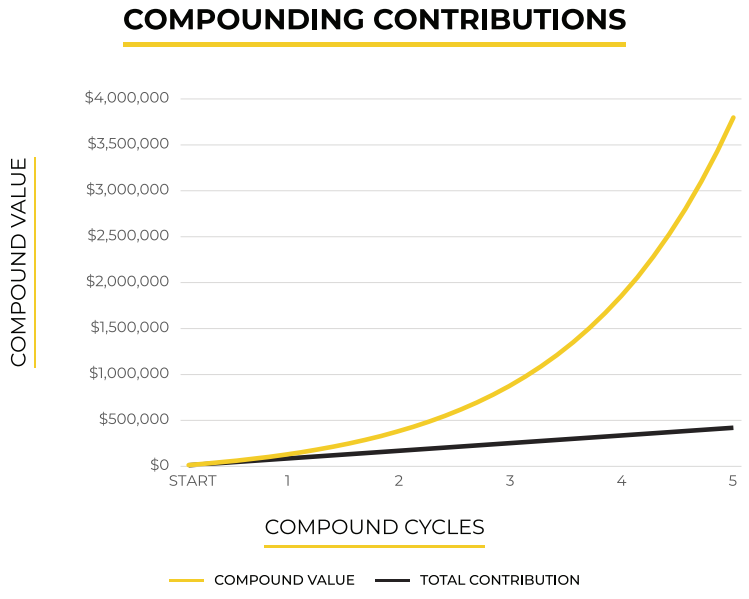
## CHAPTER 4

# The Wealth Equation: The Exponential Growth Curve

The Wealth Equation! A formula so perfect, it can take anyone, in any situation, and guide them to prosperity! It's called the Exponential Growth Curve, the formula for achieving Pure Compound Interest!

$$y = a(1 + r)^x$$




**Result Based on a $1,000 Monthly Contribution, and an Assumed 7 Year Compound Cycle.*

I define this equation as "a rate becoming more rapid over time, securely!" Doing so securely is key! Exponential Growth, or uninterrupted compounding, is pure growth energy because it accomplishes the rarest of feats: unlimited potential with no risk of losing. When Einstein stated this was the 8th Wonder of the World, he did so because he knew that if it could be achieved in any aspect of life, it would change the world for the better.

In the financial world, most people mistakenly claim traditional risk-based investments are Compound Interest. And although such investments have elements of compounding, they also experience compounding decay, or loss. Pure Compound Interest in finance is continual, positive compounding interest.

Most financial advisors believe this is an impossible scenario, one of theory and philosophy, because of the difficulty to achieve security and optimal growth simultaneously. They are seeing this through the mindset of "No Risk; No Reward."

Before we go any further, let's break down the Wealth Equation theory first to create a foundational understanding for each component. Once we understand each component, this will then allow us to understand how the equation fits together. Understanding also allows us to test, validate, and affirm that the theory works.

$$y = a(1 + r)^x$$

As you can see, there are five components: **a, 1, +, r, x**. What does each mean in plain language and how do we apply them? Many people look at the formula and turn away, assuming it is too complicated, but I promise you, it is very simple to understand when each piece is explained.

To start, we must understand the **(y)**: How it all starts! What do you want out of your life? Are you willing to go after it? **(y)** results from the action you take (or don't take). In a personal financial scenario, **(y)** represents your financial goals and desires.

Now, here are the five components to achieving the financial freedom you seek to do what you want to do, when you want to do it, and with whom you want—FREEDOM!

**(a): Your Investment In Your Future Self!** It is essential to always Pay Yourself First! This is the amount of effort and money you, as an individual, will put into the equation for your future self. To achieve Pure Compound Interest, (a) must be more than 0, because we know that anything multiplied by zero is ZERO. If you are unwilling to put any money into your personal compounding equation, it will always be 0. To achieve wealth, your efforts and money must go into the equation. The bigger (a) is in the equation, the faster the rest of the equation grows. The NET compounding results are amplified as (a) becomes larger.

**(1)**: **Your Commitment!** This is the starting point when you ignite the fuse that drives the engine. Start immediately. Any goal you might have, if put off until tomorrow, will probably never happen. Every day you wait delays the maturing of a Compound Cycle.

**(+)**: **Your Security!** Protect yourself from loss at all costs. Never move backward. I will continue to explain the catastrophic effects of loss throughout the book because I found it is the missing piece in most peoples' wealth equation. Break-even is not a loss and has no negative impact on your wealth equation so the importance of (+) is to never lose! Risk/loss eliminates all possibility of Pure Compound Interest; changing the plus to a negative sign, transforms Exponential Growth into exponential decay.

**(r)**: **Your Growth!** The maximized growth potential of Compound Interest. This follows security in priority. Without growth, your wealth equation cannot produce Exponential Growth. Growth comes in two forms; maximum rate of return and maximum rate of compounding, which are not the same thing. One gives you the best immediate result while the other gives you the best long-term result. They must be balanced.

**(x)**: **Your Acceleration!** This represents time, leverage, or both. With enough time, the smallest amount of anything compounding will achieve astonishing results. However, this process could take your entire life to achieve great results, which is where leverage comes into the equation. Leverage is the ability to use other resources, along with your own, to speed up your wealth equation.

If you can use O.P.M. (Other People's Money), an acronym synonymous with borrowing money from a bank or other financial institution, to enhance the **(a)** in the equation, your results can be amplified.

If you can supercharge the amount of effort or money going into your equation (yours plus leverage), this can now achieve Exponential Growth significantly faster because it accelerates the rate of Compound Cycles.

Those are the ingredients to financial freedom. It may appear too simple, but recall that all ingredients must be present and working together (Yin and Yang) for you to achieve **'y.'** To summarize; the ingredients required to achieve unlimited wealth through Compound Interest are:

**a** = Your Investment

**1** = Your Commitment

**+** = Your Security

**r** = Your Growth

**x** = Your Acceleration (Leverage)

What is amazing about this wealth equation is that is does not apply only to money, which is not a surprise given that Einstein spent a lifetime pondering our universe. $Y = a(1 + r)^x$ can apply to any aspect of your life.

Do you want the best marriage? Invest your personal efforts, commit to the goal immediately, secure it by not putting your efforts at risk, grow your efforts, and speed up your efforts through additional resources or continuous time.

You want the best health? Invest your personal efforts, commit to the goal immediately, secure it by not putting your efforts at risk, grow your efforts, and accelerate your efforts through additional resources or continuous time.

Do you want anything in your life? Follow the Wealth Equation as it can take any goal you have from A to Infinite!

There are some great examples of people in society who follow this equation for maximum success. They don't go for home runs, but rather slow,

steady, secure progress, always trying to compound their efforts, using every resource available, and always avoiding risk as often as possible. It's not always perfect, but the long-term results are superior to anything else, even when it makes little sense how they are doing it. Who are these people?

Well, anyone who follows me knows there is one person I often reference concerning compounding efforts and maximizing every opportunity available . . . The G.O.A.T.—The one and only Tom Brady! Is he the most athletic? Does he have the most talent around him? Does he always have the best playing conditions?

No, but you know what he does have? $Y = a(1 + r)^x$ as his blueprint! He puts in his investment (energy), with an unwavering commitment, doesn't put himself at risk or take steps backward, grows his connection with his teammates, studies and trains relentlessly, and uses time and leverage to speed up and enhance the probability of winning.

Why has he been so successful for 20 years, like no one we have ever seen? Because he follows the success equation, never takes steps backward and allows compounding to do its magic! Natural talent is good; compounding is better!

So, what is the reason other investments fail to achieve this powerful force? Time to break down the linear mindset and why it has been holding all of us back.

# The Investment Equation

The investment community has taught us our entire life that wealth results from saving inside a 401(k) or IRA with index funds or mutual funds, real estate rentals, cryptocurrencies, business, and various other investments. If that's the case, why do few people ever achieve actual wealth? Let's start with where it all begins, the Investment Equation. The Compound Counterfeit!

$$y = a(1 +/- r)^x$$

Wait! This is the Exponential Growth Equation . . . right? Because Investment Equations can have all the same components, they can be confused with one another; however, there is one glaring difference: the negative sign in the equation, **(+/-)** which stands for risk and the possibility of loss. That tiny difference makes a huge impact on your overall success. Loss eliminates or delays the probability of a Compound Cycle(s) or achieving Exponential Growth.

The Investment Equation mathematically explains why what we have been doing cannot produce the full potential of our money. Many people, especially financial advisors and investors, become angry and want to argue the facts. They say, "but Curtis, stocks and investments produce Compound Interest too!" They do, and they can make a lot of money, but they also include Compound Decay, which is a type of loss. When decay is added to the equation, "rebounding" from loss is required, which means taking steps backwards and losing time. We know, from our previous discussion, time is a significant factor in the achievement of wealth! And when you lose time, you lose a potential Compound Cycle, diminishing your wealth exponentially as every ensuing day passes.

Let's continue breaking through that linear mindset. In your pursuit of freedom and wealth, there is one truth about money that you likely haven't heard as a focus: The principle of NOT LOSING your money! This has a greater impact on creating wealth than the thrill of huge investment opportunities. It's not as exciting, but if you want the best long-term results and sustainable income, not losing comes ahead of any *home-run* opportunity.

Why and how can that be? Because with traditional investing, losses have a larger influence on money than gains! In the (+/-) equation, minus is much more influential than the plus, given that we are constrained by time.

Let me explain. If you had invested $10,000 and lost 50% of it because of risk, how much money do you have? $5,000. If one second after you lost 50%, you gained 50% back, or "rebounded," how much money would you have? In most people's minds, you broke even, and the financial world will tell you that you have a 0% average, or **Arithmetic** average. But now you have only $7,500. A 50% loss followed by a 50% gain = –25% ACTUAL return, called a **Geometric** average.

Arithmetic and Geometric averages are not identical regarding money, and they rarely explain this. A 50% loss takes a 100% gain to break even or truly rebound. One step backwards requires TWO steps forward just to get your money back. The time required to restore your money is a lost opportunity for compounding. That's the cause-and-effect impact of the decision to invest with risk present.

**ARITHMETIC VS GEOMETRIC RETURNS**

| MARKET LOSS | MARKET GAIN | ARITHMETIC RETURN (BREAK-EVEN) | GEOMETRIC RETURN (ACTUAL) |
|---|---|---|---|
| -10% | 10% | 0% | -1% |
| -20% | 20% | | -4% |
| -30% | 30% | | -9% |
| -40% | 40% | | -16% |
| -50% | 50% | | -25% |

Whenever I speak about achieving Pure Compound Interest, most people, including financial advisors, underestimate the power of "never striking out." Focusing on never losing protects your hard-earned money from the negative impact of risk-based investing. It is YOUR money, not the financial advisors, therefore we must make this a priority. Investments that lose principal value whenever there is a downturn require you to make up that loss.

The finance world says it all the time: Don't worry, the market will rebound, which is true.

However, because time is essential to maximize Compound Interest, loss in investing carries an increased negative effect on your money! Because you lost money, you lost time, because you lost time, you slowed down a Compound Cycle, and because you slowed down your next cycle, your end-result is drastically diminished. It's the cause and effect of the time equation of money and Compound Cycles.

Let's chart the result to visually review the effect of both (+) and (–) on your wealth potential using the S&P 500 Index Fund inside your 401(k) with an all-in assumed expense of 1% (the national average is 2.22%). Assume you started with $100,000 at the end of 1999. Where are the **+'s** and **–'s** and what influence do they have on your money?

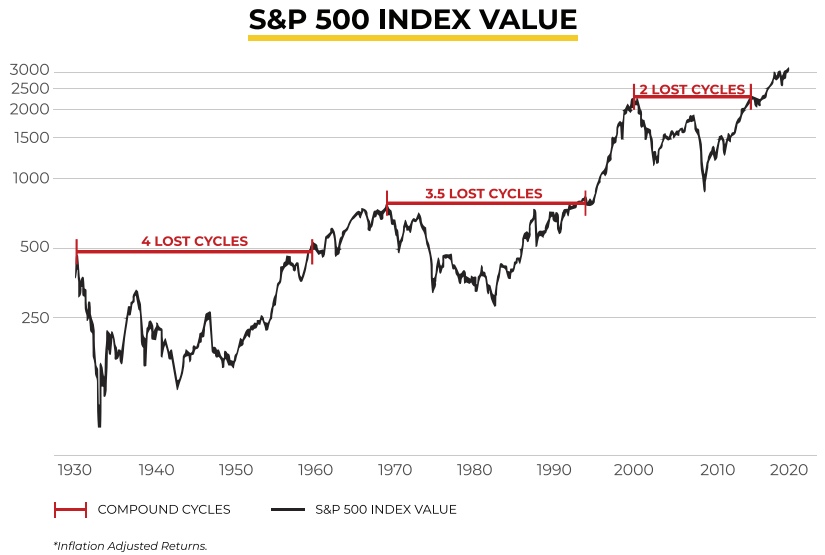
| S&P 500 RETURNS WITH DIVIDENDS | | |
|---|---|---|
| YEAR | S&P 500 RETURNS | ACTUAL CASH |
| 1999 | - | $100,000 |
| 2000 | **-9.11%** | **$89,981** |
| 2001 | **-11.98%** | **$78,409** |
| 2002 | **-22.27%** | **$60,338** |
| 2003 | 28.72% | $76,891 |
| 2004 | 10.82% | $84,358 |
| 2005 | 4.79% | $87,515 |
| 2006 | 15.74% | $100,277 |
| 2007 | 5.46% | $104,694 |
| 2008 | **-37.22%** | **$65,070** |
| 2009 | 27.11% | $81,883 |
| 2010 | 14.87% | $93,119 |
| 2011 | 2.07% | $94,096 |
| 2012 | 15.88% | $107,948 |
| 2013 | 32.43% | $141,526 |
| 2014 | 13.81% | $159,459 |
| 2015 | 1.31% | $159,933 |
| 2016 | 11.93% | $177,223 |
| 2017 | 21.94% | $213,944 |
| 2018 | **-4.42%** | **$202,443** |
| 2019 | 31.49% | $263,531 |

**S&P 500, Annual Returns Taken From www.MoneyChimp.com. *1% Management Fee Used.*

Here are some important insights to consider in this time frame:

1. If, at the beginning of 2000, your account value was $100,000, and you contributed nothing more, you didn't break even until 2012. Even though the S&P 500 averaged 3.45% in this time frame (with dividends), you achieved no actual growth because you were earning back what you lost. Arithmetic (average) return vs Geometric (actual) return — that distinction is part of the lost knowledge of Compound Interest that few understand.
2. After the dotcom crash of 2000–2002, you lost around 40% of your money. From 2003 to 2007 your return was 13.11% per year (a total gain of 65.53%), yet you barely recovered from the previous losses. The home runs of 2003–2007 made us forget about the pain of the loss. They convinced us we were winning that whole time, yet we were barely back to break-even. Did you realize that?
3. The home run/strikeout time frame from 2000 to 2007 caused you to lose an entire Compound Cycle.
4. The 2008 crash lost around 37% in a single year. That pain was real. But the home run right after it made all the pain go away. For the next 4 years, you made 14.98% annually, feeling you were winning when 2012 arrived only to make you even, getting you back to your 2000 account value.
5. The homerun/ strikeout time frame of 2000–2012 cost you up to two full Compound Cycles.
6. From 2000 to 2019, the S&P 500 ***averaged*** 7.67% (arithmetic) with an ***actual*** (geometric) return of 6.03%. Therefore, you can never trust a financial advisor who quotes investment average. When considering the impact of risk, averages and actuals are not the same value and can be misleading. Always demand ACTUAL returns over 20+ years to determine a reasonable expectation of returns.
7. Some money managers claim to be able to time the market and buy low/sell high to avoid the risk while capitalizing on the loss years, but this is a rare accomplishment and near impossible to do consistently.

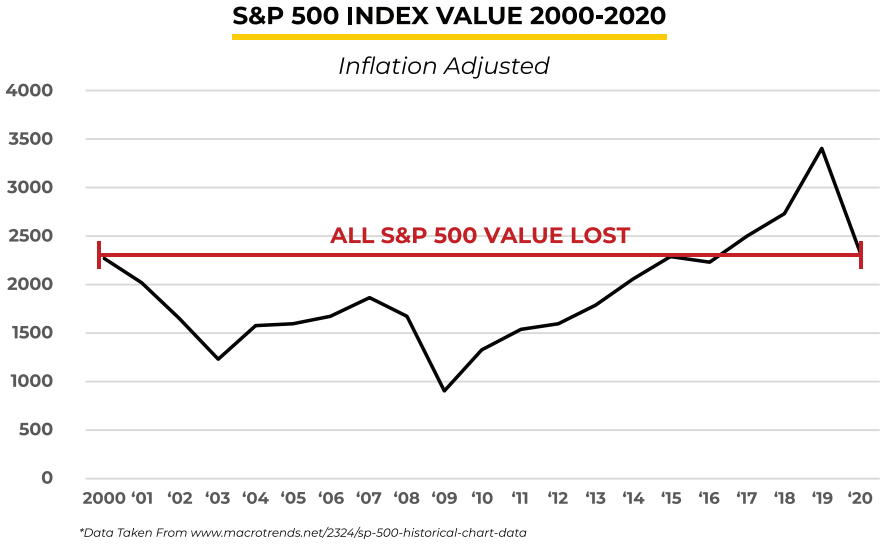
One thing I have not touched on is the impact of 3% average inflation (reducing the buying power of your money) or devaluation of the US Dollar. When you add the impact of inflation along with losses, the situation is much worse. Study the inflation-adjusted S&P 500 since 1927, to see the real growth of the stock market. This will blow your mind the same way it blew mine!




This inflation-adjusted S&P Index Value graph shows us just how little compounding occurs inside the Investment Equation. Although S&P 500 Index dividends helped with some additional growth, the results were subpar in producing wealth. At various times over the last 90 years, when loss is present, it takes decades of rebounds to get us back to where we started. It always does rebound, as our financial advisors promises us, but at what cost? We repeatedly miss Compound Cycles.

Even more eye-opening regarding inflation is the recent example of market volatility and market crash caused by the COVID-19 pandemic. In August, 2000, the S&P 500 Index had an inflation-adjusted value of 2,271.97. In March of 2020, the S&P 500 Index was hovering around 2,300. In the blink of an eye 20 years of market growth evaporated due to risk, loss, and inflation. Will it recover? Of course it will! Unfortunately, it may take one month, one year, or numerous years. We just don't know.

And when will the next pandemic, financial crisis, or other volatility arrive again? Impossible to predict!




Additionally, over the last 90 years, there have been roughly 65 years of plummets, rebounding, and inflation, with only around 25 years of actual growth. As I write this book in March 2020, the S&P 500, with re-invested dividends and inflation adjusted, has produced a growth of only 5.95% since 1930 and 2.49% since 2000. Few pay attention to just how influential risk and inflation really are because the home run behind the collapse makes us believe we are winning. The financial world uses cool terms like "re-balancing a portfolio" or "capitalize on the down market" but the damage has already been done. Lost time!

When considering investment options, I recommend using the most current information on market behavior. Society is evolving so quickly with the influence of the internet, social media, consumer behavior, technology, and accessibility of information, I don't even know if yesterday's market behavior is an accurate predictor.

From 1980 to 1999, the stock market averaged over 19% with an actual return of over 18%. $100,000 in 1980 would have been worth around $1,952,000 by 1999 in the S&P 500 Index Fund. That is incredible—it was near solid home runs with no strikeouts for 20 straight years. This was an

anomaly in the stock market during which even treasury bonds earned in excess of 10%. This anomaly has skewed the "market average" numbers that the financial gurus claim as an expectation of returns (even if they cannot legally tell us to expect it, the *average returns* make it into their presentations along with the disclaimer that past performance is not an indication of future results).

Could the market reenact 1980–1999 and again turn the S&P 500 Index Fund into a money-making machine?

Of course it could, and that would be great for everyone. But are you willing to take the chance that great gains with minimal risk is how the market will perform over the next 20–30 years? Ups and downs, risk and reward, volatility and inconsistency—The "Investment Equation" is awesome (+) until it is not (-)!

Investments can be great. They are exciting. They just aren't rational for a long-term financial plan when volatility is part of the equation. Risk and loss are extremely detrimental to your success. Years of volatility can produce zero gains and many missed Compound Cycles, devastating your ability to attain the financial freedom you deserve.

The one concept difficult for people to grasp is that security should be the focus even before considering potential gains. Security first is in direct conflict with the linear mindset of "get rich quick." Security is the cornerstone of wealth and sounds boring, slow, and steady. The linear mind wants the best immediate results at the expense of your long-term success and compounding.

There are tremendous opportunities to make money within the investment equation. The 1990s were a great example of market success. The 2000s were not. The 2010s were great! What do the 2020s have in store?

We have no clue, but history tells us, even with most years being home runs along with a couple of bad strikeouts, it will always lose time in the "rebound." To achieve Exponential Growth, the strikeout (loss) must be eliminated, and that only happens by ignoring the temptations of the potential home run. Any asset based inside of the (+/-) of the Investment Equation will inevitably underperform!

*"Learning is the Beginning of Wealth . . . Searching and Learning is where the Miracle Process All Begins"*

**Jim Rohn**

# NOTES/ THOUGHTS