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What's been happening and what's on the horizon in the world of pensions

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Given the ever-greater regularity of unanticipated impactful events with equally unpredictable tipping points, we look at the importance to pension scheme fiduciaries of risk management. In particular, we consider the need for both more inventive scenario analysis and stress testing of schemes' resilience against a multitude of ever-present and emerging risks allied to more nimble governance.

The multi-faceted nature of risk

Hands up if you thought at the beginning of the year that inflation, central bank interest rates and bond yields would rise to the degree they have? And how about government bonds being amongst the most volatile asset classes of 2022? And what about the sheer strength of the US dollar? Or that 2022 would rank amongst the coldest and wettest, yet hottest and driest on record, so heightening concerns about climate risk? I'm not seeing too many raised hands.

Although risk is one word, it isn't one number. Within pension schemes, the multi-faceted nature of risk is readily apparent, variously spanning covenant, regulatory, market, concentration, liquidity, interest rate, inflation, credit, demographic, counterparty, environmental (notably climate), social and governance (ESG), currency, operational and investment governance risk, to name those risks that typically dominate pension fiduciaries' investment risk radars.[1]

But what is risk?

Most textbooks characterise risk as the range of uncertainty surrounding, or the probability of, a future outcome. Others, the possibility that more things could happen than probably will happen.

Suffice to say, as events rarely unfold in the way we expect, while others occasionally catch us off guard completely, by seemingly surfacing from nowhere, it pays to expect the unexpected.[2] Nowhere is this truer than within the world of pension scheme investment management given the ever-present challenges to accepted macroeconomic and investment paradigms and norms, increasingly abrupt volatility spikes in public markets and the complexity of many investment and hedging strategies. Moreover, this comes against the backdrop of a world that doesn't operate predictably or conform with normally distributed outcomes or historical precedents, with largely unexpected impactful events and their capricious tipping points occurring far more often than statistically they should. Consequently, pension scheme investment management has become an increasingly complex exercise in risk management.

Separating the knowns from the unknowns

This is where the late Donald Rumsfeld's infamous 2002 quote comes in: "There are known, knowns. These are the things that we know. There are the known, unknowns… [the] things that we know we don't know. But there are also unknown, unknowns… the things we don't know we don't know."

While ridiculed at the time, Former US Secretary of Defence, Rumsfeld was simply pointing out that while the sources of some risks – the known, unknowns – are known and might even be quantifiable, others – the unknown, unknowns – the bolts from the blue, the outliers, the left tail risks or black swans,[3] cannot always be anticipated, let alone quantified.

[1]In the UK, the key risks managed by pension fiduciaries are listed in two documents – the risk register and the Statement of Investment Principles (SIP).
[2]For an insight into the top global short-term economic, societal, environmental and technological risks, associated trends and their prospective impact, according to those in the know, see: The Global Risks Report 2022 17th Edition. Insight Report. World Economic Forum. 2022.
[3]Black swans are largely unpredictable, impactful events characterised by a typically remote probability of occurrence. Coined by philosopher David Hume way back in 1711, the term was popularised in 2007 by Nassim Nicholas Taleb in his eponymous best seller.

As pension scheme investment management is littered with known, unknowns and unknown, unknowns, in seeking to manage both categories of risk, of varying shapes and sizes – some highly visible and quantifiable, others much less so, some potentially rewarded, others going unrewarded – pension fiduciaries must ensure that the uncertainties surrounding future outcomes are efficiently managed within acceptable tolerances. However, to do that, pension fiduciaries must, of course, understand the nature of the multitude of risks with which they are confronted and avoid tunnel vision.

Best practice operational and investment governance

Critical to the success of scheme outcomes and central to the efficacy of risk management is employing an advanced level of operational and investment governance. This is often only considered in the narrow context of being able to harvest the illiquidity and complexity premia of a heterogeneous and more governance-intensive investment opportunity set. However, crucially it extends to implementing a formal process by which to nimbly manage a multitude of knowns and unknowns.[4] Process and nimbly are the two watchwords here.[5]

Success in risk management also hinges on never hanging your hat on a single risk metric. Risk is too multi-dimensional for that. Additionally, while widely used metrics, such as Value at Risk (VaR), provide considerable informational value to pension fiduciary decision making, those models and metrics based wholly on mathematics and statistics, and underpinned by complex calculations and subjective assumptions, not least long-run relationships that can change quickly and dramatically, can only take you so far. Exercising judgement, even relying on intuition, is critical, especially if the metric doesn't capture the outliers, or the left tail risks. After all, it's these unknown, unknowns – the black swans and the bolts from the blue – that, by their very nature, tend to wreak the most havoc, if not create outright paralysis, in financial markets and, crucially, by association, engender considerable financial and operational stresses within pension schemes.

Fail to plan, plan to fail

This is where the importance of conducting scenario analysis, with ever-inventive scenarios and the associated stress testing of a scheme's resilience to these – all overlaid with a healthy dose of judgement – comes into play.[6]

A quickfire guide to scenarios, scenario analysis and stress testing

What is a scenario?

- A scenario describes a path leading to a particular outcome.
- Scenarios are hypothetical constructs, not forecasts, predictions or sensitivity analyses.

What are the key characteristics of a scenario?

Challenging: Scenarios should challenge conventional wisdom and simplistic assumptions about the future.

Plausible: The events in the scenario should be possible and the narrative plausible and credible.

Distinctive: Scenarios should be clearly differentiated in structure and in message, not variations on a single theme.

Consistent: Each scenario should have a strong internal logic and explore the way that factors interact. Each action should have a reaction.

Relevant: Each scenario, and the set of scenarios taken as a whole, should contribute specific insights into a scheme's ability to withstand those risks arising from possible future states of the world.

What is scenario analysis?

- Rather than represent a full description of the future, scenario analysis instead highlights central elements of a possible future and those key factors that may drive future developments.
- In challenging conventional wisdom about the future, scenario analysis seeks to enhance critical strategic thinking by exploring alternatives to simplistic assumptions about future states of the world.

What is stress testing?

- Stress testing is a tool by which to evaluate the potential impact on and resilience of a scheme to one or a number of scenarios.

Source: Adapted from Climate Disclosure Standards Board. The TCFD Knowledge Hub. The use of scenario analysis in disclosure of climate-related risks and opportunities. See: tcfdhub.org/scenario-analysis/

[4]The level of operational and investment governance employed by a pension scheme board or investment committee is, by definition, commensurate with its collective capabilities, its specialist investment knowledge, the efficacy of its time management and how well it organises itself. However, best practice governance for all pension schemes starts with considerations of size and diversity. After all, smaller decision making bodies with defined accountabilities perform better than large, while cognitive diversity, deriving from differences in gender, age, ethnicity, socio economic, educational and cultural background and neurology, further optimises decision making, by defeating groupthink. As such, the challenge remains that only if a board or investment committee has strong and diverse collective capabilities, can operate in a nimble fashion, focus on impactful strategic imperatives and intelligently share, capture and constructively challenge the collective knowledge, experience and expertise of all in the room, will more optimal investment and risk management decisions result.
[5]Given the extraordinary demands on schemes' operational and investment governance, in the face of so many risks, many pension fiduciaries are now starting to more fully appreciate the attractions of delegating day-to-day investment, risk and cashflow management to a Fiduciary Manager (FM)/Outsourced Chief Investment Officer (OCIO).
[6]For instance, testing a pension scheme's resilience against different climate-related scenarios is central to the Taskforce for Climate-related Financial Disclosures (TCFD) recommended disclosures. Although pension scheme TCFD reporting isn't mandatory in all countries, in the UK those schemes with assets of £1bn+, authorised master trusts and Collective Defined Contribution schemes are required to conduct testing against at least two climate-related scenarios. In practice, most test for more than two, typically testing scheme resilience against the impact of those likely transition and physical risks that align with a range of possible climate policies and implied temperature rises.

While acknowledging that unknown, unknowns are just that and accepting that the past rarely repeats itself to the letter, planning for and testing a scheme's resilience against material past and prospective economic and financial crises, alongside societal, demographic, technological and environmental risks is, without doubt, time well spent. Despite this, the paucity and opacity of scenario analysis and stress testing of pension schemes' resilience to such scenarios remains an issue.

Of course, while there are a multitude of prospectively plausible adverse events with a convincingly rational supporting narrative that can be analysed and tested, not all can be brought into scope in the interests of time, resourcing and attention spans. However, formulating and stress testing schemes' resilience against the really inventive scenarios, those that really challenge conventional wisdom, albeit with not quite so rational, but still believable, narratives is where the real value of scenario analysis and stress testing prospectively lies.

Why does this matter?

None of this is of any consequence unless pension fiduciaries are continually alert to the myriad of risks that may potentially confront them and are ready to act. And this is where strong operational and investment governance and those two key watchwords, process and nimbly, come into play.

Indeed, with largely unpredictable impactful events and their capricious tipping points occurring far more often than statistically they should, a proactive, multi-faceted approach to risk management, which puts inventive scenario analysis, stress testing, robust processes and the ability to act nimbly at its core, is vital to the success of pension scheme outcomes.

Although by definition it is the unknown, unknowns that are the most unpredictable of risks, it is these outliers and bolts from blue that hit pension schemes the hardest. Therefore, it is absolutely critical for pension fiduciaries to not only expect the unexpected but to be in the best possible position to identify and nimbly respond to any emerging black swan events lurking on the horizon, whether economic, market, societal, demographic, technology, or climate-related. As the adage goes: fail to plan, plan to fail.

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