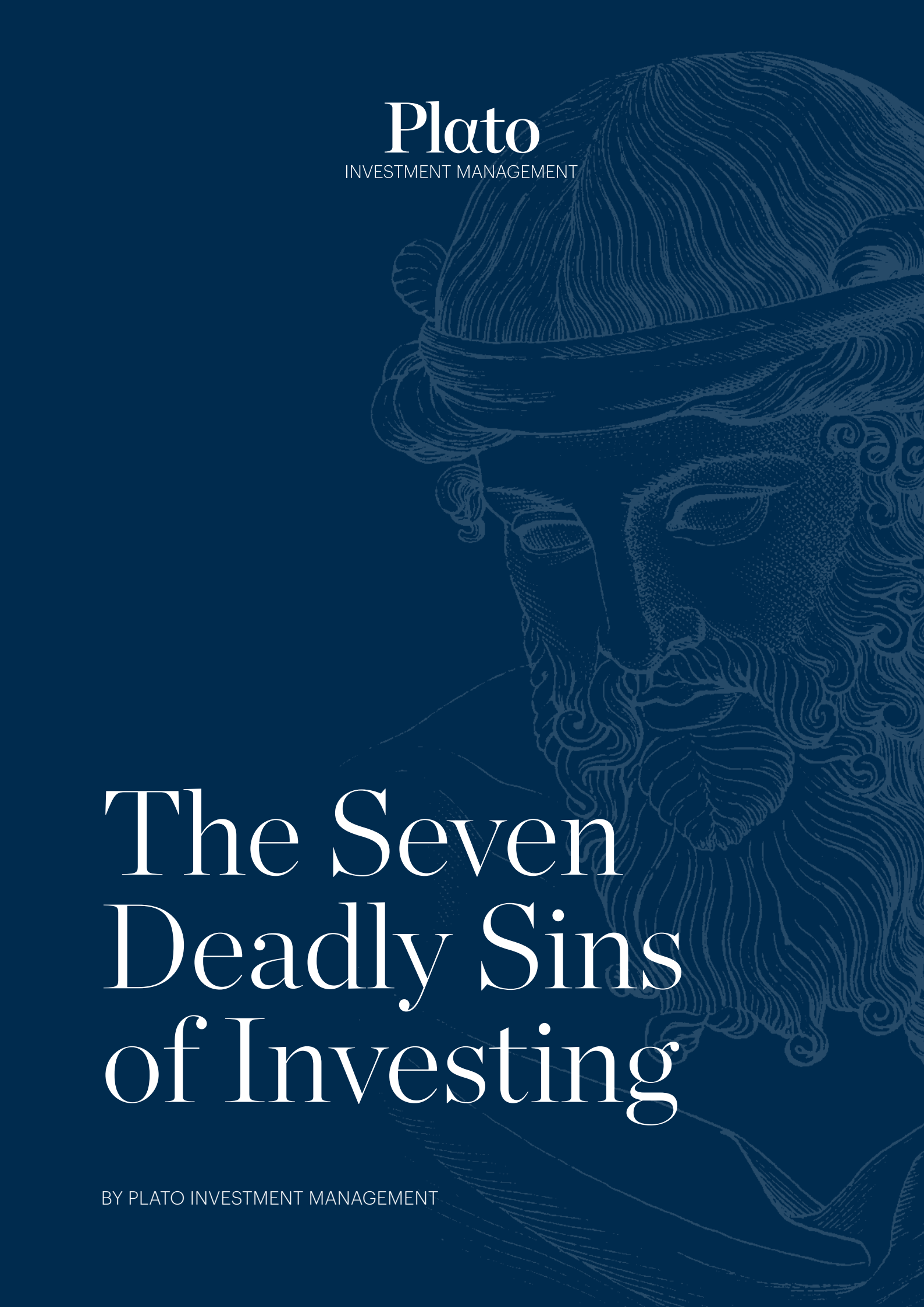




Plato
INVESTMENT MANAGEMENT

The Seven Deadly Sins of Investing

BY PLATO INVESTMENT MANAGEMENT



Table of Contents

Page 6

I. Overconfidence

The Illusion of Certainty

Page 10

II. The Hot-Hand Fallacy

Patterns in Randomness

Page 14

III. Loss Aversion

The Pain of Letting Go

Page 20

IV. The Base-Rate Fallacy

The Evidence You Ignore

Page 24

V. Confirmation Bias

The Death of the Bear Case

Page 28

VI. Anchoring

The Price You Can't Forget

Page 32

VII. Herding

The Safety of the Crowd

Introduction

In this series of investor notes, we examine seven investor behaviours that quietly, and repeatedly, destroy wealth. We know them well. We've committed every one of them, and probably always will. The hope is simple: awareness does not eliminate bias, but it can reduce its impact and improve decision-making.

These mistakes are not signs of low intelligence or poor training.

They are hard-wired into us. For millions of years, human judgment evolved to survive predators, famine and tribal conflict, not to manage diversified portfolios of global securities in a hyperconnected digital marketplace.

I Overconfidence

The Illusion of Certainty

The most common bias in investing isn't greed or fear. It's thinking you know more than you do.

The most ubiquitous bias, according to behavioural psychologists, is overconfidence.

Consider the evidence. Ninety-three percent of drivers rate themselves as better than the median driver - a mathematical impossibility.

A clear majority of people believe they are better lovers than average. Even among academics, 94% of university professors rate themselves above the median professor.

Political leaders routinely overestimate the probability of swift military victories - from Vietnam to Iraq to Afghanistan, and more recently Ukraine and Iran. In financial markets, male investors trade around 45% more frequently than women, and as a result underperform by roughly 1% per annum after costs.

Overconfidence is universal. Markets simply provide a mechanism to monetise it.

And it can be financially ruinous. Portfolios become overly concentrated. Risk factors cluster. Exposure narrows to a handful of correlated thematics (think concentrated US software bets at present). During the European Debt Crisis, I was working at a firm that held short positions in several European banks. When Mario Draghi pledged to do "whatever it takes" to preserve the euro, those stocks surged. We were caught on the wrong side and lost more than I care to remember. Conviction is admirable. Uncalibrated conviction is expensive.

Research in psychology shows that when people say they are 90% certain about something, they are actually correct only 75–80% of the time. More concerning still, when people say they are 100% certain, they turn out to be right only 85–90% of the time.

So, are you overconfident?

Here is a simple calibration test drawn from the behavioural literature. For each question on the next page, write down a low and high estimate such that you are 90% confident the true answer lies between them. If you are well calibrated, 90% of the true answers should fall inside your ranges.

Only check the answers after you have committed your intervals to paper (answers at the end of this book).

What is the length of the Nile River (in km)?

What is the population of Bangladesh?

What is the height of Mount Everest (in metres)?

What is the average distance from Earth to the Moon (in km)?

What is the annual wheat production of Australia (in tonnes)?

What is the diameter of the Moon (equatorial - in km)?

What is the gestation period of an African elephant (in months)?

In what year was Mozart born?

What is the approximate coastline length of Tasmania (in km)?

How did you go?

If, like me, more than one of the true answers fell outside your ranges, you are likely overconfident. In controlled experiments, participants who believe they are 90% certain typically capture the correct answer only about 50% of the time. We are not bad at estimating. We are bad at estimating how uncertain we are.

PROBABILITY DOES NOT ALWAYS COME NATURALLY

I'm reminded of the classic line from Anchorman, where Paul Rudd's character proudly describes his Sex Panther cologne: "60% of the time, it works every time."

The irony is that a degree of overconfidence may be necessary to function. If we perfectly understood the uncertainty embedded in life, and markets, we might struggle to act at all.

By Dr. David Allen

II

The Hot-Hand Fallacy

Patterns in Randomness

We are wired to see patterns in randomness. Sometimes it creates heroes. More often, it destroys capital.

Humans are hard-wired to search for patterns and impose order on a world that is often chaotic and senseless. Perhaps this springs from a deep desire to feel in control of our lives. Whatever its source, the instinct is powerful enough that we often see structure where none exists.

Consider the following sequences of coin tosses, where H is heads and T is tails.

Which sequence is random, and which is artificial?

Take a moment to study them.

HHTHTHTTTHTHTHTHTHTHTHTHTHTHTHTHTHTHTHTHT

HTTTTHHHTHHHHHHTTHTHTTTTHTHTHHHTHTHTHTTH

Most people choose the first sequence as random, and the second as artificial, because the second contains too many long runs of consecutive heads and tails.

In fact, the opposite is true: sequence (1) is artificial, while sequence (2) came from a fair coin.

Our intuition about randomness is remarkably poor. We expect it to look more orderly, and more evenly mixed, than it really does.

This tendency was famously documented in the classic 1985 cognitive psychology paper, *The Hot-Hand in Basketball: On the Misperception of Random Sequences*.

THE HOT-HAND FALLACY

Who among us has not watched a game and become convinced that a player is “on fire” and simply cannot miss? Studying hundreds of NBA games, the authors found that the probability of a player making the next shot after making a basket was not any different than after a miss.

This became known as the hot-hand fallacy. Since then, similar illusions of streaks have been documented in baseball, tennis, and many other sports.

The key point is that the chance of winning the next point is driven far more by the player’s long-run base rate than by what happened in the previous few moments.

The hot-hand fallacy is just as pervasive in financial markets. Investors often assume that a fund ranked in the top quartile one year is far more likely to remain a top performer the next.

When was the last time you invested in a bottom quartile performing fund?

In reality, there is very little persistence in annual relative performance, as value and growth styles fall in and out of favour.

Arguably the most dangerous version of this mistake is the belief that exceptional revenue and earnings growth can persist for many years. In competitive markets, companies rarely sustain market-beating growth rates for more than a year or two before competition, saturation, and simple mean reversion take hold.

REVENUE GROWTH RATES RARELY LAST FOREVER

Many years ago, we conducted a simple piece of research that illustrates the folly of extrapolating growth too far into the future.

The chart below shows the performance of an investment strategy that, at the start of each year, buys the global companies with the highest revenue growth rates.

If you had invested \$100,000 in that strategy 30 years ago, by the end of 2025 you would have had virtually nothing left.



Why? Because growth rates mean-revert far more quickly than investors expect, while valuations are driven to unsustainable levels by the assumption that recent success will continue indefinitely. Investors do not merely admire growth; they habitually over-extrapolate it.

That is why one of Plato's 150 Red Flags is a company with extreme growth expectations.

Market darlings with rosy narratives and heroic long-term assumptions can be especially dangerous. When expectations become too optimistic, even very good businesses can become very poor investments.

Current examples at time of writing include:

Guzman y Gomez (ASX: GYG) - forecasting 1,000 stores, the same as McDonalds, in Australia in 20 years time.

Tesla (NASDAQ: TSLA) - targeting 10 billion humanoid robots by 2040

Atlassian (NASDAQ: TEAM) - forecast to grow revenue from \$5.7b to \$11.3b despite the potential for SaaS-apocalypse to erode software moats. All are shorts and/or underweights for Plato Global Alpha.

By Dr. David Allen

III

Loss Aversion

The Pain of Letting Go

Loss aversion and the sunk cost trap quietly erode returns and, paradoxically, help explain why momentum investing works.

Read the scenario and commit to an answer before reading on.

Imagine you have booked two weekend getaways for the same long weekend. One is a trip to Noosa that cost you \$2,000. The other is a trip to Byron Bay that cost \$1,000. You realise you are going to enjoy Byron more. You cannot get a refund on either booking.

Which trip do you take?

The rational answer is straightforward: go to Byron. Both bookings are paid for. The money is gone either way. The only question is which weekend you will enjoy more.

And yet, if you are like most people, Noosa is tugging at you. In a near-identical experiment run by psychologists Arkes and Blumer in 1985, 54% of respondents chose the more expensive, less enjoyable option.

They could not bear the thought of “wasting” the bigger outlay, even though the money was gone regardless.

This is the sunk cost fallacy. A past expense, irrecoverable and economically irrelevant, overriding a clear-eyed assessment of what to do next.

WHY LOSSES HURT MORE THAN GAINS FEEL GOOD

The deeper force at work here is loss aversion.

Nobel laureate Daniel Kahneman and Amos Tversky demonstrated in their 1979 paper on prospect theory that we do not weigh gains and losses symmetrically.

Losing \$100 feels roughly twice as painful as gaining \$100 feels good. This is not a quirk of the unsophisticated. It is hardwired into how our brains evaluate outcomes.

For investors, this asymmetry creates two damaging habits. We hold onto losing positions too long, because selling forces us to confront the pain of a realised loss. And we sell our winners too quickly, locking in the pleasure of a gain before the market can take it away.

Try another quick one. Note your gut reaction.

You are offered a coin flip. Heads, you win \$150. Tails, you lose \$100. Do you take the bet?

The maths is clearly in your favour, but most people refuse it. The potential pain of losing \$100 outweighs the pleasure of gaining \$150. That is loss aversion in action. Now imagine that dynamic playing out across an entire portfolio, on every position, every day.

THE DISPOSITION EFFECT

Behavioural finance researchers call this pattern the disposition effect, and it has been measured extensively. In a 1998 study, Terrance Odean analysed the trading records of 10,000 individual investors at a US brokerage and found that a stock sitting at a gain was roughly 50% more likely to be sold than one sitting at a loss.

Worse, the winners those investors sold went on to outperform the losers they kept by an average of 3.4% over the following year.

Think about what that looks like in practice.

Millions of Australians bought Telstra in the T2 float at \$7.40. Over the years that followed, the stock drifted to \$5, then \$4, then \$3, and at every step investors told themselves it would “come back.” The money tied up in Telstra was a sunk cost, exactly like the Noosa trip, but they could not bring themselves to crystallise the loss.

More than two decades later, Telstra still trades below that T2 price. The rational question was never “will it get back to \$7.40?” It was “given what I know today, is this the best use of my capital?”

Meanwhile, the same investor might have bought Afterpay at \$10 and sold at \$20, thrilled to have doubled their money. Afterpay went on to reach \$160 before being acquired by Block.

The gain felt good. The early sale felt prudent. But it was the disposition effect at work: grabbing the certainty of a win rather than letting a strong thesis play out.

Investors are not just making emotionally driven decisions. They are making expensive ones. The pattern has been replicated across markets globally, among both retail and professional investors. It is one of the most robust findings in all of behavioural finance.

WHY THIS MATTERS FOR MOMENTUM

Here is where it gets interesting. The disposition effect is not just a curiosity of individual behaviour. It is one of the leading explanations for why momentum works as an investment strategy.

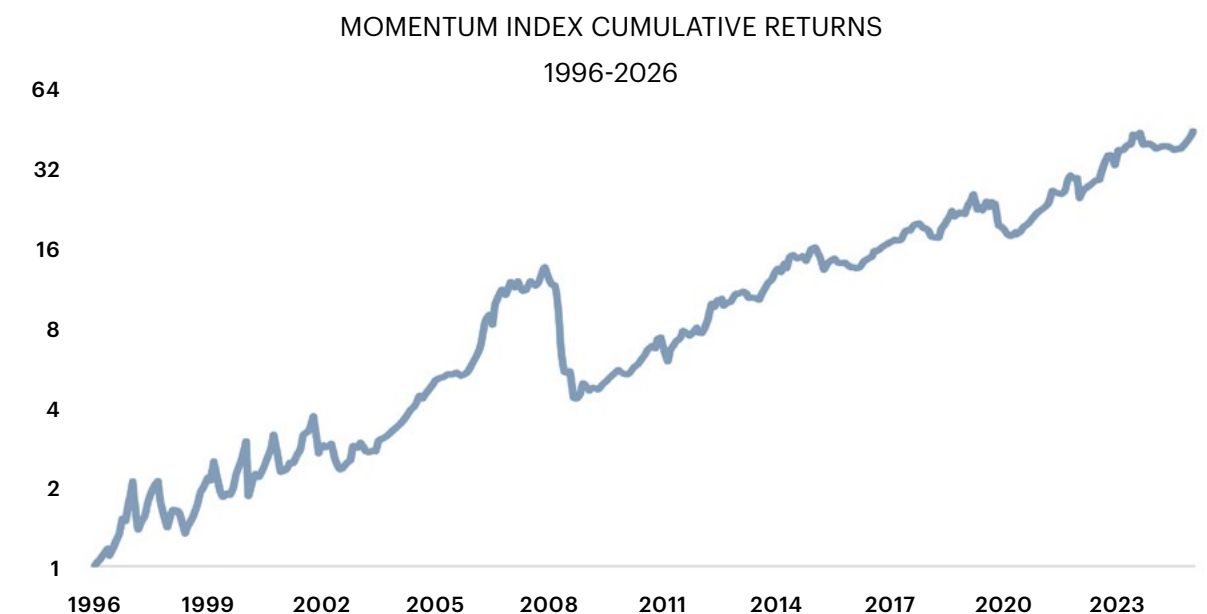
The logic is intuitive.

When good news arrives and a stock rises, many investors sell too early to lock in their gains. That selling pressure slows the stock’s ascent toward fair value. The result is that the stock continues to drift upward over subsequent months as the information is gradually reflected in the price.

The reverse applies to bad news: investors hold their losers, propping up the price, and the decline plays out more slowly than it should.

This creates a predictable pattern. Stocks that have been rising tend to keep rising, and stocks that have been falling tend to keep falling, in part because human loss aversion delays the adjustment to new information.

Momentum strategies, which systematically buy recent winners and sell recent losers, profit directly from this behavioural drag.



Source: Barra Momentum

The chart above shows the cumulative performance of a global momentum factor over three decades.

The premium has not been smooth, and it has gone through painful drawdowns, but the long-run pattern is clear: the collective tendency of investors to sell winners too early and hold losers too long has created a persistent, exploitable return premium.

KNOW WHEN TO FOLD 'EM

Kenny Rogers had it right. The problem is that our biology makes it nearly impossible to do consistently. We anchor to sunk costs. We defer losses. We grab gains too early. And we do it even when we know better.

Awareness is a start, but it is not a solution. Even professional fund managers still exhibit the disposition effect. We are not immune. But one of the more effective defences is to take the human out of the most emotionally charged part of the process: the decision of when to sell. Rules-based frameworks and systematic disciplines do not feel the sting of a loss. They evaluate each position on its forward-looking merits, without sentiment.

That does not make the decision painless. It just ensures the pain does not get a vote.

By Marcus Howes



IV

The Base-Rate Fallacy

The Evidence You Ignore

The same statistical trick that helped O.J. Simpson walk free is costing investors a fortune.

It was the case that gripped a nation. The prosecution appeared to have O. J. Simpson dead to rights.

A bloodied glove at the crime scene matched one found at his home. Blood belonging to the victim, Nicole Brown Simpson, was found in Simpson's house and in his car, the infamous white Bronco he later fled in. He had no alibi. And drops of blood matching Simpson's DNA were found leading away from the bodies.

So how did his lawyer, Johnnie Cochran, secure the acquittal of the century?

Part of the answer lies in one of the most powerful (and dangerous) cognitive errors in decision-making: the base-rate fallacy

A STATISTICAL SLEIGHT OF HAND

The LAPD's forensic experts testified that the probability of a random person matching the DNA evidence was extraordinarily small - less than one in ten million.

The defence turned this on its head.

They argued that in a country of roughly 300 million people, this implied there could be around 30 individuals who might match the DNA. Therefore, the odds that the blood belonged to Simpson were "only" 1 in 30.

It sounds compelling. It's also deeply misleading.

This argument quietly replaces the relevant base rate, the probability that Simpson was the killer given his relationship to the victim, history of domestic violence, lack of alibi, and suspicious behaviour, with an irrelevant one: the probability that a random person in America might match the DNA.

In doing so, it ignores the obvious: Simpson was not a randomly selected individual from the population. He was the ex-husband of the victim, present in the right place at the right time, with no alibi and a trail of incriminating evidence.

Undermine the base rate, and even overwhelming evidence starts to look ambiguous. The jury bought it. Simpson walked free.

A QUICK TEST

Before we move to markets, a simple question.

1% of people have a disease

99% do not

If you have the disease, there is a 99% chance you test positive

If you do not, there is a 5% chance you still test positive

If you test positive, what is the probability you actually have the disease?

Most people answer somewhere between 95% and 99%.

The correct answer is 17%.

Why? Imagine 10,000 people:

- 100 have the disease → 99 test positive
- 9,900 do not → 495 test positive

So out of 594 positive tests, only 99 are real cases.

Even with a highly accurate test, false positives dominate because the disease is rare.

If you got this wrong, you're in good company - around 80–95% of people do, including most doctors. The mistake is systematic: we focus on the strength of the signal and ignore the base rate.

MARKETS: WHERE THE FALLACY GETS EXPENSIVE

This same error shows up everywhere in investing.

We are drawn to companies with:

- charismatic founders
- disruptive technologies
- massive addressable markets
- compelling narratives

We look at them and think: this could be the next NVIDIA!

But the base rate matters.

The probability that any given pre-revenue company becomes a generational winner is vanishingly small. Yet investors routinely anchor on the upside scenario and ignore the distribution of outcomes.

Take pre-revenue stocks such as NexGen Energy, PYC Therapeutics, or IperionX. One of their great advantages is that they can't be valued on traditional metrics - there are no earnings to anchor valuation.

So what actually happens?

A global portfolio of pre-revenue companies, rebalanced monthly since 1996, turns \$100,000 into \$59,000 over nearly three decades. The only meaningful period of outperformance came during the tech bubble, when the market temporarily suspended disbelief and reason.

By contrast, the same \$100,000 invested broadly across all listed companies grows to roughly \$900,000, with significantly lower volatility. Case closed.

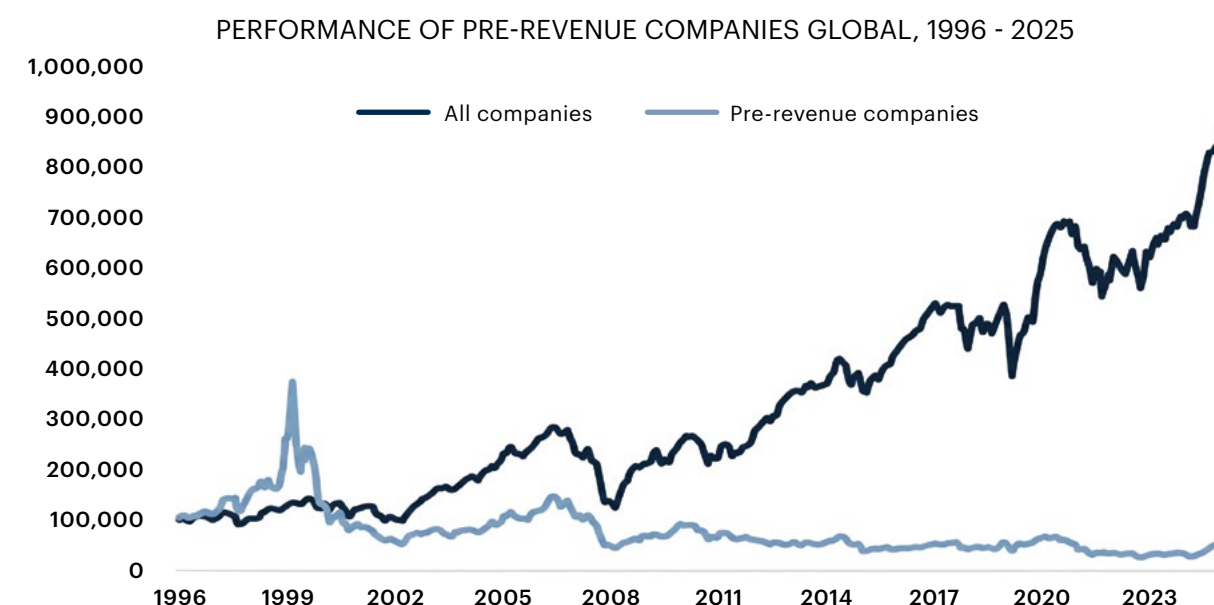
THE LESSON

The base-rate fallacy isn't about intelligence, it's about instinct.

We overweight compelling signals and underweight underlying probabilities.

In court, that can lead to reasonable doubt. In markets, it leads to permanent capital loss.

The discipline is simple, but not easy: Start with the base rate. Then update with the evidence, not the other way around.



Source: Plato Investment Management

By Dr. David Allen

V Confirmation Bias

The Death of the Bear Case

This fifth deadly sin explores the quiet force that kills the bear case

While Sin 4 was about the evidence we ignore at the start of a decision, the boring base rates that get drowned out by a vivid story, here we examine what can happen next.

Once investors own a stock or have formed the thesis, another sin can take over - the tendency to stop seeing the evidence that would change your mind.

But before we get to any of that, watch the short video below. It is about ninety seconds long. Follow the instructions on screen carefully, then read on.

Youtube Link: <https://youtu.be/vJG698U2Mvo?si=7MrflGaAh6mmXkcl>

Scan the QR code to access the video or search “Daniel Simons Selective Attention Test” on YouTube.



If you were counting passes for the first time, there is roughly a 50% chance you did not see the gorilla. A person in a full gorilla suit walks into the middle of the scene, stops, beats their chest, and walks off.

About half of viewers, focused on the ball, miss it entirely. When told afterwards, many refuse to believe it until they watch the video a second time.

The experiment was run by psychologists Daniel Simons and Christopher Chabris at Harvard in 1999, and it has been replicated more times than almost any result in modern psychology. The lesson is uncomfortable. What we are looking for determines what we see. Everything else, no matter how obvious, becomes invisible.

This is the doorway into our fifth deadly sin.

CONFIRMATION BIAS

Confirmation bias is the tendency to seek out evidence that supports what we already believe and to overlook evidence that contradicts it. It is the cognitive equivalent of counting basketball passes.

Once the brain has a job to do, defending a thesis, justifying a position, protecting a decision, the gorillas walk past unseen. Investors are especially vulnerable, because the act of buying a stock is the act of forming a thesis.

WHY THIS MATTERS IN MARKETS

Inside an investment process, confirmation bias is rarely loud. It is quiet, gradual, and almost impossible to notice in real time.

A portfolio manager buys a stock. The thesis is sound. Over the following months, the broker notes that arrive on the desk get sorted, often unconsciously, into “interesting” and “noise.”

The bullish ones get read carefully. The bearish ones get a glance and a dismissive “they don’t get it.” Management meetings reassure. The dissenting analyst on the team gets quietly moved off the name. None of this is dishonest. It is just the gorilla walking through the frame.

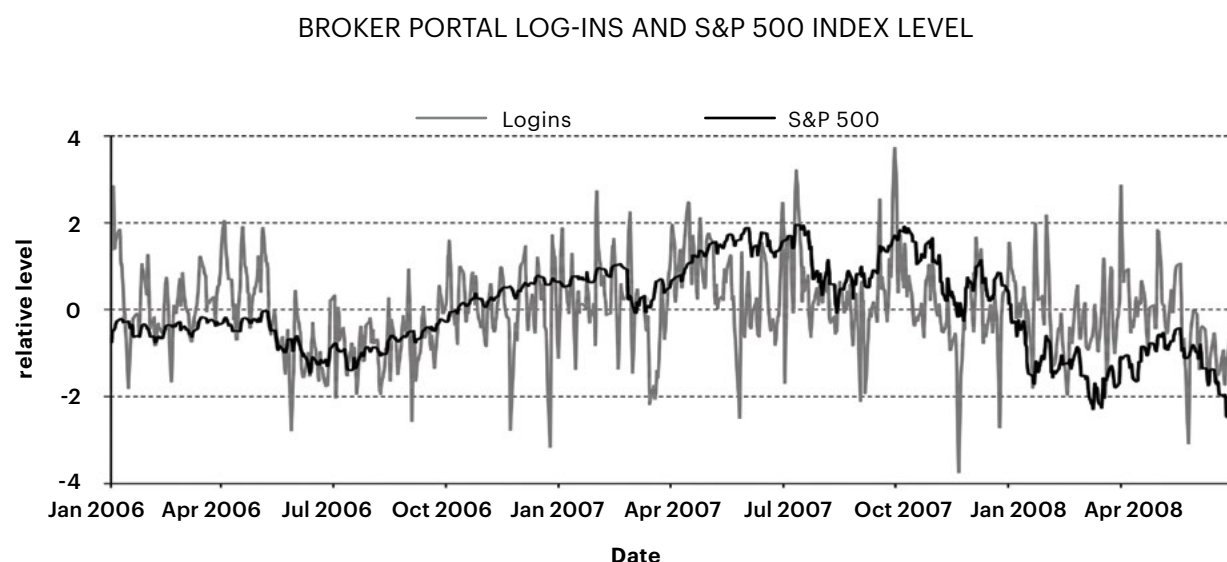
The result is that the bear case slowly dies inside the firm, even as the disconfirming evidence accumulates in plain sight.

THE OSTRICH EFFECT

In a 2009 paper, behavioural economists Niklas Karlsson, George Loewenstein, and Duane Seppi studied how often retail investors logged into their brokerage accounts.

The pattern was striking. When markets were rising, login frequency jumped. When markets were falling, it dropped sharply. They called it the ostrich effect.

It is confirmation bias stripped of its pretensions. The ostrich is not filtering the evidence, the ostrich is refusing to look at the evidence at all. And in a way, this is the more honest version of the sin, because at least the ostrich knows what they are doing.



S&P 500 index versus Vanguard account logins. Source: The Ostrich Effect (Karlsson, Loewenstein and Seppi, 2009)

The ostrich effect is also where confirmation bias compounds with loss aversion from Part 3 of this series. The investor sitting on a loss has two biases working in tandem. Loss aversion makes selling unbearable. Confirmation bias quietly screens out the evidence that would force the sale. Together, they are how a 10% loss becomes a 60% loss.

A FAMILIAR CASE STUDY

A2 Milk (ASX: A2M) was once the great ANZ growth story. Premium infant formula into China, a booming daigou channel, and a middle class that seemed to grow forever.

From 2015 to 2020, every new data point seemed to confirm the bull case.

Export volumes were up. Brand surveys were glowing. Broker price targets kept marching higher. Then in 2020 and 2021, the daigou channel collapsed, inventory piled up in the trade, and the stock fell from above \$20 to around \$5. The disconfirming evidence had been visible for months in the ASX announcements. But most investors had their head in the sand.

HOW DEEP DOES THE BIAS RUN?

The scientific method, arguably the single greatest driver of human progress, is grounded in falsification. Karl Popper’s insight was that a good hypothesis is not one you can prove, it is one you can disprove. Researchers are trained, against every natural instinct, to seek out the experiments that would break their theory rather than confirm it. We had to build an entire institutional framework to force ourselves to do the opposite of what our brains want to do. That is the scale of the problem.

The defence is not to try harder to be open-minded. Smart, well-trained, self-aware people exhibit the bias just as reliably as everyone else. Awareness helps, but it is not enough on its own.

What works is structure. Pre-mortems, where you imagine the position has failed and work backwards to the reasons why. Red-team reviews, where someone is formally tasked with arguing the bear case. And, ultimately, systematic processes that re-evaluate every position on the evidence each day, with no memory of what they concluded yesterday and no emotional attachment to being right.

The gorilla will always walk through the frame. The only question is whether your process is built to see it.

By Marcus Howes

VI

Anchoring

The Price You Can't Forget

Your brain lies to you about prices, and it's probably costing you money!

Anchoring is one of the most pervasive wealth-eroding behavioural biases in investing. It's our tendency to latch onto an arbitrary starting point and let it shape our decisions, even when it has no relevance to the future.

It shows up everywhere.

How often do you hear an investor say they'll only sell a losing position once it "gets back to their entry price"? That purchase price feels important, but in reality, it has precisely zero bearing on where the stock goes next.

THE \$100 BOTTLE OF WINE

One of the more elegant demonstrations of anchoring comes from wine tasting experiments. Give two groups the exact same wine, but tell one group it costs \$100 and the other \$10.

Consistently, the "\$100 group" reports a far superior experience, describing the wine as "complex", "layered", even "exceptional", while the \$10 group calls it "average" and "uninspiring".

It gets better. Brain scans show greater pleasure activation when people believe they're drinking the expensive bottle. The anchor doesn't just influence opinion, it changes the experience itself.

Incidentally, I remember watching the Wallabies at Stade de France, working my way through a heroic number of Heinekens and feeling convincingly tipsy, only to discover afterwards that I'd been drinking non-alcoholic beer in a dry stadium.

Proof, if any were needed, that the mind is easily anchored.

A HUMBLING LESSON IN SHENZHEN

I once thought I understood anchoring while negotiating in Shenzhen.

An item was advertised at ¥100. I offered ¥50, deliberately trying to reset the anchor lower. After a long back-and-forth, we settled at ¥70. I walked away feeling like I'd done well.

Moments later, a local buyer approached the same stall, opened at what seemed like an absurd ¥5, and settled at ¥21.

Same product. Same seller. Completely different anchor.

EVEN MEANINGLESS NUMBERS MATTER

The classic experiment by Daniel Kahneman and Amos Tversky (1974) shows just how deep this bias runs.

Participants spun a rigged “wheel of fortune” that landed on either 10 or 65. They were then asked a completely unrelated question: what percentage of African countries are members of the United Nations?

Those who spun 10 gave significantly lower estimates than those who spun 65.

The number was random, irrelevant, and obviously meaningless. Yet it anchored their thinking.

TRENDS IN SELL-SIDE STOCK EARNINGS REVISIONS

One of the most fascinating examples of anchoring appears in sell-side earnings forecasts. Rather than fully incorporating new information immediately, analysts tend to adjust their forecasts gradually, anchoring on their prior estimate and only slowly moving away from it over time.

Why does this happen? Partly it’s behavioural, partly institutional. Large forecast changes risk undermining an analyst’s credibility - they are, in effect, an admission that the previous estimate was wrong.

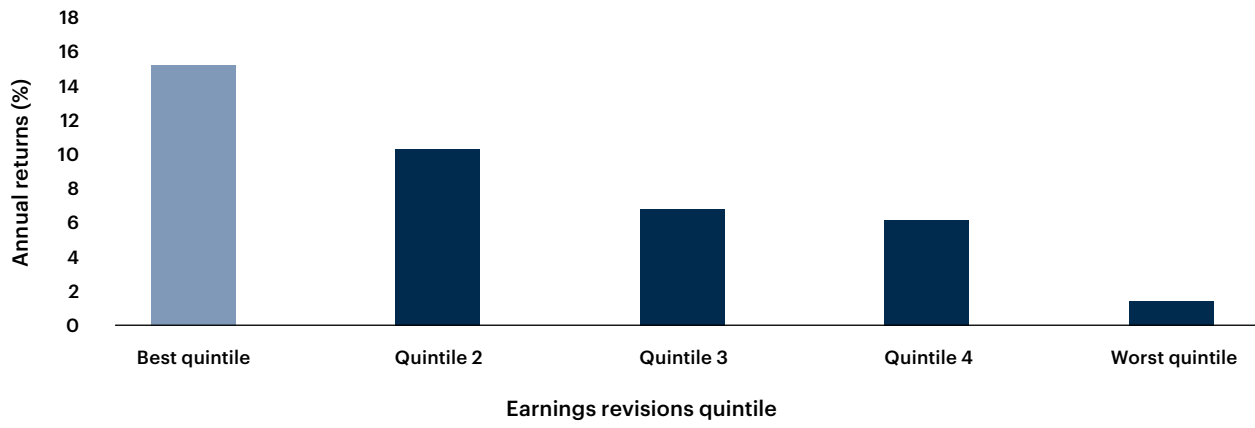
At the same time, analysts often wait for confirmation from their peers, creating a “safety in numbers” dynamic that reinforces herding behaviour.

The result is a clear statistical signature. If forecasts were fully efficient, the direction of revisions would be no better than a coin toss.

In reality, revisions exhibit persistence: when an analyst upgrades their forecast, the next revision is significantly more likely to be an upgrade as well (63% probability). In other words, revisions have momentum.

This seemingly small inefficiency has powerful implications. A simple strategy that buys companies experiencing positive earnings revisions, and avoids those with negative revisions, has historically outperformed, as the market slowly catches up with information that analysts themselves incorporate only gradually.

SELL-SIDE EARNINGS REVISIONS, AND FUTURE STOCK PRICE PERFORMANCE, GLOBAL, 1997-2025



WHERE WE’RE SEEING IT TODAY

At the time of writing, in the Australian market, names such as Santos ASX: STO, Hub 24 ASX: HUB, QBE Insurance ASX: QBE, Mineral Resources ASX: MIN , and Sandfire Resources ASX: SFR currently screen strongly on our earnings revisions models.

Whether they continue to do so will depend on one thing: how quickly analysts are forced to abandon their current anchors.

By Dr. David Allen

VII

Herding

The Safety of the Crowd

“When people are free to do as they please, they usually imitate each other.”

– ERIC HOFFER

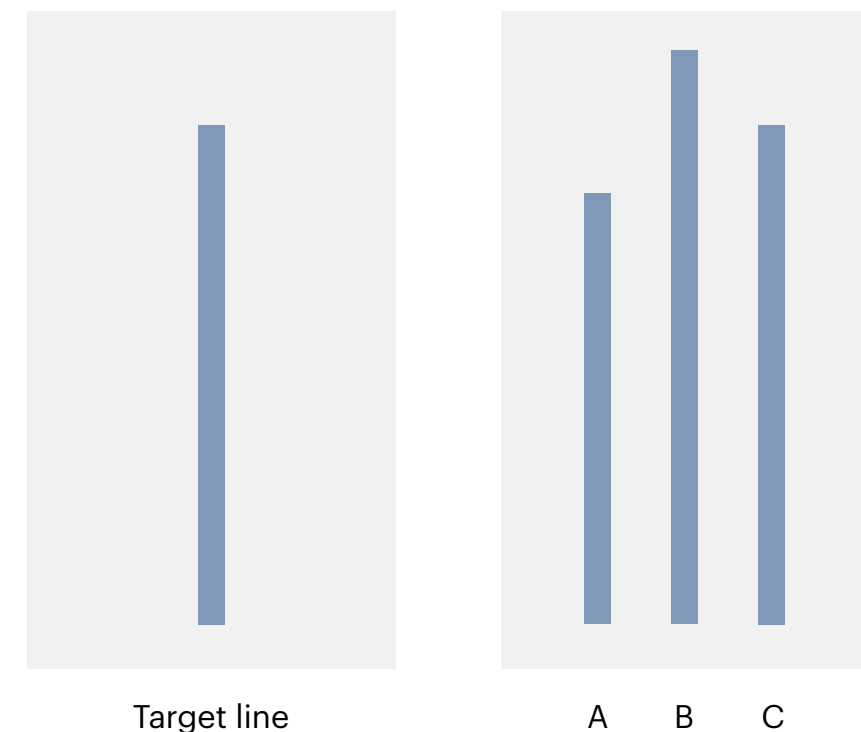
Herding is not a bias of the individual but of the group. It is what happens when all the other sins are pooled together and amplified by the fact that humans do not operate in isolation. We watch each other. We calibrate against each other. And in markets, we buy and sell each other’s ideas.

It is the social bias that sits on top of all the others, and it may be the most powerful of the lot.

THE LINES

In 1951, the psychologist Solomon Asch ran an experiment that has become one of the most replicated findings in social science.

A participant sat at a table with seven other people to take a simple visual test. Three lines of obviously different lengths were shown on a card, and each had to say aloud which of the three matched a reference line.



What the participant did not know was that the other seven were actors, instructed to unanimously call out the wrong answer on certain trials. When the participant's turn came, they faced a choice: trust their own eyes, or go with the group.

Around 75% caved at least once. Many admitted afterwards that they knew the group was wrong but could not bring themselves to say so. The social pressure of a unanimous group, even one of strangers with no authority and no stake in the outcome, was enough to override what the eyes could plainly see.

Now imagine you are not comparing lines. You are valuing a stock.

WHY THE CROWD WINS THE ARGUMENT

Keynes made the point in *The General Theory* (1936): investing is not really about valuing assets. It is about anticipating what others will pay for them. Once you accept that framing, herding stops looking like a bias. It starts looking like a rational response to the game being played.

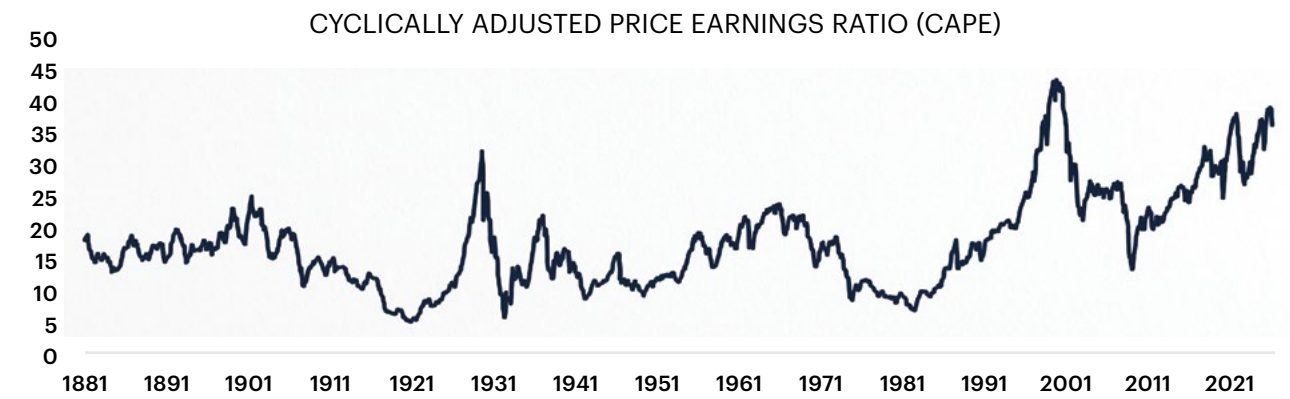
Inside a professional investment firm, this has a quieter name: career risk. Keynes had a line for that too: "it is better for reputation to fail conventionally than to succeed unconventionally."

Consider a fund manager who believes a popular stock is badly overvalued. If she sells and is right, she has done her job. If she sells and is wrong, she has underperformed on a stock everyone else owns, and she will have to explain herself to her clients. If she holds and it collapses, she has lost money, but so has everyone else, and the conversation becomes about market conditions rather than her judgement.

The incentives do not reward independent thinking. They reward being wrong in company.

A CENTURY OF CROWDS

Nobel laureate Robert Shiller has spent much of his career documenting how this plays out at the level of entire markets. His cyclically adjusted price-to-earnings ratio, or CAPE, smooths earnings over ten years and has been tracked continuously since 1881.



Shiller CAPE ratio, 1881 to present. Source: Robert Shiller, Yale University

Every major peak on that chart is a crowd event. The late 1920s. The late 1960s. The dot-com bubble of 1999 to 2000. Each one looks in hindsight like an obvious mania. Each one, at the time, felt to participants like the new normal.

Sun Microsystems built servers and workstations that powered the early internet. "We put the dot in dot com", its slogan read. On 27 March 2000, the stock was trading at \$64, a market capitalisation of roughly \$200 billion, and ten times revenues. Four years earlier it had been around \$5.

Two years later, with the stock back near \$5, Sun's CEO Scott McNealy gave an interview to *BusinessWeek* that has become one of the most cited moments in modern investing. He walked through the maths of his own peak valuation. At ten times revenues, he pointed out, an investor would need the company to pay out 100% of revenue as dividends every year for a decade just to break even. That assumed zero cost of goods sold, zero operating expenses, zero R&D for ten years, and no tax anywhere along the way. Having calmly laid out how ridiculous those assumptions were, he closed with four words: "What were you thinking?"

Sun never recovered. It was acquired by Oracle in 2010 for \$7.4 billion, a fraction of its peak value. The company was real. The business was real. What was not real was the price the crowd had agreed to pay for it.

HERDING IS NOT ALWAYS WRONG

Here is the part that usually gets left out: herding is not always a mistake.

Markets have a function, which is to aggregate the views of many participants into a price. When the crowd is right, following it is the same as being informed. The trend is a signal. Strategies that systematically lean with the crowd, from momentum to trend-following, have delivered long-run returns across markets for good reason.

The problem is not following the crowd. The problem is following the crowd without knowing why, and without a framework for recognising when the crowd has detached from the underlying reality of the businesses it is pricing.

This is where process matters.

HOW WE THINK ABOUT IT

A systematic, valuation-aware process does not try to escape the crowd. That would be both impossible and undesirable. Our net exposure to equity markets is 100%, so when the market falls, we fall with it. We do not pretend otherwise.

What the process does is anchor every decision to something other than what the crowd is doing. Every position is re-evaluated, every day, on its forward-looking merits, with valuation as a core input. When valuation and fundamentals agree with the crowd, we go with it. When they stop agreeing, we start trimming, regardless of how strong the narrative has become. The discipline is not to be contrarian. The discipline is to let the evidence, rather than the noise, make the call.

This does not call the top. What it produces is a portfolio whose biggest positions are there because the numbers justify them, not because everyone else owns them. Over time, that difference compounds quietly, and it shows up on the other side of the mania.

By Marcus Howes

This series began with the observation that our biases are hard-wired. Millions of years of evolution optimised us for tribal survival, not for the cold arithmetic of modern markets. Overconfidence helped us hunt. Loss aversion helped us avoid predators.

Confirmation bias made us loyal. Herding kept us safe in numbers. None of that goes away when we put on a suit. The brain that carries you to work tomorrow is the same brain that, given the right conditions, will still call the wrong line.

All seven of these sins have been committed, at various times, by every investor worth reading, including us. We commit them every day. The discipline is not in being above them. It is in building a process that catches us before they cost us.

Awareness helps. But it is process that turns awareness into action. Process is what forces us to confront our biases on every decision, rather than only in hindsight. It is not a cure. But it is the best defence we have against a brain that evolved for a very different game.

Thanks for reading.

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Overconfidence Quiz Answers:

- 1. 6650 km
- 2. 178 million
- 3. 8,848m
- 4. 384,400 km
- 5. 30 million tonnes
- 6. 3,474.8 km
- 7. 22 months
- 8. 1756
- 9. 5,400 km

Authors



Dr David Allen

HEAD OF LONG/SHORT STRATEGIES
PLATO GLOBAL ALPHA FUND PORTFOLIO MANAGER

Dr. David Allen has more than two decades of experience in international equity investing. He began his career at J.P. Morgan Asset Management in London in 2002 and, in 2009, became one of the firm's youngest-ever Managing Directors when he was appointed Head of Research overseeing €35 billion in assets. During his time at J.P. Morgan, he co-managed the €10 billion Europe Strategic Value Fund and the Europe Strategic Growth Fund. His true passion, however, lay in long/short investing. Dr. Allen went on to manage the €6 billion J.P. Morgan Europe Equity Plus (130/30) Fund and the €1 billion Europe Equity Absolute Alpha (market neutral) Fund, the latter earning the prestigious Eurohedge Award for Best Hedge Fund in 2014.

In 2018, Dr. Allen returned to his hometown of Sydney to join Plato Investment Management, where he is Head of Long/Short Strategies and Co-Head of Research. He manages the Plato Global Alpha (150/50) Fund, which was Australia's top-performing global fund over its first four years, delivering annualised returns of more than 24%.

Before embarking on his investment career, Dr. Allen was a professional rugby union player. He is currently President of the Eastern Suburbs Rugby Club. He holds a Bachelor of Business with First Class Honours from the University of Technology Sydney and a PhD in Quantitative Finance from the University of Cambridge.

David's research has been published in some of the world's premier academic journals, including the Financial Analysts Journal and the Journal of Empirical Finance.



Marcus Howes

QUANTITATIVE ANALYST

Marcus joined Plato in early 2023. With deep expertise in machine learning and neural networks, Marcus specialises in leveraging Natural Language Processing (NLP) techniques and harnessing the capabilities of Large Language Models (LLMs) to develop innovative investment strategies. Marcus graduated with First Class Honours from the University of Sydney with a combined Bachelor of Commerce and Bachelor of Engineering (Mechatronic).

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turns awareness into action.*

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