top management toward employees.

8. Does the company have outstanding executive relations? Just as having good employee relations is important, a company must also cultivate the right atmosphere in its executive suite. Fisher noted that in companies where the founding family retains control, family members should not be promoted ahead of more able executives. In addition, executive salaries should be at least in line with industry norms. Salaries should also be reviewed regularly so that merited pay increases are given without having to be demanded.

9. Does the company have depth to its management? As a company continues to grow over a span of decades, it is vital that a deep pool of management talent be properly developed. Fisher warned investors to avoid companies where top management is reluctant to delegate significant authority to lower-level managers.

10. How good are the company's cost analysis and accounting controls? A company cannot deliver outstanding results over the long term if it is unable to closely track costs in each step of its operations. Fisher stated that getting a precise handle on a company's cost analysis is difficult, but an investor can discern which companies are exceptionally deficient--these are the companies to avoid.

11. Are there other aspects of the business, somewhat peculiar to the industry involved, which will give the investor important clues as to how outstanding the company may be in relation to its competition? Fisher described this point as a catch-all because the "important clues" will vary widely among industries. The skill with which a retailer, like Wal-Mart WMT or Costco COST, handles its merchandising and inventory is of paramount importance. However, in an industry such as insurance, a completely different set of business factors is important. It is critical for an investor to understand which industry factors determine the success of a company and how that company stacks up in relation to its rivals.

12. Does the company have a short-range or long-range outlook in regard to profits? Fisher argued that investors should take a long-range view, and thus should favor companies that take a long-range view on profits. In addition, companies focused on meeting Wall Street's quarterly earnings estimates may forgo beneficial long-term actions if they cause a short-term hit to earnings. Even worse, management may be tempted to make aggressive accounting assumptions in order to report an acceptable quarterly profit number.

13. In the foreseeable future will the growth of the company require sufficient equity financing so that the larger number of shares then outstanding will largely cancel the existing stockholders' benefit from this anticipated growth? As an investor, you should seek companies with sufficient cash or borrowing capacity to fund growth without diluting the interests of its current owners with follow-on equity offerings.

14. Does management talk freely to investors about its affairs when things are going well but "clam up" when troubles and disappointments occur? Every business, no matter how wonderful, will occasionally face disappointments. Investors should seek out management that reports candidly to shareholders all aspects of the business, good or bad.

15. Does the company have a management of unquestionable integrity? The accounting scandals that led to the bankruptcies of Enron and WorldCom should highlight the importance of investing only with management teams of unquestionable integrity. Investors will be well-served by following Fisher's warning that regardless of how highly a company rates on the other 14 points, "If there is a serious question of the lack of a strong management sense of trusteeship for shareholders, the investor should never seriously consider participating in such an enterprise."

****

Like many games of chance, investing is a game of probabilities, upside, and downside. But with investing—especially if one is investing in equities—we usually don't know the precise odds or payoffs. If one did, the Kelly Criterion (or Kelly Formula) could be used to size positions in a way that would maximize one's expected return over time, similar to what Ed Thorp did counting cards at blackjack back in the day.

And unlike games of chance, there are more things that can happen to change the odds while one is playing, and you may not know whether or not you can keep playing the game.

So the Kelly Criterion can be used to help us think about how concentrated one may want to be, but it can't be used with precision. And because individual ability, emotion, and circumstances can determine the way one acts and reacts to positions over time, there is no one-size-fits-all answer to the questions around concentration and diversification. But many of the truly wealthy people over time (e.g. Warren Buffett, Bill Gates, Jeff Bezos, Sam Walton, etc.) achieved that wealth through concentration, either in their investments or businesses, and so it's worth thinking through in helping to develop one's own comfort level with concentration (and the volatility that usually comes with it).

For a book on the topic, see: *Concentrated Investing: Strategies of the World's Greatest Concentrated Value Investors*

Kelly Criterion:

F = Pw - (Pl / ($W/$L))

The amount to bet equals the probability of winning, minus (the probability of losing over (the amount you win if you win over the amount you lose if you lose).

This is only a good betting strategy if you can repeat the bet a large enough number of times.

If you over bet, you will go broke.

A better strategy, especially psychologically, is to bet half-Kelly, where you get three quarters of the return with half the volatility.

Generalized to investing, you need to find situations where the odds of winning are larger than the odds of losing, and where you make more money if you are right than you lose if you are wrong. And you have to make sure not to make your position sizes too big.....which may happen as a result of having too much confidence when you put in a lot of work to understand something, or from not doing enough work and thus not understanding the odds and payoffs well enough....so either from overconfidence or lack of effort.

More on position sizing…

From Warren Buffett, in 1966:

> This year in the material which went out in November, I specifically called your attention to a new Ground Rule reading, "7. We diversify substantially less than most investment operations. We might invest up to 40% of our net worth in a single security under conditions coupling an extremely high probability that our facts and reasoning are correct with a very low probability that anything could drastically change the underlying value of the investment."
>
> We are obviously following a policy regarding diversification which differs markedly from that of practically all public investment operations. Frankly, there is nothing I would like better than to have 50 different investment opportunities, all of which have a mathematical expectation (this term reflects the range of all possible relative performances, including negative ones, adjusted for the probability of each - no yawning, please) of achieving performance surpassing the Dow by, say, fifteen percentage points per annum. If the fifty individual expectations were not intercorrelated (what happens to one is associated with what happens to the other) I could put 2% of our capital into each one and sit back with a very high

degree of certainty that our overall results would be very close to such a fifteen percentage point advantage.

It doesn't work that way.

We have to work extremely hard to find just a very few attractive investment situations. Such a situation by definition is one where my expectation (defined as above) of performance is at least ten percentage points per annum superior to the Dow. Among the few we do find, the expectations vary substantially. The question always is, "How much do I put in number one (ranked by expectation of relative performance) and how much do I put in number eight?" This depends to a great degree on the wideness of the spread between the mathematical expectation of number one versus number eight." It also depends upon the probability that number one could turn in a really poor relative performance. Two securities could have equal mathematical expectations, but one might have .05 chance of performing fifteen percentage points or more worse than the Dow, and the second might have only .01 chance of such performance. The wider range of expectation in the first case reduces the desirability of heavy concentration in it.

The above may make the whole operation sound very precise. It isn't. Nevertheless, our business is that of ascertaining facts and then applying experience and reason to such facts to reach expectations. Imprecise and emotionally influenced as our attempts may be, that is what the business is all about. The results of many years of decision-making in securities will demonstrate how well you are doing on making such calculations - whether you consciously realize you are making the calculations or not. I believe the investor operates at a distinct advantage when he is aware of what path his thought process is following.

There is one thing of which I can assure you. If good performance of the fund is even a minor objective, any portfolio encompassing one hundred stocks (whether the manager is handling one thousand dollars or one billion dollars) is not being operated logically. The addition of the one hundredth stock simply can't reduce the potential variance in portfolio performance sufficiently to compensate for the negative effect its inclusion has on the overall portfolio expectation.

> Anyone owning such numbers of securities after presumably studying their investment merit (and I don't care how prestigious their labels) is following what I call the Noah School of Investing - two of everything. Such investors should be piloting arks. While Noah may have been acting in accord with certain time-tested biological principles, the investors have left the track regarding mathematical principles. (I only made it through plane geometry, but with one exception, I have carefully screened out the mathematicians from our Partnership.)
>
> Of course, the fact that someone else is behaving illogically in owning one hundred securities doesn't prove our case. While they may be wrong in overdiversifying, we have to affirmatively reason through a proper diversification policy in terms of our objectives.
>
> The optimum portfolio depends on the various expectations of choices available and the degree of variance in performance which is tolerable. The greater the number of selections, the less will be the average year-to-year variation in actual versus expected results. Also, the lower will be the expected results, assuming different choices have different expectations of performance.
>
> I am willing to give up quite a bit in terms of leveling of year-to-year results (remember when I talk of "results," I am talking of performance relative to the Dow) in order to achieve better overall long-term performance. Simply stated, this means I am willing to concentrate quite heavily in what I believe to be the best investment opportunities recognizing very well that this may cause an occasional very sour year - one somewhat more sour, probably, than if I had diversified more. While this means our results will bounce around more, I think it also means that our long-term margin of superiority should be greater.

I was reminded of Buffett's thoughts as I was once again thinking about optimal portfolio size for the "know something" investor. If you can consistently find ideas where you make 50% more when you are right than you lose when you are wrong, then even if you are right only 50% of the time, the Kelly Formula would say that you should be making 16.67% position sizes, or a total portfolio of 6 positions.

While I think those odds and payouts are pretty conservative for the investor that really puts in the work and has a developed a good process, even being more conservative and betting 1/2 Kelly would yield an optimal portfolio of just 12 positions. Considering most of us are looking for traits that give us better than 50/50 odds of being right, and potential upside vs. downside ratios much higher than the above example, I think a portfolio composed of 6-12 core positions also adds some protection for the difficulty, or impossibility, of estimating odds and precise payouts.

Of course, the odds and payouts change as prices change, and certain things may be being bought or sold over time, which could lead to one having a few more positions. But if you are fully invested in things that meet the general purchase criteria for most value investors, and if you are willing to put in the significant effort required to deeply understand each investment, then a portfolio of 6-12 core holdings seems about right to me.

And I think the most common danger area with having this kind of concentration—among the things that one has some control over—is being wrong about the downside risk in each investment, and so that analysis is probably especially important. As Alice Schroeder wrote about Buffett: "He will pass on huge upside opportunities if he can't get downside protection..." Or as Howard Marks often says, if you avoid the losers the winners will take care of themselves.

What you really want is a 3x upside vs. downside ratio. So if you're looking at something that you think can double, then you need the worst case scenario to be a decline of just 1/3 (33.33%). At 50/50 odds, a 3-to-1 upside versus downside scenario would equate to a 33.33% position size. So 1/2 Kelly would be 16.67%. That 16.67% (6 position portfolio) is also full Kelly if you are 1/2 wrong on upside and there's only 1.5x upside vs. downside.

And it is ideal—though not always possible because businesses growing at a competitive advantages are rarely at great prices (and even Buffett made big positions from profitable net-nets in his partnership days, though not nearly the 40% American Express sized position)—to find something where the upside over your holding period is 150% or more, since even the best

companies can decline by 50%, and if the downside ends up being a full loss of capital (-100%), then you still have 1.5x upside vs. downside. The ideal investments would also have all of the 4G's:

1. *Good business* with high returns on capital, competitive advantages, the ability to reinvest at those high returns, and the ability to mostly control its own destiny (i.e. it controls investment and the widening of its moats, instead of being beholden to large customers, commodity prices, etc. etc.)

2. *Good balance sheet* that is conservative and that also allows the company to control its own destiny (i.e. not subject to having to rollover debt at any point, and not having its balance sheet keep it from taking advantage of opportunities and/or market dislocations.)

3. *Good management* who understand capital allocation and whose interests are aligned with shareholders because they are owner-operators. And where, for the most part, they bought their shares in the open market (or by founding the company) instead of just getting their ownership and exposure through options, where they have the upside without sufficient downside risk.

4. *Good price* with a proper and significant margin of safety.

A few more thoughts…

Warren Buffett: "I believe that the chance of permanent capital loss for patient Berkshire shareholders is as low as can be found among single-company investments. That's because our per-share *intrinsic business value* is almost certain to advance over time."

This drove home the point to me of how much big position sizes are favored by good businesses that grow their per-share intrinsic business value over time. I mentioned I thought 6-12 position sizes is probably a good number of core positions for the value investor who puts significant effort in choosing his or her investments. Now, at the concentrated end of that, you'd have 16.67% position sizes if fully invested equally. If you're leaving some margin of safety for error,

the unknown unknowns, or because of opportunity costs, maybe you're only "betting" 1/2 Kelly on a given position. Which means that you'd need a fully Kelly position to tell you that you should be putting 1/3 of your portfolio in something before committing 16.67% to it at 1/2 Kelly.

What upside vs. downside gives you that output? If you're assuming 50/50 odds of being right (which is hopefully conservative), then you'd need a 3x upside vs. downside ratio over your investing timeframe before investing. As we've seen and as Buffett and Munger stressed, even Berkshire has been about halved three times since 1965. And while that wasn't permanent of course, if you assume your downside on a given investment is around 50%, then you'd need 150% of upside (i.e. more than a double) in order for that bet to be worth taking. And it's hard to find that kind of potential in a company that isn't growing its value over time. And if you take the potential downside to be complete loss of capital (i.e. 100% downside), then 150% of upside would give you a full Kelly position size equal to the 16.67% number, and a 1/2 Kelly position size then at 8.33%.

And the key to that growth being growth in per-share *intrinsic business value* because not all growth creates value.

…..

So I want something that I think has a decent chance of doubling over a 3-year period (~26% IRR), without a whole lot of downside. And something that I think can be worth 2.5x (150%) of the price at which I'm buying it, over a 4-7 year period (2.5x over 4 years ~26% , 5 years ~20% IRR; over 6 years ~16.5% IRR; over 7 years ~14% IRR).

And in the search for the elusive 100-bagger, a 100x over 20 years is ~26% IRR, over 25 years ~20% IRR; over 30 years ~16.5% IRR; over 35 years ~14% IRR. (i.e. The return you're looking for to achieve a 2.5x in 4-7 years can lead to a 100-bagger if it can continue for 5 times as long.)

"My largest positions are not the ones I think I'm going to make the most money from. My largest positions are the ones I don't think I'm going to lose money in." —Joel Greenblatt

"The businesses at the top of my portfolio are not necessarily going to be the ones that perform the best over the long term but are the ones I know will perform." —Chris Bloomstran

---

Nick Sleep on Portfolio Concentration:

As the cash is invested, portfolio concentration will rise. In theory, if we could find fifty ideas at equal discounts to value, with equal probability (conviction) of value being realized, then they could all be equally weighted in the Partnership. We could all then look forward to a nice smooth rise in the value of our shares in Nomad, free from the swings a more concentrated portfolio might create. But life is not like that. In reality opportunities in which we are comfortable to deploy capital are rare, and the highest conviction ideas the rarest of them all. The issue then is how much to invest in each idea? Bill Miller, who has run the Legg Mason Value Trust so brilliantly for many years, suggests the use of a system devised in 1956 by J. L. Kelly. A simplified version of the Kelly criterion is that investors should bet a proportion of the portfolio equal to 2.1 x p - 1.1, where p is the probability of being right. The common sense outcome of this equation is that if one is certain of being right, one should invest the entire portfolio in that idea. Even if one is say 75% certain of being right the correct weighting remains high at 47.5% ((2.1 x 0.75) – 1.1). But does anyone do that? As far as we are aware, only the early Buffett Partnership portfolios had anywhere near this level of concentration, and then mainly in companies in which Buffett was a controlling shareholder. But is this not the right way to think? If you know you are right, why would you not bet a high proportion of the portfolio in that idea? The logical extension of this line of thought is that Nomad's portfolio concentration has at times been too low. And if it has been too low at Nomad, what has been going on at the large mutual fund complexes with many hundred stocks in a single country portfolio? Apply the Kelly criterion, and the average fund manager would appear to have almost no clue as to the likely success of any one idea. In our opinion, the massive over-diversification that is commonplace in the industry has more to do with marketing, making the clients feel comfortable, and the smoothing of results than it does with investment excellence. At Nomad we would rather results

were more volatile year to year, but maximized our rolling five-year outcome. If you do not share this view, think long and hard about your investment in Nomad.

Seth Klarman on concentration and diversification (i.e. He's more diversified than the likes of Buffett and Munger.)…

> "It seems to me that, as we know, you diversify most of the diversifiable risk away from a portfolio by owning 20 or 25 positions, and that if one is able to tell a good investment from a bad, one should be able to tell a great investment from a good. So I see no sense in having the same size position with your best idea and your hundredth best idea to round out a 1% idea type of portfolio. When we take a concentrated position, I'd say a dozen times over 26 years, we have had a 10% or so position. It also depends on the definition: Is a position in a type of investment a position or is it only a particular issuer? So a little definitional clarity might also be needed. But in general, in one particular company's securities, every 2 years or so we have a 10% position. Most of the time, we have 3, and 5, and 6 percent positions as our most favorite ideas. We will take them higher when a cheap position becomes much, much better a bargain or when there's a catalyst for the realization of underlying value. We favor catalysts because it gives you a much shorter duration on the investment and greater predictability that you will in fact make money on that investment and aren't subject to the vagaries of the market and the economy and business over a longer period of time. So we would not own a 10% position in a common stock that was just plain cheap unless we had a seat on the board and control, because too many bad things can happen. But we'd own a 10% position in a senior, distressed debt investment where there was a plan in place, where the assets were very safe – either cash or receivables or something where we could count on getting our money back, and where we saw almost no chance of principal loss over a couple of years and a chance of a very high, meaning 20% plus, type of return. So that's how we think about it. I think when people make mistakes, it often is on both sides of diversification. Occasionally, new managers especially, that aren't that experienced in the business, will have a 20% position or perhaps even two in one portfolio. And those two might even be correlated – [i.e.] same

industry, [or] the same exact kind of bet in two different names. That's absurdly concentrated; maybe not if you have enormous confidence and it's your own money, but if you have clients, that's just not a good idea. But 1% positions also are too small to take advantage of what are usually the relatively few great mispricings that you can find. When you find them, you do need to step in and take advantage."

Warren Buffett in 1998 (University of Florida lecture):

> "If you can identify six wonderful businesses, that is all the diversification you need. And you will make a lot of money. And I can guarantee that going into the seventh one instead of putting more money into your first one is [going to] be a terrible mistake. Very few people have gotten rich on their seventh best idea. So I would say for anyone working with normal capital who really knows the businesses they have gone into, six is plenty, and I [would] probably have half of [it in] what I like best."

Warren Buffett in 2008:

> "If you are a professional and have confidence, then I would advocate lots of concentration. For everyone else, if it's not your game, participate in total diversification. If it's your game, diversification doesn't make sense. It's crazy to put money in your twentieth choice rather than your first choice. . . . [Berkshire vice-chairman] Charlie [Munger] and I operated mostly with five positions. If I were running $50, $100, $200 million, I would have 80 percent in five positions, with 25 percent for the largest."

Whatever the level of diversification you end up being comfortable with, it's important to remember that *extremely* unexpected things can happen. I think this is best illustrated by a story from Howard Marks.

From Peter Bevelin's book *All I Want To Know Is Where I'm Going To Die So I'll Never Go There*:

> "It can always get worse than you think. I love this story from Howard Marks: 'I tell my father's story of the gambler who lost regularly. One day he heard about a race with only one horse in it, so he bet the rent money. Halfway around the track, the horse jumped over the fence and ran away. Invariably things can get worse than people expect. Maybe 'worst-case' means 'the worst we've seen in the past.' But that doesn't mean things can't be worse in the future.'"

****

A few lessons/thoughts from Charlie Munger

Munger on his investing shift over time:

Kind of like Warren, when I was young I scrambled around doing anything that would work. I could get tiny little obscure companies who were too cheap because they were on the pink sheets and all kinds of things. As I got more money, I decided I didn't like all that scratching around. I was thinking about things I didn't want to think about.

I said I want to be in this to kind of admire the people who are running the business. I can admire the business, and I think it is well-placed and going to do well. I drifted into this good people, good company field in my old age. I've found it much more comfortable and my returns haven't gone down that much. It is remarkable.

Munger on how he reads books:

I'm very selective. I, sometimes, skim. I, sometimes, read one chapter and I sometimes read the damn thing twice. It's been my experience in life [that] if you just keep thinking and reading, you don't have to work.

Munger on the balance between competency and gumption:

You have to strike the right balance between competency or knowledge on the one hand and gumption on the other. Too much competency and no gumption is no good. And if you don't

know your circle of competence, then too much gumption will get you killed. But the more you know the limits to your knowledge, the more valuable gumption is…. [Successful investing requires] this crazy combination of gumption and patience, and then being ready to pounce when the opportunity presents itself, because in this world opportunities just don't last very long.

Munger on picking things that are easy:

Part of the reason that we have a decent record is [that] we pick things that are easy. Other people think they're so smart they can take on things that are really difficult. That proves to be more dangerous. You have to be shrewd, and you have to be very patient. **You have to wait until something comes along which at the price you're paying is easy.**

That's contrary to human nature, too. Just to sit there all day doing nothing but waiting. It's easy for us. We've got a lot of other things to do. For an ordinary person, can you imagine just sitting for five years doing nothing? It's so contrary to human nature. You don't feel active, you don't feel useful, so you do something stupid.

Nick Sleep on the categories Nomad invested in (from June 30, 2009 letter, emphasis mine, and typed from hard copy, so any errors are likely my own):

"Some facts and figures may help paint a useful aggregate picture of the Partnership. Zak and I think of the Partnership in terms of business models deployed by our investee firms. The names we use to describe these models are not that catchy but please bear with us. The largest group making up over half the Partnership are, no drum role required, **[1] scale-economics-shared**; next comes **[2] discounts-to-replacement-cost-with-pricing-power** (I warned you) at around fifteen percent; **[3] hated-agencies** fifteen percent; **[4] super-high-quality-thinkers** just under ten percent. The Partnership has twenty investments but a noticeable concentration in ten, which make up around eighty percent of the portfolio, and for those with sharp eyes around thirty percent of the Partnership in one investment. *[2020 Editor Note: Amazon was the big holding…. Stock price ~$80 a share then, to $3,150 today.]* Although the bulk of the Partnership is listed in

the United States, look-through revenues are far more diversified: US dollar revenues forty-seven percent, Euro and Swiss Franc revenues twenty-one percent, South East Asian currencies sixteen percent, Sterling ten percent, Yen three percent and others three percent. There are perhaps six main industry groups and their weightings are as follows: internet thirty percent, consumer staples sixteen percent, consumer discretionary fourteen, business services thirteen, insurance and finance eleven, and airlines eight percent, with a tail of smaller groupings."

…

[More on *scale-economics-shared*]

December 31, 2008 Nomad Letter

Incentives. Incentives. Incentives.

In business the question then arises: what do incentives encourage? From the perspective of investors in Nomad, the incentives are helpful if they raise the probability of a favourable destination for our investee firms. Let's take the incentives around high low retailing as compared to scale economics shared retailing. Under the first strategy operating costs are generally high as a result of operating inefficiencies, and prices are high to compensate. To attract customers some products are reduced in price on a temporary basis in the hope that whilst the customer is in the store they may buy some non-discounted items too (some prices are therefore high and others low, hence the name). The incentives here are awful: customers are trained to buy on deal, be disloyal and shop around, and for the retailer the inefficiencies of pricing and repricing and the volatility of volumes are meaningful. The effect is that, after adjusting for one off reductions in price, sales are lower on a normalised basis than they would be otherwise, which in turn exacerbates operating cost inefficiencies. Yuck.

Scale economics shared operations are quite different. As the firm grows in size, scale savings are given back to the customer in the form of lower prices. The customer then reciprocates by purchasing more goods, which provides greater scale for the retailer who passes on the new savings as well. Yippee. This is why firms such as Costco enjoy sales per foot of retailing space four times greater than run-of-the-mill supermarkets. Scale economics shared incentivises customer reciprocation, and customer reciprocation is a super-factor in business performance.

Scale economics shared works across industries too with the effect that load factors at the low price Malaysian airline, AirAsia, are superior to high-low flag carrying airlines. And it works online: Amazon have deployed it so well that Amazon's operating costs (per dollar of sales) plus its operating margin are less than some of its high street peers' costs (per dollar of sales). This offers the prospect that, in theory, Amazon's high street peers could price their products at net income breakeven and still not undercut Amazon's prices or profitability. For these high street competitors the game is over. They will leak revenues to more efficient rivals as customers respond to the incentive of consistently low prices and convenience. Over time high street rivals, and less successful online rivals, will need to restructure, change their product, or go out of business. We estimate Amazon's immediate hinterland of high street rivals have combined revenues of U$150bn in the US alone. If these firms go away over the next ten years, as Circuit City, Woolworths, Zavvi and others have recently, and Amazon picks up one dollar in ten of their sales, then this alone would be enough to quadruple Amazon's US revenues over the next decade.

Scale economics works well in bad economic times as well as good. On the busiest day in the run up to Christmas this year, order volumes at Amazon were 16% higher than the previous year, and note this compares to industry-wide US retail sales which declined nearly ten percent in December, according to the commerce department! And at AirAsia revenues per seat per kilometre flown rose 33%, whilst costs per seat per kilometre flown excluding fuel declined 10% in the latest quarterly period. Our businesses are surging ahead, even if, in some cases, their share prices are half what they were twelve months ago. In the last few months Amazon has been priced in the market as if it would not grow in the future, despite some of the best growth prospects we can imagine. That is a very rare combination and, combined with other similarly cheap stocks in the partnership, was the basis for Nomad's reopening at the end of last year.

…

[Also, see Nick Sleep's 2005 *VII* write-up on Costco for more on scale-economics shared.]

"You need a different checklist and different mental models for different companies. I can never make it easy by saying, 'Here are three things.' You have to derive it yourself to ingrain it in your head for the rest of your life." —Charlie Munger

****

When first looking at a new idea, use this order for initial filters:

1) People – Ownership and Management Team: Does it seem like they understand capital allocation? Do they have the "capacity to suffer" by focus on long-term value and not near-term earnings? Are they owner-operators?

2) Circle of Competence and Conservative Balance Sheet. Is this something you'll be able to understand, with effort, in a reasonable period of time? Is the company financed in a way that will allow it to survive and maintain flexibility even in the face of a severe economic downturn?

3) The intersection of the Quality of the Business and the Price being paid, which also determines the investing timeframe when considering an investment (see four categories below). While price and business quality are arguably the most important factors in determining an investment outcome, their merits take more time and work to determine. So before putting in that work, make sure the above items check out first, or else it may be worthwhile to move onto something else.

Four categories of investments:

In reality, it's a continuum and many things fall in between the categories below. But it's a framework that I've found useful when looking at investments, and thinking about potential purchase prices.

1) Competitively-advantaged, great business at an attractive absolute and relative earnings (FCF) yield. (***Compounder***)

- 7-10 year investment horizon, which is equivalent to the time it usually takes for market valuations to revert to the mean.
- When looking at these investments, consider your base return as the free cash flow (FCF) yield. If it's a true compounder that FCF will grow, and your return will be even better. Great and advantaged businesses should trade at a premium to the market and to the market's historical average multiple, so by buying at, for example, a FCF yield of 7-8% and a good yield relative to the market's expected return over the next 7-10 years, you should have any change in the multiple going in your favor and not against you—if you are right in your analysis. And remember that profits and margins can shrink, so don't just assume a growth rate will be positive. Also remember that sometimes you need to normalize FCF to really figure out the core business economics when you have a great business reinvesting most (or all) of its cash flow…. Amazon is a great example of this, and Josh Tarasoff's Amazon pitch at VALUEx Vail in 2012 lays the thesis out.
- Compounders can also be managers or investment teams that reinvest cash flows or float at a healthy rate of return, in a flexible manner…..but keep in mind that these are very hard to identify ahead of time, it can be easy to be fooled by people, and that a bad business can overwhelm even the best operators and capital allocators.
- The key is REINVESTMENT. Category 1a = MOAT + REINVESTMENT; Category 1b = MOAT + Fewer Reinvestment Opportunities (and thus, need to pay a cheaper price than for a business than can reinvest at high rates of return).

2) Good business close to or below liquidation value (tangible book value, after any adjustments). (or a ***Transformation*** into a good business)

- Don't give too much weight to fixed assets, especially if they are tied to commodities (it might be best to avoid commodity-related bets altogether, so make sure the investment thesis and the asset value don't depend on a certain commodity price).
- Still want to buy these businesses at good absolute FCF yields (low earnings multiples) and at a significant discount to private market values (which may involve breaking down different segments to determine their values and the prospects for the business to invest capital at high returns in those segments).
- The expectation is for these investments to double over a 3-5 year investment horizon, and will more commonly be found in the small and micro-cap universe of stocks.

3) Below liquidation value. Can be either ***Work-Outs*** (no weight to fixed assets) or ***Capital Cycle*** plays.

- Look for things that are FCF positive, or if not currently FCF positive, have a path to being there soon. And preferably look for investments that could potentially be Category 2 investments….maybe because it is a cyclical business where the cycle changes (e.g. insurance, mining services, shipping, etc.).
- 2 years or less for the investment horizon, so look for a catalyst for the value to be realized in less than 2 years.
- Probably need to really understand the capital cycle because you want to buy these names when they are about to gain some pricing power. And capital cycle analysis is especially important if you are buying into industries tied to commodities, and/or when you have no choice to think hard about fixed asset values (e.g. shipping).

…..

Toby Carlisle excerpt from *Deep Value* about Graham buying net-nets and below liquidation value stocks (related to categories 2 and 3, especially):

Ben Graham allowed, however, that stocks trading at a discount to liquidation value did so because they "almost always have an unsatisfactory trend of earnings:"

If the profits had been increasing steadily it is obvious that the shares would not sell at so low a price. The objection to buying these issues lies in the probability, or at least the possibility, that earnings will decline or losses continue, and that the resources will be dissipated and the intrinsic value ultimately become less than the price paid.

Graham responded to these objections that, while these outcomes occurred in individual cases, there was a much wider range of potential developments that would result in a higher stock price. Graham's list of developments reads like a modern activist investor's list of demands, and it included the following:

1. The creation of an earning power commensurate with the company's assets. This may result from:

a. General improvement in the industry.

b. Favorable change in the company's operating policies, with or without a change in management. These changes include more efficient methods, new products, abandonment of unprofitable lines, etc.

2. A sale or merger, because some other concern is able to utilize the resources to better advantage and hence can pay at least liquidating value for the assets.

3. Complete or partial liquidation

Graham proposed that the discerning analyst would lean toward those stocks for which she saw a fairly imminent prospect of one of these favorable developments emerging… The analyst would avoid issues that were rapidly dissipating their current assets and showed no definite signs of ceasing to do so. Even so, he wrote, there was "scarcely any doubt that common stocks selling well below liquidating value represent on the whole a class of undervalued securities."

…..

Timing and Category 3, in regards to capital cycle investments – Excerpt from *Capital Returns* (5.5 – written in November 2012):

From a capital cycle perspective, the above situations only become attractive when stock market valuations fall to a fraction of replacement cost ***and*** a path opens up for dealing with the excess capacity. While the first condition is close to being met in many European sectors, the prospects for the second appears dim. In previous downturns, capacity adjustment has come as a result of interest rates rising to choke off inflation, leading to widespread bankruptcies and industry consolidation.

…With interest rates low and set to remain so, and banks prepared to prop up weak businesses for fear of crystallising losses, monetary policy looks very unlikely to precipitate a major reallocation of resources. Indeed, it appears designed to head-off such a denouement. Under such circumstances, supply side restructuring via industry consolidation also looks like a long-shot, especially as many European industries are already quite consolidated and face anti-trust barriers.

…..

4) Good business, at a good price, being run by people who seem to be doing the right thing and that understand capital allocation, but where the moat is either more narrow or its sustainability is hard to predict, and you don't have downside protection by buying it close to or below tangible book value.

- Easier to fall for value traps in these types of investments, where the margins—and thus earnings—erode, maybe because of increased competition (never underestimate the ability high returns to attract competitors, and remember that even one competitor is enough to ruin a business), or maybe because the company was riding a trend, fad, government regulatory tailwind or credit bubble that comes to an end.
- Do extra work to develop a unique insight into these types of investments.
- Make sure reasonable assumptions lead to an expected IRR of 26% or more (a fifty-cent dollar that reaches full value in 3 years, or one that takes 5 years but that is also growing that value by 10% per year). Without sufficient downside protection in the form of a moat or asset values, don't settle for a lower expected return.

Remember that if a good return on capital business can't reinvest and grow, it may be worth a lower multiple than the return on capital of that business might lead one to believe. So to be a truly good business, it must be able to continue to reinvest at those good returns on capital.

Excerpt from Chris Mayer's book *100 Baggers* on the importance of reinvestment to having a good business:

ROE alone does not suffice. Jason looks for another key element that mixes well for creating multibaggers. "The second piece requires some feel and judgment. It is the capital allocation skills of the management team," he said. Here he ran through an example.

Say we have a business with $100 million in equity, and we make a $20 million profit. That's a 20 percent ROE. There is no dividend. If we took that $20 million at the end of the year and just put it in the bank, we'd earn, say, 2 percent interest on that money. But the rest of the business would continue to earn a 20 percent ROE.

"That 20 percent ROE will actually come down to about 17 percent in the first year and then 15 percent as the cash earning a 2 percent return blends in with the business earning a 20 percent return," Jason said. "So when you see a company that has an ROE of 20 percent year after year, somebody is taking the profit at the end of the year and recycling back in the business so that ROE can stay right where it is."

A lot of people don't appreciate how important the ability to reinvest those profits and earn a high ROE is. Jason told me when he talks to management, this is the main thing he wants to talk about: How are you investing the cash the business generates? Forget about your growth profile. Let's talk about your last five acquisitions!

Chuck Akre's 3-legged stool (also via Chris Mayer's book *100 Baggers*):

Akre's approach is simple and easy to understand. He calls it his three-legged stool. He looks for:

1. businesses that have historically compounded value per share at very high rates;

2. highly skilled managers who have a history of treating shareholders as though they are partners; and

3. businesses that can reinvest their free cash flow in a manner that continues to earn above-average returns.

We've talked about all of these in this book.

As he told me, though, the older he gets, the more he whittles things down to the essentials. And the most essential thing is that third item. This is the most important principle behind the 100-bagger. In one of his letters, he puts it this way: "Over a period of years, our thinking has focused more and more on the issue of reinvestment as the single most critical ingredient in a successful investment idea, once you have already identified an outstanding business."

****

From Nick Sleep's June 30, 2009 Letter:

Empty Vessels and a Quieter Approach.

Upon reflection, it is curious that this quiet attitude extends, in its own way, to the companies in which we have entrusted your dollars: Amazon and Costco do not advertise (no shouting here); Berkshire Hathaway and Games Workshop do not provide earnings guidance (popular with baying fund managers and stock brokers); Amazon, Costco, AirAsia, Carpetright, and parts of Berkshire give back margin to the customer, we would argue that is a pretty humble strategy too. In other words, around two thirds of the portfolio is invested in firms that in some major way shun commonplace promotional activity and they are no less successful as a result. If one steps outside of stock market listed companies to instead observe private firms run by proprietors and founders, it is the quiet approach that is far closer to the norm. Let's invert: why are publicly listed companies so promotional about their affairs? Are these companies shouting to inform shareholders and customers or convince themselves?

Nomad's investments may be in publicly listed firms but these firms are also overwhelmingly run by proprietors who think and behave as if they ran private firms. Amazon for example struggles with institutional investor relations so much so that the good people that man the IR department do so knowing that the firm's founder, Jeff Bezos, thinks their role is all but a waste of time! Poor souls. Bezos was also quite forthright on the subject of product promotion and advertising at this year's annual general meeting:

"Advertising is the price you pay for having an unremarkable product or service".

It is interesting to note that the other end of the promotional scale is exemplified by the pop star razzle of General Motors which had the largest advertising budget of any company whose annual report we read this year (actually that title went to GM last year, and the year before, and the year before…). The advertising spend was U$5.3bn in 2008, or U$630 per car delivered. It is fun to muse that had the company made cars that required little advertising support, then the firm's last five-years' advertising spend may have been sufficient to retire half of the company's debt, at par, instead! But, it seems, it was easier to call Madison Avenue than build cars that sold themselves. GM is very much the empty vessel making the most noise, in this regard. Our portfolio takes a different path. The whispered voice of price givebacks is economically fruitful

but only if the customer reciprocates in the form of more spending, even in the face of more promotional approaches by competitors. For evidence that this is the case with our whisperers look no further than the average revenue growth rate of the largest investments in Nomad (including some of the companies mentioned above, err, not GM!) which, in the most recent reporting period, was in excess of ten percent!

Why? In a word, price. It is in times like these that the hyper-efficient low cost providers, who share the benefits with their customers, often take permanent market share. This fact rather reminded us of a quip by Wal-Mart founder, Sam Walton, who, when asked about the recession of the early 1990s, stated:

"I've thought about it, and decided not to participate".

Amazon, for example, is choosing *"not to participate"* in as much as trailing twelve-month revenues have risen by over sixty percent since the onset of the credit crisis, say mid 2007. Not that the steady growth in revenues has always been apparent in its stock price, as the chart below describes. As a youthful analyst I used to have a notice on my desk that read, *"share prices are more volatile than corporate cash flow, which is more volatile than asset replacement cost"*. It was reminder to concentrate on non-transitory items. Today I would update such a notice to read, *"share prices are more volatile than business values"*, but the gist is the same: a reminder to focus on lasting value, not transitory prices.

Sanjay Bakshi discussing some of Munger's speech "Practical Thought About Practical Thought":

Those emphasized sentences are terribly important because they reveal how Mr. Munger thinks about long-term investing. There are *very* few things he focuses on. Let's call them *future value drivers.* These are:

1. Business volume growth over the long term;

2. Profit per unit of business volume over the long term; and

3. An "exit multiple" of earnings based on the belief that even after the substantial growth projected by him, there will still be more growth ahead.

Equally important, I think, are things he *ignores* in those paragraphs. For example, he does not talk about *intrinsic value today*, which is a fuzzy concept which will unnecessarily get him caught up in a debate about (1) what discount rate to use to value estimated future earnings; and (2) what perpetual growth rate to use in his valuation model. He deftly sidesteps those distractions *even though he implicitly uses those concepts* when he thinks about potential future value.

Notice, also that he makes no reference to *Return on Capital* even though students of his methods know that he is one of the proponents of the utility of that ratio. Nor does he talk about *Balance Sheet Quality*. That's because those important ideas have already been considered in his *business quality checklist*.

Any student of Charlie Munger would know that he has no interest in businesses delivering low or mediocre returns on capital or those having poor quality balance sheets. In this talk, he is basically telling you how to think about *potential future value* once you've found businesses you'd like to own.

Once you have a good idea about potential future value, you can compare it with current market value to estimate *expected return.* Notice also that Mr. Munger ignores *dividend* return. He thinks about potential gain in market value over the very long term and thinks hard about the *future value drivers* that will cause that gain to occur.

Eric Rosenfeld's categories for activist investing:

1. Management - Don't have good management. Usually the CEO, but not always. Usually occurs for the following reasons:

a) Evil CEO - uses the company as his or her piggy bank.

b) Founder running the company where the founder is capable of running a smaller company, but not a larger one.

c) Peter Principle - Someone gets promoted throughout company but once they get to the top, it is too far because they are incompetent to run the entire company.

2. Strategic or Operational issues - Things need to be fixed because strategy is wrong or operations just need to be fixed. Part of that is making sure the right management team is in place. He may be a board member, but he wants right people and strategy in place because he and his firm are not going to micro-manage.

3. Bad division(s) masking good division(s)

4. Company that needs to either buy companies or be sold (consolidating industry)

5. Capital structure is wrong

Rob Vinall on not just *having* a competitive advantage, but also making sure there is innovation going on to further *build* competitive advantage:

Perhaps the concepts of moat and innovation can be reconciled. Warren Buffett often states that his CEOs' top priority is to widen their company's moat. The idea of widening a moat is key. It is worth quoting Buffett's precise words from the 2000 AGM:

We think in terms of that moat and the ability to keep its width and its impossibility of being crossed as the primary criterion of a great business. And we tell our managers we want the moat widened every year.

In my view, widening the moat is more important than the width of the moat. Everyone is attacking a company's moat, so the question is not how wide it is, but whether it is widening at a faster pace than competitors are filling it up. Innovation is central to the idea of widening a moat.

…My intention is to pay far greater attention to innovation. Reflecting this, I am modifying the question on competitive advantage from:

"Does the company have a long term sustainable competitive advantage?"

to:

"Is the company building a long term sustainable competitive advantage?"

It is a subtle change, but, in my view, an important one. The new question better captures the idea of moat as a dynamic rather than a static concept.

The responsibility for creating and maintaining an innovative culture ultimately rests with management. As such, when underwriting management ability, I intend to focus more closely on what the leadership is doing to foster a culture where innovation can flourish.

****

Focusing on expected returns instead of intrinsic value…

From Sanjay Bakshi:

I think it's important for investors to think in terms of *expected returns* instead of fuzzy concepts like *intrinsic value* even though they may be functionally equivalent.

There are, in my view, significant advantages of thinking in terms of "How much money am I going to make in this business over time?" over "What's the discount to intrinsic business value?" The answer to the first question is what really matters isn't it? Then why try to answer it indirectly?

And the beauty about investing in moats is that you think about expected returns after the business passes your business and management quality checks. That means that if you have no idea what the earnings of a business would look like a decade from now and whether or not those earnings will still be growing or not even after ten years, you should not invest in that business.

So the business quality checklist will eliminate a huge number of possible businesses to evaluate. This is what I believe Mr. Buffett meant when he talked about "circle of competence."

Next, the management quality checklist would eliminate many more businesses from consideration. That would leave a handful of businesses which you would like and know pretty well and about which you'd have the ability to estimate a range of expected returns over a decade or more.

Now imagine you had done that exercise and come up with expected returns for about 20 stocks over the next decade. Which ones would be rational to include in your portfolio? And which ones should you *not* include in your portfolio regardless of how much you like the business and management?

More from Sanjay Bakshi:

I don't think in terms of entry multiples. I do think about exit multiples though and never value a business at more than 20 times owner earnings ten years from now. And I only limit to high ROE, low leverage businesses (most of my portfolio businesses are debt-free) which can grow earnings where return on incremental capital is high.

Under those conditions, no matter what the entry multiple, I can estimate a return over ten years. If entry multiple is high, I factor in a multiple contraction, and if low, then an expansion. Obviously the best returns come in the latter situation but by focusing on expected returns, I have sometimes bought high P/E businesses too because even if there was a multiple contraction, there is good money to be made in a decade…

In some businesses, I don't go beyond 5 years – as my visibility is a lot less in them.

Also when I said 20x multiple ten years from now as maximum I will value the firm at, I mean it. Many of them are valued at 15x and some as low as 10x…

From [Bruce Greenwald](#):

But they're [Nestle] trading at a 3.3-3.4% dividend. Their growth, because they are in high-growth areas -- if you read their financials, it looks like the growth is slower because historically it's been in Swiss francs and the Swiss franc has been appreciated -- strongly relative to the currencies in which they sell, but their growth is probably, especially in earnings because they have operating leverage, maybe 6%, which is a little above the 4.5% nominal world GDP growth, or even 4% nominal world GDP growth.

You had a 6% earnings growth, a 3.3% dividend, and probably some buybacks on top of it because they really don't need all that much capital, so you're looking at a 10% return on a stock. That is extraordinarily safe.

You look at what happened to them after 2003, where their input prices when through the roof, and there was no general inflation, and their margins go up steadily. You look at them in the crisis and they're barely affected by it in '08-'09.

It's sort of recession-proof and inflation-proof, and it's a 10% return. Maybe as low as 8, but in a world -- even where 30-year Treasuries, which have all the inflation risk, are 3% -- that is not an expensive stock, and there a fair number of opportunities.

…

When growth has value, what you're trying to do is take a cash flow number and multiply it by the appropriate multiple for a growing stream. Costs of capital these days are probably 8%. Growth rates for anybody with a franchise... and growth has no value if you don't have barriers to entry, because your return on capital is driven by the cost of capital, so you invest $100 million in growth, you earn 8%, you have to pay 8% to the people who provided it.

In the stocks where growth matters, you've got, say, an 8% cost of capital and, because you've got operating leverage, probably a 5% growth in earnings. That's 1/3%, which is 33 times, which is a crazy multiple.

If you're off by just 1%, you could have 100 times. If, for example, the cost of capital was 7 and the growth was not 5, it was 6, which is 1/1%, or if the cost of capital was 9 and the growth rate is 5, you're 25 times, and even lower.

You make small mistakes in those numbers, you get massive mistakes in valuation, so when you've got a growing stream, it's almost impossible to put a value on it. If the growth doesn't matter, you can get an earnings-powered value. It ought to be supported by assets because there are no barriers to entry, and you'll get a very good valuation.

You can get a valuation metric in terms of price/earnings ratios, price to tangible book, ultimately price to replacement cost, and price to sustainable earnings.

In the non-growth stocks, which are the non-franchised stocks, it's always been the case that traditional valuation metrics apply, and they continue to apply. In the growth stocks, on the other hand, I think we now have learned, to our cost -- and by the way, not just in this crisis but in the sell-off for the tech bust in '99-2000 -- that you cannot put a sensible value on things.

If you can't put a sensible value on things, the question is how do you decide if they're worth buying? The answer is, you can put a sensible return on things.

In those cases, notice what I did. I said, "OK, here's the cash return." It's the dividends plus the buybacks, probably -- expected level of buybacks, which is like 4.4% -- the growth is what it is, and the growth in earnings may be slightly higher than the growth in sales, but the growth in sales is forecastable.

It's going to be either slightly above or slightly below the level of GDP growth, depending on how successfully they allocate capital to grab market share or whether they're in a category that's growing faster, like pet food, than GDP or much slower, like newspapers or automobiles, than GDP.

You can assess those numbers and notice that now it's not 1/R-G. It's just linearly related to the return. What I did for you is I basically calculated a total return for Nestle, and that has always been the sensible way to look at growth stocks.

You notice you can compare that directly to returns on Treasuries, to returns on junk debt, to returns on regular debt, because they're all in returns space so you've got a much better idea of what you're buying.

That's the good news about what we've learned. I think it's not just been from the crisis. I think, as I say, it goes back to the tech bust where people put unrealistic and crazy valuations on things.

…

It's what, really, people like Warren Buffett, who have pioneered the process of investing in these franchise businesses -- and it's only the franchise businesses where growth has value, because that's where you earn above the cost of capital.

I mean, if a market grows with no barriers to entry, you just get a lot of entry. It drives prices down and it eliminates the profitability, so you have to have the barriers to entry.

What they always said is, you can make a sensible buy decision. It is incredibly difficult to make a sensible sell decision. That's because you have to pick a price at which to sell. I get a price from the market today and I can calculate, just as I did for Nestle and other things, a return at that price.

But when I decide to sell Nestle, I've got to pick a price to sell it at. That, of course, gets into all the problems of at what point it's overvalued or not. There, I think what you have to do is not hold on too long. That's the temptation.

That's what kills Buffett when he won't sell Coca-Cola at $80 a share. It's what kills him when he holds onto the Washington Post for too long.

It's a very difficult decision to make, but I think the evidence is that you've got to be pretty conservative about it so that if the dividend return for Nestle, for example, plus the buyback return, goes down to 3.5, even though the overall return may be reasonable relative to returns on fixed income, you're still going to have to sell at that point.

But I think what we've learned in, as I say, as much the tech bust as the current crisis, is you cannot effectively put numerical values on stocks, or have price-related multiples on stocks, that are growth stocks.

If you'll let me, I'll do just one more example that shows you.

…

People got really excited about newspapers when they got down to like 8 times earnings. Eight times earnings is an earnings return of about 12.5%. They were distributing 80% of that, so it was a 10% cash return, either buybacks or dividends.

In spite of what investments they were doing, those businesses were shrinking at at least 5% a year in terms of their earnings power, and they had no good alternative investments. They tried and failed, and the basic businesses were shrinking. You had all the loss in operating leverage, because you had this big fixed cost infrastructure to fill and sell newspapers and a shrinking revenue base against it.

…But let's say it was 7% a year, which means it takes 14 years for it to fall in half. You start with 10 and subtract 7, that's a 3% return, which is a substandard return in a very high-risk investment.

When people are excited by the multiple, which has never been as low as 8, if they do the return calculation, they'll understand that the multiple is almost completely uninformative, that you have to look at the implied returns. That's what I think people have learned to [do] in these franchise stocks.

***More Greenwald* on the return Buffett expects:**

His idea of a fair price, by the way, is a price that gets him a return going forward on that investment without any improvement in the multiple of somewhere between 13 and 15%. By normal standards, when the average market return is 7-8%, that’s a really good price, he’s looking for a very good price. They call it a fair price because the multiple may be fairly rich, it may be 13, 14 times earnings. But the value of the growth may bring his return up to 13-15%. So when he says a fair price he’s talking in terms of normal value metrics, and there the reason that

you prefer that to a poor company at a really good price is that because the good company can grow through reinvestment and things like same-store sales growth, your return will come in the form of capital [gain], not distributive income, and that, after tax, is much more valuable.

From François Rochon:

At Giverny Capital, we do not evaluate the quality of an investment by the short-term fluctuations in its stock price. Our wiring is such that we consider ourselves owners of the companies in which we invest. Consequently, we study the growth in earnings of our companies and their long-term outlook.

Since 1996, we have presented a chart depicting the growth in the intrinsic value of our companies using a measurement developed by Warren Buffett: "owner's earnings". We arrive at our estimate of the increase in intrinsic value of our companies by adding the growth in earnings per share (EPS) and the average dividend yield of the portfolio. This analysis is not exactly precise but, we believe, approximately correct. In the non-scientific world of the stock market, and as Keynes would have said: "It is better to be roughly right than precisely wrong."

****

Ben Thompson on *Aggregation Theory* (the excerpts below are from Thompson's Stratechery newsletter, with the orignal post published on July 21, 2015. Further related articles are also available on his site, HERE.)

The value chain for any given consumer market is divided into three parts: suppliers, distributors, and consumers/users. The best way to make outsize profits in any of these markets is to either gain a horizontal monopoly in one of the three parts or to integrate two of the parts such that you have a competitive advantage in delivering a vertical solution. In the pre-Internet era the latter depended on controlling distribution.

For example, printed newspapers were the primary means of delivering content to consumers in a given geographic region, so newspapers integrated backwards into content creation (i.e. supplier) and earned outsized profits through the delivery of advertising. A similar dynamic existed in all kinds of industries, such as book publishers (distribution capabilities integrated with control of authors), video (broadcast availability integrated with purchasing content), taxis

(dispatch capabilities integrated with medallions and car ownership), hotels (brand trust integrated with vacant rooms), and more. Note how the distributors in all of these industries integrated backwards into supply: there have always been far more users/consumers than suppliers, which means that in a world where transactions are costly owning the supplier relationship provides significantly more leverage.

The fundamental disruption of the Internet has been to turn this dynamic on its head. First, the Internet has made distribution (of digital goods) free, neutralizing the advantage that pre-Internet distributors leveraged to integrate with suppliers. Secondly, the Internet has made transaction costs zero, making it viable for a distributor to integrate forward with end users/consumers at scale.

This has fundamentally changed the plane of competition: no longer do distributors compete based upon exclusive supplier relationships, with consumers/users an afterthought. Instead, suppliers can be aggregated at scale leaving consumers/users as a first order priority. By extension, this means that the most important factor determining success is the user experience: the best distributors/aggregators/market-makers win by providing the best experience, which earns them the most consumers/users, which attracts the most suppliers, which enhances the user experience in a virtuous cycle.

The result is the shift in value predicted by the Conservation of Attractive Profits. Previous incumbents, such as newspapers, book publishers, networks, taxi companies, and hoteliers, all of whom integrated backwards, lose value in favor of aggregators who aggregate modularized suppliers — which they don't pay for — to consumers/users with whom they have an exclusive relationship at scale. For example:

Google

- Previously, publishers integrated publications and articles. Google modularized individual pages and articles, making them directly accessible via search
- Google integrated search results with search and profile data about users, enabling it to sell highly effective advertising

Facebook (and Ad Networks)

- Previously, publishers integrated content and advertisements. Facebook modularized advertisements by allowing advertisers to target customers directly, not via proxy
- Facebook integrated News feed ad inventory and profile data, enabling it to sell highly effective advertising

Amazon

- Previously, book publishers integrated editing, marketing and distribution. Amazon modularized distribution first via e-commerce and then via e-books
- Amazon integrated customer data and payment information with e-book distribution and its Amazon publishing initiative (the framework is clearest when it comes to books, but the integration of distribution and the customer relationship also applies to most of Amazon's business)

Netflix

- Previously, networks integrated broadcast availability and content purchases. Netflix modularized broadcast availability by making its entire library available at any time in any order
- Netflix integrated content purchases and customer management, enabling a virtuous cycle of increased subscription demand and increased content purchase capability

Snapchat

- Previously, networks integrated mass-market advertising and general interest programming. Snapchat (and many other services) modularized attention
- Snapchat is integrating individually interesting content with mass market advertising inventory, giving brand advertisers a new way to reach a large audience efficiently

Uber

- Previously, taxi companies integrated dispatch and fleet management. Uber modularized fleet management by working with independent drivers
- Uber is integrating dispatch with customer management, enabling it to scale worldwide

Airbnb

- Previously, hotels integrated vacant rooms and trust (via brand). Airbnb modularized vacant properties by building a reputation system for trust between hosts and guests

- Airbnb is integrating property management and customer management, enabling it to scale worldwide

It's interesting to consider the order of these examples: the pioneer of this model was Google which modularized content providers. It's easy to see why this is the case: content has always been monetized by proxy, whether it be paying for newspapers (or advertising space in those newspapers), paying for CDs, or paying for cable TV. The shift to digital has exposed these proxies for the rent-collection mechanisms they are.

Facebook, though, has built in some respects an even stronger position: its suppliers are its users, so while it, like Google, aggregates content that it gets for free, it also has exclusive access to that content. Snapchat and other user-generated content networks are similar.

The third wave are industries that don't have such an obvious digital component. Airbnb, for example, deals with vacant rooms; what makes it work is the way it has digitized — and thus commoditized — trust. Uber deals with cars; it has digitized both trust and dispatch. More importantly, both have nailed the user experience in a way that incumbents have been sorely lacking. Both companies also sit in a sort of middle ground between Facebook and Google: their suppliers are not exclusive in theory, but increasingly are exclusive in reality as both benefit from a virtuous cycle of more users leading to increased utilization of suppliers.

What is important to note is that in all of these examples there are strong winner-take-all effects. All of the examples I listed are not only capable of serving all consumers/users, but they also become better services the more consumers/users they serve — and they are all capable of serving every consumer/user on earth. This, above all else, is why consumer technology companies are so highly valued both in the public and private markets.

Looking forward, I believe that Aggregation Theory will be the proper framework to both understand opportunities for startups as well as threats for incumbents:

- What is the critical differentiator for incumbents, and can some aspect of that differentiator be digitized?
- If that differentiator is digitized, competition shifts to the user experience, which gives a significant advantage to new entrants built around the proper incentives

- Companies that win the user experience can generate a virtuous cycle where their ownership of consumers/users attracts suppliers which improves the user experience

The Uber and Airbnb examples are especially important: vacant rooms and taxis have not been digitized, but they have been disrupted. I suspect that nearly every industry will belatedly discover it has a critical function that can be digitized and commodified, precipitating this shift. The profound changes caused by the Internet are only just beginning; aggregation theory is the means.

Ben Thompson's UPDATED thoughts on *Aggregation Theory* (from September 26-28, 2017 articles):

DEFINING AGGREGATORS

Posted on Tuesday, September 26, 2017

(Note: this is not a typical Stratechery article; there is no over-arching narrative or reference to current news. Rather, the primary goal is to provide a future point of reference)

Aggregation Theory describes how platforms (i.e. aggregators) come to dominate the industries in which they compete in a systematic and predictable way. Aggregation Theory should serve as a guidebook for aspiring platform companies, a warning for industries predicated on controlling distribution, and a primer for regulators addressing the inevitable antitrust concerns that are the endgame of Aggregation Theory.

Aggregation Theory was first coined in this eponymously-titled 2015 article. That article followed on the heels of a series of posts about Airbnb, Netflix, and web publishing that, I realized, fit together into a broader framework that was applicable to a range of Internet-enabled companies. Over the ensuing two years I have significantly fleshed out the ideas in that original article, yet subsequent articles necessarily link to an article that marked the beginning of Aggregation Theory, not the current state.

That noted, the original article is very much worth reading, particularly its description of how value has shifted away from companies that control the distribution of scarce resources to those that control demand for abundant ones; the purpose of this article is to catalog exactly what the latter look like.

THE CHARACTERISTICS OF AGGREGATORS

Aggregators have all three of the following characteristics; the absence of any one of them can result in a very successful business (in the case of Apple, arguably the most successful business in history), but it means said company is not an aggregator.

Direct Relationship with Users

This point is straight-forward, yet the linchpin on which everything else rests: aggregators have a direct relationship with users. This may be a payment-based relationship, an account-based one, or simply one based on regular usage (think Google and non-logged in users).

Zero Marginal Costs For Serving Users

Companies traditionally have had to incur (up to) three types of marginal costs when it comes to serving users/customers directly.

- The cost of goods sold (COGS), that is, the cost of producing an item or providing a service
- Distribution costs, that is the cost of getting an item to the customer (usually via retail) or facilitating the provision of a service (usually via real estate)
- Transaction costs, that is the cost of executing a transaction for a good or service, providing customer service, etc.

Aggregators incur none of these costs:

- The goods "sold" by an aggregator are digital and thus have zero marginal costs (they may, of course, have significant fixed costs)
- These digital goods are delivered via the Internet, which results in zero distribution costs
- Transactions are handled automatically through automatic account management, credit cards payments, etc.

This characteristic means that businesses like Apple hardware and Amazon's traditional retail operations are not aggregators; both bear significant costs in serving the marginal customer (and, in the case of Amazon in particular, have achieved such scale that the service's relative cost of distribution is actually a moat).

Demand-driven Multi-sided Networks with Decreasing Acquisition Costs

Because aggregators deal with digital goods, there is an abundance of supply; that means users reap value through discovery and curation, and most aggregators get started by delivering superior discovery.

Then, once an aggregator has gained some number of end users, suppliers will come onto the aggregator's platform on the aggregator's terms, effectively commoditizing and modularizing themselves. Those additional suppliers then make the aggregator more attractive to more users, which in turn draws more suppliers, in a virtuous cycle.

This means that for aggregators, customer acquisition costs decrease over time; marginal customers are attracted to the platform by virtue of the increasing number of suppliers. This further means that aggregators enjoy winner-take-all effects: since the value of an aggregator to end users is continually increasing it is exceedingly difficult for competitors to take away users or win new ones.

This is in contrast to non-platform companies that face *increasing* customer acquisition costs as their user base grows. That is because initial customers are often a perfect product-market fit; however, as that fit decreases, the surplus value from the product decreases as well and quickly turns negative. Generally speaking, any business that creates its customer value in-house is not an aggregator because eventually its customer acquisition costs will limit its growth potential.

One additional note: the aforementioned Apple and Amazon do have businesses that qualify as aggregators, at least to a degree: for Apple, it is the App Store (as well as the Google Play Store). Apple owns the user relationship, incurs zero marginal costs in serving that user, and has a network of App Developers continually improving supply in response to demand. Amazon, meanwhile, has Amazon Merchant Services, which is a two-sided network where Amazon owns the end user and passes all marginal costs to merchants (i.e. suppliers).

CLASSIFYING AGGREGATORS

Aggregation is fundamentally about owning the user relationship and being able to scale that relationship; that said, there are different levels of aggregation based on the aggregator's relationship to suppliers:

Level 1 Aggregators: Supply Acquisition

Level 1 Aggregators acquire their supply; their market power springs from their relationship with users, but is primarily manifested through superior buying power. That means these aggregators take longer to build and are more precarious in the short-term.

The best example of a Level 1 Aggregator is Netflix. Netflix owns the user relationship and bears no marginal costs in terms of COGS, distribution costs, or transaction costs. Moreover, Netflix does not create shows, but it does acquire them (increasingly exclusively to Netflix); the more content Netflix acquires, the more its value grows to potential users. And, the more users Netflix gains, the more it can spend on acquiring content in a virtuous cycle.

Level 1 aggregators typically operate in industries where supply is highly differentiated, and are susceptible to competitors with deeper pockets or orthogonal business models.

Level 2 Aggregators: Supply Transaction Costs

Level 2 Aggregators do not own their supply; however, they do incur transaction costs in bringing suppliers onto their platform. That limits the growth rate of Level 2 aggregators absent the incursion of significant supplier acquisition costs.

Uber is a Level 2 Aggregator (and Airbnb in some jurisdictions due to local regulations). Uber owns the user relationship and bears no marginal costs in terms of COGS, distribution costs, or transaction costs. Moreover, Uber does not own cars; those are supplied by drivers who sign up for the platform directly. At that point, though Uber needs to undertake steps like background checks, vehicle verification, etc. that incur transaction costs both in terms of money as well as time. This limits supply growth which ultimately limits demand growth.

Level 2 aggregators typically operate in industries with significant regulatory concerns that apply to the quality and safety of suppliers.

Level 3 Aggregators: Zero Supply Costs

Level 3 Aggregators do not own their supply and incur no supplier acquisition costs (either in terms of attracting suppliers or on-boarding them).

Google is the prototypical Level 3 Aggregator: suppliers (that is, websites) are not only accessible by Google by default, but in fact actively make themselves more easily searchable and discoverable (indeed, there is an entire industry — search engine optimization (SEO) — that is predicated on suppliers *paying* to get themselves onto Google more effectively).

Social networks are also Level 3 Aggregators: initial supply is provided by users (who are both users and suppliers); over time, as more and more attention is given to the social networks, professional content creators add their content to the social network for free.

Level 3 aggregators are predicated on massive numbers of users, which means they are usually advertising-based (which means they are free to users). An interesting exception is the aforementioned App Stores: in this case the limited market size (relatively speaking) is made up by the significantly increased revenue-per-customer available to app developers with suitable business models (primarily consumable in-app purchases).

The Super-Aggregators

Super-Aggregators operate multi-sided markets with at least *three sides* — users, suppliers, and advertisers — and have zero marginal costs on all of them. The only two examples are Facebook and Google, which in addition to attracting users and suppliers for free, also have self-serve advertising models that generate revenue without corresponding variable costs (other social networks like Twitter and Snapchat rely to a much greater degree on sales-force driven ad sales).

For more about Super-Aggregators see this article. [Excerpt added below.]

TRANSACTION COSTS

Go back to the generic cellular network company I discussed above, and think about what is entailed in adding a new customer (and leaving aside the marketing expenditure to make them aware of and desirous of the service in the first place):

- Talk with the customer on the phone or in person
- Collect identifying details and run a credit check
- Provision a SIM card and/or a phone
- Receive payment

- Manage contract renewals and cancellations and other customer service

While some of these activities could be automated, the reality is that the cost of customer management had a linear curve: more customers meant more costs. Moreover, these costs accumulated, limiting the natural size of any company; at some point the complexity of managing some finite number of customers across some finite number of geographic areas cost more than the marginal profit of adding one more customer, and that limited how big a company could grow (which, to be clear, could be very large indeed!).

What makes aggregators unique, though, is that thanks to the Internet they have zero transaction costs: for Google, or Airbnb, or Uber, or Netflix, or Amazon, or the online travel agents, adding one more customer is as simple as adding one more row in a database. Everything else is automated, from sign-up to billing to the delivery of the service in question. This is why all of these companies are global, often from day one, and, as I explained in Beyond Disruption, why they start at the high end of a market and work their way down.

Note that aggregators can deal with the physical world and still have zero transaction costs, at least on the consumer side: Airbnb deals with rooms, but bears no transaction costs when it comes to signing up new customers; Amazon and Uber are similar with regards to e-commerce and transportation, respectively. Netflix doesn't deal in physical goods (beyond its old DVD business), although it does bear significant transaction costs when it comes to sourcing content (in addition to actually paying for the content), but when it comes to customers there are no marginal costs at all.

Facebook and Google, though are a special case: they are (and yes, I know this is the least imaginative term ever) super-aggregators.

SUPER-AGGREGATORS

What makes Facebook and Google unique is that not only do they have zero transaction costs when it comes to serving end users, they also have zero transaction costs when it comes to both suppliers and advertisers.

Start with supply: not only is the vast majority of online content accessible to Google's search engine (unsurprisingly, the biggest exception is Facebook), but in fact that content wants to be discovered by Google. Nearly every site on the web has a sitemap that is intended not for

humans but for web crawlers, Google's in particularly, and there is an entire industry dedicated to search engine optimization (SEO). Netflix is on the opposite side of the spectrum here (unlike YouTube, it should be noted): the company has to actively source content and pay for it. Uber and Airbnb and Amazon are in the middle: theoretically there is an open platform for suppliers but there are costs involved in bringing them online.

Facebook takes this to another level: its users are its most important content providers, and they do it for free. Professional content providers aren't far behind, not only linking to all of their content but increasingly putting said content on Facebook directly (to the extent Facebook is paying for content it is to juice this cycle of self-interested content production on Facebook).

That said, there are a few more companies that have a similar content model: Twitter, Snapchat, LinkedIn, Yelp, etc. All run on user-generated content augmented by professional content placing links or original material on their services. However, there is still one more thing that separates Facebook and Google from the rest: advertisers.

Super-aggregators not only have zero transaction costs when it comes to users and content, but also when it comes to making money. This is at the very core of why Google and Facebook are so much more powerful than any of the other purely information-centric networks. The vast majority of advertisers on both networks never deal with a human (and if they do, it's in customer support functionality, not sales and account management): they simply use the self-serve ad products like the one pictured above (or a more comprehensive tool built on the companies' self-serve API).

This is the level that the other social networks have not reached: Twitter grew revenue, but primarily through its sales team, which meant that costs increased inline with revenue; the company never gained the leverage that comes from having a self-serve ad platform (specifically, the self-serve platform costs are fixed but the revenue is marginal).

REGULATING AGGREGATORS

Given the winner-take-all nature of Aggregators, there is, at least in theory, a clear relationship between Antitrust and Aggregation. However, traditional jurisprudence is limited by three factors:

- The key characteristic of Aggregators is that they own the user relationship. Critically, the user chooses this relationship because the aggregator offers a superior service. This makes it difficult to make antitrust arguments based on consumer welfare (the standard for U.S. jurisprudence for the last 35 years).
- The nature of digital markets is such that aggregators may be inevitable; traditional regulatory relief, like breaking companies up or limiting their addressable markets will likely result in a new aggregator simply taking their place.
- Aggregators make it dramatically simpler and cheaper for suppliers to reach customers (which is why suppliers work so hard to be on their platform). This increases the types of new businesses that can be created by virtue of the aggregators existing (YouTube creators, Amazon merchants, small publications, etc.); regulators should take care to preserve these new opportunities (and even protect them).

These are guidelines for regulation; determining specifics is an ongoing project for Stratechery, as are the definitions in this article.

Wednesday, September 27, 2017

BOOKS AND BLOGS REVISITED

In retrospect, this was an odd inclusion in a Weekly Article; I think I've been a bit 'shook', as the kids say, from teasing that I mention Aggregation Theory too often, and I in part wanted to explain why I was writing about it *again*: it is a living idea, so why wouldn't I want to tinker with it, particularly given my belief the impact extends far beyond technology?

At the same time, though, I saw the point as not simply an excuse but also as an allegory of sorts: one of the overarching takeaways of Aggregation Theory is that business as taught and understood for many years has fundamentally changed. The most successful companies no longer control supply but rather demand; moreover, that shift is not due to the actions of any one company but rather to the fundamentally changed structure of the market. I wrote in the original Aggregation Theory article:

Note how the distributors in all of these industries integrated backwards into supply: there have always been far more users/consumers than suppliers, which means that in a world where transactions are costly owning the supplier relationship provides significantly more leverage.

This is the critical insight: it has always been obvious that owning all customers is preferable to owning all suppliers; before the Internet, though, that was impossible. There was too much friction. In other words, the implication of the Internet is the enablement of new models that actually make *much* more sense, yet were previously unviable because of said friction.

This was the point of Books and Blog: in terms of benefit to both writers and readers blogs, at least when it comes to formulating new ideas about current events, are better. The former isn't locked into a moment in time, and the latter gets the most up-to-date ideas and a chance to give feedback. The problem is that before the Internet there wasn't a viable medium, and then even after blogs were invented there wasn't the business model; now there are both. So, given that, why should the expectation be that the old way be the obvious choice?

By the way, I was by no means saying all books are disrupted; just books about current events and analysis. I explicitly called out "stories, both fiction and non"; I think it's clear books are still the best format there. And, I'd add, I'm not ruling out a book at some point; for now, though, I think is it yet another area where most people's intuitions are in fact quite out of date.

MORE AGGREGATORS

I should have been more clear that Defining Aggregators did not include an exhaustive list of Aggregators; rather, those presented were meant as examples. That said, there are a number of clear additions — and a few that suggest more refinement is needed:

WeChat: WeChat is obviously an aggregator: it has a direct relationship with users, incurs zero marginal costs to serve them, and operates a demand-driven multi-sided network with decreasing acquisition costs. The only question is if WeChat is a mere Level 3 Aggregator (zero supply costs) or a Super-Aggregator (Level 3 + zero marginal costs in terms of revenue generation).

Keep in mind that WeChat's advertising business is still in its early days; the product primarily makes money indirectly, by driving users towards free-to-play games with in-app purchases. Those games, though, fit a Super Aggregator revenue-generation model: they entail significant fixed costs to develop, but the actual revenue generation has zero transaction costs; I would call WeChat a Super-Aggregator, and that is even before it brings its inevitable self-serve ad model fully online.

Actually, that's not quite right: WeChat has to pay Apple 30% for transactions on iOS. I would classify that revenue, though, as akin to credit card fees (even though it is obviously much greater on a percentage basis): specifically, transaction fees that are seamlessly tied to revenue on a 1×1 basis are excluded from the zero marginal cost requirements (when I refer to transaction costs I am thinking of costs that are not fully automated). Good thing I didn't write that book!

Alibaba: I explained last month why I'm hesitant to dive too deeply into Chinese companies; it's hard to know for sure what is going on, and Alibaba (the ultimate example) made my point with its announcement this week that the company was upping its stake in Cainiao Smart Logistics Network from 47% to 51% and folding the company's financials into its own. In fact, the SEC was investigating Alibaba for not including Cainiao's financials given its clear integration with Alibaba's business — and Cainiao is one of only many entities Alibaba effectively owns and operates but doesn't include on its balance sheet. Like I said, hard to analyze effectively.

That said, Alibaba is certainly a Level 3 aggregator and probably a Super-Aggregator: suppliers list themselves directly on Alibaba's platform, and many of them also pay to advertise on Alibaba (its most important revenue source); that revenue is nearly all self-serve with zero transaction costs (note: it is no issue that Alibaba's suppliers are also its advertisers; it's not different than a social network's users also being its suppliers).

Baidu: A Super-Aggregator, similar to Google. That said, Baidu is significantly weaker: the company is far weaker on mobile than Google, which is particularly problematic given that most of China leap-frogged the PC.

Craigslist: A surprising Super-Aggregator! Craigslist acquires supply for free and makes revenue without any transaction costs. That said, the company's limited ambitions in terms of making money probably disqualify it from an honest comparison.

eBay: eBay is probably the most under-appreciated company in tech history; I call Google the grandaddy aggregator, but that means that eBay is the great-grandaddy. That said, eBay is a Level 2 aggregator, thanks to their business model: the company itself exacts costs on suppliers (note, though, like any good aggregator eBay is free for users/customers). It is interesting to imagine an alternative history for eBay where the company pursues a Level 3 model, perhaps

making money by offering advertising to sellers (like Alibaba) or more deeply leveraging Paypal.

Online Travel Agents: These revealed one of the bigger holes in my classification; where do they go? On one hand, Priceline and Expedia serve customers on a zero marginal cost basis, and have power over supply (traditionally, Expedia was a Level 1 Aggregator that bought supply while Priceline — Booking.com specifically — had a Level 2 model where supply came on-board with a self-serve model but required costs to collect payment). The problem is that a huge amount of OTA's business comes from search engine marketing; in other words, they don't have the organic user relationship that defines aggregators, but instead have to pay for it.

I'm going to think about these for a little bit; I suspect they are their own exceptional class. Mostly Level 2, but with the caveat that their relationship with users is a paid one, which, naturally, puts them at risk from Google in particular.

Zillow and Redfin: Zillow is arguably a super-aggregator, but a very weak one. Specifically, users, suppliers, and revenue (that is suppliers advertising, not unlike Alibaba) come online on a zero marginal cost basis. However, Zillow is also excluded from the majority of the transaction (Zillow is basically a real estate agent marketing tool, not a real estate transaction participant).

Redfin, on the other hand, is a Level 1 aggregator: the company actually has real estate agents that bring supply onto the platform, and then charge a commission on the sale. This is a tougher slog, in many respects, but it's also a higher revenue one on a per-transaction basis (you'll note that increasing levels of aggregation generally correspond to less revenue per transaction but dramatically higher volume).

Yelp and OpenTable: Yelp is a Level 3 aggregator, with a model not unlike social networks; however, like non-Facebook social networks, Yelp incurs marginal costs in generating revenue.

OpenTable, on the other hand, is a Level 2 aggregator: it doesn't buy supply, but it does incur transaction costs in bringing suppliers online. The problem for OpenTable (and Yelp and TripAdvisor and others) is that their hold on the customer is a bit tenuous: how many customers start on Yelp, for example, versus reaching the site/app through search results? OpenTable is even weaker: a lot of business is generated by restaurants directly who are effectively using

OpenTable as a technological solution yet paying fees more in line with customer acquisition costs.

You can see, by the way, why Google looms so large: if discovery is the primary way that aggregators gain a foothold, then the company that is best at search has a massive head start. Small wonder many of these more focused aggregators are the primary drivers of antitrust action against Google; indeed, the irony is that their complaint is that Google seeks to dominates their market in the *exact same way* they hope to dominate it.

September 28, 2017

ROKU'S IPO AND ORIGIN STORY

Roku will begin trading later this morning after completing its IPO last night. From CNBC:

Roku set its IPO price at $14 per share, according to Dow Jones, which would give the video streaming device maker a $1.3 billion stock market value when it debuts on Thursday, CNBC has confirmed.

Roku filed its IPO prospectus earlier this month. The company generated $199.7 million in revenue during the first six months of this year, a 23 period jump from the same period of 2016. The company's loss over that stretch narrowed to $24.2 million from $33.2 million. The 15-year-old company is best known for its video streaming devices that let users access Netflix, Amazon, YouTube and dozens of online channels. Roku will trade on the Nasdaq under the stock ticker "ROKU."

Roku has a particularly interesting origin story; from this 2013 article in Fast Company:

They codenamed the top-secret project "Griffin," after Tim Robbins' character from the film "The Player." After all, that's what the team was building: The Netflix Player, a black and boxy device, as plain and compact as a necklace case, which subscribers would hook up to their televisions to stream movies and TV shows from the web. Netflix executives knew it could fundamentally change how the company delivered content to its customers, who were used to waiting days for DVDs to arrive by mail. Soon, Netflix could leverage the digital content deals it

was striking with studios to dominate the living room, a war still waging today between industry giants like Apple, Google, and Microsoft.

It was December 2007, and the device was just weeks away from launching. Yet after all the years and resources and talent invested in the project (a team of roughly 20 had been working on it around the clock, from ironing out the industrial design and user interface to taking trips to Foxconn to finalize production details), Netflix CEO Reed Hastings was having serious second thoughts. The problem? Hastings realized that if Netflix shipped its own hardware, it would complicate potential partnerships with other hardware makers. "Reed said to me one day, 'I want to be able to call Steve Jobs and talk to him about putting Netflix on Apple TV,'" recalls one high-level source. "'But if I'm making my own hardware, Steve's not going to take my call.'"

To the surprise of most employees at the company, Hastings decided to kill The Netflix Player, and spin the team out as a separate company. His decision, made almost exactly five years ago this month, was one of the riskiest moves in Netflix's history. But it also proved to be one of Hastings' most prescient. By shelving its hardware and remaining an agnostic platform, Netflix was able to transform itself into a digital powerhouse and become the dominant player in subscription streaming video. Its service is now ubiquitous, accessible on computers, smartphones, tablets, Internet-connected TVs, Blu-ray players, set-top boxes, and video game consoles.

Project "Griffin" was spun-out as a separate company named Roku.

The most obvious takeaway is one of the longest-running themes on Stratechery: it is very dangerous to mix horizontal and vertical business models. For dominant companies, the danger is subtle: a vertical company may have a subpar horizontal service, or a horizontal company may be tempted to favor its vertical solution at the expense of its overall market opportunity.

In 2007, though, Netflix — at least the Netflix that we think of today, that is the video streaming service — was not at all dominant; it was barely even a thing. That meant that Hastings' decision wasn't simply endangering what we now clearly think of as a horizontal services company; rather, said decision defined whether or Netflix or vertical or horizontal in the first place.

It's hard to remember now, but releasing a set-top box made plenty of sense in 2007: AppleTV (then iTV) had been teased, but not yet released, and there were no other dedicated streaming boxes on the market (Microsoft sold Media Center PCs that were about as successful as you might expect). Streaming was an immature market, and in immature markets, integrated offerings make sense: by combining hardware and its nascent streaming service Netflix could have delivered a better experience sooner.

In the long run, though, Netflix needed to be everywhere: the company was making massive up-front investments in content (and would soon increase that amount massively), and the best way to leverage that content was to maximize the total addressable market, which, thanks to the Internet, was (then, only in theory) the entire world; setting up a situation where Netflix was competing with devices it needed to partner with would have helped Netflix in the short term and possibly doomed them in the long term.

NETFLIX VERSUS ROKU AND THE CONSERVATION OF ATTRACTIVE PROFITS

Netflix's value proposition, though, was about more than delivering TV shows via packets instead of RF signals; I explained in Netflix and the Conservation of Attractive Profits:

What is revolutionary about on-demand streaming in general and Netflix in particular is that the service has commoditized time: on Netflix Sunday at 9pm is no different than Tuesday at 11am or Friday at 6pm; there is no prime time. Thus Netflix will release original series all at once, because why not? Best to maximize the number of minutes over which an expensive upfront cost like producing a show can be utilized…

When you think about it that way — that Netflix isn't so much a network as they are a type of marketplace in which consumers can give their attention to creators — it becomes apparent that Netflix isn't that far off from Uber or Airbnb or any of the other market-makers that are transforming industry-after-industry.

As I went on to explain in that article, streaming shifted the point of integration away from networks (who controlled programming of a linear schedule and content acquisition) towards streaming services that integrated the customer relationship with content acquisition; programming a linear TV schedule was on the same path to irrelevance as controlling brick-and-mortar shelf space. To put it in theoretical terms, according to Clayton Christensen's Law of

Conservation of Attractive Profits, the shift in integration in a value chain leads to a shift in profit-making potential towards the new integrator — Netflix (with the obvious caveat that Netflix is still investing in growth and not profits).

It's worth noting, by the way, that the old cable TV ecosystem was unique in that there was significant profit to be had outside of the integration of programming and content; specifically, cable operators made excellent profits, even though they were, according to the theory, a modular part of the value chain. That, though, was because cable has long been a natural monopoly: running new coaxial cable is prohibitively expensive, which means the cable companies long extracted more value from the cable TV value chain than they deserved based on their place in the value chain.

So what does this all mean for Roku, even before we get to the S-1?

First, Roku is not a cable company. While the company claims it has more active accounts than the "fourth largest multichannel video programming video distributor in the United States", a Roku streaming box is trivially replaced by an Apple TV, Chromecast, FireTV, built-in TV apps, cable set-top boxes, etc. Small wonder the company sells its boxes with only a 12% gross profit (and almost certainly a negative net profit).

That then means a bet on Roku is a bet *against* Netflix. This is because both Roku and Netflix are in the same value chain, and we should generally expect that only one part of the value chain achieves outsize profits — the integrated part (integration in one part of the value chain drives modularization and commoditization in the rest of it). Netflix is betting that the point of integration is customers and content; Roku is betting that it can profitably integrate customers and streaming services generally.

"WEAK" AGGREGATORS

Thinking about Roku has actually helped me work through the "weak" aggregators I identified yesterday — companies like Zillow or Trip Advisor. These companies successfully garner customers, but, as I wrote about Zillow:

Zillow is arguably a super-aggregator, but a very weak one. Specifically, users, suppliers, and revenue (that is suppliers advertising, not unlike Alibaba) come online on a zero marginal cost

basis. However, Zillow is also excluded from the majority of the transaction (Zillow is basically a real estate agent marketing tool, not a real estate transaction participant).

A better characterization of Zillow is that it is a lead generation tool for real estate agents, who actually profit from real estate transactions thanks to their control of the process (at least in North America). This is also the case with Trip Advisor: the company tried to shift into the travel agent business, and away from lead generation for Priceline and Expedia, and was crushed; the company has spent the last year trying to convince investors its original "meta" business — that is, lead-generation — is not being hindered by the company's attempt to compete with its true suppliers (Priceline and Expedia), who are the real aggregators in travel (along with Airbnb).

This gets to an important distinction that I think was missing in Defining Aggregators: Aggregators have power over supply. Start with travel: Booking and Expedia are hated by hotels, but hotels still are on their platforms, because they need Booking and Expedia because they have so much influence with customers. Similarly, real estate agents hold the real power in that market; Zillow is estranged from actual houses.

This is the case with Roku. The company clearly tries to make the case in its S-1 that it is an aggregator:

When users want to enjoy streaming entertainment, they start at the Roku home screen where we put users first by helping them find the content they want to watch. From our home screen, users can easily search, discover and access over 500,000 movies and TV episodes in the United States, as well as live sports, music, news and more. Users can also compare the price of content from various channels available on our platform and choose from ad-supported, subscription and transactional video on-demand content. The Roku platform delivers a significant expansion in consumer choice.

The problem is that while Roku is arguing that it commoditizes streaming services, streaming services remain differentiated by the content that they have. Only Netflix has 'Stranger Things'; only HBO has 'Game of Thrones'; only YouTube has, well, YouTube content. Small wonder Netflix and YouTube in particular give minimal revenue to Roku: Roku needs them more than they need Roku. In short, differentiation still matters; by extension, this is why the most powerful

aggregators (Google and Facebook) dominate industries where differentiation is increasingly difficult to achieve (online publishing).

Google and Facebook loom large for Roku in another way: the company is (rightly) not planning to make money from hardware, but rather through a mix of lead-generation and advertising. Why, though, would an advertiser go to Roku instead of Google or Facebook? Roku claims it knows what its users watch, but Google and Facebook know that too, and so much more.

To that end, allow me to offer an amendment to my definition of aggregators that doubles as an expression of skepticism about Roku: aggregators differ from lead-generators in that they directly influence and have power over supply (I'm tempted to say that they integrate consumers and suppliers directly, but I have to think through it more). Roku has no such power, which isn't to say it isn't a viable company; it simply isn't an aggregator, and shouldn't be valued as such.

From Disney and Integrators Versus Aggregators (October 13, 2020):

Aggregators Versus Integrators

More broadly, the totality of Disney's approach demonstrates how an integrator ought to operate orthogonally to Aggregators in the world of content.

Aggregators are content agnostic. Integrators are predicated on differentiation.

Facebook reduces all content to similarly sized rectangles in your feed: a deeply reported investigative report is given the same prominence and visual presentation as photos of your classmate's baby; all that Facebook cares about is keeping you engaged. Content created by Disney, on the other hand, must be unique to Disney, and memorable, as it is the linchpin for their entire business.

Aggregators provide leverage. Integrators capture margin.

Modularized content creators, like our bananas publisher, spend money to create content and then seek to recoup their costs by spreading that content as far and wide as possible. Google and Facebook are the most efficient means of achieving this goal. Disney, though, is increasingly focused on capturing more and more margin from its differentiated content, both when it is created and for decades to come.

Aggregators seek to serve the maximum number of consumers. Integrators seek to monetize consumers to the maximum extent.

Google and Facebook are so attractive to content creators precisely because they reach so many consumers; a few pennies or dollars from billions of people is a tremendous amount of money. Disney, meanwhile, particularly as it restricts its content to its own services, is limiting the size of its addressable market, but increasing the amount of money it can make per user in the market that remains.

Aggregators commoditize creation. Integrators operationalize creation.

Google doesn't care from whence content comes, it simply wants content (this, unsurprisingly, has led to a whole host of businesses primarily predicated on being organic Google search results). Disney, meanwhile, wants to create differentiated content without unduly empowering individual content creators and giving them **wholesale transfer pricing power**; this leads the company to invest both in animation, which is wholly owned by Disney, and franchises, which are bigger and more valuable than the actors that bring them to life.

Aggregators avoid internal integration. Integrators avoid internal aggregation.

Aggregators get themselves in strategic trouble when they leverage their horizontal services to differentiate their own attempts at integration (Google **made this mistake with Android** a decade ago). Integrators, on the other hand, get in trouble when they serve specific audiences that don't accrue to the whole. This was the mistake the *New York Times* was making with their focus on the front page, and as long as Disney's studio and media divisions were responsible for the company's theater and TV business they would be incentivized to serve those pre-existing audiences instead of Disney's overall strategic goals.

Indy Integrators

In one of the above excerpts I put *Stratechery* in the same category as the *New York Times*; what is fascinating about the sorting effect that the Internet has on business models is that I could do the same thing with regards to Disney: yes, it is perhaps audacious to compare a one-person blog to the largest entertainment company the world has ever seen, but that is only because Aggregators are that much greater.

Just think about it: the success or failure of my business is predicated on differentiated content, high margins, high average revenue per customer, controlling content creation, and not being distracted by short-term money-making opportunities. All of this applies to the *New York Times* too: differentiated high-margin content, high prices, operationalized creation, and, at least for now, a combination of brand and pocketbook that is **attracting and keeping stars** at the expense of many other publications.

This model is still in its early days, but there is reason to be excited about the future. So much content in the analog era was predicated on reaching the mass market consumer with lowest common denominator content; after all, there simply weren't that many choices. Google and Facebook, like junk food purveyors leveraging our evolutionary impulse for high caloric food, transformed that lowest common denominator approach into content strategies that increasingly scraped the barrel in terms of both quality and effort, simply because it was easier to make a living that way, at least for a while.

A long life, though, depends on healthy living, which in this case means building a business that doesn't just produce differentiated content, but has an entire business model and integrated approach to match. The ultimate winners are the consumers that yes, pay for the content, but happily so, because it is something they value. There is room for plenty more.

****

Alice Schroeder on Warren Buffett's filtering process:

> "Typically, and this is not well understood, his way of thinking is that there are disqualifying features to an investment. So he rifles through and as soon as you hit one of those it's done. Doesn't like the CEO, forget it. Too much tail risk, forget it. Low-margin business, forget it. Many people would try to see whether a balance of other factors made up for these things. He doesn't analyze from A to Z; it's a time-waster."

More on Buffett's filtering process, from Peter Bevelin's *Seeking Wisdom*:

> At a press conference in 2001, when Warren Buffett was asked how he evaluated new business ideas, he said he used 4 criteria as filters.

1. Can I understand it? If it passes this filter,
2. Does it look like it has some kind of sustainable competitive advantage? If it passes this filter,
3. Is the management composed of able and honest people? If it passes this filter,
4. Is the price right? If it passes this filter, then we write a check.

Warren Buffett on his criteria, from his 1993 letter to shareholders:

In our opinion, the real risk that an investor must assess is whether his aggregate after-tax receipts from an investment (including those he receives on sale) will, over his prospective holding period, give him at least as much purchasing power as he had to begin with, plus a modest rate of interest on that initial stake. Though this risk cannot be calculated with engineering precision, it can in some cases be judged with a degree of accuracy that is useful. The primary factors bearing upon this evaluation are:

1) The certainty with which the long-term economic characteristics of the business can be evaluated;

2) The certainty with which management can be evaluated, both as to its ability to realize the full potential of the business and to wisely employ its cash flows;

3) The certainty with which management can be counted on to channel the rewards from the business to the shareholders rather than to itself;

4) The purchase price of the business;

5) The levels of taxation and inflation that will be experienced and that will determine the degree by which an investor's purchasing-power return is reduced from his gross return.

These factors will probably strike many analysts as unbearably fuzzy, since they cannot be extracted from a data base of any kind. But the difficulty of precisely quantifying these matters does not negate their importance nor is it insuperable. Just as Justice Stewart found it impossible

to formulate a test for obscenity but nevertheless asserted, "I know it when I see it," so also can investors - in an inexact but useful way - "see" the risks inherent in certain investments without reference to complex equations or price histories.

Alice Schroeder (from a talk on Mid-Continent Tab) discussing Buffett's first filter (What can go wrong?):

So when *Wayne Ace* and *Warren Cleary* who were two friends of *Warren*'s saw that *IBM* was going to have to divest in this business, and they thought, "We are going to buy a Carroll Press which was a press that makes these cards. And we are going to compete with *IBM* because we are based in the Mid West, we can ship faster. We can provide better service. And they went to *Warren* and they said, "Should we invest in this company and would you come in with us? And *Warren* said, "No."

Well, why did he say no? He didn't say no because it was a technology company. He said no because he went through the first step in his investing process. This is where I think what he does is very automatic but it isn't well understood. **He acted like a horse handicapper.** The first stop in *Warren*'s investing process is always to say, "**What are the odds that this business could be subject to any type of catastrophe risk—that could make it (the business) fail?** And if there is any chance that any significant part of his capital would be subject to catastrophe risk, he just stops thinking. NO. He just won't go there.

It is backwards the way most people think because most people find an interesting idea and figure out the math, they look at the financials, they do a projection and then at the end, they ask, "What could go wrong?"

Warren starts with what could go wrong and here he thought that a start-up business competing with *IBM* can fail. Nope, pass, sorry. And he didn't think anymore about it. But Wayne and Cleary went ahead anyway and within a year they were printing 35 million tab cards

a month. At that point, they knew they had to buy more Carroll Presses so they came back to *Warren* and said, we need money—would you like to come in?

So now, *Warren* is interested because the catastrophe risk is gone. They are competing successfully against *IBM*. So he asks them the numbers, and they explain to him that they are turning their capital over 7 times a year. A Carroll Press costs $78,000 dollars and every time they run a set of cards through and turn their capital over, they are making over $11,000. So basically their gross profit on a press (7 x $11,000 = $77,000) is enough to buy another printing press. At this point Warren is very interested because their net profit margins are 40%. It is one of the most profitable businesses he has ever had the opportunity to invest in.

Notably people are now bringing *Warren* special deals to invest in—it is 1959. He has been in business for 2.5 years running the partnership. Why are they doing that? It is not because he is a great stock picker. They don't know that. He hasn't yet made that record. **It is because he knows so much about business, and he started so early he has a lot of money.** So this is something interesting about Warren Buffett—people were bringing him special deals like they are today with *Goldman Sachs* and *GE*.

He decided to come in and invest in the *Mid-Continent Tab Company* but, interestingly, he did not take *Wayne* and *John's* word for it because the numbers they gave him were very enticing. But, again, he went through, and he acted like a horse handicapper.

Now here is another point of departure. **Everyone that I know or knew as an analyst would have created a model for this company and projected out its earnings or looked at its return on investment in the future.**

Warren didn't do that. In going through hundreds of his files, **I never saw anything that looked like a model.** What he did is he did what you would do with a horse….**he figured out theone or two factorsthat determined the success of the investment.** In this case, it was the cost advantage that had to continue for the investment to work. And then he took all the historical data, quarter by quarter for every single plant and he obtained similar information as best he could from every competitor they had, and he filled several pages with little hen scratches with all this information and then he studied that information.

Then he made a yes/no decision. He looked at—they were getting 36% margins, they were growing over 70% a year on a $1 million of sales—so those were the historical numbers. He looked at them in great detail like a horse handicapper would studying the races and then he said to himself, "I want a 15% return on $2 million of sales and said, Yes, I can get that." Then he came in as an investor.

OK, what he did was he incorporated his whole earnings model and compounding (discounted cash flow or DCF) into that one sentence. He wanted 15% on $2 million of sales (a doubling from $1 million current sales). Why does he choose 15%? Warren is not greedy, he always wants 15% day one return on investment, and then it compounds from there. That is all he has ever wanted and he is happy with that. …You are not laughing, what's wrong? *(Laughs)*

It is a very simple thing, nothing fancy about it. And that is another important lesson because he is a very simple guy. He doesn't do any DCF models or any thing like that. He has said for decades, "I want a 15% day one return on my capital and I want it to grow from there-ta da! The $2 million of sales was pretty simple too. It had a million in sales already and it was growing at 70% so there was a big margin of safety built into those
numbers.

It had a 36% profit margin—he said I would take half that or 18%. And he ended up putting in $60,000 of his personal, non-partnership money which was 20% of his net worth at that time. He got 16% of the company's stock plus some subordinated notes. And the way he thought about it was really simple. It was a one step decision. He looked at historical data and he had this generic return that he wants on everything. It was a very easy decision for him. **He relied totally on historical figures with no projections.**

I think that is a really interesting way to look at it because I saw him do it over and over again in different investments.

Kinetic Energy

In physics, the kinetic energy of an object is the energy which it possesses due to its motion. It is defined as the work needed to accelerate a body of a given mass from rest to its stated velocity. Having gained this energy during its acceleration, the body maintains this kinetic energy unless its speed changes. The same amount of work is done by the body in decelerating from its current speed to a state of rest.

In classical mechanics, the kinetic energy of a non-rotating object of mass m traveling at a speed v is $\frac{1}{2} mv^2$. In relativistic mechanics, this is only a good approximation when v is much less than the speed of light.

- Velocity is more important than mass because it gets squared….changing it by the same amount has that exponential effect.
- The difference between velocity and speed is that velocity includes direction.
- This mental model helps explain why some small companies seem to come from nowhere and eventually overtake larger competitors (e.g. Wal-Mart, Google, Amazon, etc.)….they travel fast and in the right direction, and the larger companies have trouble keeping up. Some larger companies have been good in the past at disrupting their core businesses in order to not become victims to smaller, faster-moving companies that could have disrupted what they were doing (e.g. Apple [iPod/iPhone], Amazon [books/Kindle], etc.). And in return, they became the leaders in the new market, as well as the old.

Excerpt from East Coast Asset Management's Q3 2014 Letter:

I recently invited Peter D. Kaufman, CEO of Glenair, Board Member of the Daily Journal, and Editor of *Poor Charlie's Almanac*, to come speak to the Security Analysis class I teach at Columbia Business School. Peter Kaufman is an exceptional business operator and is also one of the great multidisciplinary thinkers of our time. On the topic of multidisciplinary learning and rational decision-making, Peter shared the approach he uses, which he refers to as his "three-bucket" framework, to arrive at universal principles that have high utility. Peter shared:

"Every statistician knows that a large, relevant sample size is their best friend. What are the three largest, most relevant sample sizes for identifying universal principals? Bucket number one is inorganic systems, which are 13.7 billion years in size. It's all the laws of math and physics, the entire physical universe. Bucket number two is organic systems, 3.5 billion years of biology on Earth. And bucket number three is human history, you can pick your own number, I picked 20,000 years of recorded human behavior. Those are the three largest sample sizes we can access and the most relevant."

Peter then walked the class through how *compounding* and the law of *reciprocity* can be applied to these data sets and therefore applied to reason. A light immediately went on. Applying questions to these three large data sets simplified and strengthened how I was organizing and applying mental models. Kaufman's approach provides a framework of general laws that have **stood the test of time** – invariant, unchanging lenses that we can use to focus and arrive at workable answers. A multidisciplinary framework helps shift the human paradigm to one of an empathetic perspective, as if we were looking from the outside in. Just as I began this letter with the three foundational insights of Dialectical Materialism, we want to be constantly searching for these types of *invariant* strategies that can serve us in rational decision-making….

Seeing the Forest and the Trees:

One of the most limiting biases for individuals attempting to make sense of complex systems is that they are a part of the systems. When you are part of the system it becomes increasingly difficult to **see the forest for the trees**. Each individual tree's uniqueness and complexity can lead to confusion and ambiguity. The key is to attempt to step outside of the system and see the forest and trees for the essence of what they are. How can we find these groves or islands of simplicity in an infinitely complex world?

Jason Zweig of the *Wall Street Journal* asked Charlie Munger to describe a key attribute of Berkshire Hathaway's evolution over the years. His response*: "There isn't one novel thought in all of how Berkshire is run. It's all about what [Mr. Munger's friend] Peter [Kaufman] calls 'exploiting unrecognized simplicities."* Peter Kaufman was sitting with Charlie during this interview after the recent Daily Journal annual meeting. The entire quote that Charlie was referencing was one that Peter attributes to a 28 year old writer for *Sports Illustrated* named Andy Benoit, who wrote these words to describe the essence of a particular quarterback's

genius: *"Most geniuses—especially those who lead others—prosper not by deconstructing intricate complexities but by exploiting unrecognized simplicities."* This quote captures the essence of genius and can serve as a roadmap to the *Grove of Titans*.

Finding unrecognized simplicities requires one to step outside the forest, outside of the human system to see and measure holistically without biases….

IV. Evolution – Persistent Incremental Progress Eternally Repeated:

Compounding, evolution, and human and business success are only made possible by persistent, incremental progress, repeated without end. The Coastal Redwood, with the help of an evolved cultural hexaploidal DNA, doggedly progresses incrementally every day, every year, some over the last two millennia. Always getting better, flood and fire prepared, quenched by drinking in the fog of uncertainty in the niche they dominate, leaning toward a shifting angle of the sun, growing deeper roots through evolving geology. The Coastal Redwood also importantly controls growth. Most trees grow too fast reaching for the sun. *Overreaching* is one of most common causes of death in trees as it creates an air pocket in the trees' pipes, xylem, which is why trees will often rot from the inside out.

Enduring businesses avoid this fate by employing resolute incremental growth. The stewards of these enduring businesses know that most business failures are the direct result of overreaching. Instead of incremental progress, they overreach in an effort to 'get theirs now.' Quite often, that unnecessary "extra" decays the organization from the inside out. If you study business failure, you can point to overreaching as the single biggest cause of dialectical materialism in business. We see it every day in the marketplace, in how management rewards themselves with options, and in how management teams follow inferior mergers and acquisitions strategies. How often do we see mergers and acquisitions work well in biology? It is a biologically flawed objective, so why should it work seamlessly in business? It is a short-cut strategy to produce growth that often creates that same embolism that will eventually rot the decent business as they try to merge contrasting DNAs. There are evolved business systems that can integrate mergers and acquisitions well, but they are outliers.

From Peter Bevelin (on Buffett and Munger):

> As Munger says: "All I want to know is where I'm going to die so I'll never go there." When I hear them at the annual meeting, I am thinking about Einstein's reply to a student. The student had challenged Einstein's statement that the laws of physics should be simple by asking: "What if they aren't simple?" Einstein replied, "Then I would not be interested in them."
>
> They have a unique ability to distinguish masses of trivia from what is really important – to filter out situations, and find what's at their core.

More from Peter Bevelin (Farnam Street 2016 interview):

> And as the years have passed, I've found that filters are a great way to save time and misery. As Buffett says, "I process information very quickly since I have filters in my mind." And they have to be simple – as the proverb says, "Beware of the door that has too many keys." The more complicated a process is, the less effective it is.

****

June 30, 2009 letter from Nick Sleep:

The Investment Industry and Over-Diversification, again.

In business, thoughtful whispering works, which makes it all the more remarkable that the investment industry, as well as many economic commentators, spend so much time shouting. So much commentary espouses certainty on a multitude of issues, and so little of what is said is, at least in our opinion, knowable. The absolute certainty in the voice of the proponent so often seeks to mask the weakness of the argument. If Zak and I spot this, we metaphorically tune out. In our opinion, just a few big things in life are knowable. And it is because just a few things are knowable that Nomad has just a few investments.

The church of diversification, in whose pews the professional fund management industry sits, proposes many holdings. They do this not because managers have so many insights, but so few! Diversity, in this context, is seen as insurance against any one idea being wrong. Like Darwin, we find ourselves disagreeing with the theocracy. We would propose that if knowledge is a

source of value added, and few things can be known for sure, then it logically follows that owning more stocks does not lower risk but raises it! Real diversification is offered by index funds at a fraction of the price of active management.

Sam Walton did not make his money through diversifying his holdings. Nor did Gates, Carnegie, McMurtry, Rockefeller, Slim, Li Ka-shing or Buffett. Great businesses are not built that way. Indeed the portfolios of these men were, more or less, one hundred percent in one company and they did not consider it risky! Suggest that to your average mutual fund manager. And it is interesting to note that none of the great fund management organizations got rich on the back of the most successful companies of the modern era either!

This failure goes largely unrecognized, and certainly ignored, perhaps because it is the elephant in the room. (Quick, change the subject). It is ignored because some fund managers are not trying to make clients rich per se, but instead their goal is to beat their peers or a benchmark. Fine, but what strikes us about such a disposition is that, somewhere in that frame of mind, one ceases to be an investor and starts to be a business manager and, to borrow a phrase from a popular UK TV advert, *"that's not what is says on the tin"*. When investment skills share a seat with business management, in time, it's the commercial genes that tend to thrive, and investment skills that are not used end up atrophying. Is that why the fund management industry finds itself, like GM, relying so heavily on marketing?

Back to real investing! The trick, it seems to us, if one is to be a successful long-term investor, is to recognize the sources of enduring business success, get in early and own enough to make a difference. Which raises two questions: what are the sources of success and second, if these are so readily recognized up front why are they not discounted in prices already? We will spend the balance of this letter answering these two questions.

Seeing, but not Understanding.

How might corporate success be predictable? There are some clues in the world around us. Zak and I observe several business models that work in the long run, and scale economics shared is one of these, witness Ryanair, Wal-Mart, Geico, Southeast Airlines, Tesco, Nebraska Furniture Mart, Direct Line et al. And that is why companies that share scale with the customer such as Carpetright, Costco, Berkshire Hathaway, Amazon and AirAsia make up around sixty percent of

the Partnership. It works because it turns size, normally an anchor to growth and returns, into an asset. But I also don't think this is a great secret.

Investors are broadly rational people (they all knew that Wal-Mart was a wonderful business) and fund managers operate under healthy profit incentives that ought to foster good outcomes, so why is it that no one but the founding Walton family owned Wal-Mart all the way through? Zak and I were told a story by one of the industry's most senior fund managers which we enjoyed enormously, and might help illustrate the point. In the early 1970s a then, and still today, large successful fund management company analysed its portfolio and discovered that their sale of IBM thirty years earlier had been a huge error of omission. If they had instead kept their IBM shares for the last thirty years, that stake alone would have been larger than total funds under management. No doubt they all agreed to learn from that particular mistake and, as so often happens, went back to their desks and got on with life as before, as if nothing had happened. It is fun to note that, at about the same time, they also made the decision to sell their stake in Wal-Mart, which, thirty years later, would be worth more than their then-to-be funds under management! In terms of dollars of opportunity lost, it is likely to be the biggest single error this firm will make. We offer the following reasons for this mistake:

1. Misanalysis, or using the wrong mental model: Investors are used to firms which have one good idea, such as a new product, but then struggle to replicate success and end up diluting returns (Zak and I call this the Barbie problem, as Mattel has struggled to replicate the economics of its famous doll). Taking this model and applying it to Wal-Mart would miss the company's source of success entirely as the strategy of price givebacks did not change from year to year; culture plays a part in the continuity of a successful price giveback strategy and factors such as culture, because they are hard to quantify, often go undervalued by investors; investors presume regression to the mean starts at the time of their analysis or, as CFA students may recognize, in year three or five of a DCF analysis! Investors use valuation heuristics rather than assess the real value of the business.

2. Structural or behavioral: Active fund managers have to look active. One way to do this is to sell Wal-Mart, which appeared expensive (but actually wasn't), to buy something that appeared cheaper (but err, also wasn't); investors are not long-term and did not look further than the next few years or, more recently, few quarters. Evidence for this can be gleaned from the average

holding periods for shares which stands at just a few months; fund managers wish to keep their jobs and espousing a ten-year view on a firm risks being a hostage to fortune; marketing folks require new stories to tell and new stocks in the portfolio provide new stories; fund managers sell their winners in order to appear diversified in the eyes of their clients.

3. Odds or incorrectly weighing the bet: In the words of my first boss, investors tend not to believe in *"longevity of compound"*. Conventional thinking has it that good things do not last, and indeed, on average that's right! Empirical Research Partners, an investment research boutique, discovered that the chance of a growth stock keeping its status as a growth stock for five years is one in five, and for ten years just one in ten. On average, companies fail.

The list above is far from exhaustive and we can all pick our favorites. No doubt some combination of these, plus others, acted in the minds of sellers. It matters not particularly. What matters is the effect of this collective mis-cognition. Investors know that in time average companies fail, and so stocks are discounted for that risk.

However, this discount is applied to all stocks even those that, in the end, do not fail. The shares of great companies can therefore be cheap, in some cases, for decades. To illustrate the point consider the graph below. The blue line represents the share price of Wal-Mart and the red line the price that one could have paid at any time since 1972 (the firm's initial public offering) and then earned a return of ten percent (a proxy for a reasonable equity return) through to today. The red line can be thought of as what the firm was really worth.

[Chart, Page 72]

Just look how long the undervaluation persisted [over 18 years]! If, in 1972, upon reading that year's twelve page annual report (!) an investor chose to make a purchase of shares, he could have paid over one hundred and fifty times the prevailing share price (a price to earnings ratio of over fifteen-hundred times, a ratio far in excess of what professional fund managers would consider prudent. They would be mistaken, as it turns out) and he would have still earned a ten percent return on his investment through to today. If, instead, the investor thought about it for a while and decided to purchase shares ten years later he could still have paid over two hundred times earnings for his shares (beware heuristics) and still earned ten percent on his investment. And ten years after that could also have paid a premium over the prevailing Wal-Mart share price

and done well subsequently. The market struggled to appreciate the magnitude and longevity of the business' success. But why?

Weighting the Information.

Investors see the information (on conference calls they cheer *"great quarter, WalMart"*) but, in our opinion, they incorrectly weigh the information. It could be argued that lots of things had to go right for Wal-Mart to grow for forty years. That is certainly true but, at its heart, a very few simple things really mattered. In our opinion, the central engine of success at Wal-Mart was a thrift orientation fuelling growth with the savings shared with the customer. The culture of the firm celebrated this orientation and reinforced the good behaviour. This is the deep reality of the business. This should have had the greatest weighting in the minds of long-term investors even if other things looked more important at the time. Instead investors may place too much emphasis on valuation heuristics, or margin trends, or incremental growth rates in revenues or any of the list above, but these items are transitory and anecdotal in nature.

There are very few business models where growth begets growth. Scale economics turns size into an asset. Companies that follow this path are at a huge advantage compared to those, for example, that suffer from Barbie syndrome. Put simply: average companies do not do scale economics shared. Average companies do not have a healthy culture. After all, average companies are more like GM than Wal-Mart! The removal of a portion of failure risk from the investment equation creates a huge opportunity for those investors that can see the company in its true perspective and act with a bit of patience. It is a huge anomaly that investors recognize success incrementally when the factors that lead to success, such as scale economics shared reinforced by a strong culture, may be constant. If the early investors in Wal-Mart had understood this, they may have retained their holding along with the, now billionaire, Walton family.

The fund management industry has it that owning shares for a long time is futile as the future is unknowable and what is known is discounted. We respectfully disagree. Indeed, the evidence may suggest that investors rarely appropriately value truly great companies. We can hear the howls of derision from the professional cynics "that's twenty-twenty hindsight, guys!" Dare we whisper it, but in some cases we think that greatness may be knowable in, shhh, FORSIGHT!

This *“longevity of compound”* opportunity exists precisely because the average fund manager is attending a different church. Thank God!

Simple, but not Easy.

When Zak and I trawled through the detritus of the stock market these last eighteen months (around a thousand annual reports read and three hundred companies interviewed) we had four main choices: add to existing holdings, invest in new firms, invest in growth businesses, invest in cigar butts. Overwhelmingly we have preferred our existing businesses to the alternatives. Of course, such a conclusion will only make sense if the businesses in which we have invested have great prospects and the shares are cheap. Like Darwin, perhaps, we are well aware that we live in an ambiguous world. And we are not saying, for example, that Amazon is the next Wal-Mart. Time will tell on this front. But we are asking the question, what if? The portfolio weightings are sizeable in the firms we consider to be the pick of the bunch, and Nomad should do well if our firms grow from acorns to oaks. It is this rational will to believe and be patient that perhaps marks Nomad out from its peers.

What we are doing is investing at its most honest and most simple. But it is not easy. It is hard because one first has to reject industry dogma. The non-thought of received wisdom is shouted from the rooftops and it is safe and comfortable, glamorous, exciting even, being part of the crowd. The road less travelled is hard as there is lots of heavy lifting involved in the homework, although we happen to rather like the workout. As Darwin found, it is hard to let the facts speak for themselves, reject the established way of thinking and to do so in good conscience. And it is a blessing for us that the crowd have rejected something so obviously right as investing at its simplest. Phew, that was just as well! Indeed such is the lure of, what might be called, professional fund management techniques (!) that we find there is, albeit with a few notable exceptions, almost no competition for the long-term investor who has done his homework. Isn’t it exciting that honest, simple, long-term investing is so, well, unexciting.

Sanjay Bakshi on staying power:

A few days ago I asked a question on twitter: What is Pricing Power?

Yesterday, I asked another one: What is Staying Power?

I wanted to illustrate the power of focused thinking by "letting your mind wander." What happens when you think about an idea and that idea only from multiple points of view?

Well, you get insights you wouldn't get if you were distracted by other ideas.

Staying power is a very powerful idea. But where does it come from? The common answer I get from people is that it comes from a strong balance sheet. But that's only part of the answer.

You have to keep asking where *else* does it come from. And one way to find out is by asking where does a strong balance sheet come from?

The insights gained through focused thinking on a question and that question alone produced some answers which I think will be useful for you. These are listed below. Remember that this is *not* an exhaustive list but is a pretty good first attempt to answer the question.

Business Model

From the vantage point of a *business model*, staying power comes from:

1. A product or service that will not be obsoleted for a long time – usually these are things that serve basic human needs and aspirations.
2. Multiple sources of revenue streams.
3. Low customer concentration risk.
4. Low supplier concentration risk especially when dealing with critical raw materials.
5. A business which does not derive its key advantages from political clout.
6. Slack in the form of un-utilised capacity especially in case of industries when most money is made during periods of shortages.
7. High customer switching costs (financial or psychological e.g. in brands)
8. Solid entry barriers which prevent a business from a competitive attack that can destroy it.

Corporate Culture

From the vantage point of corporate culture, staying power comes from:

1. Willingness to cede market share when irrational competition drives down potential returns – and in the extreme case exiting a business.
2. Refusal to invest in a business which deserves to die – i.e. not throwing good money after bad – and conserving it for productive uses.
3. Unwillingness to bet the bank on a single idea – intelligent risk management as part of the DNA of the firm (including avoidance of gambling in the garb of risk management through derivatives).
4. Willingness to make multiple small bets to grow the business so that no single bet or a group of bets, if they turn bad, can destroy the business.

Ownership Structure

From the vantage point of *ownership structure*, staying power comes from:

1. Rich promoters who will, when needed, add financial strength to the business by infusing their own cash when no one else will (usually happens in family run businesses)
2. Controlling stockholders who support investment for future prosperity instead of treating the business like a cash cow (although doing that makes sense in many circumstances)
3. An ownership structure which, when combined with a great management team, creates stability for the firm e.g. through non voting shares (e.g. Google)

Balance Sheet

From the vantage point of *balance sheet*, staying power comes from:

1. Low or no debt levels whether on or off balance sheet.
2. A liquid balance sheet.
3. Presence of non operating assets that can be sold for cash to save the business when needed.
4. Absence of other encumbrances e.g. litigation that can drain resources or managerial focus.

5. Low short-term debt, especially during cyclical downturns.

Profit and Loss Account

From the vantage point of *P&L*, staying power comes from:

1. Size of revenues – generally speaking large businesses have better ability to withstand economic shocks than smaller ones.
2. Multiple sources of earnings.
3. Pricing power.
4. Low cost advantage over competition so when industry conditions worsen the others suffer a lot more than you.
5. Flexible cost structure – the ability to shrink the business without losing profit margins – low operating leverage.
6. Low financial leverage as reflected by low interest cost in relation to earnings available to pay interest.
7. Low economic depreciation – coming from a business that is not very capital intensive, and one that is not prone to become obsolete soon.
8. Significant discretionary spending which can be curtailed during really bad economic and industry conditions – e.g. advertising.

Cash Flow Statement

From the vantage point of *cash flow statement*, staying power comes from:

1. Low interest and principal repayments in relation to operating cash flow.
2. Low maintenance capex and maintenance working capital needs.
3. Ability to fund even growth and maintenance capex with internal resources.
4. Low dividend payouts.

The Investor

From the vantage point of the *investor*, staying power comes from:

1. Large number of years left to invest.

2. Ability to handle volatility through financial strength – low or no debt and significant disposable income preventing the need to liquidate portfolio during inappropriate times.
3. A frugal nature.
4. Ability to handle volatility through psychological strength.
5. A very long-term view about investing.
6. Structural advantages – investing your own money or other people's money who will not or cannot withdraw it for a long long time.
7. Family support during tough times.

More from Sanjay Bakshi:

I also learnt to appreciate the wisdom of Ben Franklin's advice on how to have a happy marriage: "Keep your eyes wide open before marriage, half shut afterwards."

Following that advice has helped me in dealing with situations where something is obviously wrong about a person but it's not a big deal if you look at the overall situation. Indeed, some of my best performing investments have been made because the investment community took one little adverse thing about an entrepreneur and over-emphasized it. That created an opportunity for those who understand that no one is perfect and you should not look for perfection in business models and human beings who run them.

Here is another trick I accidentally discovered. It's inspired by a Charlie Munger quote: "I constantly see people rise in life who are not the smartest, sometimes not even the most diligent, but they are learning machines. They go to bed every night a little wiser than they were when they got up and boy does that help, particularly when you have a long run ahead of you."

So Charlie prescribes that you should go to bed a little wiser than you were when you got up that morning. That's good advice. But what if you could go a step further? Can you become wiser between the time you sleep at night and wake up the next morning?

I found out that the answer is yes and the discovery is to do with the science of sleep. I found that if I read some random passage from a "super text" (e.g. some page from *Poor Charlie's Almanack*, or some passage from the letters of Warren Buffett or *Common Stocks and Uncommon Profits* by Philip Fisher) just before I sleep, then while I slept what I had read does things inside my brain. When I wake up, I get fresh insights which I can use.

There is plenty of evidence which shows that sleep makes memories and associations stronger. And learning is about making the right associations. And we sleep roughly one-third of our lives. So why not use the time to become a bit wiser while we sleep?

****

June 30, 2010 letter from Nick Sleep:

Some Observations on the Nature of Comparative Advantages

There are, perhaps, few things finer than the pleasure of finding out something new. Discovery is one of the joys of life and, in our opinion, is one of the real thrills of the investment process. The cumulative learning that results leads to what Berkshire Hathaway Vice-Chairman Charlie Munger calls *"worldly wisdom"*. Worldly wisdom is a good phrase for the intellectual capital with which investment decisions are made and, at the end of the day, it is the source of any superior investment results we may enjoy. So, when analysing a firm, one just knows one is on to a good thing when one learns something new and the penny finally drops. And many times more fortunate if that insight can be applied more generally across businesses.

Take, for example, a recent research trip to a Welsh insurance company. The firm's products are nothing special, primary auto insurance sold to customers who buy mainly due to the legal requirement to be insured on the public roads. There is little product differentiation across the industry and the customer purchase decision is usually driven by price. This is a soul-less relationship: it is near on impossible to get customers to love their insurance companies and, for their part, insurance companies don't give the impression they love their customers much either. Be that as it may, the firm we visited has a wonderful track record of financial results going back

decades. Not just good by insurance industry standards (a low hurdle to jump if ever there was one), but good by any standards. So, what is going on?

It is tempting when analysing such situations to look for the big thing the firm does right. In effect, one is looking for the smoking gun that explains the firm's success. A smoking gun may be a vivid image, but the world does not always work like that. I should have known better when I asked what big idea had led to the firm's success: *"No, no, Nick, there is no secret sauce here"*, one senior executive explained, *"we don't do one thing brilliantly, we do many, many things slightly better than others"*. I have heard this line frequently over the last twenty or so years, and I have always dismissed it as a fig leaf covering the lack of any real corporate advantage. And I think that all this time I may have been wrong.

Take Costco Wholesale: Costco's advantage is its very low cost base, but where does that come from? Not from low cost land, or cheap wages or any one big thing but from a thousand daily decisions to save money where it need not be spent. This saving is then returned to customers in the form of lower prices, the customer reciprocates and purchases more goods and so begins a virtuous feedback loop. The firm's advantage starts with 147,000 employees at 566 warehouses making multiple daily decisions regarding U$68bn worth of annual costs. It's thousands of people caring about thousands of things a little more, perhaps, than may occur at other retailers. No fig leaf here. When Zak and I met Jim Sinegal, Costco's CEO, Jim suddenly stopped in mid-sentence, his face lit up, *"I must show you this"* he said and disappeared into a filling cabinet. He emerged with a memo from 1967 written by Sol Price, Fed-Mart's founder (the predecessor firm to Costco), *"here you can have a copy of this"* he said, and that copy is framed on our office wall. The memo says this,

"Although we are all interested in margin, it must never be done at the expense of our philosophy. Margin must be obtained by better buying, emphasis on selling the kind of goods we want to sell, operating efficiencies, lower markdowns, greater turnover, etc. Increasing the retail prices and justifying it on the basis that we are still "competitive" could lead to a rude awakening as it has with so many. Let us concentrate on how cheap we can bring things to the people, rather than how much the traffic will bear, and when the race is over Fed-Mart will be there". [The best summary of the business case for scale economics shared we have come across].

Forty-three years later, almost to the day, and Costco is the most valuable retailer of its type in the world. Cultures that care about the little things all the time are very hard to create and, in the opinion of Amazon.com founder Jeff Bezos, almost impossible to create if not put in place at the firm's genesis. (It may be worth noting that, in contrast, most businesses cut costs sporadically, often-in response to a crisis, as part of plan B as it were. With their backs to the wall, good costs (investment spending) may be cut as well as bad costs (bloat), with the result that the savings prove counterproductive in the long run). The Welsh insurance company was founded by a man who cared passionately about the little savings, and he institutionalised this orientation into the culture of the firm from the beginning. It was the way they lived, it was part of their raison d'être: it was plan A. And they shared that saving with their customers. Although I was slow to grasp the point, the insurance firm's advantage was very similar to that which had built Costco and builds Amazon today.

My mistake in not recognising that these businesses share similar roots ("D'oh!" as Homer Simpson might say) might be termed by psychologists as a "framing" error. When looking for an explanation to a situation the brain tends to latch on to what can be easily found to "frame" the situation, and if what is easily found is also vivid, then the brain stops looking for another explanation. I had gone looking for what I thought ought to be there, a vivid smoking gun such as a brand name, a location, a clever reinsurance contract, or a patent. However there is no a priori reason why a comparative advantage should be one big thing, any more than many smaller things. Indeed an interlocking, self-reinforcing network of small actions may be more successful than one big thing. Let me explain.

Take a one-big-thing-firm, such as a drug company, for example. A successful drug firm does not need to be particularly good at marketing, manufacturing, or research and development for that matter if, through a patent, it has a legal monopoly on a drug. But just look, if you will, at how fragile the drug company ecosystem is. A rival could displace it at any time with a better chemical and the firm would be left with little to fall back on, certainly not marketing, R&D, and manufacturing. Its period of exceptional profitability may therefore be quite finite and the big drug firms wrestle with this issue today.

Contrast this with a scale economics business: To better an incumbent's cost base a rival would have to be superior at, not one thing, but a million little actions – a far harder task. Amazon's letter to shareholders this year contains the following section:

"…We believe that focusing our energy on the controllable inputs to our business is the most effective way to maximize our financial outputs over time…we've been using this same annual [goal setting] process for many years. For 2010, we have 452 detailed goals, with owners, deliverables and targeted completion dates".

At Amazon one employee initiative to remove the light bulbs from the vending machines (really!) saves the firm U$20,000 per annum! At the Welsh insurance company the penny dropped: firms that have a process to do many things a little better than their rivals may be less risky than firms that do one thing right because their future success is more predictable. They are simply harder to beat. And if they are harder to beat then they may be very valuable businesses indeed.

The Subtle Implication for Long-Term Investors

The opportunity for Nomad's investors comes from realising to whom these firms are more valuable. Certainly not the short-term investor, who will be indifferent as to whether Amazon, Asos or Air Asia will be the most valuable retailer/fashion etailer/airline in the world in ten years time. The institutional fund manager may be similarly indifferent. This collective professional myopia presents the true long-term investor with the spoils, but the mechanism for this wealth transfer from short-term holder to long-term investor is subtle.

When investors value a business they have in their minds, consciously or not, a decision tree with the various branches leading to all possible futures and probabilities attached to those branches. The share price can be thought of as an aggregate of the probability weighted value of these branches. The problem, as Santa-Fe Institute scientist Ole Peters most recently pointed out (SFI Bulletin 2009, volume 24), is that this is not an accurate representation of what the future will be! The next step for the company will not be to visit all of those branches simultaneously. In reality the firm in question will only visit one of those branches before proceeding to the next and so on. Short-term investors spend their time trying to handicap the odds of each branch.

Guessing which-branch-next can be a crowded trade, but it's fine, as far as it goes. However, it rather misses the big picture, in our opinion. We would propose that some businesses, once they have progressed down the first favourable branch, stand a much greater chance of progressing down the second favourable branch, and then the third, as a virtuous feedback loop builds. The process takes time, but a favourable result at any one stage increases the chances of success further down the line, as it were. Think of it as a business' culture.

Take Air Asia: The firm was born with a no frills, cost culture with the result that, we estimate, it is the lowest cost airline in the world: this is favourable branch one. Favourable branch two: the employees take pride in the firm, suggest their own savings and the savings are implemented. Branch three: the savings exceed the peer group and are given back to customers in the form of lower prices. Branch four: the customer reciprocates and revenues rise. Branch five: further scale advantages lead to more savings per seat flown. Branch six: further customer reciprocation. Branch seven: the network builds and crowds out other, less efficient airlines. Branch eight: competitors go out of business?

The point is that the odds associated with any of these branches are not static but, in a hugely important way, they improve as one travels from branch to branch. Imagine the payoff in a game with these attributes? If investors recognise the inevitability of these improving odds they are also usually indifferent to them, perhaps viewing the eventual greatness of a business as simply outside their time horizon. Nevertheless, the effect of this indifference on share prices is to leave long-term success undiscounted (note, share prices are an aggregate of all possible future worlds, not the actual future) and the rewards from that observation may be enormous for the patient few. We certainly expect so.

Reason from first principles (excerpts from a 2014 article by David Fortuna):

"He went on, "You didn't even pause to ask the fundamental question: what is education?"

"A Bridgewater recruiter taught me in 40 minutes what 18 years of school failed to get across: **reason from first principles and ask the right questions.** Elon Musk puts it perfectly: "I think it's important to reason from first principles rather than by analogy… What that really means is that you boil things down to the most fundamental truths and then reason up from there." There is a difference between Planck knowledge and chauffeur knowledge. [Editor Note: For a brief overview of Planck and chauffeur knowledge, see the relevant section in THESE NOTES.]

"Perhaps my experience is idiosyncratic, but a decade-and-a-half of "world class" schooling did not emphasize reasoning from first principles and it certainly didn't encourage students to ask "Why?" On the contrary, I was taught to come up with an answer and find a way to justify it. And this horrible habit of intellectual gymnastics was rewarded and reinforced by a steady stream of "As" on my midterms.

"I had read Richard Feynman's autobiography. His first principle is that "you must not fool yourself—and you are the easiest person to fool", but I only really learned this when rejection hit me with it unexpectedly. I didn't get the job and it doesn't matter. Because I finally understood how lacking my mental model for reasoning had been. I was going through life unaware of this massive cognitive deficit, effectively handicapped relative to those with a grasp of this concept. Whereas before I relied heavily on what psychologist Daniel Kahneman calls System 1 thinking—specifically the mode of thinking that "operates automatically and quickly, with little of no effort and no sense of voluntary control"—I now run through a mental check list as a first step in reasoning. It is scenario specific but usually starts with some take on the following 5 questions and expands from there:

1. What am I trying to achieve here / what is my goal?

2. What information/evidence do I have, how does this affect the probable outcomes, and what information/evidence do I still need to make a good decision?

3. What are the potential second order (and higher) impacts of this scenario (both upside and downside)?

4. What has to happen for "X" scenario to be true?

5. What are the risks and rewards of various scenarios and how likely are they to transpire?

"Then, as famous algebraist Jacobi once said, "Invert, always invert": think the problem through backwards."

Intellectual Honesty (from Li Lu, slightly modified):

1. Know what you know.

2. Know what you don't know.

3. Know what you need to know.

4. Know what you don't need to know.

5. And remember that there are unknown unknowns, things you don't know you don't know.

**Remember, what you need to know and don't need to know can change depending on price.*

****

June 30, 2004 letter from Nick Sleep:

In the office we keep a list of companies assembled under the title "super high quality thinkers". This is not an easy club to join, and the list currently runs to fifteen businesses. Entry is reserved for the intellectually honest and economically rational, but that alone is not enough. There are many companies that do the right thing when their backs are against the wall, and this list excludes those temporarily attending church. The anointed few are there because they have chosen to out-think their competition and allocate capital over many years with discipline to reinforce their firm's competitive advantage. Good capital allocation takes many forms and does not necessarily require a firm to grow. The Partnership's successful investment in Stagecoach has been due to the firm's shrink strategy, not its growth, although that may come in time. At

National Indemnity (an insurance subsidiary of Berkshire Hathaway), the firm's ability to write insurance only when pricing is good and stand back when pricing is poor, even if revenues decline by 80% and remain depressed for many years, is a wonderful example of capital discipline and good capital allocation. After all, why grow if returns are going to be poor? However, surprisingly few companies have the strength to just sit it out, or shrink, as the pressure to grow is often overwhelming. The clamor comes from within the company (reinforced by poorly constructed incentive compensation), Wall Street promoters and short-term shareholders. When faced with this barrage, the voice of the long-term shareholder often goes unheard. We ask companies with poor economics why they want to grow. And senior management, with their hands on our purse strings, look back at us incredulous at our line of questioning. It is just not that easy to resist the urge to grow, even if economic results look so so. The "super high quality thinkers" are our best guess of those firms whose shareholders could abdicate their right to trade stock (allocate capital themselves) sure in the knowledge that their capital will be well allocated for years to come within the businesses. This list is a group of wonderful, honestly run compounding machines. We call this the "terminal portfolio". This is where we want to go. The question is, why is this list not the same as the current Nomad portfolio?

This is not an easy question to answer. But let us return to the church analogy for a moment. When we think about companies, the over-riding analytical consideration is the quality of the business and quality of management's capital allocation decisions. The longer investors own shares the more their outcome is linked to these two metrics. What separates a corporate hero from a loon is an intellectually honest appraisal of business prospects, and armed with that knowledge an appropriate allocation of discretionary resources. There are only two reasons companies behave well. Because they want to, and because they have to. Our preference is to invest in those that want to. If we can find enough of these heavenly opportunities they will in effect put us out of a job, and you should be pleased with this happy outcome (even we will be pleased, if a little bored). The problem of course is price. In paying up for excellent businesses today, investors are already paying for many years growth to come, in the hope that, as the saying goes, "time is the friend of a good business".

We can all observe that stock prices, set in an auction market, are more volatile than business values. Several studies and casual observation reveal that individual prices oscillate widely

around a central price year in year out, and for no apparent reason. Certainly, business values don't do this. Over time, this offers the prospect that any business, indeed all businesses, will be meaningfully mispriced. Even the mighty Berkshire Hathaway with its stalwart long-term shareholder base was demonstrably half priced in early 2000. And Marathon bought shares (unfortunately pre-Nomad inception). It is just a matter of time. Those that chase high prices today, leave less gunpowder for the future. In effect, they value future opportunities close to nil. So opportunity cost is partly behind our decision as well. Today, we have made two investments in wonderful compounding machines, and only one of those is meaningfully represented in the portfolio (Costco Wholesale). What is the probability that say, over the next ten years, a good portion of these "super high quality thinkers" will be priced at 50c? Our betting is that the odds are reasonable. Even though prices are generally high, the trick is to do the work today, so that we are ready.

Tom Russo, when asked about the first factor he looks at when analyzing a company:

Well for me it would be the people. It would be who owns it and then it would be who runs it, the quality of the management team. It is very much a people-driven analysis. On the ownership side, if there is a strong holder who is like-minded in their long-term outlook I would find that to be a very early positive indicator that justifies setting out to do more work. If I found on that first test that there was something about the management that left me feeling it was opportunistic or short-term driven, I probably won't embark on the analysis that follows. Threshold screening would be the caliber of owners and then the management that follows.

Sanjay Bakshi on investing in businesses that benefit society (from Symphony lecture notes):

One of the things I love about Symphony is its pro-social business model. In previous lectures, I have spoken to you about:

1. business models with pyramid schemes embedded in them,

2. business models which sell products or services which may be legal but are a net negative for civilization — tobacco is a prime example where true costs are socialised but benefits are privatised, and

3. business models which promote use of leverage, gambling or predatory lending.

Over the years, I have become averse to investing in such businesses, regardless of what others think about the wisdom or otherwise of such an approach. (Recall my mail on the need for an inner scorecard vs an outer scorecard).

Indeed, one the first questions I ask myself before I contemplate investing in a business is:

Is this business a net positive for humanity?

If, in my view, the answer is overwhelmingly no, then I will not invest in such a business. While everyone is entitled to one's own worldview, my own view is that, averaged out, anti-social business models have shorter life spans than pro-social ones. But, even if a few, highly profitable anti-social models may last long time, I am uncomfortable owning them because I have to look at myself in the mirror every time I shave in the morning…

What is Symphony's value proposition to its customers? To provide them with a comfortable environment at a reasonable price. It does not cause harm to civilization. When people feel comfortable, they are happier, they fight much less, and they are more productive. They sleep well at night. Isn't that far better than predatory lending at interest rates of 45% a year leading to debt-traps for borrowers often causing them to commit suicide as happened in Andhra Pradesh a few years ago?

… Profits in Ethics

One of the best books on the subject of investing in pro-social businesses I have read is "100 to 1 in the Stock Market" by Thomas Phelps. It has a chapter titled "Profit in Ethics" which contain

some lessons which I think are worthy of your attention. While you should read the entire chapter which I have reproduced at the end of this note, my favorite quotes from it are:

Earlier, I said there were two approaches to investing, one, the psychological one and, two, the statistical. Actually there are three. And in the long run the third is the most important. It is what might be called the ethical or even spiritual approach... Beware of cynics in high places. Avoid the fast buck artists, the something-for-nothing shysters. Remember that a man who will steal for you will steal from you. Ask yourself whether the company in which you contemplate investing is contributing to making this a better world. If the answer is no, avoid it like the plague.

And,

To make the biggest gains, don't buy companies whose sole goal is to make money… Bet on men and organizations fired by zeal to meet human wants and needs, imbued with enthusiasm over solving mankind's problems. Good intentions are not enough, but when combined with energy and intelligence the results make it unnecessary to seek profits. They come as a serendipity dividend on a well-managed quest for a better world.

Charlie Munger on culture and *practice evolution*:

This is really important. For example, Hertz and Enterprise Rent-a-Car through practice evolution have developed personnel systems, etc. that work for them. They are like different species in similar ecological niches.

Common stock investors can make money by predicting the outcomes of practice evolution. You can't derive this by fundamental analysis -- you must think biologically.

Another example is Tupperware, which developed what I believe to be a corrupt system of psychological manipulation. But the practice evolution worked and had legs. Tupperware parties sold billions of dollars of merchandise for decades.

We wouldn't have bought CORT if we didn't like the culture, which resulted from long practice evolution.

****

Notes, Thoughts, and Excerpts on Good Businesses and Competitive Advantages

"A dreamy business offering has at least four characteristics. Customers love it, it can grow to very large size, it has strong returns on capital, and it's durable in time – with the potential to endure for decades. When you find one of these, don't just swipe right, get married." —Jeff Bezos

Is the business in a viable industry?

- If no, then it is worth liquidation value.
- If a liquidation value investment, is there a catalyst?
  - Liquidation value isn't enough – you need more. (e.g. Sears: ~200,000 employees standing in way and making it nearly impossible to liquidate if it came to that….at least in an easy, peaceful manner.)
- Is it in an unattractive industry that should be avoided no matter what the price (e.g. airlines according to much of Buffett's investing history)? Almost any investment is a good deal at a certain price, but some industries make the estimation of what a good deal is very difficult, and there is an opportunity cost to one's own time spent trying to figure them out.
- What are the key success factors to superior performance in this industry?
- How fast is the industry growing?
- Is their market share stable?
- How (and how much) can a good company differentiate itself from a bad one in this industry?
- Compare the company to a weaker competitor.
  - What is the difference and why?
- Am I viewing this business as it is today, or how it used to be?
  - People have a tendency to extrapolate and view things (and people) as they remember them, which often clouds seeing things as they really are.

- Combat Investing (Peter Lynch): Remember that if there is a competitive war going on…it might be best to NOT buy the companies that are doing the fighting (e.g. IBM and all its clones in the early stages of personal computers.); it might be best to buy the companies that sell the bullets (e.g. Microsoft in the personal computer war….they won regardless because everyone was using their operating system).
- Does the business solve a problem for its customers?
- How do customers pay for the company's products? Is it with cash or capital that they have? Does the company rely on outside sources of capital for its customers to buy its products?
    - E.g. CarMax (from my review of Guy Spier's book) - There's a big difference between a business whose customers have the money to pay for their products at the time of the transaction and ones that rely on outside creditors to provide their customers access to credit. While CarMax has other advantages of scale that still make it a decent business and allowed it to recover after credit had dried up in the 2008 crisis, there are many other businesses that make a living relying on the credit of others that don't have any competitive advantages and can quickly and unexpectedly have their business models become at risk in the wrong environment. While things may work well if the wrong environment doesn't occur in one's investment horizon, I think the big key from Guy's examples and checklist items is to stick to areas where your odds of success of winning are higher, and areas where you are less likely to encounter unexpected and unfavorable surprises. As Charlie Munger likes to say, "All I want to know is where I'm going to die so that I'll never go there."
- "How does this company sit within the value chain, and what parts of this business could be impacted by changes in other parts of the value chain that this company has very little influence over?" –Guy Spier
    - You want to invest in companies that control their own destiny.
- Does the business earn a good and/or extraordinary return on capital (based on cash/owner earnings)?
- What is the ratio of sales to invested capital ($ Sales per $ Invested Capital)?

   - This can often give an early warning sign of increased competition if a management is investing large sums just "to stay competitive" and maintain sales.
- Is there a moat and barriers to entry protecting the company's earning power? If not, competition—including competition that doesn't yet exist—will likely come in and drive down returns.
- Possible competitive advantages (Dorsey): intangible assets, customer switching costs, network economics, cost advantages.
- If the business sells a commodity product, the only advantage is to be the low-cost producer.

Greenwald and Kahn on competitive advantages (from *Competition Demystified*):

§ With a universe of companies seeking profitable opportunities for investment, the returns in an unprotected industry will be driven down to levels where there is no "economic profit," that is, no returns above the costs of the invested capital. If demand conditions enable any single firm to earn unusually high returns, other companies will notice the same opportunity and flood in. Both history and theory support the truth of this proposition. As more firms enter, demand is fragmented among them. Costs per unit rise as fixed costs are spread over fewer units sold, prices fall, and the high profits that attracted the new entrants disappear.

§ Life in an unprotected market is a game played on a level field in which anyone can join. In these markets, often but mistakenly identified as "commodity" markets, only the very best players will survive and prosper, and even they have to be continually on their toes. Without the protection of barriers to entry, the only option a company has is to run itself as efficiently and effectively as possible.

§ The existence of barriers to entry means that incumbent firms are able to do what potential rivals cannot. Being able to do what rivals cannot is the definition of a competitive advantage. Thus, barriers to entry and incumbent competitive advantages are simply two ways of describing the same thing. Entrant competitive advantages, on the other hand, have no value. By definition, a successful entrant becomes the incumbent. It then is vulnerable to the next entrant, who benefits from newer technology, less expensive labor, or some other temporary competitive edge. And because there are no barriers to entry, the cycle doesn't stop. So it is

only in the presence of incumbent competitive advantages that strategy, in our sense of the term, comes to the fore.

§ Competitive advantages that lead to market dominance, either by a single company or by a small number of essentially equivalent firms, are much more likely to be found when the arena is local—bounded either geographically or in product space—than when it is large and scattered. That is because the sources of competitive advantage, as we will see, tend to be local and specific, not general or diffuse.

§ Paradoxically, in an increasingly global world, the key strategic imperative in market selection is to think locally. Dominance at the local level may be easier to accomplish than one might initially think. If the global economy follows the path of the more developed national economies, service industries will become increasingly important and manufacturing less significant. The distinguishing feature of most services is that they are produced and consumed locally. As a consequence, opportunities for sustained competitive advantages, properly understood, are likely to increase, not diminish. The chances of becoming the next Wal-Mart or Microsoft are infinitesimal, but the focused company that understands its markets and its particular strengths can still flourish.

§ Strategic analysis should begin with two key questions: In the market in which the firm currently competes or plans to enter, do any competitive advantages actually exist? And if they do, what kind of advantages are they?

§ The analysis is made easier because there are only three kinds of genuine competitive advantage:

· **Supply.** These are strictly cost advantages that allow a company to produce and deliver its products or services more cheaply than its competitors. Sometimes the lower costs stem from privileged access to crucial inputs, like aluminum ore or easily recoverable oil deposits. More frequently, cost advantages are due to proprietary technology that is protected by patents or by experience—know-how—or some combination of both.

· **Demand.** Some companies have access to market demand that their competitors cannot match. This access is not simply a matter of product differentiation or branding, since competitors may be equally able to differentiate or brand their products. These demand

advantages arise because of customer captivity that is based on habit, on the costs of switching, or on the difficulties and expenses of searching for a substitute provider.

· **Economies of scale.** If costs per unit decline as volume increases, because fixed costs make up a large share of total costs, then even with the same basic technology, an incumbent firm operating at large scale will enjoy lower costs than its competitors.

§ Beyond these three basic sources of competitive advantage, government protection or, in financial markets, superior access to information may also be competitive advantages, but these tend to apply to relatively few and specific situations. The economic forces behind all three primary sources of competitive advantage are most likely to be present in markets that are local either geographically or in product space.

§ **There are two straightforward tests of competitive advantage: market-share stability and high return on capital.**

§ Most companies that manage to grow and still achieve a high level of profitability do it in one of three ways. They replicate their local advantages in multiple markets, like Coca-Cola. They continue to focus within their product space as that space itself becomes larger, like Intel. Or, like Wal-Mart and Microsoft, they gradually expand their activities outward from the edges of their dominant market positions.

§ The natural starting point for any strategic analysis is a market-by-market assessment of the existence and sources of competitive advantages.

§ When there are no competitive advantages present, then genuine strategic issues are of little concern. Therefore, in markets along the "Competitive Advantage: No" branch in figure 1.1, operational effectiveness—efficiency, efficiency, efficiency—is both the first priority and the last.

§ But for markets along the "Competitive Advantage: Yes" branch, where companies do benefit from competitive advantages, the next step is to identify the nature of the competitive advantages and then to figure out how to manage them. The alternatives are not pleasant. If the advantages dissipate, whether through poor strategy, bad execution, or simply because of the unavoidable grindings of a competitive economy, these firms will find themselves on a level

economic playing field—the no-competitive-advantage branch—where life is all work and where profits, except for the exceptionally managed companies, are average at best.

- Am I depending on a durable competitive advantage (franchise value) for this to be a good investment?
- Am I making proper consideration for how difficult and rare it is for a company to have a REAL durable competitive advantage?
- If no competitive advantage, than the company is worth EPV/NAV (earnings power value and net asset value should be the same), assuming it is in a viable industry (Greenwald/Kahn book).
- If it has a competitive advantage, how was it achieved? Is it sustainable?
- Be careful not to confuse a well-known brand name with a wide moat. There has to be more to it, and that brand has to lead to high, sustainable returns on invested capital.
    - Greenwald, Kahn: "For an incumbent to enjoy competitive advantages on the demand side of the market, it must have access to customers that rivals cannot match. Branding, in the traditional sense of a quality image and reputation, by itself is not sufficient to establish this superior access. If an entrant has an equal opportunity to create and maintain a brand, the incumbent has no competitive advantage and no barrier impedes the process of entry."
- Tom Russo, when asked about how to determine when a brand has a wide moat and when it does not: "I think the real story with brand strengths and the return that you get from them is linked to the distribution and the retail channel. And to the extent that you are reliant upon the mass market where the retailers have enormous clout and you fail to deliver innovation on your brand platform, you are increasingly today going to suffer pressure on price. And so it's really incumbent upon the stewards of the brands that we invest behind that they innovate and that they add value and that they tell the consumer about it through effective marketing—whether it's digital, whether with conversation, whether it's broadcast, whether they create an atmosphere, whether it's billboard—whatever the vehicle is—they have to tell the consumer that there is a reason why they're asked to pay up, because some product feature warrants the premium price that they're asked to pay. And absent that, you're going to face pressure and the pressure is going to increasingly come from the retailer and it's going to be enforced against those

who fail to innovate by retailer-owned brands, which increasingly are viewed as adequate by consumers around the world when compared against just the me-too offerings of even strongly-branded companies if they don't add enough value through the communication or the innovation that the product should deserve to stay vital as a brand."

- The distribution matters not just in regards to the control of the price, but also in regards to the control of the experience the customer has with the product.
- Warren Buffett on brands and share of mind: "We always think in terms of share of mind versus share of market – because if the share of mind is there, the share of market will follow…. [On Amex back when he loaded up on it in his partnership days…] Well, that's a great position to have in people's minds where, when faced with a choice, they're willing to go with a newer product at a higher price and leave behind an entrenched product. Well, that just showed the power of American Express. American Express had a special cachet that identified you as something special when you pulled out your American Express Card – as opposed to the Diner's Club Card and the Cate Blanche Card (which was the third main competitor). Visa still didn't exist…. So you could see this dominance prevail. It told you what was in people's minds – which is why I bought into the stock in 1964. We bought 5% of the company – which was a huge investment for us at that time. I was only managing $20 million at the time. But you could see that this share of mind – this consumer franchise – had not been lost."
- Competitive advantage quotes from the book *The Investment Checklist* by Michael Shearn:
    - "Competitive advantages are less sustainable when they are affected by changes in technology or if they are in rapidly emerging industries. Changes in technology threaten a competitive advantage when they expand customer choice, whether by offering the same product for less or by offering greater benefits for the same price or less."
    - "The greatest gains in a stock are usually made as a business is *developing* its competitive advantage rather than after it already has developed one."
    - "Do not confuse a competitive strength or a business that is successful because it is in the right place at the right time with having a competitive advantage."

What is the relative power of:

- Customers
    - *Has the company's customer negotiating power shifted (e.g. Atlantic City casinos got desperate in 2010-2011 and started offering never before seen deals to get high rollers in.)?*
- Suppliers
- Competitors
- Regulators

- Who controls industry pricing? Does the company/sector have any pricing power? What is the outlook for pricing?
- More from the book *The Investment Checklist* by Michael Shearn:
    - "Businesses that have pricing power typically have several characteristics in common such as high customer- retention rates; their customers spend a small percentage of their budget on the business's product or service; the customers generate high margins and lots of cash flow; or the quality of the product is more important to the customer than the price."
    - "Price increases add value to the business when they add to operating income, rather than just offsetting new expenses."
- Tren Griffin (October 2016): "Platforms (e.g., Uber, eBay, Airbnb, etc.) matching sellers & consumers unlock otherwise unused resources are inherently deflationary. Technology drives greater efficiency. What's hard to find right now is pricing power, 'the most important attribute of a business' (Buffett)."
- Tom Russo: "…pricing power is really the result of the company's total process of delivering products that have attributes that they determine the consumer wants sufficiently, that the consumer believes there to be no adequate substitute. And that really is the job of the companies that we invest in, to capture deep consumer insights so they know the needs that they then can address through rapid innovation of products that offer the ability to meet those consumer needs. And that's what we look for. And as a result of that the consumer believes that there is no adequate substitute for the products that our businesses offer and they'd be willing to bear a little higher cost as a result of that if costs indeed must go up to face inflation pressures and cost of goods sold."

- Warren Buffett (1991 Letter to Shareholders): "An economic franchise arises from a product or service that: (1) is needed or desired; (2) is thought by its customers to have no close substitute and; (3) is not subject to price regulation. The existence of all three conditions will be demonstrated by a company's ability to regularly price its product or service aggressively and thereby to earn high rates of return on capital. Moreover, franchises can tolerate mis-management. Inept managers may diminish a franchise's profitability, but they cannot inflict mortal damage. In contrast, "a business" earns exceptional profits only if it is the low-cost operator or if supply of its product or service is tight. Tightness in supply usually does not last long. With superior management, a company may maintain its status as a low-cost operator for a much longer time, but even then unceasingly faces the possibility of competitive attack. And a business, unlike a franchise, can be killed by poor management."
- Has the company had instances of major losses in the past?
- Can the business be beaten by low-price/low-cost foreign competition?
- Does the business have opportunities to reinvest profits?
    - If 'no' or 'not enough', do they return excess profits to shareholders?
    - If 'yes', then earnings growth equals: ROE on Reinvested Capital x Retained Earnings.
- Andrew Smithers on Overstated ROEs: "Returns on equity as published…are habitually overstated through using book values, which understate real asset values by ignoring the impact of inflation. They are also boosted by write-offs. These are used to adjust balance sheets for the past overstatement of profits, or to overstate them in the future. As the profits published by companies tend to be overstated both before and after write-offs, though understated in the year in which they are made, and net worth is understated by excessive write-offs, RoEs are habitually overstated, with the exception of those years in which the big write-offs occur."
- Ben Inker on being careful with RoEs when looking at financial companies: "The rather odd thing about financials relative to other industries is that a high return on equity capital is as likely to be a sign of weakness as strength. Overly-levered financial firms generally look extremely profitable in the good times but have no cushion against losses when the cycle turns."

- What are the reinvestment requirements for the business to grow (working capital, capital spending, additional people/training, restructurings)?
- Is this company growing by acquisition?
    - If yes, how sustainable is that? Usually, not very. And the best business tend to have a runway of organic growth.
- Have you talked to competitors or other non-management people to get an honest opinion on the business? A major part of scuttlebutt due diligence should be focused on trying to talk with *Customer, Suppliers, Employees (current and former),* and *Competitors*. You can often learn more in a couple of conversations with these counterparties—especially among smaller companies—than hours and hours of reading financial reports.
- Be on the lookout for "reverse brands" (from Youngme Moon in the book *Different*).
    - Reverse brands/businesses *eliminate* and *elevate*...often happen when consumer choice becomes too saturated.
        - i.e. Google (Yahoo! had too much going on; Google eliminated all the extras on the main page and elevated by improving search experience); other examples: Ikea, JetBlue, In-N-Out Burger).
- On Float….Buffett: "Leaving the question of price aside, the best business to own is one that over an extended period can employ large amounts of free, other people's money in highly productive assets, so that return on owners' capital becomes sensational."
- Sanjay Bakshi on Floats and Moats:
    - Wherever you find large negative working capital, absence of debt, a liquid balance sheet, and high ROCE, it's very likely the result of a moat.
    - The moat, which gives its owner market power allows it to dictate terms to its suppliers and customers. This results in the creation of long-enduring floats.
    - You may also spot an enduring moat by simply monitoring the size and movement in floats.
    - "Go to where the puck float is going to be, not to where it is."
    - When moat quality deteriorates floats will go down. Surplus cash will disappear, debt will appear, because float has disappeared.

  - Invert, always invert. Quantitative criteria. You can measure the competitive threats by monitoring the size of float relative to assets and revenue over time.
  - As moats improve, floats will go up, debts will disappear, treasury will rise. It makes sense to monitor progress of float to see if improvement is happening or not.
  - Then there may be businesses which have a mediocre ROA but have high ROCE because they have large trade credit. Basic business is not great but looks attractive on ROCE basis. Weak link is trade credit. What if it goes away for some reason? [Important for the float to be permanent for the advantage to be in place.]
  - Beware of floats created because of shortages…. They are not enduring.
    - Power shift in a value chain. It makes sense to monitor how power is shifting by quantitatively measuring float in a value chain.
      - For example, think about how power shifts in the "Iron ore-steel-auto ancillary-automobiles" value chain. In times of shortage, an iron ore supplier can not only command high prices, he can also insist on advance payments from buyers. But such good times won't last!
  - Some companies will use financial shenanigans. They will create large amounts of trade credit with implicit cost to understate reported debt.
  - Presence of genuine cost-less float will make debt unnecessary. But some people will try to game the system.
- **Is this a business I'd want to own in its entirety?**
- Are there similar businesses to this one in other countries that might also be as good as or better than this business, and worth me looking at?
- **"The only moat that is not fleeting, and conversely the only moat that is truly enduring, is *culture*."** –Christopher Begg (Q3 2014)
- More on culture, from the book *DREAM BIG*: "YOU CAN EXPORT A GREAT CULTURE ACROSS WIDELY DIVERGENT INDUSTRIES AND GEOGRAPHIES. The truly remarkable thing is how the Dream-People-Culture model carried from investment banking and finance into beer, from Brazil to all of Latin America, then to

Europe and the United States, and now expanding all over the world. For Lemann, Telles and Sicupira, culture is not in support of strategy; culture is strategy. The three partners have always held to their core values and distinctive culture, while continually growing into new industries, expanding across geographies, and pointing towards ever bigger goals – a beautiful example of the underlying dynamic, "Preserve the Core and Stimulate Progress" exemplified by any enduring great company. There is a corollary to this lesson: you can "predict the future by geography." In the early days of the company, the three founders looked from Brazil to the United States, saw what was already working; then, instead of simply waiting for that to happen in Brazil, they would act aggressively to import the best United States practices, and do so early."

- Do all stakeholders (customers, suppliers, employees, owners, regulators, and the community) win the way the company does business? You must have Win-Win relationships to endure.
- Guy Spier: "Indeed, one item on my investment checklist is a reminder that I only want to invest in companies that are a win-win for their entire ecosystem — in other words, companies that benefit everyone from their customers to their suppliers to their shareholders. Essentially, I want to invest in companies that make society better, not worse."
- Examples of companies that may not be win-win: casinos, lottery companies, tobacco companies, and even a company like the early Tupperware, which was selling its customers overpriced products [It was selling a product that its customers wanted, that they couldn't really get elsewhere, and Tupperware was the market leader. Sounds good, right? But the problem was that they weren't giving their customers a good deal. They were overpricing their merchandise. So while there may be money to be made for a while, especially if you get in early and buy a company like this cheap enough, there is a big competitive risk in the future that isn't easy to see just by looking at the past. How loyal do you think customers are likely to be when someone comes along with essentially the same product at a much better price (especially when it then becomes clear how much customers were being overcharged in the past)? Competition drastically drove down prices.].

Sanjay Bakshi on MOATS:

Actually, *defining* a moat is the *easy* part of the problem. The *tough* part of the problem is to get good answers to four questions:

1. How big and wide is the moat?;
2. How enduring is it?;
3. Can inept or corrupt management impair your ability to make a good return by owning this business for a long time?; and
4. How much money you will make by buying it now and holding on to it for a decade or more?

First the *easy* part. Many investors simply look for *quantitative* evidence of a moat relying on the wisdom of these words of Warren Buffett…

> *A good moat should produce good returns on invested capital. Anybody who says that they have a wonderful business that's earning a lousy return on invested capital has got a different yardstick than we do.*

So far so good. But then the investors ignore businesses which may be earning a mediocre return right now but are on their way to earn superior, sustainable returns ("emerging moats").

Investors also don't bother asking the remaining three questions. Instead, they implicitly assume that the moat is an enduring one, management really doesn't matter, and nor does valuation. Those are *big* mistakes in my view.

Using Michael Porter's framework on competitive advantage, we can think about the resilience of a moat from five perspectives –

1. Intensity of competition amongst existing players in the industry;
2. Threat of new entrants;
3. Threat of Substitute Products or Services;
4. Bargaining Power of Customers; and
5. Bargaining Power of Suppliers

I think it's *very* important to have these five forces in mind when thinking about *resilience* of moats.

… People who focus on entry barriers (threat from new entrants) alone may forget that increased power of customers and/or suppliers could also significantly impair a company's ability to deliver high returns on invested capital over time. Life for a towel supplier to Wal-Mart who contributes to most of its revenues is unlikely to be a happy one over time. Is that too hard to comprehend?

And that's precisely why you need to have those five forces described by Porter on a checklist on moat investing. Otherwise, you may not remember them.

****

Sanjay Bakshi: "Seven Patterns of Inefficiency in Pricing of Quality Businesses":

Here are some of broad patterns of inefficiency that I have encountered over the last few years of practicing value investing in better quality businesses:

1. The market's inability to appreciate the probable future value of higher quality businesses with very long runways (something I covered here);

2. A niche business which is doing something remarkable but it belongs to an unremarkable, largely unprofitable, commodity-type industry and the market is failing to make the distinction;

3. Mispriced B2B businesses which are enormously profitable but remain below the radar because, unlike B2C businesses, their output doesn't show up in the final product or service;

4. The market's inability to spot an emerging moat that is growing slowly over time (the "boiling frog syndrome");

5. The market's inability to forgive an entrepreneur "learning machine" who has learnt very important lessons from his or her past mistakes and is unlikely to repeat them;

6. The market's propensity to misunderstand the integrity of an entrepreneur; and

7. Because of its intense dislike of conglomerates, the market's inability to treat as exceptions, the great capital allocators who create well-managed, and highly profitable diversified conglomerates over time.

There are several other patterns that play out in classic Graham-and-Dodd style cigar butts but the above list pertains only to patterns that I could identify with in better quality businesses misunderstood by markets.

Brian Bares on quality and competitive advantage (from *The Small-Cap Advantage*):

Factor screening on any of the aforementioned ratios suffers from a major flaw: Company value is determined by *all* future free cash flows discounted to the present. Rudimentary ratios fail to capture what could, should, or would happen to a company beyond the next year or two. Historical cash flows, book value, earnings, or momentum in the growth of any of these factors may not be comparable with what happens in the future for dynamic companies undergoing change. This renders these ratios useless as indicators of value. The key determinants for predicting the future earnings power of a company are actually *qualitative*. Factors like competitive positioning, industry growth, and the capital allocation ability of management are not adequately captured by simple ratios.

Small-cap managers are more likely to insulate their research process from quantitative obsolescence if they build it around qualitative company analysis. Finding dislocations between price and value comes from understanding businesses better than other investors and from modeling future free cash flows more accurately. Because equity value, by definition, is the discounted stream of future free cash flows for a business, an analyst's task is primarily a predictive one. Some factors that influence the cash-generating ability of a company are its competitive position, management's capital allocation decisions, industry growth prospects, and potential capital requirements. These are researched qualitatively. An understanding is achieved through the art of investment research. Reading company filings, industry journals, and reports; visiting company facilities; meeting with management; and other investment fieldwork help to

form the basis of qualitative company understanding. It is this work that can set a manager apart in the inefficient small-cap space.

If a company is earning far in excess of its cost of capital, it is likely to attract competition. Competitive forces chip away at economic margins in a capitalist system so that participants generally end up earning their cost of capital. The exceptions to this dynamic are companies with unique competitive positions. The competitively advantaged company can lever its position in the market and earn sustained economic profits. Competitive advantage can manifest itself in many ways. Graduate business students learn Michael Porter's five forces framework. First articulated in 1979 in the *Harvard Business Review*, Porter's five forces are helpful in identifying the competitive strengths and weaknesses of almost any business.

Porter's Five Forces

1. Bargaining power of suppliers
2. Bargaining power of buyers
3. Threat of new entrants
4. Threat of substitute products
5. Rivalry among industry participants

The first two forces emphasize the influence of suppliers and buyers on a company's competitive position. The third and fourth characterize the extent to which a company is threatened by competitive forces that may appear within the industry or in related industries. The final force describes the intensity of competition within an industry. In addition to these, some strategists would complement or further parse Porter's list to reflect the actions of the government, strategic alliances, technological lock-in and switching costs, network effects and positive feedback loops, standardization, and other industry characteristics that are conducive to one company's garnering an outsized share of economic profits.

Most fundamental analysts understand and acknowledge that the goal of competitive analysis is to identify the qualitative characteristics that enable a company to earn sustained profitability in excess of its cost of capital. What many investors fail to realize is that this quest is premised on another assumption: As long as a manager does not overpay for a business, sustained above-average internal business compounding should lead to above-average total stock returns, given a long enough time horizon. This is because increases in stock price necessarily follow the growth

in value of the underlying business. In the short term, a company's stock price may be volatile and appear to reflect the highs and lows of market emotion; over longer time periods, it will tend toward an average appraisal or intrinsic value. This outing of value happens in many ways. It may occur through information dissemination and the aggregate actions of market participants. It may be the result of a tender offer for the company. The company itself may help to out intrinsic value through the repurchase of stock or payment of special dividends. In any case, the manager's chain of logic should begin with the assumption that stock prices follow internal business compounding. And since managers are looking to experience above-average stock-price performance, they should be pursuing the competitive characteristics that allow for above-average business compounding.

Small-cap managers should assess the strengths and weaknesses of each idea by using Porter's framework. Excessive concentration in one supplier for a critical production input can force a company to forfeit control over its costs. Similarly, if there are only a handful of buyers for a company's product (like auto or aircraft parts sold to original equipment manufacturers), the company may be subjected to heavy pricing pressure. Both of these ruin profitability. Rivalry between firms may lead to aggressive pricing that can wreak havoc on profitability for all firms. In other markets, pricing may remain stable as firms compete on product differentiation. In technology, winner-take-all standards emerge for some software and information services companies. This creates an almost insurmountable barrier to entry. The most difficult force to assess in Porter's framework is the threat of substitutes. It is very difficult to predict the pace of innovation in certain industries, as analysts and the companies themselves have almost no idea what new products or technologies could render current ones obsolete until it is too late.

The small-cap manager should attempt to understand the linkage between returns-on-capital and competitive advantage. The latter drives the former, but the former is also indicative of the latter. If an analyst discovers that a company exhibits high returns on capital employed for long time periods, it is likely that the descriptive qualities of the business will reveal a competitive edge. This symbiosis may support the case for a quantitative screen using returns on capital as a factor; however, companies that exhibit sustainably high internal compounding are more likely to be priced as superior businesses, given their success. A better approach is to find those businesses that exhibit competitive advantages but have yet to post stellar financial results. These rare situations can be a source of high total returns for the astute manager.

Warren Buffett on Economic Moats (via "Measuring the Moat"):

"What we refer to as a 'moat' is what other people might call competitive advantage . . . It's something that differentiates the company from its nearest competitors – either in service or low cost or taste or some other perceived virtue that the product possesses in the mind of the consumer versus the next best alternative . . . There are various kinds of moats. All economic moats are either widening or narrowing – even though you can't see it."

Outstanding Investor Digest, June 30, 1993

"Look for the durability of the franchise. The most important thing to me is figuring out how big a moat there is around the business. What I love, of course, is a big castle and a big moat with piranhas and crocodiles."

Linda Grant, "Striking Out at Wall Street," U.S. News & World Report, June 12, 1994

"The key to investing is not assessing how much an industry is going to affect society, or how much it will grow, but rather determining the competitive advantage of any given company and, above all, the durability of that advantage. The products or services that have wide, sustainable moats around them are the ones that deliver rewards to investors."

Warren Buffett and Carol Loomis, "Mr. Buffett on the Stock Market," Fortune, November 22, 1999

"We think of every business as an economic castle. And castles are subject to marauders. And in capitalism, with any castle . . . you have to expect . . . that millions of people out there . . . are thinking about ways to take your castle away."

Then the question is, 'What kind of moat do you have around that castle that protects it?'"

Outstanding Investor Digest, December 18, 2000

"When our long-term competitive position improves . . . we describe the phenomenon as 'widening the moat.' And doing that is essential if we are to have the kind of business we want a decade or two from now. We always, of course, hope to earn more money in the short-term. But when short-term and long-term conflict, widening the moat must take precedence."

Berkshire Hathaway Letter to Shareholders, 2005

"A truly great business must have an enduring 'moat' that protects excellent returns on invested capital. The dynamics of capitalism guarantee that competitors will repeatedly assault any business 'castle' that is earning high returns . . . Our criterion of 'enduring' causes us to rule out companies in industries prone to rapid and continuous change. Though capitalism's 'creative destruction' is highly beneficial for society, it precludes investment certainty. A moat that must be continuously rebuilt will eventually be no moat at all . . . Additionally, this criterion eliminates the business whose success depends on having a great manager."

Berkshire Hathaway Letter to Shareholders, 2007

****

Peter Thiel: Characteristics of Monopoly to Look For (Notes and quotes from Hurricane Capital blog):

Thiel asks and discusses a critical question when it comes to businesses and investing: *"What does a company with large cash flows far into the future look like?"* This is pretty close to the one-million dollar question. But Thiel also provides a discussion of the different characteristics to look for in our analysis of different businesses. According to Thiel "[e]very monopoly is unique, but they usually share some combination of the following characteristics: proprietary technology, network effects, economies of scale, and branding."

Below each one of the different characteristics is summarized with all of the quotes below taken from the book.

Monopoly Characteristic Nr. 1: Proprietary Technology

Definition: "Proprietary technology is the most substantive advantage a company can have because it makes your product difficult or impossible to replicate."

Two different ways: (1) invent something completely new, or (2) radically improve an existing solution.

· Invent something completely new: "Google's search algorithms, for example, return results better than anyone else's. Proprietary technologies for extremely short page load times and highly accurate query autocompletion add to the core search product's robustness and defensibility. It would be very hard for anyone to do to Google what Google did to all the other search engine companies in the early 2000s."

· Radically improve on an existing solution: "Or you can radically improve an existing solution: once you're 10x better, you escape competition. PayPal, for instance, made buying and selling on eBay at least 10 times better. Instead of mailing a check that would take 7 to 10 days to arrive, PayPal let buyers pay as soon as an auction ended. Sellers received their proceeds right away, and unlike with a check, they knew the funds were good. Amazon made its first 10x improvement in a particularly visible way: they offered at least 10 times as many books as any other bookstore. When it launched in 1995, Amazon could claim to be "Earth's largest bookstore" because, unlike a retail bookstore that might stock 100,000 books, Amazon didn't need to physically store any inventory—it simply requested the title from its supplier whenever a customer made an order. This quantum improvement was so effective that a very unhappy Barnes & Noble filed a lawsuit three days before Amazon's IPO, claiming that Amazon was unfairly calling itself a "bookstore" when really it was a "book broker." You can also make a 10x improvement through superior integrated design. Before 2010, tablet computing was so poor that for all practical purposes the market didn't even exist. "Microsoft Windows XP Tablet PC Edition" products first shipped in 2002, and Nokia released its own "Internet Tablet" in 2005, but they were a pain to use. Then Apple released the iPad. Design improvements are hard to measure, but it seems clear that Apple improved on anything that had come before by at least an order of magnitude: tablets went from unusable to useful."

Examples: Google, PayPal, and Amazon.

Rule of thumb: Must be "at least 10 times better than its closest substitute in some important dimension to lead to a real monopolistic advantage."

Monopoly Characteristic Nr. 2: Network Effects

Definition: "Network effects make a product more useful as more people use it."

Examples: "For example, if all your friends are on Facebook, it makes sense for you to join Facebook, too. Unilaterally choosing a different social network would only make you an eccentric."

Rule of thumb: "Network effects can be powerful, but you'll never reap them unless your product is valuable to its very first users when the network is necessarily small. … Paradoxically, then, network effects businesses must start with especially small markets. Facebook started with just Harvard students—Mark Zuckerberg's first product was designed to get all his classmates signed up, not to attract all people of Earth. This is why successful network businesses rarely get started by MBA types: the initial markets are so small that they often don't even appear to be business opportunities at all."

Monopoly Characteristic Nr. 3: Economies of Scale

Definition: "A monopoly business gets stronger as it gets bigger: the fixed costs of creating a product (engineering, management, office space) can be spread out over ever greater quantities of sales. Software startups can enjoy especially dramatic economies of scale because the marginal cost of producing another copy of the product is close to zero."

Rule of thumb: "Many businesses gain only limited advantages as they grow to large scale. Service businesses especially are difficult to make monopolies. If you own a yoga studio, for example, you'll only be able to serve a certain number of customers. You can hire more instructors and expand to more locations, but your margins will remain fairly low and you'll never reach a point where a core group of talented people can provide something of value to millions of separate clients, as software engineers are able to do."

Examples: "A good startup should have the potential for great scale built into its first design. Twitter already has more than 250 million users today. It doesn't need to add too many customized features in order to acquire more, and there's no inherent reason why it should ever stop growing."

Monopoly Characteristic Nr. 4: Branding

Definition: "A company has a monopoly on its own brand by definition, so creating a strong brand is a powerful way to claim a monopoly."

Rule of thumb: "Beginning with brand rather than substance is dangerous."

Examples: "Today's strongest tech brand is Apple: the attractive looks and carefully chosen materials of products like the iPhone and MacBook, the Apple Stores' sleek minimalist design and close control over the consumer experience, the omnipresent advertising campaigns, the price positioning as a maker of premium goods, and the lingering nimbus of Steve Jobs's personal charisma all contribute to a perception that Apple offers products so good as to constitute a category of their own."

"...building [i.e. organic growth] is better unless the challenge is rooted in network effects, in which case the best course of action is the exact opposite."

From Ben Thompson (in an article discussing Amazon's purchase of Whole Foods):

In fact, I think that is the point: you only pay that much for something you cannot build yourself.

The best example is social networking: Facebook took off by digitizing offline relationships, but as the company eventually learned, that didn't mean they could create new social networks by brute force (to be clear, Messenger is not a separate network; it's a separate app sitting on the same network as Facebook proper). One of the reasons social networks are such attractive businesses is because, well, they are networks: extremely hard to build, and extremely resilient once built. And so, Facebook has decided to buy them instead.

Google's purchase of YouTube is another example: the search giant tried to compete with YouTube with its own Google Videos product, but YouTube had superior network effects (in this case, a two-sided network of video uploaders and viewers). So Google just bought the whole thing.

Surprisingly, the purchase of Whole Foods is not dissimilar: as I explained yesterday groceries present unique challenges, particularly perishable goods. It is basically a two-sided network problem: on one side you need sufficient items to be competitive, and on the other you need sufficient customers such that perishable goods in particular are purchased before they spoil.

Of course, just as it took Facebook time to realize they couldn't simply ape every other network, and Google time to realize that YouTube was kicking their rear end, it took Amazon time — a full decade! — to realize it was facing a network problem with no built-in shortcuts like books. And now, with that network problem solved, I expect the company to get back to the businesses of slowly and methodically building its business and only making acquisitions that support that.

This, by the way, is why Apple has, with the exception of Beats (which is a pretty meh acquisition at this point), never made a major acquisition: the company's business model is very straightforward — sell physical products directly to customers — which means network effects are rarely an issue. Instead, the company has rightly prioritized building its own solutions and adding smaller companies to augment that. In short, building is better unless the challenge is rooted in network effects, in which case the best course of action is the exact opposite.

Michael Porter on disruptive technology (from the Porter interview at the end of the book *Understanding Michael Porter: The Essential Guide to Competition and Strategy*):

Magretta: What is a disruptive technology? Where does it intersect with your thinking about strategy?

Porter: This is a really useful and compelling idea, but it is badly misused and misunderstood to refer to any and every competitive threat. It would be more helpful for managers to use the term only for the far less common situation of real game changers.

A disruptive technology is not any new technology. Many new technologies are not disruptive. Nor is it any big technological leap, because many big leaps are not disruptive. A disruptive technology is one that invalidates value chain configurations and product configurations in ways

that allow one company to leap ahead of another and/or make it hard for incumbents to match or respond because of the existing assets they have. So a disruptive technology is one that would invalidate important competitive advantages.

The Internet offers a classic case. It was disruptive where the mechanism for delivering information was fundamental to the product or service, where the business, in essence, was the delivery mechanism. Travel agents, for example, or the recorded music business. But in other cases, the Internet wasn't disruptive because it was simply one more channel for communicating with customers or suppliers. In those cases, established companies with the best product sets and brands were simply able to incorporate the new technology. It wasn't incompatible or inconsistent with anything they were doing.

Two questions will tell you whether you're dealing with a disruptive technology or not. First, to what extent does it invalidate important traditional advantages? Second, to what extent can incumbents embrace the technology without major negative consequences for their business? If you stop and ask those questions, you'll see that true disruptions are not so common. If you look over a decade, for example, at the hundreds of industries that make up the economy, I would guess that less than 5 to 10 percent would be affected by a disruptive technology.

Having said that, managers should of course be on the lookout for potentially disruptive changes. The advice they get tends to focus on just one form of disruption: a simpler and less costly technology is improved and gets good enough to serve a need that's currently met by a more complex and more costly technology. So most managers look for the threat to come from below, from some upstart you've been dismissing as being irrelevant to your business. And then you learn to your horror that for a lot of customers, the upstart is good enough. To use my value proposition terms, the customers' needs were being overserved by the "old" technology. The new one meets just enough of their needs at the right price. Disruption from below is an example of a focus strategy. If you focus on the customers who don't need all the special bells and whistles, you can establish a beachhead. A focuser with a disruptive technology can enter your industry and ultimately grow to occupy a major position. This is the Southwest Airlines story.

But other forms of disruption play a role in strategy. The threat can come from above. You can have an advanced technology or a richer approach that performs at a high level but that can be simplified or streamlined to meet less sophisticated needs at much lower cost. We don't have

good evidence on which form is most prevalent, but both exist. Disruptive technology is compelling as a metaphor, but managers need to be rigorous about what's creating the disruption. How does it impact the value chain? Relative price? Relative cost? The strategy fundamentals definitely apply here.

****

Circle of Competence

- "What I cannot create, I do not understand." —Richard Feynman
- Do I understand the entire process of how they make money?
    - Do I understand the true economics of the business?
    - How are all the stakeholders/employees compensated?
    - How do the economics compare to the reported earnings?
    - (Test yourself and describe it to a ten year old.)
- What is the selling model: razor/blades? services? one-off contracts?
    - Can you describe the sales process from order to fulfillment?
- What are the economics of the base business unit?
    - How does it stack up against competitors?
- Can I get complete information to understand the business?
- Do I have an edge either in information gathering or in interpreting the information?
- Do I understand the competitive landscape?
    - And remember to think about the *potential* competitive landscape. For example, a company with a good niche may look to have a great competitive position or maybe even a lock on a local market. But if margins and returns on capital are high, it may entice a larger competitor to finally enter the market, spend money, and drive down returns and margins for everyone. ("Your margin is my opportunity." –Jeff Bezos)
    - "In order to best understand a company, you first have to understand the industry. Only focus on companies and industries you understand. Don't go outside your circle of competence. You need to know what the strengths of the company are in relation to the competition, if they have a good management team, and most importantly, what the moat is. **If you don't**

know how many competitors the company has, do not invest in the company. Coke's moat is that it has no taste accumulation, and the moat of railroad companies are that no one can build anymore because of saturation. That is why I am currently invested in both industries." —Warren Buffett (2015 meeting with Ivey School students)

- Can I define why the stock is undervalued?
- Do I understand the country and culture I am investing in?
- Can I talk to the company's trade association, customers, or competitors to gain a better understanding of the business and competitive landscape?
- Peter Bevelin quote: "Meeting and learning from certain people and my own practical experiences has been more important in my development. As an example – When I was in my 30s a good friend told me something that has been very useful in looking at products and businesses. He said I should always ask who the real customer is: *'Who ultimately decides what to buy and what are their decision criteria and how are they measured and rewarded and who pays?'*"
- What insight do I have on this business that others don't have?

Industry Specific Quotes:

Warren Buffett on retail: "Retailing is a tough business. During my investment career, I have watched a large number of retailers enjoy terrific growth and superb returns on equity for a period, and then suddenly nosedive, often all the way into bankruptcy. This shooting-star phenomenon is far more common in retailing than it is in manufacturing or service businesses. In part, this is because a retailer must stay smart, day after day. Your competitor is always copying and then topping whatever you do. Shoppers are meanwhile beckoned in every conceivable way to try a stream of new merchants. In retailing, to coast is to fail…. Buying a retailer without good management is like buying the Eiffel Tower without an elevator."

Roger Lowenstein's oil example in *Security Analysis, Sixth Edition*: "The competition for such values is fiercer in the United States, but they can be found, especially, again, when some

broader trend punishes an entire sector of the market. In 2001, for instance, energy stocks were cheap (as was the price of oil). Graham and Dodd would not have advised speculating on the price of oil—which is dependent on myriad uncertain factors from OPEC to the growth rate of China's economy to the weather. But because the industry was depressed, drilling companies were selling for less than the value of their equipment. Ensco International was trading at less than $15 per share, while the replacement value of its rigs was estimated at $35. Patterson-UTI Energy owned some 350 rigs worth about $2.8 billion. Yet its stock was trading for only $1 billion. Investors were getting the assets at a huge discount. Though the subsequent oil price rise made these stocks home runs, the key point is that the investments weren't dependent on the oil price. Graham and Dodd investors bought into these stocks with a substantial margin of safety."

Chris Begg Q4 2015 letter sections -- Quality of the Business, Culture:

Quality of the Business – *Distinction*

The first lens of our investment process begins with an assessment of the Quality of the Business. We have articulated our hexagonal approach to *Distinction* in previous quarterly letters and have referred to this element of our process as the "Six Sides of Great." Toward this end we are qualifying and quantifying a business's economics, competitive advantage, market opportunity, pricing power, capital (structure and allocation history), and management's operational capability. We are looking to determine what *owner earnings* will look like over the next five to ten years with some confidence. Businesses are categorized as Compounders, Transformations and Workouts depending on their lifecycle and economics.

The beacon that lights the way for any business that passes our due diligence of *Distinction* lens is a **PIPER mindset**. Persistent Incremental Progress Eternally Repeated is at the heart of anything that grows and grows better over time. We are ideally looking for businesses where the terminal value will be materially better in five years or more.

PIPER Mindset – Twin Lights South – *Distinction*

Great businesses have a focused and far-reaching signal that is driven by a winning system and strategy. Every great business has a *flywheel* at work that is providing a steady state – non-intermittent power source producing abundant and amplified power. We attempt to identify a business's key drivers based on what flywheel effects are at work. We borrowed this idea from the actual back of the napkin flywheel that Jeff Bezos created when he launched Amazon. We have found this template a creative way to identify six critical areas of the business that will create *enduring* growth or help identify when there is a fatal flaw in the system. We have looked at East Coast's investment management principles under the same framework.

1. **Win-Win:** Our flywheel begins with the objective of a win-win mandate. We want our operations and the businesses we invest in to pass the "Win-Win Test" with all six counterparties: customers, employees, suppliers, stewards, shareholders, and the community. Win-Win is the only system that is sustainable over the long-term – any fatal flaw with any counterparty will inevitably self-correct. We believe by striving to eliminate Win-Lose, Lose-Win, and Lose-Lose situations we can go far in removing many of the blind spots that those unsustainable relationships nurture.

2. **Mastery:** We are seeking a level of Mastery in understanding the fundamental truths that enable a business to earn superior returns, with a healthy margin of safety over the longest duration possible. We prefer "one decision" (buy) to "three decision" (buy, sell, reallocate) investments, therefore the duration and sustainability of a business's advantages are important to us. We want to cultivate a level of creativity and imagination of how we curate and source the opportunities that meet our criteria.

3. **20%:** We believe Pareto's principle is one of nature's most prominent signatures. 20% of anything that is allowed to thrive owes its gratitude to the 80% that gives birth to its contrasting advantageous divergence. We believe it is likely that less than 20% of all businesses, worldwide, are actually going to be better five years from now. We are qualifying better as a widening moat and quantifying better as its return on tangible assets employed. This insight has taken greater essence for us as our process has evolved and is particularly important for focused investment strategies. This quality insight came out of the rhetorical question Warren Buffett has often asked – what percent of businesses will be better five years from now?

4. **IRR:** If we are successful in seeking Win-Win relationships, arriving at investment Mastery in our niche, and investing in a curated universe of businesses that are improving (20%), we increase our odds of earning superior compounded returns, without risking permanent loss of capital over a long duration.

5. **Partners:** Our desire is to work with clients and partners who share our appreciation of the logarithmic path – compounding of learning and capital. We believe our success will be directly correlated with whom we partner with to maintain a structure that can enable mutual success. Partners will lead to leaping emergent effects in both the joy of compounding and compounding of joy. We are interested in both so our business development efforts are limited to introductions by interested parties that we trust. We endeavor to deserve a call from potential clients and partners that share these ideals.

6. **Network:** A carefully cultivated network of investors and operators drives exponential benefits to the proceeding five ideals. This is one of the great sources of intellectual property we honor. This is also one of the areas in which we receive our greatest sources of joy in solving the puzzles with curious, intelligent, hardworking individuals.

"In chess you might find a good move. Then you might find a better move. But take your time. ***Find the best move****.... It is rarely a mysterious technique that drives us to the top, but rather a profound mastery of what may well be a basic skill set."* - Josh Waitzkin – *The Art of Learning*

Quality of the Investment – ***Safety***

The second lens of our investment process takes a *quality business of distinction* through an assessment of the Quality of the Investment. We have written about our hexagonal approach to *Safety* and referred to this stage of our process as "M-Theory." Toward this end we are qualifying and quantifying the investment's merit by the following attributes: nature of its mispricing (M), critical data points that will drive the investment (H4), margin of safety (MoS), price and valuation (IRR), the duration and durability of competitive advantage (Nth) and economics (e). The foundational understanding where we are looking to arrive at is to determine the compounding merit of the investment – superior returns, asymmetric risk, and ideally a long-duration. We value the important truth that almost any advantage can be copied away eventually

and that the only truly sustainable long-term competitive advantage lies in the *culture* of a business.

The beacon that lights the way for any investment that passes the due diligence of our *Safety* lens is **Culture**.

"Quality tends to fan out like waves. The Quality job he didn't think anyone was going to see is seen, and the person who sees it feels a little better because of it, and is likely to pass that feeling on to others, and in that way the Quality tends to keep on going." - Robert M. Pirsig – *Zen and the Art of Motorcycle Maintenance*

Culture – Twin Lights North – *Safety*

We are keenly aware that the only, truly *durable* competitive advantage is Culture.

1. **Win-Win:** Win-win is as much safety as it is compassion. The sustainability of any organization ultimately rests on delivering a win-win partnership with counterparties. Any other relationship will eventually lead to a fatal flaw that will eventually be corrected. Be constant – Be Kind.

2. **LATitude:** The best, most thriving business cultures typically have a combination of three things: 1) a centralized leader who sets the tone of the organization, 2) a leader who gives responsibility and autonomy to their teams, individuals and often business units to carry out their vision, and 3) a leaping emergent effect driven by team dynamics. We see the effectiveness of this at Berkshire Hathaway, Transdigm, Constellation Software, and Glenair. The alternative is an approach of centralized control and micromanaging that, while it can optimize cost and control, rarely aligns with human nature's innate desire for freedom.

"A leader is best when people barely know he exists, when his work is done, his aim fulfilled, they will say: we did it ourselves." - Lao Tzu – *Dao de Jing*

3. **Winning System & Strategy:** Winning is just as important for employees as it is for the owners and operators of the business. Winning is essential to the culture of the organization. Not every human being is given the same opportunities at birth. For many employees working for a winning business may be one of their first opportunities to be part of

something greater than themselves. Shared success and purpose amplify human achievement and the whole can accomplish things that were never thought possible.

"The achievement in my life of which I am the most proud was turning that crew into a tight-knit, smoothly functioning team that boasted—accurately—that Benfold was the best damn ship in the Navy." - D. Michael Abrashoff – *It's Your Ship: Management Techniques from the Best Damn Ship in the Navy*

4. **Getting the Air Right:** A safe, secure environment where there is plenty of work is one of the most important elements of a great culture. Any species on this planet, when there is a feeling that resources are scarce, will hoard. Employees, when they feel the work is scarce or their job is at risk of being rationalized, will hoard work and hoard information so no one will know how to do their job. This culture of hoarding exists in many businesses that fail to understand the important psychology of scarcity and abundance. The goal is to create a homeostasis environment where workers can feel safe and thrive. This insight was recently imprinted again after a recent visit to see Peter Kaufman at Glenair – one of the best cultures and most exceptional CEOs in the world.

5. **Positively Spring-Loaded:** Every organization is subject to chaos. Uncertainties of economic cycles, disruptive technologies, and competition affect every company. The goal is to have a culture where the chaos can be confronted with a positive, united force. If all of the first four attributes of a great culture are in place, the business will have prepaid the system for positive outcomes. Cultures that are inferior when they face challenges will often spiral out of control because the system is negatively spring-loaded.

6. **Self-Policing:** Another virtuous effect of a great culture is that the work force and system participants will take great care to protect that which they value. They value their career, livelihood, and the joy and purpose of their job that they will monitor to make sure nothing stands in the way of hindering their happiness and autonomy.

****

Quotes, Thoughts, and Reminders on Risk & Fragility

Risk = probability and amount of potential loss; possibility of permanent loss of capital.

- Balance Sheet Risk
- Income Statement/Business Risk (sales, margins, etc.)
- Valuation Risk

What is important? What is knowable? And what is unknowable?

- Russo: "…what I have observed about the really great investors is the simple decisions that they end up having to make by virtue of focusing on what's important and what's unknowable."
- Charlie Munger: "A special version of this 'man with a hammer syndrome' is terrible, not only in economics but practically everywhere else, including business. It's really terrible in business. You've got a complex system and it spews out a lot of wonderful numbers that enable you to measure some factors. But there are other factors that are terribly important, [yet] there's no precise numbering you can put to these factors. You know they're important, but you don't have the numbers. Well practically everybody (1) overweighs the stuff that can be numbered, because it yields to the statistical techniques they're taught in academia, and (2) doesn't mix in the hard-to-measure stuff that may be more important."
- "Not everything that counts can be counted, and not everything that can be counted counts." —sign that hung in Albert Einstein's office at Princeton
- Taleb: "The probabilities of very rare events are not computable; the effect of an event on us is considerably easier to ascertain (the rarer the event, the fuzzier the odds). We can have a clear idea of the consequences of an event, even if we do not know how likely it is to occur….This idea that in order to make a decision you need to focus on the consequences (which you can know) rather than the probability (which you can't know) is the central idea of uncertainty."

How fragile is this investment?

- Taleb:
    - "Instead of a discussion of risk (which is both predictive and sissy) I advocate the notion of fragility, which is not predictive—and, unlike risk, has

an interesting word that can describe its functional opposite, the nonsissy concept of antifragility."

- "It is far easier to figure out if something is fragile than to predict the occurrence of an event that may harm it. Fragility can be measured; risk is not measurable (outside of casinos or the minds of people who call themselves "risk experts"). This provides a solution to what I've called the Black Swan problem—the impossibility of calculating the risks of consequential rare events and predicting their occurrence. Sensitivity to harm from volatility is tractable, more so than forecasting the event that would cause the harm. So we propose to stand our current approaches to prediction, prognostication, and risk management on their heads."
- "In every domain or area of application, we propose rules for moving from the fragile toward the antifragile, through reduction of fragility or harnessing antifragility. And we can almost always detect antifragility (and fragility) using a simple test of asymmetry: anything that has more upside than downside from random events (or certain shocks) is antifragile; the reverse is fragile."
- "Antifragility is beyond resilience or robustness. The resilient resists shocks and stays the same; the antifragile gets better."
- "You cannot say with any reliability that a certain remote event or shock is more likely than another (unless you enjoy deceiving yourself), but you can state with a lot more confidence that an object or a structure is more fragile than another should a certain event happen."

Seth Klarman quotes:

- "Accepting that we cannot predict the future--i.e., that there will always be unexpected and highly consequential events--is the first step in becoming less fragile and more adaptable. People should be highly skeptical of anyone's, including their own, ability to predict the future, and instead pursue strategies that can survive whatever may occur. Taleb advises us to be "antifragile"-- i.e., to embrace those elements that benefit from volatility, variability, stress, and disorder. This is exactly what we strive to do at Baupost, and Taleb has coined a name for it. The world will always deliver surprises coming from left field, things that have never happened before or, at least, that no one

can remember having happened. As Nobel Laureate Daniel Kahneman notes, people tend to underestimate the odds of extreme events that haven't occurred recently. It's a tendency known as availability bias. This tendency is crucial to effectively position ourselves to survive and even thrive regardless of an uncertain future. How do we do that? By eschewing portfolio leverage, keeping ample cash balances ready for rapid deployment, pursuing a mostly generalist and flexible approach while avoiding narrow silos, seeking bargain-priced investments where possible adverse developments are already priced in, holding numerous investments with uncorrelated catalysts to drive outcomes irrespective of market levels, maintaining prudent diversification, demanding high intellectual honesty while consistently striving to improve, and having clients whose long-term orientation matches our own."

- "In the financial markets, there is rarely anything new under the sun, but you can never say you've seen it all, and what you thought you would never see can clobber you."
- "We make no heroic assumptions in our analysis, hoping, instead, that by compounding multiple conservative assumptions, we will create such a substantial margin of safety that a lot can go wrong without impairing our capital much or even at all. We never invest just to invest and don't bet blindly on mean reversion or on historical relationships holding up. Our settings are permanently turned to 'risk off.'"

Howard Marks and Ian Schapiro on risks to avoid (in a discussion on power industry investments specifically, but also in relation to overall risk management)….

- Risks to Avoid:
    - Commodity Risk
    - Turnaround Risk
    - Technology/Start-up/Venture Risk
    - Leverage Risk
    - Regulatory Risk
    - Inertia Risk [having to do something because someone else (customer, competitor, etc.) is doing something?]

Is this a business/balance sheet/management team that can/will gain from disorder (often at the expense of less able competitors)?

How sensitive is the business to the overall economy?

Have I considered second order and higher level impacts? [i.e. Howard Marks' second-level thinking.]

If there is a distressed seller, is he being forced to liquidate unrelated securities that could be creating opportunities elsewhere and/or creating a negative feedback loop forcing others to sell?

- Examples = Hunt brothers' trouble in the silver market forcing them to sell cattle positions in 1980; Portfolio insurance in 1987; or LTCM in 1998 (see Bookstaber 1999 paper and June 2008 testimony for details).

Are there either forced buyers (i.e. mutual funds that got inflows) or forced sellers (i.e. margin calls – need to sell at any price)?

Have I thought forwards and backwards?

- Invert, always invert.

Consideration of risk must never take a backseat to return.

Risk is always relative to the price paid.

Remember that large capital projects almost always run (way) over budget. Investing based on earnings and future capacity before the capex is finished often ends badly.

"The great lesson in microeconomics is to discriminate between when technology is going to help you and when it's going to kill you." —Charlie Munger

- Does technology increase the power of the incumbents, or open the door to new entrants? Do investments in technology accrue to company profits or to lowering the price for customers? Etc.

Are you using the current business model and not anchoring on how the business used to be (i.e. remember that businesses are always changing)?

- Has there been a significant change in the structure of this market/industry, no matter how stable it seems to have been in the past? For example:
  - Steel prices declined 80% after Carnegie developed and built a new kind of plant that massively increased output.

    - After the Spindletop discovery in Texas by the Hamil brothers in 1901, a barrel of oil dropped from about $2.00 down to $0.03. Oil at that time was cheaper than water.
    - The price of a car went from 2 years wages to 3 months wages due to the assembly line, although this was over a ten year period.
    - Malcolm McLean's 1956 innovation of the shipping container slashed shipping prices from $6 to $0.16 cents per ton.

What role does innovation play in the industry and what does it cost?

A competitor that comes in with a simpler, cheaper, and inferior product can potentially be much more dangerous than one that develops a better but yet more complex and expensive product. (Clayton Christensen's disruption innovation idea)

Three enablers of disruption:

1. Technological
2. Business Model
3. Commercial system

If there is a new technology or more efficient way discovered to do something, do the cost savings accrue to the business or the customer?

- e.g. Berkshire textile days when new machines were purchased to make things more efficient, but the efficiencies all accrued to lowering the cost for customers (competitive market where all competitors bought the same new machines).
- e.g. The invention of the cotton gin kept prices very low for cotton and the things made of cotton.

A low cost business model only works if there's high cost competition (i.e. steel mini-mills worked until high cost competitors left and then all that was left were low cost mini-mills, which increased competition and drove down margins).

"What can go wrong is really more important than what can go right, because over time, even a marginally good business will profit—will do well. So you really need to understand: you don't know what anything is worth until you know what can go wrong." —Tony Deden

****

John Maynard Keynes was not a great investor until he switched to focusing on high quality, concentrated bets where he did a lot of work in getting to know the businesses he was invested in. In a memo, he laid out what some of his core principles. From Chris Mayer's book *100 Baggers* (with slight formatting edits to fit this newsletter):

Keynes's investment performance improved markedly after adopting these ideas. Whereas in the 1920s he generally trailed the market, he was a great performer after the crash. Walsh dates Keynes's adoption of what we might think of as a Warren Buffett sort of approach as beginning in 1931. From that time to 1945, the Chest Fund rose tenfold in value in 15 years, versus no return for the overall market. That is a truly awesome performance in an awfully tough environment.

A more recent paper is "Keynes the Stock Market Investor," by David Chambers and Elroy Dimson. They add more interesting details about how his investing style changed. As Chambers and Dimson note, "As a young man, Keynes was supremely self-assured about his capabilities, and he traded most actively to the detriment of performance in the first period of his stewardship of the College endowment up to the early 1930s."

In the early 1930s, he changed his approach. With the exception of 1938, he would never trail the market again. This change showed up in a number of ways. First, he traded less frequently. He became more patient and more focused on the long-term.

Here is his portfolio turnover by decade:

1921–1929: 55%

1930–1939: 30%

1940–1946: 14%

Turnover was just one aspect of Keynes's change. Another was how he reacted during market declines. From 1929 to 1930, Keynes sold one-fifth of his holdings and switched to bonds. But when the market fell in the 1937–1938, he added to his positions. He stayed 90 percent invested throughout.

This is a remarkable change. It again reflects less concern about short-term stock prices. He was clearly more focused on the value of what he owned, as his letters show. The authors of the paper note of Keynes's change, "Essentially, he switched from a macro market-timing approach to bottom-up stock-picking."

In a memorandum in May of 1938, Keynes offered the best summing up of his own philosophy:

1. "careful selection of a few investments (or a few types of investment) based on their cheapness in relation to their probable actual and potential intrinsic value over a period of years ahead and in relation to alternative investments;
2. a steadfast holding of these investments in fairly large units through thick and thin, perhaps for several years, until either they have fulfilled their promise or it has become evident that their purchase was a mistake; and
3. a balanced investment position, that is, a portfolio exposed to a variety of risks in spite of individual holdings being large, and if possible, opposed risks."

Here is one last bit of advice from the same memo:

"In the main, therefore, slumps are experiences to be lived through and survived with as much equanimity and patience as possible. Advantage can be taken of them more because individual securities fall out of their reasonable parity with other securities on such occasions, than by attempts at wholesale shifts into and out of equities as a whole. One must not allow one's attitude to securities which have a daily market quotation to be disturbed by this fact."

Sanjay Bakshi on when management is especially important:

[Warren Buffett's] words "*leverage magnifies the effects of managerial strengths and weaknesses*" imply that whenever leverage is high, management factor is important.

Take HDFC Bank. Would you like to remain invested in HDFC Bank if it was run by a fool who doesn't know anything about risk management and would love to learn on the job?

Which other highly leveraged industry has attracted Mr. Buffett's interest? Well, the answer of course is the insurance industry.

Insurance uses float (other peoples' money) which is another form of leverage. The role of management becomes terribly important in this business. That's because it's easy for a fool to under-price insurance contracts, the consequences of which will not show up in the P&L for many years.

This even more true in the Super Cat insurance business. That's because there is little baseline information to be relied on to adequately price insurance contracts.

The same logic applies to derivatives, where leverage magnifies the effects of smart, as well as, dumb behavior.

Imagine if one day someone like Kenneth Lay replaced Ajit Jain to run Berkshire Hathaway's Reinsurance business and its derivatives book!

Which other business models require you to focus a lot on managerial skills? Well, one that comes to mind would be a good business which operates on wafer-thin margins but still delivers an acceptable return on equity because of high capital turns and/or presence of float. [e.g. "McLane, a Berkshire Hathaway subsidiary which is a distributor of groceries, confections and non-food items to thousands of retail outlets, the largest of them being Wal-Mart."]

Sanjay Bakshi on Intelligent Fanatics:

"If you get an opportunity to get into a wonderful business that's being run by an intelligent fanatic and if you don't load up, it's a big mistake." –Charlie Munger

Who are intelligent fanatics? What are their traits? How do we find them?

These were important questions which fascinated me.

The idea of an intelligent fanatic is a simple one but it must not be taken lightly. Charlie likes to say: "Take a simple idea and take it seriously."

So I took up this simple idea and I took it seriously. I went about looking for people who

Charlie would call intelligent fanatics. I read up everything he and Warren had written about the kinds of business owners they had partnered with. People like Rose Blumkin — founder of Nebraska Furniture Mart, for example.

Let's take Rose Blumkin. Buffett adored her. Why? What qualities did she possess that made him adore her? There were three — integrity, energy and intelligence.

I found the very same attributes in the other entrepreneurs who had sold their businesses to Berkshire. As I read through all the material and reflected upon it, a pattern starting to emerge. I started to see similarities with some entrepreneurs in India. They had the same combination of integrity, energy and intelligence. And they ran really high quality operations.

…. Now, let's shift focus to the second ingredient of an intelligent fanatic: Energy.

All entrepreneurs, by definition have a lot of energy and these seven guys have plenty of it too. But there's something about energy that these seven guys (and other intelligent fanatics) have, which other entrepreneurs usually don't. And that something is FOCUS.

An INTENSE FOCUS.

…These guys understand the power of focus, and the power of extreme specialization. They agree with Charlie and they agree with Warren.

"Our job is to find a few intelligent things to do, and not to keep up with every damn thing in the world." –Charlie Munger

"The difference between successful people and really successful people is that really successful people say NO to almost everything." –Warren Buffett

…. So, there we have it. Two of the three ingredients of Intelligent Fanatics — integrity, and right type of energy. But there's a third ingredient: Intelligence. As investors, the last thing we

need is to partner with dumb fanatics. So, what are the things we are looking for when we look for intelligence? Well, one trick Munger uses is that of inversion. So, let's try that. What are the common elements of dumb behavior? Four are key. (1) Over-aggression, usually expressed in the form of excessive leverage; (2) Growth without any regard to profitability; (3) A tendency to gamble; and (4) An inability or unwillingness to delegate, constraining growth potential.

Well, you won't find any of those elements in the seven guys I talked about. They are low profile, frugal and conservative. Five of them have no debt and the remaining three have extremely strong balance sheets. They run their businesses for profitable growth as the numbers I showed you proved. They understand the idea of per-share intrinsic business value. They don't over bid for assets in acquisition deals. Nor do they dilute equity on unfavourable terms. In fact, most of them have delivered growth with zero dilution.

Moreover, they *understand* the concept of moat and spend all their time trying to expand theirs. Charlie's observation that "almost all good businesses engage in 'pain today, gain tomorrow' activities" applies very well to the businesses managed by these seven guys. They invest in their businesses while thinking in terms of decades and not the next quarter.

They are also what Charlie calls "learning machines." Recall, the case of Achal Bakeri — the cooler guy [who had taken the company bankrupt before changing his business model]. He made many mistakes, but he learnt and he never repeated them. In fact, he was candid about his mistakes. He listed them in his letters. And he said 'I am never going to borrow money again, I am going to focus on becoming the best cooler company in the world and I am going to outsource manufacturing so I can focus on product design and branding and marketing.'

These guys *understand* risk management. They don't gamble. No matter how lucrative the numbers look, they never bet the company on one product or one deal. And they know they can't do it on their own, so they know the importance of getting help.

…. These seven guys taught me a lot of things. They taught me the importance of extreme specialization. That's why when I started a fund, my partner and I decided to become extreme specialists in moat investing. We don't waste our time on other businesses. They taught me about the benefits of partnering with entrepreneurs like them. It is obvious to me that the

formula of owning a group of great businesses run by intelligent fanatics is a very good business plan. It took me 15 years to figure this out. Finally, Sid taught me the benefits of holding on to a great business run by someone like him. I don't ever want to sell a business at 600 and see its value soar to 20,000 over the next 6 years.

My study of Intelligent Fanatics taught me that they are geniuses who have the ability to compound capital at handsome rates of return for decades and that ending your partnership with them by selling out is almost always a bad idea.

****

Peter Kaufman on the Win-Win (from his Culture presentation):

Whether you are an employer, employee, customer or supplier, you simply never want to be viewed by your counterparties as a reason for their "losing." I see this madness all the time in my industry—employers, employees, suppliers, customers—all behaving as if deceit, double-dealing and squeezing out the last dime are shrewd, savvy, "best practices." ***Their untrustworthiness acts to cause the best of their counterparties—often the most valuable "intellectual capital" around—to "vote with their feet" and leave.***

"The Reputational Cue Ball"

Non-Win/Win tactics are akin to playing a billiards tournament with a focus on sinking only the first shot or two. Billiards—or life—is a multi-shot game. When we fail to consider the future consequences of mistreating our counterparties in a current "deal" or first phase, it can wind up leaving our "reputational cue ball" ill-positioned for the next shot—the next deal or phase to come down the pike.

Remember this on your first job or any new assignment: any new kid on the block, any new "change agent" can come in and sink the first couple of billiard balls by simply throwing their weight around. But, who's interested in sinking only a few balls? We want to sink them all, we want to "run the table."

If the history of human interaction shows us anything, it is that the most capable, honest, contributing, clear-thinking counterparties—the very people we should want to stay attached to most—***will be the first to vote with their feet and leave when they sense they are***

"losing." Now, I ask you, could there be a simpler reason to avoid non-Win/Win methods like the plague? ***Over time, they separate us further and further from life's most potentially valuable relationships!***

Win/Win: Better In Every Respect

"Why do people leave an organization? I assumed that low pay would be the first reason, but in fact it was fifth. The top reason was not being treated with respect or dignity; the second was being prevented from making an impact on the organization; third, not being listened to; and fourth, not being rewarded with more responsibility." ***–Michael Abrashoff***

Ben Franklin had a wise "life backwards" observation regarding the pain incurred by those who have lost a key relationship as a consequence of non-Win/Win behavior: ***"An empty well teaches the value of water."*** So often, the real value of a key relationship becomes apparent only ***after*** it has been lost.

The Benefits Of Being A Benevolent Black Hole: If They Only Knew…

"If rascals knew the value of honesty and fair dealing, they'd be honest and deal fairly." ***–Michael Novak***

Employing an astronomy metaphor, a true Win/Win framework can ultimately have your organization functioning as a ***"Benevolent Black Hole."*** The high-grade counterparties you have attracted through earned reputation begin to increasingly view their relationship with you as "a local maximum"—***so satisfactory a situation that they see no need to "shop for a better deal."***

"A Local Maximum"

"A business absolutely devoted to service will have only one worry about profits. They will be embarrassingly large." ***–Henry Ford***

In the finest spirit of "recognizing useful simplicities," eight centuries ago Moses Maimonides observed that understanding human behavior is not difficult at all, just watch them: they move toward what they find agreeable, and away from what they find disagreeable. Attracting and holding the very best customers, employees, suppliers is thus very simple: ***Continuously position***

your organization as the most "agreeable" around—a true "Win/Win"—and not only will you induce the very best counterparties to move toward you, once they do, they will never leave!

Nassim Taleb on barbells:

- "What do we mean by barbell? The barbell (a bar with weights on both ends that weight lifters use) is meant to illustrate the idea of a combination of extremes kept separate, with avoidance of the middle. In our context it is not necessarily symmetric: it is just composed of two extremes, with nothing in the center. One can also call it, more technically, a bimodal strategy, as it has two distinct modes rather than a single, central one."
- "I initially used the image of the barbell to describe a dual attitude of playing it safe in some areas (robust to negative Black Swans) and taking a lot of small risks in others (open to positive Black Swans), hence achieving antifragility. That is extreme risk aversion on one side and extreme risk loving on the other, rather than just the 'medium' or the beastly 'moderate' risk attitude that in fact is a sucker game (because medium risks can be subjected to huge measurement errors). But the barbell also results, because of its construction, in the reduction of downside risk—the elimination of the risk of ruin."
- "Let us use an example from vulgar finance, where it is easiest to explain, but misunderstood the most. If you put 90 percent of your funds in boring cash (assuming you are protected from inflation) or something called a 'numeraire repository of value,' and 10 percent in very risky, maximally risky, securities, you cannot possibly lose more than 10 percent, while you are exposed to massive upside. Someone with 100 percent in so-called 'medium' risk securities has a risk of total ruin from the miscomputation of risks. This barbell technique remedies the problem that risks of rare events are incomputable and fragile to estimation error; here the financial barbell has a maximum known loss."

- "For antifragility is the combination aggressiveness plus paranoia—clip your downside, protect yourself from extreme harm, and let the upside, the positive Black Swans, take care of itself. We saw Seneca's asymmetry: more upsi"de than downside can come simply from the reduction of extreme downside (emotional harm) rather than improving things in the middle."
- "A barbell can be any dual strategy composed of extremes, without the corruption of the middle—somehow they all result in favorable asymmetries.
- "So take for now that a barbell strategy with respect to randomness results in achieving antifragility thanks to the mitigation of fragility, the clipping of downside risks of harm—reduced pain from adverse events, while keeping the benefits of potential gains."
- "To return to finance, the barbell does not need to be in the form of investment in inflation-protected cash and the rest in speculative securities. Anything that removes the risk of ruin will get us to such a barbell. The legendary investor Ray Dalio has a rule for someone making speculative bets: "Make sure that the probability of the unacceptable (i.e., the risk of ruin) is nil." Such a rule gets one straight to the barbell."
    - [Footnote to the above paragraph]: "Domain dependence again. People find insuring their house a necessity, not something to be judged against a financial strategy, but when it comes to their portfolios, because of the way things are framed in the press, they don't look at them in the same way. They think that my barbell idea is a strategy that needs to be examined for its *potential return* as an investment. That's not the point. The barbell is simply an idea of insurance of survival; it is a necessity, not an option."

Have you done a pre-mortem (i.e. if this investment doesn't work out, what will be the reasons)?

> "What if I am wrong? Any rational investment plan has to start with that question." —Peter L. Bernstein

Be a **positive realist**, about both investing and life.

- In early 2008, when asked if he was an optimist, Warren Buffett said he was a *realist*, though he was optimistic about the long term.
- In 2013, Buffett said "That belief that tomorrow is more exciting than today, you just have to have it permeate the organization….The world does not belong to the pessimist. Believe me."
- It is important to be a positive person and to have the long-term optimism that Buffett discusses, but it is vital to be a realist in the present moment. Though a positive one.

You must stay humble and curious.

- Socrates claimed that the only thing he was sure of was his own ignorance. He stated: "The only thing that I know is that I know nothing."
- Remember both the importance and difficulty of keeping a beginner's mind: "In the beginner's mind there are many possibilities, but in the expert's mind there are few."
- Keep in mind that there are plenty of things you do not know and that much of what happens in the future you will not see coming. Keep that in mind when investing and sizing positions.

****

Questions and thoughts on assessing management teams:

- Focus on what they do, not what they say.
    - Make sure they don't say the wrong things, but managers will almost always sound good. Don't let their enthusiasm affect your thinking.
- Do they have a reputable/good track record?
    - Have they grown tangible book value or has capital allocation been bad and not reinvested well?
    - Was their track record (whether good or bad) a result of skill or more a function of luck/randomness?
        - Remember the notion of silent evidence (i.e. you don't hear about the ones that didn't make it).
        - "A good decision can wisely anticipate the range of things that might happen, but the one thing that actually happens may not have been one of the ones that reasonably could have been considered

highly likely – or even possible." –Howard Marks, "Assessing Performance Records – A Case Study"

- Are their interests aligned with mine?
    - Are they owner-operators?
- Is the business family controlled?
    - This can be good or bad. The good situations are the ones where the family treats shareholders they way they'd want to be treated and are willing to take a long-term focus to building the business and widening the moat (if they have one).
    - Tom Russo on how to differentiate good family control versus bad family control: "One of the great indicators is the caliber of the people who are not family members who are active in and retained by the businesses that we choose to invest in….So I think the real best test is 'Are they able to recruit the industry's best and brightest and keep them, incent them and then have them develop products that are world class?'"
- Do they avoid falling for the institutional imperative?
    - From Warren Buffett's 1989 Letter:

      My most surprising discovery: the overwhelming importance in business of an unseen force that we might call "the institutional imperative." In business school, I was given no hint of the imperative's existence and I did not intuitively understand it when I entered the business world. I thought then that decent, intelligent, and experienced managers would automatically make rational business decisions. But I learned over time that isn't so. Instead, rationality frequently wilts when the institutional imperative comes into play.

      For example: (1) As if governed by Newton's First Law of Motion, an institution will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of

peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated.
Institutional dynamics, not venality or stupidity, set businesses on these courses, which are too often misguided. After making some expensive mistakes because I ignored the power of the imperative, I have tried to organize and manage Berkshire in ways that minimize its influence. Furthermore, Charlie and I have attempted to concentrate our investments in companies that appear alert to the problem.

- Do they get paid too much?
- Are they able?
- Are they trustworthy?
    - More from Buffett's 1989 Letter:

      After some other mistakes, I learned to go into business only with people whom I like, trust, and admire. As I noted before, this policy of itself will not ensure success: A second-class textile or department-store company won't prosper simply because its managers are men that you would be pleased to see your daughter marry. However, an owner - or investor - can accomplish wonders if he manages to associate himself with such people in businesses that possess decent economic characteristics. Conversely, we do not wish to join with managers who lack admirable qualities, no matter how attractive the prospects of their business. We've never succeeded in making a good deal with a bad person.

- Remember that a management team that runs a low cost, frugal operation is more likely to find further costs to cut or ways to save money. A management team that spends freely or extravagantly is more likely to find more ways to spend or waste money.
    - Do they treat the company checkbook as their own or feel they are entitled to spend shareholder money on extravagant or unnecessary things?
    - Have you examined the related party transaction disclosures in the footnotes?
- How are they choosing to invest the company's capital? CapEx? Buybacks? Acquisitions?

- Managers, like investors, have often made mistakes when they either had little to do (do-something syndrome) or had too much cash on hand.
    - "Managements are more careful when they're not floating in cash." –Peter Bernstein
- Have they achieved progress in their activities, or been active just to be active?
    - If they are making acquisitions, am I able to judge the quality of those acquisitions?
    - Am I putting too much weight on their previous successes?
- Is the CEO going through a divorce, or other personal experience that might be affecting the way he or she is running the company?
- Remember that a great jockey isn't enough to justify an investment (e.g. Sears/Lampert). You must be able to value the business as well, and not have an industry headwind that is too hard to overcome.
- Management questions from Chris Pavese (Broyhill Asset Management):
    - Have the managers/directors been buying/selling stock?
    - Do they have skin in the game?
    - Is their ownership a significant portion of their net worth?
    - How did they acquire their holdings?
    - What is their ownership relative to their cash compensation?
    - How is management compensated?
    - How does management evaluate itself?
    - How difficult are their performance hurdles to meet?
    - Do they use long-term metrics? Do they use the right metrics?

Marathon Asset Management on meeting with management teams (from *Capital Returns*):

Over the last two years, Marathon has engaged in nearly two thousand meetings with company management. This activity, along with preparation and the writing of notes, consumes most of the investment team's working hours. Yet many commentators view such meetings as a waste of

time. One can see their point. Managers are now so well prepared by PR advisers that meetings can seem like a promotional exercise. Investors still turn up. But for many of them, we suspect, their purpose is to gain an informational advantage about the short-term outlook for the business – in our view, a fruitless endeavour. Given the long-term nature of our investment approach, capital allocation is of paramount importance. The prime purpose of our company meetings is to assess the skill of managers at investing money on behalf of their shareholders.

Meeting management is not a scientific process. Rather, it involves making judgements about individuals, an activity which is prone to error (witness the rate of divorce). We go into meetings looking for answers to questions such as: does the CEO think in a long-term strategic way about the business? Understand how the capital cycle operates in their industry? Seem intelligent, energetic and passionate about the business? And interact with colleagues and others in an encouraging way? Appear trustworthy and honest? Act in a shareholder-friendly way even down to the smallest detail?

To assess such questions, the format of the meeting is important. In general, the smaller the number of people in attendance the better. Having fewer attendees on both sides of the table – large meetings often include company managers, investor relations personnel, financial PR types, stock brokers, and other hangers-on – encourages a more open and friendly dialogue. It also reduces the risk of attendants showing off, which can result in the conversation becoming hopelessly bogged down in detail. A new and dreadful manifestation of the quest for redundant detail is the "fireside-chat" format used at many sell-side conferences, which typically involves a CEO being quizzed by the specialist analyst. The conversation generally turns into a "deep dive" into factors impacting short-term earnings, which can be of no interest to long-term investors. Questions of this sort can be ludicrous. At a recent conference we attended, the boss of a major industrial firm was asked whether we could expect that same pattern of seasonality as the year before.

Large delegations from a company can be a sign that the CEO lacks confidence, resorting to a safety-in-numbers approach. This is often the case when dealing with companies in difficulty, as well as with many Japanese, Spanish and Italian firms. Contrast this with Geberit, the highly successful Swiss plumbing equipment company, whose CEO tends to arrive alone at our offices,

having seemingly made his own travel arrangements, fitting us in between meetings with plumbers, architects and other customers.

When it comes to discussing a company's strategy, it is alarming how frequently one finds managers confused on the topic. Too often, the CEO mistakes a short-term target – say an earnings per share target or a return on capital threshold – with a strategy. "Our strategy is to deliver a 15 per cent return on capital," they say. Real strategy, whether military or commercial, involves an assessment of the position one finds oneself in, the threats one faces, how one plans to overcome them, and how opponents might in turn respond. During his tenure at General Electric, Jack Welch required managers of GE's divisions to prepare a few simple slides describing their operating environment in terms of: what does your global competitive environment look like? In the last three years, what have your competitors done to alter the competitive landscape? In the same period, what have you done to them? How might they attack you in the future? What are your plans to leapfrog them?

Getting CEOs to open up about their competitors can be difficult. They fear that too much openness may lead to a breach of confidentiality (professional investors are a thoroughly untrustworthy bunch) or that revelations about the firm's true market dominance might raise anti-trust issues. Besides, many managers are so fixated on growth, they fail to anticipate the likely competitor response (another example of the "insider view"). Still, on occasions something useful slips out. When a management team compliments a competitor, this can be like gold dust to investors. Learning that DMGT, the UK media company, found it hard to compete with Rightmove, the property listings website, contributed to our decision to invest in the company.

Discussing how a firm uses investment bankers and how it makes acquisitions (e.g., whether it prefers friendly negotiated deals to contested auctions) can be revealing. Unexpected diversifications into an unrelated area may suggest that something is not right in the core business. Views on share buybacks can also be highly informative. Very few CEOs see this as a legitimate investment on a par with capital expenditure or M&A decisions, presumably due to an aversion to shrinking any aspect of the company. Many fear that buybacks are an admission that the company has run out of investment ideas. On this subject, we like to hear managers justify buybacks based on an internal valuation model, as this can then lead to an interesting discussion about valuation of their business.

Forming impressions of the CEO's character, intelligence, energy and trustworthiness can be gleaned using a variety of questioning techniques. Intellectual honesty can be tested by asking the CEO to pick out what he or she thinks is important. To unsettle the more promotional CEOs, we like to ask what is not working and wait to see whether they have given the matter much thought. Sometimes the boss will seek to evade responsibility by asking a colleague to talk about a problematic area of the business. The CEO in denial often blames problems on a divisional boss and follows up by saying that management has now been changed. How the chief executive interacts with colleagues, such as the CFO or investor relations personnel, often reveals their leadership qualities. We like to see signs of individual curiosity at meetings – revealed, for instance, by their taking an interest in our own business. Signs of humility – say a recognition of past mistakes – give us some confidence that the chief executive has a grip on reality.

Appearances can also be revealing. A CEO of an industrial company who wears expensive shoes, or a snappy suit, is more likely to enjoy the expensive company of investment bankers than spend his time visiting factories and customers. Signs of vanity are generally off-putting. One CEO was spotted before a meeting carefully adjusting his elaborate bouffant hair style in our washroom. Several months later, he launched a large and foolhardy acquisition.

Meetings can also provide insights into a management's approach to costs. This frequently comes out in discussions about compensation. Learning about something as mundane as corporate travel policy can also tell us a lot. After Brazil's AmBev took over the Belgian-based Interbrew, its managers told us about a new edict limiting business-class flights to those lasting six hours or more. This insight into corporate frugality was a pointer to the same management's ability to cut costs at Anheuser-Busch – which prior to the merger sported a fleet of eight Falcon executive jets – and increase the US beer company's operating margins by a massive ten percentage points (between 2005 and 2011). We were equally impressed to learn that senior executives at another company preferred the underground to chauffeured limousine when travelling around London. The number of IR representatives in attendance is a good indicator as to how carefully a company counts its pennies. Of course, we have made mistakes when assessing management teams. But, in our view, trying to spot a great manager remains a game very much worth playing.

****

Questions and thoughts on assessing balance sheets:

- What is the company's capital structure, and how does it compare to its peers?
- If they have debt, could they pay it off today with the cash on their balance sheet if they needed to?
- Do they have any hidden liabilities that aren't on the balance sheet?
    - Treat lease obligations as debt.
- When does debt come due?
- What are the debt covenants?
- Is the debt recourse or non-recourse?
- What are its coverage ratios on interest payments?
- What are the trends in inventory turns, days payable/receivable, and working capital?
- What is the average age of property, plant, and equipment?
- How easy is it to misjudge the value of the assets?
    - e.g. The value of the assets that took down a lot of the firms in 2008 were incorrect many months (and years) beforehand.
    - Is there a risk that the assets are overstated because competition, technology and innovation have changed the business model going forward (e.g. integrated steel facilities vs. newly built mini-mills)?
- If a business has operational leverage (i.e. something cyclical where sales can be down 40% in a year, for example), make sure it doesn't also have financial leverage.

Some additional thoughts and quotes on risk:

- Things can take a long time to play out.
    - i.e. The process of boom to bust; mean reversion; effect of government intervention.
    - Don't underestimate the ability of government intervention to boost prices in the near term.

- ‘Don’t fight the Fed’ isn’t always a truism, but post-2008 Financial Crisis and post-COVID, there is probably more truth than has historically been the case, given the magnitude that interventions have trended…. Assuming some probability (even a very small one) that the Fed may print endless money and extend infinite credit to protect the nominal value of assets, credit and the property that collateralizes it seems like a reasonable thought exercise these days when looking at one’s portfolio, even if one shouldn’t depend on that outcome.
- The value of all asset classes passes through the mean, but you cannot know when; the future is unknowable.
- “It’s one thing to have an opinion, and something very different to act as if it’s right.” –Howard Marks
- New technologies can take a lot of tinkering and refinement before they are good enough to make a huge difference economically.

- Are you prepared for the being-too-early risk?
  - Being too early is indistinguishable from being wrong....another reminder not to depend on the *timing* of something without a clear catalyst.
  - Remember that the market can stay irrational (and get more irrational!) longer than you can stay solvent, so be careful with leverage and investing in anything that relies on timing.
  - Stock market prognostications tell us much more about the prognosticator than the likely direction of the market.
- Remember that a bearish fundamental development could lead to a rally if:
  1. Events are fully anticipated and already discounted; or
  2. It spurs or is expected to spur government action that will have a greater impact than the event itself (e.g. quantitative easing, interest rate cuts, bond buying, etc.).
     - This shows the difficulty of being too short or of betting on timing.
     - e.g. Ray Dalio was very bearish on the market leading up to the Latin America defaults, but lost money because market rallied on hope for large government involvement to stem the crisis: “I learned not to fight the Fed unless I had very good reasons to

believe that their moves wouldn't work. The Fed and other central banks have tremendous power. In both the abandonment of the gold standard in 1971 and in the Mexico default in 1982, I learned that a crisis development that leads to central banks easing and coming to the rescue can swamp the impact of the crisis itself."

- It is very hard to tell what is priced into the market, so it is extremely difficult to tell how the market will react to any specific news or event, whether good or bad.
- Does the business operate in Extremistan or Mediocristan?
    - It is difficult to predict [forecast] outcomes in an environment of concentrated success (Extremistan). So be careful not to become too attached to a company valuation for a business that operates more in Extremistan and is thus more subject to randomness.
- Does this investment make my portfolio more or less robust/resilient (i.e. not fragile)?
    - Is it redundant (i.e. back-up systems)?
        - i.e. Many positive characteristics that make one more likely to win or less likely to lose (low debt + low PE + low PB + competitive advantage + insider ownership + etc.)
- Is this investment antifragile (i.e. Would this company benefit from volatility and tougher times because, for example, it has cash for acquisitions and a history of making them at the right times, a history of smart buybacks, etc.)?

****

Questions and thoughts on assessing investment purchase price:

- Remember that the price you pay determines the return you get and that the market is there to serve you, not guide you.
- Downside first – is the downside limited?
    - Am I properly considering the downside under extreme conditions?
    - The first question should be: "Where can I not lose money (in real terms)?" instead of "Where can I make money?"
- Do I expect at least a 20% annual rate of return, with little chance of losing money? This number may be higher or lower for different people, but the more important thing is

targeting risk, not return. An expectation of the return you want to earn when investing does not mean that you should do it without considering risk first (see Klarman quote below).

- If the expected return is less, then the risk must also be significantly less (i.e. near certain to achieve lower return).
- Seth Klarman ("Margin of Safety"):

  Many investors mistakenly establish an investment goal of achieving a specific rate of return. Setting a goal, unfortunately, does not make that return achievable. Indeed, no matter what the goal, it may be out of reach. Stating that you want to earn, say, 15% a year, does not tell you a thing about how to achieve it. Investment returns are not a direct function of how long or hard you work or how much you wish to earn. A ditch digger can work an hour of overtime for extra pay, and a piece worker earns more the more he or she produces. An investor cannot decide to think harder or put in overtime in order to achieve a higher return. All an investor can do is follow a consistently disciplined and rigorous approach; over time the returns will come.

  Targeting investment returns leads investors to focus on upside potential rather than on downside risk. Depending on the level of security prices, investors may have to incur considerable downside risk to have a chance of meeting predetermined return objectives. If Treasury bills yield 6%, more cannot be achieved from owning them. If thirty-year government bonds yield 8%, it is possible, for a while, to achieve a 15% annual return through capital appreciation resulting from a decline in interest rates. If the bonds are held to maturity, however, the return will be 8%.

  Stocks do not have the firm mathematical tether afforded by the contractual nature of the cash flows of a high-grade bond. Stocks, for example, have no maturity date or price. Moreover, while the value of a stock is ultimately tied to the performance of the underlying business, the potential profit from owning a stock is much more ambiguous. Specifically, the owner of a stock does not receive the cash flows from a business; he or she profits from appreciation in the share price, presumably

as the market incorporates fundamental business developments into that price. Investors thus tend to predict their returns from investing in equities by predicting future stock prices. Since stock prices do not appreciate in a predictable fashion but fluctuate unevenly over time, almost any forecast can be made and justified. It is thus possible to predict the achievement of any desired level of return simply by fiddling with one's estimate of future share prices.

In the long run, however, stock prices are also tethered, albeit more loosely than bonds, to the performance of the underlying businesses. If the prevailing stock price is not warranted by underlying value, it will eventually fall. Those who bought in at a price that itself reflected overly optimistic assumptions will incur losses.

Rather than targeting a desired rate of return, even an eminently reasonable one, investors should target risk. Treasury bills are the closest thing to a risk-less investment; hence the interest rate on Treasury bills is considered the risk-free rate. Since investors always have the option of holding all of their money in T-bills, investments that involve risk should only be made if they hold the promise of considerably higher returns than those available without risk. This does not express an investment preference for T-bills; to the contrary, you would rather be fully invested in superior alternatives. But alternatives with some risk attached are superior only if the return more than fully compensates for the risk.

- Tom Russo uses about a 10% discount rate (in 2012: "the discount rate is sort of 10%") when thinking about investments when rates are well below 10%. Historically it has been the long-term treasury rate plus a risk premium, but it's also the hurdle that he believes equity returns ought to generate for investors, and he thinks equity investors ought to expect—over time and over market cycles—to have double-digit returns to warrant the risk that they take. So he uses 10% when rates are very low.
- Does my position size properly reflect the opportunity and an uncertain world? [See Part 3 for more detailed thoughts than below on position-sizing.]
    - Typically, should have 3-6% positions. Very occasional 10% positions. And maybe a few times in one's life, a very large, all-in type of bet.

  - There is definitely a case to be made for more concentration for a know-something investor that does proper due diligence. [Again, see Part 3 for more.]
- Would I be willing to buy the entire business at this price? And have I really done enough work to make that kind of commitment if I had to (which is what you want to do if you're making something a large position)?
  - Remember, it takes 20 years to build a reputation and 5 minutes to ruin it. Going all in and being wrong can take you out of the game.
  - "Nobody ever got into big trouble by saying 'I don't know.' The way you get into big trouble is by saying 'I know,' and betting heavily on your opinion, and being wrong." —Howard Marks
- Why is this investment undervalued and/or misunderstood, and what do I know that the market doesn't?
- What is the value of the business on DCF, sum-of-the-parts, and private market value?
  - Don't just buy something because it is just cheap on an EBITDA basis (such as Cable TV or Blockbuster) or cheap based on FCF (i.e. Tyco).
  - Earnings can disappear quickly. Need to consider sustainability and CapEx .
  - And most value traps first look like cheap stocks.
- With technology companies, especially those where the software underlying the business is important, the market leader may be worth more than all the other players combined. The long-run is often a winner-take-all or winner-take-most market, or at least a winner-take-most-of-the-profits market. So be especially careful when using comparable multiples with market leaders, because those that are not the market leader may not deserve a multiple comparable with the market leader. And those that are market leaders might be worth paying up for.
- Am I using the right comparable?
  - e.g. "Is motor oil used in car parts of the same industry as motor oil used in trucks and stationary engines? The oil itself is similar. But automotive oil is marketed through consumer advertising, sold to fragmented customers through powerful channels, and produced locally to offset the high logistics costs of small packaging. Truck and power generation lubricants face a different industry structure—different customers and selling channels,

different supply chains, and so on. From a strategy perspective, these are distinct industries." —*Understanding Michael Porter: The Essential Guide to Competition and Strategy*

- Earnings Surprises:
    - Are there any potential upsides to earnings (i.e. R&D costs that could potentially either lead to increased profits or eventually be saved and added to earnings; or venture capital type of investments yet to come to fruition, but not being priced in to the current valuation; or wildcatting for oil; or prospecting for mineral deposits.)?
    - Has the company been a good citizen (i.e. environmental clean-up, etc.)? If not, there is downside risk that may not be showing up by looking at the financials.
    - Does the company pay competitive wages to workers? Fair pay helps foster a good culture (e.g. Costco), while unfair pay can do the opposite. Good cultures are more likely to see positive surprises, and bad cultures or those with high employee turnover are more likely to see negative surprises.
        - Is there a chance that they'll be forced to significantly increase wages over time (especially true with manufacturing operations in less developed countries)?
        - Is there a chance that key people could leave?
- What is the valuation of the overall market?
    - Howard Marks: "If you buy a cheap stock when the market is high, it is a challenge because, if the market being high is followed by a general decline in prices, then for you to make money in your cheap stock, you have to swim against the tide. If you buy when the market is low, and that lowness is going to be corrected by a general inflation, and you buy your cheap stock, then you have the tailwind in your favor….I think it is unrealistic and maybe hubristic to say, 'I don't care about what is going on in the world. I know a cheap stock when I see one.' If you don't follow the pendulum and understand the cycle, then that implies that you always invest as much money as aggressively. That doesn't make any sense to me. I have been around too

long to think that a good investment is always equally good all the time regardless of the climate."

- Seth Klarman quote:

  We clear a high bar before making an investment, and we resist the many pressures that other investors surely feel to lower that bar. The prospective return must always be generous relative to the risk incurred. For riskier investments, the upside potential must be many multiples of any potential loss. We believe there is room for a few of these potential five and ten baggers in a diversified, low-risk portfolio. A bargain price is necessary but not sufficient for making an investment, because sometimes securities that seem superficially inexpensive really aren't. "Value traps" are cheap for a reason--perhaps an inept and entrenched management, a poor history of capital allocation, or assets whose value is in inexorable decline. A catalyst for the realization of underlying value is something we seek, but we will also make investments without a catalyst when the price is sufficiently compelling. It is easy to find middling opportunities but rare to find exceptional ones. We conduct an expansive search for opportunity across industries, asset classes, and geographies, and when we find compelling bargains we drill deep to verify the validity of our assumptions. Only then do we buy. As for what we own, we continually assess and reassess to incorporate new fundamental information about an investment in the context of market price fluctuations. When bargains are lacking, we are comfortable holding cash. This approach has been rewarding--as one would hope with a philosophy that is painstaking, extremely disciplined, and highly opportunistic.

- Remember that intrinsic value is not a precise figure; it's a guess.
- Though you need to sell something when it is clearly at or above intrinsic value, be careful about cutting the flowers to water the weeds.

When do you average down? – by John Hempton [SOURCE]

The last post explained why I think a full valuation is not a necessary part of the investment process. A decent stock note is 15 pages on the business, one page on the management, one paragraph or even one sentence on valuation.

Valuation might normally be a set of questions along the lines of "what do I need to believe" to get/not get my money back.

But I would prefer a simple modification to this process. This is a modification we have not done well at Bronte (at least formally) and we should do better. And that is the question of averaging down.

--

Warren Buffett is famously fond of "averaging down". If you liked it at $10 you should love it at $6. If it goes down "just buy more". And in the value investing canon you will not find that much objection to that view.

But averaging down has been the destroyer of many a value investor. *Indeed averaging down is the iconic way in which value investors destroy themselves (and their clients)*.

After all if you loved something at $40 and you were wrong, you might love it more at $25 and you almost as likely to be wrong, and like it more still at $12 and could equally be wrong.

And before you know it you have doubled down three times, turning a 7 percent position into a 18 percent loss.

Do that on a few stocks and you can be down 50 percent. And in a bad market that 50 percent can be 80 percent.

And if you do not believe me this has a name: Bill Miller. Bill Miller assembled a startling record beating the S&P ever year for fifteen straight years and then blew it up.

Miller had a (false) reputation as one of the greatest value investors of all time: In reality he is one of the biggest stock market losers of all time and a model of how not to behave in markets.

How not to behave is be a false value investor, buying stocks on which you are wrong, and recklessly and repeatedly average down.

--

At the other end traders who (correctly) think that people who average down die. The most famous exposition of this is a photo of Paul Tudor Jones - with a piece of paper glued to his wall stating that "losers average losers".

And yet Warren Buffett and a few of his acolytes have averaged down many times and successfully. And frankly sometimes I have averaged down to great success.

At least sometimes - the Bill Miller slogan is correct: "lowest average cost wins". Paul Tudor Jones may be a great trader - but he is not a patch on Warren Buffett.

--

I would love it if I had an encyclopedic knowledge of every mid-cap in Europe and could buy the odd startlingly good business when tiny and cheap. But the task is too large. The world is complicated and I can't cover everything.

But when I look at tasks that can be achieved by a four-analyst shop I have one very high on my list of things we can do and should do: We should get the *average down decision right more often*.

So I have thought about this a lot. (The implementation leaves a little to be desired.)

--

At a very big picture: averaging down when you are right is very sweet, averaging down when you are wrong is a disaster.

At the first pick the question then is "when are you wrong?", but this is a silly question. If you knew you were wrong you would never have bought the position in the first place.

So the question becomes is not "are you wrong". That is not going to add anything analytically.

Instead the question is "under what circumstances are you wrong" and "how would you tell"?

--

When you put it that way it becomes obvious that you must not average down (much) on highly levered business models. And looking at Buffett he is very good at that. He bought half a billion dollars worth of Irish Banks as they collapsed. They went approximately to zero. But he did not double down. He liked them down 90 percent, he did not like them more down 95 percent.

By contrast these are the stocks that Bill Miller blew up on: American International Group, Wachovia, Washington Mutual, Freddie Mac, Countrywide Financial and Citigroup. They were all levered business models.

By contrast you can probably safely average down on Coca Cola: indeed Buffett did. It is really hard to work out a realistic circumstance in which Coca Cola is a zero. *And if it is still growing there is going to be a price at which you are right - so averaging down is going to go some way to obtaining an average cost near or below that price.*

Of course even Coca Cola is not entirely safe. You could imagine a world where the underlying problem was litigation - where some secret ingredient is found to be a carcinogen and where the company faces an uncertain future of lawsuits. It is not likely - and if it happens

you are going to get at least some warning that this is a circumstance on which you could be wrong. Whatever, outside that circumstance on which you might be warned, Coca Cola is not a leveraged business model subject to bankruptcy and is almost entirely unlikely to halve four times in a row. You can average that one down.

Operationally levered business models

Not every business model is as as safe as Coca Cola. Indeed almost every business model is more dangerous than Coca Cola. A not financially levered mining stock can halve five or six times. If you have a mining company that mines coal at $40 per tonne, has no debt and the price is $60 a tonne it is going to be really profitable. But prices below $40 (highly possible) will take profits negative. Add in some environmental clean up and some closing costs and it is entirely possible that a stock loses 95 percent of its value. Averaging down when down 40%, some more when it halves, and then halves again and it will still lose two thirds of its value. The difference between averaging stuff like that down and doing what Bill Miller did is only one of degree.

It is still a disaster. And you will have proven Paul Tudor Jones adage: losers average losers.

Obsolescence

There is another iconic way that value investors lose money - and that is technical obsolescence. Kodak was made obsolescent and was a value stock all the way down to bankruptcy. The circumstances on which you might be wrong (digital photography going to 95 percent of the market) could have been stated pretty clearly in 1999.

You might thing it was worth owning Kodak as a "cigar butt stock" - plenty of cash flow and deal with the future later. *There was a reasonable buy case for Kodak the whole way down.* But technical obsolescence is always a way you should be wrong. When the threat is obsolescence you are not allowed to average down.

Bill Miller averaged Kodak down. Ugh.

If I could improve our formal stock notes in any way I would like an *ex-ante* description of what circumstances we are allowed to average down a particular stock, and how much.

We have a default at Bronte - and the default at Bronte is that we have a maximum percentage for a stock (typically say 9 percent but often as low as 3 percent depending on how we assess the risk of the stock) and as the fund manager I am allowed to spend that whenever I want but I am not allowed to overspend it. If we have a 6 percent position with a 9 percent loss limit and it halves I am allowed to add three percentage points more to the exposure. But that is it. Simon, being the risk manager, isn't particularly fussed if add the extra when the stock is down 30 percent of 50 percent, but I can't add it twice. If it is a position on which we agree we are allowed to risk 9 percent then I am allowed to risk 9 percent.

We will not fall for the value investor trap of losing 18 percent on a 7 percent position.

We have made a modification of this over time. And that is every six to nine months I get another percentage point to add. That is at Simon's discretion - but the idea is that the easiest way to find out whether you are wrong is to wait. After a year or two the underlying problem will usually become public. If time has not revealed new information then we are allowed to risk more.

But we can and should do better with ex-ante descriptions under the circumstances in which we are prepared to add and circumstances where we are not. *The problem is that you can wind up in a mindset where you always where you want to add, where you think the world is against you and you are right and you will just be proven to be right*.

Clear ex-ante descriptions of the issue (which require competent business analysis) might help with that problem.

--

The bad case of averaging down

The iconic bad situation to average down is a levered business model involving fraud. It is surprisingly common because people who run highly levered business models have very strong incentives to lie or to cover it up when things turn to custard. I can think of two recent examples: Valeant and Sun Edison.

Much to my shame I added to my (small) position in Sun Edison as it fell. Ugh. But also this was a highly levered business model and thus by definition the sort of place where losers average losers. I should not have done it - and I won't in future.

But the highly levered business models apply fairly generally. When Bill Ackman rang Michael Pearson and asked if there was any fraud at Valeant he already had the wrong mindset. Then he added to a large holding in a company with over 30 billion dollars in junk-rated debt. Losers average losers.

Incidentally our six month rule (before you were allowed to add) would have saved Mr Ackman a lot of extra losses. Time has revealed plenty about Valeant. And it would have saved me at Sun Edison too.

--

Whilst I think that someone asking me (as per the last blog post) for a valuation on every stock is absurd, I think it is entirely reasonable for them to ask "under what circumstances would you average down". If you can't answer that you probably should not own the stock. I should insist on it with every long investment.

Charlie Munger's Two-Track Analysis:

1. First, what are the factors that really govern the interests involved, rationally considered?

2. And second, what are the subconscious influences where the brain at a subconscious level is automatically doing these things – which by and large are useful, but which often misfunction.

One approach is rationality – the way you'd work out a bridge problem: by evaluating the real interests, the real probabilities and so forth. And the other is to evaluate the psychological factors that cause subconscious conclusions – many of which are wrong.

And

Charlie Munger's "ultra-simple general notions":

1. Solve the big no-brainer questions first.

2. Use math to support your reasoning.

3. Think through a problem backward, not just forward.

4. Use a multidisciplinary approach.

5. Properly consider results from a combination of factors, or lollapalooza effects.

****

The Balance of Skepticism and an Open-Mind

This is from the book *Capital Account* and was written in 2001 during the tech bust, but it is probably timely for many technology companies (or those that claim to be technology companies) that have become popular in 2020-2021 as well [emphasis mine]:

> The challenge for investors is to distinguish the genuine innovations which create sustainable competitive advantage for companies and value for shareholders from the MacGuffins of this world. This requires **a balance between an openness to new ideas and a healthy scepticism**. In the last few years, we have seen many new investment concepts turn out to be nothing more

than flagrant promotions. Even in the more questioning times that lie ahead, an aptitude for spotting absurdities in the stock market -- the financial equivalent of devices for trapping lions in Scotland -- remains an invaluable component in the fund manager's tool-kit.

Howard Marks on skepticism (via *The Most Important Thing*):

The global credit crisis of 2007– 2008 represents the greatest crash I have ever seen. The lessons to be learned from this experience are many, which is one reason I discuss aspects of it in more than one chapter. For me, one such lesson consisted of reaching a new understanding of the skepticism required for contrarian thinking. I'm not usually given to epiphanies, but I had one on the subject of skepticism.

Every time a bubble bursts, a bull market collapses or a silver bullet fails to work, we hear people bemoan their error. The skeptic, highly aware of that, tries to identify delusions ahead of time and avoid falling into line with the crowd in accepting them. So, usually, investment skepticism is associated with rejecting investment fads, bull market manias and Ponzi schemes.

…

It was readily apparent immediately after the bankruptcy of Lehman Brothers that . . . a spiral was under way, and no one could see how or when it might end. That was really the problem: no scenario was too negative to be credible, and any scenario incorporating an element of optimism was dismissed as Pollyannaish.

There was an element of truth in this, of course: nothing was impossible. But in dealing with the future, we must think about two things: (a) what might happen and (b) the probability that it will happen.

During the crisis, lots of bad things seemed possible, but that didn't mean they were going to happen. In times of crisis, people fail to make that distinction. . . .

For forty years I've seen the manic- depressive pendulum of investor psychology swing crazily: between fear and greed— we all know the refrain— but also between optimism and pessimism, and between credulity and skepticism. In general, following the beliefs of the herd— and swinging with the pendulum— will give you average performance in the long run and can get you killed at the extremes. . . .

If you believe the story everyone else believes, you'll do what they do. Usually you'll buy at high prices and sell at lows. You'll fall for tales of the "silver bullet" capable of delivering high returns without risk. You'll buy what's been doing well and sell what's been doing poorly. And you'll suffer losses in crashes and miss out when things recover from bottoms. In other words, you'll be a conformist, not a maverick; a follower, not a contrarian.

Skepticism is what it takes to look behind a balance sheet, the latest miracle of financial engineering or the can't-miss story. . . . Only a skeptic can separate the things that sound good and are from the things that sound good and aren't. The best investors I know exemplify this trait. It's an absolute necessity.

Lots of bad things happened to kick off the credit crisis that had been considered unlikely (if not impossible), and they happened at the same time, to investors who'd taken on significant leverage. So the easy explanation is that the people who were hurt in the credit crisis hadn't been skeptical— or pessimistic— enough.

But that triggered an epiphany: *skepticism and pessimism aren't synonymous*. Skepticism calls for pessimism when optimism is excessive. But it also calls for optimism when pessimism is excessive.

Some Warren Buffett Comments on inflation, and the types of businesses/investments that do well in an inflationary environment:

From Warren Buffett's 1981 Letter to Shareholders:

In fairness, we should acknowledge that some acquisition records have been dazzling. Two major categories stand out.

The first involves companies that, through design or accident, have purchased only businesses that are particularly well adapted to an inflationary environment. Such favored business must have two characteristics: (1) an ability to increase prices rather easily (even when product demand is flat and capacity is not fully utilized) without fear of significant loss of either market share or unit volume, and (2) an ability to accommodate large dollar volume increases in business (often produced more by inflation than by real growth) with only minor additional investment of capital. Managers of ordinary ability, focusing solely on acquisition possibilities meeting these tests, have achieved excellent results in recent decades. However, very few enterprises possess both characteristics, and competition to buy those that do has now become fierce to the point of being self-defeating.

The second category involves the managerial superstars - men who can recognize that rare prince who is disguised as a toad, and who have managerial abilities that enable them to peel away the disguise. We salute such managers as Ben Heineman at Northwest Industries, Henry Singleton at Teledyne, Erwin Zaban at National Service Industries, and especially Tom Murphy at Capital Cities Communications (a real managerial "twofer", whose acquisition efforts have been properly focused in Category 1 and whose operating talents also make him a leader of Category 2). From both direct and vicarious experience, we recognize the difficulty and rarity of these executives' achievements. (So do they; these champs have made very few deals in recent years, and often have found repurchase of their own shares to be the most sensible employment of corporate capital.)

From the Appendix of Warren Buffett's [1983 Letter to Shareholders](#):

But what are the economic realities? One reality is that the amortization charges that have been deducted as costs in the earnings statement each year since acquisition of See's were not true economic costs. We know that because See's last year earned $13 million after taxes on about $20 million of net tangible assets – a performance indicating the existence of economic Goodwill far larger than the total original cost of our accounting Goodwill. In other words, while accounting Goodwill regularly decreased from the moment of purchase, economic Goodwill increased in irregular but very substantial fashion.

Another reality is that annual amortization charges in the future will not correspond to economic costs. It is possible, of course, that See's economic Goodwill will disappear. But it won't shrink in even decrements or anything remotely resembling them. What is more likely is that the Goodwill will increase – in current, if not in constant, dollars – because of inflation.

That probability exists because true economic Goodwill tends to rise in nominal value proportionally with inflation. To illustrate how this works, let's contrast a See's kind of business with a more mundane business. When we purchased See's in 1972, it will be recalled, it was earning about $2 million on $8 million of net tangible assets. Let us assume that our hypothetical mundane business then had $2 million of earnings also, but needed $18 million in net tangible assets for normal operations. Earning only 11% on required tangible assets, that mundane business would possess little or no economic Goodwill.

A business like that, therefore, might well have sold for the value of its net tangible assets, or for $18 million. In contrast, we paid $25 million for See's, even though it had no more in earnings and less than half as much in "honest-to-God" assets. Could less really have been more, as our purchase price implied? The answer is "yes" – *even if both businesses were expected to have flat unit volume* – as long as you anticipated, as we did in 1972, a world of continuous inflation.

To understand why, imagine the effect that a doubling of the price level would subsequently have on the two businesses. Both would need to double their nominal earnings to $4 million to keep themselves even with inflation. This would seem to be no great trick: just sell the same number of units at double earlier prices and, assuming profit margins remain unchanged, profits also must double.

But, crucially, to bring that about, both businesses probably would have to double their nominal investment in net tangible assets, since that is the kind of economic requirement that inflation usually imposes on businesses, both good and bad. A doubling of dollar sales means correspondingly more dollars must be employed immediately in receivables and inventories. Dollars employed in fixed assets will respond more slowly to inflation, but probably just as surely. And all of this inflation-required investment will produce no improvement in rate of return. The motivation for this investment is the survival of the business, not the prosperity of the owner.

Remember, however, that See's had net tangible assets of only $8 million. So it would only have had to commit an additional $8 million to finance the capital needs imposed by inflation. The mundane business, meanwhile, had a burden over twice as large – a need for $18 million of additional capital.

After the dust had settled, the mundane business, now earning $4 million annually, might still be worth the value of its tangible assets, or $36 million. That means its owners would have gained only a dollar of nominal value for every new dollar invested. (This is the same dollar-for-dollar result they would have achieved if they had added money to a savings account.)

See's, however, also earning $4 million, might be worth $50 million if valued (as it logically would be) on the same basis as it was at the time of our purchase. So it would have gained $25 million in nominal value while the owners were putting up only $8 million in additional capital – over $3 of nominal value gained for each $1 invested.

Remember, even so, that the owners of the See's kind of business were forced by inflation to ante up $8 million in additional capital just to stay even in real profits. Any unleveraged business that requires some net tangible assets to operate (and almost all do) is hurt by inflation. Businesses needing little in the way of tangible assets simply are hurt the least.

And that fact, of course, has been hard for many people to grasp. For years the traditional wisdom – long on tradition, short on wisdom – held that inflation protection was best provided by businesses laden with natural resources, plants and machinery, or other tangible assets ("In Goods We Trust"). It doesn't work that way. Asset-heavy businesses generally earn low rates of return – rates that often barely provide enough capital to fund the inflationary needs of the existing business, with nothing left over for real growth, for distribution to owners, or for acquisition of new businesses.

In contrast, a disproportionate number of the great business fortunes built up during the inflationary years arose from ownership of operations that combined intangibles of lasting value with relatively minor requirements for tangible assets. In such cases earnings have bounded upward in nominal dollars, and these dollars have been largely available for the acquisition of additional businesses. This phenomenon has been particularly evident in the communications

business. That business has required little in the way of tangible investment – yet its franchises have endured. During inflation, Goodwill is the gift that keeps giving.

But that statement applies, naturally, only to true economic Goodwill. Spurious accounting Goodwill – and there is plenty of it around – is another matter. When an overexcited management purchases a business at a silly price, the same accounting niceties described earlier are observed. Because it can't go anywhere else, the silliness ends up in the Goodwill account. Considering the lack of managerial discipline that created the account, under such circumstances it might better be labeled "No-Will". Whatever the term, the 40-year ritual typically is observed and the adrenalin so capitalized remains on the books as an "asset" just as if the acquisition had been a sensible one.

From Warren Buffett's 1984 Letter to Shareholders:

While there is not much to choose between bonds and stocks (as a class) when annual inflation is in the 5%-10% range, runaway inflation is a different story. In that circumstance, a diversified stock portfolio would almost surely suffer an enormous loss in real value. But bonds already outstanding would suffer far more. Thus, we think an all-bond portfolio carries a small but unacceptable "wipe out" risk, and we require any purchase of long-term bonds to clear a special hurdle. Only when bond purchases appear decidedly superior to other business opportunities will we engage in them. Those occasions are likely to be few and far between.

****

Questions and thoughts on psychology and investing:

- Remember and be careful of this fact: While what you think changes what you do, **what you do also changes what you think**.
- Am I making sure that I'm not positive on the company just because I've learned a lot about it?
- Am I making sure that I'm not positive on the company just because I like the CEO (or other members of the management team)?
    - Remember that the psyche is especially susceptible to a magnetic personality with a story plausibly delivered by a seemingly brilliant mind.
- Am I making sure that I'm not making this decision out of hubris or boredom?

    - Resist the natural human bias to act.
- Am I making sure that the investment is based on the facts and not management's interpretation of the facts, or my desire to see the facts in a certain light?
    - Do not assume that management is just "telling it like it is." They may have studied what investors want and be telling investors and potential investors what they want to hear.
    - Actions matter more than words.
- Are you sure you're not falling for the confirmation bias?
    - Have you approached the facts and data with a suspension of belief, rather than looking to confirm a theory or investment case/story?
- Am I being overconfident?
    - "If incompetence is the disease of the novice, overconfidence is the disease of the expert."
- Am I purchasing this stock because there is some sort of psychological and/or non-financial reward, including possible narcissism? [from Guy Spier]
    - Guy's description of narcissism: *The psychology goes like this: "All of you people who refuse to buy this stock because you say it is too expensive are just too dumb to appreciate the subtleties that make this such an incredible purchase. I on the other hand, am so smart, so experienced and so nuanced in my analysis that I am not fearful of paying up."*
- Am I falling for a good story?
    - "Narrative, as well as its associated mechanism of salience of the sensational fact, can mess up our projection of the odds……abstract statistical information does not sway us as much as the anecdote—no matter how sophisticated the person." –Nassim Taleb, *The Black Swan*
- Remember that humans seek reasons for things, and feel a sense of comfort by having reasons, even if they aren't true.
    - John Mauldin: "With an explanation firmly in mind, we now feel we know something. And the behavioral psychologists note that this state actually releases chemicals in our brain that make us feel good. We literally become addicted to the simple explanation. The fact that what we 'know' (the explanation for the unknowable) is irrelevant or even wrong is not important

for the chemical release. And thus we look eagerly for reasons….And that is also why some people get so angry when you challenge their beliefs. You are literally taking away the source of their good feeling, like drugs from a junkie or a boyfriend from a teenage girl."

- Have I taken a little time away from the idea for distraction before coming back to it and seeing if I still feel the same?
  - Jonah Lehrer: "So yes: taking a break is important. But make sure you do something that makes you happy, as positive moods make us even better at diagnosing the value of our creative work. After a few relaxing days of vacation, you'll suddenly know which new ideas deserve more time and which need to be abandoned."
- Have you been making too many decisions lately, so that the quantity of decisions may be affecting the quality of your decisions?
  - Research shows that the simple act of making decisions degrades one's ability to make further decisions.
- Am I assuming certainties or near certainties about things that are uncertain and unpredictable?
  - Resist the craving for false precision, false certainties, etc.
  - "The first principle is that you must not fool yourself — and you are the easiest person to fool." —Richard Feynman
- "Our challenge is not only to keep up with rapidly unfolding events around the world, but to keep our perspective fresh and differentiated from that of our competitors. As securities analysts we are truth seekers and problem solvers. We must satisfy ourselves with determining ranges of outcomes and potential scenarios rather than searching for, and ultimately fabricating, absolute truths. The only thing we are 100% confident in is that we are fallible, we don't have all the answers, and we will make some mistakes. However, if we are honest with ourselves and our colleagues, remain attentive to our own biases and deceptions, focus on process, attempt to understand why we erred, and engage in deliberate practice and self-observation to improve our decision-making ability, we will not only minimize our errors, but also ultimately become better people and better investors." —Dan Loeb

A summary of Robert Cialdini's Six Principles of Influence (also known as the Six Weapons of Influence) [Source: MindTools]…. **And the Seventh Principle he later added:**

1. Reciprocity

As humans, we generally aim to return favors, pay back debts, and treat others as they treat us. According to the idea of reciprocity, this can lead us to feel obliged to offer concessions or discounts to others if they have offered them to us. This is because we're uncomfortable with feeling indebted to them.

For example, if a colleague helps you when you're busy with a project, you might feel obliged to support her ideas for improving team processes. You might decide to buy more from a supplier if they have offered you an aggressive discount. Or, you might give money to a charity fundraiser who has given you a flower in the street.

2. Commitment (and Consistency)

Cialdini says that we have a deep desire to be consistent. For this reason, once we've committed to something, we're then more inclined to go through with it.

For instance, you'd probably be more likely to support a colleague's project proposal if you had shown interest when he first talked to you about his ideas.

3. Social Proof

This principle relies on people's sense of "safety in numbers."

For example, we're more likely to work late if others in our team are doing the same, put a tip in a jar if it already contains money, or eat in a restaurant if it's busy. Here, we're assuming that if lots of other people are doing something, then it must be OK.

We're particularly susceptible to this principle when we're feeling uncertain, and we're even more likely to be influenced if the people we see seem to be similar to us. That's why commercials often use moms, not celebrities, to advertise household products.

4. Liking

Cialdini says that we're more likely to be influenced by people we like. Likability comes in many forms – people might be similar or familiar to us, they might give us compliments, or we may just simply trust them.

Companies that use sales agents from within the community employ this principle with huge success. People are more likely to buy from people like themselves, from friends, and from people they know and respect.

5. Authority

We feel a sense of duty or obligation to people in positions of authority. This is why advertisers of pharmaceutical products employ doctors to front their campaigns, and why most of us will do most things that our manager requests.

Job titles, uniforms, and even accessories like cars or gadgets can lend an air of authority, and can persuade us to accept what these people say.

6. Scarcity

This principle says that things are more attractive when their availability is limited, or when we stand to lose the opportunity to acquire them on favorable terms.

For instance, we might buy something immediately if we're told that it's the last one, or that a special offer will soon expire.

***

The **7th Principle: Unity**, which he added in his book *Pre-Suasion*, and then detailed in the updated edition of *Influence*. As described by Cialdini:

It's about the categories that individuals use to define themselves and their groups, such as race, ethnicity, nationality, and family, as well as political and religious affiliations.

A key characteristic of these categories is that their members tend to feel at one with, merged with, the others. They are the categories in which the conduct one member influences the self-esteem of other members. Simply put, we is the shared me.

****

More questions and quotes related to risk and risk management:

- "The biggest mistake investors make is to believe that what happened in the recent past is likely to persist." —Ray Dalio
- George Soros on REFLEXIVITY: "Today I shall explain the concepts of fallibility and reflexivity in general terms…I can state the core idea in two relatively simple propositions. One is that in situations that have thinking participants, the participants' view of the world is always partial and distorted. That is the principle of fallibility. The other is that these distorted views can influence the situation to which they relate because false views lead to inappropriate actions. That is the principle of reflexivity. For instance, treating drug addicts as criminals creates criminal behavior. It misconstrues the problem and interferes with the proper treatment of addicts. As another example, declaring that government is bad tends to make for bad government."
- Is the stock liquid or illiquid? [As one example of a question to determine this, which may vary between investors and firms: If you were 20% of the average daily volume, would it take you more than 10 days to sell the position?]
    - If it is illiquid, does this put too much of your portfolio (e.g. about 30% max) into illiquid investments?
- Have I properly allowed for outliers and the fact that what SHOULD happen or has the highest probability of happening doesn't always happen?
    - A stock that looks cheap can go on to decline by 80% or more (e.g. Sears Holdings in 2008, which actually wasn't cheap; Amazon from 2000-2002, which ended up being very cheap; the entire market in the early 1930's).

    - A stock that looks really overvalued can go on to double or more than double and stay there for a long time. This is partially why it is very hard to short, especially just based on valuation.
- Remember that turnarounds rarely turn. ***[See below for more.]***
- Does the company appeal to me because of personal preferences that might be clouding my judgment?
- Am I looking at the right variables?
    - Am I missing the forest for the trees?
- Is my information Accurate AND Complete?
    - Do I really know what I think I know?
    - Do I really know what I don't know?
        - "We work really hard never to get confused with what we know from what we think or hope or wish." —Seth Klarman
        - "Let's say you're reviewing a prospectus and they're throwing lots and lots of data at you. You'll get this impression that you really understand the company really well, but you're not thinking about what data is missing from that prospectus. So you don't notice the risks that are not highlighted in that prospectus. That's a real danger." –Daniel Simons (when discussing the difficulty of seeing and paying attention to other things around you when you're so focused on doing something else.)
- Have I read all the documents and SEC filings?
    - Have I looked for changes of language in the company's filings over time?
- Do I really understand how the system in which the company/investment operates works?
- "To achieve long-term success over many financial market and economic cycles, observing a few rules is not enough. Too many things change too quickly in the investment world for that approach to succeed. It is necessary instead to understand the rationale behind the rules in order to appreciate why they work when they do and don't when they don't." —Seth Klarman
- What is the opposing view to the investment thesis?
- Have you properly given as much consideration to the opposing view and figured out why you think you are right and the opposite side of the trade is wrong?

  - "The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function." —F. Scott Fitzgerald
- Examine the thesis through Hardin's three filters:
  - Literacy: What are the words?
  - Numeracy: What are the numbers?
  - Ecolacy: And then what?
- Are things uncorrelated?
  - Quote from Ray Dalio: "If you have 15 or more good (not great), uncorrelated return streams…you'll improve your return to your risk by a factor of 5."
    - However, Dalio believes that correlation can be a misleading statistic and poorly suited as a tool for constructing a diversified portfolio. The crux of the problem is that correlations between assets are highly variable and critically dependent on prevailing circumstances. For example, typically, gold and bonds are inversely related because inflation (current or expected) will be bullish for gold and negative for bonds (because higher inflation normally implies higher interest rates). In the early phases of a deleveraging cycle, however, both gold and bonds can move higher together, as aggressive monetary easing will reduce interest rates (i.e., increase bond prices), while at the same time enhancing longer-term concerns over currency depreciation, which will increase gold prices. In this type of environment, gold and bonds can be positively correlated, which is exactly opposite their normal relationship.
    - Markets behave differently in different environments. The behavior of markets in deleveragings is very different from their responses in recessions. Any fundamental model that assumes static relationships between markets and economic variables will be flawed because those relationships can change dramatically in different market situations. For example, the same government

actions that might lead to a sustained rebound in a recession might have little impact in a deleveraging.

Turnarounds:

In his 1979 letter to shareholders, Warren Buffett wrote:

> *Both our operating and investment experience cause us to conclude that "turnarounds" seldom turn, and that the same energies and talent are much better employed in a good business purchased at a fair price than in a poor business purchased at a bargain price.*

In 1990, he also wrote:

> *Charlie and I frequently get approached about acquisitions that don't come close to meeting our tests: We've found that if you advertise an interest in buying collies, a lot of people will call hoping to sell you their cocker spaniels. A line from a country song expresses our feeling about new ventures, turnarounds, or auction-like sales: "When the phone don't ring, you'll know it's me."*

And while they seldom turn, and it may in general be best to avoid them, there are certain characteristics that may make the likelihood of success increase should you find yourself looking at or involved in such a situation. I think the excerpt below, from the book *Capital Account* (p.199-202), captures those characteristics about as well as anything, and it makes a great addition to any kind of turnaround checklist:

> "Evaluating the likely success of a corporate turnaround is a notoriously difficult activity for investors. They need to distinguish between easy and difficult turnarounds. In almost every case, however, they must start by understanding how the firm got into trouble in the first place. Most troubled companies can only hope to recover once management open-mindedly appraises the situation -- when there is a mood of denial, turnarounds are unlikely. This explains why successful new starts are so often associated with fresh management, usually from outside the industry.

Table 5 The characteristics of easy and difficult turnarounds.

Easier turnarounds	More difficult turnarounds
Intellectually honest management	Management in denial
Good capital allocation: declining levels of investment preferred	More investment needed
Robust core business	Core business troubled
Long product lives/loyal customer base	Short product lives/disloyal customer base
Constrained supply side	Supply side out of control
Good balance sheet	Bad balance sheet
Constructive fellow investors (bond and equity)	Stubborn investment constituencies
Properly constructed management incentives	Counter-productive incentives

"In Table 5 we rank the factors to be considered when evaluating corporate turnarounds by importance. After the honesty with which management addresses the problem, we consider the second most important issue is the level of investment. A successful turnaround should not need large levels of new investment. After all, why risk throwing good money after bad?

"… There is no shortage of poorly performing companies that appear cheap on paper. But it's how management allocates capital that determines the success or failure of any turnaround.

"… Firms with short product lives, such as speciality retailers and technology firms, face an uphill battle. Miss a fashion trend or a technology leap and it is very difficult to catch up.

"… To sum up, the three most favourable characteristics for identifying the probability of success in a corporate turnaround are: intellectually honest management, good capital allocation (preferably declining levels of investment) and a robust core business."

[Also make sure that turnarounds are done without issuing a bunch of shares. You need actions to lead to strong revenue and earnings growth *per share*, so you need to make sure you don't get diluted.]

****

Peter Bernstein quotes from the 2004 interview with Jason Zweig:

Understanding that we do not know the future is such a simple statement, but it's so important. Investors do better where risk management is a conscious part of the process. Maximizing return is a strategy that makes sense only in very specific circumstances. In general, survival is the only road to riches. Let me say that again: *Survival is the only road to riches*. You should try to maximize return only if losses would not threaten your survival and if you have a compelling future need for the extra gains you might earn.

The riskiest moment is when you're right. That's when you're in the most trouble, because you tend to overstay the good decisions. So, in many ways, it's better not to be so right. That's what diversification is for. It's an explicit recognition of ignorance. And I view diversification not only as a survival strategy but as an aggressive strategy, because the next windfall might come from a surprising place. I want to make sure I'm exposed to it.

…

We don't know what's going to happen with anything, ever. And so it's inevitable that a certain percentage of our decisions will be wrong. There's just no way we can always make the right decision. That doesn't mean you're an idiot. But it does mean you must focus on how serious the consequences could be if you turn out to be wrong: Suppose this doesn't do what I expect it to do. What's gonna be the impact on me? If it goes wrong, how wrong could it go and how much will it matter?

Pascal's Wager doesn't mean that you have to be convinced beyond doubt that you are right. But you have to think about the consequences of what you're doing and establish that you can survive them if you're wrong. Consequences are more important than probabilities…. In making decisions under conditions of uncertainty, the consequences must dominate the probabilities. We never know the future.

…

[In September, 1958, for the first time in history,] stocks began to yield less than bonds, and it was not something tentative. The lines crossed without any period of hesitation and just kept on going. It was just, *zzzoop!* All my older associates told me that it was an anomaly and it

could not last. To understand why that happened and what that meant—and to recognize that what was accepted wisdom for a couple hundred years could turn out to be wrong—was very important. It really showed me that you don't know. That anything can happen. There really is such a thing as a "paradigm shift," when people's view of the future can change very dramatically and very suddenly. That means that there's never a time when you can be sure that today's market is going to be a replay of a familiar past.

The Multiplication Rule (from a post by Sanjay Bakshi):

A few years ago, Warren Buffett wrote on probability chains derived from the multiplication rule, which would serve as an even better example on how the rule should be used in one's investment thinking.

Last year MidAmerican wrote off a major investment in a zinc recovery project that was initiated in 1998 and became operational in 2002. Large quantities of zinc are present in the brine produced by our California geothermal operations, and we believed we could profitably extract the metal. For many months, it appeared that commercially-viable recoveries were imminent. But in mining, just as in oil exploration, prospects have a way of "teasing" their developers, and every time one problem was solved, another popped up. In September, we threw in the towel.

Our failure here illustrates the importance of a guideline – stay with simple propositions – that we usually apply in investments as well as operations. ***If only one variable is key to a decision, and the variable has a 90% chance of going your way, the chance for a successful outcome is obviously 90%. But if ten independent variables need to break favorably for a successful result, and each has a 90% probability of success, the likelihood of having a winner is only 35%. In our zinc venture, we solved most of the problems. But one proved intractable, and that was one too many. Since a chain is no stronger than its weakest link, it makes sense to look for – if you'll excuse an oxymoron – mono-linked chains.*** *[Emphasis Bakshi's]*

Clearly, Buffett learnt an important lesson there. The way I see it is that some business models, by their very nature are so complex (e.g. drug discovery) that one has to worry about lots of "moving parts" — independent risk factors. For the investment to be successful, *all* of those risks must be mitigated. And given the way the multiplication rule works, that's a long shot. To be sure, long-shots can sometimes be offset by bonanza profits if success does occur, but that kind of investing is more in the nature of a venture capital operation than a value investing operation.

In contrast, other things remaining unchanged, simple, easy to understand businesses with fewer moving parts carry much lower risk of disappointment. As Buffett writes:

> *Our investments continue to be few in number and simple in concept: The truly big investment idea can usually be explained in a short paragraph. We like a business with enduring competitive advantages that is run by able and owner-oriented people. When these attributes exist, and when we can make purchases at sensible prices, it is hard to go wrong (a challenge we periodically manage to overcome).*
>
> *Investors should remember that their scorecard is not computed using Olympic-diving methods: Degree-of-difficulty doesn't count. If you are right about a business whose value is largely dependent on a single key factor that is both easy to understand and enduring, the payoff is the same as if you had correctly analyzed an investment alternative characterized by many constantly shifting and complex variables.*

[Related Charlie Munger quote to the above: "In business we often find that the winning system goes almost ridiculously far in maximizing and or minimizing one or a few variables — like the discount warehouses of Costco."]

****

Peter Bernstein quotes from the 2004 interview with Jason Zweig:

> Understanding that we do not know the future is such a simple statement, but it's so important. Investors do better where risk management is a conscious part of the process. Maximizing return is a strategy that makes sense only in very specific circumstances. In general, survival is the only road to riches. Let me say that again: *Survival is the only road to riches*. You should

try to maximize return only if losses would not threaten your survival and if you have a compelling future need for the extra gains you might earn.

The riskiest moment is when you're right. That's when you're in the most trouble, because you tend to overstay the good decisions. So, in many ways, it's better not to be so right. That's what diversification is for. It's an explicit recognition of ignorance. And I view diversification not only as a survival strategy but as an aggressive strategy, because the next windfall might come from a surprising place. I want to make sure I'm exposed to it.

…

We don't know what's going to happen with anything, ever. And so it's inevitable that a certain percentage of our decisions will be wrong. There's just no way we can always make the right decision. That doesn't mean you're an idiot. But it does mean you must focus on how serious the consequences could be if you turn out to be wrong: Suppose this doesn't do what I expect it to do. What's gonna be the impact on me? If it goes wrong, how wrong could it go and how much will it matter?

Pascal's Wager doesn't mean that you have to be convinced beyond doubt that you are right. But you have to think about the consequences of what you're doing and establish that you can survive them if you're wrong. Consequences are more important than probabilities…. In making decisions under conditions of uncertainty, the consequences must dominate the probabilities. We never know the future.

…

[In September, 1958, for the first time in history,] stocks began to yield less than bonds, and it was not something tentative. The lines crossed without any period of hesitation and just kept on going. It was just, *zzzoop!* All my older associates told me that it was an anomaly and it could not last. To understand why that happened and what that meant—and to recognize that what was accepted wisdom for a couple hundred years could turn out to be wrong—was very important. It really showed me that you don't know. That anything can happen. There really is such a thing as a "paradigm shift," when people's view of the future can change very dramatically and very suddenly. That means that there's never a time when you can be sure that today's market is going to be a replay of a familiar past.

The Multiplication Rule (from a post by Sanjay Bakshi):

A few years ago, Warren Buffett wrote on probability chains derived from the multiplication rule, which would serve as an even better example on how the rule should be used in one's investment thinking.

Last year MidAmerican wrote off a major investment in a zinc recovery project that was initiated in 1998 and became operational in 2002. Large quantities of zinc are present in the brine produced by our California geothermal operations, and we believed we could profitably extract the metal. For many months, it appeared that commercially-viable recoveries were imminent. But in mining, just as in oil exploration, prospects have a way of "teasing" their developers, and every time one problem was solved, another popped up. In September, we threw in the towel.

Our failure here illustrates the importance of a guideline – stay with simple propositions – that we usually apply in investments as well as operations. ***If only one variable is key to a decision, and the variable has a 90% chance of going your way, the chance for a successful outcome is obviously 90%. But if ten independent variables need to break favorably for a successful result, and each has a 90% probability of success, the likelihood of having a winner is only 35%. In our zinc venture, we solved most of the problems. But one proved intractable, and that was one too many. Since a chain is no stronger than its weakest link, it makes sense to look for – if you'll excuse an oxymoron – mono-linked chains.*** *[Emphasis Bakshi's]*

Clearly, Buffett learnt an important lesson there. The way I see it is that some business models, by their very nature are so complex (e.g. drug discovery) that one has to worry about lots of "moving parts" — independent risk factors. For the investment to be successful, *all* of those risks must be mitigated. And given the way the multiplication rule works, that's a long shot. To be sure, long-shots can sometimes be offset by bonanza profits if success does occur, but that kind of investing is more in the nature of a venture capital operation than a value investing operation.

In contrast, other things remaining unchanged, simple, easy to understand businesses with fewer moving parts carry much lower risk of disappointment. As Buffett writes:

Our investments continue to be few in number and simple in concept: The truly big investment idea can usually be explained in a short paragraph. We like a business with enduring competitive advantages that is run by able and owner-oriented people. When these attributes exist, and when we can make purchases at sensible prices, it is hard to go wrong (a challenge we periodically manage to overcome).

Investors should remember that their scorecard is not computed using Olympic-diving methods: Degree-of-difficulty doesn't count. If you are right about a business whose value is largely dependent on a single key factor that is both easy to understand and enduring, the payoff is the same as if you had correctly analyzed an investment alternative characterized by many constantly shifting and complex variables.

[Related Charlie Munger quote to the above: "In business we often find that the winning system goes almost ridiculously far in maximizing and or minimizing one or a few variables — like the discount warehouses of Costco."]

TURF

Temperament

- Am I making the decision in a clear, calm state?
- Have I made the decision in an analytical manner that is based on facts, while keeping in mind that the facts can change quickly?

Uncertainty

- Has the extreme uncertainty of the future been given due consideration?
- Is my investment dependent on unknowable events coming to fruition?
- Have you rightly separated news and facts from opinions?

Risk

- My job is to identify risks and adjust accordingly.
- Micro Risks – income statement, balance sheet, and valuation risks.
- Macro Risks – don't depend on uncertain macro happening.
    - Always beware of inflation and interest rate exposure, but remember that they are pretty much unpredictable, especially when it comes to timing.
    - "It's one thing to have an opinion; it's something very different to assume it's right and act on that assumption." —Howard Marks
- Reputational Risk is the most important.
- Shun permanent loss of capital.
    - "The main job of a steward of other people's assets is to manage risk and protect capital." —Howard Marks

Flexibility

- Maintain flexibility of thought.
    - Always pay attention to and reconcile disconfirming evidence and opinions.

****

Industry Supply and the Capital Cycle…

Edward Chancellor, in an interview with "MoneyWeek" in 2015:

Ed: And this interesting point is that people, I don't quite know why, but they love to think about and project demand into the future. They love it, I suppose, because… well, they like projecting demand because demand is unknowable. And because it's unknowable, then you can have any fantasy you want about it at all, optimistic or pessimistic.

But given the nature of mankind, those would tend to be optimistic. So a huge amount of work goes into forecasting demand. As our mutual friend Russell Napier says, analysts spend 90% of their time thinking about and forecasting demand, and 10% of their time thinking about supply.

Now, the interesting thing about supply is that supply actually can be forecasted because in most industries, it takes quite a while for the supply to come on stream. You can see how much assets

have grown inside an industry, or inside any particular business. You can see it through any number of measures.

Through IPO issues, through secondary share issues, through companies taking on more debt, through companies going through a boom, such as the mining companies or the US homebuilders, who have had a surge in profitability, and have reinvested those profits.

You can measure it technically through looking at things, like current capital spending to depreciation ratios. Or you can look at it, for instance, the rate of reported profitability of a company to its cash flow, the so called cash conversion rate. And if a company is generating large profits, but not generating any cash flow, it's probably in a negative phase of the capital cycle.

So the point, to go back to what you were saying, is that investors, if they knew the right way to approach, would be thinking 90% about supply, and then fantasising 10% about the completely, or not quite completely, but more or less completely unknowable demand side.

In his introduction to the book Capital Returns, Chancellor also gives several recent examples where a focus on supply instead of rosy demand projections would have allowed one to better grasp the risk one was taking investing in particular stages of those industry cycles, including the telecoms in the late 1990s, shipping in the 2001-2007 period, and the homebuilding industry that peaked in 2006. The below excerpt on the homebuilding boom is a good example showing the capital cycle and the importance of focusing on industry supply:

Rising house prices after 2002 prompted another capital cycle in the US homebuilding industry. By the time the US housing bubble peaked in 2006, the excess stock of new homes was roughly equal to five times the annual production required to satisfy demand from new household formation. Spain and Ireland, whose real estate markets had even more pronounced upswings, ended up with excess housing stocks equivalent to roughly 15 times the average annual supply of the pre-boom period. Whilst under way, housing booms are invariably justified by references to

rosy demographic projections. In the case of Spain, it turned out that recent immigration had largely been a function of the property boom. After the bubble burst and the Spanish economy entered a depression, foreigners left the country by the hundreds of thousands.

Several well-known "value" investors who ignored capital cycle dynamics were blindsided by the housing bust. In the years before US home prices peaked in 2006, homebuilders had grown their assets rapidly. After the bubble burst, these assets were written down. As a result, investors who bought US homebuilders' stocks towards the end of the building boom when they were trading around book value – towards their historical lows – ended up with very heavy losses [5]. From a capital cycle perspective, it's interesting to note that although UK and Australia experienced similar house price "bubbles," strict building regulations prevented a supply response. Largely as a consequence, both the British and Australian real estate markets recovered rapidly after the financial crisis [6].

***

[5] For instance, the large US homebuilder KB Home experienced a 28 per cent compound annual growth in assets between 2001 and 2006. By summer of 2006, its shares were trading at 1.2 times book. From that point, KB's book value declined by 85 per cent, and its shares, already well below their peak, fell a further 75 per cent

[6] The fact that UK housing supply didn't respond to the British housing bubble is reflected in the superior performance of UK homebuilding stocks relative to their US counterparts over the last decade

---

And more from Chancellor in [Capital Returns](#):

FOCUS ON SUPPLY RATHER THAN DEMAND

Given that the future is uncertain, why should Marathon's approach fare any better? The answer is that most investors spend the bulk of their time trying to forecast future demand for the

companies they follow. The aviation analyst will try to answer the question: How many long-haul flights will be taken globally in 2020? A global autos strategist will attempt to forecast China's demand for passenger cars 15 years hence. No one knows the answers to these questions. Long-range demand projections are likely to result in large forecasting errors.

Capital cycle analysis, however, focuses on supply rather than demand. Supply prospects are far less uncertain than demand, and thus easier to forecast. In fact, increases in an industry's aggregate supply are often well flagged and come with varying lags – depending on the industry in question – after changes in the industry's aggregate capital spending. In certain industries, such as aircraft manufacturing and shipbuilding, the supply pipelines are well-known. Because most investors (and corporate managers) spend more of their time thinking about demand conditions in an industry than changing supply, stock prices often fail to anticipate negative supply shocks [33]....

***

[33] Several accounting based measures provide insights into the capital cycle. As observed above, stocks with the fastest asset growth tend to underperform. When a company's capital expenditure relative to depreciation rises above its average level it may be a sign that the capital cycle is deteriorating (see 1.4 "Supercycle woes" and Chapter 1, "A capital cycle revolution"). A rising gap between reported earnings and free cash flow is another warning sign (see 1.7 "Major concerns"). The Herfindahl Index provides a statistical measure of industry concentration which may reveal changes in competitive conditions. Anecdotal signs prove just as useful in gauging the capital cycle. It's generally a bad sign when a company starts building a grandiose new head office (see 4.9 "On the rocks")].

ANALYZE COMPETITIVE CONDITIONS WITHIN AN INDUSTRY

From the investment perspective, the key point is that returns are driven by changes on the supply side. A firm's profitability comes under threat when the competitive conditions are deteriorating. The negative phase of the capital cycle is characterized by industry fragmentation and increasing supply. The aim of capital cycle analysis is to spot these developments in advance of the market. New entrants noisily trumpet their arrival in an industry. A rash of IPOs concentrated in a hot sector is a red flag; secondary share issuances another, as are increases in

debt. Conversely, a focus on competitive conditions should alert investors to opportunities where supply conditions are benign and companies are able to maintain profitability for longer than the market expects. An understanding of competitive conditions and supply side dynamics also helps investors avoid value traps (such as US housing stocks in 2005–06).

The Capital Cycle's Key Tenets (from "MoneyWeek" article with Chancellor):

Capital cycle analysis can be boiled down to the following key tenets:

1. Changes in supply drive industry profitability
2. Demand forecasts are more prone to error than supply forecasts
3. Yet investors devote more time to considering demand than supply
4. As a result, share prices often fail to anticipate changing profitability
5. The value/growth dichotomy is false: differences in firm and industry asset growth is key
6. Management's capital allocation skills are paramount
7. Meetings with management often provide valuable insights
8. Investment bankers facilitate the capital cycle, largely to the detriment of investors
9. Policymakers influence the capital cycle, largely to the detriment of investors
10. New technologies may disrupt the normal operation of the capital cycle
11. Generalists are more able to adopt the "outside view" necessary for capital cycle analysis
12. Long-term investors are better suited to applying the capital cycle approach

---

When the Capital Cycle May Not Work (5.6 in Capital Returns):

5.6 CAPITAL PUNISHMENT (MARCH 2013)

The capital cycle ceases to function properly when politicians protect underperforming industries

The credit boom created excess capacity in a wide array of global industries. If the capital cycle had been operating smoothly, the subsequent collapse in share prices and demand ought to have led to consolidation and capital withdrawal. This has not always been the case, despite notable exceptions in certain industries (e.g., US homebuilders). Errors of capital cycle analysis can lead to mistaken share purchases. Still, they help us adapt and evolve our investment discipline. With hindsight, our capital cycle approach has failed at times when we have underestimated the impact on industries of political and legal interference, disruptive technologies and globalisation.

To this list of external factors, one can add the self-inflicted wounds of mismanagement. The most common problem is the failure of capital to exit industries with unacceptably poor returns. In the latest cycle, the forces of creative destruction have been moderated by aggressive monetary easing and low interest rates. This has allowed weak firms to continue in business, servicing what are likely to prove unsustainable debt levels. This situation contrasts with the end of previous economic cycles when interest rates have risen to stave off inflationary pressures leading to mass bankruptcy. The effect has been exacerbated in a number of territories (notably Europe) by forbearance on the part of banks whose appetite for further write-downs is already constrained in an environment of rising regulatory capital requirements.

Matters tend to get worse when politicians enter the picture. Jobs in manufacturing, unlike financial services, hold a particular allure for the political classes in many developed economies. Lack of growth and overcapacity in mature industries would ordinarily require restructuring and consolidation, particularly as off-shoring is more prevalent in more basic, labour-intensive industries. Nostalgia for a past golden age of "honest" jobs and the politicians' hunger for votes fuel protectionist instincts. Nowhere is this more apparent than in Europe, where nationalistic urges are irresistible.

Managers in politically sensitive industries struggling with excess capacity can face a prisoner's dilemma. Why should a French automotive manufacturer shut capacity when the benefits accrue

disproportionately to its Italian competitor? Or, the Swedish paper company draw back to the advantage of its Finnish rival? Why not wait for others to deal with the capacity problem? In the emerging markets, the identification of “strategic industries” by Chinese politicians has led to excess capacity in various sectors, as diverse as solar and wind power, stainless steel, shipbuilding and telecommunications equipment. As a result, certain markets in the developed world, where competition was seen as regional in nature, have suddenly become global. Because of the difficulty of assessing what motivates competitors under conditions of state capitalism, capital cycle analysis tends to be more effectively applied to industries which are largely domestic in nature or where the dominant players are inclined to Anglo-Saxon style capitalism (as is the case in the global beer industry).

New technologies often interfere with the smooth operation of the capital cycle. The Internet has wreaked havoc on many industries, including music, regional newspapers, book retailing and travel agencies. Marathon has suffered in a number of cases where the benefits of supply side consolidation in distressed sectors was insufficient to offset a secular decline in demand. Fortunately, the capital cycle approach is well attuned to identifying superior Internet business models which can sustain high returns of capital. An understanding of the power of network and scale effects that protect companies from the chill winds of competition has led to successful investments in a number of Internet businesses including Amazon, Priceline and Rightmove. (Although, to date Amazon has proven better at destroying profits in other businesses than in generating any for itself.)

In recent years, capital cycle analysis has been more useful at picking stocks in companies which can maintain high returns than in finding opportunities among bombed-out industries recovering (or not) after a supply side restructuring. For the former, the investment case rests on whether competing capital can enter the sector and boost supply, eventually driving down industry returns. What we have seen in a number of cases is that dominant businesses often become more powerful when they have well managed, proprietary assets. Examples here include Nestlé, Unilever, and McDonald’s. It has helped that the durable cash flows generated by such businesses have the bond-like characteristics investors crave in the current environment of low interest rates.

In short, the great strength of the capital cycle approach lies in its adaptability. The basic insight doesn't change. Namely, both high and low returns are likely to revert to the mean as valuation influences corporate behaviour and brings about shifts in the supply side. In Marathon's early years, our discipline was focused on finding stocks where the supply conditions were changing. More recently, the emphasis has shifted to identifying sectors and companies where the forces of competition are blunted and the process of mean reversion is drawn out.

****

General Questions and Reminders:

- Remember that you are not buying a stock, you are buying a business.
- Is this investment dependent on timing?
    - Remember: The market can stay irrational longer than you can remain solvent. *Seriously.*
- Do I need to worry about this investment if the stock market closes for an extended period of time?
- "Benchmark all stock ideas against those already owned (rather than against an irrelevant universe (index) of those which you'd rather not own), while pondering all concentrations of risk in an unscientific but flexible fashion." —Claire Barnes
- Is there some type of deep/deliberate practice you can to do further your understanding on the business or industry? [See below for more on deliberate practice.]
- Am I basing this investment on my own analysis and not that of anyone else?
    - Objectivity and rationality require independence of thought.
- Have I asked the question "WHY?" enough times in my analysis?
- Have I asked the question "HOW?" enough times in my analysis?
    - How do things work? How do decisions get made? How does the group interact?
- Don't overlook the obvious by drowning in the minutiae.
    - Am I getting caught up in the details and the noise, and forgetting to keep an eye on the big picture?
    - Am I giving weight to unneeded information?

IS IT A NO-BRAINER DECISION / (1-foot hurdle vs. 7-foot hurdle) / 'SURE THING' [See: Malcolm Gladwell's January 2010 article "The Sure Thing"]?

General portfolio:

- Do not accept principal risk while investing short-term cash.
- **Remember that you are a risk-identifier, not a forecaster.**
    - Risk identifier, not forecaster because no one can accurately predict the future direction of the stock market or economy. Your job is to identify risk and then either avoid or hedge (if possible and cheap to hedge) the risks you've identified.
- Remember that unless you are worried about extremely high inflation in the very near term, your default position is cash.
    - Approach the investment process as one of NOT wanting to invest your cash... the idea must be very safe and attractive in order to get you to exit the default cash position.

Sanjay Bakshi's email reply to someone about investing and deliberate practice [I believe the excerpts below were from one of his blog posts, but it may also have been some other source]:

Thanks for your mail. Daniel Coyle has done a tremendous service to humanity for writing that book [*The Little Book of Talent*]. I ordered 21 copies yesterday to give to my friends.

It's true that unlike in sports like archery you don't get instant feedback in long-term investing. But that doesn't mean there is no feedback that is useful.

Here's what I do when I look for feedback on my decisions on investing in high quality businesses:

1. Every once in a while I look at the business and ask if this is a high quality businesses or not. If, for example, the moat is getting impaired or is likely to be impaired, then I must consider selling. Factors affecting the quality of the moat are many but keeping Porter's five forces framework is helpful as is quantitative checks (operating

performance as compared to competition, resilience of profitability during tough times, trends in balance sheet quality, return on incremental capital for new expansion projects being taken up by the business etc). It's important to recognize that doing this too frequently will *not* be a good idea. By definition, a really good business is very unlikely to be ruined in a quarter or two. So, there is feedback but I am not likely to get it on a daily or a quarterly basis. Sometimes, of course a negative black swan event (e.g. an earthquake) could destroy the earning power of the business. Under those circumstances cogitating over a few quarters about where the moat of that monopoly hotel that now lies in ruins now is impaired or not would be funny and foolish! I cite this just as an example that sometimes shit happens and one has to act quickly but usually good businesses do not get destroyed in a quarter so one must try to avoid the *noise* in the short-term earnings announcements and focus on the big picture.

2. Every once in a while I look at the quality of the management and ask if it's the same, better or worse than it was when I first bought into the business. A bit of caution here however. Once an investment in a great business run by an excellent management has been made, one should not become overly disappointed by a few mistakes, *provided* none of them can destroy the business. So this analysis is done keeping in mind Ben Franklin's advice that one should keep one's eyes wide open *before* marriage but only *partly* open thereafter. Factors that go into the quality of the management bucket comprise of checks on operating skills, capital allocation skills and integrity. There are some situations, however, when the management does something that is wrong from the perspective of the minority shareholders. Under such situations the question to ask is: Knowing what I now know about the intention of the management, would this business pass the management quality test? If the answer is a no, then I must exit from the business. In other words, some things are to be tolerated, others not. It's not physics. It's very subjective and different people come to different conclusions. It just helps to monitor the overall *quality* of management's decisions over time and make the judgment using Ben Franklin's Prudential Algebra framework.
3. Every once in a while, I look at the market value of the business and try to understand if it's run up faster than fundamentals or is lagging the fundamentals. So long as I am satisfied from the feedback I get from 1 and 2 above, I don't get overly worried about the former. I know from studying the history of great value creators that there will

always be periods when the stock outperforms the business and there will be periods when the reverse happens. One's eyes should be on the playing field (covered in 1 and 2 above) and not on the scoreboard. This kind of thinking has really helped me a lot as an investors and has also helped my firm's clients too!

There is very good feedback in long-term value investing. If your process is good, then over time, you should get good results. Over time, the role of luck diminishes and process dominates. So all the feedback should be directed towards the validity of the investment process.

Additionally, I think it's a very good idea to follow the Shane Parrish's advice on writing up a decision journal because it forces you to calibrate your confidence level over time.

[Note: On the topic of journaling, you might want to think about joining the Journalytic waitlist if this interests you.]

Thoughts on Deliberate Practice and Investing [a personal brainstorming thought]:

I've been very interested in the idea of expertise and deliberate practice, and the difficulty of applying it to the investment business. I'm especially not inclined to disagree too much—*on average*—with Danny Kahneman when he says "There are domains in which expertise is not possible. Stock picking is a good example." And so I try to reconcile that with the fact that some great investors obviously do show expertise—very clear expertise over a long period of time. Combining all of those ideas with the idea of deliberate practice and the examples Malcolm Gladwell gives in his book *Blink*, makes me think that expertise means knowing something so well that you can very (or relatively compared to peers, depending on the field) quickly make an accurate decision. For investing, I think there isn't one set of valuation metrics because assets change over time, the interconnectedness of everything changes, laws change, etc., etc.….bottom line, there is too much complexity. But where I do think expertise can become valid in the investment process is the filtering process.

If one has good filters (which I like to think of as a checklist at the beginning of the research process – or just a really good understanding of what is on your checklist to avoid looking at things that will fail later), he or she can avoid wasting time on fruitless research, which can give one a time advantage. And maybe one can follow certain economic and market data to know where there is too much risk and what to avoid (i.e. bubbles) that can give one an advantage of not being surprised or as vulnerable to things that are gray swans to some and black swans to others. Having a deep enough knowledge of industries and economic history to know that when something initially comes up and looks cheap whether or not it's a value trap, worth spending more time on, or if it's better to look for things that fit that initial filter better can probably give one a decent advantage in the investing world.

These are just some random thoughts. There is some combination of experience over a long period of time where the right lessons are learned, and deep, specialist knowledge in certain areas that probably can lead to long-term outperformance in the markets. And sometimes, it's just the ability to either work harder or stay calmer and more patient than most others that can be the thing that matters. As Charlie Munger says: "It's not supposed to be easy. Anyone who finds it easy is stupid."

"To achieve long-term success over many financial market and economic cycles, observing a few rules is not enough. Too many things change too quickly in the investment world for that approach to succeed. It is necessary instead to understand the rationale behind the rules in order to appreciate why they work when they do and don't when they don't." —Seth Klarman

****

General Reminders:

- The goal is to win by not losing.
- While you want to try to not ever lose money on an investment/trade, you will be wrong and make mistakes. That's part of the game—so you need some diversification to account for being wrong.

  - "No matter how hard you work at having systems for avoiding error and practices of trying to stay within your circle of competency, et cetera, et cetera, you still make mistakes." —Charlie Munger
- Remember, it is about making good expected-return bets, even if they won't all work out. But make sure you are making a good expected-return bet, and that you've done the necessary work, before putting capital to work.
- Can this investment survive (and maybe even thrive) under high inflation?
- Is the company or investment conservative with its balance sheet and leverage? Can its balance survive a major recession where revenues could drop 20% or more (depending on the industry) without having to raise outside capital?
- Are management's incentives aligned with shareholders?
- Is the management team comprised of owner-operators that have the "capacity to suffer" adverse reported earnings' impacts that may accompany opportunities to invest and reinvest in markets and other projects that will expand the company's long-term sustainability and competitive advantages?
  - But remember that the capacity to suffer isn't enough…it also has to be right. (e.g. Barnes and Noble was a closely-controlled company and invested in its Nook product, but why would you decide to compete with Amazon, Apple, and Google, who were all larger and already had big lead in the market?)
- Is the stock undervalued? [General rule-of-thumb: FCF yield at least 2x the AAA-rated bond yield…..or a minimum absolute level of about a 10-12% pre-tax yield (8.34x – 10x pre-tax), or about 6-9% after tax. But flexibility may be required for earlier-stage businesses if you pursue investing in them.]
  - Munger, 10% comment: "Though not an iron rule, we hope to make, say, 10% pretax long term when buying with equity."
  - Bruce Greenwald on the return Warren Buffett expects [also included in Part 7]: "His idea of a fair price, by the way, is a price that gets him a return going forward on that investment without any improvement in the multiple of somewhere between 13 and 15%. By normal standards, when the average market return is 7-8%, that's a really good price, he's looking for a very good price. They call it a fair price because the multiple may be fairly rich, it may be 13, 14 times earnings. But the value of the growth may bring his return up

to 13-15%. So when he says a fair price he's talking in terms of normal value metrics, and there the reason that you prefer that to a poor company at a really good price is that because the good company can grow through reinvestment and things like same-store sales growth, your return will come in the form of capital [gain], not distributive income, and that, after tax, is much more valuable."

- Is the probability very high that the earnings you are using is a normal level of earnings? (i.e. Don't underestimate competitive forces…. even from competitors that don't yet exist.)
  - "We have found in a long life that one competitor is frequently enough to ruin a business." —Charlie Munger
- Are the next 10 years extremely likely to have the company earning more FCF? (i.e. How predictable is it that the future path is positive?)
- Is there plenty of margin for error?
- Is this investment antifragile? (i.e. Would this company benefit from volatility and tougher times because, for example, it has cash for acquisitions and a history of making them at the right times, a history of smart buybacks, etc.?)
- Is this a good addition to a portfolio goal of having 6-12 uncorrelated positions if you know them deeply, have limited downside, and much more upside potential than downside risk? Or 15-30 uncorrelated positions if you know them well and are confident about the upside potential versus the downside risk, but maybe aren't things you know extremely deeply and/or maybe aren't quite 1-foot hurdles? [For more on position sizing, see Part 3.].
- Is this a business I'd want to own in its entirety, if it was the only one I could own (and run by the people running it, and by buying it at the current price)? (i.e. Am I taking a businesslike approach to investing?)
- Are there good reinvestment opportunities? (i.e. Is the runway long and wide?)
- The ideal buy to earn the *highest* returns is probably a low p/e (high earnings yield) and low ROIC business, where diligence leads you believe that the low ROIC is going to become a high ROIC.
  - This way you may get the combination of re-rating to a higher p/e and also increased earnings.

- These ideas are likely to be found by thinking conceptually and not just quantitatively (i.e. where are the tailwinds? Where may higher returns be coming in the future as a result of economic, political, technological, or other changes?).

- Don't confuse the economy with the stock market.
  - The stock market is a discounting mechanism. The direction of the economy does not necessarily mean that the direction is the same for the stock market.
  - Remember that economies can have a lot of problems that don't impact shareholders.
  - "Using U.S. market data going back to 1926, Vanguard analyzed the predictive powers of a whole range of metrics. The rather depressing conclusion – at least from an economist's point of view – is that we are pretty much wasting our time by assigning any value at all to what goes on in the real economy. Of all the metrics tested by Vanguard, only P/E ratios seem to explain some reasonable proportion of future (real) stock market returns, and that is only if you are prepared to take a very long term view (10 years in the Vanguard study)." (Absolute Return Letter – December 2012)

Some of Peter Lynch's Rules of Investing (from *Beating the Street)*:

- Investing is fun, exciting, and dangerous if you don't do any work.
- Your investor's edge is not something you get from Wall Street experts. It's something you already have. You can outperform the experts if you use your edge by investing in companies or industries you already understand.
- Behind every stock is a company, find out what it's doing.
- Often, there is no correlation between the success of a company's operations and the success of its stock over a few months or even a few years. In the long term, there is a 100 percent correlation between the success of the company and the success of its

stock. This disparity is the key to making money; it pays to be patient, and to own successful companies.

- You have to know what you own, and why you own it. "This baby is a cinch to go up!" doesn't count.
- Long shots almost always miss the mark.
- Owning stocks is like having children - don't get involved with more than you can handle. The part-time stockpicker probably has time to follow 8-12 companies, and to buy and sell shares as conditions warrant. There don't have to be more than 5 companies in the portfolio at any time. [Note: Lynch was much more diversified himself.]
- If you can't find any companies that you think are attractive, put your money into the bank until you discover some.
- Never invest in a company without understanding its finances. The biggest losses in stocks come from companies with poor balance sheets. Always look at the balance sheet to see if a company is solvent before you risk your money on it.
- If you're thinking about investing in a troubled industry, buy the companies with staying power. Also, wait for the industry to show signs of revival. Buggy whips and radio tubes were troubled industries that never came back.
- If you invest $1,000 in a stock, all you can lose is $1,000, but you stand to gain $10,000 or even $50,000 over time if you're patient. The average person can concentrate on a few good companies, while the fund manager is forced to diversify. By owning too many stocks, you lose this advantage of concentration. It only takes a handful of big winners to make a lifetime of investing worthwhile.
- In every industry and every region of the country, the observant amateur can find great growth companies long before the professionals have discovered them.
- A stock-market decline is as routine as a January blizzard in Colorado. If you're prepared, it can't hurt you. A decline is a great opportunity to pick up the bargains left behind by investors who are fleeing the storm in panic.
- Everyone has the brainpower to make money in stocks. Not everyone has the stomach. If you are susceptible to selling everything in a panic, you ought to avoid stocks and stock mutual funds altogether.

- There is always something to worry about. Avoid weekend thinking and ignore the latest dire predictions of the newscasters. Sell a stock because the company's fundamentals deteriorate, not because the sky is falling.
- Nobody can predict interest rates, the future direction of the economy, or the stock market. Dismiss all such forecasts and concentrate on what's actually happening to the companies in which you've invested.
- If you study 10 companies, you'll find 1 for which the story is better than expected. If you study 50, you'll find 5. There are always pleasant surprises to be found in the stock market - companies whose achievements are being overlooked on Wall Street.
- If you don't study any companies, you'll have the same success buying stocks as you do in a poker game if you bet without looking at your cards.
- Time is on your side when you own shares of superior companies. You can afford to be patient - even if you missed Wal-Mart in the first five years, it was a great stock to own in the next five years. Time is against you when you own options.

"The key in investing is to know what you know and know what you don't know. You can know about management teams without meeting with them. Every situation is slightly different. So I come back to the point that if you know enough on other things that there is enough margin of safety. Even if you meet with management, you may not learn something. Obviously, actions speak louder. You want to see what they have done. Everything being equal, the more you know about management, the more honest and upfront they are, the more motive they have, the better the situation is and the deeper the discount. You have to analyze it all. The key to analyzing it is you have to ask: Do I really know what I think I know? Do I really know what I don't know? If you can't answer that question, chances are you are gambling." —Li Lu