

2025 **Sci-Fi Report**

THE BEHAVIOURAL **SCIENCE** OF
SOUTH AFRICAN **FINANCIAL** DECISIONS





Table of contents

Note from the editor

4

Section 1: Articles

10

- 1.1 The behaviour business: Creating finance experiences that work for humans and AI
- 1.2 Scaling behavioural finance: How personalisation is transforming investor engagement
- 1.3 Beyond risk tolerance: A science-based approach to understanding your clients
- 1.4 Applying behavioural science to improve financial wellbeing

11
16
20
24

Section 2: Investor behaviour in the Flexible Income Option (FIO)

29

- 2.1 Volatility and switching for the period
- 2.2 The investor “switch itch” for 2025
- 2.3 Following the money
- 2.4 The behaviour tax for 2025

30
31
31
33

Section 3: Investor behaviour in the Retirement Income Option (RIO)

35

- 3.1 Overall behaviour summary
- 3.2 The investor “switch itch” for 2025
- 3.3 Following the money
- 3.4 The behaviour tax for 2025

36
37
37
39

Section 4: Archetype analysis (machine learning insights)

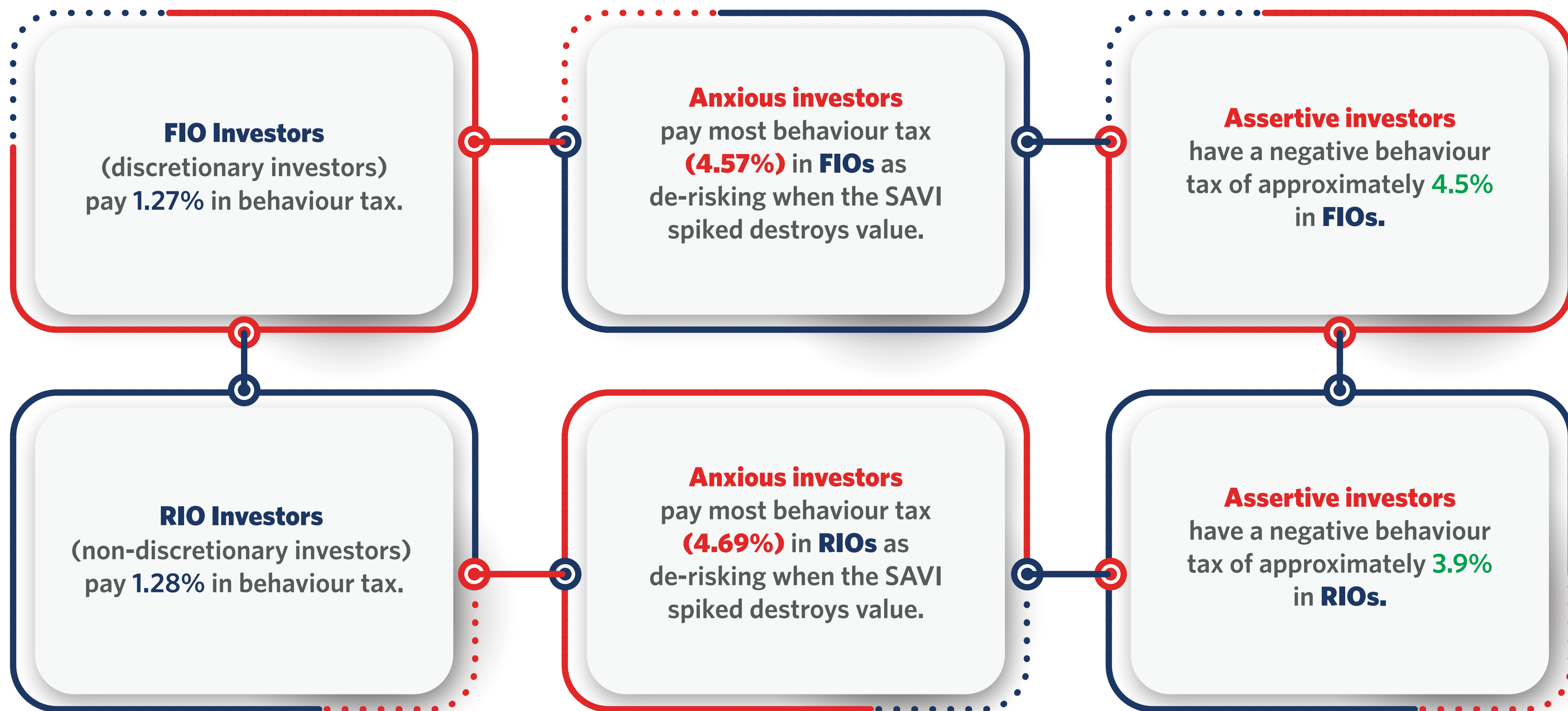
41

- 4.1 Archetype analysis for 2025 using unsupervised machine learning

42



Sci-Fi Report highlights





Note from the editor

Paul Nixon

Head: Behavioural Finance



Note from the editor

Welcome back to the 2025 edition of the Sci-Fi report. In the 2024 Sci-Fi report, post-COVID levels of behaviour tax, on average, remained alarmingly elevated. The 2025 period, however, once again presents some interesting findings as only the Anxious investor archetype pays behaviour tax at high levels (> 4%). At the same time, assertive investors incur a high negative behaviour tax as rising markets persist. While behaviour tax overall has subsided to just over 1% in FIOs and RIOs, switching once again occurs in sync with a rising South African volatility index (SAVI), which is where the Anxious investor often gets trapped and sidelined in rising markets.

For the behavioural finance department, once again, a highlight was the continued partnership with the Global Association of Applied Behavioural Scientists (GAABS) and the CFA Society of South Africa to deliver a ground-breaking behavioural finance webinar on the future of behavioural finance, which more than 2 500 people watched.

This year also saw the building and preliminary testing of the Momentum Money Fingerprint psychometric assessment for Consult by Momentum and Momentum Financial Planning (MFP). A prototype of a retrieval augmentation generation large language model (RAG LLM) was also successfully tested, which was trained on the Money Fingerprint after generating random

money attitudes and personality traits. Behaviourally informed content was then successfully generated as the RAG was able to augment prompts to the base LLM (like Claude or GPT 5.0) and hyper-personalise relevant and meaningful content. This will be key to the implementation of behaviour finance in the modern advice practice.

Another key achievement for the year was publishing a structural equation model (SEM) that showed the relationship between the Money Fingerprint and two-pot withdrawals and that the attitudes of Money Anxiety and Money Prudence remain key in predicting two-pot withdrawals. Only 15% of highly prudent pension members withdraw from their savings pot, while 60% of those with low prudence do the same. This reinforces the importance of this instrument for business and advisory insights.

Before we get into the featured articles from this year's Minds and Machines conference, the following is an interview from Cover magazine where Sonja Steyn, strategic head of wealth management and financial planning & advice at Momentum, and I are interviewed about where we think advice is headed.

Paul



Paul Nixon, CFP®
Head: Behavioural Finance



Redefining advice for the human era



Redefining advice for the human era

In recent years, I've noticed how the conversation around technology in financial services has grown louder, sharper, and more urgent. At our own TechFest2025, the theme that kept resurfacing was simple but profound: where does the human fit in a digital world? Technology is essential to survival and growth, but advice, especially financial advice, is ultimately about people. It's about trust, context, emotion, and lived experience. I was reminded of this when I sat down with Paul Nixon, head of behavioural finance at Momentum, and Sonja Steyn, head of wealth management strategy, to discuss their initiative called the Money Fingerprint™. What struck me was how this tool represents more than a product feature, it symbolises a shift in mindset about advice itself. It is about redefining financial advice for the human era.

Moving beyond the numbers - Sonja framed the discussion with Momentum's purpose: to build and protect clients' financial dreams. She was adamant that advice cannot be reduced to spreadsheets or portfolio allocations. True advice demands deeper connections and conversations with clients. It means meeting them in their context, their world, their priorities, their fears. "We want to focus on the being as well as the money," she said. That line resonated with me. For too long, our industry has been comfortable treating people as balance sheets. Sonja reminded me that numbers without context

disempower clients. They switch off when faced with jargon, when we fail to acknowledge what truly matters to them. Why a "Money Fingerprint™"? - Paul explained why the traditional risk profiling approach has been flawed for decades. The old questionnaires - asking whether someone enjoys bungee jumping, for example - never measured true financial risk tolerance. Risk is domain-specific: someone may skydive on weekends but only invest in fixed deposits. The danger, Paul pointed out, is that traditional questionnaires often capture perceptions of risk at a moment in time, which shift with life events. A promotion, a job loss, or a windfall will change answers dramatically. What we need to measure, he argued, is the underlying psychological construct - a person's enduring willingness to take financial risk. The Money Fingerprint™ addresses this by layering other dimensions onto risk tolerance: personality, money attitudes, anxiety levels, and spending patterns. It paints a holistic picture of how someone actually relates to money.

Transforming the advice conversation - Where I saw the power of this approach was in how it changes the client-adviser interaction. Instead of leading with risk and return jargon, advisers can start by asking simple but profound questions: Do you worry a lot about money? What dreams or fears shape your decisions? These are not complex models, but they are deeply human entry points.



Sonja Steyn

Strategic Head of Wealth Management and
Financial Planning & Advice at Momentum



Redefining advice for the human era

Sonja highlighted how this creates alignment between financial context and personality. It allows clients to “buy into their own plan” rather than feeling a plan has been imposed on them. That shift builds trust. When a client says, “you get me,” you know advice has moved from transactional to transformational. Momentum Financial Planning has taken this philosophy to heart, embedding behavioural science into the very fabric of its advice process. With experts like Paul Nixon from Momentum Investments guiding the integration of behavioural insights, the business is equipping its advisers to move beyond conventional product-led conversations. By combining tools like the Money Fingerprint™ with outcomes-based advice, Momentum is creating an advice environment where clients feel seen and understood – not just as investors, but as people with values, fears, and aspirations. This positions Momentum Financial Planning as a champion of a new era of advice, where behavioural understanding is not a peripheral add-on but a core enabler of better long-term financial decisions.

Connecting finance and behaviour - Paul unpacked behavioural finance in refreshingly practical terms. For years, academia has catalogued biases – loss aversion, anchoring, the IKEA effect. But labelling clients with biases doesn’t help them

change behaviour. What matters is recognising that psychology has value. People don’t always make wealth-maximising decisions; sometimes they buy Range Rovers because it makes them feel respected. Financial plans that ignore these realities fail. Plans that integrate them stand a chance. This is where behavioural finance is evolving: less about “irrationality” and more about normal people making normal money decisions. Our role as an industry is not to judge those decisions but to guide clients towards trade-offs they can live with – ones that serve both their emotions and their long-term well-being.

Long-term well-being and behavioural tax - Circumstances change, but personalities are surprisingly elastic, they tend to snap back after life events. Money attitudes, however, are more malleable. This is where advisers can add enormous value. Sonja gave a practical example: Predicting which clients are more likely to withdraw funds under South Africa’s two-pot retirement system. These decisions can act as a “behavioural tax”, devastating long-term wealth because of short-term impulses. By identifying those clients early, advisers can intervene and guide them toward better choices. Here, the Money Fingerprint™ isn’t just descriptive; it becomes predictive. It helps advisors prevent costly mistakes before they happen.

Integrating behavioural insights with outcome-based advice - Momentum has long championed outcomes-based advice, mapping a client’s risks across life stages and prioritising needs before matching them with products. Behavioural finance adds a critical psychological layer to that framework. As Sonja put it, technical outcomes are important, but unless the emotional execution is factored in, clients will lapse policies or disengage. Outcome-based advice, fused with behavioural insight, ensures that clients not only have the right plan but also stay committed to it.

The role of technology and AI - No discussion today is complete without AI. Paul described how AI can augment advisers by digesting vast volumes of psychological research and suggesting conversation pathways. Imagine an adviser feeding a client’s Money Fingerprint™ into a system that proposes discussion prompts or identifies likely roadblocks. The adviser still applies judgment, but with far more confidence and efficiency. Sonja added that AI also enables segmentation beyond demographics. Two clients with identical profiles on paper may behave entirely differently, one anxious, another impulsive. Hyper-personalisation requires this behavioural layer, and AI makes it scalable.



Redefining advice for the human era

For advisers, this frees up time to do what they do best: have meaningful conversations. For clients, it creates advice journeys that feel tailored, relevant, and human.

Future-proofing advice practices - The ultimate question is whether this future-proofs financial advice. Both Paul and Sonja believe it does. Younger generations are less interested in buying products and more interested in guidance that helps them manage their lives. They also resist traditional sales approaches. Advice, then, becomes about being an objective partner who helps people make good decisions – sometimes saving them from catastrophic mistakes. Paul shared his own story of nearly doubling down on a failed coffee shop venture. Knowledge alone couldn't save him; objectivity from a trusted outsider did. That lesson applies to every client we serve. As remuneration models evolve, we may see more fee-based structures that reward advisers not just for selling products, but for improving clients' long-term well-being. That's a future worth preparing for.

My takeaway - Reflecting on this conversation, I left convinced that Money Fingerprint™ is more than a tool it's a philosophy. It represents a shift from advice as product-matching to advice as life-guiding. From risk boxes to human fingerprints.

If we want to stay relevant in the human era of technology, we must remember that behind every portfolio is a person with dreams, fears, and quirks. When advice acknowledges both the balance sheet and the beating heart, trust is built, behaviour changes, and financial well-being becomes a shared achievement. That, in my view, is the road ahead.

Source: <https://www.cover.co.za/magazines/september>



1

Articles

(Features from our annual
behavioural finance conference)

Article 1

The behaviour business: Creating finance experiences that work for humans and AI





The behaviour business: Creating finance experiences that work for humans and AI

About Richard:

Richard Chataway has worked in senior strategic roles for government in Australia and the UK, and with clients including HSBC, Atos, Southern Water, UBS, Coca-Cola and Natwest Group - and conducted training for call centre personnel, marketing directors, sales teams, creatives, and everything in between. Richard has a reputation for the engaging, effective and practical application of (behavioural) science as a frequent conference speaker, and author of the book 'The Behaviour Business'. He is a former board member of the Association for Business Psychology, the industry body that is the home and voice of business psychology in the UK.

Why behavioural science matters in finance

Human behaviour is at the heart of business success. The choices customers make are more important than ever—which service providers they use, whether they use self-service or call the contact centre, how they complete purchase journeys, and whether they contact you to clarify information about product features, risks, and conditions. These are all behaviours, and behavioural science can add value in addressing each one.

We've learned more about human behaviour in the last 50 years than in the previous 5 000 years. Most decisions we make daily—whether as customers or employees—are largely subconscious and instinctive. This includes decisions about our finances, our families, our homes, the products and services we buy, and how we invest, spend, and save our

money. These decisions are strongly influenced by uniquely human traits like liking, trust, fear, laziness, and peer pressure—what in behavioural science we categorise as behavioural biases or heuristics.

“One critical insight from behavioural science: how you say something is as important as what you're saying.”

Just giving people information—just saying "do this" or "don't do that"—is often not enough to change our habits. We have these Homer Simpson-like behaviours we're prone to, behaving instinctively and often irrationally.



Richard Chataway
Author and Chief Behavioural Scientist - Concentrix



The behaviour business: Creating finance experiences that work for humans and AI

When we think about algorithmic-based tools and AI, they can only operate in System 2 mode—the reflective, controlled, effortful, deductive mode. As Daniel Kahneman said, the difference between a human and an algorithm is that if you feed the same data to an algorithm twice, you'll get the same answer. This is not true of humans. Our customers, for the time being at least, remain humans. We need to be cognizant of their biases to influence behaviour effectively.

Applying behavioural science: Real-world examples

At Concentrix, we've developed a framework called Cognition that synthesises over 200 different behavioural biases and heuristics. We've applied it in well over a hundred client engagements through what we call a Cognition Audit. Let me share some examples of how powerful this can be.

Channel shift success

We worked with a UK bank that wanted to encourage customers to use their website rather than calling the contact centre. When we audited their calls, we found they were closing with: "If you have any more problems, you can call us anytime. We are here 24/7." This was priming customers to call again as their default behaviour.

We changed the script to: "You can find the answers to most problems on our website, and you can always call us back if you need to. We are here 24/7." This framing categorised the website as the default behaviour, with the phone line available if needed. We also trained agents to walk reluctant customers through the website process, building their confidence and capability—what behavioural science calls self-efficacy.

The results? A 14% reduction in future calls over the next 90 days. For a bank with over 20 million customers, this was tremendously significant.

Improving retention

We worked with a roadside breakdown cover provider struggling with customer retention. When customers called about renewals, agents were opening with: "Thank you for calling today. Are you looking for a better deal on your breakdown cover?" Who's going to say no to that? It framed everything around deals and haggling. We removed that framing and made the conversation more neutral, focusing on meeting customer needs rather than providing deals. The results were remarkable: retention improved by 10%, customers accepted slightly higher prices because they felt the service met their needs better, and—unexpectedly—absentee rates among contact centre staff reduced significantly

because agents were having better, more productive, less stressful conversations.

The AI challenge: Humans remain human

Now we're moving into a world where these interactions are increasingly automated or using GenAI-based tools. What does this mean? The opening line of my book, written in 2020, discussed AI extensively. At the time, some questioned its relevance, but the core fundamentals of how AI influences human behaviour haven't changed, even as the tools have evolved dramatically.

We're already interacting with AI extensively—recommendation engines on Netflix and Amazon are classic examples. Seventy-five per cent of content watched on Netflix is driven by these recommendations, and they're responsible for 25% of Amazon purchases. But these are relatively simple, low-consequence choices. Most AI is not generative AI—it's what Australian academic Joshua Gans calls "prediction machines."



The behaviour business: Creating finance experiences that work for humans and AI

With GenAI, we've entered a new chapter, but humans remain human. All forms of automation rely on the quality of data they're learning from, the inputs they receive, and the governance of their execution. Behavioural science is critical to understanding all of these.

The data quality problem

There's a phrase in technology: garbage in, garbage out. All data that humans touch contains bias—the human biases we're all prone to. When tools learn from this data, you're simply automating and magnifying those biases.

One scary example: studies show you're more likely to be run over by a driverless car if you're non-white or a child, because training data is heavily biased toward white adults from Northern California streets. In a less serious but reputationally damaging case, UK delivery company DPD created a chatbot that users quickly encouraged to swear and write haikus about how useless DPD was. This was covered in all major news outlets—a terrible outcome because they hadn't thought about the data being used to train the bot.

The governance problem

The nature of human-to-human interaction is intrinsically different from human-to-bot interaction. The biases governing these interactions differ significantly. One hugely significant impact for finance: we are more likely to lie and be fraudulent when interacting with automated or AI-based tools than with humans.

A study in China demonstrated this powerfully. When participants thought they were guessing a number selected by a human versus an AI, they lied slightly more with the AI. But when financial gain was introduced—a scenario involving lying to avoid a shipping fee on returned clothing—only 12% lied to a human agent, but 62% lied to a bot. Fifty per cent more people committed low-level fraud because they felt they could get away with it with a bot.

This is hugely important in the financial world, where fraud risks are significant.



The behaviour business: Creating finance experiences that work for humans and AI

The solution: Agent AI

The science says AI should assist, not replace, human agents. It's the combination that achieves the most positive customer experience impact. Here's what the evidence shows:

- Simple problems: AI is often better—faster and more effective
- Complex, nuanced problems: Humans are much better because they're perceived as warmer and more competent
- Rejections and unfavourable offers: Bots are often better
- Favourable decisions and generous offers: People prefer humans (we think favourable decisions are thanks to our own merits—the fundamental attribution error)
- Gathering sensitive information: AI bots are better—people disclosed 11.5% more sensitive information to an AI agent than to a human doctor
- Fraud risks: Better handled by humans
- Repetitive or high-volume tasks: Better done by bots
- Trust and emotions critical (sales, investment advice): Still much better coming from humans

One fascinating detail: if you use an overly cute avatar (big eyes, cartoon-like) for a bot in a trust scenario like financial advice, it reduces perceived competence. In one study, people were 23.4% more willing to follow advice from a virtual sales assistant using a neutral avatar versus a cute one.

Conclusion

Successfully harnessing GenAI requires recognising where it's not appropriate—transactions where creativity and empathy are critical, where trust is fundamental. We need to identify biases in existing data, ensure our tools are trained correctly, and enhance rather than replace the humans in our business. AI and humans working together—what we call Agent AI—is where we achieve win-wins.

At Concentrix, we've developed tools like GenAI content readiness, IX Hero (agent assistants for customer-facing staff), and IX Hello (a ringfenced large language model trained on specific brand data). We're creating future-state value maps showing where to use advisers, AI, or combinations of both across different customer journeys.

The bottom line: your customers remain human with all their irrationalities and biases. Whatever else may change in technology, understanding human behaviour remains critical to creating finance experiences that truly work—for humans and for AI.

Article 2

Scaling behavioural finance:

How personalisation is transforming investor engagement





Scaling behavioural finance: How personalisation is transforming investor engagement

About Greg:

Greg B Davies, PhD is a globally recognised expert in behavioural finance, decision science, and sustainable investing. He helps individuals and organisations make better decisions by aligning what’s financially right with what’s emotionally comfortable. In 2006, Greg founded the first behavioural finance team in global banking as Head of Behavioural Quant Finance at Barclays. He now leads Behavioural Science at Oxford Risk, where he builds technology to improve financial decisions at scale.

For decades, behavioural finance has understood why investors make costly mistakes, but struggle to deliver solutions at scale. After more than two decades working in this field, I believe that the challenge is finally being solved through the convergence of behavioural science, data analytics, and artificial intelligence.

The cost of human behaviour

The stakes are significant. Our research shows that the average investor foregoes approximately 3% per year on their total investable assets simply by doing what feels emotionally comfortable in the moment rather than what's financially optimal. This massive "behaviour gap" stems from two main sources: the mistakes investors make when they are invested (buying high, selling low, overtrading, under-diversifying), and perhaps more costly, the reluctance to get invested in the first place.

For most investors, the most reliable behavioural cost is not what they do when they invest. It's the fact that most people don't invest early enough. Year after year, people leave money sitting in cash accounts because taking money from somewhere that feels safe and putting it into markets is emotionally uncomfortable in the short term.

Closing this gap represents a rare win-win-win scenario: better outcomes for investors, increased assets under management for wealth managers and advisers, and more productive capital allocation for the broader economy.

“The wealth management industry has long talked about personalisation, but traditionally, this has meant segmentation based on demographics, wealth level, or life stage.”



Dr. Greg B Davies
Head of Behavioural Finance - Oxford Risk



Scaling behavioural finance: How personalisation is transforming investor engagement

Beyond traditional segmentation

In my view, this approach misses what really matters: financial personality, emotional comfort needs, and the behavioural barriers that prevent people from taking appropriate action.

What people really need to make good decisions are three things. First, a sense of urgency—feeling that this is an issue that must be addressed now. Second, knowledge—not perfect knowledge, but enough not to get things badly wrong. And third, enough emotional comfort with the decision that they can actually put it into practice.

While urgency and knowledge are often addressed through education and awareness campaigns, emotional comfort remains the critical missing piece that I've spent my career trying to solve.

Measuring financial personality

At Oxford Risk, we've spent over 15 years developing psychometric tools to measure financial personality, collecting data from tens of thousands of research participants and hundreds of thousands of actual clients across four continents. Using rigorous statistical techniques, we've identified 15-18 dimensions of financial personality that matter for financial decision-making.

Traditional finance theory essentially only considers risk tolerance—an individual's willingness to trade off risk and return in the long term. But our research reveals numerous other crucial dimensions, including composure (tendency toward short-term anxiety), impulsivity, familiarity preference, liquidity preference, and various sustainability-related preferences.

Our core assessment measures seven statistically-validated scales that provide the greatest predictive power in understanding how one person differs from another. The entire assessment takes just two minutes to complete, yet yields a rich financial personality profile.

Behavioural personas: A new framework

Beyond individual trait scores, we've identified 10 proprietary behavioural personas that represent the most common combinations of personality traits in the investor population. These personas aren't based on demographics or wealth levels, but purely on psychological preferences and what makes people comfortable or uncomfortable.

For example, "Planners" tend to have low financial comfort (anxiety about their financial future), low confidence (reluctance to make decisions), and high desire for guidance.

They're cautious, methodical individuals who seek evidence and prefer familiar, low-risk options. In contrast, "Guardians" are high composure, reasonably confident individuals who are cool, calm and collected—interestingly, many financial advisers themselves tend to be Guardians. "Pioneers" are highly impulsive with high confidence—they think they know what they're doing and tend to act on it quickly.

We've arranged the personas across two primary dimensions: avoid versus approach (confidence and comfort with investing) and guided versus self-directed (preference for sharing decision-making burden versus maintaining control).

Practical application: Cash deployment

The real power emerges when matching personas to specific interventions. Let me give you a practical example. Consider three personas with identical financial circumstances, all sitting on surplus cash: the Planner, the Guardian, and the Pioneer.

For Guardians, the traditional industry approach works reasonably well: present numbers-based information about long-term investing's risk-return tradeoff and encourage them to get going.



Scaling behavioural finance: How personalisation is transforming investor engagement

But this same approach would fail completely with Planners. For them, success requires focusing entirely on emotional comfort: framing investments as emotionally manageable, establishing a cash buffer as an emotional safety net, providing simple step-by-step guidance with minimal jargon, and using pre-commitment techniques that let them plan future actions rather than deciding today. Let's be honest—none of us ever start a diet today. We only ever start our diet on Monday, only ever start the gym program in the new year. There's a reason for that: it's a behavioural hook that makes it easier for us to get going.

For Pioneers, I might employ completely different tactics—leveraging FOMO (fear of missing out), highlighting the costs of what they've already missed, or even using market timing messages like "buy the dips" that would be dangerous for other personas.

Technology Enablement

What makes this scaling possible now is the integration of behavioural insights with modern technology. Our solutions are built on APIs that don't require extensive data integration or long implementation projects. Organisations can begin delivering personalised insights simply by providing clients with a link to complete the financial personality assessment.

The system delivers insights at multiple levels: individual clients receive their own profiles, advisers get guidance on how to communicate with each client, and organisations gain aggregate insights about their client base through management information systems and CRM integration.

We use machine learning algorithms that continuously analyse client interactions and behavioural responses, identifying what works and what doesn't in real-time without requiring traditional randomised control trials. We're not in a world anymore where we can run AB tests and randomised control trials for everything we want to do—they're too slow, require vast sample sizes, and are very costly. Instead, we start messaging people, measure what happens, and use sophisticated machine learning algorithms to tweak the parameters in real-time.

Large language models represent another powerful tool. We're currently building personalisation that can take a single piece of content—say, a CIO's market commentary—and automatically generate 10 personalised versions tailored to each persona, complete with lists of which clients should receive which version.

A pivotal moment

After 25 years in applied behavioural finance, I believe the field has finally reached its scaling moment. Behavioural ideas are great, but there's always been a massive "so what" at the end of it: how do I get them adopted? How do I get them to scale? Those questions have very little to do with the value of the behavioural ideas themselves. They have everything to do with how you integrate that with data science and technology.

The convergence of behavioural science, advanced analytics, and AI has created the infrastructure to deliver the right message, to the right person, at the right time, in the right tone. I think behavioural science and behavioural finance is at an incredibly exciting point right now, and it's because we're finally being able to mix it properly with advanced data science and advanced technologies and AI, which makes it adoptable and scalable. This is what I've spent my career working towards, and I believe we're finally here.

Article 3

Beyond risk tolerance: A science-based approach to understanding your clients





Beyond risk tolerance: A science-based approach to understanding your clients

About Thomas:

Dr Thomas Oberlechner is an internationally recognised expert in decision psychology and behavioural science. With his company BehaviorQuant, he develops novel behavioural finance technology that quantifies the behavioural dispositions of financial decision-makers. This technology helps professionals make better financial decisions, achieve more consistent performance, and provide uniquely tailored advisory services.

The limitations of traditional approaches

Many advisers still rely on gut feeling or traditional risk questionnaires, but I believe that's not enough in today's complex world. Traditional risk profiling is too simplistic. Behind every risk score is a human being with unique feelings about uncertainty and loss. At BehaviorQuant, we've developed a science-based system that helps advisers understand clients on a much deeper level, personalise advice, and build deeper, trust-based relationships.

Advanced risk profiling

Let me start with something you already know well, but through a different lens. Traditional methods rely on a few generic questions to produce a single 'risk score.' Our system goes much further, using a mix of proven psychometric scales and realistic financial decision scenarios to fine-tune results. This scientific approach cross-checks what clients say about

risk with how they actually respond in trade-off situations. I've seen this work in practice. A client might rate themselves as cautious and conservative, but when faced with actual financial scenarios—like choosing between a guaranteed profit and a gamble for a bigger gain—that same client might go for the gamble. This reveals a higher risk appetite in practice than survey answers alone suggested.

Our behavioural technology makes these inconsistencies immediately clear and adjusts the risk score accordingly.

Research shows that separating risk into two components is crucial: Risk Tolerance (the client's psychological willingness to take risk) and Risk Capacity (their financial ability to take risk).



Dr. Thomas Oberlechner
Founder - CEO BehaviorQuant



Beyond risk tolerance: A science-based approach to understanding your clients

I once heard about an adviser who labelled a client, John, as "aggressive" because John said he was comfortable with risk and loved talking about volatile stocks. But our system's behavioural assessment revealed that while John's risk tolerance was high, his capacity was low—he was near retirement with little cushion for losses. Without measuring both tolerance and capacity, the adviser might have placed John in a portfolio that was too risky.

The power of personality

Now let me move on to one of my favourite topics: personality. The Big Five model of personality—Openness, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability—is psychology's gold-standard framework. These core traits influence how people make financial decisions, from how impulsively or cautiously someone invests to how emotionally they react to market swings.

A 2024 study found that knowing someone's Big Five traits helps predict their investment choices and portfolio outcomes. In plain terms, if you understand a client's personality, you can better anticipate their financial decisions and needs.

Think about your own clients. Alice is high in Conscientiousness—she's organised and future-oriented. Bob is high in Extraversion—

he's outgoing and excitement-seeking. If you present the same complex financial plan to both, Alice will likely read every detail because she craves structure. Bob might lose interest if you go too deep—he'll prefer a big-picture overview.

One adviser using our system discovered that a long-term client was very low in Emotional Stability, meaning he had a strong tendency to worry about losses. This explained why, during past market dips, the client would call in a panic. So the adviser adjusted his approach ahead of the next downturn, reaching out proactively with extra reassurance. The result: the client stayed calm and kept his investments on track. The adviser joked that it was like having a user manual for the client.

Decision-making styles

Not all investors make decisions the same way. Decision science shows there's a wide spectrum: some people are fast, intuitive decision-makers who rely on gut instinct, while others are slow, analytical thinkers who deliberate carefully over data.

Imagine pitching the same investment to two different clients. Client X goes with their heart—as soon as you start explaining, they say, "I have a good feeling about this!" Client Y decides with their head—they interrupt to ask for hard numbers, ten-year performance, fees, all the details.

Research backs this up: studies show that aligning your advice delivery with the client's decision-making style improves both their understanding and decision quality. Intuitive decision-makers feel more confident when advice is presented through stories and scenarios. Analytical types do better with statistics and charts. But mismatch the style—overwhelm an intuitive client with spreadsheets, or give an analytical client nothing but feel-good stories—and you risk causing confusion or even distrust.

I know an adviser who worked with a married couple with opposite decision styles. One was big-picture and intuitive, the other very detail-focused. Before using our system, their meetings were challenging. After profiling them, the adviser gave the big-picture spouse visual summaries and the detail-oriented spouse plenty of numbers. It worked: both felt at ease and could finally agree on a plan.

Overcoming adviser biases

Have you ever caught yourself assuming a client thinks just like you do? Two major biases can derail how we understand clients. The False Consensus Bias—assuming others see the world as we do—and the Halo Effect, where one standout trait distorts your perception of the whole person.



Beyond risk tolerance: A science-based approach to understanding your clients

Take Karen, an adviser who learned this the hard way. Cautious by nature, she assumed a young entrepreneur client shared her conservative approach. But when he later pushed for bold, aggressive investments, it became clear her instincts had been off. After using our system, the truth emerged: the client was a natural risk-taker. Karen's own risk lens had distorted her judgment.

Behavioural technology helps neutralise these biases by offering an impartial, data-driven view. Instead of guessing, the system gives you a comprehensive profile covering risk tolerance, personality, decision-making style, and more.

Bridging finance and psychology

This is where finance meets real human behaviour. We have the time-tested principles of Modern Portfolio Theory on one side, and the human side—how people actually feel about risk and reward—on the other. The best portfolio means nothing if the client can't sleep at night or abandons the strategy at the first sign of trouble.

Our system includes model portfolios aligned with a range of risk profiles, backed by decades of historical market data. But it also uses the client's unique behavioural inputs to fine-tune recommendations. When clients see realistic scenarios—like

"Worst year: -25%"—it opens frank conversations. Together, you can adjust to an allocation they truly feel comfortable with.

The client experience gap

A 2021 Accenture study of 1 000 wealth advisory clients revealed something striking: 90% said the advice they receive feels "too general." Their top expectation? "My adviser understands me as a person." Clients don't just want good financial advice—they want to feel genuinely understood.

And a 2023 Charles Schwab study found that advisers using behavioural tools saw three times larger deposits from existing clients, along with significantly stronger loyalty and higher client acquisition rates. Why? Because clients had a better experience and were more satisfied.

Throughout my career, I've learned that empathy combined with science creates something truly powerful. By understanding your clients on a deeper level—their personality, their decision-making style, their true risk comfort—you can deliver advice that genuinely fits who they are. That's the future I'm working toward, and I invite you to join me on this journey.



Article 4

Applying behavioural science
to improve financial wellbeing





Applying behavioural science to improve financial wellbeing

About Stina:

Stina Söderqvist, PhD, has a Master's degree in Psychology from the University of St Andrews and a PhD in Cognitive Neuroscience from Karolinska Institute. She has more than 10 years of experience with digital product development. In her role as Head of Behavioural Science at Doconomy, she is responsible for integrating insights from behavioural science in product development, ensuring development of engaging and impactful financial products.

Doconomy is a Stockholm-based company operating globally through a B2B2C model. We provide an engagement platform that helps financial institutions deliver more responsible banking—encouraging users to change their financial behaviours and consumption habits. Our goal is twofold: to improve customers' financial well-being and to promote more sustainable consumption with regard to climate impact.

Our product suite includes two major categories. Impact Finance, which I'll focus on in this article, centres on building financial well-being by increasing savings and investments. It includes saving goals, tools for mindful consumption, investment features, and segmentation capabilities. Our Impact Transaction features focus more on climate impact, with carbon calculators and engagement services that help users take action to reduce their environmental footprint.

Why behavioural science matters

The question I often get is: why employ a Head of Behavioural Science? It all comes down to the impact we want to have. To improve financial well-being and contribute to a sustainable climate future, we need to encourage genuine behavioural change in our users.

But here's the challenge: getting people to engage with the product is just the first step. We need to engage them beyond the product, out in the real world where they make actual decisions about how they consume and spend their money. We can help users understand how to save more and set up savings plans within our product, but for them to actually change their spending patterns so money is available to save, we need to do more than just nudge them toward a one-time decision.



Stina Söderqvist
Head of Behavioural Science - Doconomy



Applying behavioural science to improve financial wellbeing

We all recognise this from other areas of life. We can get information and create a plan for exercising more, eating healthfully, or saving money. But—and I include myself here—we struggle to actually do it. This is the intention-action gap that's central to behavioural science. Information alone is often not enough. It can be crucial—we need to understand what to do and why—but unless there's more to it, we simply don't take action.

This is where behavioural science becomes essential. It helps us identify the barriers stopping people from taking action, allowing us to meet people where they are and help them change behaviours on their own terms.

The power of emotions

Our approach differs significantly from traditional personal finance management tools, which tend to focus on presenting numbers and insights, expecting users to change as a result. From the start, our focus has been on understanding and working with users' emotions, because money, finances, and consumption are deeply emotional topics. These emotions shape our behaviours in fundamental ways—their importance cannot be overestimated.

Two key emotional areas are rewards and stress.

The role of rewards

We like to do more of what makes us feel good. It's simple, but incredibly important. Biologically, the function of rewards is to tell us that a certain behaviour is good for us and something we should repeat. Rewarding behaviours become easier to learn and remember, more easily turning into habits.

This worked fine throughout evolution when food was scarce and social belonging was crucial for survival. The problem is that we now live in a society where things good for survival are so abundant that we overconsume them in ways no longer beneficial. Our brains haven't adapted to teach us moderation—they keep getting excited about high-energy food and telling us to consume it.

Consumption is remarkably similar. There's a reason it's called "retail therapy"—consumption activates reward regions in our brains. When you see campaigns, bargains, or "buy now, pay later" options, this increases the rewards and makes it even more difficult for the brain to appreciate consequences. Consumption also strengthens our identity and helps us adhere to social norms. Much of our consumption happens in social settings, or with the thought that it will improve our status or acceptance within a group—something our brains highly prioritise.

Financial stress

The second major emotional influence is financial stress, which can result from overspending, increased cost of living, or simply not having enough money to begin with. This is extremely common. Statistics from the US and South Africa show that the majority of people report that financial stress impacts their physical and mental health.

This matters because financial stress fundamentally influences how we make decisions and behave. Research shows it reduces our cognitive bandwidth—it actually impacts our ability to make decisions, understand information, and process information. If we're providing users with information, we need to make it simpler to understand and help reduce their stress.

Financial stress also reduces emotional bandwidth.



Applying behavioural science to improve financial wellbeing

When we experience scarcity—feeling we don't have enough of something—we become narrow-minded and preoccupied. We struggle to think about other aspects of life and, more importantly, to think long-term. We become prone to short-term wins and solutions. As we know with money, that's not a recipe for long-term financial stability and wealth.

The 'Why': motivation and dreams

We need to help users understand why they want to save or invest. Motivation research shows us a continuum: on one side is motivation deeply linked to internal values, needs, and desires—when you truly care about something, you might even enjoy the task itself. On the other side is external motivation—linked to material rewards or avoiding punishment.

Money often falls into this external category. Think about your job—how many people would stay if they didn't need the money? This has been a key insight: money isn't the driver for most people. The driver is what you can get with the money—experiences you dream of, things you want, or feelings like stability and reduced financial stress.

We created what we call "Dreams"—saving goals designed to enhance emotional connection. These goals are concrete,

emotional, and fully localisable so they're culturally and contextually relevant. They must truly resonate with what users care about. This also provides financial institutions with valuable intention data about their users, creating opportunities for better segmentation and personalised experiences.

When working with Dreams, we follow important principles: inspire, don't prescribe. We never tell people what they should save for—even though we know having a buffer is beneficial. Instead, we inspire them to see that themselves, working with their emotions to help them understand what's important for feeling good and getting the most from their money.

We also make Dreams personal and concrete so they become motivating and emotionally resonant. Additionally, we leverage social belonging as a powerful motivator—allowing users to save together toward shared goals with friends, family, or partners.

The 'how': Self-efficacy and simplicity

Once users connect with why they should save, the next question is how. This is where self-efficacy becomes crucial—our belief in our own ability to reach our goals. Research shows that this strongly determines how we succeed in working toward goals.

When people lack self-efficacy around saving or investing—when it seems difficult, overwhelming, or stressful—they tend to procrastinate. You might think, "I should be saving for my pension," but if you don't feel confident or know how, you won't find the energy to do it today. You'll think, "I'll do it next month"—and that procrastination continues.

We address this by keeping it simple, both practically and emotionally. We help users see where small changes could help them save money. But we can't tell people what to save on, because we don't know what's truly important to someone. For one person, going out for lunch with colleagues might be an expense they could easily eliminate; for another, it might be a social highlight of their week. We need to make saving realistic from both practical and emotional perspectives—that's when behaviour continues.

We provide "Save Hacks"—tools that help users allocate more money toward their dreams through different methods. These include automated options like regular monthly transfers or round-ups that save spare change. We also offer lifestyle inspiration—suggestions for changing habits to save money, like reducing takeaway or skipping that daily coffee purchase.



Applying behavioural science to improve financial wellbeing

Finally, we have fun and surprising saving methods that have proven very popular, especially in South Africa. Our Rocket Game lets users play within their banking app and save money whenever they score. Users can save on their favourite sports team—putting aside money whenever their team scores. The "Squirrel" or "Thief" mimics small impulsive purchases, randomly taking small amounts to save—showing users how these amounts add up significantly.

Visualisation and rewards

We work extensively on visualising and rewarding user progress. When users manage to save money, we want them to feel good about it. If saving becomes rewarding, it increases self-efficacy and helps users see how their behaviour is making real change, bringing them toward goals they care about.

This also creates excellent upselling opportunities. When we know what someone is dreaming about and their savings timeline, financial institutions can offer relevant products. Someone saving for 15 years might benefit from investing; someone saving for a house might be interested in mortgage offers.

This approach particularly helps reduce the risk aversion associated with investing. Research shows that experience trumps description—we have a greater fear of large all-or-nothing

decisions compared to many small cumulative decisions. By helping users start small—investing the cost of that daily coffee instead of buying it—investing doesn't seem as scary. It's money they would have spent anyway, and we can show them how changing behaviour not only saves money but helps it grow significantly.

The impact

The results have been truly encouraging. In our Swedish research, 28% of users had no savings before using our product—we activated people that normal banking products couldn't reach. Users who already had savings increased them by an average of 2,000 euros. We consistently see 6-8% of monthly income saved across different countries.

Perhaps most importantly, we see emotional improvements. Two-thirds of users feel less stressed about money after just two months. This visualisation of progress toward improving finances has profound effects, helping build self-efficacy and confidence to set bigger goals. After two months, 59% report feeling more confident and 74% feel more positive about their finances generally.

These numbers demonstrate that when we truly understand the emotional drivers behind financial behaviour and design products that meet people where they are, we can create genuine, lasting

change in financial wellbeing. That's what behavioural science enables us to do—and I'm incredibly proud of the impact we're making in people's lives.

2

Investor behaviour in the Flexible Income Option (FIO)

Note: The 2025 period is defined as 01/09/2024 to 01/09/2025

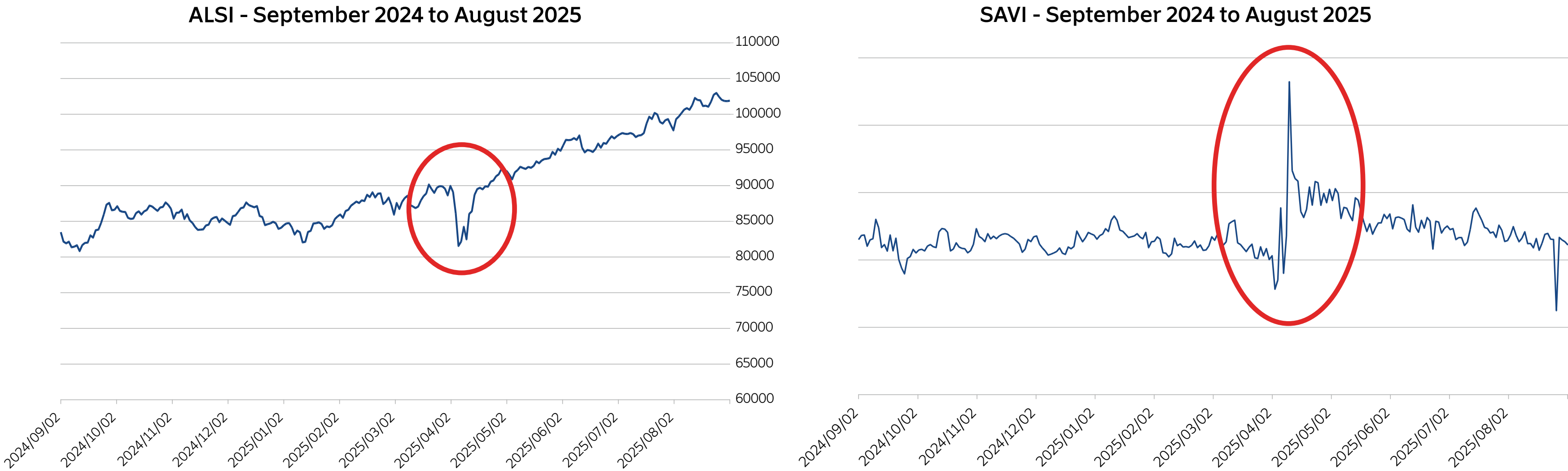




2.1 Volatility and switching for the period

Overall, the volatility index remained flat until a spike in April, whereafter it decreased and stabilised. Switch activity was highest in May, the month after the drop in the JSE All Share Index (ALSI) and spike in the SAVI. Overall switch activity around this point remained relatively flat. Notably fewer investors ended up switching relative to prior years and this could be a function of relatively low volatility with a general increasing trend in the ALSI. A general trend of de-risking prevailed over the period, however, and when the Anxious investor executes on this, they incur the greatest behaviour tax.

Figure 1: Market volatility and increased switching



Source: Momentum Investments (2025)



2.2 The investor “switch itch” for 2025

The number of active switching investors over the period was below the previous period, with 13 924 switches recorded at an average switch rate of 2.29 switches per investor for the year. In other words, switching activity for the previous period was similar to this period, while there was a slight decrease in the number of investors that switched.

Additionally, 43.85% of investors who switched between the previous period and this period switched back again. This percentage is lower than in previous years. This is likely due to a clearer and steadier uptrend in the period analysed compared with previous periods.

It is important to note that a ‘behavioural switch’ is identified as a change in risk preferences of the investor, likely due to a change in risk perception. A rule engine is constructed to filter each switch transaction to eliminate regular income withdrawals, switching between fund classes and phasing into or out of markets, for example. Finally, the average switch amount remains within its average band at approximately R154 000 per investment switch.

2.3 Following the money

Much in line with the varied behaviour tax for 2025, a clear pattern of outflows is less clear for this period. The Momentum Core Equity Fund had the largest outflow at over R109 million off the back of 2024 performance of 8.44%. The fund then delivered an 11.19% return for the period that followed. The remainder of the funds on the list show a mix of local income and equity funds. In some cases funds are switched out of that indeed deliver worse performance in the following year and then in some cases the more regular trend of delivering better performance persists (for example the Momentum Focus 7 Fund of Funds that saw nearly R30 million in outflows but then delivers over 17% in returns for the 2025 period of analysis).

The more even spread of these results reflects the more subdued behaviour tax for the period analysed, which is where our attention turns next.



Table 1: Top funds ditched and switched for the 2025 period (FIOs)

	Fund	Net outflows (in rand)	2024 Performance	2025 Performance ¹
10.	Coronation Global Emerging Markets Flexible	(29 245 896.61)	-13.87%	17.79%
9.	Sesfikile BCI Property Fund	(29 666 271.71)	-14.74%	12.08%
8.	Momentum Focus 7 Fund of Funds	(29 993 384.82)	11.59%	17.09%
7.	Ninety One Opportunity Fund	(31 563 914.27)	17.47%	0.00%
6.	BCI Fundsmith Equity Feeder Fund	(32 959 195.20)	28.85%	13.77%
5.	Rezco Value Trend Fund	(33 675 847.49)	7.69%	14.16%
4.	FG SCI Venus Cautious Fund of Funds	(36 310 769.97)	6.07%	19.67%
3.	Ci Diversified Income Fund	(42 621 155.95)	9.22%	8.82%
2.	BlueAlpha BCI Equity Fund	(87 710 482.79)	6.79%	11.47%
1.	Momentum Core Equity Fund	(109 214 647.05)	8.44%	11.29%

¹**Note:** This performance is annualised at the time of writing this report where a full 12-month look ahead period is not available.

Source: Momentum Investments (2025)



2.4 The behaviour tax for 2025

Behaviour tax is calculated as the difference in future performance between the funds switched from (theoretical buy-and-hold) and the funds switched to. It is important to note that ‘future performance’ is annualised to make calculations comparable for switches made where a full 12 months of future performance is not available.

Over the 12-month period leading up to 1 September 2025, behavioural switching resulted in a cumulative behaviour tax of **1.27%** for the period. It is also important to note that a positive value here is indicative of value lost or destroyed (red line above 0% indicates a behaviour tax and green line below 0% indicates value added). At the time of the SAVI spiking in May 2025, which also coincided with the peak period of de-risking, was the period of sharply rising behaviour tax for the year.

Figure 2: Monthly behaviour tax levels 2025



Source: Momentum Investments (2025)



Table 2 shows how the spike in market volatility in May 2025 starts the period where most of the behaviour tax is generated. Higher market performance early on in the period is paired with a negative behaviour tax. As market performance tapers off from May (paired with de-risking), the behaviour tax accelerates. Shortly we'll also see how the Anxious investor is severely penalised here and is the only archetype paying behaviour tax in the 2025 period.

Table 2: Behaviour tax over the 2025 period (FIOs)

	Performance of fund switched from	Performance of fund switched to	Difference (Behaviour Tax)	Market Return
Sep 2024	14.05%	16.74%	-2.68%	22.70%
Oct 2024	16.12%	17.51%	-1.39%	17.84%
Nov 2024	15.33%	14.52%	0.81%	19.33%
Dec 2024	14.48%	17.37%	-2.90%	21.15%
Jan 2025	13.11%	16.54%	-3.43%	21.89%
Feb 2025	17.05%	13.24%	3.81%	20.82%
Mar 2025	16.37%	19.73%	-3.36%	18.52%
Apr 2025	19.95%	22.12%	-2.17%	14.88%
May 2025	26.17%	24.75%	1.42%	11.92%
Jun 2025	24.91%	17.06%	7.85%	8.71%
Jul 2025	20.04%	15.52%	4.51%	5.69%
Aug 2025	20.71%	19.54%	1.17%	16.39%
Annualised Behaviour Tax for the 2025 period			1.27%	

Source: Momentum Investments (2025)



3

Investor behaviour in the Retirement Income Option (RIO)

Note: The 2025 period is defined as 01/09/2024 to 01/09/2025

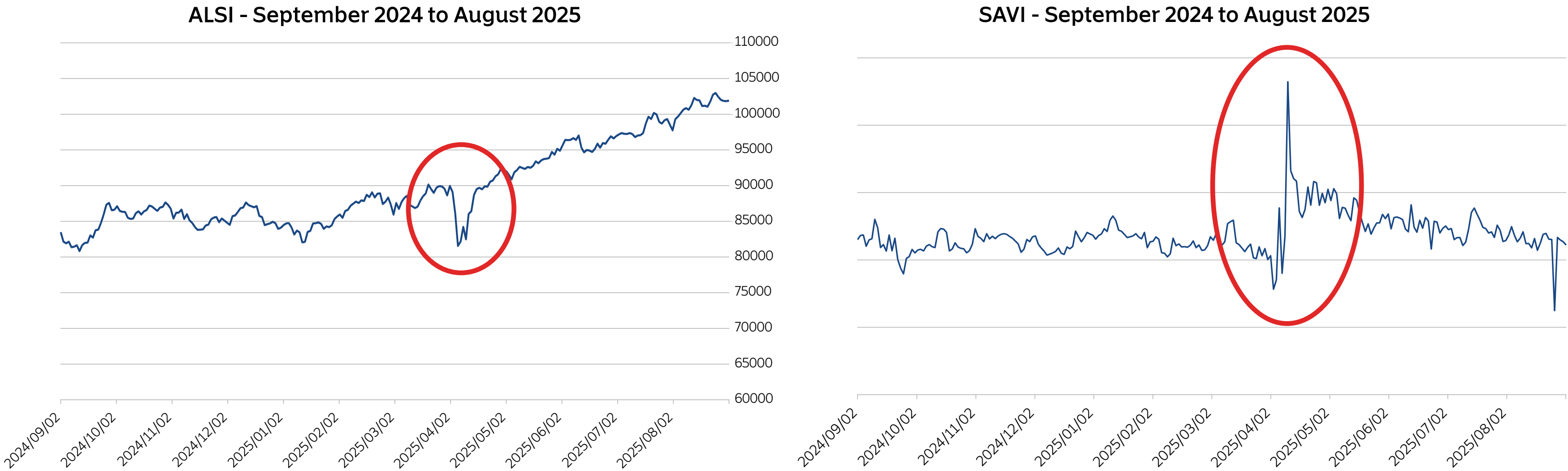




3.1 Overall behaviour summary

Overall, the picture for RIOs represents behaviour on the back of a similar market context. Again, the volatility index remained flat until a spike in April, after which it decreased and stabilised thereafter. Switch activity was highest in May, the month after the drop in the ALSI and spike in the SAVI. Overall switch activity around this point remained relatively flat. Notably fewer investors ended up switching relative to prior years in RIOs and this could also be a function of relatively low volatility with a general increasing trend in the ALSI. A general trend of de-risking prevailed over the latter part of the period, however, and when the Anxious investor executes on this, they incur the greatest behaviour tax.

Figure 3: Market volatility and increased switching



Source: Momentum Investments (2025)



3.2 The investor “switch itch” for 2025

The number of active switching investors over the period was below the previous period, with 32 378 switches recorded at an average switch rate of 2.28 switches per investor for the year. In other words, switching activity for the previous period was similar to that of this period, while there was a decrease in the number of investors who switched. The average switch amount increased relative to the 2024 average and peaked at nearly R276 000 in April 2025, highlighting potentially significant switches in April 2025 due to the ALSI dip.

Once again, it is important to note that a ‘behavioural switch’ is identified as a change in the investor's risk preferences, which is likely due to a change in risk perception. A rule engine is constructed to filter each switch transaction to eliminate regular income withdrawals, switching between fund classes and phasing into or out of markets, for example.

3.3 Following the money

The top outflow fund for the 2025 period was the Allan Gray Balanced Fund, with over R127 million in outflows. In this case, however, the 2025 performance of the funds (bearing in mind that the period of analysis ended on 1 September 2025), was greater than the 2024 period. The same pattern is evident with the Momentum Core Equity fund, with nearly the same level of withdrawals as the Allan Gray Equity Fund. In this case however, the Momentum Core Equity fund provides greater performance when compared to the previous period and investors here miss this enhanced performance.



Table 3: Top fund ditched and switched for the 2025 period (RIOs)

	Fund	Net outflows (in rand)	2024 Performance	2025 Performance ²
10.	Catalyst SCI Flexible Property Fund	(61 297 236)	6.99%	12.89%
9.	Ninety One Managed Fund	(64 374 536)	9.09%	9.01%
8.	Coronation Balanced Plus Fund	(79 938 343)	14.97%	14.06%
7.	Rezco Value Trend Fund	(83 850 835)	7.69%	19.65%
6.	Ninety One Global Franchise Feeder Fund	(90 696 778)	-11.32%	10.58%
5.	Ninety One Opportunity Fund	(106 952 260)	17.50%	17.09%
4.	BlueAlpha BCI Equity Fund	(114 136 210)	6.81%	8.75%
3.	PWS BCI Moderate Fund of Funds	(120 407 585)	11.56%	11.89%
2.	Momentum Core Equity Fund	(123 185 230)	8.44%	11.86%
1.	Allan Gray Balanced Fund	(127 551 948)	16.39%	11.29%

RIOs exhibit significantly more movement from the riskier end of the spectrum compared to FIOs. This pattern makes sense when considering the investment context in this case, which is retirement and greater investor risk aversion. For the most part this serves investors well in 2025 and this pattern likely arises in line with the spike in the SAVI. In a similar fashion, the Anxious investors are penalised the most for this behaviour.

Source: Momentum Investments (2025)

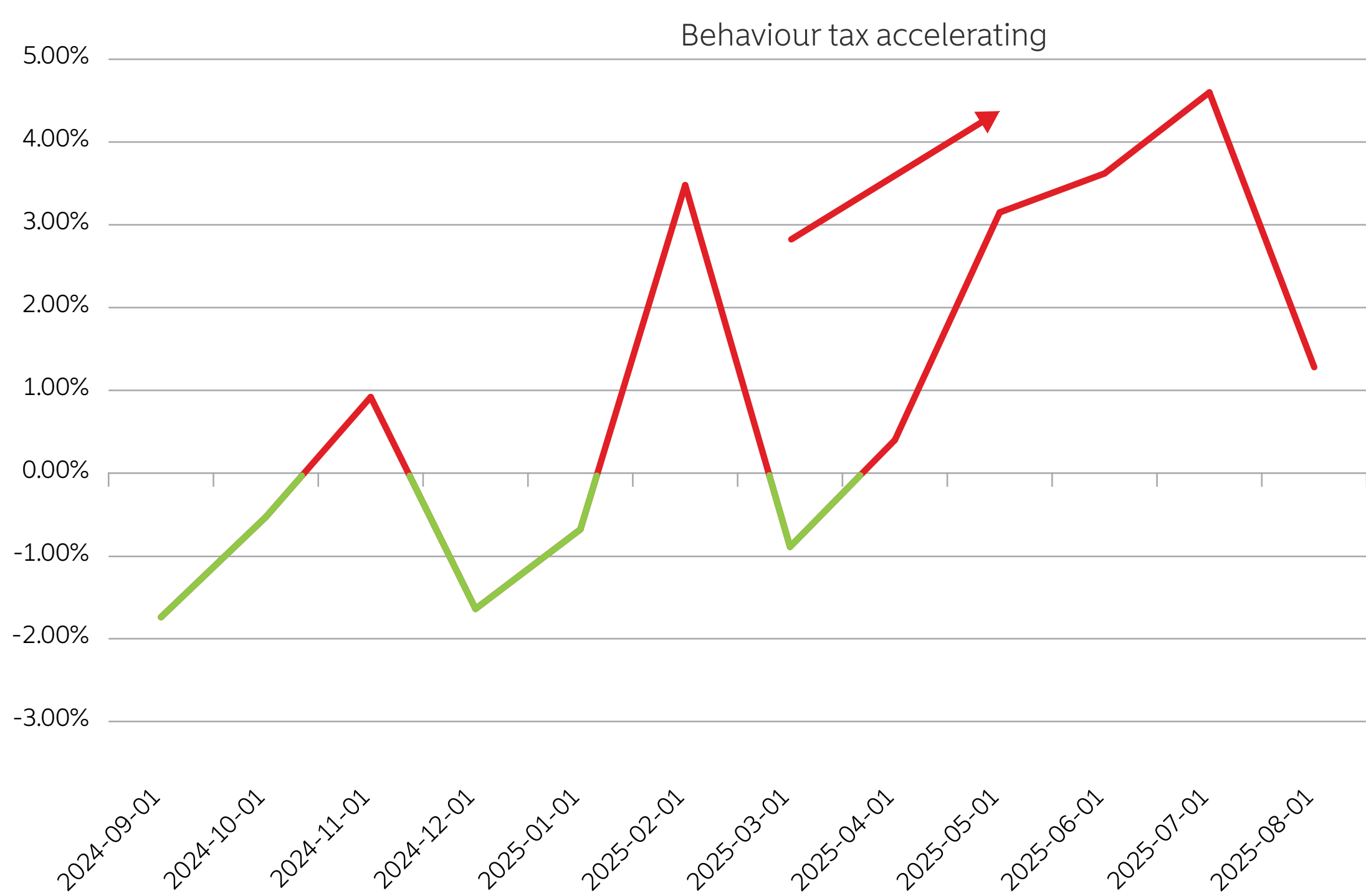
²**Note:** This performance is annualised at the time of writing this report where a full 12-month look ahead period is not available.



3.4 The behaviour tax for 2025

Behaviour tax is calculated as the difference in future performance between the funds switched from (theoretical buy-and-hold portfolio) and the funds switched to. It is important to note that “future performance” is calculated from the end of the month a switch was made up to the end of August 2025. The future performance is annualised to make calculations comparable for switches made in different months. Over the 12-month period, behavioural switching resulted in a cumulative behaviour tax of **1.28%** (value eroded).

Figure 4: Market returns and the behaviour tax (RIOs)



Source: Momentum Investments (2025)



Figure 4 and Table 4 show how, similarly to the FIO analysis, the volatility surge in the latter parts of the 2025 period (earlier this year) was accompanied by a rapidly accelerating behaviour tax. Investors (particularly the Anxious investor) accounted for most of this behaviour tax, but more detail is provided in section 4 of this report. Overall, for the 2025 period, the behaviour tax reaches **1.28%**, which represents a much more muted level for the first time since the COVID-19 period of 2020. The latter months of 2024 saw a negative behaviour tax (value added from switching) in contrast to January to September 2025, where value was eroded by switching.

Table 4 shows the difference between the performance of funds switched from and those switched to. The results are used to plot Figure 4. A similar pattern is evident when compared to FIO investor behaviour where the market volatility in 2025 causes de-risking behaviour that ultimately results in most of the behaviour tax. We examine these archetypes next.

Table 4: Behaviour tax over the 2025 period (RIOs)

	Performance of fund switched from	Performance of fund switched to	Difference (Behaviour Tax)	Market Return
Sep 2024	14.22%	15.96%	-1.74%	22.70%
Oct 2024	16.35%	16.88%	-0.53%	17.84%
Nov 2024	15.54%	14.62%	0.92%	19.33%
Dec 2024	14.25%	15.89%	-1.64%	21.15%
Jan 2025	14.40%	15.08%	-0.68%	21.89%
Feb 2025	17.04%	13.56%	3.48%	20.82%
Mar 2025	17.45%	18.34%	-0.89%	18.52%
Apr 2025	20.44%	20.05%	0.40%	14.88%
May 2025	27.39%	24.24%	3.15%	11.92%
Jun 2025	23.62%	20.00%	3.62%	8.71%
Jul 2025	20.00%	15.39%	4.60%	5.69%
Aug 2025	20.08%	18.90%	1.18%	16.39%
Annualised behaviour tax for the 2025 period			1.28%	

Source: Momentum Investments (2025)

4

Archetype analysis

Insights from unsupervised
machine learning algorithms





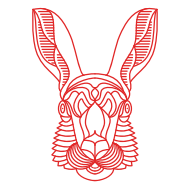



4.1 Archetype analysis for 2025 using unsupervised machine learning

Figure 7 provides the summary of how the archetypes fared when using the k-means clustering algorithm over the 2025 period for the RIO product.

Anxious investors pay the heftiest behaviour tax in 2025 from de-risking during the latter part of the period (4.69% in value eroded) analysed from being left on the sidelines as markets recovered. Market Timers predictably made the most number of switch transactions (a high 3.97 switches each, on average). Usually, Market Timers incur the greatest behaviour tax, but when we see a period where Assertive investors incur a large negative behaviour tax of 3.90% (value added), the Market Timers would have gained on this leg as well and then given those gains back on the de-risking leg of the behaviour.

Figure 5: Behaviour tax archetype ranking

	Population proportion	Archetype	Average switch frequency	Annualised Behaviour Tax
	25%	Anxious	1.70	4.69%
	35%	Avoider	1.97	1.37%
	24%	Market Timer	3.97	0.32%
	16%	Assertive	1.48	-3.90%

Source: Momentum Investments (2025)



Assertive investors also usually switch more than double that of the Market Timer, and so when they are rewarded for behaviour (up-risking in rising markets), they will also incur positive behaviour tax at a greater rate.

Lastly, the Avoiders (also unusually) incur more behaviour tax than the other archetypes in this period. The Avoider is usually a tamer version of the Anxious investor, as they de-risk far less aggressively. In this period, however, the behaviour tax from this behaviour was so high that they incurred the second-highest behaviour tax, slightly above the average of **1.28%** across all the archetypes.

When considering the archetype transition map for 2025, the proportion of Market Timers remained constant. In contrast, Assertive and Anxious investors increased (attracting investors from the other archetypes), while Avoiders saw a decrease. Over 57% of investors who switched during September 2023 to September 2024 switched again after September 2024. This once again confirms that once investors start switching, they tend to continue the behaviour. When comparing current clustering data with switchers before September 2024, the transitions as per the following table were observed.

Table 5: Archetype transition for 2025

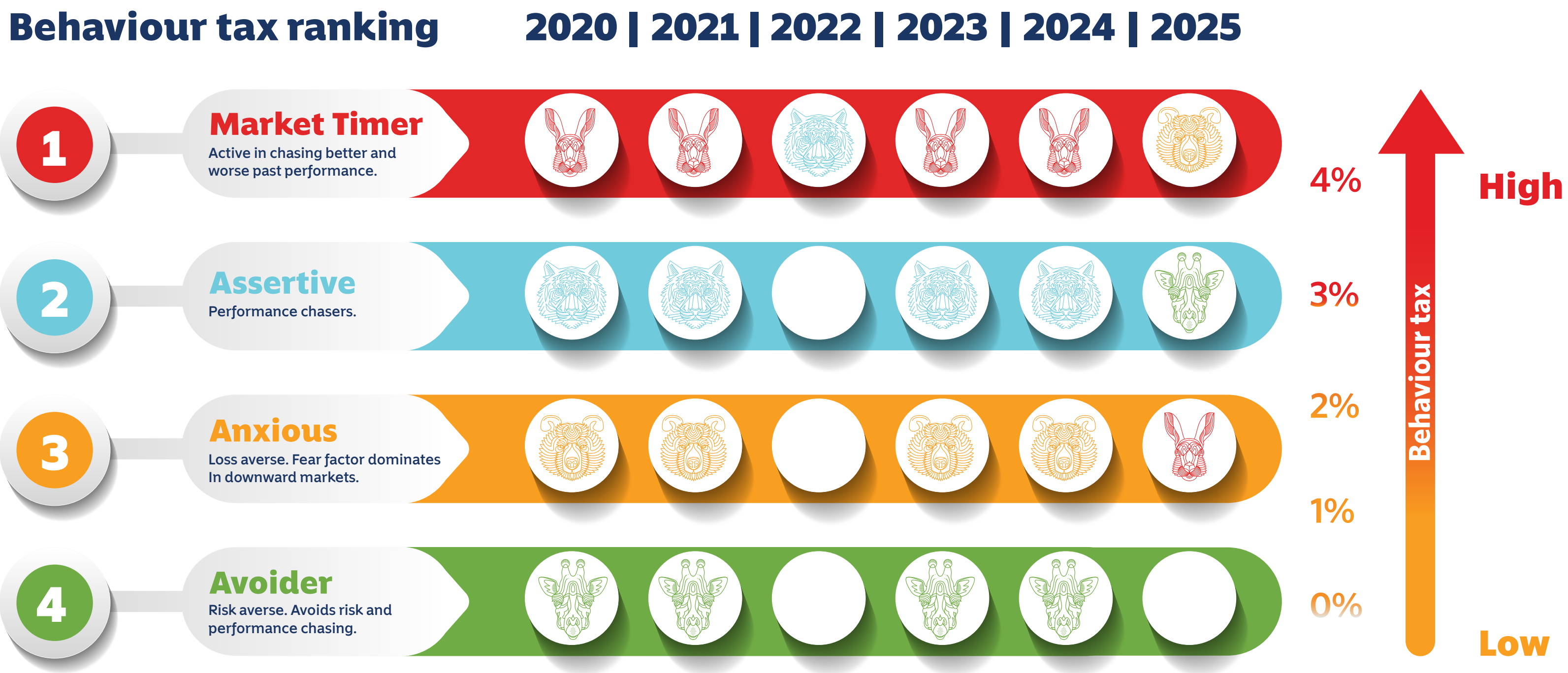
2024 2025	Market Timer	Assertive	Anxious	Avoider
Market Timer	43.39%	6.59%	16.90%	15.96%
Assertive	9.35%	12.97%	24.16%	15.26%
Anxious	9.37%	7.01%	27.06%	11.50%
Avoider	8.70%	5.36%	21.57%	14.81%

Source: Momentum Investments (2025)



Figure 6 shows the behaviour tax ranking since the COVID-19 period began in 2020. Two important insights are revealed here. Firstly, there is relative consistency. In four of the six analysis periods (67%), behaviour tax was paid mainly by Market Timers. They pay more behaviour tax simply because switching generally erodes value in both directions (chasing past performance or de-risking during volatility). Secondly, different behaviour patterns result in different amounts of behaviour tax at different times. In 2022, only the Assertive archetype incurs behaviour tax. In 2025, the Assertive archetype is the only archetype that gains value (the blue tiger icon is at the top in 2022 and omitted from the list in 2025). The 2025 period is one where the Anxious archetype incurs the most behaviour tax because de-risking left them on the sidelines when markets recovered. Switching generally destroys value, and how much depends largely on investor reactions to different market movements. If investor goals haven't changed, they should not be changing the plan to reach them.

Figure 6: Behaviour tax ranking and summary since COVID-19 (2020)



Source: Momentum Investments (2025)



Disclaimer

The information used to prepare this document includes information from third-party sources and is for information purposes only. Although reasonable steps have been taken to ensure the validity and accuracy of the information contained herein, Momentum Metropolitan Life Limited does not guarantee the accuracy, content, completeness, legality or reliability of the information contained herein and no warranties and/or representations of any kind, expressed or implied, are given to the nature, standard, accuracy or otherwise of the information provided.

Neither Momentum Metropolitan Life Limited, its affiliates, directors, officers, employees, representatives or agents (the Momentum Parties) have any liability to any persons or entities receiving the information made available herein for any claim, damages, loss or expense, including, without limitation, any direct, indirect, special, incidental, punitive or consequential cost, loss or damages, whether in contract or in delict, arising out of or in connection with information made available herein and you agree to indemnify the Momentum Parties accordingly. For further information, please visit us at momentum.co.za. Momentum Investments is part of Momentum Metropolitan Life Limited, an authorised financial services and registered credit provider, and rated B-BBEE level 1.