

UNSW and Macquarie Actuarial Societies

2025 Joint Case Competition



Building a better
working world

Background

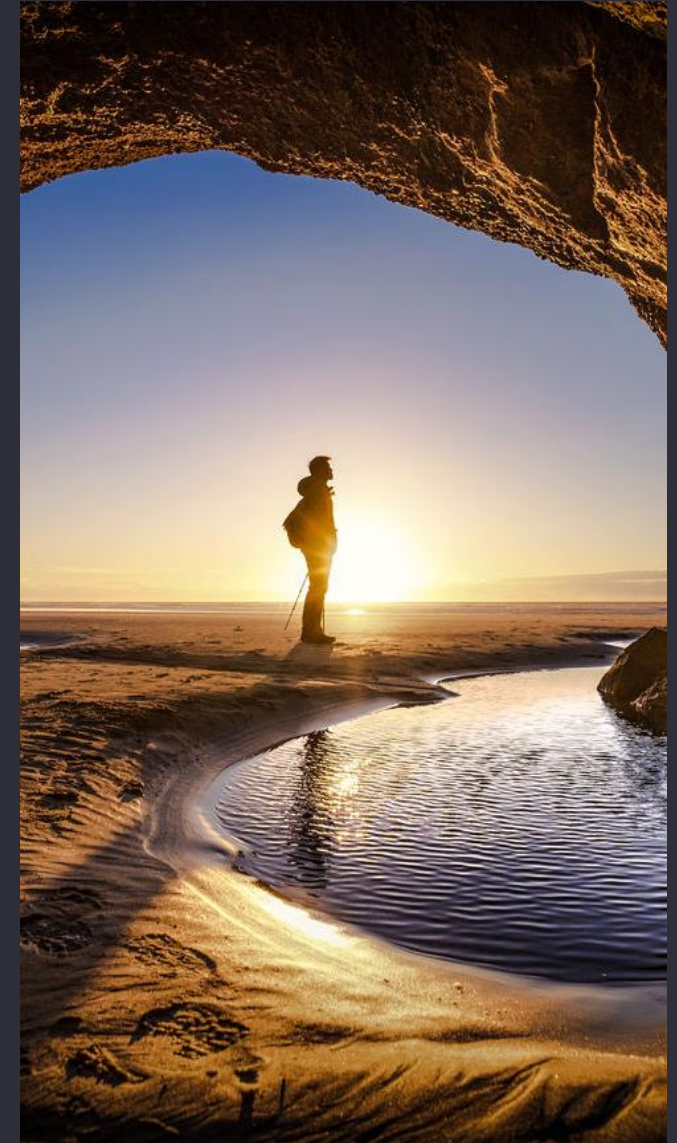
In recent years, the people of an island nation Atlantia demanded a reform of compensation system for injuries or illness that has arisen while working. Atlantia's existing arrangements for compensating workers operates as follows:

- The medical cost associated with these injuries or illness have been covered by Atlantia's universal health care system Atlanti-aid.
- The employers are required to allow the affected workers to remain on an unpaid leave of absence until they are fit to return to their prior roles
- No other forms of benefits are provided for affected workers

Following lobby groups activities and increasingly strong public concerns over the recent years, the government of Atlantia recently passed a legislation to reform the current compensation system, which will be effective from 1 January 2026. The new compensation system will operate as follows:

- The new compensation system will be named "Atlanti-care". In accordance with the legislation, a government entity called "Atlanti-safe" will regulate and oversee Atlantic-care. One of Atlantic-safe's primary duties includes the determination of a compulsory premium to be collected from all employers at the start of each year
- The compensation provided under Atlantic-care include the following:
 - Medical cost associated with injuries or illness acquired whilst working
 - Loss of earnings due to injuries or illness acquired whilst working for the period where they are deemed as unfit to return to their prior roles. This benefit will only replace 75% of their pre-injury earnings
- The benefits will be administered and paid to the workers via the employers during the year, and reimbursed at the end of the year by Atlantic-care
- Corporate tax are expected to reduce over the coming years as cost of Atlanti-aid reduces

As a group of young talented actuarial analysts, the Director of Atlantic-safe has requested for your technical expertise as well as advice.



Question 1

Based on the mandate of the Atlanti-safe set in accordance with the legislation, a **break-even premium** at an industry level must be determined.

Advise the Director on what needs to be included into a break-even premium, and help determine a break-even premium at an industry level for the year of 2026. Please note any relevant assumptions made.



You may make the following assumptions:

- The premium collected will need to be sufficient to cover the operating expenses of Atlanti-safe, which amounts to \$2.4m per year.
- 70 percent of injuries or illness results in people to be unfit to return to their prior roles
- The average length of periods where people are deemed to be unfit to return to their prior roles after injury is approximately 4 weeks

Question 2

The Director of Atlanti-safe has requested your team to determine a recommended premium at an industry level for the year of 2026 based on the breakeven premium.

The difference between a break-even premium and a recommended premium is that the latter often requires consideration of contextual issues and practicality.

Please advise the Director of your team's considerations, and how it leads to changes between the breakeven premium and recommended premium.

HINT:

- What is unique about Atlanti-safe?
- What would be Atlanti-safe's objectives?
- What type of outcome would trigger scrutiny for Atlanti-safe?



Question 3

The Director has been requested to submit a report to a parliament committee, with a focus on how Atlanti-care can be improved to deliver better outcomes for the public.

The Director has approached your team for input with respect to the following:

- What would you expect to be the largest challenges or concerns from the perspective of employers?
- What would you expect to be the largest challenges or concerns from the perspective of employees?
- Suggestions or recommendations to respond to the challenges or concerns above, or for the improvement of better outcomes for the public?



HINT:

- What has become easier or harder for employers/employees under Atlanti-care?
- Are there any conflicts of interests and how would this be resolved?
- “Building a better working world” is part of EY’s purpose. Whilst Atlanti-care has no affiliations with EY whatsoever, does Atlanti-care deliver to this ideal?

Submission instructions



Teams are required to submit their response as a slide deck (in .ppt, .pptx or .pdf format) for a 10 minute presentation and 5-10 minute Q&A.

Teams should also add their projection model methodology and code (if applicable) as technical appendix at the end of the slide deck or as a link to a GitHub repository (optional).

HOW TO SUBMIT

1. Email your response to
 - ▶ UNSW students: careers@asoc.unsw.edu.au
 - ▶ Macquarie students: admin@mqassoc.com
2. Attach the slides and projection model with the subject:
EY Joint Case Competition - [Team Name]
3. Include your team name and members in the body of your email.
4. Deadline
11:59 pm, 1st April 2025

A photograph of three students in a classroom or office setting. In the foreground, a young woman with short brown hair and glasses, wearing a white and blue striped shirt, is looking down at a white smartphone she is holding. Behind her, a young man with dark curly hair and glasses, wearing a black and white checkered shirt, is also looking down. In the background, another student is partially visible, working on a laptop. A red lamp is visible in the upper left background.

APPENDIX

About EY Actuarial Services

Building a better working world



Drawing on a diverse range of experiences and competencies, the Actuarial Services team at EY tackles the problems that face our clients in a wide range of industries, ranging from insurance practices to broader financial services and government departments.

We apply actuarial and analytical skills to a wide range of traditional and non-traditional areas within our teams:

- ▶ General Insurance
- ▶ Life Insurance and Wealth Management
- ▶ Banking and Capital Markets
- ▶ Health and Human Services

As part of these teams, you might:

- ▶ Design and price products taking into consideration market developments, client objectives, current product profitability and marketing issues
- ▶ Assist insurers with an assessment of their capital stability under various stress scenarios
- ▶ Value exotic derivatives using sophisticated stochastic modelling
- ▶ Perform due diligence, business valuation and provide assistance with mergers and acquisitions
- ▶ Value liabilities for insurance companies, regulators or other businesses under a range of circumstances
- ▶ Transform complex datasets to help clients understand their business and their needs
- ▶ Work with professionals from other EY service lines to improve the analytical capabilities of government clients so that they can better support their members and communities

Meet our people

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My journey at EY has been incredibly rewarding. After interning, I chose to continue working for EY because I was drawn to the diverse range of projects, which has helped me pursue the areas I was interested in. Since joining as a Graduate, I've continued to experience this firsthand; I've had the chance to work on many impactful projects, developing both technical and soft skills along the way. I especially appreciate the collaborative nature of the various actuarial teams and the opportunity to learn from others. EY has provided a great foundation for my career growth, and I've really enjoyed working with everyone here!



Coco Xu
Sydney



The Actuarial Services team has grown considerably over the last few years, with more than 150 professionals across Australia and New Zealand.

Do you have what it takes? If you want to change how the world works and leave a lasting legacy, apply to Actuarial Services.

As a Graduate or Vacationer in EY Actuarial Services, you'll be joining a leading actuarial consultancy in Australia and EY's global actuarial network. We apply actuarial skills to a wide range of traditional and non-traditional areas such as life insurance, general insurance, banking and capital markets and advanced analytics and modelling. We're looking for confident, dynamic, highly numerate students with strong communication skills. At EY, you'll have all the formal training and professional development you need to set you up for success, both now and in the future.

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

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