


Making the complex simple

Rethinking your insurance portfolio
for today's challenges

October 2019

A woman with blonde hair, wearing a blue lab coat, is focused on working on a complex mechanical system. She is looking through a series of pipes and wires, which are connected to various components. The background is blurred, showing a workshop or laboratory setting with other equipment and lights. The lighting is bright, highlighting the woman's face and the intricate details of the machinery.

Created in partnership with Dr Bob Swarup, Principal, Camdor Global.

“Fools ignore complexity. Pragmatists suffer it.
Some can avoid it. Geniuses remove it.”

Alan Perlis

“What we think, or what we know, or what we
believe is, in the end, of little consequence.
The only consequence is what we do.”

John Ruskin

The value of investments will fluctuate, which will cause prices to fall as well as rise and you may not get back the original amount you invested. Where past performance is shown, please note that this is not a guide to future performance.

Executive summary

Insurance investors are grappling with a world bedevilled by complexity. Though premiums are still growing in aggregate and claims being paid, the business model is coming under strain and the investment management required in between the two is no longer a simple turnkey exercise.

As underwriting becomes harder, investment returns have risen in importance as a key component of shareholder returns – but also face significant challenges in the current environment.

The confluence of a challenging macroeconomic landscape, new influences such as climate risk, and the rapid growth of risk-based capital regulation means asset-liability management today is no longer about the avoidance of risk, but rather the art of learning how to live with it.

Insurers are having to shift from a focus on maximising yield and minimising capital to seeking to optimise return on capital – a subtly but importantly different approach.

To overcome these challenges and adapt the business and investment models, innovation is critical, not just for insurers but also for their partners. We have seen the advent of new investment asset classes and strategies, with the lines between traditional and alternative becoming increasingly blurred. Management of balance sheet volatility has moved to centre stage, and thoughtful, capital-efficient solutions are arising to tackle essential issues.

This is all encouraging: as an industry, we are innovating to find answers to once intractable problems. But there is also risk, as new assets and solutions bring new exposures to understand; new challenges such as capacity and regulatory alignment; and new skills to master, such as origination and structuring.

Collaboration and innovative partnerships between insurers, asset managers and others are key to delivering the solutions to enable investment portfolios to adapt and thrive in this complex, changing landscape.

Arguably, insurance investment management has finally come of age. Reducing today's interwoven complexities to simple management actions and decisions brings us all closer to the industry's holy grail: a sustainable business with stable and visible returns into the far distance.

Deconstructing the Gruffalo

There is a popular children's story called The Gruffalo. It charts a mouse's walk through a deep dark wood, where he protects himself from the various predators who approach him by inventing a monster that he is on his way to meet.

Successive fantastical details – terrible claws, huge tusks, poisonous warts, penetrating eyes and so on – layer on to create this mythical terrible creature, the Gruffalo. Then, to his unexpected horror, the mouse actually meets a Gruffalo.

Insurers may not read children's stories for guidance, but there is doubtless something familiar about the villain.

The insurance business model is simple – collect premiums, invest said premiums in assets with secure returns (preferably contractual), pay out claims and live off the margin. It's a mantra that has served the industry well for the best part of two centuries.

The problem is that today, the premiums are still piling in and the claims are still going out, but somewhere in the middle, the factory line has broken down thanks to a toxic cauldron of monetary easing, macroeconomic uncertainty, regulatory and accounting changes, and a staggering growth in complexity.

The result has been a challenging environment for insurers across both their businesses and their investment portfolios. As underwriting profits shrink, investment returns have risen in importance as a key component of shareholder returns, yet face their own problems in the current environment.

In an ideal world, risk is a mathematical number, there is a bond for every cashflow, and yield is not a problem. In the real world, however, uncertainty swamps risk, cashflows don't line up neatly and yield is the problem that bedevils us all today.

Then, there are the strictures and demands of regulation, of actuaries and accountants, and of external stakeholders. Economic risk and regulatory capital diverge, there is too much cash, the assets that work are few and far between, and the textbooks forgot to include the chapter on navigating organisational politics and bureaucracy.

To overcome this requires rethinking the fundamental principles of insurance asset management, adopting a more holistic approach and embracing innovation across all facets of the insurance landscape – not just for insurers, but also for their partners.

The shifting sands of insurance

Insurance assets globally sit at around \$27 trillion, according to the OECD (as of end December 2017), making insurers one of the largest pools of capital globally. Europe itself accounts for approximately 40% of these assets, according to data from Insurance Europe. Traditionally, most of the balance sheet assets were run internally, largely in the form of sovereign debt, investment grade fixed income and cash, and with the occasional sprinkling of property and equity-like investments.

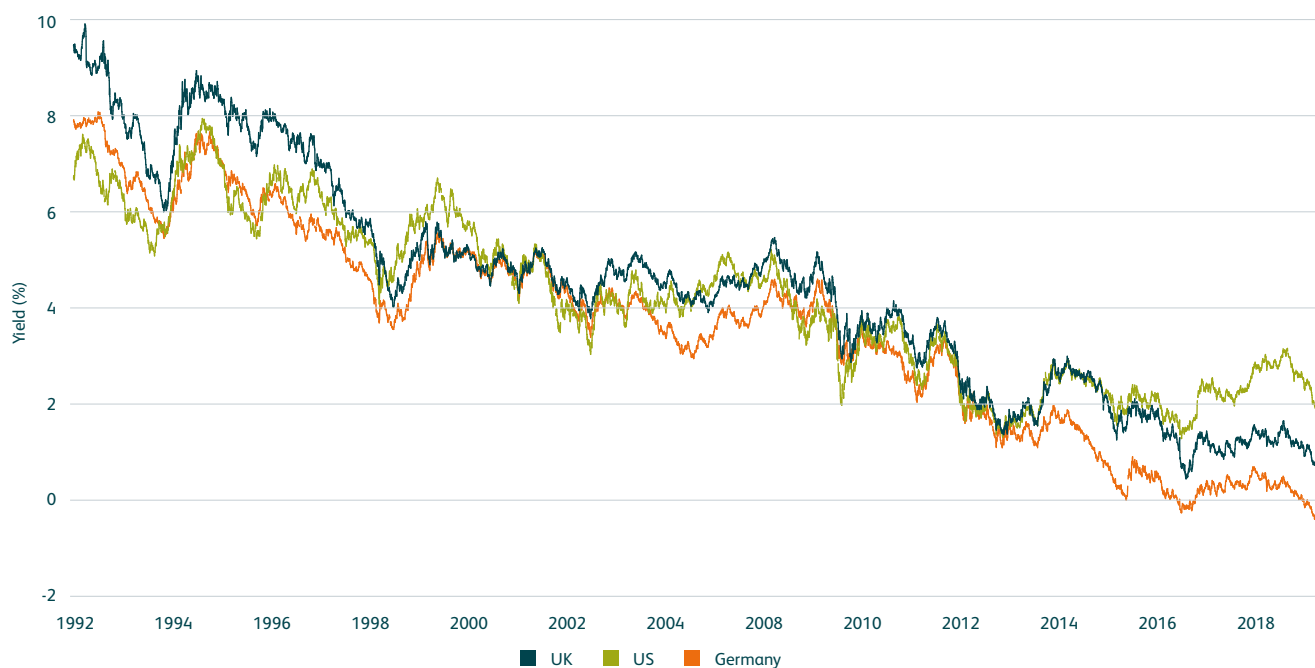
The resource devoted to the management of these assets was small in comparison to what was spent on underwriting. But this also reflected three realities. Firstly, these portfolios were simple and slow to change. Secondly, assets were held typically at book cost or their discount rate directly derived from the liabilities.

Thirdly, for the best part of the last four decades, insurers were on the right side of a benign fixed income environment, as rates fell from the dizzy heights of 1970s stagflation and the golden age of omniscience, namely that of central bankers with the power to carefully control and finetune economic growth, took hold.

Since 2008 this has all changed. The macroeconomic and regulatory environment today presents many challenges and the dependable returns of yesteryear can no longer be taken for granted. The financial crisis of 2007-2009, coupled with a decade and counting of monetary accommodativeness, have created uncertainty.

Today, yields across every major economy sit at multi-decade lows, as can be seen from even a cursory examination of long-term interest rates.

Figure 1: Long-term interest rates (proxied by 10 year bonds) for the US, UK and Germany



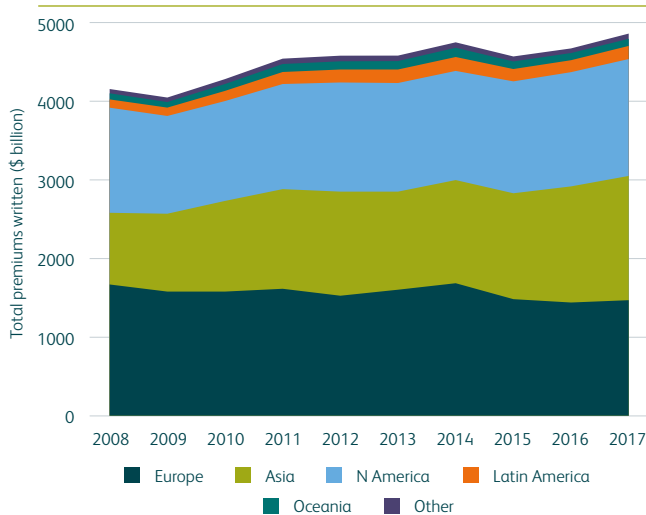
Source: M&G, Bloomberg, ICE BofAML indices, as at 3 September 2019.

Thanks to monetary dovishness and worries about economic fragility, more than \$15 trillion of bonds in the Barclays Global Aggregate Index – almost 30% of the index – are now in negative yielding territory¹. The assets that served insurers well in better times, such as sovereigns and investment grade fixed income, have seen yields fall, fall and then some, to the point where they largely no longer meet the return targets for management or for shareholders.

The current prognosis of increased economic uncertainty and fragility does not bode well for the future path either, threatening to further accentuate the trend.

Holding just cash is never an option for insurers, as the whole business model is about outperforming cash. Unfortunately today, cash is very much a problem. Insurance premiums globally have steadily marched upwards over the last decade, and today are sitting at around \$5 trillion annually.

Figure 2: Worldwide insurance premiums across major geographies



Source: Swiss Re Sigma, as of 31 December 2017.

The insurance investor's problem today is having increasing amounts of money to invest precisely when less would be preferable, and while stakeholders are demanding more – more yield, better returns on capital and greater returns to shareholders.

Today's low-yield environment and host of uncertainties – from ongoing economic unpredictability to bouts of market volatility resulting from increasingly populist politics on both sides of the Atlantic – have created a challenging return distribution where the mean is far too low and the tails are exceedingly fat. As businesses and as investors, that is unacceptable for insurers.

Alongside this there has also been an influx of new regulation, led initially by Solvency II but also rippling outwards, such as, for example, through the advent of the International Capital Standard (ICS). There is a trend towards risk-based capital frameworks globally, which has increased the demands on insurers' resources and the scrutiny of their decisions. Some elements are prescriptive, others less so. But it has generally required the community to look deeper into its investment decisions and map out the risks in more detail than ever before, while also holding more capital back for possible losses.

Most importantly, all the incipient regulation is intended to uncover the economic volatility in the balance sheet of insurers by moving them all onto a mark-to-market basis and, thereby, provide a more consistent means of assessing and ultimately improving their financial adequacy.

The confluence with the sustained low-yield environment of the past decade has been punishing for insurers, a situation potentially compounded by the new accounting changes on the horizon in coming years, notably IFRS 9 and IFRS 17. A strong underwriting environment might mask this in better times, but that is not the case today.

¹ Source: M&G, Bloomberg, as of 12 September 2019

This has all had a tremendous impact on profitability. Not only are insurers facing a huge increase in the complexity of regulation and number of reporting requirements, but the regulation is also still evolving. As insurers begin to grapple with this new world, decisions have to be carefully made as to where best to spend precious capital while still enhancing the returns to shareholders. Importantly, any earnings volatility emanating from the underlying balance sheet has to be managed and minimised, both in response to shareholder sensitivities but also because these have an enormous influence on the credit rating of an insurer and its ability to carry out business.

To manage and meet these wider business challenges requires rethinking the core principles of managing insurance assets.



Rethinking the core principles

In the aftermath of the credit crunch of 2007-2009, a new joke began to do the rounds in the rarified world of asset-liability management (or ALM, to use its less clunky acronym).

According to it, the real reason behind the financial crisis was that financial institutions forgot ALM 101.

On the left, you have liabilities.

On the right, you have assets.

Unfortunately, on the left, nothing was right.

And so, on the right, eventually nothing was left.

If you are new to the world of ALM, you may worry at what passes for humour among your peers. If you are steeped in it, it may bring a smile to your lips.

Regardless, the witticism encapsulates a fundamental truth. For any institution, assets and liabilities are inextricably bound and must be viewed as a holistic whole. This is particularly true for financial institutions such as banks and insurance companies, where the balance sheet is typically highly leveraged and often complex. Here, ALM becomes a delicate balancing act and any failure can rapidly lead to contagion.

As the last financial crisis amply demonstrated, failing to appreciate and manage the mismatches that arise between assets and liabilities can have a devastating impact on both the institution and in extremis, on the wider economy.

Simply put, good asset-liability management is the key to the continued health and longevity of any financial institution. This is true irrespective of geography, specialisation, size, regulatory environment or business model. All of these are just nuances that are reflected in the refinement and precise nature of the ALM models adopted by institutions.

Today, ALM is paramount like never before for insurers. The old business model is changing. Insurance companies have traditionally been far more focused on their liabilities than their assets, a natural consequence of being liability-driven businesses. The status quo has been large underwriting teams and small asset management teams, thanks to the long-held perception of the asset portfolio as a low risk, stable source of return, providing a dependable series of cashflows to offset against liabilities. The natural approach, therefore, is to defer to a static long-term strategic asset allocation, largely centred around fixed income, and have little or no active investment resource.

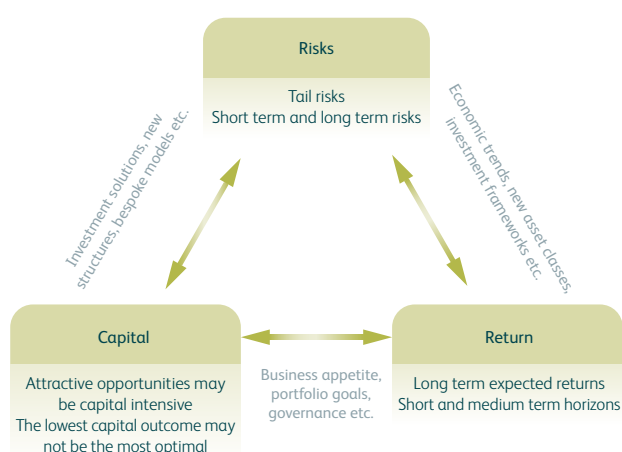
But as noted, today's environment is upending that status quo. In this new world, assets and liabilities are inextricably bound and must be viewed as a holistic whole. ALM now becomes a delicate balancing act, founded on a renewed appreciation and proactive management of the mismatches between assets and liabilities that lie at the heart of every insurance portfolio.

Most importantly, we are seeing a move from an approach that focused historically on minimising capital to one that now seeks to maximise the return on capital.



Insurers are learning that good ALM today is not about the avoidance of risk but rather the art of learning how to live with it. While the rest of the investment community ponders the trade-off between risk and return, insurers have to tackle a three-dimensional problem of risk, return and regulatory capital.

Figure 3: The three-dimensional challenge of risk, return and capital in insurance portfolios



Source: Camdor Global, illustrative.

Their goals are simple: avoid catastrophic losses from taking unintended risks, and remove all unwanted risks wherever possible.

But to do so in the low-yield and uncertain environment of today necessitates a proactive and dynamic approach. Changing markets mean changing risks.

And while long-term return expectations may have a sound basis, investors still have to navigate through the short-term and its associated volatility to survive long enough to harvest those returns.

Taking risk and judiciously deploying capital in this pursuit is now key. Going forward, the impact on profitability, capital management and solvency will mean that managing returns and the growing balance sheet volatility are the key foci for insurers going forward. But the journey to meet today's challenges is only just beginning.

Insurers are wrestling with a shift towards risk-based assessment, the unveiling and active management of underlying balance sheet volatility and capital-driven asset decisions. They have begun down the road that banks took in the 1980s – towards a growing and far more complex balance sheet.

There is no 'one size fits all' solution. Each insurer's balance sheet is unique and will require their own path through the forest. But the simple fundamental principles above are common to every journey.

Managing this means rethinking the way insurers approach their portfolios. Tough decisions now have to be made as to where best to spend precious capital and fundamental realignments are under way in asset allocation, as insurers look to maximise their return on capital. Some of these are already evident: the rise of private assets as a key component of insurance portfolios, the move towards greater diversification and so on.



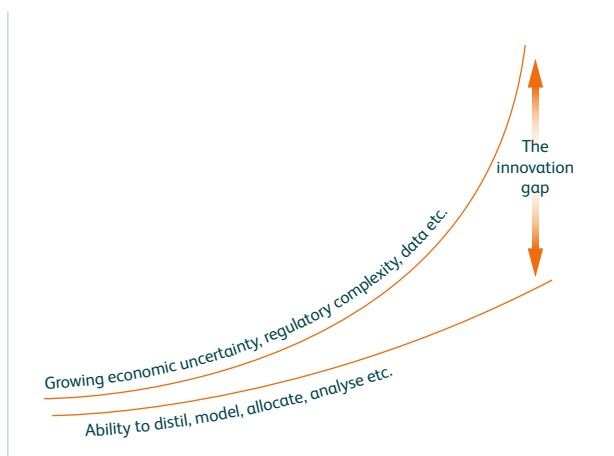
A renaissance in innovation?

Innovation lies at the heart of human progress.

The past few years have not been easy for insurance investors thanks to the challenging environment, flurry of regulation and the need to rethink many of the industry's core beliefs. But beyond all this, we inhabit a world where data overload is fast becoming the norm.

It is of little surprise then that we question our ability to meet and to overcome these challenges. There is a gap between our efforts and our reality, and often it may seem we are constantly falling behind, rushing to stand still and grasping futilely for control.

Figure 4: The innovation gap



Source: Camdor Global, illustrative.

Closing that gap takes innovation, and here, it is worth remembering that financial markets are not static entities.

Insurers have made significant strides already. If today's insurance portfolios are a constant and evolving trade-off between risk, return and capital employed, then in practical terms, that means a more diverse set of assets, a more diverse set of strategies and a more dynamic approach to managing it all.

The result has been a huge growth in the diversity of the fixed income universe in recent years and a need to generate greater return, even if the capital required is higher and as return on capital declines.

In the absence of suitable assets, insurers have cast the net wider. They have moved into different geographies, gone down the credit curve, sought out alternative investment strategies and private assets, and begun to examine new structures to optimise that risk-return-capital trade-off. Even equity – once anathema – is making an appearance in insurance portfolios.

However, the journey is not solitary. Insurers are fast learning that there are many tools at their disposal if they choose to look more widely. The asset management industry has worked hard to move from turnkey products to solutions that meet vital needs.

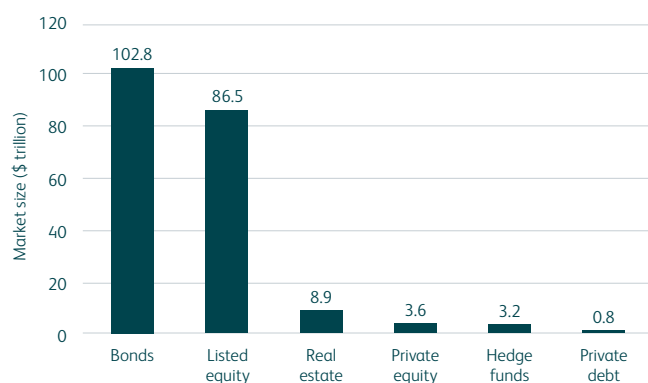
A host of advisers and service providers have sprung up to provide insurers with both the tools and advice they need to manage the complex journey, from capital modelling to comprehensive risk solutions to data provision.

But still more needs to be done. Innovation comes in many flavours and challenges remain to be overcome.

For example, public fixed income assets globally stood at \$102.8 trillion at the end of 2018, according to the Securities Industry and Financial Markets Association (SIFMA), with insurers making up a significant chunk of the holders of these and also biased towards investment-grade credit in developed markets.

The areas of interest they are moving into are far smaller – the global managed real estate market is \$8.9 trillion while private debt was still below one trillion last year (\$767 billion as of end-2018).

Figure 5: Estimated market size of asset classes of interest for institutional investors



Source: M&G, Bonds: Securities Industry and Financial Markets Association (SIFMA) Capital Markets Fact Book 2019, 31 December 2018; listed equity: World Federation of Exchanges (30 June 2019); Real estate: MSCI, size of the professionally managed global real estate investment market (31 December 2018); Private equity: Preqin, total industry assets, (31 December 2018); Hedge funds: BarclayHedge, excluding fund of funds assets, (30 June 2019); Private debt: Preqin, assets under management (31 December 2018).

There is consequently a capacity issue that limits the ability of insurers to evolve their asset allocations, compounded by the fact that only a fraction ticks the boxes for insurers in terms of risk profile and regulatory suitability.

But there is change happening as well. Private debt as an asset class has grown fourfold in the past few years, reflecting both an escalation in supply to meet insatiable demand but also structural shifts in the wider markets as they align to new investor preferences, such as in the commercial real estate debt market.

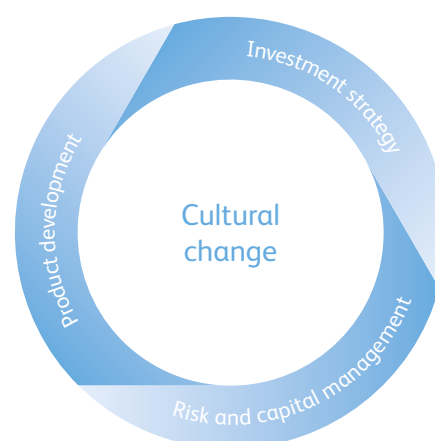
Securitised debt became penal from a capital perspective for many insurers, but more recently, new structures have sought to reopen these channels for insurers by fitting within the strictures of regulation.

This is a journey of opportunity and peril. Necessity is the mother of invention, and the last few years have seen plenty of innovation across strategies, structures and modelling. That is encouraging and shows that as an industry, we are innovating to find answers to once intractable problems.

But there is also risk. These new assets and structures bring new risks and exposures. As the palette expands and the portfolio grows broader, there is also a greater need to curate, to distil, to analyse and to understand.

Above all, there is a need to be vigilant and ensure that the hunt for yield and capital efficiency do not overcome a prudent assessment of economic risk and substance. Innovation is also needed in risk and capital frameworks, both to absorb new assets and structures as well as to monitor, quantify and manage.

Figure 6: Where is innovation needed in the insurance world today?



Source: Camdor Global, illustrative.

There is also the critical importance of the evolution of capital at the portfolio level in aggregate.

Maximising the return on capital means not just looking for higher-returning assets, but also more capital-efficient strategies.

The move to a risk-based approach implies diversification benefits waiting to be exploited. Given the overwhelming dominance of fixed income assets (largely investment grade) in portfolios currently, even small allocations to other sectors and asset classes have the potential to offer significant diversification benefits.

These may offset higher capital charges in isolation, and potentially lead to a very similar or even a preferential capital position at the portfolio level than previously.

Additionally, insurers who understand these higher capital-consuming assets and can demonstrate that their risk can be fully or partially mitigated (eg through internal models, careful construction or by efficient use of derivatives) may have the opportunity to enhance their return on capital further and, therefore, gain exposure to diversification benefits from allocating to a broader set of asset classes, geographies and sectors.

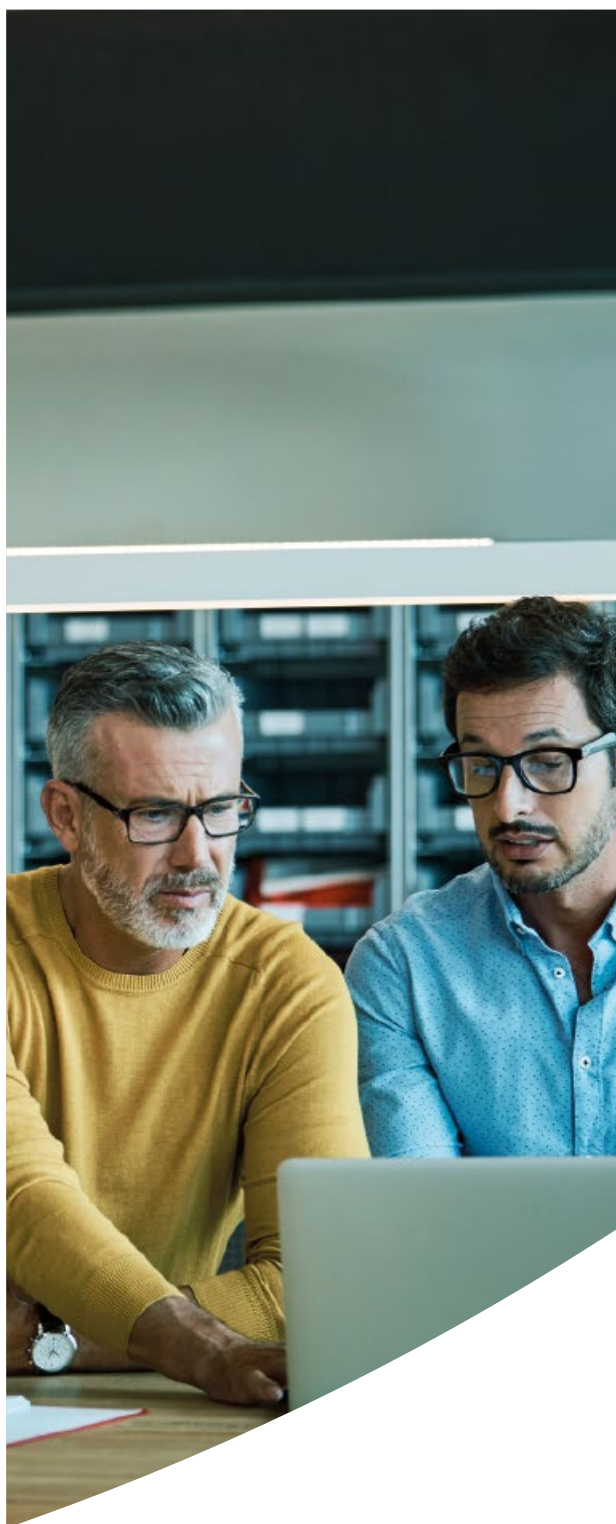
Embracing the investment evolution

The potential for further change also remains, particularly as new insurance business models emerge, regulation evolves and new policy priorities develop around growth and climate change, to name but two of the highest profile issues.

There has already been movement on infrastructure investments within Solvency II, for example, and the European Commission has begun to put substance to its oft-expressed desire to kick-start insurance investment in debt securitisation once again, through the simple, transparent and standardised (STS) framework. The ICS framework is even newer and still in flux, while regular and upcoming review periods across various frameworks in the next two to three years all herald opportunities for further evolution.

Today, key investment considerations include:

- Investment strategy and risk management becoming board-level issues as their importance in managing the balance sheet and delivering shareholder returns increases
- Linked to the above, a move for the CIO from a previously operational to a critical strategic role
- A new emphasis on holistic approaches
- How best to build out or access the requisite expertise they lack, eg in alternatives, risk management, origination and more
- Understanding how best to match assets with liabilities and within regulatory constraints to minimise regulatory capital
- A growing focus on constructing and managing fixed income portfolios to maximise ALM benefits
- Greater diversification across asset classes
- A significant growth in interest in private credit, infrastructure and liquid alternatives to meet return hurdles and shareholder objectives
- Full look-through to underlying assets and liabilities, coupled with increased transparency around the risks
- Consideration of wider risk factors and stakeholder criteria such as climate change and ESG more broadly.



Extending the possible

These naturally also imply key considerations for insurers' asset management partners, if these are to evolve and deliver solutions alongside them. Valuable attributes that partners can offer to support insurance investors include:

- Ability to structure offerings into debt (or other desirable forms) and create cashflows that meet ALM needs for insurers across different segments
- Ability to negotiate appropriate covenants that reduce risk and speak to key insurance needs (eg ratings migration risk, matching adjustment)
- Derivative overlays to limit the downside
- More detailed portfolio analysis and modelling of portfolios and assets
- Modelling and implementation of transitions to minimise capital drag
- Providing data and risk analytics to a sufficient and appropriately granular level for the purposes of both regulatory oversight as well as any internal models
- Scenario analysis to help with risk management and reverse stress testing
- Documentation of key aspects such as internal ratings, hedging strategies, valuation policies and work-out processes, supplemented with case studies, to provide regulatory and internal risk management support for insurers.

Facing the future

Innovation is widespread and we should embrace it if we are to overcome the challenges we face. To the industry's credit, insurers, asset managers and advisers alike have all learnt that their best tools in navigating today's uncertain currents are their minds and incubating a culture of openness to change. Thinking and collaborating are the best deterrents we have against complacency and failure.

Arguably, insurance portfolios are where we are seeing the most exciting strides today in new asset classes, new structures, new approaches and new thinking – all in response to the growing challenges faced today by the largest pool of assets globally.

Insurance investment management has finally come of age. From the perceived dull ditch-waters of a decade ago, it has rapidly progressed to being at the forefront of asset management and ALM today.

There has been a multiplying of asset strategies that increasingly blur the lines between traditional and alternative; innovative risk management to manage balance sheet volatility; the rise of thoughtful, capital efficient solutions to tackle key issues; and far more thought and regard for the macro currents driving markets today.

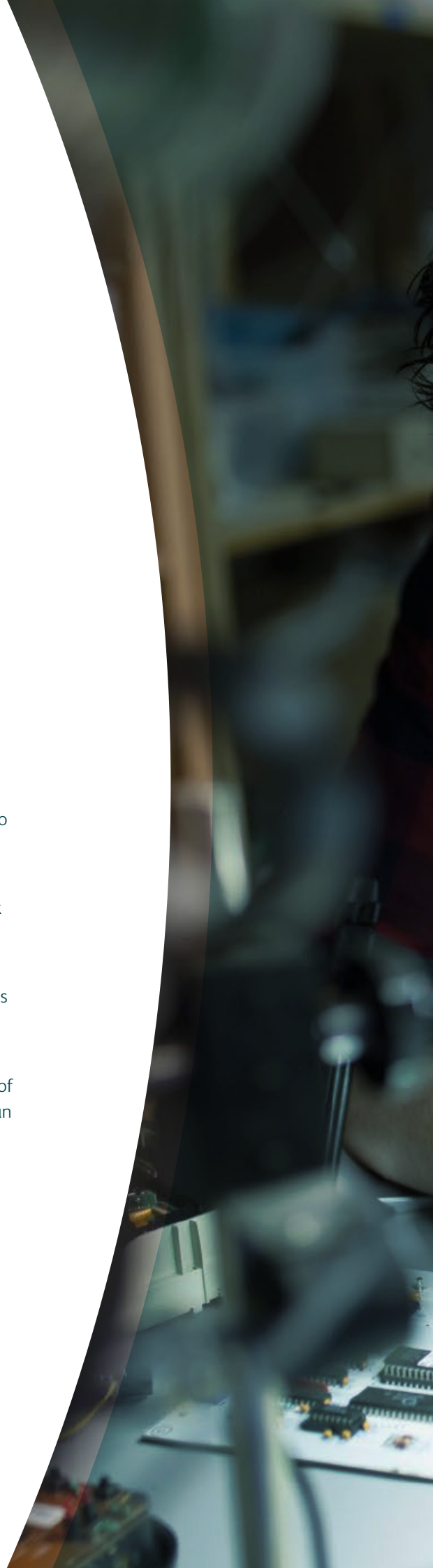
But that is only the start. There is much more to come and it promises to be both a challenging and rewarding journey ahead for the industry as we seek our holy grail: a sustainable business with stable and visible returns into the far distance.


Life is not a fairytale, and we are not children. But stories also contain lessons and encapsulate hope.

The mouse in our story met the Gruffalo – a monster far greater and far more terrifying than anything else in that creature's existence, capturing all of its worst imagined fears. Yet the mouse used the one superior tool it had – an active imaginative mind – to outwit and banish this monster.

Complexity is by nature terrifying and its impact paralysing, but both our history and a clear-headed reconnaissance of the landscape tell us it is also reducible and manageable.

We but have to use the same tools as the mouse that lie at our disposal.





With thanks to Dr Bob Swarup. Principal at Camdor Global, an advisory firm that works with leading institutions and policymakers around the world on strategic investment, risk and governance issues.

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