

Ref	Key Risk <small>A regulatory risk which has the potential to impact on the public interest, as relevant to actuaries and their work</small>	Description of risk	Practice area	Key examples	Impact	Likelihood	Overall risk status	Likelihood change	Indicative timescale	Recent or suggested action/mitigation: Regulatory Board	Recent or suggested action/mitigation: Other IFoA / External	Residual risk status	Owner(s)	Comments	Recent changes/comments
					minor moderate major	unlikely possible likely	Low Medium High	No change Increasing Decreasing							
HS01 HS08	Complex models being insufficiently validated and understood, and/or insufficiently communicated	There is a risk that complex models and/or emerging techniques are insufficiently validated and understood. There may be inappropriate balance of customer and commercial consideration through more extensive use of data, resulting in potentially unfair outcomes. Model limitations may be insufficiently communicated to, and understood by, senior management and boards.	All	Data science, machine learning, GI and health pricing	Major	Possible	High	↑ increasing	Now and ongoing	IFoA specific data science guidance published in 2021. GI Thematic Review report highlighted the risks around data science. AMS team planned data science thematic review during 2023.	IFoA Lifelong learning offers certification in data science. Scrutiny of issues by IFoA Data Science MIG. GI Machine Learning in Reserving working party conducting research into this topic. TAS 100 requires models used in technical actuarial work to be fit for purpose & subject to sufficient controls. FRC/GAD AI/ML questionnaire for actuaries during Q1/Q2 2023 UK Dept for Science, Innovation and Technology white paper March 2023 CMA launches initial review of AI models May 2023	High	RB	This risk has significantly increased profile at present with the accelerated focus on AI and recent high-profile releases of tools such as ChatGPT. Actuaries will be under increasing pressure to deliver potential solutions for their firms and clients. There are increased risks around appropriateness of models and data usage. Equally actuaries do not want left behind on these potentially ground-breaking opportunities. There is significant UK and international government and regulator focus, upcoming AMS data science activity will review and summarise this.	Consider an interim Risk Alert as a regulatory "holding pattern" as further review work is carried out. There is current IFoA working party activity that can be harnessed to make progress on this. Also propose a data science / AI deep dive to take place at July 2023 Board meeting.
HS02	Actuaries taking into account climate change risks, biodiversity and climate change disclosures	There is a risk that actuaries do not sufficiently allow for climate-related risks in the work that they carry out. Additionally actuaries may not sufficiently promote risks to climate, sustainability and biodiversity within their organisations.	All	risk management, climate modelling, climate disclosures	Major	Likely	High	↔ No change	Ongoing	Risk alert published in April 2022. Further guidance on the Code to be developed by the Board (spring 2023).	Sustainability and Climate Risk course / Sustainability Board curated library and practical guides on climate change / sustainability Thought Leadership series of webinars / creation of Sustainability Research Thought Leadership Sub-committee and ambitious research agenda. Biodiversity and Natural Capital Working party established developing think pieces, webinars, blogs, case studies and other educational resources.	High	RB with support from Sustainability Board	February 2023: Work on non-mandatory guidance (including case studies) progressing, with the aim of publication by May 2023.	
HS04 HS10 HS12	Significant Pensions developments requiring appropriate governance	There are a number of significant developments taking place in relation to pensions, each of which may result in sub-optimal outcomes if not developed and governed appropriately.	Pensions	CDC, Master trusts, Fast track funding	Major	Possible	High	↑ increasing	2022-25	AMS Thematic review on corporate pensions advice will touch on this area. Consider reviewing PC requirements / consider guidance for members advising Master Trust	New funding regulation and guidance published by TPR.	Medium	RB with support from Pensions Board	CDC Scheme Actuary proposals approved in November 2022 and revised PC Scheme, plus amended APS P1 came into force on 1 March 2023. Thematic review on corporate pensions report published April 2023.	
HS05	DB to DC transfers	Risk of poor outcomes for scheme members/public interest by consumers making inappropriate DB -> DC transfers Risks around actuaries' role in providing advice/communications (either to members themselves or to trustees or sponsors) that members have regard to in making those decisions.	Pensions		Moderate	Possible	Medium	↔ No change	0-5 years	Discussed by RB during deep dive in Feb 2020. RB Chair worked with IFoA Policy team on the published Great Risk Transfer document in 2021 which touches on this risk.	Significant amount of activity on the part of the regulators, including publication of further FCA guidance and joint guidance between the FCA and TPR	Medium	RB with support from Pensions Board / IFoA Policy Team	Increased focus by trustees and sponsors on reducing risk may lead to more actuaries advising on scheme-wide transfer offers, with the potential for member detriment. There has also been a significant amount of activity on the part of the regulators, including publication of further FCA guidance and joint guidance between the FCA and TPR.	
HS07 HS03	Products which combine higher risk of adverse outcomes with significant actuarial involvement	There are certain products which combine a higher risk of adverse outcomes with significant actuarial involvement.	GI, Life	equity release, funeral plan trusts	Moderate	Possible	Medium	↔ No change	0-5 years	Recent thematic reviews on ERM and on Funeral Plan Trusts. Watching brief on FCA Consumer Duty implementation following Reg Board deep dive in Feb 2023.	Funeral plans move under FCA regulation during 2022. Introduction of FCA Consumer Duty in 2023 likely to have a significant impact in this area.	Medium	RB with support from Life Board & IFoA Policy Team	AMS Reviews published. February 2023: the ERM report was published on 7 December 2022 after Reg Board discussion	
HS13 HS16 HS17	Actuaries not appropriately allowing for significant changes in economic environment.	There is a risk that actuaries are not appropriately allowing for significant changes in economic environment, particularly as it impacts inflation and interest rates. This in turn may impact on reserving, pricing and hedging activities, with implications for both organisations and consumers. At times of significant cost-of-living pressures there is a risk of consumers not taking out, or lapsing, important insurance or savings products due to affordability. Stress testing activity may not sufficiently consider possible outcomes which could threaten liquidity and solvency of firms or pension schemes.	All	Inflation assumptions interest rate hedging, LDI	Moderate	Possible	Medium	↑ increasing	Ongoing	Significant movement in inflation considered by Board in H2 2022 leading to agreement for the drafting of a cross-practice area risk alert in August 2022. AMS team is reviewing LDI challenges, and how standards can mitigate future problems, for the July 2023 Board meeting (taking into account DWP response expected Q2 2023).	TPR, BoE and other market regulators taking steps to strengthen collateral arrangements and reporting of LDI investments. DWP due to report findings on LDI in Q2 2023.	Medium	RB, and practice boards - requires ongoing engagement.		
HS14	Risk of inaccurate pandemic modelling and future path of longevity as a result of the COVID-19 pandemic	There is a risk that actuaries use data emerging from the pandemic in an inappropriate way. There may also be insufficient development of pandemic models to learn lessons from the recent experience, and improve on previous models	Life, Pensions	Pricing Reserving and Funding Stress testing Capital modelling	Moderate	Unlikely	Low	↓ decreasing	Ongoing	Risk Alert and member communications issued to highlight various potential issues, including challenges in assumption setting.	Scrutiny of Covid related issues and implications by IFoA member groups, including IFoA Covid 19 Task Force (ICAT) of whether there are public interest implications. The Continuous Mortality Investigation (CMI) is consulting on proposals for the next version of its Mortality Projection Model. The consultation focuses on the high mortality rates seen in England & Wales in 2022 and the extent to which these should be reflected in the model. WHO announcement that global health emergency is over May 2023.	Low	RB, ICAT, Regulation Team	Watching brief - possibly worth a deep dive on what IFoA member activity is in this area, later in 2023.	