THE WEIGHING MACHINE

Taking Simple Ideas Seriously

A Framework for Productive Investing

Roka Capital

2026 Edition

Note: Our investment philosophy is deeply inspired by the wisdom of investors such as Benjamin Graham, Warren Buffett, Charlie Munger, Peter Lynch, and Howard Marks. Consequently, we attribute many of the insights shared here to these influential figures.

Snowball Effect

Rather than letting money sit idle, investing transforms it into an active engine for growth. At its heart lies compound interest: the process of earning a return on your previous returns. By reinvesting profits rather than withdrawing them, you build upon a constantly expanding foundation. This 'snowball effect' is the engine of long-term wealth. While the initial growth may feel slow, the exponential acceleration in later years eventually turns modest, disciplined contributions into a fortune.

The ultimate magnitude of capital generated through compound interest is determined by the interplay of three critical variables:

1. **Time:** Compounding requires time to fully manifest its exponential power. The longer the capital is invested and returns are reinvested, the more pronounced the compounding effect becomes, leading to disproportionately larger gains in later years.
2. **Annualized Return on Investment:** This factor represents the efficiency and success of the investment strategy. It is the average yearly percentage gain realized on the invested capital. A higher consistent annualized return dramatically increases the speed and volume at which capital compounds.
3. **Amount of Capital Invested:** A larger initial investment and contributions made along the way, while still subject to the same rate of return and time horizon, will generate a proportionally larger sum of capital in future returns.

A vivid illustration of these principles comes from the animated TV series *Futurama*. The protagonist, Fry, accidentally freezes himself until the year 2999. Upon awakening, he discovers that his initial deposit of just 93 cents, compounded at a modest annual rate of 2.25% over a millennium, has grown to $4.3 billion. Fry's understandable reaction is to gasp and faint. Had his original deposit been a few hundred dollars more, or if the rate of return had been slightly above 2.8%, he could have become a trillionaire.

The average human life is obviously much less than 1000 years, but we can start investing with an initial capital much more than 93 cents, keep contributing to our investments frequently, and earn more than a measly 2.25% annually.

Consider the financial outcomes for three hypothetical individuals, each beginning with $20,000 and adding $5,000 annually:

- **After 10 Years:**
  - The individual who saves only in cash will possess $70,000.
  - An investor achieving an 10% annual return will have accumulated approximately $132,000.
  - An investor earning a 20% annual return will see their portfolio grow to nearly $254,000.
- **After 20 Years:**
  - The cash saver's total will reach $120,000.
  - The 10% investor's holdings will have swelled to $421,000.
  - The 20% investor's portfolio will have skyrocketed to an astonishing $1.7 million.

All three contributed the exact same amount of their own money. The enormous difference in their results comes from the power of compounding, where your money starts making its own money, creating a snowball effect that grows exponentially over time. To achieve investment success then, it is therefore crucial to maximize these three factors. We must begin investing as early as possible and remain invested throughout our lives to not interrupt the effect of compounding, invest as much capital as we can, and strive for a satisfactory annualized return.

"The first rule of compounding: Never interrupt it unnecessarily."
– Charlie Munger

Perhaps the ultimate reward of investing and compounding is the gift of time. Investing is essentially the process of taking the money you've earned through your own time and effort via personal labor and turning it into capital that works on your behalf. While labor is limited by the number of hours you can work, capital works 24/7 without getting tired. As your investments mature and generate significant returns, they create an income stream with which you can eventually sustain your lifestyle, providing you with the freedom to decide how you spend your time.

Types of Investments

There are three types of investments: currency-based assets, unproductive assets, and productive assets.

- **Currency-Based Investments**
  These include money market funds, bonds, mortgages, and other instruments whose value is tied to a specific currency. The return on these investments is dependent on the future purchasing power of that currency. If inflation erodes the currency's value, the real return on these investments can be negative.
- **Unproductive Assets**
  These are assets that you buy with the hope that someone else will pay more for them in the future. Examples include crypto, gold, or even certain collectibles. These assets do not generate any income or produce anything of value; their value is purely dependent on market sentiment and the "greater fool" theory.
- **Productive Assets**
  These are assets that generate cash flow through the production of goods or services. This primarily refers to businesses, whether privately owned or publicly traded through the stock market. The value of productive assets comes from their ability to generate and grow earnings and pay dividends.

We prefer investing in *productive assets* only because they can sustainably and reliably create wealth over the long-term. Unlike unproductive assets, which rely on speculation, productive assets generate intrinsic value through their operations. Unlike currency-based investments, which are susceptible to inflation, productive assets can often grow their earnings and, therefore, their value, outpacing inflation. Our focus on productive assets aligns with the philosophy that a business's fundamental earning power is the most reliable driver of investment returns.

Principles of Investing

Value Investing

When we buy shares of a company on the stock market, we are not simply betting on the price movements of the stock, we are becoming a part-owner and partner in an actual business. This ownership is fundamentally identical to acquiring 100% of a private business, only on a smaller scale. As a partner, we "inherit" the business's entire economic reality. This includes its tangible assets and cash in the bank, but also its liabilities and debts. Most importantly, we are buying a claim on all the future cash flow the business will generate.

Because we are a partner in the business's future, protection of your capital is paramount. As legendary investor Benjamin Graham noted, an operation that does not prioritize the safety of principal is not an investment, but a speculation. To ensure a "satisfactory return," we must apply a margin of safety by paying a price that is significantly lower than the business's intrinsic value. We define intrinsic value as the true worth of a business, the price a knowledgeable and honest investor would pay to acquire 100% of a business, based on a realistic assessment of its assets and future earnings.

To confidently estimate a business's true worth, we must conduct thorough quantitative and qualitative assessments. This involves a deep dive into the business's financial health, scrutinizing balance sheets, income statements, and cash flow, and evaluating future growth prospects, and the industry of the business as a whole. We must also prioritize identifying talented, honest, investor-aligned management and CEOs who actively seek to return value to shareholders.

"Investment success doesn't come from 'buying good things,' but rather from 'buying things well" – Howard Marks

While strong businesses naturally attract more investors, the core principle of value investing is to pay a price below intrinsic value. A fundamentally sound business can be a poor investment if its high price already incorporates most of its future growth. Conversely, a less-than-perfect business might be an excellent investment if acquired at a sufficiently low price. In essence, we want to acquire as much value for as little capital as possible.

Mr. Market

Benjamin Graham's enduring character, Mr. Market, elucidates the essential mental attitude investors should adopt regarding price fluctuations of their stocks. Imagine a Mr. Market who, without fail, shows up at your door everyday and offers you a price to either buy your investment or sell you one of thousands of his. Even though the core of most businesses are stable and rarely change day to day, Mr. Market, suffering from mood swings and emotional instability, feels extremely euphoric and greedy some days and offers you very high prices. Other days, he is depressed and anxious, and offers to trade with you at very low prices.

"Mr. Market is there to serve you, and not guide you."
– Benjamin Graham

An intelligent inventor should not fall into the trap of allowing Mr. Market's emotional swings to dictate investment decisions. If an offer looks unimpressive, we can simply ignore him, and let him come back tomorrow with a new offer. If the offer is lucrative, and we understand the business and can value it, we take advantage of the opportunity by either selling our interest or buying more.

To help solidify these concepts, let's work with an example. Imagine you bought a farm. You bought it because you analyzed the soil quality, the local climate, and the historical crop yields. You expect the farm to produce $50,000 worth of corn every year. Now, imagine that every morning, a man named Mr. Market stands at your fence and shouts a price at which he would buy your farm. One day he is ecstatic and offers you $2 million. Another day he is depressed and offers you $100,000. The *speculator* hears the lower price, gets scared that "land values are crashing," and sells his farm to the man. The *intelligent* investor looks at his corn. If the corn is still growing and the soil is still good, he ignores the man at the fence. In fact, if the man offers a low enough price, the investor might just buy the neighbor's farm, too. Offered a really high price, he might completely move on from farming if there are better investment opportunities somewhere else.

"In the short run, the market is a voting machine but in the long run it is a weighing machine." — Benjamin Graham

Even Sir Isaac Newton, one of history's greatest minds, fell victim to investment fervor. He famously invested in the South Sea Company, a British trading company, during the speculative bubble of the early 18th century. Initially, he made a substantial profit, but then pulled out, only to reinvest a larger sum later when the market frenzy was at its peak. The bubble burst shortly thereafter, leading to a catastrophic loss of around £20,000, worth millions today. Newton himself declared, "I can calculate the motions of the heavenly bodies, but not the madness of people." His experience serves as a timeless reminder of the dangers of emotional investing and the speculative "greater fool" theory.

“In the stock market, the most important organ is the stomach. It’s not the brain.” – Peter Lynch

The stock market, influenced by human psychology, can lead investors to make irrational decisions driven by emotions like greed, envy, and fear. While public market prices often reflect a business's intrinsic value, human misjudgment can sometimes cause misquotes. Therefore, it's crucial to conduct thorough analysis to determine intrinsic value, maintain emotional stability, and act decisively. Overall, price volatility is the investor’s friend and creates opportunities for profitable transactions.

“Time is the enemy of the poor business and friend of the great business” – Warren Buffett

Although careful analysis allows us to discover when a stock has significantly diverged from its intrinsic value, it does not answer the question of when the market will eventually recognize it. Here, patience and long-term orientation is crucial. Long periods when the price does not present the value of our investments can be a mixed blessing. If we own good businesses, the intrinsic value will naturally increase over time as the business grows sales, accumulates more cash, pays off debt, acquires other business, or reinvests capital to boost future growth. The delayed recognition of the good business by the market may actually allow opportunities to buy more of the business at a cheap price.

"It's not the buying and the selling that makes the money; it's the waiting." – Charlie Munger

Patience and discipline are crucial in investing, primarily because short-term price movements are inherently unpredictable. While we cannot know where a stock will trade tomorrow or next month, we do know that price and intrinsic value eventually converge. The longer a price remains disconnected from reality, whether undervalued or overvalued, the higher the probability of a correction. Because the market's "clock" rarely matches our own, a long-term horizon is essential. This is why time-bound bets, such as stock options and short selling, are so perilous. It is not enough to be right about a company's value; you must also be right about when the market will recognize it. By forcing a specific timeline onto a thesis, an investor dramatically increases the risk of permanent capital loss.

Margin of Safety

In the field of engineering, the principle of adding additional layers of safety or redundancy to account for unforeseen stresses or errors is fundamental. For example, when designing a bridge, engineers don't simply calculate the minimum load it needs to bear. Instead, they incorporate a significant "margin of safety" by designing it to withstand forces far greater than anticipated, such as extreme winds, heavy traffic beyond initial projections, or even material fatigue over time. This ensures that even under unexpected circumstances, the bridge remains structurally sound and safe.

In investing, the margin of safety is a similar concept, popularized by Benjamin Graham. It refers to the difference between a company's intrinsic value and its market price. We only invest in a business when its market price is *significantly* below our conservative estimate of its intrinsic value. Just as an engineer builds a bridge stronger than theoretically necessary, we buy businesses cheaper than we believe they are worth, providing a protective buffer for our capital. In line with Mohnish Pabrai's adage of "Heads I win, tails I don't lose much", this principle helps us minimize the risk of permanent capital loss and increases the probability of satisfactory returns over the long-term. The discount also acts as a cushion against unforeseen adverse events impacting the business and even against our own shortcomings.

"It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." – Mark Twain

When evaluating potential investments, humans are prone to biases and misjudgments, which can affect our estimation of intrinsic value and margin of safety. As Richard Feynman stated, "The first principle is that you must not fool yourself and you are the easiest person to fool." We might be drawn to a business for the wrong reasons or overestimate its future growth. Therefore, it is crucial to apply the principle of margin of safety not only in our investments but also in our thinking.

When considering an investment in a business, a paradoxical relationship often emerges between price fluctuations and actual risk. Counterintuitively, after an initial purchase, a decline in a stock's market price actually reduces the inherent risk of that investment as long as the fundamental economic characteristics of the underlying business and intrinsic value remain robust. In such a scenario, a lower stock price simply means that the investor can acquire a greater share of the business for less capital, effectively with a higher margin of safety. As the margin of safety increases, the risk lowers, and the potential reward increases.

Conversely, as market prices for a particular stock escalate, holding onto or initiating a new investment in that same business progressively becomes a more risky endeavor. The higher the price climbs relative to the business's intrinsic value, the greater the premium an investor pays, and consequently, the less margin for error exists. Elevated prices can sometimes reflect speculative fervor rather than a true increase in underlying value, thus amplifying the potential for significant drawdowns should market sentiment shift or the business's prospects falter even slightly. Therefore, while a rising stock price might feel reassuring in the short-term, it inherently increases the capital at risk if the valuation becomes detached from the economic realities of the enterprise.

Never Lose Money

One of Warren Buffett's most famous rules of investing is:

"Rule No. 1: Never lose money. Rule No. 2: Never forget Rule No. 1."

Capital preservation is of utmost importance because losing money not only diminishes your principal but also incurs an opportunity cost. Every dollar lost is a dollar that cannot be invested for future returns elsewhere. For instance, a loss of $50k from an investment of $100k in a year in which we could have compounded the same amount by 20%, results in a potential loss of $70k, not just the $50k. A 50% capital loss requires a 100% gain on the remaining capital to break even, and in total, requires a 140% gain, to also cover the opportunity cost we incurred by missing out on the 20% gain.

On the flip side, we do not need to have top returns every year compared to other funds or investors to have excellent long-term results. One of Howard Marks's most important examples of success in investing is the story of a pension fund that for 14 consecutive years never ranked below 47th percentile or above 27th percentile. In any given year, the fund's performance was only above average, but never outstanding. However, when looking at the overall performance at the end of the 14 years, the fund ranked in the *4th* percentile, putting it in the top tier of all pension funds.

The takeaway is that we do not need to be a top performer year in and year out. What's important is to never lose money, avoid disastrous years, and *consistently* have above-average results to have excellent long-term results.

"You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right."
– Benjamin Graham

Achieving relatively above-average results by principle is only possible by making investment decisions purely on one's own analysis without regard to popular opinion or where the crowd stands on a particular investment idea. Investing with the crowd will only produce average results, as true value is often found in overlooked or misunderstood opportunities. Therefore, our investment decisions must stand apart from the crowd, adopting a contrarian view against the prevailing market sentiment when our analysis dictates.

Charlie Munger's mental model of "inversion" can perhaps help us look at the problem of earning above-above results from a different lens. Instead of focusing on what we should do to earn good returns, we should instead look at what actions and patterns lead to unsatisfactory returns, and avoid them. We believe that the following patterns lead to poor results:

- **Speculative and Unproductive Assets:** Owning speculative, unproductive assets with no cash flow, and thus no intrinsic value like crypto, NFTs, precious metals, and many others.
- **Neglecting the Margin of Safety:** Overpaying for a business, even a high-quality one, without applying a significant margin of safety.
- **Herd Mentality and Blind Following:** Buying what others recommend, what is popular, or cloning popular investor's actions in the market without due diligence.
- **High-Risk Trading and Leverage:** Trading speculative assets such as stock options, engaging in short selling, or using leverage carry a significant risk of permanent loss of capital.
- **Impatient Portfolio Management and Over-Diversification:** Diversifying the portfolio extensively and changing investments impatiently in a portfolio without allowing enough time for the original investment thesis to develop.
- **Timing the Market:** Trading based on attempts to predict short-term price movement trends. Peter Lynch warns against this: "Far more money has been lost by investors trying to anticipate corrections, than lost in the corrections themselves."
- **Allowing Mr. Market's Mood Swings to Dictate Our Actions:**
    - Selling a stock solely because its price in the public market dropped by some amount without any negative changes in the fundamental economic characteristics of the business.
    - Selling a stock too early because its price increased by some amount.
    - Buying a stock solely because its price dropped without first calculating its intrinsic value.
    - Buying a stock solely because its price increased and seems to be increasing in a "trend"

"The world is not driven by greed; it's driven by envy."
– Charlie Munger

Envy is a particularly damaging emotion. In investing, seeing friends or colleagues grow wealthy faster than us can be a powerful trigger. This reaction often causes an investor to abandon a set of perfectly good, well-understood investments to chase higher returns from riskier investments outside of our circle of competence, simply because someone else is relatively overperforming. We might also feel *self-envy* when our current portfolio underperforms its own previous periods, tempting us to pursue riskier strategies for arbitrary gains. It's crucial to resist letting envy undermine our rationality and discipline; instead, we must consistently adhere to fundamental investment principles.

By consistently avoiding these pitfalls and resisting envy, we can significantly reduce the likelihood of losing money and making unsuccessful decisions, and increase the likelihood of consistently earning above-average returns, resulting in excellent long-term results.

Understanding The Business

The investor's circle of competence defines the limits of their genuine expertise. Operating within these boundaries is the only way to estimate a company's intrinsic value both today and a decade from now. By restricting investments to businesses that are easily understood, you increase the probability of accurate forecasting while naturally insulating yourself against permanent capital loss. If the core mechanics of a business cannot be explained to a ten year old child in three sentences or less, it likely falls outside your circle.

Focusing on simple, understandable businesses that can stand the test of time is often more profitable than chasing speculative opportunities that promise to revolutionize a sector. Jeff Bezos, the founder of Amazon and a pioneer of e-commerce, famously argued that long-term strategy should be built on things that will *not change*. In retail, for instance, customers will always prize lower prices, faster delivery, and broader selection. Focusing on these stable truths allows an investor to identify companies with lasting power, rather than those vulnerable to unpredictable technological shifts.

"How do you beat Bobby Fischer? You play him at any game but chess." — Warren Buffett

Success in the stock market requires the humility to choose the right arena. Just as you would not challenge Magnus Carlsen to a game of chess, you should avoid competing against industry specialists in sectors where you lack mastery. We maintain a competitive advantage by staying within our circle and refusing to be lured into situations where others hold the upper hand.

"...be fearful when others are greedy and be greedy when others are fearful." — Warren Buffett

Beyond intellectual competence, a successful investor must also possess the proper temperament to exploit the emotional volatility of Mr. Market. Naturally, we favor public markets where assets are mispriced from time to time due to human emotion, creating opportunities for those who remain disciplined, rather than efficient markets where every asset is perfectly priced by astute professionals.

Ignore Macroeconomics

Macroeconomics and market forecasting is generally not a profitable pursuit for investors. The future of the economy, political developments, markets, interest rates and inflation is simply unknowable. According to Warren Buffett, for information to be valuable, it has to be both *important* and *knowable*. Forecasting things that are inherently unknowable does not lay the groundwork for successful investing. Instead of a "top-down" approach starting with macroeconomics, we prefer a "bottom-up" approach focusing on individual businesses first. The quality and value of businesses through careful analysis is knowable, and perhaps the most important factor an investor should spend time uncovering.

"Microeconomics is what we do, macroeconomics is what we deal with" – Charlie Munger

If our understanding about the business is correct, we can predict more accurately how the business and the management will "deal" with different macroeconomic environments like varying levels of inflation, interest rates, or growth of the economy. Often, the most compelling investment opportunities emerge during periods of heightened macroeconomic anxiety, when Mr. Market's fears lead to irrational pricing.

According to Warren Buffett: 'only when the tide goes out do you discover who's been swimming naked.' A rising tide hides many flaws, but economic contractions expose those with weak balance sheets or poor financial practices. Ultimately, if we identify an inherently strong business at an attractive price, negative macroeconomic factors should not deter us from investing.

Conversely, a thriving macroeconomic environment should not entice us to overpay or overlook the fundamental risks of a business.

Opportunity Cost

Of the thousands of publicly traded companies globally, only a select few qualify as viable investments. We identify these by first filtering for businesses within our circle of competence, those we can truly understand and value, that pass a strict margin of safety test.

"The right way to make decisions in practical life is based on your opportunity cost. When you get married, you have to choose the best spouse you can find that will have you. The rest of life is the same damn way." — Charlie Munger

Subsequently, each potential investment enters a rigorous 'opportunity cost' competition. We never evaluate ideas in isolation. Instead, we benchmark them against our current holdings. If a new opportunity does not offer a superior potential return compared to what we already own, it is rejected. This disciplined comparison ensures that capital is always flowing toward its highest and best use, minimizing the opportunity cost of our portfolio.

"Diversification is a protection against ignorance.” — Warren Buffett

Consequently, our portfolio naturally adopts a concentrated structure. We prefer a focused approach over broad diversification, which often dilutes returns by spreading capital across businesses where conviction is low. Rather than placing eggs in many baskets, we place them in a few and watch those baskets very carefully.

We challenge the notion that concentration is inherently riskier because of higher price volatility. As Buffett says, 'I would much rather earn a lumpy 15% over time than a smooth 12%.' We think that volatility is a psychological hurdle, not a financial one. True risk is the permanent loss of capital. By mandating a significant margin of safety and operating strictly within our circle of competence, we mitigate this fundamental risk while concentrating the portfolio for exceptional returns from the select few opportunities that meet these criteria.

Conclusion

As Jason Zweig highlights in *Your Money and Your Brain*, in one experiment, subjects were rewarded for predicting whether a green or red light would flash. The green light flashed 80% of the time, and the red light 20%, in random order. Rats quickly learned to choose the green light consistently, achieving an 80% success rate. However, human participants, attempting to discern non-existent patterns, only achieved a 68% success rate.

"Take a simple idea and take it seriously." – Charlie Munger

The principles of value investing we tried to outline here are neither new nor complex. Yet given the perplexity of human nature, many find them challenging to implement. As social beings, it is difficult to disregard the constant noise, the crowd, and the "experts" urging action and yelling "buy" or "sell". For value investors, it is essential to pair these simple concepts with the appropriate temperament.

We believe that these outline principles, like the green light, carry a high probability of consistent success. Like our rat friends who use a maximizing strategy by only choosing the more likely option every single time, we choose to only adopt value investing. Like Charlie Munger said, “all intelligent investing is value investing.”