

# THE POWER AND CHALLENGES OF COMPOUNDING BY CHRISTOPHER TSAI

“Compound interest is the eighth wonder of the world. He who understands it, earns it; he who doesn’t, pays it”, said Albert Einstein.

Due to millions of years of evolution, our brains have been wired to think in linear rather than in exponential terms. We therefore have to put some effort into understanding the power of compound interest. But with a little mental exertion, it can be done! What’s more challenging is for investors to control their emotions during periods of uncertainty and volatility, so as not to unnecessarily interrupt the compounding process.

The power of compounding shines through best when demonstrated with an example. Consider this: would you prefer to have a million dollars right now or a penny that doubles every day for 30 days? As you might guess, the answer is that it would be better – much better, actually – to take the penny. After 30 days, your humble penny would burgeon into \$5,368,709.12! Yet, here’s the twist: if you had stopped doubling that penny after 27 days, opting for the million dollars up front would have been wiser. Why? Because by day 27, your penny’s value would have peaked at \$671,088.64. Those final three days of exponential growth, in other words, make all the difference.

Now you might be thinking, nobody can actually double money every day. That would be a neat trick but it’s completely unrealistic. I agree. Therefore, let’s assume we compound instead at 10.26%, which is the average annualized return of the S&P 500 Index since 1957, including dividends.<sup>1</sup> Over 66 years (which is a reasonable timeframe to represent a full investing career), each dollar would have grown by 630 times. Put differently, \$10,000 invested in 1957 to the end of 2023 would be worth \$6,303,579!

Why, then, are there not more millionaires, or even billionaires? In essence, why haven’t more people truly benefited from what Einstein called the eighth wonder of the world? The answer, I believe, is because the vast majority of investors, whether they are beginners or seasoned professionals, interrupt the compounding process unnecessarily.

Ever since I bought five shares of NAC Re Corporation at \$20 when I was 11 years old, the news has never been good - not really. In my lifetime alone, I’ve witnessed recessions, depressions, numerous financial crises, the first foreign attack on U.S. soil, a global pandemic, and more recently, surging interest rates.<sup>2</sup> Despite all of this, the market has persisted in advancing, not always in a linear fashion, but at a commendable long-term pace.

I can only conclude that there are not more affluent individuals because most investors have not stayed the course. In fact, they’ve found every reason in the world to sell. People sell because they are concerned about a potential recession or because they think they can get back in at a lower price. They sell because of election anxieties or to rebalance their portfolio. And they sell because a company missed Wall Street estimates or because of what they heard at a cocktail party. People behave this way because they think it

---

<sup>1</sup> Source: Investopedia.com. Author: J.B. Maverick. Date: January 3, 2024. Title: “S&P 500 Average Return and Historical Performance”.

<sup>2</sup> The Federal Reserve began raising interest rates in March 2022. The most recent series of interest rate increases marks the sharpest and quickest ascent seen in the last four decades.

makes sense. But the truth is, it usually doesn't make sense. As the late Charlie Munger said, "Nervous money never wins." That's why compounding is easier said than done. It requires equanimity and it requires discipline.

In my experience, during times of uncertainty and volatility, it's almost always better to refrain from selling. That's because market timing is a fool's game. We have plenty of data to back that assertion up. Opting for a do-nothing approach, however, goes against the grain for most individuals since we're genetically programmed to believe that doing something is preferable to doing nothing. However, choosing to do nothing is a choice, and it's a choice that proves incredibly challenging to adhere to, especially in a world where we are constantly inundated with information and we might be losing money at the same time.

It's also important to remember that even the most exceptional businesses go through difficult periods and growing pains. Market sentiment also changes like the seasons. That's another way of saying that stocks don't perpetually ascend. In fact, growth stocks, which are our primary focus, often exhibit a step-like trajectory, marked by sharp increases, periods of consolidation, and subsequent sharp rises once again. However, when a stock experiences a downturn or remains stagnant for a few years, it's human nature to seek the excitement of what's in favor at the time. As a result, people lose patience, they sell, and they subsequently miss out on the next growth phase which often comes at the least expected moment.

Unfortunately, most people are primarily informed by the stock price but that's the least significant piece of information. Rather than reacting to stock price fluctuations, individuals should instead focus on shifts in business fundamentals. Factors such as sales, earnings, and return on capital fundamentally dictate the trajectory of a stock over the long term and the value of one's investment.

Tsai Capital's investment approach is to follow the fundamentals of the high-quality, growth companies we own. We just don't obsess about the general market and the headlines of the day. By doing deep research and thinking long-term, we tip the scale in our favor, thus allowing the power of compounding to work for our clients.

That's not to say we won't be quick to sell if we think we've made a mistake or if the math unequivocally supports a reallocation of capital. But it's our goal to compound our clients' wealth over the long-term, ideally in businesses that we can own for a decade or more, so that they can fully reap the rewards of exponential growth.

Christopher Tsai

## **Important Disclosures**

**Past performance is no indication or guarantee of future performance and no representation or guarantee is being made as to the future investment performance of Tsai Capital's separately managed accounts or any entity.**

The information provided herein includes certain opinions, portfolio and/or market characteristics and other information provided by Christopher Tsai, as of February 13, 2024. Any opinions or other information included herein may change without notice and should not be relied upon in selecting any investment or investment-related product or service. Nothing contained herein should be construed as investment advice.

In order to highlight the application of certain concepts discussed herein, examples were provided which included the historical result of the S&P 500 Index. This information was provided solely for illustrative purposes and should not be construed as indicative of any historical investment made by Tsai Capital over any time frame.

References herein to Tsai Capital's efforts to minimize losses and seek a margin of safety should not be construed to imply an absence of risk in any investment. All investments carry risk, including the risk of loss of investment principal. Additionally, short-term market volatility may present increased risks for investors who have shorter investment horizons due to impending or current liquidity needs.