



# Irrational Behaviour, Rational Investing: How We Ov<u>ercome Our Biases</u>



"We have spent a considerable amount of time thinking about how human behaviour can damage our clients' capital – indeed it is why we work with a team of behavioural coaches – so that we can short-circuit our own potentially harmful biases."

We focus on delivering attractive long-term performance by investing in a concentrated portfolio of companies that uniquely solve problems for their customers and generate attractive economics for shareholders. As active managers in a highly competitive market, we believe we have two sources of alpha in our approach to investing: our long-term investment horizon and our disciplined focus on capital allocation. We believe that our long-term investment horizon is a powerful competitive advantage, as many market participants are more focused on the short term, leaving compelling investment opportunities for patient investors. Our rigorous capital allocation includes implementation of behavioural analysis into the investment process to overcome these heuristics and biases. In this note, we want to focus on our capital allocation approach and behavioural analysis specifically.

# The Pillars of Our Process: Payoffs, Psychology and Portfolio Risk

We employ two distinct processes when investing: investment selection and capital allocation. Most investment managers focus on the investment side, or the "treasure hunt," but we have seen that spending equal time on determining how much capital to put behind each investment can be even more impactful from a return perspective.

#### PORTFOLIO MANAGERS, GLOBAL LEADERS STRATEGY



#### MICK DILLON, CFA

- Investment experience since 2000
- Joined Brown Advisory 2014

#### BERTIE THOMSON, CFA

- Investment experience since 2002
- Joined Brown Advisory 2015

Our capital allocation process includes three parts: (1) a payoff versus probability assessment, (2) the integration of our behavioural rules and (3) a portfolio risk analysis. The goal of capital allocation is to improve the risk-adjusted returns of our portfolio.

With the launch of the Brown Advisory Global Leaders Strategy in 2015, we embraced the opportunity to create processes around our strengths and weaknesses as investors and to combine our individual skills with a set of guidelines appropriate for the strategies we manage. To do so, we started working with a team of behavioural investing coaches who provide reflection and insights into our investment process to this day.

# Outsmarting Evolution: Managing Our Stone Age Brains

We are firm believers that human beings are uniquely disadvantaged in the activity of investing. Many of our behaviours have been shaped by evolution – we are hardwired to survive and reproduce – behaviours that can be frighteningly detrimental to allocating capital. We rely on pre-programmed biases and heuristics to achieve these aims. In many ways, we are doing a 400-year-old activity with a 2-million-year-old brain. The accepted wisdom of social proof embeds the heuristic of focusing on near-term multiples into most investors' minds as they succumb to myopia and forget about the net present value of an investment. Acceptance is the first step toward improvement, and we have spent a considerable amount of time thinking about how human behaviour can damage our clients' capital (and ours!) and how we can create a repeatable process to increase investment skills by minimising the negative impact of behavioural biases.

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#### WHAT IS BEHAVIOURAL ANALYSIS?



Creating skill around unconscious decisions.

Ultimately, the only thing a portfolio manager can control is their own behaviour.

Source: Brown Advisory.

Clients rightly look at the inputs of an investment strategy (the process) rather than simply the outcome (performance) to disentangle a fund manager's skill from luck and get a better understanding of predictability around success. We aim to partner with investors for the long term and be very transparent about what we are looking for in an investment as well as our process for capital allocation. For us, embracing the behavioural side of investing is a key ingredient of our capital allocation approach. We believe we can improve our decision-making by addressing unconscious, emotionally-driven choices. Self-awareness of our own biases is the first step to improving skills; the systematic implementation of a decision-making framework and the measurement of its outcomes further help us minimise potentially capital-destructive biases.

Examples of biases we have identified and created processes around are loss aversion, regret aversion and the endowment effect. In this note, we analyse the loss aversion bias and our approach to overcoming it in more detail. Over the years, we have spent significant time with a multi-disciplinary team of coaches examining our strategy's data. Portfolio managers' digital decision-making diaries are combined with trading data and review sessions for analysis. This leads to implementation of decision-making processes to overcome our potentially harmful biases.

### How Human Biases Undermine Returns

It is our hard-wired evolutionary focus on survival and pain avoidance that can be incredibly damaging to long-term returns during a crisis. Loss aversion is best described as a mental state where we aim to avoid risks when gains are at stake but seek risk when already in a losing position. It is the idea that human beings feel pain more than pleasure. In investing, this manifests itself in losing positions where we do not want to face up to the painful loss – in moments of crisis, loss aversion can short circuit rational long-term thought. Additionally, humans do not like thinking about selling

a loser, as we will be crystallising a loss forever and will expose ourselves to another source of pain – the pain of regret should that loser rebound after the sale.

Loss aversion manifests itself in another way that can undermine our long-term thinking. When faced with stress, our natural reaction is to avoid pain and focus on the immediate source of that pain. This natural instinct dramatically shortens our time horizon, and in times of market turmoil, it makes it much harder for investors to think long-term. Nobel prize winner Richard Thaler coined this myopic loss aversion. In his 1995 seminal paper, "Myopic Loss Aversion and the Equity Premium Puzzle," he leverages Daniel Kahneman and Amos Tversky's groundbreaking work on prospect theory to explain the existence of the equity risk premium. Myopic loss aversion is particularly acute in moments of market stress when the temptation is to frequently check falling stock prices - the sources of pain - despite intentions of being long-term investors. In a self-destructive cycle of evolutionary bias, the more we check falling security prices, the more we succumb to loss aversion, the shorter our time horizons become and the more our long-term time horizon advantage is undermined. The outcome can be disastrous, as the probability of recovering from a loss quickly diminishes.

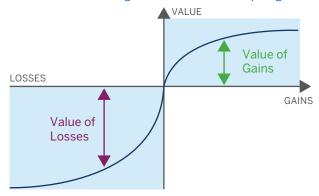
### Drawdown Review: Our Secret Weapon Against Knee-Jerk Reactions

Within the Brown Advisory global strategies, we have sought to overcome loss aversion bias through our "Drawdown Review." When one of our companies' share prices either declines 20% since purchase or underperforms by 20% over a rolling 12-month period, this process is triggered. This results in a review of the investment case. Our process for dealing with "losers" creates repeatability, metrics for measurement and also takes the emotion

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#### LOSS AVERSION AND THE DRAWDOWN REVIEW

#### Humans Prefer Avoiding Losses Rather Than Acquiring Gains



Source: Thinking, Fast and Slow, David Kahneman.

out of a stressful situation, particularly as it relates to the analyst team. Instead of blaming the immediate source of pain on the analyst who recommended a specific investment, as a team, we focus on this moment of opportunity. It allows us to identify if we are facing market inefficiency, which, if acted on successfully, should help us protect and grow our investors' capital. Our focus in a Drawdown Review is on the reason driving share price performance, whether it is temporary (demand side) or permanent (supply side or regulation). It is the permanent impairments of a company's business model that concern us most. If, at the end of a Drawdown Review, we conclude the investment thesis is intact, then it is seen as a "bargain moment," and we buy more. If not, we exit. This process has evolved over time as we have collected more strategy-specific data to learn from.

## Adapting to Thrive: Making Our Process Even Stronger

As investors, we firmly believe in the importance of self-improvement, which means we need to be open to adapting a process when new information presents itself. This is in line with the Edisonian approach of trial and error and, therefore, the idea that small improvements can yield big benefits over time. The best things in life come from compounding – in relationships and in learning but also at the company level from a compounding cash flow perspective. Small incremental improvements can compound over time into what look like large quantum leaps – these are what we aim to harness for our investors.

Triggers for a process improvement can be manifold, such as new learnings from our data, suggestions from our coach or observations and ideas from our colleagues in the investment team. We do not undertake changes to our process lightly, but we must avoid slavish adherence to a process that no longer serves the goal of

Percentage Gain Required to Compensate for Percentage Loss



sustainable alpha generation. As such, we have an annual offsite where the entire global equity investment working group comes together to scrutinize the investment process and reflect on areas for improvement. We think back on challenges faced throughout the year and often over many years, including inputs from our behavioural coach. In 2023, we further introduced Think Week, a week of uninterrupted time to build lasting knowledge that can help us become better investors. By placing Think Week ahead of our annual offsite, we can gather and discuss impactful ideas and compounding knowledge with the aim of further process improvements in the future.

### A Capital Preservation Mindset: Why Our Behavioural Focus Will Keep Us Ahead

The goal of integrating behavioural analysis is to systematically improve skills by avoiding bias pitfalls and explicitly avoiding losers. It is typically the "wrong" investments in a portfolio that destroy capital, not what you don't own. While self-awareness is indispensable, it alone is not enough. Our institutionalised decision-making framework and continuous measurement enable ongoing optimisation, anchoring us in insights that provide a durable edge. By instilling behavioural analysis into our DNA, we believe our sharpened process will keep us ahead, but no shortcuts exist - we must keep observing, learning and enhancing. After all, the process is there to drive performance. We strongly believe that Brown Advisory's independent ownership structure, which is flat in nature and aligned to our investors' success, is a vital ingredient for investment excellence. This structure also helps attract the type of self-motivated and curious investors that, when working in a collaborative and psychologically safe environment, can continuously drive success for our clients.

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