



THREE QUESTIONS OF CONSEQUENCE

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BY ROB NICOSKI, CFA
WITH CONTRIBUTIONS FROM THE DGI INVESTMENT TEAM

At the core of any sound investment process is a clear understanding of what we as investors can and cannot control. This distinction seems self-evident, yet all investors, including seasoned ones, struggle to avoid conflating the controllable with the uncontrollable. Mistake luck for skill.

We contend that developing a deeper understanding of what we can control as investors (rather than agonizing over what we cannot) is the most assured path towards long-term investment success. This simple but important insight sharpens our focus and enhances our research efficiency.

“WHILE MOST PEOPLE WILL AGREE THAT THERE IS MUCH OVERLAP BETWEEN SKILL AND LUCK, A FULL UNDERSTANDING OF HOW INEXTRICABLY BOUND THE TWO ARE HAS YET TO BE ATTAINED. IN PRINCIPLE THE DISTINCTION SEEMS CLEAR. IN SKILL SITUATIONS THERE IS A CAUSAL LINK BETWEEN BEHAVIOUR AND OUTCOME. THUS, SUCCESS IN SKILL TASKS IS CONTROLLABLE. LUCK, ON THE OTHER HAND, IS A FORTUITOUS HAPPENING. SUCCESS IN LUCK OR CHANCE ACTIVITIES IS APPARENTLY UNCONTROLLABLE.”

Ellen J. Langer, “The Illusion of Control.” *Journal of Personality and Social Psychology* 1975, Vol. 32, No. 2, 311-328

We also need to acknowledge that there is an uncomfortably long list of important things we cannot control as investors. We cannot control the daily pricing of the securities we own. We cannot control the likely market performance over the next twelve months. We cannot control the inevitable fits and starts of economic growth. Not only are these things and numerous other phenomena impervious to our influence as investors (and often our attempts at forecasting as well), it is rarely evident what their impact might be on long-term security prices. The astute investor will acknowledge the importance of a general understanding of the prevailing economic and political affairs while simultaneously placing these matters in their proper place in making investment decisions.

Once we free ourselves from the undue and distracting effects of those things beyond our control, we can focus properly. And the heightened clarity we gain inevitably leads to three domains of true investor influence—what we own, the price we pay, and how much we own.

These are the only levers we have for directly influencing our investing outcomes. Everything else we can only observe and carefully consider whether it warrants pulling one or more of these levers. Any thoughtful investment philosophy and process must offer clear answers to the three questions implied in these domains of investor control:

- 1) What securities will we target for ownership?
- 2) How much are we willing to pay to own these securities?
- 3) How much capital will we allocate to each security?



These are the central questions of investment consequence. We encourage all investors to carefully deliberate over the implication of their answers, because it is clear to us that how an investor decides to address these seemingly elementary queries will profoundly inform their attitudes toward return maximization, risk mitigation and portfolio construction.

In the pages that follow we share our answers to these three questions.

WHAT SECURITIES WILL WE OWN?

Empirical evidence and decades of experience have taught us that long-term portfolio returns are primarily driven by the big winning positions—the proverbial “10 or 20 baggers” (i.e., stocks which appreciate 10 to 20 times plus dividends). Few investments are able to generate these types of returns, because few businesses are able to achieve the type of sustained growth in the underlying value of the business, or intrinsic value (“IV”), that can propel 10-factor returns or more.

It is important to note that IV represents the real “worth” of the company based on the value of future earnings and cash flows; IV is *not* the “price” a security happens to be trading for in the market. IV and price can differ materially on any particular day, but they tend to converge over the long term.

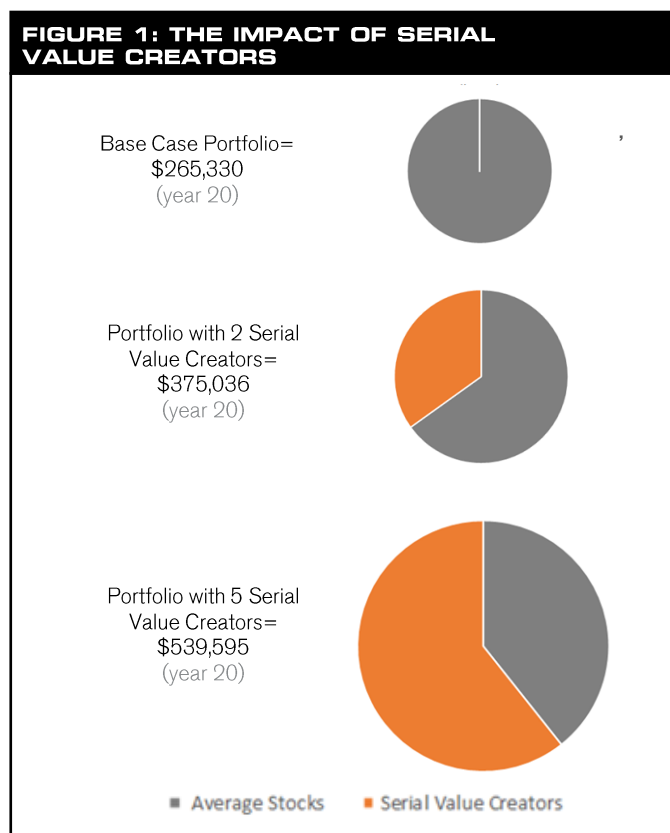
Our investment mission is centered on identifying those rare companies poised to meaningfully increase IV. We refer to these businesses as serial value creators. We believe that the prodigious growth in IV that these businesses generate will ultimately be reflected in the price of the security and, therefore, have the potential to have an outsized impact on long-term portfolio returns.

Additionally, owning businesses that are capable of internally generating significant growth in the value of the business puts time on our side as we benefit from the powerful compounding effect of IV growth. This is a more reliable exercise than buying companies with little potential for IV growth, because in these cases the investor is wholly dependent on shifts in market sentiment to generate the desired returns.

To better understand the impact these serial value creators can have on investment returns, we provide an example of three different portfolios. In each portfolio, we assume \$100,000 is invested proportionally in 25 different stocks. Of those 25 stocks, the portfolios have 0, 2 and 5 serial value creators, respectively. We assume these serial value creators increase IV at a rate of

approximately 15% per year, while the balance of the portfolio increases IV at approximately 5% per year. These assumptions are consistent with the magnitude of historical returns for serial value creators versus the “average” stock. We further assume the market value of each company increases in tandem with its increase in IV and that there are no additional portfolio transactions during this period.

As can be seen in Figure 1, the base case portfolio with no serial value creators would be worth approximately ~\$265,330 after 20 years, an increase in value of 2.7 times. Not bad. However, the portfolio with just two serial value creators (out of 25 positions) would be worth \$375,036 or 41% more than the base case portfolio in year 20. The portfolio holding five serial value creators would be worth \$539,595 or 103% more than the base portfolio. In fact, the five big winners alone would be worth more than the entire base case portfolio. This simple example highlights the substantial impact serial value creating businesses can have on portfolio returns.





It is important to note that the portfolio example with five serial value creators mirrors the historical reality of U.S. stock market returns and our own experience: where a relatively small group of companies have generally accounted for the bulk of long-term returns.

Since value creation in the stock market tends to be concentrated in the best businesses, our research process is geared to maximize the number of serial value creators that we own. We refer to the number of serial value creators as a percentage of the overall number of stocks in the portfolio as our “hit rate”. And as the numbers in this example above illustrate, a small improvement in an investor's hit rate can substantially increase the overall return potential of their portfolio.

We have learned through observation and analysis that sustained value creation is not confined to particular industries or business models. Serial value creators do, however, tend to share important attributes that are key indicators of the potential for long-term value creation. These underlying drivers of IV growth include:

- A differentiable value proposition that underpins a sustained competitive advantage
- A large addressable market
- Strategic clarity on the part of company leadership
- A proven innovation engine
- A corporate culture that allows the creative potential of the company's human capital to flourish
- A commitment to operational excellence and continuous improvement
- A fiduciary mindset with respect to capital deployment

By better understanding the key underlying drivers of long-term value creation, we can tailor our investment identification efforts towards companies that are more likely to possess these attributes and more effectively avoid companies that don't.

Though the evidence supports our contention that owning companies with the potential for outsized IV growth is essential to long-term investment success, above-average growth prospects are only one part of the equation. We will discuss in the next section how the price an investor pays is also a critically important factor in determining the potential for superior long-term investment returns.

SUSTAINED VALUE CREATORS (IV COMPOUNDERS)

Businesses capable of maintaining above-average IV growth for an extended period of time.

- The goal is to increase the proportion of high-potential holdings by continuously improving our effectiveness at identifying the potential for sustained growth in IV.
- The process of identifying sustained value creators focuses on the key fundamental drivers of long-term value creation such as competitive moat, total available market, business model, leadership, clarity of purpose, culture, innovation, fiduciary mindset and execution.
- Key questions to answer: “Do each of our holdings have the potential for substantial growth in IV? How can we raise our odds of correctly identifying these serial value creators?”

HOW MUCH ARE WE WILLING TO PAY TO OWN THESE SECURITIES?

A disciplined investor will only purchase an investment at a price that tilts the odds of making money significantly in their favor. If the price paid is too high, sub-par returns or even losses are the likely outcomes. This can be true no matter how promising the outlook is for the company.

Paying a “fair” price is an easy concept to grasp, but a surprisingly difficult one to execute in practice. It requires an investor to make a reasonably accurate assessment of the IV of any business in which they invest.



Absent a reasonable assessment of IV, an investor has no basis for determining exactly what constitutes a fair price. For investors in growth companies, the challenge is even greater because investment decisions must be made on the basis of a future estimate of IV. The process of making a reasonable assessment of IV is beyond the scope of this paper, which is focused on how we use IV to improve the long-term return potential of our portfolio.

While we have scant influence on the day-to-day market pricing of a security, the good news is that we are *always* in control of the price we choose to pay. Therefore, we can be steadfast in our discipline to wait for a price that represents a meaningful enough discount to our assessment of IV to protect us from serious loss if our estimates prove to be optimistic. A disciplined investor never knowingly violates this principle. This is the principle of margin of safety.

If we are prudent in assessing IV and disciplined in the price we pay (which often requires great patience as we wait for an attractive buying opportunity), the resulting margin of safety not only protects us from the potential for catastrophic loss, it also increases the odds of achieving a superior rate of return by allowing for a degree of business risk in our projections. Conversely, investors that ignore margin of safety in their portfolio decisions do so at their own peril and are destined to suffer regrettably large losses at some indeterminate time in the future.

We will highlight the importance of purchase discipline and the protective impact of margin of safety on long-term investment returns with a hypothetical stock purchase. In this example, we are looking to make an investment in Fred Corp. Our financial projections suggest that the IV value of Fred Corp is \$100 today. Additionally, our earnings and cash flow projections suggest that the IV of the business should increase 10% per year to approximately \$195 per share over the next seven years.

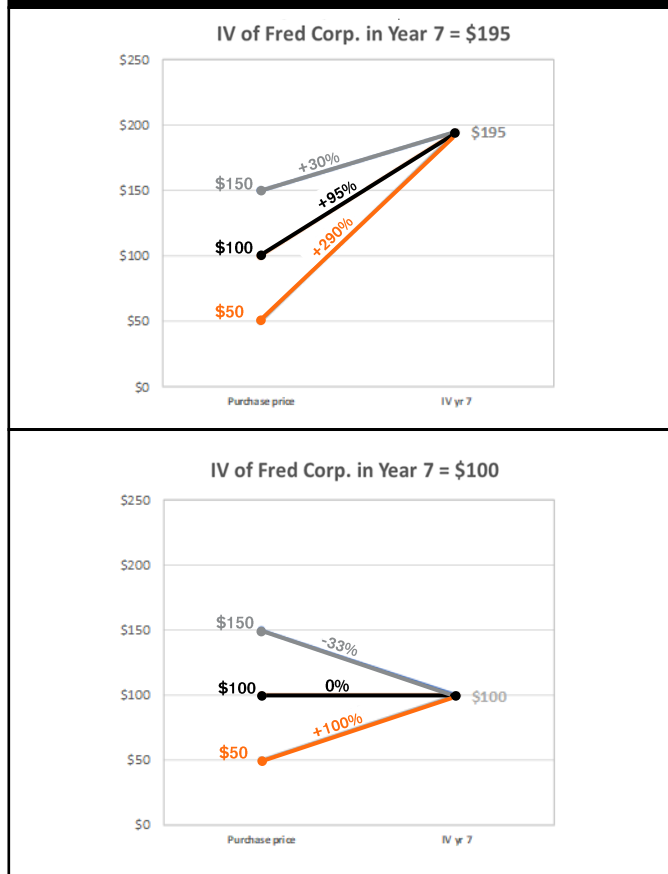
There is no magic behind seven years. We use a 7-year forecast horizon because it takes us outside the normal business cycle and it provides a long enough period of time for company management to execute on their business strategy. We also assume that over the long-term (five plus years) the true value of the business will

be fully reflected in the price of the stock, i.e. the gap between the stock price and IV will close. This “short-term inefficient, long-term efficient” pricing view of the market is consistent with our investment philosophy and experience.

In Figure 2, we highlight three different purchase scenarios for Fred Corp stock, i.e. buying the stock at \$50, \$100 or \$150 per share. We then calculate what our return would be over seven years for each purchase. In the first chart, we assume that the stock price converges with our IV estimate of \$195 in year seven. In the second chart, we assume that the forecast underlying our IV estimate proves to be optimistic and that the company in fact fails to increase its IV over our holding period. So instead of being worth \$195, Fred Corp actually ends up being worth \$100 in seven years.

The impact of having a large margin of safety versus little to no margin of safety in the purchase price is particularly noteworthy in the return differential between the stock purchased at \$50 and \$150 per share, respectively. In the case of the \$50 purchase price, we earn a spectacular return of 290% if our IV estimates are correct. Even in the second scenario where we assume there is no growth in IV, the margin of safety inherent in our purchase price still allows us to double our money over seven years. In contrast, purchasing the stock at \$150 per share leaves little margin for error with the potential for only a modest return if our initial IV estimate is accurate and a large loss if our IV estimate proves to be optimistic.

One might argue that it is unlikely that a truly great company will offer such disparate purchase price opportunities. Fortunately, our experience suggests otherwise. Market price volatility is the gift that keeps on giving for the patient investor. If an investor can avoid the temptation to chase an overvalued business franchise, they are likely to be presented multiple future opportunities to purchase that business at more favorable prices.

**FIGURE 2: PURCHASE PRICE IMPACT ON MARGIN OF SAFETY**

Before we close this section, we feel compelled to warn investors that *ignoring the concept of margin of safety (overpaying)* represents one of the most dangerous risks to investment returns as well as one of the most avoidable. Sure, an investor might be able to occasionally make money by buying an overpriced asset and then selling it at an even more extreme level in certain exuberant market environments, but experience tells us that the odds of repeating that process successfully over an extended period of time fall somewhere between slim and none. That is because the price of overpriced assets eventually succumb to the laws of financial gravity. And like the gravity of the physical world, when financial gravity reasserts its

grip on sky-high market prices the fall is generally swift, painful and unannounced.

Thus far we have established that purchasing the right investments (i.e. serial value creators) at steeply discounted prices relative to our future estimates of IV (i.e. ample margin of safety) sets a solid foundation for achieving satisfactory investment returns. However, there is one final step toward maximizing the potential for superior long-term investment results—the intelligent allocation of capital.

MARGIN OF SAFETY

Discount to IV paid that protects the portfolio from a material loss of value and increases the likelihood of achieving our targeted rates of return.

- The goal is to pay a fair price or less, i.e. a large enough discount to estimated IV to protect us from catastrophic loss if we are wrong.
- Margin of safety focuses on the veracity of IV estimates, targeted rates of return, and forecast probabilities and dispersion.
- Key questions to answer: “How confident are we that we can avoid material value destruction if we are wrong? How do we assess forecast error and business risk? How should these risks influence our desired margin of safety?”

HOW MUCH CAPITAL WILL WE ALLOCATE TO EACH SECURITY?

Allocating capital effectively is part science and part art. It is an exercise in setting probabilities informed by intuition. Since it is highly unlikely that our investment hit rates will approach anything near 100%, it is important that we have a process designed to direct the allocation of more capital to the probable big winners and less to the probable mistakes. This is conceptually straightforward, but difficult to execute without deep individual security knowledge and a proven capital allocation discipline.



In our experience, the most effective guidepost for intelligently allocating capital is the estimated future return for each of our individual portfolio holdings (aka, expected return.) Expected return facilitates comparisons between holdings even when the companies themselves may have little in common. In fact, once an expected return estimate is calculated for each individual security holding in the portfolio, capital allocation becomes (in theory) a largely mechanical process.

The impact of allocation decisions on future returns can be seen in the two portfolios in Figure 3. Each portfolio holds the same 25 securities. In the first portfolio, there is no attempt to optimize portfolio weightings. Each position represents an equal portion of the portfolio. In the second portfolio, the weightings are adjusted to align with the expected return of the individual securities. The difference in return potential is a substantial 3.7% per year which means a portfolio value of approximately twice as much after 20 years.

FIGURE 3: RETURN IMPACT OF OPTIMIZING ALLOCATION DECISIONS

Security	Expected Return	Equal Position Size	Partially Optimized Position Size
1	30.0%	4.0%	9.2%
2	27.5%	4.0%	8.5%
3	25.0%	4.0%	7.7%
4	22.5%	4.0%	6.9%
5	20.0%	4.0%	6.2%
6	17.5%	4.0%	5.4%
7	14.0%	4.0%	4.3%
8	14.0%	4.0%	4.3%
9	13.0%	4.0%	4.0%
10	13.0%	4.0%	4.0%
11	12.0%	4.0%	3.7%
12	12.0%	4.0%	3.7%
13	12.0%	4.0%	3.7%
14	11.0%	4.0%	3.4%
15	11.0%	4.0%	3.4%
16	10.0%	4.0%	3.1%
17	9.0%	4.0%	2.8%
18	9.0%	4.0%	2.8%
19	8.0%	4.0%	2.5%
20	7.0%	4.0%	2.2%
21	7.0%	4.0%	2.2%
22	6.0%	4.0%	1.8%
23	5.0%	4.0%	1.5%
24	5.0%	4.0%	1.5%
25	4.0%	4.0%	1.2%
Wtd Average Expected Return (annualized)		13.0%	16.7%
Cumulative Expected Return (20 years)		1048%	2100%



As this example illustrates, all other things being equal, a high-expected return holding should be allocated more capital than one with a low expected return. Unfortunately, “all other things” are rarely, dare we say never, equal. Each individual security brings with it a unique set of business circumstances and varying levels of forecast uncertainty. More colloquially, we would say that “not all 12% expected returns are created equal.”

Our allocation discipline deals with the differing levels of uncertainty across securities by considering other important factors in the portfolio weighting decision such as the attainment of fundamental milestones, forecast confidence, and forecast dispersion (i.e. upside and downside scenarios). This results in an expected return estimate that is more finetuned for the probability of various potential outcomes. We also leave room for weightings adjustments based on portfolio manager intuition that has been conditioned by decades of investment successes and failures.

INTELLIGENT ALLOCATION OF CAPITAL

Process of optimizing portfolio weightings to maximize returns under acceptable levels of assumed risk; aligning portfolio weightings with “investment insights”

- The goal is to make sure position sizes reflect our probability-weighted ERs.
- The intelligent allocation of capital focuses on company milestone achievements, expected returns under various scenarios, forecast confidence and forecast dispersion.
- Key questions to answer: “Are our weightings aligned with our investment insights? How should weightings be influenced by the interplay between the first two investment drivers and the various risk factors?”

CONCLUSION

Reasoned analysis and hard-won experience suggest that long-term portfolio returns are a function of the interplay between three critical factors over which we have control as investors:

- 1) The proportion of sustained value creators in the portfolio.
(What will we own?)
- 2) The margin of safety at purchase.
(What will we pay?)
- 3) The process of intelligently allocating capital across the portfolio holdings.
(How much will we own?)

Our knowledge as investors in these areas will never reach the level of precision that we desire. However, if we thoroughly understand the areas where we have genuine impact as investors, then through discipline and focused expertise we can shift our investment outcomes toward those influenced by skill and effort and away from those dependent primarily on random shifts of fate.

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