KNOWLEDGE
[WHITEPAPER]
OF WALL STREET

„ANALYZE THE FINANCIAL MARKET AND ITS ANALYSTS“

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Introduction

After more than ten years of intensive analysis and research on stock market trading and financial markets, I have concluded that only a few key pieces of knowledge are necessary to make a profit in the stock market and identify real investment opportunities.

The most important insight is that no books, trading coaches, stock market newsletters, YouTube channels, bank advisors, or tools - such as charting techniques and indicators - can guarantee long-term success in multiplying your capital on the stock market.

Too many factors, narratives, and cycles make it difficult to consistently make the right decisions, especially without investing considerable time. Even if the correct decision is made based on sound analysis - whether fundamental, technical, or both - it does not necessarily lead to financial success. The only decisive factor is the current price of the security.

A significant factor, if not the most important factor, for success in financial markets is one's psyche. This is one reason why regular savings plans in ETFs can fail in the long term and lead to significant losses if you don't actively engage with the market.

Overall, this topic appears to be very complex, and it undoubtedly is. However, it can also be simple if you focus on the essentials - the price - and ignore all other factors and the advice of professionals.

The reasons for this are explained simply and clearly in the following white paper. The paper aims to demystify the stock market and demonstrate an easy way to independently manage and trade your capital without spending a lot of time or mental energy.

Contents

This white paper was translated from German to English using DeepL and DeepL Write.

CHAPTER 1

STOCK MARKET PROFESSIONALS, ANALYSTS, AND FINANCIAL ADVISORS

In my efforts to trade successfully on the stock market, I have used various services. These include subscriptions to stock market newsletters, watching YouTube videos, listening to podcasts, purchasing technical analyses, and reading and listening to numerous books and audiobooks. For years, I followed the analyses of various analysts online, regardless of their respective areas or methods of active stock market trading. I also studied analyses from large banks, financial advisors, and hedge funds, and I followed the news daily to form conclusions. Ultimately, none of this helped me trade successfully.

However, the journey was not in vain. Through this approach, I gained insight, and a few professionals and books helped me along the way. However, the analysis of the professionals themselves, coupled with independent thinking and reflection, helped me the most.

Finfluencers

This phenomenon can be observed on all types of social media platforms. Podcasts and YouTube videos, for example, take up a considerable amount of your time. You usually don't receive the information you're hoping for, and there are several reasons why. Finfluencers want you to regularly consume their content until the end of each episode or video. This generates revenue for them via the platform. Third-party products or services are also frequently advertised, generating additional revenue through advertising and discount codes. Additionally, finfluencers often try to sell their own products, such as courses, analyses, or stock market newsletters. They ultimately generate the most revenue this way. Why would a finfluencer offer you a comprehensive solution? You would cancel your subscription and manage your finances independently, meaning the finfluencer would no longer be able to profit from you. These products are designed to keep you dependent on them, paying continuously, whether through your subscription or your time.

You usually won't learn anything new in courses or webinars from stock market experts. The content has usually already been communicated in the free content. For the paid version, it has simply been reworked and summarized. Ultimately, these are mere repetitions of the free versions.

Stock Market Letters

Most stock market newsletters offer precise recommendations on when to buy or sell a variety of stocks, certificates, and cryptocurrencies. They are typically designed as complete model portfolios. However, such a product is only helpful if you have sufficient capital to replicate it exactly in your own portfolio. For most offers, this requires a minimum of around $100,000. Deviating from the exact trading instructions takes a considerable risk because these sample portfolios take integrated risk management into account.

Additionally, stock market letters are usually published monthly, which can lead to delays in your actions. For example, the provider acquired position XY two weeks ago. You only make the purchase after the letter is published. During this period, the provider has already recorded profits. The next issue states that the position was sold again at time X, so you sell your position with a delay. In the meantime, the price has fallen, resulting in a loss due to the professional's recommendation. Most stock market newsletters include email notifications, but they don't offer any significant advantages or security. As soon as the provider makes a purchase or sale, you are immediately notified by email. This gives the impression that you will make the right decision at the right time, but it is not a reliable signal. However, you may open a position without having any additional information apart from a supposed professional's recommendation. You may act impulsively without certainty that you have made an informed and convincing decision.

Previous stock market newsletters may have informed you about the company and the likely upcoming purchase of the stock through fundamental analysis. But who can guarantee that the professional's analysis is accurate and that no significant aspects have been overlooked?

If you follow a stock market newsletter over a long period, you'll see how often misanalyses occur - more often than you'd initially assume.

Technical Analysis and Trading Coaches
Trading coaches primarily work with different technical analysis methods. I will discuss these methods in detail in a later chapter. Basically, their primary goal is to sell you a paid course or ongoing analysis.

Typically, they recommend risking no more than 1% of your available capital per trade to minimize the risk of loss. While this risk management rule is fundamentally sound, it is worth taking a critical look at it. If you only have a few thousand euros at your disposal, it will take a long time for your assets to grow significantly if you strictly adhere to this rule.

You will always be dependent on subscribing to these analyses and have to invest a considerable amount of time continuously following and implementing the recommendations. Ultimately, you will never know the actual risk of loss with each trade.

These analyses and coaching sessions are designed to provide a wealth of information, giving the impression that the provider is highly competent. In reality, however, this information does little to help you manage your investments independently and successfully in the long term.

Even if you learn a specific method of technical chart analysis from a coach or by purchasing analyses, it requires considerable time. Initially, you will lose money during this time, and it is usually only available if you can focus completely on trading and learning the analysis methods for an extended period.

If you are willing to invest this effort, you will discover that even professional technical analysis methods only achieve a 70% hit rate for trading signals. I hope to explain later on why you can completely avoid this enormous investment of time, money, and associated losses.

One key rule applies to all of the aforementioned types of stock market professionals:
don't be blinded by advertised profit ratios or supposedly high annual returns. These figures are not a reliable indicator of the product's quality or the providers' actual skills.

Often, the published profit ratios and returns are not fully verifiable, are calculated in a questionable manner, or are deliberately manipulated or falsified. Additionally, as a less experienced investor, you often lack the expertise to determine if the presented successes were based on a level of risk you would never take.

Hedge funds and major banks
If you believe you can rely on the positions and analyses of professional service providers, such as hedge funds, I'm afraid I must disappoint you.

Hedge funds are subject to strict regulatory requirements that limit their scope of action to protect investors' assets. As a private investor, however, you are solely responsible for your own capital and are not bound by these regulations. Therefore, you should not subject yourself to these restrictions - after all, regulations always limit.

Another issue is the timeliness of the information. Disclosed fund positions are usually published in the following quarter, long after the fund has bought or sold the respective security. Additionally, these funds predominantly use fundamental and historical data to forecast the future of financial markets. I will discuss this method of analysis in detail at a later date.

If you compare the annual forecasts of hedge funds and major banks for the coming year, you will quickly notice how different they are from one another. Differences of 40-50% in price targets for individual stocks, commodities, or indices are not uncommon. Why would one renowned expert recommend buying a stock while another advises selling it at the same time? Incidentally, this applies equally to trading coaches and technical analysts.

Furthermore, compare the actual annual returns of hedge funds and actively managed bank funds with the performance of the S&P 500 or Nasdaq. In most cases, a simple, low-cost ETF of one of these broad indices would have generated a significantly higher return.

News

Reading financial and stock market news regularly is one of the least effective ways to make informed investment decisions and analyze the market meaningfully.

This type of news mainly presents government reports, quarterly figures, and macroeconomic data. This information primarily generates short-term volatility and offers little reliable guidance for long-term investment decisions. The same applies to published portfolio changes of hedge funds and the widely diverging analyses and forecasts of banks and economists. None of these "professionals" can accurately predict the future, let alone the exact timing or probability of an event.

Markets react to economic and political developments with a delay anyway. You cannot deduce the most likely or decisive time for concrete action from these reports and comments, regardless of the charts, diagrams, or opinions presented. Ultimately, this is news whose supposed relevance evaporates after a few days and is forgotten. News evokes emotions and usually leads to impulsive actions.

Books

The vast majority of books on financial markets and stock trading are written primarily to be sold. Like modern finfluencers, online coaches, and self-proclaimed experts, their main goal is to sell you something.

I know of hardly any books that would give you a lasting advantage apart from the guidance of a coach or influencer. Often, authors pursue the goal of offering paid coaching on their websites or encouraging you to buy more books to "delve deeper into the subject." You will not find a new, reliable method of technical analysis or current recommendations on which stocks to add to your portfolio or how to structure it in line with current trends.

These books don't necessarily convey false facts or mislead you, but they're of little practical use. Even if there is a book among them that offers real added value, you would probably have to read a hundred others first to find it.

Bank advisors, independent financial advisors, and fee-based advisors
Now, let's turn to the group of "professionals" you should be most wary of: bank advisors.

They do not actually provide advice; they sell. They are primarily trained to offer customers in-house products or those of partners. They are given information that highlights the advantages of these products, but the significant disadvantages are often unknown to or deliberately ignored by most advisors.

The annual management costs of in-house funds are usually 50% to 400% higher than comparable ETFs, which you can easily purchase through an online broker. When you purchase through a bank advisor, you often incur additional front-end fees, or you indirectly pay through significantly higher order fees charged by your bank. If you choose one of these in-house products, you will likely have an unfavorable combination of high annual management fees, expensive order costs, and a very defensive fund management strategy.

These products are usually marketed as "actively managed," which is supposedly an advantage because the protection of your capital is supposedly the main focus. In practice, however, returns almost always suffer as a result. When you compare their performance to that of a simple index ETF, it becomes clear how unprofitable these funds are. It's not uncommon for annual management costs to exceed the actual return, resulting in a loss of assets.

This often goes unnoticed in your securities account because only the gross return of the fund is reported, not the costs that are deducted separately. This creates scenarios in which investors can only show a total return of around 10% after ten years. After major market corrections, these actively managed funds recover much more slowly than comparable index ETFs - fund managers act even more cautiously and defensively during these periods, "only to protect your capital."

Independent financial advisors (brokers) deliberately give the impression that they are acting neutrally and independently. They typically offer a wide range of products from various third-party providers. However, higher fees are usually incurred, and the advisor receives a commission for each referral, which you ultimately pay.

You will, of course, be offered products that appear cheaper than your bank's in-house funds. However, you still pay above-average management costs and brokerage commissions. You could still be at risk of overly defensive fund management, and you could have purchased a comparable ETF yourself through an online broker at significantly lower order costs.

The only person who benefits from your investment is usually the "independent" advisor, not you. This model differs little from that of a traditional bank advisor, except with a little luck, you will pay lower fees and have a wider selection of products.

Fee-based advisors often give the impression that they offer the fairest and most product-neutral form of advice. They claim not to want to sell you a specific product but rather to be paid exclusively for their time and expertise. But here, too, appearances are deceptive.

In fact, you have already purchased the consulting service itself before you could assess the quality of the advice. Fee-based advisors essentially do the same work as independent financial advisors or brokers. They analyze your situation, draw up an investment proposal, and recommend specific products. The only difference is that you don't purchase the recommended product directly from them. Instead, you purchase it independently (e.g., via an online broker) or, if you feel overwhelmed, from your bank or a broker.

This means there's still a risk you'll pay for advice whose recommendations you can't implement, or can only implement to a limited extent. In the worst case, you could still fall for expensive products with hidden costs.

Typically, fee-based advice is calculated as a percentage of investable assets. For example, with assets of $100,000 and a fee rate of 0.5%, you would pay $500 for advice that you could have obtained for free from an independent financial advisor or broker.

The crucial difference is that with a commission-based advisor, you have the freedom to decide after the consultation whether to implement the recommendation and indirectly finance the advisor's commission or purchase the proposed products independently and commission-free. With a fee-based advisor, however, this freedom of choice is gone from the start: you have already paid the costs, regardless of subsequent success or implementation of the recommendations.

Regardless of the type of advisor you consult, you are ultimately alone with your investment.

With fee-based advisors, this is obvious: as soon as you have new questions or want to adjust your strategy, you will incur another consulting fee.

Bank advisors and independent financial advisors are content with the commission they have already received. They usually lack the necessary expertise and genuine interest to inform you in a timely manner when active capital protection is necessary. You will not be informed if it would be advisable to sell at least part of your funds or ETFs or if it is time to temporarily suspend monthly savings rates to retain liquidity for more favorable entry points. Certainly, you will not be informed in the case of individual stocks, as most advisors rarely or never recommend these.

However, if the market declines and your investment suffers losses, the unanimous advice is: "Sit it out and be patient; prices will recover." At the same time, you are asked to continue paying your monthly savings rates unchanged, even though this will systematically cause you to suffer further losses in falling markets.

The ETF savings plan system generally only works reliably in the short to medium term, mainly for psychological reasons. This will be discussed in detail in a later chapter.

Even if you find an advisor with sound financial knowledge, they likely know they can't offer you the best product or service. Why would they present you with this white paper and forego their commission?

Later, I will introduce you to a simple yet effective method to protect and manage your stock market investments independently.

Crash prophets

Another type of financial advisor is the so-called "crash prophet." These individuals constantly warn of the next financial crisis, impending stock market crash, and imminent collapse of currencies or currency systems. This mechanism is widely used in the media and financial industries to generate attention through the deliberate creation of fear.

These crash prophets essentially pursue the same goal as the other "professionals" described above - they want to sell you something. They usually offer coaching on how to protect your assets in an impending crash, special stock market newsletters with crisis strategies, and courses on how to safely transfer capital abroad. They consistently promote the idea that gold is the only reliable protection in times of crisis.

These players often operate online shops for precious metals or sell products from partners via discount codes and affiliate links. This constant crisis rhetoric is primarily an effective marketing tool to sell these paid products and services.

In a later chapter, I will explain why you should not trade gold or continuously increase your holdings.

Another narrative is the claim that investors lose a lot of capital in stock market crashes or bear markets. Take the dot-com bubble, for example. It was not a sudden crash in the classic sense. The market gave investors sufficient time to exit in an orderly manner. Examining the monthly price movements of the Nasdaq from early 2000 to late 2002 reveals that the decline occurred over more than two and a half years - ample time for attentive investors to gradually reduce their positions. This can be observed in almost all bear markets. Short market crashes or corrections are always followed by a rally. The price itself always provides the clearest signals.

Real estate

One of the most widespread narratives related to investments and wealth accumulation is that owning your own home is a safe way to become wealthy or an excellent investment for retirement.

Nassim Taleb completed Eleanor Roosevelt's well-known quote:
"Great minds discuss ideas; average minds discuss events; small minds discuss people; and fools discuss real estate in their neighborhood."

I won't discuss the real estate market in detail here because the focus of this white paper is investing in the stock market. However, to give you a more comprehensive understanding of financial markets, it makes sense to provide basic information on real estate.

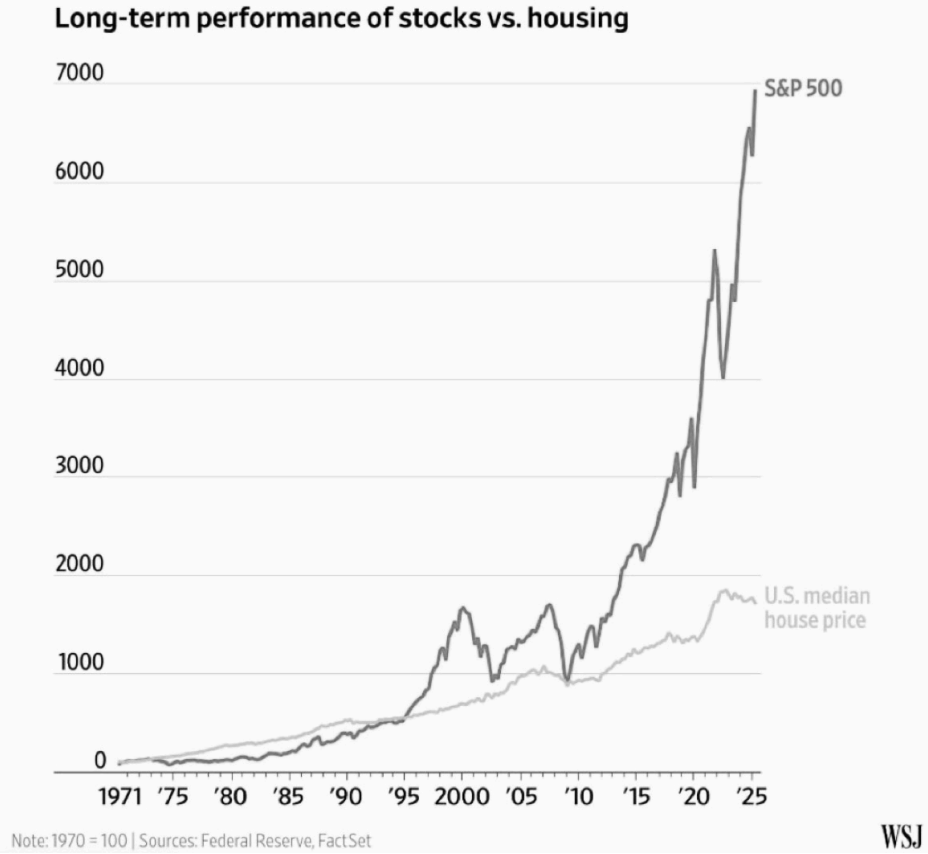
Real estate can be a way to generate wealth, but only if you rent it out instead of using it yourself. Even then, extreme caution is advised unless you have in-depth knowledge of the real estate market and its legal and tax framework.

Such investments can easily generate negative real returns in the long term or involve considerable administrative and maintenance costs, which often significantly reduce achievable returns.

Real estate agents, financial advisors, and banks often use the supposedly high increase in value of real estate as a key argument for purchasing it.

However, an objective comparison of long-term performance with that of the stock market clearly shows that neither owner-occupied nor rental real estate is a superior asset class when all costs, taxes, maintenance, and opportunity costs are considered.

The following Wall Street Journal's informative chart comparing the performance of U.S. real estate from 1970 to 2025 with the S&P 500 clearly illustrates the situation. Since around 1995, real estate has lagged behind the broader stock market in long-term performance, even without considering financing costs, taxes, maintenance, and transaction fees.



The nominal price development of real estate since 1970 is as follows:

USA: +1.700%
Europe: average increase of 700%.
Germany: +250%
China: Since the introduction of a free market in 1998, the average increase has been 1.000%.

These figures are purely nominal and do not account for inflation or operating costs (financing, taxes, maintenance, and administration), which significantly reduce the actual net return.

From the beginning of 1970 to the end of November 2025, the S&P 500 (including dividends) has increased by approximately 32.222% in nominal terms (with all dividends reinvested).

*Nassim Nicholas Taleb is a world-renowned essayist, author, mathematician, former options trader, and risk researcher. He is also one of the most influential thinkers of the last 20 years when it comes to uncertainty, chance, and robustness. He predicted the 2008 financial crisis (saying, "Your models are garbage") and made a lot of money betting against the system.

„Some people have no idea what they're doing, and many of them are really good at it.“
(George Carlin)

To a certain extent, I would exempt hedge funds from this criticism, as they are subject to strict regulatory requirements that restrict their activities. Additionally, they work in large teams. Consequently, the psychological phenomena I highlight below should be less applicable here. Nevertheless, it is evident here, too, that highly paid teams of analysts and economists can significantly miss the mark with their market assessments and forecasts, even though an entire research team prepares the outlook and acts on it, not a single expert.

With individual analysts, trading coaches, and finfluencers, however, one must wonder whether they trade consistently using the system they promote or if they know their business model is based on marketing and sales, not superior market expertise. Many of these "experts" may manage their own portfolios in a simpler manner than they portray to clients or followers. After all, their business model depends on convincing you that you have a lot to learn - and to take out the next subscription, book the next course, or purchase another paid product.

With advisors of any kind - bank advisors, independent brokers, or fee-based advisors - it is usually not transparent or verifiable what kind of training they have undergone or if they continuously educate themselves. Instead, many simply follow the standardized narratives of their sales-oriented training. This group of "experts" is particularly convinced of their above-average expertise in the financial market, partly because they consider their training content and methods to be objective and superior.

These advisors and experts often follow a single analysis method or narrative with conviction, believing they have found the best or safest method to achieve above-average returns or protect capital.

This conviction usually arises because the chosen method has worked well, either coincidentally or temporarily, in certain market phases or because a particular narrative confirms the method. Consequently, they deem it unnecessary to critically examine their own approach or search for potentially superior alternatives. Instead, they are firmly convinced that they have acquired all the necessary knowledge.

Below, I present four key psychological phenomena that illustrate why the competence of stock market professionals should be questioned.

Dunning-Kruger Effect
The Dunning-Kruger effect is a well-known psychological phenomenon in which people with little competence in a particular area greatly overestimate their abilities. Meanwhile, highly competent people tend to underestimate their abilities.

In the original 1999 experiment,
Psychologists Justin Kruger and David Dunning of Cornell University had students take tests in logic, grammar, and humor. The results:

The bottom 25% (the lower quartile) rated themselves, on average, at 62 out of 100 (i.e., well above average).
The top 25% rated themselves only slightly above average, even though they were top performers.

A famous quote from the researchers is:
"The incompetent are often extremely confident, while the truly competent doubt themselves."

Why does this happen?
1. Metacognitive blindness: Those who know little cannot recognize their own mistakes and gaps in knowledge because recognizing them would require precisely the knowledge they lack.

2. Highly competent people understand the limitations and complexities of their field, so they are more cautious when assessing themselves.

In short, the less you know, the less aware you are of your limitations.

Confirmation bias
Confirmation bias involves looking for and creating patterns in data where none actually exist, as well as discarding data that does not align with one's preconceptions. Wikipedia defines confirmation bias as "...the tendency to seek, interpret, prefer, and recall information in a way that confirms one's preconceived opinions or hypotheses."

"...the tendency to seek, interpret, prefer, and recall information in a way that confirms one's preconceived opinions or hypotheses."

For instance, if you advocate for gun control, you might seek out charts and figures showing that an increase in guns leads to an increase in shootings. However, you might disregard data showing cities with high gun ownership rates and low shooting rates. In short, you only look for data that confirms your beliefs and go to great lengths to find it.

Confirmation bias plays a significant role in technical and cyclical analysis. You recognize different patterns and go to great lengths to find ones that most closely resemble them on a chart or graph. These patterns may not correspond to relevant textbooks, but because of confirmation bias, you interpret them as accurate, especially if the stock is moving in the corresponding direction.

Thinking, Fast and Slow by Daniel Kahneman (2011).

In this book, Daniel Kahneman, winner of the 2002 Nobel Prize in Economics and one of the founders of behavioral economics, summarizes his life's work with Amos Tversky and others. The central model distinguishes two thinking systems:

System 1 is fast, automatic, intuitive, emotion-driven, effortless, and mostly unconscious. It delivers lightning-fast judgments and is prone to systematic errors (bias).

System 2 is slow, conscious, effortful, logical, computational, and self-controlled. System 2 is only activated when System 1 gets stuck or when we force ourselves to think carefully.

The book demonstrates that System 1 controls us most of the time and that System 2 often remains lazy, even when we believe we are acting rationally.

The most important topics and findings:

1. Cognitive biases and heuristics: People use simple rules of thumb (heuristics), which are usually useful but often incorrect.

Examples:
We overestimate the probability of events that come easily to mind.

Arbitrary numbers have a significant influence on subsequent estimates.

We judge probabilities based on similarity to a stereotype rather than base rates.

2. Judging under Uncertainty
We often ignore the base rate and rely too much on conspicuous yet unreliable information.

3. Prospect Theory:
Kahneman and Tversky's most important discovery, for which they won the Nobel Prize.

People do not evaluate gains and losses in absolute terms, but rather relative to a reference point.
Loss aversion: Losses hurt about twice as much as gains of the same amount bring pleasure.
Risk behavior is asymmetrical; we are risk-averse when it comes to gains but risk-seeking when it comes to losses.

4. Overconfidence and the illusion of validity:
We greatly overestimate our ability to predict the future.

Even experts, such as stock market analysts, political scientists, and doctors, are hardly better than chance at complex predictions.

The "illusion of validity": The more coherent a story is, the more likely we are to believe it, regardless of its actual predictive power (WYSIATI: What You See Is All There Is).

Conclusion of the book:
We are not rational "econs," but rather, we are fallible human beings. Our intuitions are often useful, yet in many important situations - finance, medicine, politics, and personnel selection - they systematically mislead us. Kahneman does not advocate abolishing System 1 but rather knowing its limitations and using System 2 in a targeted manner. This book is an inventory of human judgmental weaknesses.

Noise: A Flaw in Human Judgment by Daniel Kahneman, Olivier Sibony, and Cass Sunstein (2021).

This book complements Kahneman's Thinking, Fast and Slow. It shows that human judgments are flawed not only by systematic biases but also by "noise" - random, unwanted variation in judgments that should actually be the same.

Core idea:
When the same thing is judged completely differently by different people (or even by the same person at different times) despite having the same information, that is noise.
Noise is the "forgotten" error alongside bias, and in many areas, it is significantly greater and more costly.

The most important types of noise:

1. Level noise
Some judges, doctors, and HR managers are generally stricter or more lenient than others.

2. Pattern noise:
The biggest and most surprising source is that even in identical cases, people react differently depending on unimportant details (e.g., whether they are hungry, whether the weather is good, or whether their favorite soccer team has just won).

3. Occasion noise:
The same person in the same case may receive 10 years in prison one week and 3 years the next. This is simply because of differences in mood, fatigue, or the order of cases.

Striking examples from the book:

Criminal Judges in the US: For identical cases, sentences ranged from a few months to several years in prison, often depending on whether it was lunchtime or if the city's football team had won.

Medical diagnoses: Radiologists only agree with each other 70-80% of the time when presented with the same X-ray images months later.
Insurance: Underwriters assess the same claim and differ by more than 50% in the premium.

Personnel decisions and forecasts: Almost everywhere, noise dominates the error rate more than bias.

Why is noise so dangerous and expensive?

Bias leads to systematically incorrect decisions, which can be identified and corrected.

Noise, however, leads to chaotic and arbitrary results that appear "fair" but are not because similar cases are treated differently.

In many organizations, noise costs billions of dollars in incorrect hiring decisions, unfair penalties, and erroneous credit decisions.

The key insight is that:
Wherever you look, the variance in judgments is much greater than we intuitively believe. We overestimate how objective and consistent our judgments and those of others are. Bias is the error that everyone wants to see. Noise is the much bigger but invisible error.

CHAPTER 2

PSYCHOLOGICAL FACTORS IN STOCK MARKET TRADING

Please note that the Dunning-Kruger effect can apply to anyone, and no one - including you, supposed experts, and myself - is completely free of cognitive biases, confirmation errors, or random errors in judgment. Seventy to ninety percent of people suffer from the Dunning-Kruger effect.

This chapter explains other psychological aspects that play crucial, yet often underestimated or unnoticed, roles in securities trading. Most books, courses, and coaching sessions only touch upon psychology, if they mention it at all, usually at the end. I consider this a serious mistake because the biggest risk in investing ultimately lies within you - your ego and emotions.

Influencers and the news media often amplify emotions. They create a fear of missing out (FOMO) or arouse greed because the presented profits and prices trigger the desire to achieve similarly high returns. In stock market trading, FOMO is the fear of missing out on a significant increase in prices. You see exploding prices and profit posts, and you panic-buy at the peak, often believing yourself to be well-informed. Psychologically, this behavior is similar to gambling in that it is primarily driven by emotions, especially hope and greed for the big win, rather than by rational probability calculations and disciplined risk management.

Most market participants are unaware whether they are investing, speculating, or gambling. To the untrained observer, these three activities appear similar because they all involve capital and the hope of making a profit. However, the key difference is that gambling actively creates new risk, whereas investing and speculating aim to take on, evaluate, and manage existing market risk.

Investing in stocks means using capital with the expectation of a secure, long-term investment and reasonable return. Investors acquire shares in healthy, profitable companies with sustainable business models to benefit from their growth, earnings, and dividends over the course of decades. Buy-and-hold decisions must be based solely on the fundamental quality and development of the companies. Unlike short-term strategies, genuine equity investments are geared toward an investment horizon of several years or more - a classic buy-and-hold strategy.

In its purest form, **speculation** is the purchase of a security or asset solely for the purpose of reselling it at a higher price later on - not for generating ongoing income. Speculators invest capital solely to realize a capital gain, or an increase in price or value, which is their only source of return. Regular income, such as dividends or interest, plays a minor role, if any. The term "speculation" is derived from the Latin "speculari" (to observe, spy, or examine with foresight), which emphasizes the central role of anticipatory analysis. Speculators attempt to intellectually identify future market movements, sentiments, or events earlier and more accurately than the average market participant to gain a time advantage.

At its core, speculation is forward-looking, systematic thinking. It requires systematic consideration, analysis, and decision-making before each transaction - in other words, thinking first and then acting. A successful speculator develops various possible future scenarios, assesses their probabilities, and establishes specific rules of action (purchase, sale, or hold criteria) for each scenario. This sequence - thinking first and then acting - is the exact definition of planning. Therefore, speculation and planning are essentially identical. A solid plan is the only tool that enables one to deal rationally with the markets' inherent uncertainty. This approach works over very long time horizons, as with the classic investor, and over medium and short horizons, as with the active speculator or trader.

Gambling is a specific type of betting where money or something else of value is wagered on the result of an event that is largely determined by chance. The outcome may depend on either pure chance or a combination of skill and chance. Gambling focuses on entertainment, excitement, and thrills, not winnings. One of the most well-known psychological biases in gambling and betting is the favorite-longshot bias. Market participants systematically overestimate the probability of longshots with very high odds winning and underestimate the probability of favorites with low odds winning. Consequently, bets with low probability of success but high potential winnings are overvalued, while bets with high probability of success and low payouts are undervalued. A classic example of this can be found in horse betting. Underdogs with odds of 20:1 or higher receive significantly more money than they should, given their actual probability of winning. Favorites with odds of 2:1 or lower, on the other hand, receive significantly less money than they should. In the long run, this distortion means that bets on underdogs have the worst mathematical expectation.

Since you can't survive in the stock market as a pure gambler or without a plan, methodical, forward-looking speculation remains the only serious way to deal with an uncertain future.

Conduct regular self-analysis of your thoughts, emotions, beliefs, and decision-making processes. Develop the discipline to minimize or block out external influences, especially those that elicit strong emotional reactions. Decide what kind of market participant you want to be:
an investor or a speculator.

This fundamental decision will determine your strategy, risk tolerance, holding period, sources of information, and ultimately, your long-term success. It should be made out of conviction and implemented consistently, not on a situational basis.

The crucial difference between an independent individual and the masses lies in their decision-making quality: the individual weighs things up rationally, checks facts, questions their own assumptions, and acts according to a predefined plan. The masses, on the other hand, are guided by collective emotions - fear, greed, hope, and the irresistible urge to do what "everyone" is doing. Emotional contagion and blind imitation spread rapidly, often faster than in the past thanks to social media.

Two models of psychological mass

The **deception model**, also known as the suggestibility model, accurately describes the psychological process by which an independent market participant becomes emotionally driven and joins the crowd before opening a position. This process almost always follows the same pattern.

1. Expectant Attention: Investors are excited and ready to "make money." They are receptive and actively searching for the next "big thing."

2. Suggestion: They notice a tip, headline, chart pattern, tweet, or seemingly convincing analysis.

3. Emotional Transfer: Enthusiasm, fear, or greed spreads like wildfire. Reason is switched off and the information suddenly appears irrefutable.

4. Collective acceptance and action: Investors act immediately, usually alongside many others who were exposed to the same stimuli.

This pattern explains why most private investors incur losses in the long term. Those who try to "make up" for a loss immediately only reinforce this state of affairs. Expectant attention becomes even more intense and the willingness to deceive oneself becomes even greater. This mechanism is universal and affects everyone who does not actively immunize themselves against it, including experienced market participants.

The **illusion model** describes the psychological process by which a market participant becomes emotionally dependent on the crowd after opening a position, losing their original objectivity completely. This process unfolds in four distinct steps.

1. Confirmation: You express an opinion or theory about the market, such as "The S&P will continue to rise," "Gold will break out," or "This company will be taken over."

2. Repetition: You share this opinion with friends, on forums, in chat rooms, and with acquaintances. With each repetition, your conviction solidifies - it becomes "truth."

3. Prestige: Initially, the market develops in your favor. You receive admiration ("He knew it again!"). Your ego is stroked and your critical faculties disappear completely. You feel superior, infallible, and chosen. Prestige acts like a hypnotic power, blinding you to any counterarguments and filling you with awe for your own "genius."

4. Emotional Transfer: Initial confirmation and prestige are transferred to your entire perception. You are now emotionally trapped, hypnotized by your own story. Even when the market turns, you interpret any new information only in terms of how it could still validate the original thesis.

The illusion model also applies to loss positions as soon as prestige is based not on an accurate market assessment but on supposed courage or contrarian thinking. Narratives such as "I am one of the few who dare to go against the trend," "The masses are wrong," and "The market will turn around" serve only to protect one's self-image. People hold on to their positions because selling would be perceived as a personal defeat and a loss of hard-earned prestige. The emotional investment is stronger here because the ego fights reality with all its might. Although losses hurt about twice as much psychologically as gains bring joy, investors tend to be more willing to take risks during periods of loss. Often, investors deny the unrealized loss by convincing themselves that no "real" loss has been suffered as long as the position is not sold.

Another classic example of the personalization of stock market positions is the widespread disposition effect, wherein investors sell profitable positions too early while holding on to unprofitable ones for too long. As previously mentioned, this behavior often stems from the unconscious association of market results with one's intelligence and self-esteem. Realizing a loss is experienced as a personal defeat. In this way, neutral capital becomes linked to self-esteem; losing money feels like a loss of personal competence or value. Therefore, a consistent separation of capital gains and self-esteem is one of the most important prerequisites for long-term, successful, and emotionally stable trading on the stock market.

I went through all of these phases myself, but I wasn't consciously aware of them at the time. It wasn't until later, when I read **What I Learned Losing a Million Dollars** by Jim Paul and Brendan Moynihan (1994), that I realized where I had been at each stage. Since the book exclusively and deeply explores the psychology of stock market traders, I recommend it to all aspiring and successful traders.

A trader's growth potential is directly related to how much truth they can face about themselves. I am convinced that these psychological insights, gained in retrospect, were the most important I gained during my entire learning phase.

In my opinion, it is essential to address psychological aspects before dealing with analytical methods. Only when you are aware of the most important psychological pitfalls can you clearly recognize which common analytical methods can reinforce such distortions. This allows you to consciously manage risk and avoid stress and unconscious mistakes.

CHAPTER 3

ANALYSIS METHODS

There are various methodological approaches available for analyzing financial markets and assessing future price developments. These approaches can be used in isolation or in combination.

There are three main categories of analysis:

- Cyclical analysis
- Fundamental Analysis
- Technical Analysis

The most important approaches within these categories are presented below in a systematic manner, and their actual significance and practical effectiveness are examined.

Interest Rate Cycles

Various phases of the economic cycle are characterized by different macroeconomic conditions, such as high inflation (well above 2%), stagflation, recession, depression, and, less frequently, deflation.

Central banks primarily respond to these developments with monetary policy measures.

Restrictive monetary policy:
Interest rate hikes reduce the money supply and dampen aggregate demand to control overheated economies and inflationary pressures.

Expansionary monetary policy:
Interest rate cuts and other easing measures stimulate demand, investment, and economic growth, especially during downturns and recessions.

By actively using key interest rates and complementary instruments, central banks attempt to stabilize economic trends and limit extreme upward or downward swings.

Complex narratives are repeatedly disseminated in connection with the above-mentioned macroeconomic conditions (e.g., if interest rates behave in a certain way, then stocks and metals should behave in a certain way).

Many market observers and analysts overlook a key correlation.

Central banks typically only lower key interest rates when the real economy is significantly weakening or under serious threat due to overly restrictive monetary policy.

Therefore, an interest rate cut primarily serves to stabilize and support a struggling economy. In most cases, it is a reactive instrument to economic weakness that has already occurred or is imminent rather than a proactive means of permanently stimulating a healthy economy.

Many market participants and observers widely believe that interest rate cuts lead to positive stock price developments.

However, historical data paints a much more nuanced - and contradictory - picture.

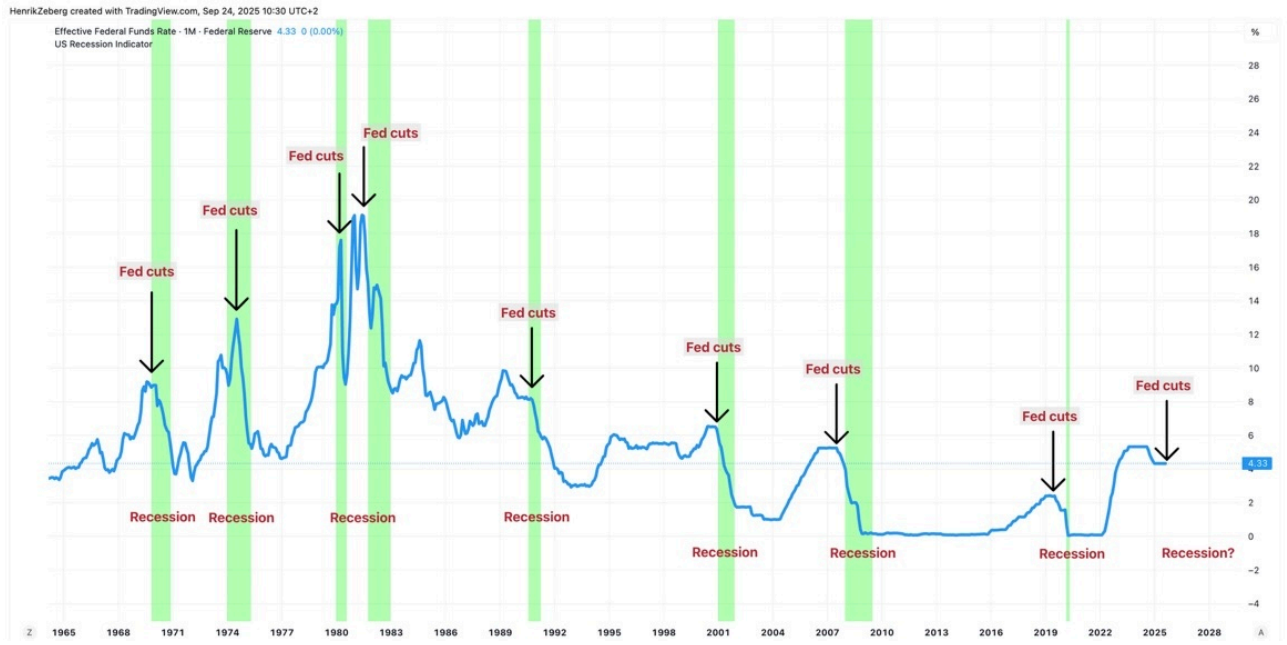
Since the 1970s, key interest rate cuts by the U.S. Federal Reserve have not necessarily been accompanied by a sustained upward trend in stock markets. Rather, they have coincided closely with the onset or deepening of recessions.

Danish economist Hendrik Zeberg's chart below clearly illustrates this recurring correlation.

In this context, interest rate cuts act more as a reactive emergency measure by a central bank responding to an already slowing or recession-bound economy than as a stimulus for growth. This economic weakness usually weighs on the stock markets, often much more than monetary easing can compensate for.

Even if stock prices initially rise in the short to medium term after interest rate cuts, historical analysis often reveals a different pattern.

The initial positive reaction is followed by the onset or deepening of a recession, which has negative consequences for the stock markets. Therefore, such rises in stock prices can be deceptive and lead to significant losses.

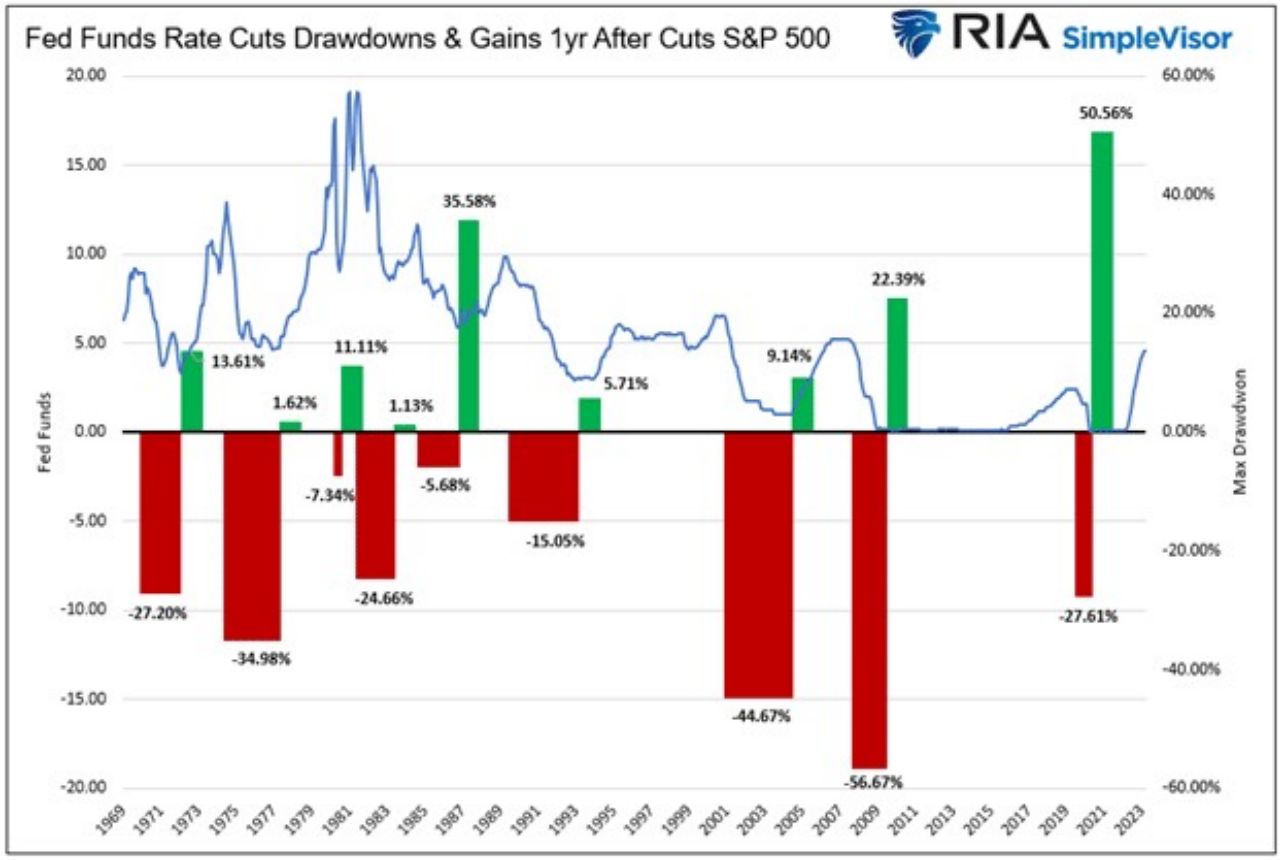


Further evidence can be found in the chart below. It illustrates the maximum losses during the interest rate cut phases and the one-year returns following the final key interest rate cut.
On average, the maximum decline in the S&P 500*, measured from the start of each interest rate cut period to the stock market's cyclical low point, was -27.25%.

Therefore, investments during interest rate reduction phases should not be based on the common narrative that "interest rate reductions drive the stock market," but rather on the realization that historically, these phases have also been associated with significant price declines and the onset or deepening of a recession.

Nevertheless, it is important to bear in mind that.
In every market and economic phase, there are sectors, industries, and individual assets that perform well above average and offer attractive to excellent opportunities, even in difficult or falling overall markets.

A consistently selective investment strategy focused on quality and opportunities remains a proven and promising approach, even in difficult phases, provided it is based on solid market observation, a deep understanding of the market, and clear discipline.



*The S&P 500 is a stock index comprising the 500 largest publicly traded U.S. companies. It is widely regarded as the most important indicator of the health and development of the American stock market.

Macroeconomic cycles

Macroeconomic cycles, also known as business or economic cycles, describe recurring waves of macroeconomic activity. The economy typically grows and shrinks in phases:
During an upswing, production increases, more jobs are created, and corporate profits grow. The mood is optimistic. During a boom, the economy overheats, unemployment is low, demand is high, and exaggerations and rising prices often occur.

This is followed by a downturn.
Growth slows or becomes negative, companies cut jobs, and uncertainty increases. A recession or depression is characterized by a significant economic contraction, sharp rise in unemployment, and pessimistic sentiment.

These cycles vary in length. Short Kitchin* cycles last around three to five years and are mainly related to inventories. Medium-term Juglar* cycles of seven to eleven years are driven by investment in machinery and equipment. The longest, Kuznets* cycles, last 15 to 25 years and are often related to the construction cycle, real estate, and infrastructure. The longest Kondratieff* cycles span 45 to 60 years and are characterized by fundamental technological innovations.

Today's most important drivers are credit and debt cycles, mass behavior oscillating between greed and fear, monetary and interest rate policies of central banks, excessive investment leading to excess capacity, and commodity and energy price shocks.

* Kitchin cycle:
Named after British statistician Joseph Kitchin, who discovered these short fluctuations in the UK and the US at the beginning of the 20th century, it is also known as the 40-month cycle.

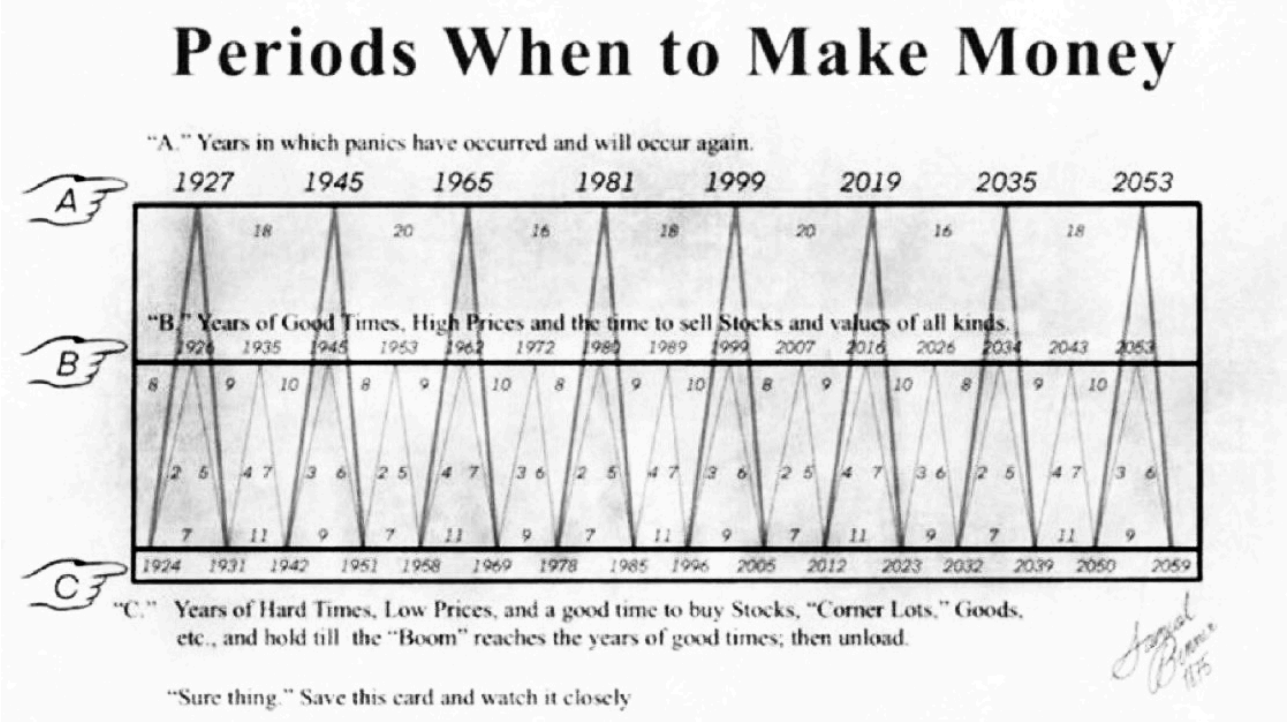
* Juglar cycle:
Named after 19th-century French physician and economist Clément Juglar. He was one of the first to systematically describe recurring 7–11-year economic waves.

* Kuznets cycle:
Named after Simon Kuznets, an American economist and Nobel Prize winner.

* Kondratieff cycle:
It is named after Nikolai Kondratiev, a Russian economist from the 1920s.

The historical projection of economic cycles, published by Samuel T. Benner in his 1875 work Benner's Prophecies of Future Ups and Downs in Prices, is a widely used and still highly regarded diagram. Benner was a farmer from Ohio and a self-taught economist.

Named after him, this "Benner cycle" representation is considered one of the earliest systematic attempts to forecast long-term patterns in economic cycles, commodity prices, and stock market cycles.



Benner analyzed price patterns of commodities, particularly pig iron, corn, cotton, and hogs, from the late 18th and early 19th centuries until around 1872. He identified recurring cycles of economic booms, crises, and panics and used them to predict future market conditions. The chart, which extends to 2059, was designed as a practical guide to help investors, farmers, and traders determine the optimal times to buy and sell. The chart is divided into three main sections (A, B, and C) with arrows pointing to specific years and numbers indicating cycle lengths in years between events.

Unlike later traders such as W.D. Gann, who drew inspiration from similar ideas, Benner's work was based on empirical observations of historical data rather than complex mathematics or astrology. Benner believed economic activity followed natural, recurring patterns similar to the agricultural seasons - sowing during low phases and harvesting during high ones.

The chart gained popularity in the late 19th century and has been revisited in modern times for its supposed predictive power, though it is controversial.

Section A: Years of Panic
This section lists the years in which panics have occurred or will occur again. These panics represent major economic crises, depressions, or stock market crashes. Benner identified a "main cycle" of panics that recurs every 54 years but is divided into subcycles of 16, 18, and 20 years. These are periods of widespread financial distress, bank failures, and sharp asset losses. During these phases, one should avoid heavy investments and prepare for downturns.

Historical Correlations of the Benner Cycles:

As early as 1927, the cycle indicated a significant turning point. Just two years later, in 1929, the stock market crashed, marking the beginning of the Great Depression.

In 1945, a cycle milestone coincided with the phase of war-related economic restructuring and associated recession fears after World War II.

In 1965, the cycle point was close to the credit crunch and bear market phase from 1966 to 1968.

In 1981, the cycle coincided with a severe recession characterized by high inflation and unemployment.

The cycle marked the peak of the dot-com bubble in 1999, which burst just a few months later in 2000, resulting in dramatic price losses.

The cycle point in 2019 was immediately before the global stock market crash at the beginning of the spring 2020 COVD-19 pandemic.

Section B: Years of Prosperity
This section highlights years of prosperity, high prices, and the ideal time to sell stocks and securities. These are boom phases marked by rising asset prices and economic expansion - ideal times to sell investments before a downturn. Benner derived this from a 27-year cycle of high commodity prices, especially pig iron, with subcycles of eight, nine, and ten years. Some interpretations consider a second series of smaller numbers (2, 5, 4, 7, 3, 6, repeating) to be smaller sub-phases or adjustments within the cycles. This series may be derived from averaging historical data.

The underlying cycle pattern follows a recurring sequence of eight-, nine-, and ten-year intervals between peaks. These three phases add up to a 27-year grand cycle (8 + 9 + 10 = 27).

Historical correlations with economic and stock market booms can be seen in the following years, among others:

1926 fell right at the peak of the "Roaring Twenties," a period of excessive speculation that led to the stock market crash of 1929 and the Great Depression shortly thereafter.

1946 marked the strong postwar upswing and the beginning of the reconstruction boom after World War II.

1972 was the last year of strong, unbridled growth before the 1973/74 oil crisis abruptly slowed the global economy.

2007 occurred at the absolute zenith of the real estate and credit bubble, just one year before the dramatic global financial crash of 2008.

2016 was in the advanced stage of the long-term recovery from the financial crisis and was characterized by new multi-year stock market highs.

Looking ahead, 2026 marks the next predicted peak in the cycle. Given the current market development, which has been strongly driven by AI and technology since 2025, this could indicate a significant upward movement or boom.

Section C: Years of Hard Times
This section covers the years of hard times, low prices, and the ideal time to buy and hold stocks, "corner lots," and commodities until the "boom" reaches the years of good times, at which point you should sell. These periods resemble the Great Depression, with low economic activity, cheap assets, and opportunities for long-term purchases. This is based on a 27-year cycle of low commodity prices with subcycles of seven, 11, and nine years.

Historical lows in the Benner cycles often correspond to periods of significant economic and stock market weakness.

For example, 1931 was the dramatic low point of the Great Depression and the nadir of the global economic crisis.

1942 fell in the middle of the most severe period of economic stress during World War II, marked by rationing, resource shortages, and shifts in production related to the war.

The cycle peaked in 1978 during the height of stagflation, which is characterized by persistently high inflation, weak growth, and the aftermath of the second oil crisis.

In 2005, the cycle coincided with the real estate bubble's escalation; its first structural problems and credit risks had already begun to emerge, just three years before the global financial crash.

In 2012, the European debt crisis was ongoing, accompanied by slow and uncertain recovery, high unemployment in southern Europe, and continued financial market uncertainty.

2023 fell right in the aftermath of the 2022 bear market, which was characterized by extremely high inflation, aggressive interest rate hikes by central banks, and widespread fears of a recession.

Accuracy and Modern Relevance:
The chart shows uncanny similarities to events such as the 1929 crash (near 1927), the 2008 crisis (near the 2007 boom, which transitioned into lows in 2005 and 2012), and the 2020 crash caused by the pandemic (near 2019). 2023 is predicted to be a challenging year due to market volatility caused by inflation and geopolitical tensions. However, the chart is not infallible, and the data is sometimes off by one to two years.

Proponents highlight the correlation with major events, while critics argue that the model is too simplistic and prone to confirmation bias. They also point out that it does not account for modern factors, such as central bank policy.

Additionally, the macroeconomic environment has fundamentally changed.

Governments around the world are financing their rising debt burdens by creating new money, i.e., through monetary expansion. This represents a form of systematic, creeping currency devaluation that burdens every money and asset owner with an "inflation tax," yet this process receives little

public attention. If the general public fully understood this mechanism, it is unlikely that anyone would want to hold large amounts of cash.

Instead, the classic fear of a recession continues to prevail.
People and companies are trying to accumulate as much liquidity as possible. Although the traditional recession pattern is characterized by rising unemployment and falling real GDP, followed by an official recession, this pattern is becoming increasingly less meaningful in the current environment.

The classic GDP formula (GDP growth equals productivity growth plus population growth plus net credit expansion) is breaking down into its components:

1. Birth rates are falling worldwide, and in many countries, the population is shrinking.

2. Debt growth is increasingly reduced to debt servicing through further monetary expansion.

3. Only productivity shows potential for exponential growth, driven by artificial intelligence, automation, and robotics.

AI and robots are replacing human labor at a significantly higher productivity rate. Consequently, the traditional unemployment rate is losing its reliability as an early indicator of recessions. In the future, an increase in the unemployment rate will not necessarily indicate an overall economic contraction. Rather, it may result from a successful, productivity-enhancing transformation.

Against this backdrop, I believe the global economy is on the verge of an unprecedented technology-driven upswing - a boom whose magnitude most market participants currently underestimate.

In the long term, there are essentially two realistic scenarios for overcoming the current dilemma of debt and money supply:

1. Massive, unprecedented real GDP growth driven by technological productivity gains.

2. A fundamental restart/reorganization of the global financial system, most likely with significantly greater importance attached to cryptocurrencies and decentralized forms of wealth. It is very likely that a combination of both will occur.

Therefore, the coming years and decades will be shaped primarily by this epochal technological and monetary change, not by classic economic cycles.

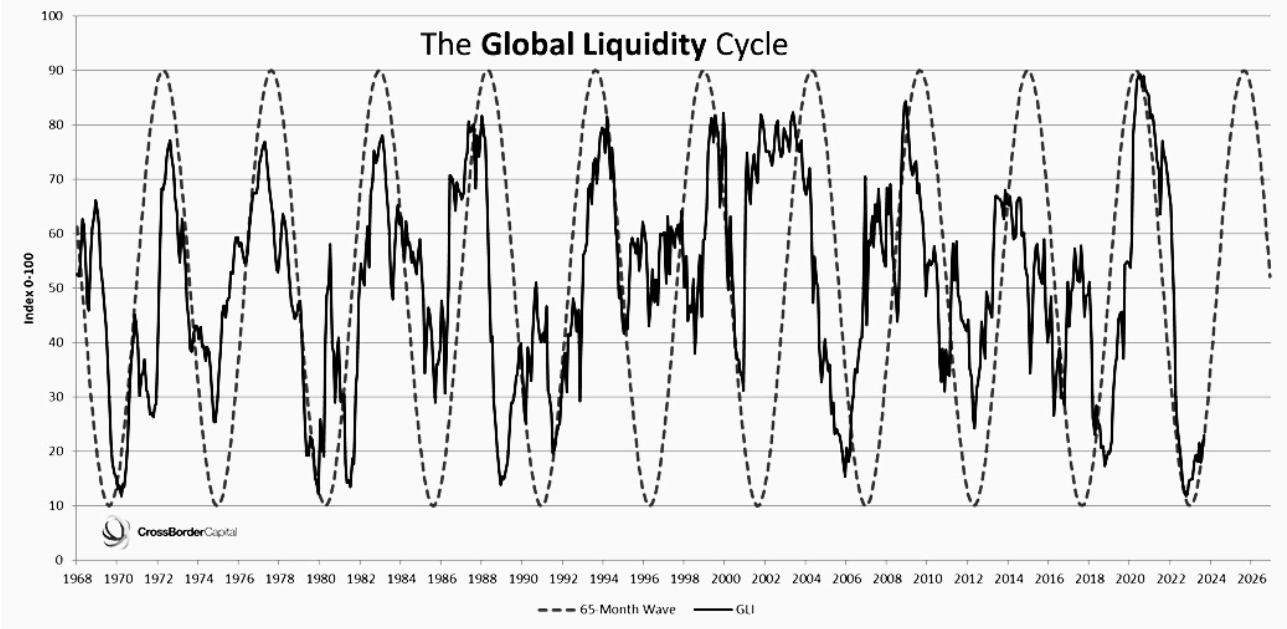
The 65-month cycle
Also known as the global liquidity cycle, the 65-month cycle spans approximately 5.4 to 5.5 years. It is one of the most robust empirical rhythms in the modern financial system. This cycle was popularized by Michael Howell and CrossBorder Capital's analyses in the 1990s and 2000s.

At its core, the cycle is based on the observation that the weighted average maturity of all outstanding debt worldwide - including that of governments, corporations, households, and financial institutions - has remained relatively stable at around 64 to 66 months for decades. This creates a massive collective refinancing need at regular intervals of approximately 65 months. This recurring refinancing pulse creates a clear rhythm in global liquidity availability, significantly impacting lending, risk appetite, and asset price development.

The typical cycle is divided into three phases.
In the expansion phase (usually 30-36 months), liquidity rises sharply. Debts can be refinanced at favorable terms, banks lend generously, and investors become risk-tolerant. Capital flows abundantly into stocks, real estate, and other high-risk investments. A positive, often optimistic, market environment emerges, accompanied by sharply rising prices.

This is followed by a comparatively short peak or exaggeration phase (usually 3-9 months). Liquidity peaks, euphoria spreads, and speculative bubbles can form. Prices (especially for stocks and alternative assets) sometimes explode. However, at the same time, refinancing costs begin to rise, and the first warning signs of a turnaround appear.

Finally, the cycle enters the contraction phase, which lasts approximately 28-32 months. Refinancing must now take place under significantly more difficult conditions. Lending becomes more restrictive, risk aversion increases, and capital withdraws. These changes lead to falling asset prices, increased volatility, possible market corrections, corporate burdens, and, not infrequently, recessions or crisis phases.



Since 1968, the Global Liquidity Index (GLI), published by CrossBorder Capital, has shown a high, albeit imperfect, correlation with an idealized 65-month sine wave, which was originally determined using Fourier analysis and then extrapolated. The period length has remained stable in the long term, usually ranging from 60 to 70 months. The most significant turning points have historically been accurately represented within a margin of 3 to 9 months.

In reality, however, the development is asymmetrical and sawtooth-shaped. It is also superimposed by external shocks, such as financial crises, interest rate policy, and pandemics. This is why the perfect sine wave is only a statistical approximation. Nevertheless, the 65-month cycle is one of the most reliable long-term patterns in the financial system, surpassing many classic economic cycles in its empirical robustness.

Seasonal Cycles
Short-term cycles in the stock market last from several months to a year. These cycles are based on recurring patterns arising from tax deadlines, vacation behavior, bonus payments, reporting seasons, and collective psychology. Despite being well known, these patterns have historically proven to be surprisingly reliable. The strongest and best-known annual cycle is the "Sell in May and Go Away" or "Halloween Effect."
Stocks generally perform significantly better from the end of October to around April or early May. The January effect describes how January is often one of the strongest months, especially for small-cap and value stocks. At the end of the previous year, many investors realize losses to save on taxes, which depresses prices. Then, from January onwards, purchases begin due to new starts in the tax year and bonus payments.

Since around 1980, the typical monthly sequence for the S&P 500 has been as follows:
January is usually positive and often among the top months; February tends to be neutral to weak, often serving as a correction after the January rally; March is usually positive due to the end of the quarter; April is one of the strongest months, driven by tax refunds and positive first-quarter reports; May is neutral to weak, marking the beginning of the "sell in May" period; June is weak and volatile, due to the start of the summer lull; July is often positive; August is weak, due to vacation time and low trading volume; and September is statistically the worst month, almost always seeing negative returns and high volatility. October is historically known as a crash month but often sees a strong recovery and the start of the "Halloween phase." November is one of the best months due to the year-end rally and post-election optimism during US election years. December is also a strong month. Other notable periods include the Santa Claus rally, which encompasses the last five trading days of December and the first two trading days of January, often yielding gains of one to two percent; the turn-of-the-month effect, whereby the final days of the previous month and the initial three to four days of the new month exhibit above-average positivity due to purchases by pension funds; quadruple witching, which occurs on the third Friday of March, June, September, and December, resulting in high volatility due to the simultaneous expiration of options and futures; and the earnings seasons in January, April, July, and October, during which quarterly reports can trigger significant fluctuations in individual stocks and sectors.

These patterns must now be linked to the current U.S. presidential election cycle. This describes a four-year statistical pattern in the stock market that has been evident for decades, regardless of the ruling party.

In the first year after the election, presidents often implement unpopular measures, creating uncertainty. Historically, this is the weakest year, with returns averaging 3-7%. The second year (the midterm year) is the most volatile and weakest. Midterm elections cause high political uncertainty and often lead to corrections of around -18%, with average returns of only 3-5%. The third year (the pre-election year) is the strongest. Before reelection, the economy is stimulated by expansionary policies, resulting in historically high returns of 13-17% or more. The fourth year (election year) is usually positive, with returns of 6-11%. However, there is increasing uncertainty during the election campaign, often followed by a rally after the election.

(This theory, originally proposed by Yale Hirsch, is based purely on statistical patterns, not causality.)

Midterm election year stock market performance since 1962

Year of midterm	President	Party	President's party: House seats	President's party: Senate seats	Before-midterm S&P 500 price performance Nov. 1–Oct. 31 (12 months)**	S&P 500 price performance Nov. 1–Jan. 31 (3 months)	S&P 500 price performance Nov. 1–Apr. 30 (6 months)	S&P 500 price performance Nov 1. –Oct. 31 (12 months)
1962	John F. Kennedy	D	-4	+3	-17.6%	17.1%	23.5%	30.9%
1966	Lyndon Johnson	D	-47	-4	-13.2%	8.0%	17.2%	17.1%
1970	Richard Nixon	R	-12	+2	-14.4%	15.1%	24.8%	13.0%
1974	Gerald Ford (Nixon)	R	-48	-5	-31.8%	4.2%	18.1%	20.5%
1978	Jimmy Carter	D	-15	-3	0.9%	7.3%	9.2%	9.3%
1982	Ronald Reagan	R	-26	+1	9.7%	8.7%	23.0%	22.3%
1986	Ronald Reagan	R	-5	-8	28.5%	12.3%	18.2%	3.2%
1990	George Bush	R	-8	-1	-10.7%	13.1%	23.5%	29.1%
1994	Bill Clinton	D	-52	-8	1.0%	-0.4%	9.0%	23.1%
1998	Bill Clinton	D	5	0	20.1%	16.5%	21.5%	24.1%
2002	George W. Bush	R	8	+2	-16.4%	-3.4%	3.5%	18.6%
2006	George W. Bush	R	-30	-6	14.2%	4.4%	7.6%	12.4%
2010	Barack Obama	D	-63	-6	14.2%	8.7%	15.2%	5.9%
2014	Barack Obama	D	-13	-9	14.9%	-1.1%	3.3%	3.0%
2018	Donald Trump	R	-40	+2	5.3%	-0.3%	8.6%	12.0%
2022	Joe Biden	D	-9	+1	-22.1%			
Average seat change:			-22	-2				
Midterm average:					-1.1%	7.3%	15.1%	16.3%
Non-midterm average*:					11.2%	2.9%	4.2%	6.4%

Flip to Republican control Flip to Democrat control

Data source: Bloomberg data, Oct. 31, 1961 to Oct. 3, 2022.

* The average monthly price return of the S&P 500 in three-month, six-month and 12-month increments, starting in the month of November of every year since 1963 where there wasn't a midterm election held in that November.

** The average 12-month price return of the S&P 500 in the 12 months preceeding a midterm election, where the last date of the price close as of Oct. 31 is several days before the November midterm election. 2022 as of October 3.

A closer look at the chart above reveals that past U.S. presidential election cycles alone are not a sufficiently accurate basis for classifying the current cycle or deriving well-founded forecasts.

The dispersion of historical data and the overlap of other dominant influencing factors make generating precise predictions from this pattern that can be used to make superior investment or trading decisions practically impossible.

Additionally, a meaningful analysis should not be based solely on seasonality patterns and the presidential election cycle. To substantially improve the overall picture, it would make sense to include the real economic cycle, the Federal Reserve's interest rate and monetary policy cycle, and the 65-month global liquidity cycle.

Only by considering these overlapping cycles together would it be possible to identify an overarching pattern. As has already been shown, none of these cycles can be precisely timed or defined. They are all exclusively statistical trends. These trends are increasingly losing their contours and reliability due to the growing influence of algorithmic trading and advancing globalization.

At the same time, the composition of market participants is changing.
A new generation of young investors is entering the market while older participants, who rely heavily on historical patterns and established narratives, are retiring.

Additionally, as previously mentioned, macroeconomic conditions are changing at a significantly faster pace than in previous periods.

Trading according to cycles and associated narratives and predictions will become less important.

Considering that at least one of the psychological biases described in the previous chapter is likely to affect any cycle analysis, cycle analysis ultimately becomes a method similar to gambling.

Statistical trends are so strongly influenced by subjective interpretation, emotional weighting of individual turning points, and selective perception of confirming examples that their predictive power falls short of the theoretically possible level in practice. Theoretically, the accuracy of pure cycle analysis is around 55% on average, historically and statistically. However, after deducting systematic psychological distortions, the actual achievable accuracy rate usually drops significantly to around 40% or below in practice. This means that, in its actual application, cycle analysis is only slightly above the level of chance.

Those who wait for a market peak, imminent trend reversal, or "big crash" because it is cyclically probable are as detrimental to long-term portfolio performance as those who overinvest during periods of euphoria, continue buying, or rotate into riskier assets. Both extremes - chronic or cycle-driven caution and sustained, cycle-driven euphoria - typically lead to systematic underperformance in the long term.

Gold Cycle

This long-term gold price chart, shown on a logarithmic scale from 1965 to 2025, illustrates the precious metal's pronounced cyclical nature and highlights its role as a reliable alternative asset during times of economic and geopolitical uncertainty. The price trend is characterized by long, dynamic upward phases. Historically, these bull markets last 10 to 12 years, often reaching their peak during a phase of pronounced euphoria with a blow-off top, as occurred in 1980 and 2011. This is followed by correction and consolidation phases. The approximately 20-year period since the 1980 peak embodies the classic "lethargy" phase, during which gold is often considered a "dead asset."

The idea that gold is always a good investment or perfect for buy-and-hold strategies does not stand up to a sober historical analysis, as this long-term chart clearly shows.

Gold is a cyclical asset with extremely long periods of underperformance and zero returns during the holding period. Unlike stocks, it has no intrinsic growth. Unlike stocks, which generate returns through dividends and company growth, or real estate, which generates returns through rental income, physical gold does not generate a single cent of return as long as you hold it. The only way to make a profit is to sell it for more than you paid for it. This makes gold a bet on future price increases, which are often driven by fear, inflation, or currency weakness - not a productive way to build wealth. For this reason, many experts call it speculation rather than an investment.

Gold has a low correlation with stocks, which is good for diversification, but its own drawdowns are brutal. Anyone who bought gold in 1980 and held onto it until 2000 lost nearly all of their investment in real terms (-70%). A similar situation occurred after 2011. By 2015, the price had fallen by around 45%, and the recovery took even longer in real terms (adjusted for inflation). Even over very long periods (e.g., from 1971 to the present), the real annualized return on gold is only 1-2%, whereas stocks have historically generated 6-7% per year in real terms. During periods of panic, gold can fall in the short term alongside stocks (e.g., when liquidity is needed). Gold is not a stable "safe haven" for every crisis; it only serves as a haven during certain crises, such as inflation, currency crises, and geopolitical crises.

Fundamental Analysis

Fundamental analysis is a method of evaluating stocks and other securities in the financial market. It involves determining a company's intrinsic or fair value. In other words, it is the price a stock should have in the long term based on real economic fundamentals. The key question is whether the stock is currently undervalued (therefore a good buy), overvalued (therefore expensive), or fairly valued.

To answer this question, one examines the company's financial data, such as its balance sheet, income statement, and cash flow statement, over several years. Important key figures include the price-earnings ratio, the price-book ratio, the dividend yield, earnings growth per share, sales growth, profit margins, return on equity, debt, and free cash flow. Additionally, one examines the company's position in its industry, including market share, competitive advantages, the industry's growth potential, and barriers to entry for new competitors. Macroeconomic factors, such as interest rate trends, inflation, the economic cycle, commodity prices, and geopolitical risks, are also considered to provide a comprehensive overview.

Fundamental analysis assumes that every company has an intrinsic value derived from its earnings, assets, and future growth. In the short term, share prices fluctuate greatly due to emotions, news, or speculation. In the long term, however, share prices adjust to this intrinsic value. Therefore, anyone who buys a share significantly below its fair value is highly likely to achieve above-average returns.

Thoroughly evaluating a company requires studying its balance sheets, annual reports, industry reports, and macroeconomic data over many years, often requiring dozens of hours per company. For private investors without professional resources, this can quickly become overwhelming and lead to incomplete or flawed analyses.

Intrinsic value depends heavily on future growth rates, margins, discount rates, and scenarios, each of which is assessed differently by every analyst. Small changes in these assumptions can shift fair value by 20-50% or more, resulting in widely varying valuations, even when using the same data.

The analysis is largely based on historical data, which does not guarantee future outcomes. Sudden, disruptive events, such as technological upheavals, regulations, pandemics, and geopolitical shocks, as well as qualitative factors, such as management quality, corporate culture, and innovative strength, are often difficult to quantify and are frequently underestimated or overlooked.

Another major problem is timing risk. Even if a stock is significantly undervalued (e.g., 50% below its intrinsic value), the market can remain "wrong" for an irrationally long time. In bear markets, sector rotations, and momentum trends, fundamental undervaluation may be ignored for months or years, resulting in high opportunity costs or drawdowns.

The quality and reliability of information are also risky. Balance sheets can be distorted by aggressive accounting, window dressing, or manipulation.

Industry and sector differences also make uniform valuation difficult. Tech or growth companies with negative earnings cannot be compared using traditional metrics, such as P/E ratios. Meanwhile, cyclical or commodity companies depend heavily on external prices that are difficult to predict.

Most analysts and investors base their assessment of stocks and markets primarily on the price-earnings ratio (P/E ratio).

The P/E ratio is one of the simplest and most popular indicators for quickly determining whether a stock is expensive or cheap. It shows how much an investor pays for each euro of profit that the company generates per share.

It is calculated by simply dividing the current share price by earnings per share. For instance, if a share costs $100 and the company earned $5 per share last year, the P/E ratio is 20. This means you are paying 20 times the current annual earnings for the share. In other words, if profits remain constant, it would theoretically take the company 20 years to "pay off" the purchase price through profits alone, not counting dividends or growth.

As a rough guide:
A P/E ratio between 10 and 15 is often considered fair to cheap, especially for stable, mature companies, such as those in the consumer goods or utility sectors. A P/E ratio between 20 and 30 is typical for solid growth companies, such as those in the technology or consumer goods sectors. If the P/E ratio is 30 or higher, it becomes speculative or expensive. This is often the case with fast-growing tech companies, where investors are betting heavily on future growth. A P/E ratio below 10 can signal a bargain, but it may also indicate problems such as declining profits, industry crises, or poor future prospects.

Although the P/E ratio is extremely popular, analyses of above-average performing stocks show that it is one of the most useless metrics on Wall Street when viewed in isolation. It only reflects the past and ignores the crucial element of the future.

There is no consistent correlation between the price-earnings ratio and the long-term performance of stocks. For top-performing stocks, the P/E ratio can be relatively high or low at the beginning of an upward trend. Historically, the best long-term performers have an average P/E ratio of around 33.

Direct comparisons between current stock prices and P/E ratios often show that
Low P/E ratios tend to be associated with lower prices, while high P/E ratios tend to be associated with higher prices. Therefore, the P/E ratio is generally not a reliable indicator of future price trends.

Instead, many growing companies experience a significant increase in their P/E ratio during their expansion phase. As operational performance, market share, and profits increase, market expectations rise, as does the valuation multiple.

Thus, the P/E ratio functions more as a barometer of sentiment and expectations.
A high P/E ratio usually signals high and optimistic future expectations among market participants. Conversely, a low P/E ratio reflects subdued, skeptical, or low expectations.

Therefore, it is less a measure of "cheap" or "expensive" and more a reflection of the collective assessment of future potential. Those who rely on the P/E ratio ultimately base their decisions on subjective estimates and opinions that are usually already priced in.

While systematic or team-based fundamental approaches can achieve a success rate of 50%-75% in studies, the success rate of fundamental analysis decreases when performed by a single person. For individual investors, it typically drops to 30%-50% or lower due to psychological pitfalls, depending on their expertise and the market conditions. Confirmation bias exacerbates this issue, causing retail investors to ignore contradictory data and distort their assumptions. This leads to an annual underperformance of up to 9% relative to the market, as evidenced by empirical analyses such as the Dalbar study. Individuals tend to make emotionally driven mistakes. Studies citing sources from behavioral economics suggest that these factors often reduce the real chance of success for solo analysts to 20%-40% in volatile markets. This means that, in practice, fundamental analysis is only slightly above chance.

As explained in Chapter 1, you should not necessarily listen to analyses and recommendations from analysis firms, hedge funds, or other stock market professionals. Additionally, other reasons emerge from studies, regulatory reports, and market reality.

First, most sell-side analysts (from banks such as JPMorgan, Goldman Sachs, and Deutsche Bank) are biased due to conflicts of interest. They work for institutions that earn commissions from trading and investment banking fees. This is why genuine "sell" recommendations are rare, historically accounting for less than 5% of all ratings. Instead, "buy," "outperform," or "hold" recommendations dominate, even though "hold" actually means "sell, but don't admit it." Many studies show that, in order to not upset company management, retain bank customers, and generate retail investor trading, analysts remain publicly optimistic while privately giving institutional clients (hedge funds) more accurate, pessimistic assessments ("say-buy-whisper-sell" behavior).

Second, statistically, these recommendations perform poorly to negatively for private investors. Numerous studies (e.g., NBER, Stanford, and Dalbar) prove that Follow-the-analyst strategies often deliver worse returns than the market index, especially after transaction costs and timing errors are deducted. Retail investors usually only buy after the recommendation is publicized and the price has risen. They are too late and sell in a panic when downgrades occur.

Third, the timing and information advantage is significant. When a hedge fund or bank recommends or buys a stock, they have often traded it months earlier or have information that you, as an individual investor, will only receive later. By the time you react, the movement is often already over.

Fourth, private investors reinforce psychological traps by blindly following the herd, which leads to herd behavior, overconfidence ("the professional says so"), and confirmation bias. This leads to buying expensive stocks when everyone is optimistic and selling in a panic during corrections, resulting in losses.

Technical Analysis
Technical analysis is a method used to predict the future prices of stocks or other securities. It involves examining historical price trends, trading volumes, and the patterns derived from them.

Technical analysis essentially assumes that all relevant information, such as the economic situation, company news, and political events, is reflected in the current price. Therefore, there is no need to read balance sheets, earnings forecasts, or industry studies. Instead, one looks at how the price has moved in the past because human behavior in the stock market - such as greed, fear, euphoria, and panic - manifests in recurring patterns. Prices move in trends (upward, downward, or sideways), and these trends usually last longer than most people anticipate.

In practice, you work with charts, usually candlestick charts, that show price movements over days (1D), weeks (1W), months (1M), or years (12M). Then, trend lines, horizontal support and resistance zones, and channels are drawn on these charts, and classic patterns such as double bottoms, head-and-shoulder formations, triangles, flags, and wedges are identified. These patterns signal whether a trend will continue, accelerate, or reverse.

The goal is not usually to determine the fair value of a stock (that's what fundamental analysis does), but rather to identify optimal entry and exit points. In other words, the goal is to identify when to buy or sell regardless of whether the stock is actually "expensive" or "cheap."

Chart analysis is the common term for the visual, pattern-based part of technical analysis. It primarily focuses on studying price movements in charts and using them to predict future movements without complicated mathematical indicators.

Technical analysis is the umbrella term that includes classic chart patterns and modern indicators (RSI, MACD, etc.). However, chart analysis usually refers to the "classical" approach that is based purely on chart patterns with trend lines, formations, and support/resistance zones.

In practice, the terms "technical analysis," "chart analysis," and "charting" are almost always used interchangeably. There is no official, consistent difference in how it is handled by all books, brokers, or forums.

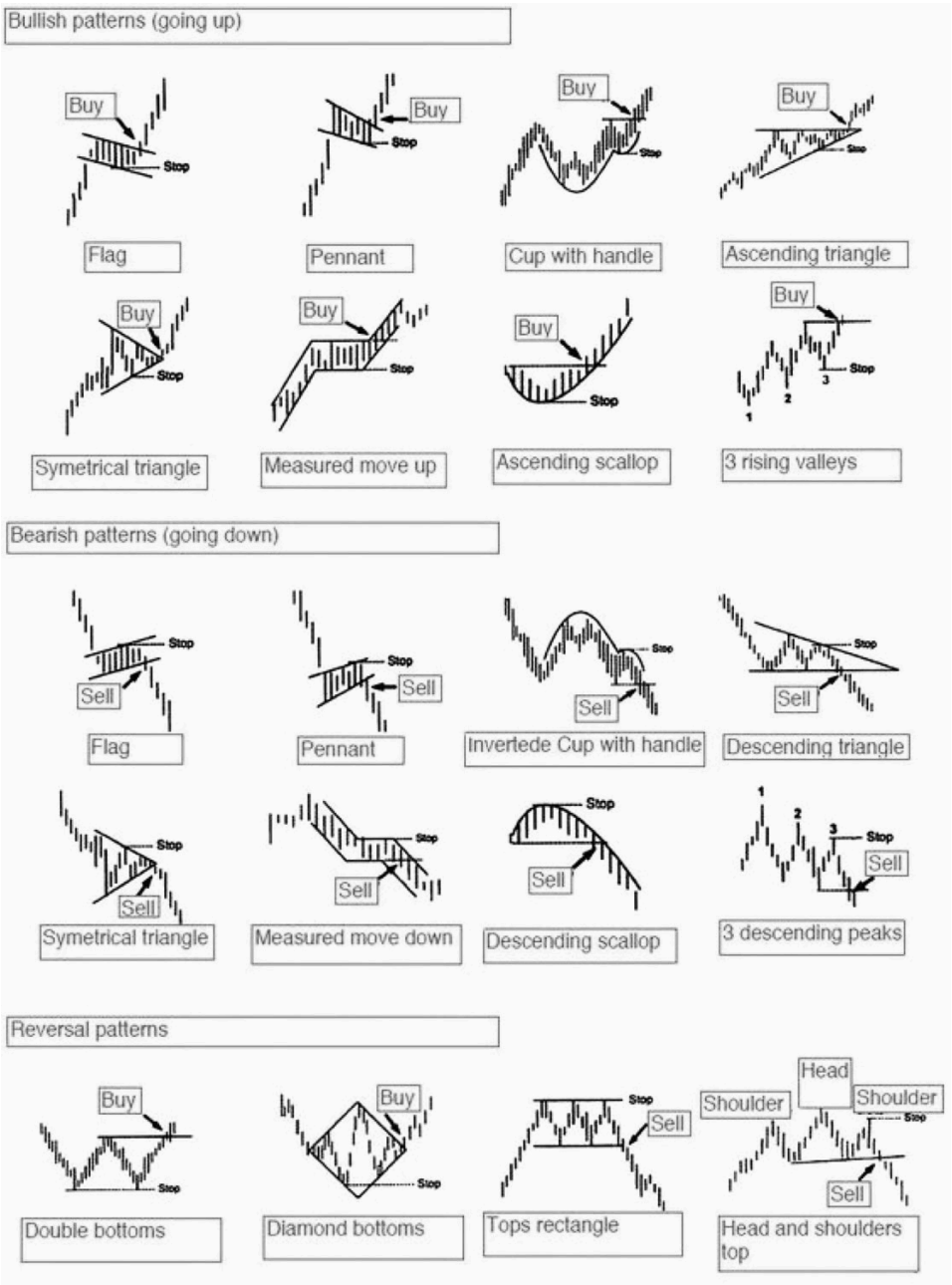
Therefore, the real big difference is not between chart analysis and technical analysis but between technical analysis as a whole and fundamental analysis.

Fundamental analysis tells you what to buy.
Technical analysis tells you when to buy.

The following section presents the most common methods used to analyze future price movements or determine potential price targets.

Chart Patterns
The chart below is a classic overview (cheat sheet) of chart patterns from technical analysis/ charting. It shows the most important and well-known price patterns that traders use to decide if the price will continue to rise (bullish), fall (bearish), or reverse.

These patterns are usually combined with volume and indicators (e.g., RSI and MACD) as well as the overall trend. A pattern alone is rarely sufficient.



Classic chart patterns, such as the cup-and-handle, head-and-shoulders, double top, falling wedge, and ascending triangle, are largely meaningless in practice.

These formations occur in almost any time series. This is true regardless of whether the data is stock prices, commodity prices, suicide rates, crime statistics, traffic accidents, plane crashes, or randomly generated random walk series. Therefore, there is no evidence that these patterns represent a unique feature of the stock market, buyer-seller dynamics, or human psychology. It is much more likely that they are the natural result of random fluctuations in long time series.

Even if a head-and-shoulders pattern develops "correctly" and breaks through the neckline, no causal or predictive relationship can be derived. Millions of market participants around the world have different time horizons, strategies, and levels of information.

- Many traders and investors examine other time frames or don't use charts at all.

- Institutional purchases and sales are made through ETF rebalancing, index tracking, and passive flows.

- Dividends are reinvested, options are exercised, and hedging positions are established or reduced.

- Macro decisions, corporate events, and algorithmic trading can override any chart-based logic.

Given the highly heterogeneous and uncoordinated nature of the influencing factors, it is illogical to assume that a stock's price will follow a specific pattern. Price movement is the result of multiple independent and predominantly random events.

According to the most comprehensive and reputable studies, the average accuracy rate when trading with this technique is 65%. Pure pattern trades without indicators or filters (e.g., volume, RSI divergence, overarching trend, and sector strength) often only achieve a win rate of 50%-60%.

The most important and frequently cited source for this information is Thomas Bulkowski's Encyclopedia of Chart Patterns, which contains statistics from tens of thousands of patterns, mainly from U.S. stocks.

However, hit rates have declined since the 1990s (failure rates have doubled or even quadrupled in some cases) because markets have become more algorithmic, liquid, and news-driven. Additionally, this method of technical analysis is particularly susceptible to confirmation bias, or incorrect pattern recognition, which reduces the average success rate by 20%.

The Elliott Wave Principle

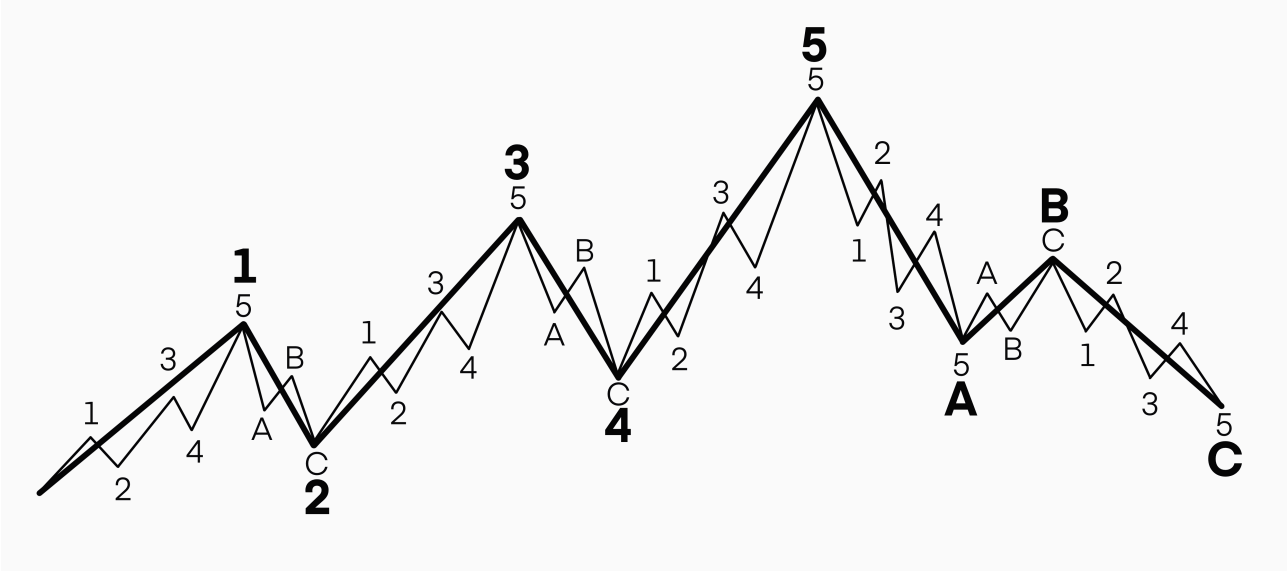
The Elliott Wave Principle, also known as Elliott Wave Theory, is one of the most advanced and controversial methods of technical analysis. Developed in the 1930s by Ralph Nelson Elliott, it is based on the idea that financial markets do not move randomly but rather in recurring fractal wave patterns driven by the collective psychology of market participants. These patterns are driven by the collective psychology of market participants, ranging from optimism to euphoria to fear to panic to optimism again.

The core principle is that markets move in cycles that always consist of 8 waves:

5 waves in the direction of the trend (impulse waves), which drive the main trend (e.g., a strong upward trend in a bull market), and three waves against the trend (correction waves), which temporarily correct the trend.

3 waves move against the trend (correction waves) and temporarily correct it.

This pattern repeats fractally at all time levels. A large wave consists of smaller waves, which consist of even smaller waves, similar to snowflakes.



Upward trend (bull market cycle)
Wave 1: Initial rise (often weak, many still doubtful)
Wave 2: Downward correction (usually 50-61.8% retracement of wave 1)
Wave 3: The strongest, longest rise (usually the most dynamic wave, where you earn the most)
Wave 4: Sideways or slight correction (often complex, but flat)
Wave 5: Final upward push (often accompanied by euphoria, but weaker than wave 3)

Correction phase (A-B-C)
A: First relapse
B: Counter-rally (many think the upward trend will continue)
C: Final crash (often as deep or deeper than wave A)

In a downward trend (bear market), it is exactly the opposite: 5 waves down, 3 waves up.

The 3 hard rules (must always be followed, otherwise the count is invalid):

Wave 2 must never retrace more than 100% of wave 1 (no overlap into the starting zone of wave 1).

Wave 3 must never be the shortest of the impulse waves 1, 3, and 5 (it is usually the longest).

Wave 4 must never enter the price territory of wave 1 (no overlap with wave 1).

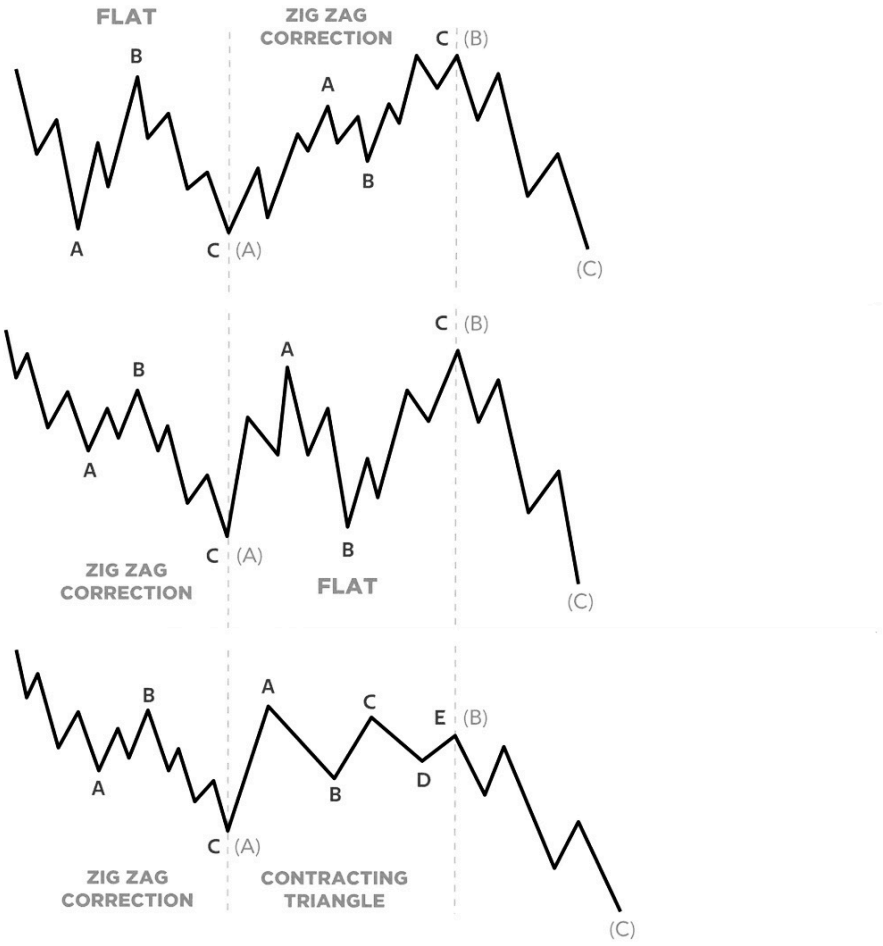
Important guidelines (not mandatory, but very common):

Wave 2 often corrects 50-61.8% (Fibonacci).

Wave 3 is usually 161.8% or 261.8% of wave 1.

Wave 4 often corrects only 38.2% and is longer in duration than wave 2 (principle of alternation: if wave 2 was sharp, wave 4 is flat and vice versa).

Wave 5 is often 61.8% or 100% of wave 1 or ends at the extension of the trend channels.
Correction waves (A-B-C) often follow zigzag (5-3-5), flat (3-3-5) or triangle (3-3-3-3-3) patterns.



A long-term observation by Elliott wave analysts reveals a clear pattern: different analysts usually provide different wave counts.

There is frequent disagreement about whether the market is in wave 3 or 5. Even experienced Elliott analysts often correct their own counts several times, switching back and forth between these two waves.

The system is highly complex and requires years of intensive practice. Beginners almost inevitably produce many miscounts. Even with a sound mastery of Elliott rules and principles, the achievable hit rate of pure Elliott wave analyses is only between 50% and 65%.

In practice, combining Elliott wave theory with other technical indicators or oscillators hardly improves the success rate significantly. No other established method of technical analysis is as susceptible to confirmation bias as Elliott wave theory. Once a count is established, subsequent price movements are almost always interpreted according to the existing pattern.

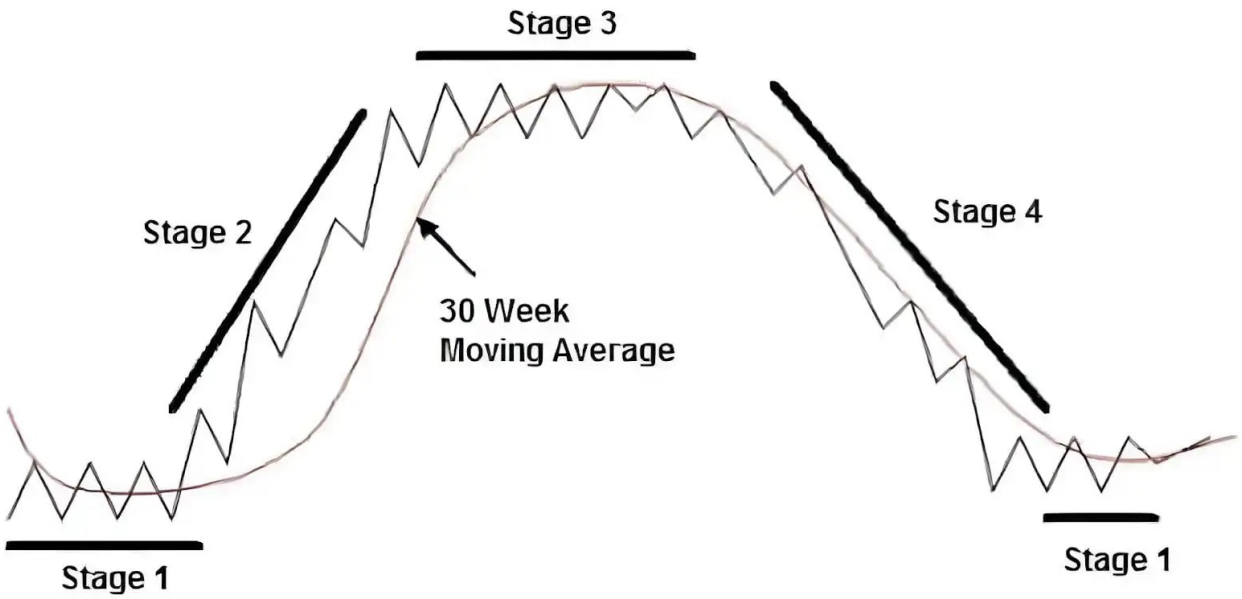
Added to this is the extremely high maintenance effort required. Maintaining an Elliott analysis requires daily or weekly checks and adjustments to the count. There is such a high level of disagreement within the Elliott community for good reason. In retrospect, every count appears correct due to continuous recounts and adjustments - a classic example of hindsight bias. Those who are 100% convinced of Elliott wave theory and present it as an infallible system are often the same people who offer and sell analyses, signals, mentoring programs, and paid courses related to it.

This strong personal conviction often correlates with a commercial interest.

Stage Analysis
Stage analysis, also known as Weinstein stage analysis, is one of the simplest and most effective technical analysis methods for understanding the life cycle of a stock, index, ETF, etc., and using this information to make clear buying and selling decisions.

Stan Weinstein developed it in his classic book Secrets for Profiting in Bull and Bear Markets (1988). This method has stood the test of time and is still used today by many professional traders and investors.

Every stock repeatedly goes through the same 4-stage cycle:



Stage 1:
Accumulation (bottom formation/accumulation):
The price moves sideways within a flat range, often following a long crash. The 30-week simple moving average (SMA) flattens out or rises slightly.

Trading rule: Stay away! It's too risky because the downtrend has not yet been broken.

Stage 2:
Advancing/Markup (Upward Trend/Bull Market Phase).
The price breaks out of the Stage 1 range (breakout above resistance). The 30-week SMA clearly turns upward, and the price usually remains above it.

Trading rule: Buy! The best entry points are at the breakout or during pullbacks to the rising 30-week MA. Hold as long as the price remains above the MA.

Stage 3:
Distribution (distribution/top formation).
The price moves sideways again, often within a range above. The 30-week SMA flattens or begins to fall.

Trading rule: Caution! Sell or reduce positions. Do not wait for the big crash.

Stage 4:
Declining/Markdown (Downward Trend/Bear Market).
The price breaks down out of the Stage 3 range (breakdown below support). The 30-week SMA clearly turns downward, and the price usually remains below it.

Trading rule: Sell/stay away! Do not trade again until Stage 1 reappears.

Stan Weinstein's simple rules:
- Never buy a stock below its falling 30-week MA.
- Only buy in Stage 2 (breakout or pullback in Stage 2).
- Sell as soon as the price falls below the 30-week MA.

Stage analysis uses volume and relative strength as confirmation filters to minimize false signals and identify only the strongest trades.

Volume indicates whether real market participants, especially institutional investors, are behind a price movement.

Stage 1:
Volume is usually low and declining because the panic selling has ended. A sudden spike in volume while prices are falling indicates that the downtrend is not yet over.

Stage 2:
Here, volume must increase significantly - ideally, 50 to 150 percent above average - to show that many buyers are entering the market and that the new uptrend has real momentum. Without this spike in volume, the breakout is often false and should be avoided. However, during a pullback in Stage 2, volume should decline sharply, indicating low selling pressure and a healthy correction. Rising volume during a pullback, on the other hand, is a warning sign.

Stage 3:
Often high volume, but the price is no longer rising. A jump in volume usually accompanies the breakdown in Stage 4, confirming the panic and the real trend reversal.

Relative Strength (RS) measures how a stock is performing compared to the overall market (e.g., the S&P 500). An RS line that is rising or clearly above its own moving average or the zero line indicates leadership and strength.

Stage 1:
RS often stabilizes or turns upward early on, which is an indication that a bottom is approaching.

Stage 2:
A clearly positive and rising RS line is essential. Only stocks that significantly outperform the market have the potential for sustained, substantial growth. A breakout without RS strength is usually short-lived. Throughout Stage 2, the RS should continue to rise, or at least remain high.

A flattening or decline in the RS indicates that momentum is waning and Stage 3 is approaching. In Stages 3 and 4, the RS often breaks down before the price does and is often the first clear sell signal.

The ideal Stage 2 trade occurs when the price is clearly above the rising 30-week moving average (MA), volume spikes on the breakout, and relative strength is strongly positive and trending upward. If any of these three elements are missing, the probability of a successful trade decreases significantly.

The success rate of Stan Weinstein's stage analysis cannot be determined by a single, universally valid percentage. Unlike some chart patterns at Bulkowski, there is no large, public, independent long-term study that has analyzed this method in isolation.

However, a realistic assessment can be derived from available backtests, trader experiences, community discussions, and indirect analyses.

In 55-70% of cases where you enter Stage 2 (breakout or pullback), the trade will not run against you and will bring a moderate profit. In strong bull markets, this success rate can climb to 75-85% because many Stage 2 phases last months or even years.

Why is the rate higher than with other methods?
Stage Analysis is not just a pattern; it's a strong trend filter. You trade almost exclusively in the direction of the primary trend (Stage 2). The 30-week moving average (MA) protects against large losses, and you systematically avoid Stage 4, the most loss-prone phase.

According to Stan Weinstein, Stage Analysis is considered by the trading community to be one of the methods least susceptible to confirmation bias and many other classic psychological traps. This is not because it is "bias-free" - no system is - but rather because its design structurally complicates or even prevents many typical thinking errors.

The reasons why Stage Analysis is psychologically more robust than chart patterns, Elliott waves, or subjective price action approaches are clear.

- There are very clear, objective rules instead of interpretation.

- The 30-week SMA (approximately 150-day MA) serves as a central, mathematically unambiguous filter and an automatic "emotional protection." As soon as the price falls below the MA, sell or reduce significantly.

- There is little room for thoughts like "I still see a bullish pattern" or "This is just a small correction; I'll hold on." Stage analysis minimizes confirmation errors and the need for gray areas and room for interpretation.

Although stage analysis is not immune to psychology, it is structured in a way that minimizes many dangerous biases through simplicity, objectivity, focus on trends, and automatic exit rules. This is why many experienced traders and investors call it "the simplest and best protection against yourself." It has survived among professionals for over 35 years and is repeatedly recommended as a basic strategy, especially for those who recognize that their greatest danger lies in their own thinking, not the market.

For those who want to gain a comprehensive and in-depth understanding of the various methods of classical technical analysis, we recommend the standard work Technical Analysis: Schwager on Futures by Jack D. Schwager.

In over 850 pages, the author explains almost every relevant form of classic chart and technical analysis in a detailed, practical, and critically differentiated manner.

Indicators
As previously mentioned, Fibonacci retracements, the Relative Strength Index (RSI), and the Moving Average Convergence Divergence (MACD) are the most commonly used technical indicators.

The following examination of these three indicators will cover how they work, their theoretical basis, their usefulness, and their limitations in real market environments.

In technical analysis, **Fibonacci** is based on the Fibonacci sequence and its derived ratios. Leonardo Fibonacci described this series of numbers (0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ...) as early as the 13th century, and it occurs frequently in nature (e.g., in the arrangement of petals or the spirals of a snail shell). Traders use percentages derived from the sequence to predict potential support, resistance, and target levels in price movements.

The two most important tools are Fibonacci retracements and extensions. Both are drawn on charts by connecting two significant points of a price movement (usually a low and a high point).

Fibonacci retracements (pullback levels)
These show how far a correction (pullback) in an existing trend typically retraces before the trend continues.

Most important levels (percentages of the previous movement):
- 23.6%
- 38.2%
- 50.0% (not a true Fibonacci ratio, but very often respected)
- 61.8% (the "golden ratio" – the most important level)
- 78.6% (root of 61.8%)
- Sometimes 100% (complete retracement) or 0% (no correction)

Application (simply explained):
In an uptrend: Draw from the low to the high. The retracement levels are potential buying zones (support) where the price could bounce and continue to rise.

In a downtrend: Draw from the high to the low. The levels are potential selling or short zones (resistance).

Most common scenario: The price corrects to 38.2%, 50%, or 61.8% and then reverses back in the direction of the trend.

Fibonacci Extensions (Target Levels / Projections)
These project how far the trend could continue after a correction.

Most important levels: 127.2% and 161.8% (golden ratio – the most popular target)

Application:
After a correction (e.g., after a 61.8% retracement), draw the tool from the low through the high of the previous movement to the end of the correction.

The extensions indicate take-profit targets or possible turning points.

Fibonacci helps identify logical entry (retracement) and exit/target (extension) points based on mathematical proportions and collective market participant psychology. Many traders use the same levels, making it a popular tool. It is one of the most commonly used tools in chart analysis and works best in strong trending markets.

Scientific studies show that Fibonacci levels are statistically significantly more frequently respected than would be expected by chance, but they are only moderately superior to random levels (often by 5-15%). Fibonacci is a probability tool, not a guarantee.

The technical analysis method described in Chapter 5 demonstrates why using Fibonacci retracements and extensions is unnecessary for identifying potential trend reversal points with a higher probability.

The **RSI** and **MACD** are two of the most popular oscillators used in technical analysis. They both help identify momentum, overbought/oversold conditions, and potential trend reversals. Here is a clear, factual explanation of each:

The RSI (Relative Strength Index) measures the strength of a price movement and indicates whether a stock (or index) is overbought or oversold.

Calculation (standard):
14 periods (usually days or weeks)
RSI = 100 – [100 / (1 + RS)]
RS = Average gain over the last 14 periods / Average loss over the last 14 periods

Overbought: RSI > 70 → Price has risen sharply, possible correction (sell signal)

Oversold: RSI < 30 → Price has fallen sharply, possible recovery (buy signal)

In strong trends (trends can remain overbought/oversold for a long time), the RSI is often wrong.

The MACD (Moving Average Convergence Divergence) is a trend-following and momentum indicator that shows the relationship between two exponential moving averages (EMA).

Default setting:
MACD(12, 26, 9)
MACD line = EMA(12) – EMA(26)
Signal line = 9-period EMA of the MACD line
Histogram = MACD line minus signal line

Application:
MACD line crosses signal line from below → buy signal (bullish)

MACD line crosses signal line from above → sell signal (bearish)

MACD above zero → Upward trend (bullish momentum)

MACD below zero → Downward trend (bearish momentum)

Growing bars → Momentum is increasing

Shrinking bars → Momentum is decreasing (often a sign of a reversal)

A key problem with indicators such as RSI, MACD, and Fibonacci levels is that they only work intermittently. They often produce false signals, which can lead to costly mistakes.

Classic example:
A stock can have an RSI value above 70 for days or weeks without a significant correction. In retrospect, there are countless "perfect" signals on every chart. However, in real time, it is extremely difficult to distinguish the right signal from the noise. It's hard to imagine a trader achieving consistent positive expected values using only one of these indicators.

In theory, it would be possible to construct a narrowly defined, multi-stage trading system that incorporates such indicators within a specific filter context (e.g., purchasing only during strong uptrends with particular RSI divergences). In practice, however, this usually renders the indicators superfluous because, if the higher-level trend filter already dictates the direction, the downstream oscillators typically offer little additional information.

The most fundamental question is:
Why study a mathematical derivation of the price when you can observe and analyze the price directly?

The belief that these constructs "predict" the future or provide a decisive advantage over observing the price alone is empirically untenable.

Chart patterns, classic formations, and indicators are ultimately visualizations of potential probability constellations. However, they are often used to construct narrative fantasies and confirmation biases. They primarily serve to structure price movements, not to precisely calculate future prices.

Technical analysis methods tend to become increasingly susceptible to overfitting, subjective interpretation, and psychological distortions as they become more complex. This is precisely where one of the biggest problems lies.

The more complicated the system, the more opportunities there are to retroactively make the data "fit," and the lower the system's real predictive power usually becomes in live trading.

AI Tools
Some market participants, especially newcomers, mistakenly believe that AI tools or conversational AI models, such as ChatGPT, can be used to conduct in-depth analyses of financial markets or reliably predict price movements.

However, these tools are fundamentally unsuitable for analyzing price trends and predicting future price movements for several structural reasons.

The efficient market hypothesis (EMH) states that:
All known information is already included in the price. According to the weak and semi-strong forms of the EMH, the current price reflects all publicly available information, such as historical prices, volume, news, balance sheets, and sentiment. Any new information is priced in almost instantly.
AI models, including machine learning, deep learning, and large language models, are trained almost exclusively on historical data. Therefore, they can only learn and extrapolate patterns from the past. However, as soon as the market receives new, unforeseen information (e.g., geopolitics, interest rate decisions, balance sheet bombs, or black swan events), historical modeling fails. The price adjusts immediately. AI has no chance of predicting this.

Non-Stationary, Chaotic, and Reflexive Markets:
Financial markets are non-stationary, meaning their statistical properties are constantly changing, and chaotic, meaning small changes can have large, unpredictable effects. They are also reflexive, meaning the behavior of market participants (including AI algorithms) influences prices, which then influence behavior. This creates an endless loop that no purely data-based model can accurately

predict. AI is excellent at recognizing correlations but cannot distinguish causality from coincidence.

Random walk character and lack of real predictability:
According to random walk theory (Burton Malkiel et al.), price movements over short to medium time horizons are largely random and unpredictable.

Empirical studies, including more recent ones from 2024 and 2025, consistently show that even the most advanced AI models do not outperform a simple buy-and-hold index consistently over longer periods, especially after deducting transaction costs and taxes.

AI can process numbers and text, but it cannot understand human greed, fear, panic, or geopolitical narratives as humans do. AI excels at finding patterns in past data, quantifying risks, extracting sentiment, and optimizing portfolios. However, it cannot reliably predict future price movements because, by definition, markets are efficient, chaotic, reflexive, and driven by unpredictable external shocks. Ultimately, the market is a competition of information and psychology, and no matter how advanced, no AI can know the future before it happens.

CHAPTER 4

TRADING TOOLS OF THE PROFESSIONALS

Professional market participants use a number of financial instruments, such as options, futures, and certificates. The following section introduces these key trading tools and highlights their specific risks.

Options

An option is a standardized financial derivative that gives the buyer the right, but not the obligation, to purchase or sell a specific asset (e.g., stock, index, or commodity) at a predetermined price (the strike price) before or on a specified expiration date. The buyer pays the seller a premium for this right immediately. This premium represents the consideration for the right granted and is the option buyer's maximum loss.

There are two basic types:

Call option (purchase option)
This gives the holder the right to buy the underlying asset at the strike price.
It is typically used when a rising price is expected.

A put option (sale option)
Gives the holder the right to sell the underlying asset at the strike price.
It is typically used when a falling price is expected.

The buyer of an option is said to be "long" (call or put).
The risk of loss is limited to the amount of the premium paid (max. 100% loss).
There is theoretically unlimited profit potential (for calls) or high profit potential (for puts).

Seller of an option (short call/short put).
Receives the premium immediately as income.
They commit to fulfilling the option if the buyer exercises it.

The risk is theoretically unlimited for short calls and limited to the underlying asset minus the premium for short puts.

The value of an option is largely determined by:
- the current price of the underlying asset
- the distance to the strike price
- the remaining term to maturity
- the implied volatility
- the current interest rate level

Option contracts are not typically used for the physical delivery of the underlying asset. Instead, they are usually closed out before expiration by selling or repurchasing them through a countertrade.

Options are leveraged instruments that enable investors to speculate on price movements, volatility, or time with relatively little capital. However, they also involve considerable risk, especially on the short side, including the potential for total loss of the invested capital or more. Therefore, trading requires sound knowledge of price formation, risk management, and contractual provisions.

Those who cannot consistently profit from stocks should avoid options.

Futures
A futures contract is a standardized, exchange-traded agreement in which the buyer and seller agree to purchase or sell a specific asset at a set price on a specified future date. Unlike options, futures impose a performance obligation on both parties, meaning they are binding transactions.

All contract details, such as contract size, underlying asset quality, expiration dates, and minimum price change/tick size, are precisely specified by the futures exchange (e.g., Eurex, CME, or ICE).

Futures are traded exclusively on regulated futures exchanges. A central clearinghouse (e.g., Eurex Clearing) assumes counterparty risk, so buyers and sellers do not need to know or trust each other.

When entering into a position, only an initial margin, typically 3-12% of the contract value, needs to be deposited. The margin is revalued daily (mark-to-market). In the event of losses, a variation margin or margin call may be required.

The low margin relative to the contract value creates a strong leverage effect. Price movements of just a few percent can multiply the invested equity - both positively and negatively.

Long future: The buyer benefits from rising prices of the underlying asset.
Short future: The seller benefits from falling prices.

Most financial futures (such as indices and interest rates) are settled in cash. The difference between the futures price and the closing settlement price is settled in cash. Physical delivery is possible for commodity futures (raw materials) but occurs in very few cases (less than 2-3%). Most positions are closed out beforehand.

Main uses:

Hedging:
Producers, processors, and exporters use hedging to protect themselves against unfavorable price changes.

Speculation:
Speculation involves targeted betting on price movements with leverage.

Arbitrage and Spread Trading:
Exploiting price differences (e.g., between different expiration months or markets).

Futures are highly liquid, transparent, and efficient instruments with excellent price formation. They offer outstanding opportunities for hedging and speculatively exploiting market movements, but they also carry considerable risk. Due to leverage and margin calls, potential losses can significantly exceed the initial investment. Successful trading requires an in-depth understanding of margin mechanisms, contract specifications, exchange rules, and consistent risk and position management.

CFDs
A CFD (contract for difference) is an over-the-counter agreement between a trader and a CFD broker. The trader does not buy or sell the underlying asset - such as shares, indexes, gold, or currency pairs - but rather places a bet on future price changes. Ultimately, only the difference between the entry and exit prices is settled in cash: positive in the case of a profit and negative in the case of a loss.

The key advantage of CFDs is their high leverage. Traders only need to deposit a fraction of the actual position value as collateral, or margin. In the EU, this is typically between 3.3% and 50%, depending on the asset and applicable regulations. Consequently, even minor price fluctuations can result in substantial profits or losses. Long positions benefit from rising prices, and short positions benefit from falling prices. This means that CFDs can be used in both directions.

Since CFDs are traded over the counter, execution, spread, and financing depend entirely on the respective broker. Reputable providers closely reflect the real market price but usually charge a slightly wider bid-ask spread than the underlying market. If positions are held overnight, daily financing costs (swaps) are incurred. These costs are usually negative for long positions and sometimes positive for short positions.

The risks are correspondingly high.
Due to leverage, the invested capital can be lost quickly. Some brokers even used to require additional margin payments. However, since the 2018 ESMA regulation, negative balance protection has been in place in the EU, preventing accounts from becoming negative. Nevertheless, CFDs are among the riskiest products for private investors. This is why brokers are required to provide clear warnings, such as "CFDs are complex instruments and carry a high risk of losing money quickly."

In summary, CFDs offer simple, flexible, and inexpensive access to almost all markets, even with small accounts, and in both directions. At the same time, due to leverage, financing costs, and counterparty risk, they require disciplined risk management and clear stop-loss rules. Investors should also have a realistic understanding that most private investors lose money with this product in the long term.

Margin
As previously mentioned, a margin account - also referred to as a leverage or securities credit account - is typically necessary for trading the aforementioned derivative financial instruments. The key features of this account type and how it works are explained in more detail below.

A margin account is a special type of securities account with a broker that allows you to trade leveraged products and borrow money (margin credit). Unlike normal cash or securities accounts, margin accounts do not require you to pay the full purchase price of a position with your own money immediately. The broker provides part of the capital as credit.

The central principle is the security deposit (margin) that the trader must provide. Depending on the product, broker, and regulations, this margin is only a fraction of the actual position value. The rest is "borrowed" from the broker.

This creates a leverage effect:
Significantly larger positions can be controlled with little equity capital.

Typical products that require or make heavy use of a margin account:

- CFDs
- Forex (foreign exchange trading)
- Futures
- Options (especially naked short positions)
- Stocks on margin (purchases on credit/short sales)
- Spread betting (in some countries)

Suppose you want to buy $100,000 worth of shares and the broker requires an initial margin of 25%. In this case, you would only need to contribute $25,000 of your own capital. The broker will provide the remaining $75,000 as a loan (margin loan).

If the share price rises by 10%, your position will generate a profit of $10,000. This corresponds to a 40% return on the equity capital invested ($10,000 profit ÷ $25,000 equity capital). However, if the share price falls by 10%, you will incur a loss of $10,000. This corresponds to a 40% loss of the invested equity.

The leverage effect multiplies both profits and losses in relation to the invested equity.

The position is valued mark-to-market daily. If the portfolio's value falls below the maintenance margin threshold, a margin call is issued.

You must then either add more money or reduce/close positions immediately. If the margin falls too far below the threshold, the broker can liquidate your positions at unfavorable prices (stop-out/ forced liquidation).

A margin account is the technical prerequisite for almost all real leverage trading. It enables you to take large market positions with relatively little capital and trade in both directions (long and short). However, it is also extremely risky.

Margin calls, forced liquidations, and the possibility of losing more than the initial investment (unless the broker is in the EU and has negative balance protection) make it one of the most dangerous tools for private investors. Anyone using a margin account should fully understand the broker's margin requirements, leverage, and liquidation rules, and practice strict risk management.

Leveraged Certificates and ETCs
These financial instruments can usually be traded through a standard securities account. Below, you will find a direct comparison of the two products' key characteristics. The comparison is between the UBS Factor Certificate Long (3x) and the WisdomTree NASDAQ 100 3x Daily Leveraged ETC (both of which are based on the NASDAQ-100 Index and have 3x long leverage).

Both products aim to achieve three times the daily performance of the NASDAQ-100 (before costs). They are highly speculative and path-dependent and are designed for short-term investments.

Both products are susceptible to volatility drag in volatile or sideways markets, which is particularly relevant for the volatile NASDAQ-100 (~42%-44% annual volatility).

Both are subject to issuer risk* (total loss possible in the event of insolvency of UBS or WisdomTree).

UBS Factor Certificate Long (3x):

Advantages:
Reset mechanism:
The reset mechanism adjusts the strike price when the adjustable reset barrier is reached, which can delay a knockout and extend the certificate's life in volatile markets. This is useful when the NASDAQ-100 experiences short-term setbacks but rises in the long term.

Disadvantages:
Knock-out risk:
The biggest disadvantage is the possibility of losing everything if the NASDAQ-100 falls to or below the strike price. With 3x leverage, the strike price is farther from the current price than with higher leverage; however, the risk remains, especially in volatile markets like the NASDAQ-100.

Financing costs:
The daily increase in the strike price (for long certificates) due to financing costs (e.g., 1-3% p.a.), reduces the return over longer periods, even if the NASDAQ-100 rises. This is
This is why the leverage (leverage effect) of certificates can diminish over time.

Path dependency:
In sideways markets or when prices fluctuate without a clear upward trend, the value of the certificate can decline significantly due to daily adjustments.

WisdomTree NASDAQ 100 3x Daily Leveraged ETC

Advantages:
There is no knock-out risk because there is no strike price. This means that there is no abrupt expiry event, which makes the ETC more durable than a factor certificate in theory. This is advantageous when the NASDAQ-100 is volatile yet rising in the long term.

Simpler structure:
The absence of a conversion ratio or reset mechanism makes performance more transparent.
directly reflects the 3x performance of the NASDAQ-100 (before fees).

Disadvantages:
Path dependency and volatility loss.
Daily rebalancing can cause high losses in volatile or sideways markets due to a compound interest effect.
The NASDAQ-100's volatility amplifies this effect.

Costs:
The total expense ratio (TER) and rebalancing costs reduce returns, especially over longer periods.

Suitability:
It is slightly better for longer-term holding than the UBS factor certificate because there is no knock-out risk. However, it is not suitable for long-term holding, as volatility, losses, and costs significantly impair performance.

Compared to UBS factor certificates, WisdomTree leveraged ETCs have several advantages. Notably, they have no strike or knock-out risk, which makes them theoretically more durable. They also require less active monitoring because there are no dynamic adjustments, such as reset barriers. This reduces trading costs. Their simple structure, without a strike or reset mechanism, makes them easier to trade than factor certificates, but the risks remain high.

*Issuer risk:
Both UBS factor certificates and WisdomTree ETCs are subject to the credit risk of their respective issuers. In the event of UBS's (for factor certificates) or WisdomTree's (for ETCs) insolvency, there is a risk of total loss of the invested capital, regardless of the performance of the underlying asset. Factor certificates are structured products and ETCs are debt securities; neither are protected as special assets. This risk is particularly relevant since neither UBS nor WisdomTree is completely immune to financial difficulties, despite being established issuers.

Short Selling
Short selling enables investors to profit from falling stock prices by selling securities they don't own at the time of sale. They borrow the relevant shares from an owner, usually an institutional investor, via their broker. Then, they sell the shares immediately on the market and receive the proceeds from the sale. Later, they buy back the same number of shares on the market (ideally at a lower price) and return them to the lender. The difference between the sale price and the repurchase price represents the profit (minus all costs).

The main costs include the borrowing fee for the shares, which varies greatly depending on demand and availability, as well as interest on the margin capital used. If dividends are paid during the short position, the short seller must also pay these to the lender.

The main risk is that the price could rise indefinitely. Unlike long positions, where the maximum loss is limited to the investment, the risk of loss in classic short selling is unlimited. A possible short squeeze makes the position particularly risky. In this scenario, strong purchases (e.g., by coordinated buyers) drive the price up explosively, forcing short sellers to buy back at high prices.

In addition to traditional short selling, there are simpler alternatives for private investors. These include short trading via CFDs (no actual borrowing required), purchasing put options (limited risk), investing in inverse ETFs, and futures trading. In the EU, private investors can directly short sell shares with many brokers, but this is subject to strict transparency and reporting requirements, as well as occasional temporary bans in crisis situations. Naked short selling (selling without prior borrowing) is largely prohibited.

In summary, short selling is an effective hedging or speculating tool on falling prices but requires a high degree of risk awareness, strict risk management, and precise knowledge of cost structures and potential market dynamics because losses can significantly exceed invested capital.

These trading instruments and financial products were not primarily developed to give private or professional investors a structural advantage. From the perspective of issuers, brokers, and exchanges, their actual economic purpose is to generate fees, spreads, financing costs, option premiums, and other transaction charges. In this ecosystem, users (especially active private investors) are the product.

Additionally, almost all of these instruments are complex in their own way, whether in terms of pricing, margin mechanisms, knock-out risks, leverage, expiration dates, or basis risks.
As previously mentioned, the more complex a method or financial instrument is, the more potential sources of error, misunderstandings, and systematic disadvantages it creates for the average user.

Stop Loss
A stop loss order is an automated sell order that traders place with their brokers to limit losses from open positions. Once the price of the underlying asset reaches or falls below the predetermined stop price, the order is triggered, and the position is closed, either partially or entirely, at the next available market price.

The most common form is the stop market order.
Reaching the stop price triggers a market order, which is executed at the currently available price - though high volatility or gaps can cause deviation (slippage) from the desired price. With a stop-limit order, a limit order is activated instead. This allows for better price control, but there is a risk that the order will not be executed at all in the event of large price gaps.

An important development is the trailing stop, also known as the trailing stop-loss.
The stop price automatically adjusts to favorable price movements, securing profits while protecting against setbacks. Some brokers also offer guaranteed stop-loss orders, which ensure execution at the specified price, typically for an additional fee.

The primary purpose of a stop-loss order is disciplined risk management.
It transforms the potential for unlimited losses (e.g., in short positions, futures, or leveraged products) into predictable, limited risk. It also prevents emotional misjudgments, such as holding onto losing positions in the hope of recovery. At the same time, it ensures consistent adherence to risk rules, such as limiting capital loss to 2-7% per trade.

However, significant limitations exist, including slippage in volatile or illiquid markets, targeted price movements against frequent stop levels (stop hunting), and premature triggering due to normal market corrections. In the case of overnight or weekend gaps, the actual execution price may be significantly below the stop price.

In summary, the stop-loss order is a key instrument of professional trading that promotes discipline, loss control, and psychological relief. However, it does not offer absolute protection and should be used in conjunction with realistic position sizing, volatility considerations, and complementary order types, if necessary, to maximize its effectiveness.

Although stop-loss orders are a key risk management tool, they have several disadvantages and risks that can limit their effectiveness.

The most prominent risk is slippage. In volatile markets, during news events, at market opening or closing, and with illiquid securities, orders are often executed at prices that are significantly worse than the specified stop price. The actual loss can then exceed the planned risk by 20-50% or more in extreme cases, such as a flash crash or a gap.

A related and very common problem is overnight or weekend price gaps. If the price jumps sharply after the market closes or over the weekend (due to a profit warning, takeover, or geopolitical events, for example), the stop order will be executed at the next available price, which is often well below the stop price. In this case, there is virtually no protection against the gap itself.

Premature stopping out due to normal corrections is another common disadvantage. Many traders set their stops too tightly, causing normal pullbacks or noise to close their positions before the actual trend continues. This results in a high percentage of losing trades and undermines long-term profitable strategies.

With stop-limit orders, there is a risk of non-execution. If the limit price is not reached, or if it is only partially reached, the position remains open, and the loss can increase significantly, especially during rapid downward movements.

Guaranteed stop-loss orders, offered by some CFD/forex brokers, eliminate slippage and gap risk but usually incur a significantly higher fee, often 0.5-3% extra per trade, and are not available from all brokers or markets.

Additionally, having too many visible stop orders in an account, especially with smaller brokers, can pose a counterparty risk.

The broker or market maker knows the exact stop levels and can theoretically trade against them in illiquid markets or in the absence of regulation. Professional market participants, such as market makers, algorithms of large institutions, and high-frequency traders, often know the clusters of stop orders (round numbers, previous lows/highs, Fibonacci levels, etc.). They push the price to these

levels, triggering masses of stops. Then, they often reverse immediately. The trader is "thrown out of the market," only to see the price move in the originally expected direction afterward.

In summary, stop-loss orders protect against emotional misjudgments and offer a clear risk limit, but they do not provide perfect or guaranteed protection. The biggest practical disadvantages are slippage, gaps, stop hunting, premature triggering due to noise, and potential non-execution. Those who rely exclusively on tight stop-loss orders usually significantly underestimate real market mechanisms and realization risks.

CHAPTER 5

STUDY THE PRICE

"You don't have to participate in every market movement. On the contrary, you shouldn't even try. Be a precise opportunist. Be selective and choose your entry points very carefully. Wait until the odds are in your favor before you act."

(Mark Minervini)

Moving averages are not chart patterns or formations in the strict sense. Rather, they are a calculation representing the average price of a stock over a defined period of time. This calculation is visualized as a smoothed line on the chart. The most commonly used moving averages are the 50-, 100-, and 200-day averages.

As a lagging indicator, the moving average always lags behind current price developments, as it is based exclusively on past price data. Nevertheless, these lines act as dynamic support or resistance levels at which the price repeatedly bounces off or breaks through.

Their effect is essentially based on two factors.

Self-fulfilling prophecy:
A large number of market participants observe and trade at the same levels (e.g., 50-, 100-, or 200-day lines), intensifying buying and selling at these points.

Mean reversion and trend confirmation:
A stock that has significantly deviated from its moving average is often overbought or oversold and tends to revert to the mean, at least temporarily.

Many traders and investors also use moving averages as simple trend filters.

If the price is above the 50- or 200-day average, the stock is considered to be in an uptrend and is still a good buy. Conversely, if the price falls below this level, it is often seen as a sign of a downtrend and a reason to sell.

Displaying Moving Averages in Charts

Chart software adds up the closing prices of the last 50 trading days and divides the sum by 50 to calculate the 50-day simple moving average (SMA) in a daily chart. The result is plotted as a point on the line. Since the oldest price is dropped and a new one is added daily, the line continuously shifts—smoothing the price trend and serving as an objective reference value.

The same principle is applied to the weekly chart, only with different data. The SMA calculates the average of the closing prices of the last 50 weeks. This results in a significantly slower, longer-term reference line.

The EMA uses closing prices from selected periods (e.g., 50, 100, or 200) but gives more weight to recent prices. Consequently, it reacts more quickly to current price movements, positioning itself slightly above the SMA in rising markets and slightly below it in falling markets.

In essence, combinations of 50-day and 200-day simple moving averages (SMAs) or exponential moving averages (EMAs) produce clear, objective buy and sell signals. These signals are often generated earlier and are more comprehensible than those produced by other analytical methods.

Certain moving average crossovers have proven to be relatively reliable. The most well-known examples are the golden cross, which occurs when the 50-day average crosses the 200-day average from below, and the death cross, which is the reverse of the golden cross.

However, these are purely lagging indicators that merely confirm and visualize a trend change that has already occurred. They are not mystical patterns that require subjective interpretation; they are numerically defined and quantitatively objective. This characteristic makes them significantly more reliable and credible than other forms of technical analysis, which depend heavily on subjective interpretation.

The chart above illustrates the 50-day simple moving average (SMA) in green and the 200-day SMA in red.

The green circle highlights a death cross that correctly indicated the start of the bear market in 2022. It is also evident that the two SMA lines would have signaled the beginning of the downtrend much earlier than the classic death cross.

The red circle shows another death cross that occurred at the lowest point of the market. In this case, it is particularly evident that the classic death cross signal arrived far too late. It is also confirmed that the position of the 50- and 200-day SMAs relative to each other would have made the downtrend apparent much earlier. Anyone who had waited exclusively for the death cross would have likely exited too late, suffering avoidable losses instead of waiting out the correction.

The yellow circle shows a classic golden cross after the end of a bear market. To the right of the red circle is another golden cross that occurred after a rapid but sharp correction. Both events would have been excellent entry opportunities.

The Golden Cross and the Death Cross
These are two well-known technical signals in chart analysis based on the interaction of two moving averages.

Golden Cross - Bullish Signal
The 50-day line crosses above the 200-day line.
This indicates that the short-term trend is stronger than the long-term trend. The market shifts from a downward (or sideways) trend to an upward trend.

Death Cross - Bearish Signal
The 50-day line crosses the 200-day line from top to bottom.
The short-term trend becomes weaker than the long-term trend. The market shifts to a downward trend.

A death cross often signals market corrections with considerable delay, typically only at the end of a short-term correction phase. The golden cross at the 50/200 SMA is a more reliable signal, however.

The goal is not to trade every short-term upward or downward movement, but rather to capture major, relevant trend reversals.

Both patterns, the golden and death crosses, occur not only in the classic 50/200 period combination but also with other period lengths. They work with all types of two moving averages.

History of the Simple Moving Average (SMA)
The SMA is one of the oldest and most fundamental tools in technical analysis. It is used to smooth price data and identify trends. This method has evolved over the past century and remains a central component of trading strategies.

Its statistical origins can be traced back to the early 20th century.
The mathematical foundations of moving averages can be traced back to statistical methods for data smoothing that were initially unrelated to financial markets. In 1901, British statistician R. H. Hooker developed a formula for "instantaneous averages" that smoothed data points without using the term "moving average." This technique was used in time series analysis to mitigate short-term fluctuations and highlight long-term trends. In 1909, G. U. Yule coined the term "moving averages" in the Journal of the Royal Statistical Society while describing Hooker's work. The term was popularized further in 1912 by W. I. King's book, Elements of Statistical Method, and it became established in statistics.

In the 1920s, the method was further developed in stochastic processes through the work of Yule and Eugen Slutsky. This development culminated in Herman Wold's "process of moving average" in 1938. These early applications were primarily used to analyze time series data in fields such as economics and meteorology.

The Transition to Technical Analysis in Financial Markets (1920s–1930s)
The application of moving averages to stock prices and other financial data began in the early 20th century, coinciding with the development of technical analysis as a discipline. In the 1920s, the simple moving average (SMA) was used to identify market trends in the context of Dow Theory, named after its founder, Charles H. Dow, who was also the founder of the Wall Street Journal and a pioneer of trend analysis. Although Dow died in 1902, his successors, including William P. Hamilton and Robert Rhea, continued his work and incorporated moving averages into the study of stock indices.

One of the earliest documented applications of technical analysis dates back to the 1930s. Richard Schabacker, an influential analyst, pioneered using moving averages to analyze stock prices. In

1935, Harold M. Gartley published a book titled Profits in the Stock Market, in which he detailed trading rules based on the SMA. These rules included buying stocks when the price rises above the moving average and selling when it falls below it. Gartley's work is considered a milestone because it established the SMA as an indicator of trend reversals. At that time, such calculations were performed manually due to the lack of computers.

Some sources loosely associate the concept of price averaging with 18th century Japanese rice traders such as Munehisa Homma, who developed candlestick charts and analyzed market trends. However, this primarily refers to general trend observation and not explicitly to the SMA method.

Further Development and Variants (1940s–1960s)
In the following decades, variants of the SMA were developed to increase its sensitivity.
During World War II, Robert Goodell Brown developed exponential smoothing (a weighted form) for military applications. This method was later adapted for financial analysis. In the early 1960s, rocket scientist P. N. (Pete) Haurlan systematically applied exponential moving averages (EMAs) to stock prices for the first time under the name "trend values." This marked the transition to computer-assisted calculations, as Haurlan adopted techniques from aviation.

With the advent of computers in the 1970s, the SMA became easier to calculate and was widely adopted by trading software.

History of the Exponential Moving Average (EMA)
The EMA is an improvement on the SMA. Unlike the SMA, which assigns equal weight to all data points, the EMA assigns more weight to recent prices. This makes the EMA more sensitive to current market changes. The EMA is used in technical analysis to identify trends, smooth price data, and generate trading signals. The EMA is based on the concept of exponential smoothing and originated in statistics before being applied to financial markets.

Statistical Origins (1950s)
The EMA is derived from the exponential smoothing method, which was initially developed for forecasting and time series analysis rather than for financial markets specifically.
In the 1950s, Robert Goodell Brown and Charles Holt independently developed exponential smoothing. Brown applied it to inventory control and published Smoothing, Forecasting, and Prediction of Discrete Time Series in 1959, in which he described the method in detail. In 1957, Holt published the essay "Forecasting Seasonals and Trends by Exponentially Weighted Moving Averages," which focused on forecasts using exponentially weighted moving averages.

This technique built on earlier ideas about moving averages. The exponential variant allows for more dynamic weighting, with older data decreasing exponentially.
Exponential smoothing was originally used in areas such as production planning and military logistics to improve forecasts (e.g., during World War II and thereafter).

The Transition to Technical Analysis in Financial Markets
The application of exponential moving averages (EMAs) to stock prices and other financial data began in the early 1960s when this engineering method was adopted by traders. As computers became more prevalent in the 1970s, EMA was integrated into trading software and became a standard indicator. Haurlan's ideas inspired further developments, such as the McClellan Oscillator and the Summation Index by Sherman and Marian McClellan. These developments applied exponential smoothing to advance-decline data.

Today, EMAs are used in strategies such as EMA ribbons (multiple EMAs, e.g., 10-, 20-, or 30-day), crossover signals (e.g., EMA 9 and EMA 21), and combinations thereof.

EMAs are particularly effective in trending markets because they react more quickly to price changes than SMAs do. However, they can generate more false signals in sideways markets.

Variants of Moving Averages
Simple moving averages (SMAs) are often referred to as MAs.

SMA and DMA
A DMA is not an indicator in its own right. Rather, it is a normal moving average (usually an SMA with a period of 200) that is shifted to the right by a certain number of days, typically 20 to 50.

The purpose of the shift is to ensure that the line does not lie at the theoretical point but rather at the point where the price often bounces or reverses in reality. For this reason, the 200-day DMA (+40 or +42) is considered the "true" long-term support or resistance line for the S&P 500 and many stocks.

SMA and WMA
SMA (simple moving average): Each day within the calculation period is given equal weight. This results in a line that is particularly smooth and heavily smoothed, with a comparatively sluggish response to price changes.

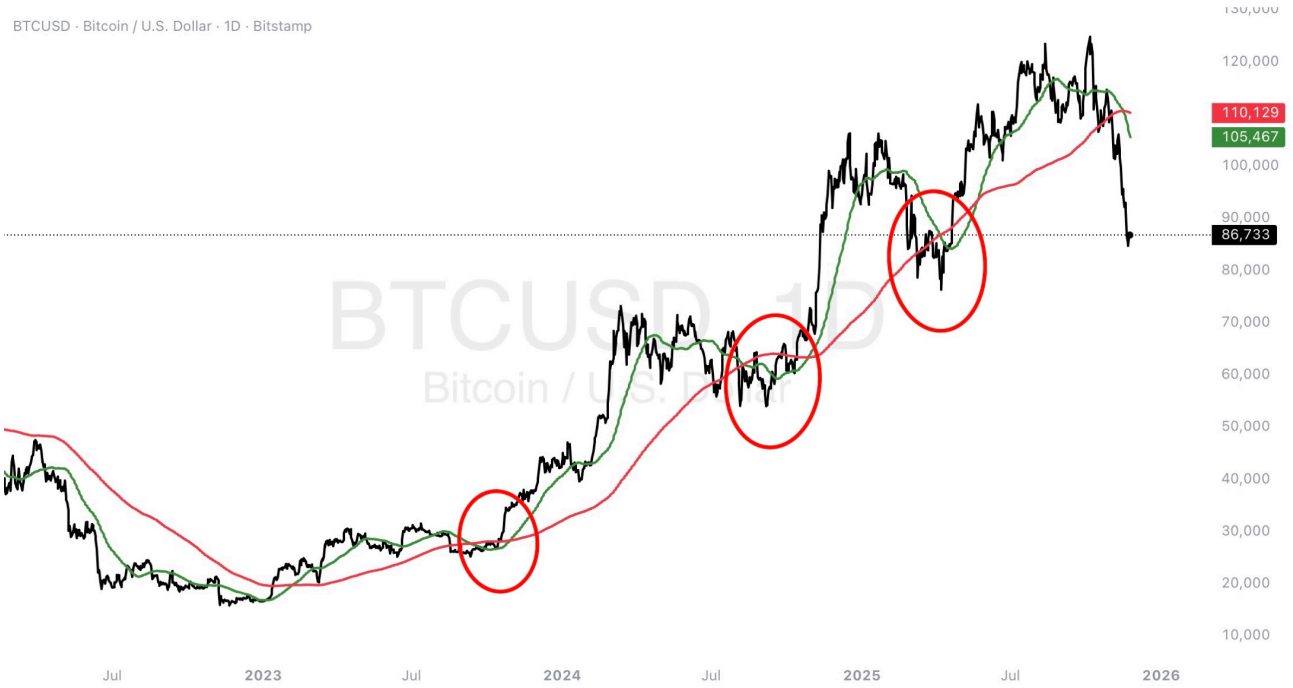
WMA (Weighted Moving Average): More recent price data is given higher, linearly increasing weight. Therefore, the indicator reacts faster to current market movements than the SMA but remains less aggressive and volatile than the exponential moving average (EMA).

Only a few traders deliberately use the WMA because they are looking for a medium degree of reaction between the SMA and the EMA.

The 20- and 40-week SMAs are practically the "smoothed, reliable version" of the 50- and 200-day SMAs. They show almost the same information but react more calmly and generate fewer false signals.

In practice, traders predominantly use the SMA (especially the 50-, 100-, and 200-day SMAs) and the EMA; these two variants are therefore clearly preferable.

Death Cross Bitcoin
In highly volatile markets such as Bitcoin, a Death Cross (50/200) can also paradoxically mark the end of a minor correction or sideways phase. This signals that the bottom has been reached. As the following chart shows, this is often followed by strong upward movements within a relatively short period of time.



The only information that can be objectively and unequivocally obtained from a chart is the current price, its moving averages, and the historical development of these values. Study the 50/200 SMA and 50/200 EMA lines on the daily chart, paying attention to the mentioned patterns.

With a little attention, you will notice that, despite the occasional false signal, these lines do not usually cause major losses. Instead, they typically provide a new trading opportunity shortly thereafter, which is far more reliable than any other technique.

Pay attention to the market structure. When the market suffers a sharp decline, significant technical damage often occurs. This cannot be remedied by a one-day recovery. First, the price must recover and close above the 50-day average for several days.

Focus exclusively on the major structural market phases.
Avoid attempting to actively trade minor corrections or re-enter prematurely in the event of false breakouts in bear markets.

Having a rough overview of the current economic cycle, relevant political risks, and the prevailing market sentiment can be helpful. However, do not let yourself be influenced by short-term narratives or media reports, and consciously avoid confirmation bias. Use the daily chart (1D) for current analysis and decision-making. The weekly chart (1W) is also useful for long-term historical research and assessing large trends.

Stage Analysis with 9 EMA, 21 EMA, and 50 SMA
As mentioned in Chapter 3, Stan Weinstein's stage analysis is the simplest and most reliable method for recognizing an uptrend (Stage 2) in a stock chart.

The 9 EMA, 21 EMA, and 50 SMA indicators practically replace the entire Weinstein stage analysis and are faster and more precise for determining entry points in weekly charts.

9 EMA	Short-term trend ("trigger")
21 EMA	Medium-term trend (the "heart" of Stage 2)
50 SMA	Long-term trend & support

The 4 phases
Stage 1:
9 - 21 - 50 mixed or slightly declining
Price criss-crossing - sideways, flat or slightly declining

Stage 2:
9 EMA > 21 EMA > 50 SMA (clearly separated, all pointing upwards)
Price well above all 3 is a clear uptrend
Pullbacks at 21 and 50

Stage 3:
9 and 21 repeatedly cross above/below 50 SMA
Price around 50 SMA this is the distribution phase
Volatile, often rounded top

Stage 4:
9 EMA < 21 EMA < 50 SMA (clearly separated, all pointing downwards)
Price significantly below all 3
Clear downward trend

If you only look at this sequence, you can immediately recognize the stage - without volume or other indicators.

The strongest buy signals
(Stage 1 → Stage 2 transition)

Golden Cross 9/21 + above 50
9 EMA crosses 21 EMA from below and both are already above the 50 SMA
(~85%)

21 EMA turns upward and 9 EMA crosses above the turning point
Earliest signal - often 1-3 weeks before the 50 SMA break
(~80%)

Pullback to the 21 EMA in a new uptrend
Stock already in Stage 2, retreats to the 21 EMA (buy)
(~90%)

50 SMA turns upward
Latest but reliable signal (Weinstein equivalent)
(~95%)

Practical rule (works for 95% of all big winners over the past 20 years)
Buy exactly when:

1. 9 EMA > 21 EMA > 50 SMA
2. All three lines are pointing upwards (rising slope)
3. The price is above the 21 EMA

This is the core of Stage 2 as long as these three points are met.

The weekly chart of Palantir Technologies' shares below illustrates the above-described method. Following the breakout in Stage 2 in May 2023, the share price increased by approximately 2,600% and reached a cyclical high in November 2025.

9 EMA = Turquoise / 21 EMA = Pink / 50 SMA = Green

As the chart above shows, the stock experienced several major corrections during the mentioned period, some of which were around 50%. The daily chart is useful for predicting such corrections and overarching trend reversals. The following rule applies:

1W (weekly): Main direction.
This chart should always be observed first by looking back over one to two years to understand a stock's behavior. It also serves to assess the different stages.

1D (daily): Trading planning.
The daily chart is used to plan entries more accurately, identify corrections earlier, and find new entries after interim corrections.

The upper daily chart (1D) of Palantir Technologies' shares illustrates the benefits of daily analysis. Notably, the death cross of the 9- and 21-day EMAs usually occurred close to or at the low point of the recent downward phases.

Exiting based on this technical signal would have typically occurred at unfavorable times, often shortly before or at the turning point upwards, resulting in suboptimal performance.

Currently, however, neither the further price development nor the exact turning point upward can be reliably predicted. For this reason, protecting the invested capital takes priority in such situations. It usually makes more sense to close or significantly reduce the position and wait for a clear entry signal to re-enter the market under improved risk/return conditions.

The most dangerous illusion in the stock market is thinking that you understand it.

No analyst, economist, or trader truly understands it. We create stories to make the chaos more manageable. The price is the radically honest alternative.

It requires no explanation. Only observation is required.

Sell signals (Stage 2 → Stage 3/4)

9 EMA crosses 21 EMA from above → exit immediately or reduce significantly

21 EMA crosses 50 SMA from above → end of Stage 2, sell completely

Price closes below 50 SMA → Stage 4 has begun

Two consecutive weeks with > 12-15% loss

The sell signals described above should be used primarily for stage analysis in the weekly chart (1W). However, these signals do not lose their fundamental validity in the daily chart (1D), as the following Tesla share example shows. These signals can also provide valuable daily information and support decision-making.

The weekly chart of Tesla stock illustrates the advantages of regular and disciplined trading.

There are two key advantages.

Capital protection:
By promptly responding to clear signals of technical weakness or trend reversal in the weekly chart, investors can protect the capital they've generated from major drawdowns.

Improved returns:
Avoiding prolonged sideways or downward phases and re-entering the market when new upward signals are confirmed can lead to significantly higher long-term cumulative returns than a pure buy-and-hold approach.

The daily chart (1D) illustrates two key characteristics of this time horizon.

First, it generally generates buy and sell signals earlier than the weekly chart, making potential entry or exit opportunities visible sooner. However, this higher sensitivity also leads to a significantly higher number of false signals.

For example, between July 2023 and the end of 2024, there were repeated short-term but ultimately unsustainable signals that would have led to frequent incorrect decisions if strictly followed.

For this reason, during such market phases, it is important to broaden one's view and not just look at the individual stock in isolation. Instead, the following levels should be systematically observed in parallel:

- The overall market (e.g., S&P 500 and NASDAQ 100)
- The relevant sector or industry group
- The weekly chart for the respective security (overarching trend and stage transitions)

If you have any doubts about whether the current situation offers a promising risk-reward ratio, remember this simple but crucial rule:

Wait and see. Disciplined restraint in gray areas protects capital much more effectively than premature entry.

When entering the market based on false signals, consistent action is crucial.

As soon as a signal is identified as false, exit immediately and with discipline. Any delay or hope for later recovery usually increases the resulting loss, undermining long-term capital preservation and psychological stability. Timely and disciplined exits usually limit losses to a minimum, especially compared to the significantly higher profits that can be achieved with successful trend reversals. This asymmetric risk-return effect is one of the key advantages of the rule-based, trend- and stage-oriented approach.

Small, controlled losses from false signals are offset by full participation in large, sustained upward movements.

For beginners especially, it is advisable to consciously and consistently focus on the weekly chart (1W) in the initial phase, particularly when searching for solid, high-quality entry signals.

The weekly chart filters out short-term noise and false signals more effectively, providing a clearer picture of the overall trend and stage development.

Through routine, disciplined work with this time horizon - i.e., regular chart study, consistent rule application, and real market experience gathering - one can develop the ability to classify frequent false breakouts in the daily chart (1D) and minimize associated risk.

Those who build discipline, reliability, and pattern recognition on a weekly basis first lay the most stable foundation for safely and advantageously using shorter time frames later.

Experienced professionals - including many participants in the United States Investing Championship - use this method, sometimes with slight modifications, and often achieve exceptional annual returns ranging from 200% to over 800%.

Some traders prefer 10- and 20-day simple moving averages (SMAs) to 9- and 21-day exponential moving averages (EMAs). This is a matter of personal preference and does not substantially change the underlying concept.

You may want to compare the two variants directly to find out which suits you better.

I prefer the variant explained above.

Profit Taking
To secure unrealized profits, traders use various proven methods.

Many sell one-third or one-half of their position as soon as they reach a profit margin of 20% to 50%, then allow the rest to continue running until a clear sell signal appears.

Another common method is to sell one-third of the position at +50%, another third at +100%, and hold the rest until the final exit signal appears.

Another common method is to halve the position once a 100% return has been achieved. The remaining portion continues running until a sell signal appears.

Some traders refrain from taking profits prematurely and hold the entire position until the defined sell signal appears.
The appropriate profit-taking method depends on individual factors.

- Personal risk tolerance
- Investment and time horizon
- Current market and overall market phase
- Discipline and emotional stability

Regardless of the option chosen, one thing is crucial:
You should establish a clear, predetermined rule and adhere to it consistently. Depending on the experience gained and verifiable results, the profit-taking rule can, of course, be adjusted.

However, the following is important:
If the new rule results in higher realized losses or significantly lower cumulative profits, it is advisable to return to the original, proven rule.

Changes should be based exclusively on data, not emotion or situation. Sticking to a rule once it has been made, even if it seems temporarily "boring" or "too defensive," is one of the most crucial factors for success.

Frequently changing methods driven by emotional impressions, short-term market developments, or pressure to achieve results usually leads to inconsistency, poorer performance, and increased stress. The strength of a rule-based approach lies in its consistent implementation across many trades and market cycles.

If you expect to earn annual profits of 100% or more in a short amount of time using this method, I'm afraid I must disappoint you.

Even when using a solid technical approach, sustainable, repeatable, and above all, risk-adjusted returns require a well-thought-out, individual portfolio and trading strategy precisely tailored to the following factors:

- Your personal experience and confidence in the process
- Your actual risk tolerance and psychological resilience
- Your available time for analysis and decision-making
- Your capital size and liquidity needs
- The current market phase

Without a strategic framework, even the most promising method is ultimately just a tool and does not guarantee long-term success.

The art of professional trading does not primarily lie in searching for the perfect signal, but rather in consistently implementing a rule-based system that suits you and that you can adhere to, even during difficult market phases.

CHAPTER 6

DEVELOP YOUR OWN PORTFOLIO AND TRADING STRATEGY

Just as there are many methods of analyzing markets, stocks, cryptocurrencies, and commodities, there are also many proven portfolio and trading strategies.

Some traders who hold positions for only a few days (day or swing trading) invest only 1-2% of their total capital per trade.

They choose this very conservative position size strategy primarily for the following reasons:

- It significantly minimizes risk per trade and protects the portfolio from substantial losses in the event of a series of losing trades.

- It enables a large number of parallel or consecutive trades without any single trade substantially endangering the total capital.

However, due to costs, this option is only profitable for deposits of around $50,000 to $100,000. Otherwise, order fees, spreads, and financing costs would consume a large portion of the expected profits.

This strategy is effective only for disciplined day traders who actively buy and sell daily, spend several hours a day observing the market intensively, analyzing charts, and executing orders. These traders must also have a high level of process discipline, quick decision-making skills, and emotional stability.

For most private investors who are not fully involved in the markets on a daily basis and have limited time, this extremely risky, costly, and time-consuming option is generally neither practical nor superior in the long term.

On the other hand, position traders generally hold their positions for significantly longer periods - typically weeks to months and, in many cases, several years.

This form of active stock market trading involves very different approaches to position sizes, risk distribution, and gradual position building. However, most experienced position traders and long-term investors agree on one key point.

A single position should never account for more than 25% of the total available capital.

This upper limit spreads cluster risk and ensures that, even in the event of a total loss of a position (due to insolvency, delisting, or extreme market events), the portfolio remains viable and retains the ability to act in the long term.

It is advisable to limit the number of positions in the portfolio to a maximum of 20 securities.

In practice, a higher number often leads to a loss of oversight of each position's individual performance, a decline in monitoring quality, and an increase in emotional or irregular decision-making.

At the same time, portfolio diversification should be both quantitative and qualitative.

Whether there are five, ten, or twenty positions, they should be spread across different sectors and industries. This type of diversification reduces cluster risk, mitigates the effects of industry-specific setbacks, and increases the portfolio's overall robustness against one-sided market developments or sector rotations.

Position traders and long-term investors typically don't open large positions in one step. When a clear buy signal occurs, only a portion of the planned total position size - usually one-third or one-half - is initially entered. Only after the upward trend is confirmed is the position gradually increased with one or two additional tranches.

This staggered approach offers several advantages:

- Reduction of entry risk in the event of a false signal or short-term pullback
- Psychological relief, since not all capital is immediately exposed to the market.
- Preservation of liquidity reserves for potential additional purchases in the event of temporary setbacks.

The exact number and size of positions and tranches depends on individual risk tolerance, the volatility of the security, and the strength of the overall trend.

Long-term investors who follow the classic buy-and-hold strategy usually hold their investments for several years, or sometimes even decades. They base their investment decisions primarily - and often exclusively - on a thorough fundamental analysis of the company. Short-term price fluctuations, technical signals, and cyclical market developments play a minor role, if any, in this approach. The focus is on the company's long-term value creation and the associated increase in intrinsic value over time.

As the example of Tesla shares in the previous chapter shows, this type of portfolio strategy often requires sitting out longer periods of correction and consolidation for individual stocks. During these periods, substantial unrealized losses can arise, sometimes lasting several years, even though the capital invested only shrinks temporarily.

These temporary declines in capital can only be offset, and as a rule, exceeded, through subsequent, often very strong recoveries and upward movements. This approach therefore requires high frustration tolerance, a long-term perspective, and the conviction that the company's intrinsic value will be maintained and ultimately reflected in the share price.

Based on my many years of experience in the market, I have found that position trading is the most profitable and stable approach in the medium and long term. This impression is supported by the charts presented in Chapter 5.

The largest cumulative profits were not generated by frequent short-term trading or by passively sitting out longer correction and consolidation phases. Rather, the decisive factor was consistently and disciplinedly capitalizing on sustainable upward trends lasting from several weeks to several years. The ability to take full advantage of large, strong trends while acting promptly when clear signs of weakness or trend reversals appear has proven to be the most profitable factor in the medium and long term.
Regardless of the specific trading or investment strategy you choose, the following principle applies:

Capital preservation takes precedence over return optimization.

(A loss of 50% of the invested capital requires a subsequent gain of 100% to return to the starting point. With even greater losses, it becomes more difficult and time-consuming to recover.)

In retrospect, it is almost always possible to identify an alternative approach that would have theoretically achieved a higher return. However, this does not mean the chosen strategy was necessarily wrong.

In most cases, the supposedly better option would have required accepting significantly more risk, whether through larger position sizes, holding on longer during weak phases, or ignoring clear warning signs.

Therefore, such retrospective "optimization" is not a valid measure of the quality of the original decision.

More important is whether the chosen method was implemented consistently and in a rule-based, risk-aware manner and whether it was appropriate for one's risk profile and the real market conditions at the time of the decision.

No matter how well a strategy has performed in the past, no matter how clear and rule-compliant a buy signal appears, and no matter how favorable the overall market situation, sector strength, or fundamentals seem,

There is no such thing as risk-free securities trading.

Every position, regardless of preparation and apparent evidence, carries residual risk that can never be completely eliminated.

This is precisely why consistent capital protection, strict adherence to defined risk rules, and acceptance of small, controlled losses are the only reliable ways to stay in the game long term and take advantage of the markets' asymmetric opportunities.

Of course, your assets will fluctuate, but if you apply the right approach, you will not incur major losses. The most important aspect of your strategy is probably aligning it with your personality and risk tolerance. Don't just follow what's currently popular; analyze the market and yourself critically, and develop your own portfolio and trading strategy.

Statistically speaking, private investors tend to achieve the best risk-adjusted returns in the long term by investing consistently and cost-effectively in broadly diversified index funds.

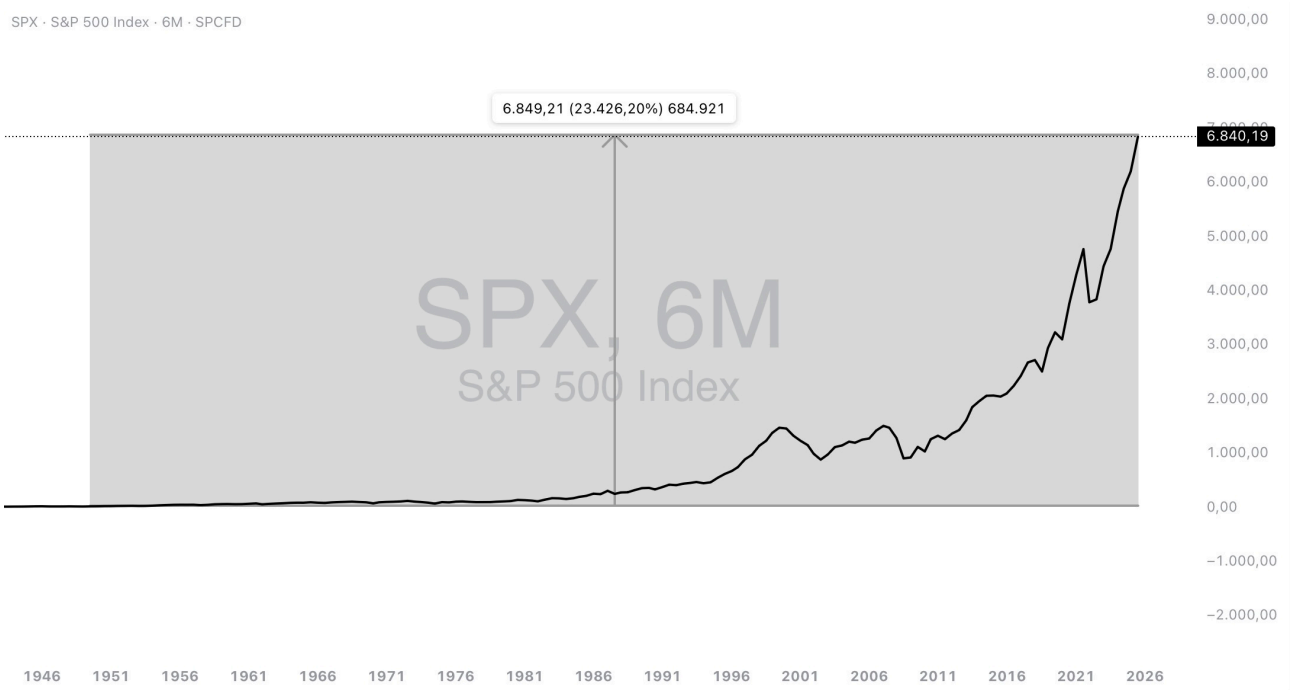
Numerous long-term studies support this finding, including those by Vanguard, Morningstar, and academics. These studies show that the majority of active strategies, particularly frequent rebalancing, do not outperform simple, passive index investments consistently after deducting costs, taxes, and behavioral errors.

Interestingly, this reality is also reflected in the practices of institutional investors.

Many portfolios of professionally managed hedge funds and family offices regularly include significant proportions of ETFs, particularly S&P 500 and global stock index ETFs, as well as selected sector and industry ETFs. Index products offer a cost-efficient, transparent, and liquid way to participate in the long-term growth of markets.

From June 1949 to November 3, 2025, the S&P 500 achieved a total return (including reinvested dividends) of approximately 542,000%. This calculation is based on historical annual returns. The

returns are adjusted for the start in June 1949 and the partial year of 2025. An initial investment of $100 would have grown to approximately $542,100. The pure price gain is approximately 2,350%, as shown in the following chart.



A clear trend has emerged among private investors in recent years due to historically proven solid real returns over long periods of time. Many investors regularly (usually monthly) contribute to low-cost index funds through savings plans to build long-term assets, save for retirement, and achieve other financial goals.

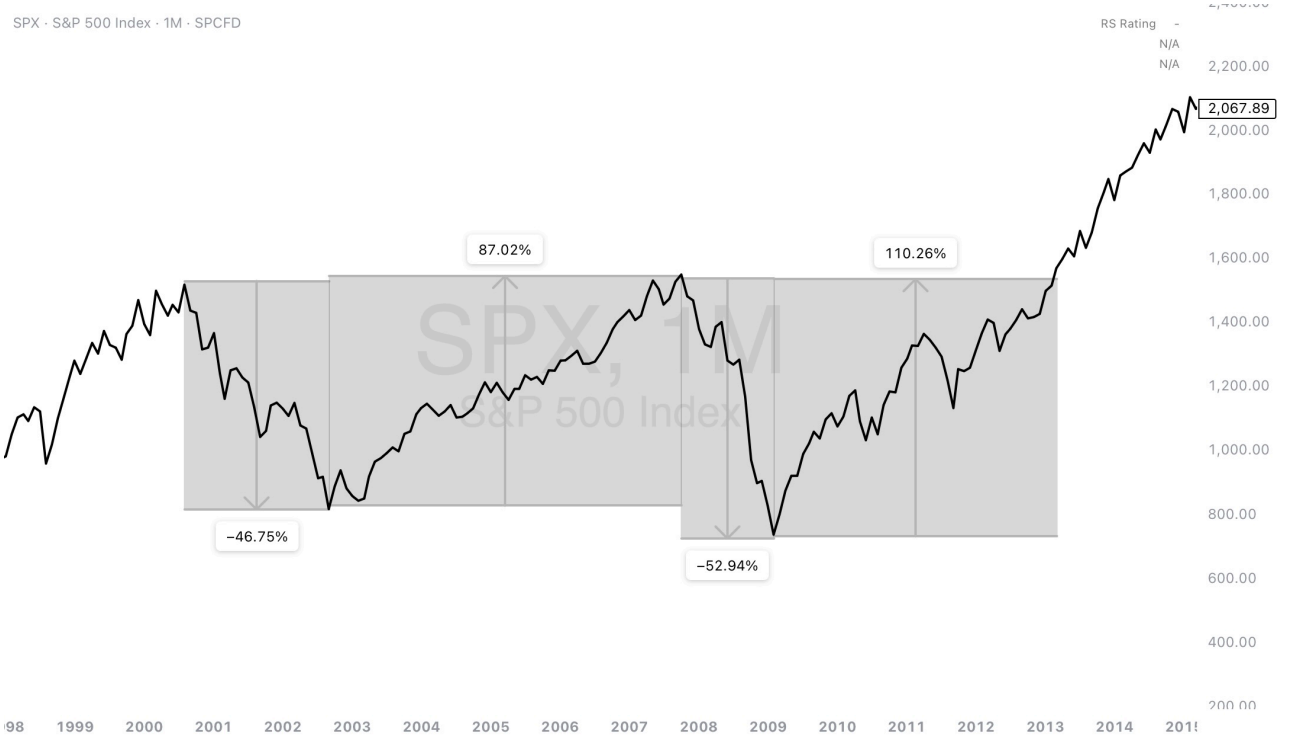
An ETF savings plan is based on the principle of dollar-cost averaging (DCA).
You invest a fixed amount regularly, regardless of market fluctuations. Mathematically, this evens out volatility because you purchase more shares when prices are low and fewer when prices are high. In the long term, the plan benefits from the historical upward trend of the markets. Over decades, stock indices such as the MSCI World have achieved an average annual return of around 7-9%, after deducting inflation and costs. Low fees (often less than 0.3% per year), broad diversification across thousands of stocks, and avoidance of expensive active fund management ensure you receive almost the full market return. Studies show that passive strategies, such as ETFs, outperform over 90% of active funds in the long term because they focus on "time in the market" rather than market timing. Although savings plans may sometimes be inferior to one-time investments in terms of returns, they minimize risk in volatile markets and are feasible for most investors who do not have large sums of money at their disposal all at once.

Why it often fails nonetheless:

Psychologically, ETF savings plans are challenging because human behavior, influenced by emotions such as fear, undermines rational strategy.

Losses have twice the emotional impact of gains. When markets decline by as much as 50% and sometimes remain low for years, many people panic and interrupt their savings plan or sell everything. This is precisely when they should be buying more at a low price.

Examples of this include the dot-com bubble of 2000 and the 2008 financial crisis.



As the chart above shows, the S&P 500 fell by about 45 percent between August 2000 and September 2002. During the 2008 global financial crisis, the index lost just over 50% of its value between its October 2007 peak and its February 2009 low.

These examples demonstrate the significant losses possible in a long-term, rising benchmark index like the S&P 500. They also highlight the importance of capital protection and realistic risk assessment, even in passive, broadly diversified investment strategies.

Example calculation:

In August 2000, $10,000 was invested in the S&P 500, and then monthly purchases of $100 were made via a savings plan. By September 2002, the index had fallen by about 45%. An additional $2,600 was added over 26 months during this period, bringing the total amount paid in to $12,600. Due to the cost averaging effect, the portfolio was worth approximately $7,500-7,800 in September 2002. This corresponds to a loss of around 38%-41% of the total capital invested.

Had the sell signal described in Chapter 5 (at a price loss of approximately 10%) been implemented in a timely manner, the savings plans would have been stopped and the available capital and savings rates would have been parked in a secure instant-access savings account. In this case, approximately $11,600 in capital would have been available in September 2002.

Calculating the return on a regular savings plan in the S&P 500 from August 2000 to February 2013 yields the following:

From August 2000 to February 2013, a total of $25,100 was invested in the S&P 500 ($10,000 starting capital plus 151 $100 savings).

By February 2013, the index price had nearly returned to its August 2000 level, with the portfolio value reaching approximately $27,200-27,800. This corresponds to a total profit of around $2,200-2,700, excluding dividends. With reinvested dividends (historically realistic at ~2-2.5% per year in this period), the return would have been significantly higher, reaching approximately $35,000-40,000 in final capital, i.e., around +50%.

Now, let's revisit the buy and sell signals from Chapter 5.

According to the results of the initial calculation, your capital was approximately $11,600 in September 2002.

The S&P 500 rose by 87% between September 2002 and October 2007. It is assumed that about 20% of the price movement was not captured because the buy and sell signals did not occur directly at the lowest or highest prices.

$11,600 + 67% = $19,372.00.

Added to this are the savings rates:
Total amount paid in = 62 × $100 = $6,200.
With the price increase and reinvested dividends (historically realistic at ~1.8%-2.2% per annum in this phase), the final value of the savings plans would have been $9,600-10,000.

Final result:
$30,000 in October 2007.

Calculation from October 2007 to February 2009:
Sell signal (loss of about 10%) = $27,000
Savings rate: 16 x $100 = $1,600.00

The capital in February 2009 was approximately $28,600.

Return calculation from February 2009 to February 2013:

The S&P 500 achieved a 110% return during this period. However, the full price movement was not taken into account, and there was no drawdown at the end of the calculation.

$28,600 + 100% = $57,200.

Added to this are the savings rates:
Forty-nine installments of $100 = $4,900.
With the price increase and reinvested dividends (historically ~1.8%-2.5% p.a. in this phase), the final capital would have been $8,100-$8,400.

Final result:
$65,500 in February 2013.

This calculation clearly shows that taking active action three times - i.e., exiting and re-entering at optimal times - would have increased the average return by around 75% over the 13-year review period.

Of course, this calculation is not exact.
It is based on simplifying assumptions and does not account for several real-world factors, including:

- The overlap in time and different purchase dates of the monthly savings plan installments.

- The exact timing of entries and exits when actively trading never falls exactly at the ideal point.

- Possible slippage, transaction costs, tax effects, and dividend reinvestments at different prices.

Therefore, the difference in return of around 75% shown should be understood as an illustrative order of magnitude and not as a precise forecast or guarantee of actual results.

Taking all practical factors into account, the actual achievable return difference would most likely be significantly lower - around 45-55%.

Added to this is the decisive psychological factor that plays an enormous role in such prolonged downward phases.

While a passive savings plan investor experiences substantial paper losses during the years 2000-2002 and 2007-2009, these losses are never realized, and the portfolio remains intact and recovers later. Many active market participants - especially private investors - panicked and sold their portfolios at the lowest points, driven by fear of further massive losses.

Many of these investors never returned to the stock market - or only did so much later, at significantly higher price levels.

The Nasdaq 100's losses during these two periods rank among the most severe in modern stock market history.

The dot-com crash (2000-2002) resulted in an approximate 78% loss.
The financial crisis (2007-2009) resulted in a loss of approximately 54-57%.

Thus, the dot-com crash was significantly more severe for the Nasdaq 100 than the financial crisis, mainly because the index consisted almost exclusively of overvalued tech and internet stocks at that time.

In pronounced bear markets, certain sector ETFs can suffer significantly higher losses than broadly diversified index ETFs. During the same phases, such sector ETFs often lost 60–85% or more of their value.

Investment advisors and asset managers often recommend building a diversified ETF portfolio that combines classic, broadly diversified index ETFs with selected sector ETFs.

The purpose of including sector ETFs is typically to emphasize sectors with above-average long-term growth potential, such as technology, healthcare, and renewable energies, while simultaneously enhancing risk-adjusted returns through moderate sector rotation. This approach effectively limits cluster risk by establishing a clear upper limit per sector, typically 10-20% of the total portfolio.

A pure index strategy often remains the core while sector ETFs serve as tactical or strategic additions, provided the weightings are monitored and rebalanced as necessary.

As previously mentioned, many providers and advisors either systematically underestimate or deliberately downplay the significantly increased risk in major correction phases, especially in bear markets, as these products are often offered with higher ongoing management fees than traditional, broadly diversified index funds.

Even in uptrends (bull markets), such thematic or sector ETFs often underperform or, at best, match the performance of a broad index ETF.

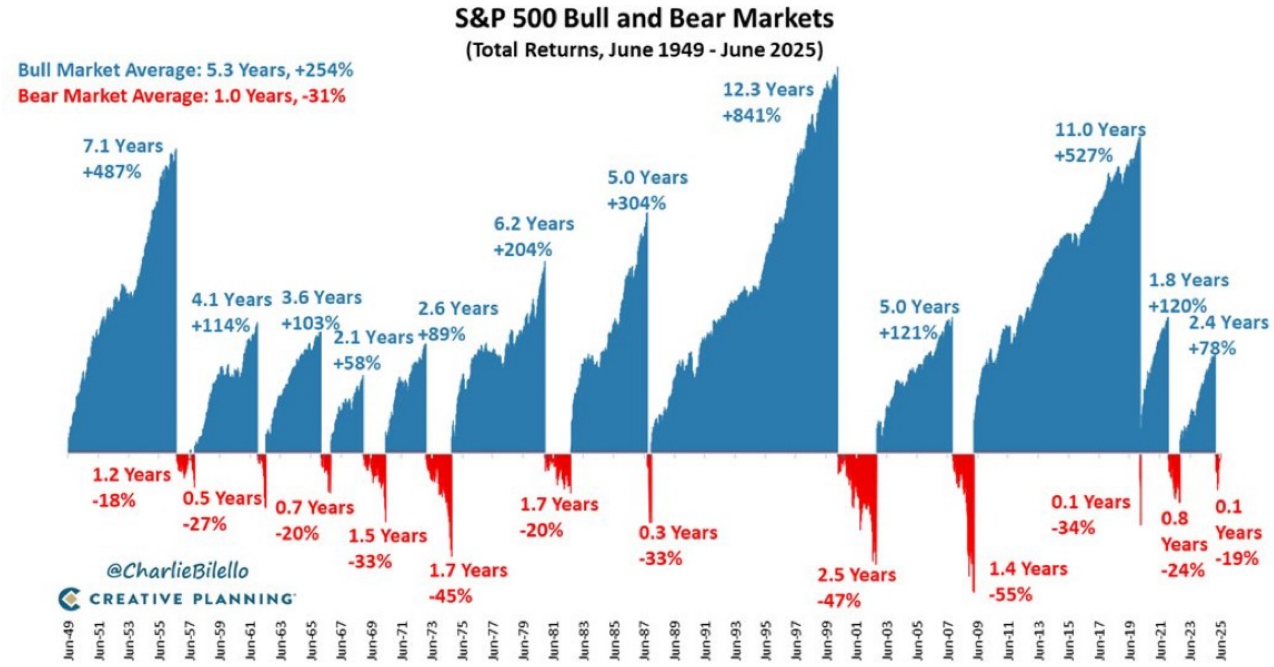
This is primarily due to two structural disadvantages.

1. Many of these ETFs are actively managed and only launched or increased significantly when the corresponding trend is already in full swing. Consequently, they often miss the strongest initial upward movements and enter at relatively high valuation levels.

2. The selection and weighting of included companies is usually dominated by pure fundamental analysis. Technical factors, such as momentum, relative strength, volume development, and chart stage, typically play a minor or nonexistent role in ETF construction and rebalancing.

Consequences:
ETFs are often restructured, new stocks are added, or weightings are adjusted precisely when prices have already risen sharply - i.e., at technically unfavorable times. This often results in purchases near local or cyclical highs, leading to above-average drawdowns when a correction occurs, even if the industry as a whole continues to perform well.

The combination of delayed entry and purely fundamental stock selection, without considering technical timing factors, negatively impacts the net performance of these products in many market phases.



This chart, created by Charlie Bilello of Creative Planning, illustrates the historical bull and bear markets of the S&P 500 Index over the past 75 years (from June 1949 to June 2025). It is based on total returns, meaning that it includes not only price gains, but also dividends and other distributions.

Average values:
Bull Market Average: 5.3 years, with an average return of 254%.
This indicates that bull markets tend to be long-lasting and profitable.

Bear market average: One year in duration, with an average return of -31%.
Although bear markets are shorter, they are painful in terms of losses.

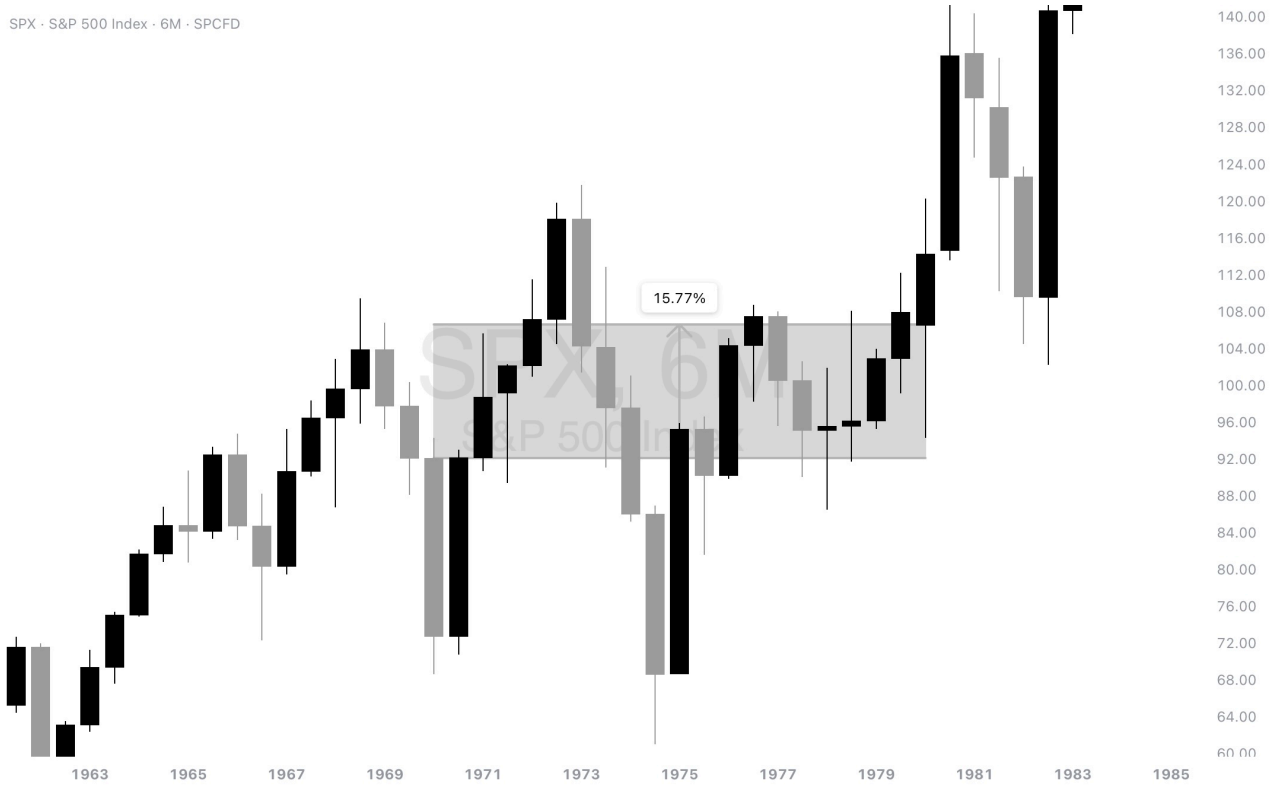
These averages, based on the historical data in the chart, underscore a key message:

In the long term, markets tend to rise more often and more substantially than they fall. This is a classic argument for long-term investing ("buy and hold"), as positive phases more than compensate for negative ones.

However, this chart does not reflect the psychological factor, which is actually the decisive factor for long-term gains or losses in the stock market.

Technical signals, stage transitions, and historical return differences can be objectively represented, but the biggest variable - investor behavior (e.g., panic selling at lows, greedy buying at highs, premature exiting out of fear, and delayed re-entering out of regret) - remains invisible in any chart.

This behavior gap often causes the actual return achieved by investors to differ greatly from the theoretically possible or retrospectively "optimal" performance.



The gray box on the top chart indicates the period from January 1970 to December 1980. Each bar within this range represents a six-month period.

Here is a clear psychological example:

An investor consistently invests his hard-earned money in a broadly diversified index fund over thirty to forty years. Over time, this results in the accumulation of a considerable fortune of around $500,000.

Between 1968 and 1974, he approaches or enjoys his well-deserved retirement. He knows he will need this capital over the next ten to thirty years to maintain his standard of living, finance necessary home repairs, buy a new car, or simply enjoy retirement with financial security and dignity.

It is precisely at this stage in life, when dependence on the portfolio is at its highest and there is no time to recover from heavy losses, that the reality of the many bear markets and long sideways phases of the 1970s hits particularly hard.

As the value of the portfolio shrinks due to sustained price declines over months or even one to two years, lower pension income makes it impossible to continue regular savings plans.

During this already stressful phase, investors often have to withdraw capital from their portfolios for various reasons, such as unexpected repairs, medical expenses, supporting family members, or covering living expenses.

This combination of

- shrinking portfolio value,
- lack of inflows from savings rates,
- forced withdrawals at unfavorable (low) prices

usually leads to massive psychological stress.

As investors become increasingly panicked and lose confidence in the long-term recovery potential of the markets, they often liquidate large portions, or even their entire portfolio, at precisely the wrong moment. This causes them to realize their losses and miss out on a subsequent recovery.

This classic "panic exit" at the low point is one of the most common and costly behavioral traps in private wealth accumulation and retirement planning.

Overall, this entire period can be classified as a classic sideways market.

The S&P 500 only gained around 15% over the ten-year period, corresponding to an average annual nominal return of approximately 1.5% (excluding dividends).

Considering the substantial risks in the stock market during this period, including two severe bear markets, high volatility, ongoing inflationary pressures, and macroeconomic uncertainties, the risk-return ratio was unfavorable.

The combination of such a low annualized return with high drawdowns and prolonged stagnation underscores why, while historically robust, long-term passive investing does not necessarily offer adequate compensation for the risk taken in every market phase.

Anyone serious about investing in the stock market and building long-term wealth must actively and continuously engage with their investments.

This includes:

- recognizing relevant risks in a timely manner;
- understanding the market phase and overarching trends,
- acting consistently and in accordance with rules is also essential to protect capital and take advantage of opportunities.

The method presented in Chapter 5 - based on stage analysis of weekly charts, clearly defined entry and exit signals, and disciplined risk limitation - is the simplest, most transparent, and most effective way to meet these requirements in the private and semi-professional sectors.

It is not necessary to be fully invested at all times.

It can be sensible and strategic to keep all your money in cash for several months - for example, six months or more - if the market doesn't offer attractive, compliant opportunities with a positive expected value.

In favorable market phases, it may be realistic to achieve a triple-digit return (100% or more) on invested capital within a relatively short period - say, three months - provided one enters the right strong trends and high-quality stocks and consistently follows them.

The key advantage of this patient, opportunistic approach is that it avoids unnecessary sideways and downward phases. It protects capital during periods of weakness and harnesses the full power of large, sustained upward movements rather than compromising during unattractive market phases.

In this context, patience and selectivity often generate significantly higher returns than constant activity or always being invested out of fear of missing out on profits.

Rule number one in my book is: Don't always listen to the professionals!
Twenty years in this business have convinced me that any normal person who uses the usual 3 percent of their brain can be at least as good, if not better, at picking stocks than the average stock market expert.

(Peter Lynch)

Peter Lynch is widely regarded as one of the most successful fund managers of all time. From 1977 to 1990, he managed the Fidelity Magellan Fund and achieved an average annual return of 29.2%, which was significantly higher than that of the S&P 500. During this period, the fund's assets grew from approximately $18 million to over $14 billion.

It is advisable to analyze moving averages separately for each market phase - indices on the one hand, and individual stocks or commodities on the other. Attractive profits can still be achieved even in pronounced bear markets or prolonged sideways phases of the overall market.

Precious metals (especially gold and silver) are typical examples of this, often performing strongly in the opposite direction or defensively during periods of crisis and uncertainty. Similarly, individual sectors or industries can remain resilient or grow at above-average rates despite general market weakness. Examples include healthcare, consumer staples, utilities, and certain commodity and energy segments.

Differentiating the analysis of moving averages at these different levels helps identify such opportunities early and focus on assets that are trending strongly or moving in the opposite direction rather than focusing exclusively on the broad index's behavior.

Start building your portfolio with regular savings plans in broadly diversified index funds. This approach provides a solid, cost-effective, statistically proven foundation for long-term wealth accumulation.

At the same time, I recommend taking a close look at Chapter 5, especially the charts of indices, precious metals, individual stocks, and cryptocurrencies, including the plotted moving averages.

By systematically studying these charts, you will develop a better feel for them:

- Overarching trends and stage transitions.
- The significance of moving averages as trend filters and signal generators.
- Countercyclical or resilient assets in different market phases.
- The difference between sustainable upward movements and short-lived false signals.

This combination of a passive core (index savings plans) and active learning (technical and general market observation) provides a robust foundation for wealth accumulation and selective supplementation through opportunistic position trading.

Once you have a solid grasp of the dynamics of individual stocks, overarching trends, and different market phases, you can start selecting individual securities, commodity or precious metal ETCs, sector ETFs, or cryptocurrencies.

A cautious and controlled approach is recommended:

- Begin with small position sizes.

- Increase your exposure slowly and only if the selected position develops positively and sustainably.

- Strictly adhere to the defined entry and exit rules, as well as the upper limits for individual positions and sector weightings.

You can only build the necessary process reliability, emotional stability, and judgment required to successfully supplement or replace your passive core portfolio with active position trading through a consistent, disciplined, and experience-based approach - in other words, by taking real action in small steps.

An average annual net return of 25% doubles your capital every four years, on average.

With consistent reinvestment and no major drawdowns, this rate leads to exponential wealth accumulation over the years and decades. This is precisely why it is neither necessary nor advisable to become greedy or take excessive risks during euphoric phases.

A disciplined, realistic, and sustainable return expectation of 20-30% per annum (net) is ambitious enough for a well-managed, selective, and opportunistic approach to building substantial wealth over the long term without jeopardizing the portfolio through excessive leverage, concentration, or emotional overreactions.

The key lies in consistency, capital protection, and avoiding large losses, not chasing extraordinary one-off returns.

This white paper cannot replace your own experience gained over time.

Market experience, process reliability, emotional stability, and an understanding of different market regimes can only be developed through repeated practical action. This involves experiencing phases of profit and loss and continuously reflecting on your decisions.

While theoretical knowledge and proposed methods serve as guidance and a foundation, the actual implementability and long-term superiority of a strategy can only be achieved through years of disciplined application in real market conditions.

My goal was never to become the best analyst, chart technician, or trader. Rather, my ultimate goal was to find the simplest and most effective method. I wanted to find a strategy that enables maximum returns with minimal time spent on analysis. This strategy can be expanded to suit any risk appetite and reduces psychological influences and distortions to an absolute minimum.

Taking these factors into account, if you know of a more effective, robust, or superior method, I would love to hear from you.

I would love to exchange concrete experiences and suggestions for improvement with you.

CHAPTER 7

BITCOIN

Bitcoin is the world's first decentralized digital currency, a monetary system that operates independently of banks, governments, and other central authorities. Its history began during a period of major financial crisis, and it continues to be considered a serious global phenomenon today.

In October 2008, an individual or group using the pseudonym Satoshi Nakamoto published a white paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System." The paper presented the idea of exchanging digital money directly between individuals, secured by cryptography and a public, immutable transaction chain called the blockchain. The goal was to create a system that builds trust through mathematics rather than institutions.

On January 3, 2009, the Bitcoin network went live. Satoshi mined the first block, known as the Genesis block, and left a hidden message in it: "The Times 03/Jan/2009 Chancellor on Brink of Second Bailout for Banks." This was an obvious criticism of the traditional financial system in the aftermath of the 2008 financial crisis.

In the early years, Bitcoin remained a niche project among cryptography enthusiasts. In 2010, the first real-world transaction took place. On May 22, 2010, Laszlo Hanyecz paid 10,000 Bitcoin for two pizzas - a legendary anecdote now celebrated as "Bitcoin Pizza Day." At the time, 10,000 BTC was worth only a few dollars.

Between 2011 and 2013, Bitcoin became widely known for the first time. Its price rose from cents to over $1,000 in 2013, followed by the first major crash. There were repeated sharp ups and downs in the years that followed: Bitcoin reached almost $20,000 amid huge hype in 2017, followed by the deep "crypto winter" of 2018/2019.

In 2020, a new phase began when institutional investors became involved and large companies such as Tesla and MicroStrategy started buying Bitcoin to include in their balance sheets. The price soared, hitting an all-time high of approximately $69,000 in November 2021.

In January 2024, the US Securities and Exchange Commission (SEC) approved the first spot Bitcoin ETFs - regulated products that allow private investors to invest in Bitcoin through the traditional stock market. This brought massive new capital into the market. The fourth Bitcoin halving took place in April 2024, halving the reward for miners - an event that has often coincided with price increases in the past. By the end of 2024, Bitcoin had surpassed the $100,000 mark for the first time.

In 2025, Bitcoin became more integrated into the traditional financial world. Its price continued to rise, reaching new highs throughout the year, surpassing $126,000 at times in the fall of 2025. Political developments helped: In the US, clearer crypto regulations were passed, a strategic government Bitcoin reserve program was launched, and Bitcoin was increasingly recognized as a long-term store of value ("digital gold").

In just under 17 years, Bitcoin has evolved from an obscure internet concept to a global asset with a market capitalization in the trillions. Millions of people use it, and thousands of companies accept it, at least partially. Despite all the criticism, regulatory debates, and violent price fluctuations, it is seen by many as a hedge against inflation and an alternative to the traditional monetary system.

*The Bitcoin halving is a central element of Bitcoin's design. It ensures that the currency will remain scarce in the long term and that no more than 21 million Bitcoins will ever exist. This is a built-in mechanism that cannot be changed as long as the network remains decentralized.

Since its launch in 2009, Bitcoin miners have received a reward in the form of new Bitcoin for each block they create (approximately every 10 minutes). This block reward serves as an incentive to secure the network and as a controlled method of introducing new coins into circulation. Halving comes into play here: every 210,000 blocks - which corresponds to approximately every four years on average - the reward automatically halves.

Initially, the reward was 50 BTC per block. After the first halving in November 2012, the reward fell to 25 BTC. It then fell again to 12.5 BTC in 2016, to 6.25 BTC in 2020, and most recently to 3.125 BTC in April 2024. The next halving is expected in spring 2028, when the reward will decrease further, to 1.5625 BTC per block. This process will continue until around the year 2140, when the last Satoshi will be mined and no new bitcoins will be created.

The reasoning behind this is simple. The issuance of new Bitcoin is slowing down, and the total supply is approaching the limit of 21 million. This creates genuine scarcity, similar to that of gold, which also becomes increasingly difficult to mine. Unlike normal fiat currencies, such as the euro or dollar, which can be expanded by central banks, Bitcoin has a fixed, predictable inflation rate that continues to decline with each halving. Currently, the annual inflation rate is around 1.5-1.6 percent, and it will be halved again after the next halving.

Historically, halving events have often triggered significant price fluctuations. Previous cycles have usually seen massive bull markets in the months leading up to and following a halving: after 2012, the price rose from around $12 to over $1,000; after 2016, it rose from around $650 to almost $20,000; after 2020, it rose from around $9,000 to $69,000; and after the 2024 halving, it rose to new highs above $126,000 in 2025. This is mainly because reduced new issuance coupled with steady or rising demand drives up the price. However, this is not an automatic guarantee; it depends on market sentiment, adaptation, macroeconomics, and many other factors.

Currently, over a year and a half has passed since the last halving in April 2024, and Bitcoin has been operating with the halved reward of 3.125 BTC per block. Consequently, only approximately 450 new bitcoins are created daily. Many view this scarcity mechanism as a key reason why Bitcoin is considered "digital gold" in the long term: a hard, deflationary asset without central control that is ideal for storing value. Despite all the volatility, crashes, and criticism, halving remains one of the things that distinguishes Bitcoin fundamentally from all other cryptocurrencies and traditional currencies.

*Satoshis are the smallest units of Bitcoin - named after its inventor, Satoshi Nakamoto.

One Bitcoin consists of exactly 100 million Satoshis.
1 Satoshi = 0.00000001 BTC (one hundred millionth of a Bitcoin).

This high divisibility makes Bitcoin practical even at high prices. At a price of $78,000, for instance, one Satoshi is worth approximately 0.00078 US cents. Many wallets already display smaller amounts primarily in sats because they are easier to understand in everyday life. For example, "That costs 25,000 sats" sounds more tangible than "0.00025 BTC."

Satoshis are the "cents" of Bitcoin.

*A Bitcoin wallet is a digital tool for securely managing Bitcoin. It does not store Bitcoin itself, which always remains on the blockchain, but rather the private keys that enable access to and authorization of transactions associated with the balances.

There are three main types of wallets:

Software wallets:
These are applications for desktop computers or smartphones. They are characterized by their user-friendliness, quick setup, and low cost. They are particularly suitable for everyday use and small-to-medium amounts.

Hardware wallets:
These are physical security devices (e.g., BitBox, Ledger, Trezor, Coldcard) that keep private keys offline. Because they are disconnected from the internet, they offer the highest level of protection against online attacks. They are the recommended solution for long-term storage of larger assets.

Paper wallets:
An analog variant in which the address and private key are printed on paper. They are free of charge and completely offline, but they carry risks due to physical loss, damage, or improper handling, and they are now considered obsolete.

The key point is:
Control over Bitcoin lies exclusively with the holder of the private key or the associated seed phrase (usually 12-24 words). This information must never be disclosed or stored digitally. Losing the seed phrase will result in irrevocable loss of access to the funds.

Choose a wallet that corresponds to your security requirements and intensity of use: software wallets are convenient for everyday use, while hardware wallets offer maximum protection for larger amounts. For getting started, a reputable, up-to-date software wallet is usually sufficient.

As you have noted, Bitcoin differs from stocks, traditional fiat currencies, and classic commodities in terms of its function, behavior, and market dynamics. For this reason, I have dedicated an additional chapter to Bitcoin to adequately and comprehensively present its unique characteristics, risks, opportunities, and valuation factors.

Opinions on Bitcoin are highly divided in the financial market.
While some traditional investors and economists attribute no intrinsic value to Bitcoin, believing it could tend toward zero or become worthless in the long term, a strong countercurrent exists in the crypto community: Bitcoin maximalists, or Bitcoin Maxis.

They believe Bitcoin is the superior digital currency of the future and will ultimately account for most or all of the world's monetary value.

Most market participants, analysts, and institutional investors fall between these two extremes. They view Bitcoin as a highly speculative but potentially relevant asset with an asymmetric risk-reward profile, without fully subscribing to either extreme position.
Bitcoin maximalists advocate a consistent buy-and-hold strategy (HODL), in which Bitcoin is held long term regardless of short-term price fluctuations.

The term "HODL" originated in 2013 due to a typo in a forum post ("I AM HODLING" instead of "holding") and quickly became one of the most famous memes and slogans in the crypto community.

Today, HODL stands for a clear mental and strategic attitude:

- No panic selling during market crashes or high volatility
- No premature realization of profits out of fear of corrections
- Instead, consistent buying on dips ("buy the dip")
- Firm conviction that Bitcoin will show very strong performance in the long term

This strategy is based on the belief that Bitcoin is fundamentally superior as a digital, scarce, decentralized, and censorship-resistant currency. It is also based on the assumption that the long-term upward trend will outlast any temporary setbacks.

Bitcoin maximalists typically hold a large proportion of their liquid assets in Bitcoin, despite its volatility and massive price fluctuations.

They consciously accept drawdowns of 50-85% as a temporary, unavoidable side effect of a transition process that is expected to outperform all other asset classes in the long term.

In my view, it is reasonable to allocate 5-10% of total assets to Bitcoin stored in a secure hardware wallet using the HODL strategy over the long term. This moderate allocation represents an acceptable risk/reward ratio and generally meets the criteria for reasonable diversification in most portfolios.

At the same time, I consider Bitcoin, like stocks, precious metals, and other commodities, to be an actively traded asset. While a small core can be held long term, the rest lend themselves to an opportunistic, rule-based trading strategy.

- ride the wave in strong upward phases.
- secure profits or limit losses in overheated or weak phases.

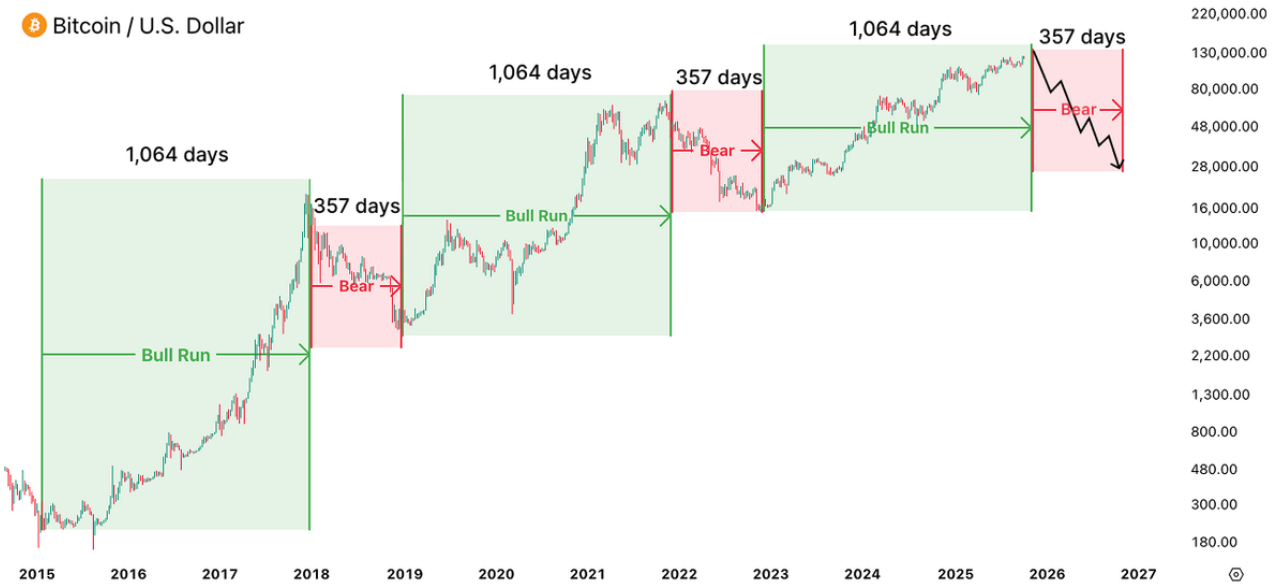
This strategy helps better manage the volatility of the overall portfolio.

The following chart illustrates a recurring time pattern in market cycles using a logarithmic representation of the Bitcoin price (BTC/USD). History is divided into alternating phases: bull runs of approximately 1.064 days (about two years and 11 months) from the low point to the all-time high, followed by bear markets of about 357 to 364 days until the next low point.

This pattern is based on the last two complete cycles.

- From the low in 2018/2019 to the high in November 2021, the bull run lasted nearly 1.064 days. This was followed by a bear market that lasted approximately one year, ending in late 2022.

- A similar pattern emerged in the 2022-2025 cycle: from the low at the end of 2022 to the high in October 2025 (around $126,000), another 1.064 days passed.



The chart indicates the start of a new bear phase (shaded in red and marked with a downward arrow). If the pattern continues, this phase could last around 357-364 days and extend to September or October 2026. After that, a new bull cycle would begin.

The model is visually convincing because the time intervals of past cycles have been remarkably consistent. It serves as a rough guide for many in terms of when the market may bottom out. However, it is purely historical and offers no guarantee. As the market matures with ETFs, institutional investors, and regulatory developments, the dynamics are changing. Therefore, the pattern could deviate or weaken in the future.

The chart illustrates two key findings:

First, the pure HODL strategy has worked extremely well to date, leading to exceptional long-term performance.

Second, it clearly shows that, during recurring correction and bear phases, it makes sense to sit these phases out.

There is no reason to watch a significant portion of your capital temporarily shrink by more than 50%, 70%, or even 85%.

The overriding principle remains unchanged, especially for Bitcoin:

Capital protection takes precedence over everything else.

Even with an asset of such high long-term potential, it is neither necessary nor wise to accept significant temporary losses when there are technical, risk-based, or rule-based options to limit these losses and reenter the market later, when clear signs of recovery emerge.

Another chart illustrates a central concept of Bitcoin cycles: the decreasing percentage gains from cycle to cycle. It shows the historical price development of Bitcoin (in USD) since around 2011 on a linear scale (not logarithmic).

As Bitcoin's market capitalization increases (from a few billion to over $2 trillion today), more capital is needed to move the price by the same percentage.

Early cycles had extremely low starting points, making very high multiples possible. As the market becomes more mature (with more institutions, ETFs, and higher valuations), growth becomes more "normal."

The chart implicitly refutes the expectation of permanently exponential, ever-increasing multiples, which many Bitcoin maximalists assumed in the early years. Instead, it shows a flattening of the yield curve, which is typical of any growing asset.

This does not mean that Bitcoin is "dead" or has no future, but the days of 10x to 50x growth in a single cycle are statistically over. We are more likely to see multiples in the single-digit to low double-digit range instead (such as 1.8x in the last cycle).

Many analysts view this pattern as evidence that Bitcoin is evolving from an "exponential speculation story" into a more mature, cyclical asset with positive, albeit significantly more moderate, gains per halving cycle.

It is also clear that:
A purely long-term HODL strategy is becoming less sensible and superior regardless of how strongly one believes in its long-term potential.

Furthermore, Bitcoin maximalists often overlook certain risks.

According to the latest and most widely accepted estimates, Satoshi Nakamoto owns about 1.096 million Bitcoin. These coins are distributed across thousands of addresses, almost all of which originate from the early mining blocks of 2009 and 2010. To date, not a single Bitcoin has been moved from these addresses, apart from a few tiny test transactions at the very beginning.

If Satoshi Nakamoto (or whoever has access to these addresses) were to suddenly move Bitcoin, it would cause a huge shock, especially psychologically, and it would greatly impact market dynamics.

First, blockchain explorers and on-chain analysts would discover the movement within minutes, and the news would spread explosively. Many investors and algorithms would immediately interpret this as massive potential selling pressure - after all, we're talking about approximately 1.1 million BTC, worth tens of billions of dollars. This would trigger panic selling and stop-loss orders and likely cause the price to plummet by an estimated 20-60% within hours to days, depending on the scale of the movement and whether the coins land directly on exchanges.

In the medium term, the outcome depends on the context. If the coins are transferred to more secure wallets and not sold, the market usually recovers relatively quickly. Many see this as a positive signal: "Satoshi is alive and trusts Bitcoin." However, in the event of a genuine sell-off of large quantities, the price would suffer more deeply and for a longer period of time. The narrative of Bitcoin as an "eternally scarce, decentralized asset with a dormant creator" would be damaged, and confidence, especially among new investors, could suffer.

In the long term, however, nothing will change at the core of Bitcoin. The network will remain decentralized, and Satoshi will have no control over the protocol. It is impossible to predict how Bitcoin would develop if large quantities of coins were sold. No one knows who is behind the pseudonym or the corresponding wallets.

The identity of Satoshi Nakamoto, the pseudonymous inventor of Bitcoin, is one of the biggest mysteries in the crypto world. Since 2008, it has sparked countless speculations and investigations. As of February 2026, there has been no definitive confirmation, and many experts believe it will never be revealed because anonymity is central to the Bitcoin ethos. Nevertheless, numerous theories based on linguistic analysis, timelines, technical contributions, and chance discoveries circulate. One prominent theory is that Satoshi was not one person but rather a group of cypherpunks - cryptography experts and privacy activists - who collaborated to develop the Bitcoin white paper and code, ensuring decentralization and avoiding personal vulnerabilities.

Other theories point to the involvement of intelligence agencies, such as the NSA or CIA, which may have created Bitcoin as a financial tool, perhaps as "Project Mint," that then got out of hand. Some even speculate that Satoshi was connected to figures such as Jeffrey Epstein, Muammar Gaddafi, or a "deep state" agent, but these theories are mostly dismissed as conspiracies.

The individual candidates are primarily crypto pioneers:

Hal Finney, who passed away, was one of the first Bitcoin developers to communicate with Satoshi and receive Bitcoins.

Nick Szabo, the inventor of "Bit Gold," a concept similar to Bitcoin, is another suspect due to stylistic similarities in his writing.

Adam Back, whose "Hashcash" system was integrated into Bitcoin's proof-of-work system, denies the allegations, yet he is frequently mentioned.

In the 2024 HBO documentary "Money Electric: The Bitcoin Mystery," Canadian developer Peter Todd was presented as Satoshi based on age, writing style, and forum posts. However, Todd has vehemently denied this, criticizing the documentary as dangerous.

Craig Wright, an Australian entrepreneur, has repeatedly claimed to be Satoshi but was refuted in court in 2024 and exposed as a liar.

Len Sassaman, a privacy activist who died in 2011, is considered a strong candidate because he was active in the cypherpunk scene, and his death coincided with Satoshi's disappearance.

Paul Le Roux, a criminal programmer currently in prison, is linked to Satoshi because his technical skills and timeframe match.

Others who have been considered include Arthur Britto, co-founder of Ripple, due to a large Bitcoin transfer and his silence; as well as Jack Dorsey, the founder of Twitter, due to temporal and technical overlaps.

Dorian Nakamoto, an engineer of Japanese descent, was falsely exposed by Newsweek in 2014, which led to a media frenzy. However, he has nothing to do with Bitcoin.

Current developments include lawsuits against U.S. authorities, such as the DHS, to release documents that could reveal Satoshi's identity based on alleged interviews.

Documentaries, books, and forums, such as X (formerly Twitter), continue the debate, but without cryptographic proof, all assumptions remain speculative. Many in the community see anonymity as a strength that makes Bitcoin independent of any person or organization.

Another topic in the crypto world is Bitcoin and quantum computers, as there are various narratives surrounding the potential risks and opportunities they pose. The main narrative revolves around the threat quantum computing poses to Bitcoin.

Many experts warn that advanced quantum computers could crack Bitcoin's cryptography within the next five to ten years, a scenario sometimes referred to as "Q-Day." Specifically, these experts are concerned about algorithms such as ECDSA, which are used to sign transactions. A quantum computer could derive private keys from public keys and steal bitcoins, especially from old wallets that have disclosed their public keys. This could lead to a "quantum apocalypse," putting billions of dollars' worth of BTC at risk. Some investors prefer gold because it is "quantum-safe."
This narrative stokes fear and has already contributed to price declines, even though current quantum computers are still too weak.

A counter-narrative is that the threat is exaggerated.
Bitcoin uses hash functions and signatures, not classic encryption, which cannot be "cracked" so easily. Many view the warnings as marketing hype intended to unsettle investors or promote new technologies. Quantum computers are still years away, and Bitcoin could adapt by then. In fact, there are plans for quantum-resistant upgrades, such as post-quantum cryptography, which could protect the network without destroying it.

One positive narrative suggests that quantum computers could strengthen Bitcoin.
They would necessitate improved security measures, encourage decentralization, and bolster the network's resilience, much like previous threats (e.g., mining bans) that ultimately fortified Bitcoin. Some speculate that quantum mining could increase efficiency without compromising the system's security.

Narratives range from apocalyptic scenarios to skeptical rejection to optimistic adaptation strategies. Bitcoin developers are already working on solutions, and as of 2026, there is no immediate danger, but the debate continues to drive innovation.

At some point, the upper limit of 21 million Bitcoin could be raised.
This idea is a frequently discussed counterargument to the "digital gold" narrative of Bitcoin. Critics, skeptics, and people from other crypto projects mainly use it to cast doubt on Bitcoin's long-term scarcity.

Technically, the 21 million limit is not set in stone. It results from the code, specifically the halving logic and block reward calculation. Anyone could change the Bitcoin code to prevent the rewards from being set to zero after 2140 or adjust the halving, but this would require a hard fork. A hard fork means the blockchain splits into two versions. The old chain (with a 21 million cap) would remain in place while the new chain (with a higher supply) would need to be accepted by miners, nodes, wallets, exchanges, and users to remain "Bitcoin."

If enough influential figures (e.g., major miners, institutions like BlackRock, governments, or a future majority) desire this, the supply could become inflationary, which would diminish the value of each BTC. There is no central body that could prevent this because Bitcoin is decentralized. Thus, "greed" or necessity (e.g., paying miners in the long term if transaction fees alone are insufficient) could lead to a change. Some even speculate that "tail emissions" (small, permanent inflation after 2140) will be necessary to maintain network security and that this will eventually lead to acceptance.

However, most Bitcoin supporters, especially maximalists, reject this narrative.
There is no incentive for it - scarcity is the main reason people invest in Bitcoin. An increase would lead to an immediate loss of confidence, a price crash, and migration. The new chain would likely fail, as many hard forks have in the past.

Throughout history, the community has shown that fundamental changes to the monetary model are extremely difficult to implement, requiring near-unanimous consensus (e.g., the 2017 blocksize wars).

In 2024/2025, institutions such as BlackRock included a disclaimer in a video stating, "There is no guarantee that the cap won't change." This reignited the debate but was dismissed as a legal precaution rather than a plan.

For an individual or organization to change the fixed upper limit of 21 million bitcoins, extremely strict and practically impossible conditions would have to be met.

First, someone (or a group) would have to create a detailed proposal, called a Bitcoin Improvement Proposal (BIP), that explains how to adjust the block rewards or halvings to generate more than 21 million coins. The developer community (e.g., on GitHub or mailing lists) would intensively discuss, test, and usually immediately reject this proposal because scarcity is the main reason for Bitcoin's value.

If the proposal were to proceed nonetheless, the change would have to be incorporated into the official Bitcoin software, such as Bitcoin Core. Then, an overwhelming majority of the approximately 22.000 nodes worldwide would need to download, install, and run this new software version - ideally almost all of them; otherwise, a hard fork would occur. The blockchain would split into two chains: one with the old 21 million rule and one with the new, higher supply.

Miners would then have to actively favor the new chain and focus their computing power on it; otherwise, it would have no security. Large exchanges, wallets, institutions (e.g., BlackRock and ETFs), and the broader community (e.g., hodlers, traders, and developers) would also need to

accept and use the new version as the "real" Bitcoin. Otherwise, the old chain would continue to run, and the new one would likely become worthless, as has happened with many failed forks in the past.

Even someone with enormous power (e.g., a large miner or institution) would not be able to change the rules with a pure 51% attack on the hashrate because nodes reject invalid blocks. Thus, near-universal consensus would be required - almost all participants would have to voluntarily join, even though such a change would immediately trigger a massive price drop, loss of trust, and migration. These economic incentives ("those who have a lot of BTC want to maintain scarcity") and decentralized governance make it virtually impossible.

A Bitcoin ETF (exchange-traded fund) tracks the price of Bitcoin, allowing investors to indirectly invest in Bitcoin without buying coins, setting up wallets, or managing private keys. An ETF provider, such as BlackRock, Fidelity, or Grayscale, buys real Bitcoin, stores it securely with a professional custodian, and issues shares that trade like normal stocks on regulated exchanges. The price of a share fluctuates nearly in line with the price of Bitcoin, minus small ongoing fees.

Since the approval of spot Bitcoin ETFs in the U.S. in January 2024, these products have changed the market significantly. The largest ETFs are IBIT (BlackRock), FBTC (Fidelity), and GBTC (Grayscale). Together, they hold approximately 1.3 million BTC as of February 2024 - around 6-6.5% of the total Bitcoin supply - with assets under management totaling $100-$110 billion. This makes Bitcoin extremely accessible to ordinary investors, pension funds, and institutions because the ETF can be purchased easily through any normal securities account, eliminating the need to deal with crypto technology.

Advantages include high SEC regulation, strong liquidity, a low risk of theft, and the ability to integrate Bitcoin into traditional portfolios. Disadvantages include annual fees (typically ranging from 0.2% to 0.9%), not owning the actual coins (meaning you cannot spend or transfer them yourself), limited trading hours, and occasional tracking discrepancies. Large cash inflows or outflows into ETFs (hundreds of millions to billions per week) directly influence the Bitcoin price and increase volatility. Overall, Bitcoin ETFs have transformed Bitcoin from a niche asset into a mainstream investment since 2024, serving as one of the most important bridges between the traditional financial world and cryptocurrency.

However, Bitcoin spot ETFs have several disadvantages regarding price development and price stability - similar to paper gold (e.g., gold ETFs or gold certificates) compared to physical gold.

ETFs turn Bitcoin into "paper Bitcoin," comparable to paper gold.
Many investors only hold shares in a fund, not the actual coins. Large ETF flows (billions of dollars of inflows or outflows in a short period) can artificially inflate or deflate the price of Bitcoin because they go through regulated exchanges and are often associated with leveraged positions or institutional behavior. This creates additional volatility and dependence on Wall Street dynamics rather than on Bitcoin-specific factors, such as on-chain activity or mining. With physical gold or direct Bitcoin ownership, this layer does not exist; the price is determined more directly by real buyers and sellers.

It's difficult to answer the hypothetical question of where the Bitcoin price would be today if all the funds currently invested in spot Bitcoin ETFs ($113 billion) had flowed directly into Bitcoin. The ETFs themselves buy and hold real Bitcoins, so the capital has already flowed into the market and influenced the price.

Without ETFs, this capital would directly drive the price through open market purchases, similar to what is happening now with ETF purchases, so the effect would be largely identical. The price could be 5-10% higher because direct investments often lead to stronger "hodling" and trigger fewer panic-driven sales.

Nevertheless, this remains speculative.
The decentralized nature of Bitcoin means that, without ETFs, the market might have seen less institutional demand. This could potentially keep the price lower. After all, ETFs have facilitated mainstream access and driven the price up sharply since 2024.

At the same time, the chart above clearly shows that despite increasing demand from institutional investors, price growth from halving cycle to halving cycle has been less expansive. If this pattern of declining percentage gains continues, the demand for Bitcoin ETFs will likely decline in the medium to long term. This could prompt institutional investors to gradually reduce their Bitcoin holdings, especially if the asset is no longer expected to significantly appreciate in value and is primarily perceived as a long-term store of value.

Additionally, it is likely that a significant portion of Bitcoin maximalists will shift at least some of their capital to other asset classes in search of attractive return opportunities once the phase of extremely high return multiples is over. Together, these effects would put noticeable pressure on the price of Bitcoin in the medium to long term and contribute to a further flattening of price momentum.

In the long term, it is highly questionable whether governments and financial authorities worldwide will allow Bitcoin to establish a largely private and uncontrolled parallel financial system.

Blockchain technology enables complete traceability of every transaction ever made, which governments could use as a surveillance tool. Even if the private key remains exclusively in the individual's possession and no one else can directly access the Bitcoin, governments and authorities could use numerous indirect mechanisms to make extensive use more difficult or effectively prevent it.

- Regulation and prohibition of on- and off-ramps, including crypto exchanges, payment service providers, and fiat bridges.

- KYC*/AML* requirements for every relevant transaction or wallet use.

- Targeted tax and reporting requirements for Bitcoin holdings and transactions.

- Criminal prosecution for circumventing existing regulations.

- Technical interventions, such as blacklisting addresses and chain analysis by government agencies.

*KYC (Know Your Customer) requires financial institutions and regulated crypto platforms to verify their customers' identities beyond a shadow of a doubt. This process typically involves providing one's name, address, and date of birth, as well as presenting official identification documents and often undergoing video identification.

*AML (Anti-Money Laundering) encompasses legal measures to prevent money laundering and terrorist financing. KYC is a central component of AML. Additionally, suspicious transactions must be identified, documented, and reported to the relevant authorities if necessary.

KYC and AML ensure transparency in financial transactions.
They clearly identify customers and monitor transactions to prevent illegal cash flows. In regulated crypto environments, both are now standard and legally mandated in most countries.

As long as Bitcoin is exchanged for fiat currencies or used to purchase goods and services on a large scale, it will inevitably interact with regulated systems - and it is precisely at these interfaces that states can most effectively control it. Therefore, the idea of a completely autonomous, "private" financial system that is not influenced by the state encounters very narrow limits in practice, regardless of the technical decentralization of the blockchain itself.

In principle, it would be possible to identify and record every transaction retroactively for tax purposes based on the transparency of the public blockchain and KYC requirements. However, such systematic retroactive taxation would most likely lead to significant and sustained price declines for Bitcoin.

Many holders would need to sell Bitcoin to pay the additional taxes. This forced selling pressure would increase the supply significantly in the short term, putting noticeable pressure on the price.

For many holders, the core appeal of Bitcoin lies in its ability to hold assets in a decentralized manner. If this feature were eliminated by retroactive mass taxation, Bitcoin would lose its added value for this group. The resulting loss of confidence could lead to a broad, long-term outflow of capital from the ecosystem.

Together, these effects would have a lasting negative impact on Bitcoin's price dynamics and could trigger a downward spiral that would extend far beyond a temporary correction.

No one can reliably predict or mathematically calculate the future of the markets.

No matter how sophisticated a chart, model, or analysis is, it cannot accurately predict or guarantee actual future price movements. Therefore, do not follow narratives, and do not believe those who claim with great conviction to know where the price is "going" or "must go."

Study the charts soberly and objectively.

Follow only what you actually see, i.e., real price movements, clear trend and stage transitions, and rule-based signals, and not what you think you know, hope, or fear. Disciplined observation and rule-based action based on available information are better protection against wrong decisions than any eloquent forecast or opinion.

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The analyses, methods, charts, examples, and personal assessments presented here are for informational and educational purposes only. They do not claim to be complete or accurate with regard to future market developments.

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- You should critically examine your own level of knowledge, personal risk tolerance, and financial situation.

- Seek independent professional advice if necessary.

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