Debashish Dey, FIA C. Act.

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GAD, London (Nov 2025 - NOW) – Contractor, Actuarial & Processes

- Assisting with BAU deliverables as well as process improvements.

Aviva, York (Nov 2024 – Nov 2025) – Contractor, Capital Modelling

- Part of a wider team implementing a Major Model Change, transforming the internal model, allowing for credit spread and transition adjustments impacts mainly on the BPA business / Matching Adjustment Portfolio as well as reflecting recent Solvency UK changes, and differences between risk drivers in our credit model (CM4) and internal model (IM4). Final analysis included overall impact on Group SCR.
- Collated, checked and separately validated information submitted as part of a PRA template which included breakdown of asset figures, critical scenario information, stress information before and after rebalancing the portfolio in line with PRA's SS8/18 guidance.
- Worked with Risk Management & Compliance Team to draft final deliverable templates for PRA showing detailed SCR impact of project changes (movement in overall basic own funds, ring-fenced funds and detailed IM4 breakdown of movements), applying impacts to the overall Group- and business unit-level SCR by reconstructing the Partial Internal Model (PIM) aggregation tool. Completed independent high-level checks, back-testing, AoC, seed selection and validation on overall SCR impact.
- Helped develop new stressed transition matrix model in Python, using inputs from the internal credit tool. Helped migrate tool to BAU platform, including building a web front-end via ReactPy / FastAPI and deploying via POSIT. Created several independent validation checks / test suites and models (via unit tests and Excel) to verify calculations and outputs from the tool, in line with internal validation and TAS requirements. Documented internally technical specifications, testing and validation checks completed e.g. via JIRA and Confluence, including recommendations for future enhancements / current weakness & limitations. Developed framework, infrastructure and processes for annual validation including low level and top-down approach, and annual validation suites.
- Developed a new stochastic capital modelling tool in Python which calculates risk adjustments from first principles e.g. Monte Carlo simulations, random number generation (Mersenne Twister), application of Cholesky decomposition, PSD correlations, Gaussian smoothing, mapping many risk drivers on to one / vice versa to improve loss function fitting efficiency in downstream BAU processes.
- In charge of replacing in-house asset risk categorisation tool (ASP.net) which interacts with Bloomberg and Clearwater, SQL server databases and supporting regulations (NACE codes).
- Gave internal training and presentation sessions. Hiring manager for interns.

Deloitte, Manchester (Oct 2023 - Sep 2024) – Senior Manager, Actuarial Pensions Audit & IT

- Actuarial auditing of pension schemes (accounting and valuations).
- Successfully implemented bond yield and inflation curve models.
- Leading and working with a range of teams (actuarial, IT, specialist teams) including introducing cloud-based solutions and databases. Aim was to replace Excel with ASP.net core model (C#) and Azure-based solutions (ADO, AKS, Synapse Analytics, SQL databases), microservices architecture, Docker, modern front-end (Blazor, ReactJS) and RESTful APIs (testing via Swagger).
- Working on internal global business restructuring project.
- Hiring manager for new recruits.

WTW, London (Oct 2018 - Sep 2023) – Actuary and Consultant, Global Solutions Services

- Managing and leading a range of global actuarial projects for several high-profile clients, including a global client with overall pension liabilities of EUR 14 billion / assets of EUR 15 billion, across 30+ countries and 100+ pension plans. Review and produce group-level reports (detailed figures and final commentary reports), as well as discussions with auditors.
- Projects focus on year-end and interim actuarial accounting (IFRS and US GAAP), VAR calculations, local valuations, review of benefits (pensions, medical, life, risk), investment projections and financial market commentary at group level.
- Drafting SoWs and scoping fees for prospective business. Drafting responses for new RFPs. Sales credit for 2021 totalled USD 50,000.

- Managing a team of 8 for a high-profile international pension plan.
- Work on pension current plan design and future design strategy for high-profile client.
- Part of "core" development team for a global software reporting to global Steering Committee (global head of actuarial and senior management), as well as advising a team of developers. Implemented new SharePoint site to deal with user queries, help pages and created video tutorials.
- Use of WTW actuarial software including for accounting and Solvency 2 SCR calculations.

Mercer, London (Jun 2015 - Sep 2018) – Actuary and Consultant, International Consulting Group

- Regional lead for global clients for global HR and accounting projects.
- Sales totalled around USD 200,000 each year. Drafted RFPs, in charge of budgeting and contract negotiations (MSA, SoW, engagement letters). Focus was on sales of cross-LOB solutions (risk insurance, reinsurance, pension, admin, flex, mobility), multinational pooling and captive solutions.
- Managed and negotiated project budgets, including monthly invoicing to clients, tracked and allocated budget across remote teams, as well as implementing project teams (internal, cross-LOB, third-party).
- Lead presentations on benefit harmonisation and reviewed global accounting work (IFRS, GAAP), and specialist DC teams. Worked on M&A projects and "due diligence" checks.
- Worked in conjunction with reinsurance arm to review current pricing on reinsurance policies for captive and model indicative quotes, e.g. based on 1 in 200 scenarios with Remetrica and Excel. Produced high-level, as well as detailed cashflow run-offs for Solvency 2.
- Gave several training sessions including at client seminars.

GAD, London (Jul 2013 - May 2015) – Contractor, Actuarial Pensions

- Reported to senior staff, reviewed calculations as part of public sector valuations.
- Working with large data sets – assumptions and data manipulation via SAS programming.

Aon Hewitt Limited, Manchester (Nov 2011 - Oct 2012) – Senior Associate, Actuarial, Pensions

- Pension DB valuations and accounting, M&A, changes in plan design and BPA transactions.
- ALM projects included use of MATLAB analysis different deterministic and stochastic scenarios.

Barnett Waddingham LLP, Leeds (Nov 2004 - Oct 2011) – Associate, Actuarial Pensions

- Directly reported to scheme actuaries on 10+ valuations and related work.
- Worked on mortality models, reports and BPA transactions.
- Successfully implemented 18-month IT transformation managing 30 members of staff across 2 offices.
- Developed firmwide actuarial Excel and software models including validation processes and controls.

八戸高等学校、八戸市、日本 (Aug 2002 - Jul 2004) – *Teacher, Hachinohe Senior High School, Japan*

- Teaching senior high school students – 400 students split across 10 forms and 2 years.

Education and Qualifications

- Fellow of the Institute and Faculty of Actuaries (FIA C. Act.)
- *The University of Nottingham, Nottingham*: Mathematical Physics 2.1 (BSc with Hons)
- *Manchester Grammar School*: A-levels (4 As), GCSEs (7A*s, 1A, 1B)

Volunteer Work

- Chair of several IFoA working parties on climate change, sustainability and data science (2022-2025)
- List of publications: https://orcid.org/0009-0009-0579-3197
- Speaker at following conferences:
    - 2024: Aurum ESG event (London), IFoA Life (Manchester), IFoA GIRO (Birmingham)
    - 2025: IFoA Middle East (Riyadh), IFoA Asia (Kuala Lumpur), IFoA Life (Edinburgh), IFoA GIRO (Liverpool)

Other skills

- IT: Azure, Coding (C++, C#, .NET core, Python, SQL), data science, Docker
- Languages: Japanese