



Society of Actuaries in Ireland

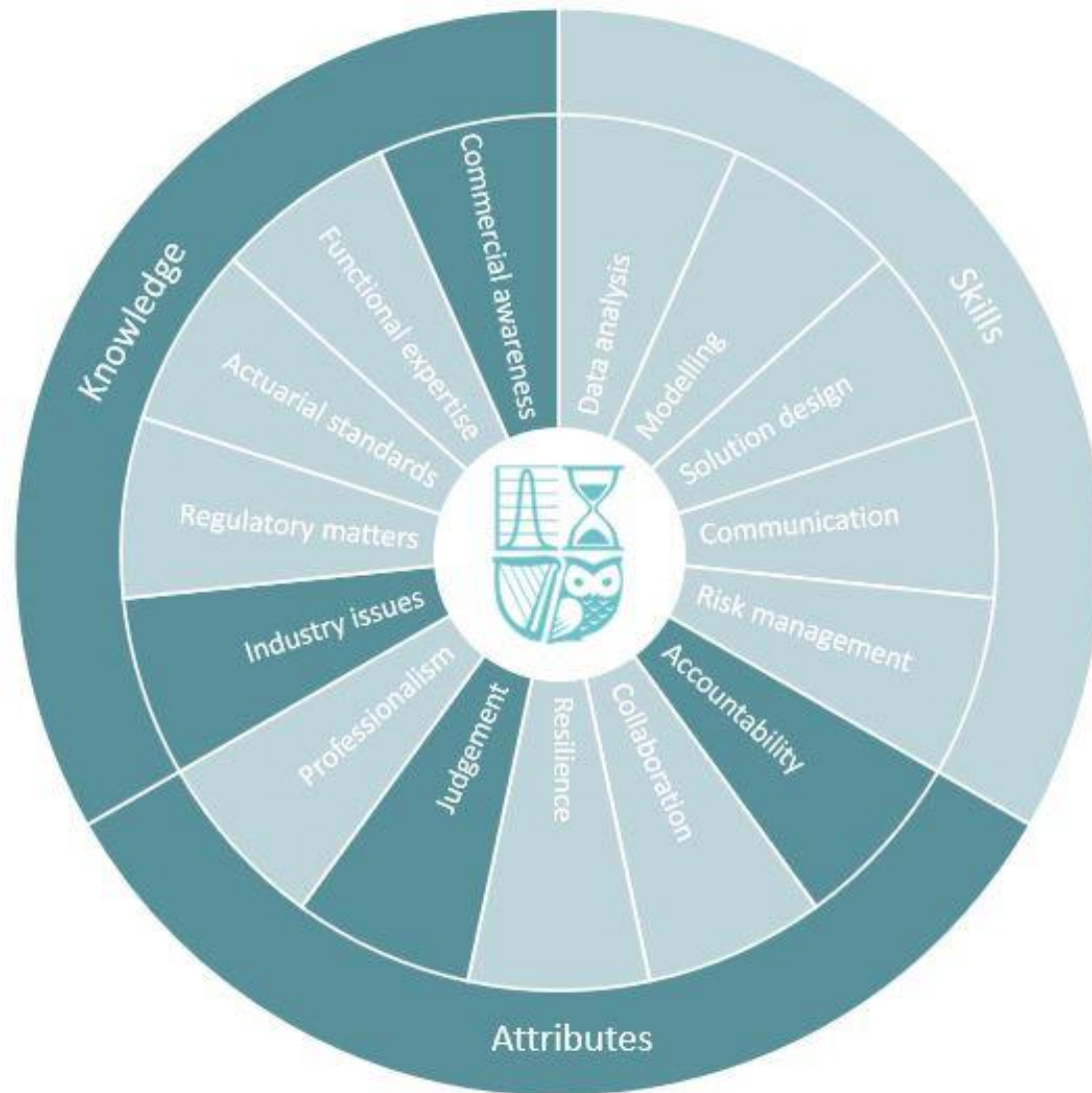
New Student Seminar

13th December 2022

Disclaimer

The views expressed in this presentation are those of the presenter(s) and not necessarily those of their employer(s) (if any) or the Society of Actuaries in Ireland.

Competency Framework Wheel

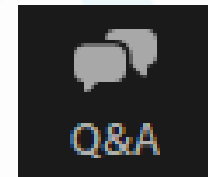


Q&A

Please click on the **'Raise Hand'** icon
to ask a question aloud
and
wait to be unmuted

or

Use the **Q&A function** to ask a question





Society of Actuaries in Ireland

Life as a Student Actuary:
How to Study & Pass Exams

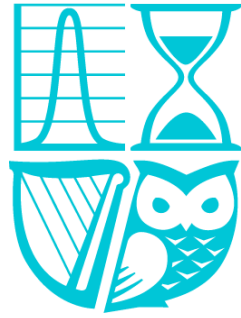
Chris Wroblewski



Introduction

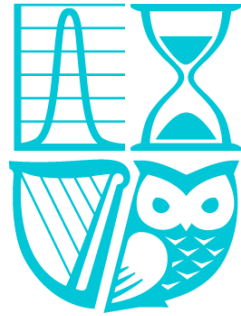


- Actuarial and Financial Studies (BAFS) in UCD, graduated in 2021
- Joined PwC Dublin in September 2021, moved to CACI in August 2022
- SAI Student Committee Member 2021/22
- 7 exemptions, 1 pass and 5 exams left.



Agenda

- Working & Studying
- Planning your Exam Route
- Study Materials & Tutorials
- Planning your Study
- Study & Exam Tips
- After the Exams
- Working From Home



Working & Studying

- Working ***and*** studying is hard!
 - Different to college
 - Less free time / self-taught / peers taking exams
- Balancing work, study and other commitments
 - Exam sittings in April and September
 - Work objectives and other goals, especially year-end
 - Work-based Skills / PPD
- Managing your time effectively
- Communicating with your manager



Planning your exam route

Core Principles
7 Exams

Core Practical
3 Exams

Specialist Principles
2 Exams
(choose from 8)

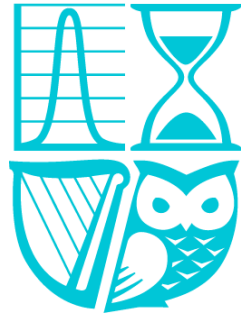
Specialist Advanced
1 Exam
(choose from 5)

- Exemptions
- Order of completion
 - Exam timetable
 - Student handbook
- Choose your SPs and SA
 - Consult senior students / qualified actuaries / manager
- Chartered Enterprise Risk Actuary – SP9



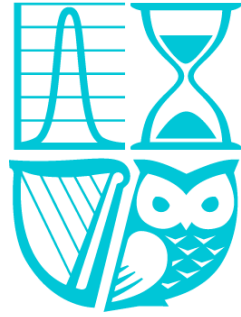
Recommended Study

Core Principles		Recommended study hours
Actuarial Mathematics	CM1	250
	CM2	200
Actuarial Statistics	CS1	200
	CS2	250
Business	CB1	150
	CB2	150
	CB3	20
Total		1,220
Core Practices		Recommended study hours
Actuarial Practice	CP1	400
Modelling Practice	CP2	120
Communication Practice	CP3	60
Total		580
CORE TOTAL		1,800
Specialist Principles	x2 (SP0 – SP9)	400 (200 per subject)
Specialist Advanced	x1 (SA0 – SA7)	300
TOTAL		2,500



Study Timetable

- **Planning your study**
 - Start early!
 - Study leave allowance – communicate with your employer
 - Plan around busy periods in work
 - Holidays / hobbies / other commitments
 - Unexpected events
- **Study timetable**
 - Have a target of when to have core reading completed
 - Deadlines: tutorials / assignment submission
 - Leave time for past paper practice and revision



Study Materials

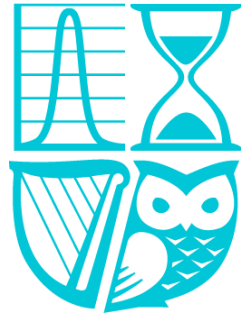
- The Actuarial Education Company (ActEd)
 - Produce study material for IFoA students
 - www.acted.co.uk

Combined Materials Pack (CMP)

- Study Guide
- Course Notes (Core Reading & additional explanation)
- Question and Answer Bank
- Assignments (& marking)

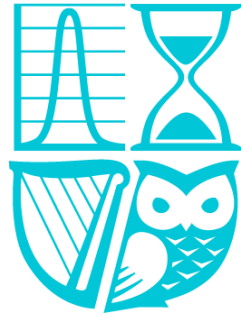
Additional Resources:

- ASET (ActEd Solutions with Exam Technique)
- Revision Booklets
- Tutorials
- Flash-cards
- Mock Exams (& marking)
- Sound Revision



Tutorials

- Types of Tutorial
 - Regular / Block
 - Online
- What's covered?
 - Difficult topics explained
 - Exam style questions
 - Exam technique
- Arrive prepared
- Ask lots of questions



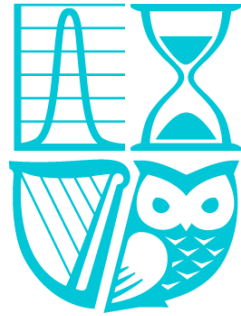
Study Tips

- Suitable place to study
- Set goals, get dressed and pretend you're in work
- Familiarise yourself with the Core Reading
- Spend time understanding the concepts
- Find friends / peers studying the same exams – mark each other
- Leave time for revision
- **Practise, Practise, Practise Exam Questions!**
 - ASET, Revision Booklets, Past Papers on IFoA Website, Tutorial Qs
- Do questions under exam conditions



Exam booking deadlines

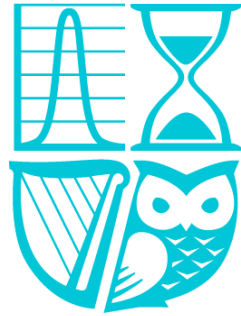
- Be aware of exam booking deadlines:
 - April exams: End of January
 - September exams: End of JulyBest to set an event in your calendar
- More details on the IFoA website:
<https://www.actuaries.org.uk/studying/exam-bookings/>



Exam Tips

- Time management
 - Be aware of how many minutes you have per mark
 - Plan your answers*
 - Cross off which questions already completed
- Answer the question being asked
 - Question word: List / Describe / Discuss
 - Number of marks
 - Answer all parts of question
 - Make your paper easy to correct

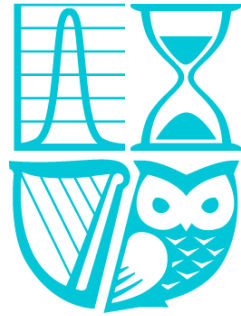




Online Exam Tips

- Prepare as if it was closed book
- Open book – notes
- Keep up to date (SAI news or The Actuary magazine)
- Practise on computer
- Planning





Online Exam Tips

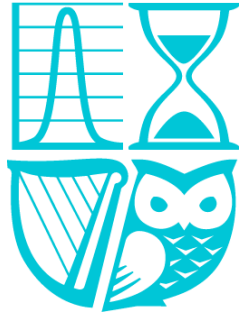
- Quiet and interruption free area
- Set an alarm for end of exam
- Save as you go
- Do not modify files outside of exam time
- Submit only what is asked for





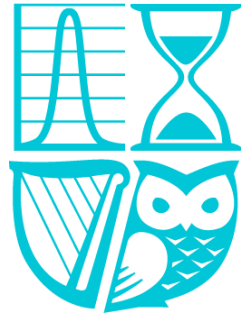
After the exams

- No exam post-mortems
- Failure is, unfortunately, common
 - Focus on positives
 - Reassess your preparations
 - Talk to senior students / recently qualified actuaries
 - Exam counselling
- Don't give up!
- Enjoy yourself – take a break
- Plan what to do next



Working From Home

- Set up working space - bedroom / kitchen / spare room home
- Keeping a routine
 - Get out in the morning, getting fresh air
- Dress
- Short breaks throughout the day
- Try and go in to the office to meet your co-workers (and make friends!)



Useful Information

- SAI's Guide for Student Actuaries
<https://web.actuaries.ie/students/guide-student-actuaries-ireland>
- IFoA's Student Handbook
<https://www.actuaries.org.uk/studying/student-news/student-handbook>



Society of Actuaries in Ireland

Introduction to the SAI Student Committee

Catriona McDonnell



Introduction

- BSc (Hons) Actuarial Science (Graduated 2018)
 - Bachelor of Actuarial Science
- Joined Irish Life in 2018
 - Defined Benefits Actuarial team
 - Retail Systems Actuarial team
- Chairperson of SAI Student Committee 2022



Agenda

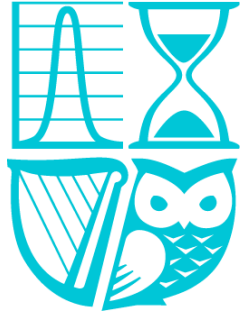
- The Student Society
 - Student Events
 - Student Travel Card
 - Student Consultative Forum (SCF)
 - Members & Support Services
 - One more thing...
-



The Student Society

- Represents students
- The committee is made up of student members
- Automatic membership when you join SAI
- Meet other students and make new friends
- Networking and career development
- Email and web updates
- Help and advice





Student Events

- We organise social and educational events
- Past Events included:
 - Christmas Party
 - Table Quiz
 - Summer BBQ
- We are planning The Annual Student & Recent Qualifiers Ball for May 2023.





Student Travel Card

- Actuarial students are eligible for the Student Travel Card each year until qualification
- Discounts on rail travel and many shops
- Further details available on website <http://www.studentleapcard.ie/>





Mentoring & Support Services

- Provide students with a Recent Qualifier Mentor
- Informal mentor providing support on work-related issues and how to successfully balance work and study
- Contact mentor with any queries
 - Quick phone call
 - Or email
- More information on <https://web.actuaries.ie/mentoring-support-services>





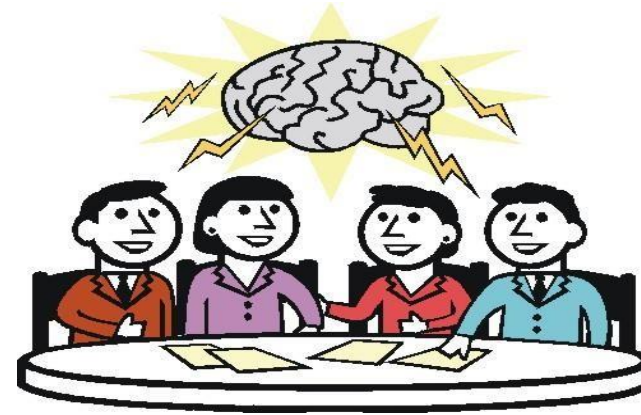
Student Committee 2023

- Next year we will be looking for committee members needed for 2023
- Great opportunity to get involved and play a part in shaping the Student Society.
- Rewarding experience and chance to get to know a lot of people in the student network.
- Email for more information:
 - Catriona.mcdonnell@irishlife.ie



IFOA's Student Consultative Forum

- Meets twice a year to discuss student issues.
- Prior to the forum, the SAI representative contacts all Society students to check for any exam issues
- After the forum, a report is provided covering matters of particular interest to students





Summary

- Get involved in the Student Society
- Student Travel Card
- Sign up for Mentoring & Support Services
- Get in touch with any queries
 - [Members Directory](#)
 - Email info@actuaries.ie
- Keep up to date by visiting Society website and Student Society Facebook page





Questions?

Email: Catriona.mcdonnell@irishlife.ie

Email: krzysztof.wroblewski@ca-caci.ie





Society of Actuaries in Ireland

Life Insurance

Tomás Hayes



Market Overview

Life Assurance Market

Term Assurance

Whole of Life

Critical Illness

Mortgage Protection

Income Protection

Key Person Insurance

Group Risk

Personal Accident Insurance

Pensions Market

Pension Schemes

Personal Retirement Savings
Accounts

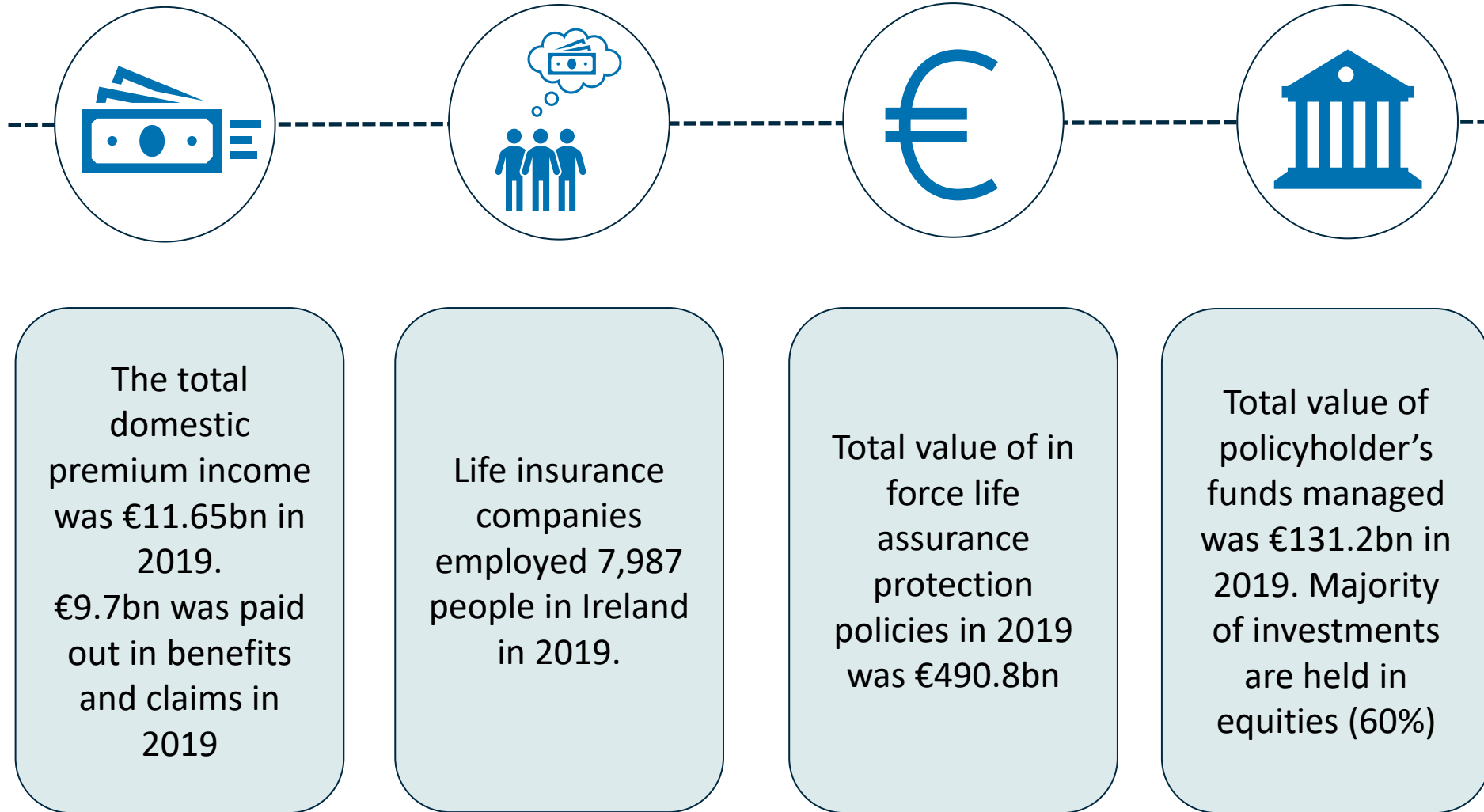
Annuity

Personal Retirement Bond

Approved Retirement Fund



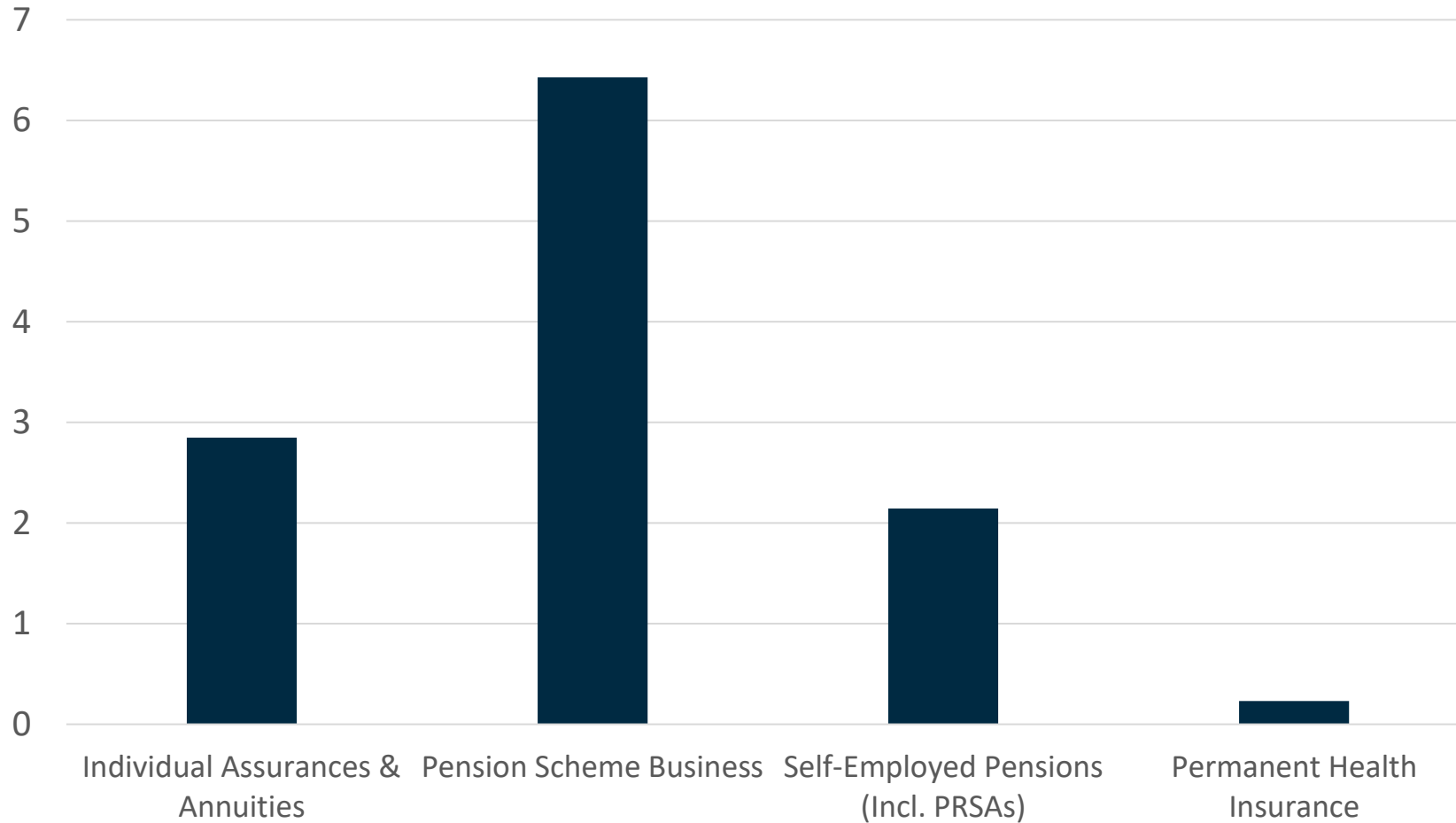
Domestic Market





Domestic Market

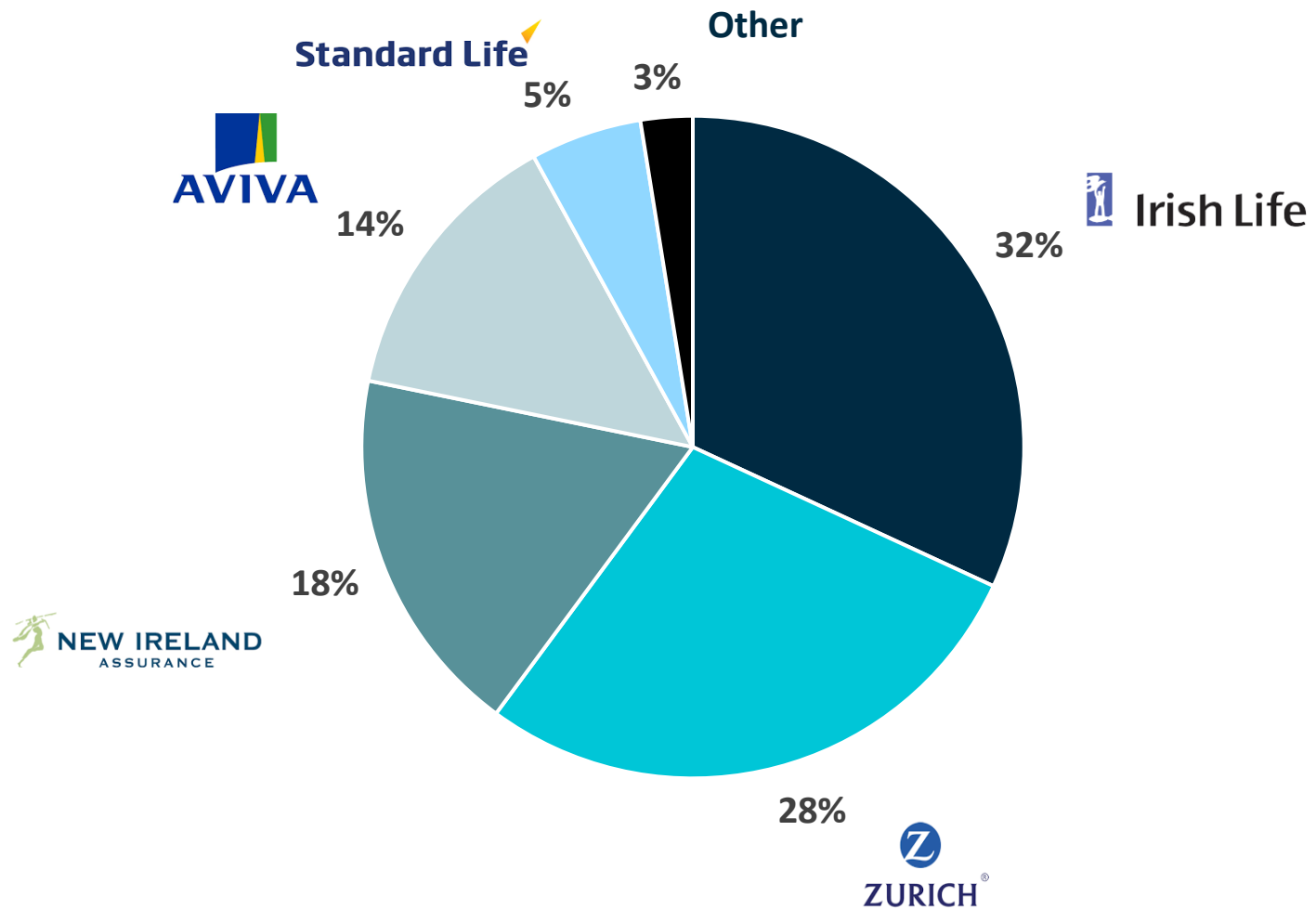
Total Domestic Market Premium - Split By Product Type (€bn)





Domestic Market

Total Domestic Market Premium - Breakdown By Company



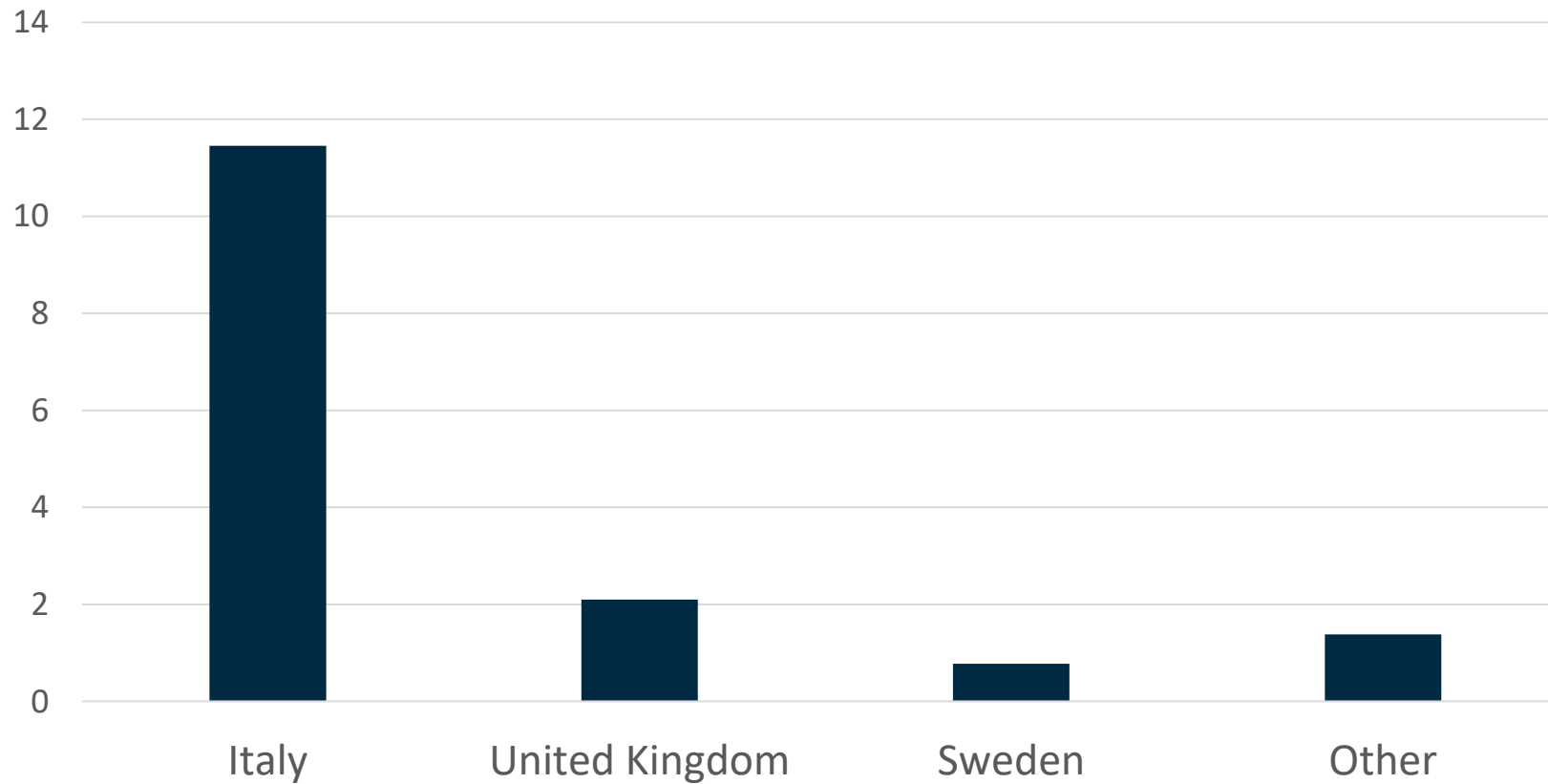


Cross-Border Market

Total Cross-Border Market Premium (Life & Pensions) 2019:

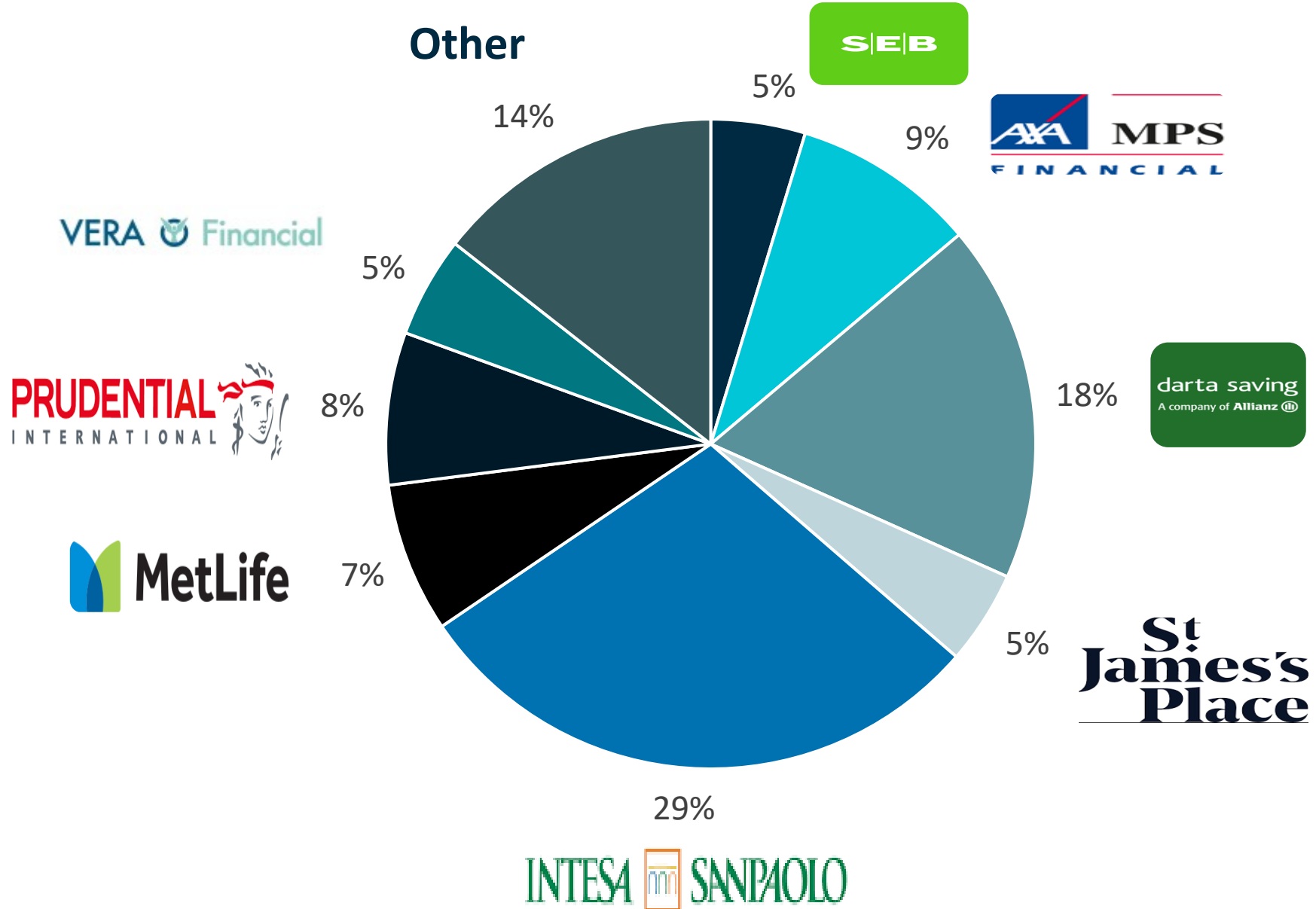
€16.7 bn

Breakdown By Country (€bn)



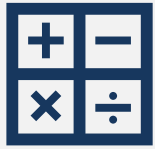


Cross-Border Market





The Role of a Life Actuary



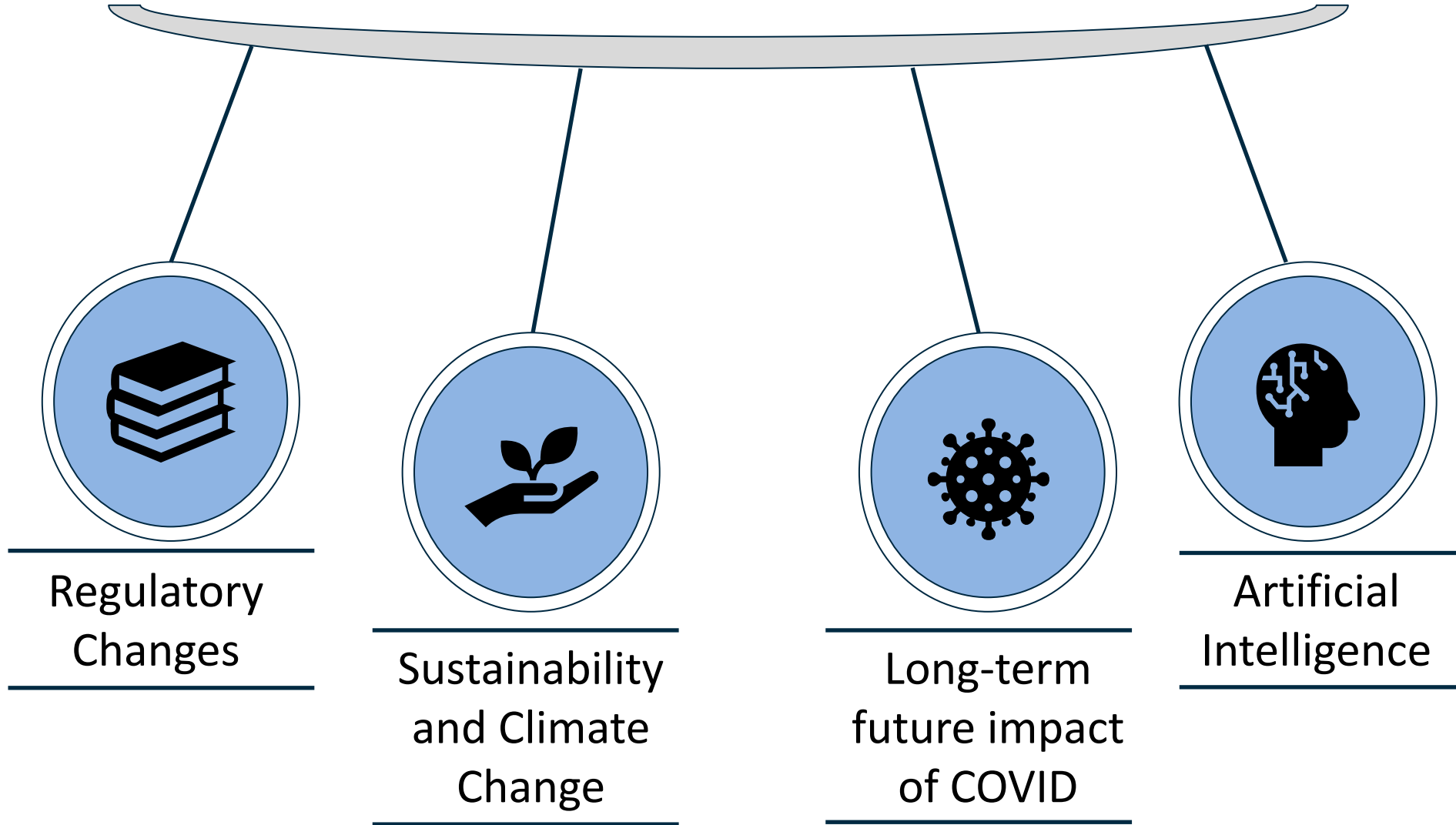
Actuaries can fill several diverse roles within the operations of a life insurance company.

These include, but are not limited to:

- Reserving
- Pricing
- Regulatory and financial reporting
- Product design
- Capital management (including Economic Capital)
- Solvency projections (Own Risk & Solvency Assessment)
- Risk Function (CRO)



Future of Life Insurance Market





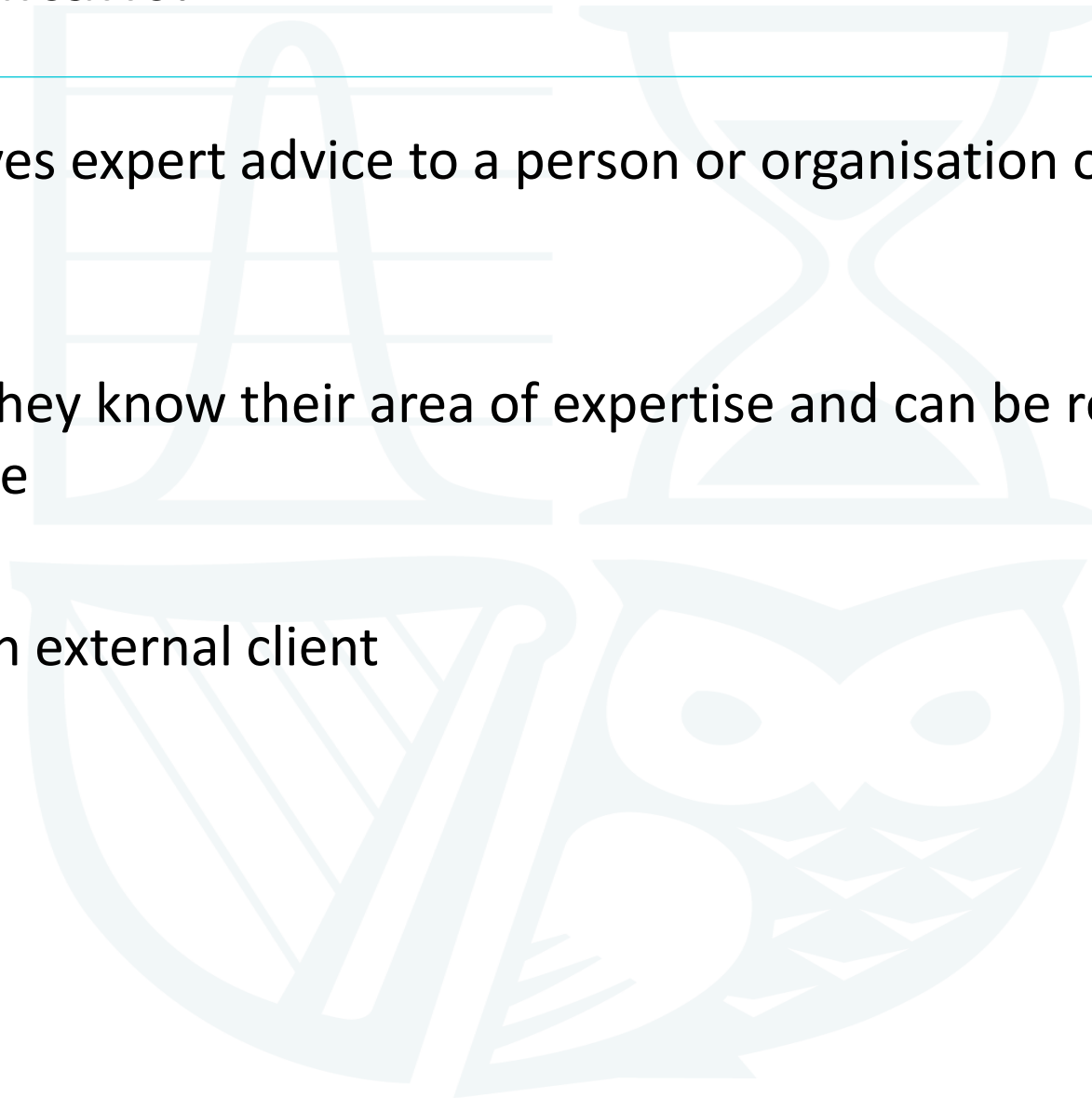
Society of Actuaries in Ireland

Actuarial Consulting

Michael O'Brien (he/him)

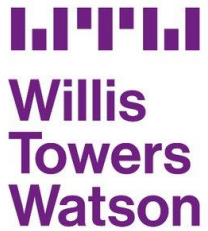
What is a consultant?

- Someone who gives expert advice to a person or organisation on a particular subject
- A professional – they know their area of expertise and can be relied on to give appropriate advice
- Typically advise an external client





Where consultants can work?



And many more....



Areas of work

Life insurance

Healthcare

General
insurance

Pensions

Reinsurance

Enterprise
Risk
Management

Investment

Personal
finance advice

Litigation

Family Law



Why become a consultant?

Variety of work

Solving new problems

Business skills

Communication skills

Variety of clients

Industry knowledge

Subject Matter Expert

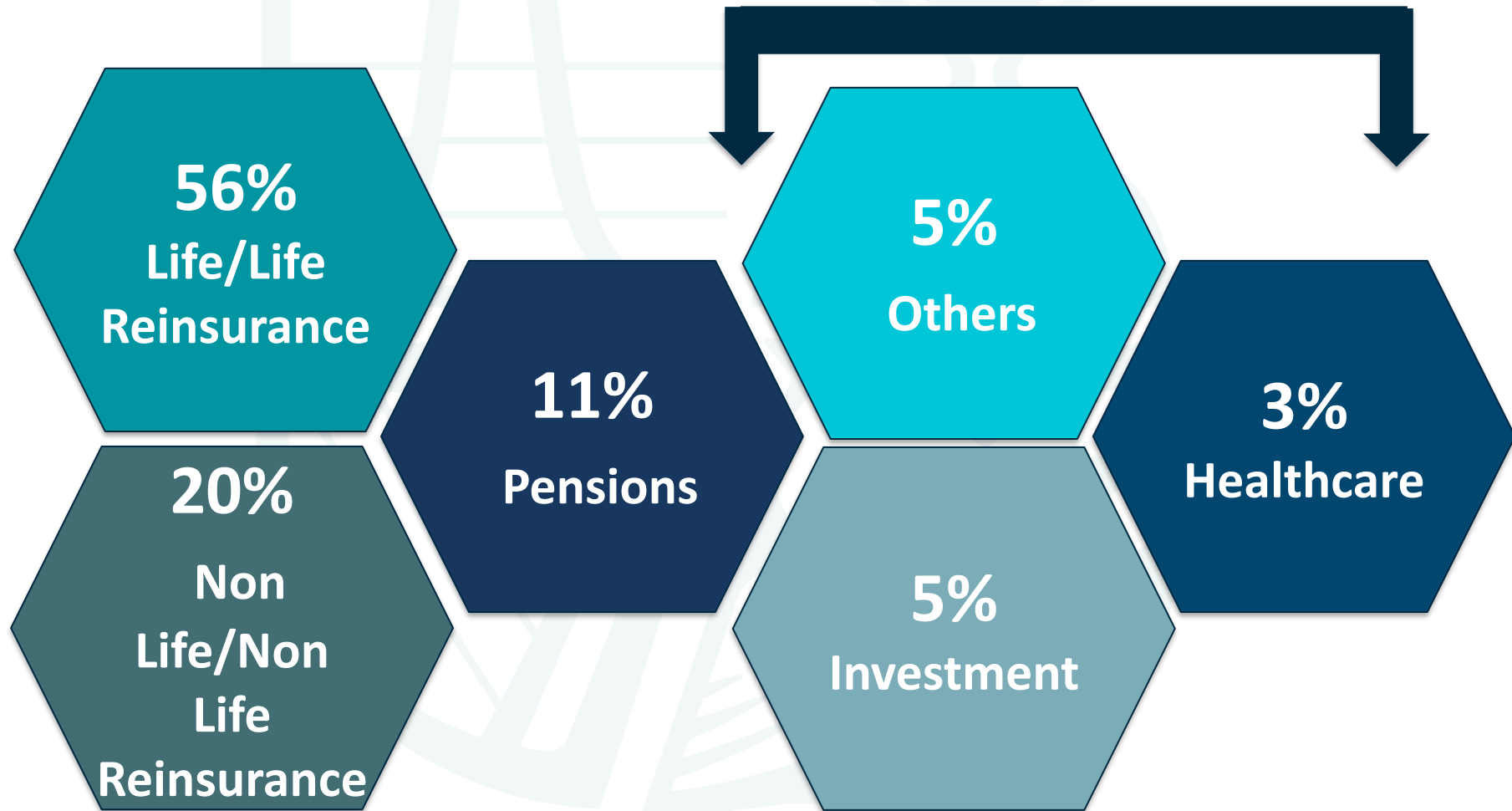


Society of Actuaries in Ireland

Wider Fields

Niall McCarthy

Where do Actuaries Traditionally Work?



Public Perception of Actuaries?



Do Actuaries need to broaden their definition?

Actuarial Careers are changing

“Wherever there is risk—and a desire to manage it—there is opportunity for actuaries to apply analytical skills and business knowledge to solve problems.”

Healthcare Senior Management
Aviation Finance Underwriting
Regulatory Bodies Environmental
Enterprise Risk Management Legal
Investments/ Fund Management HR
Data Analytics Recruitment
Artificial Intelligence Education
Banking Wealth Management

Aviation Finance



Valuation of aircraft leases
model

Credit defaults and migrations

Hail damage to fleet?

Loss of aircraft?

modelling

-> Monte Carlo market risk

-> Internal model credit model

-> non-life CAT model

-> life insurance

Data analytics

Endless scope of use the actuarial toolkit in Data Analytics

- GLMs
- Time series
- Stochastic modelling
- Inferential/Actuarial Stats
- Goodness-of-fit tests

Scope to bring in business/economics/accounting knowledge in a business setting to be more than just a number cruncher

- Artificial Intelligence
- Sports analytics and training/performance optimisation
- Odds compiling/bookmakers
- Clinical trials

The right tools in the wrong hands is a recipe for disaster!

Wider Fields Committee

- SAI Committee
- Aims to broaden opportunities for actuaries in non-traditional roles and provide support.
- Organise Events
- Banking subject to be added to IFoA syllabus – boost roles in banking
- Newsletter on SAI website provides interviews with some actuaries who have gone into wider fields and includes a Data Analytics Library





Society of Actuaries in Ireland

General Insurance

Stephen Brennan

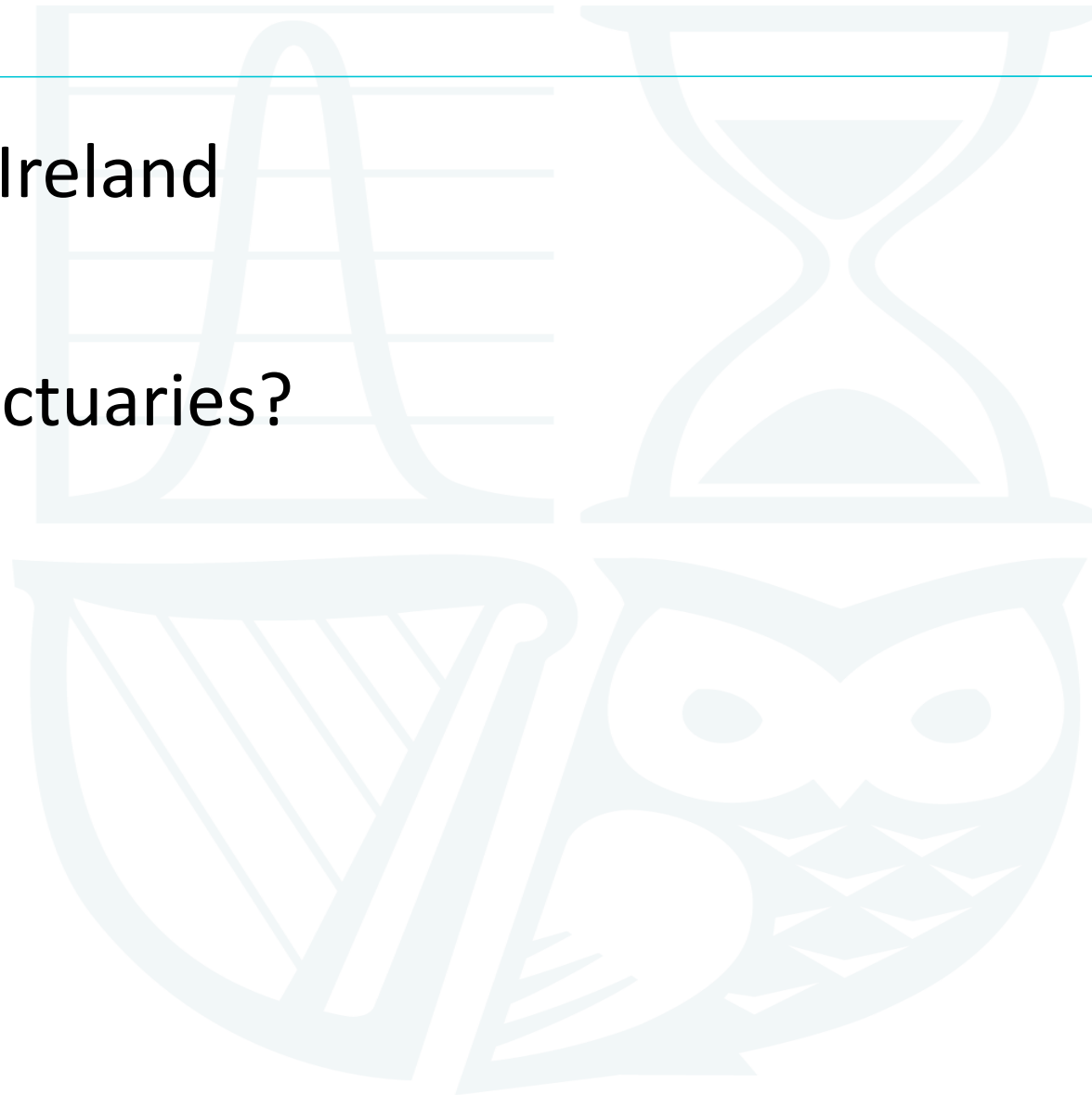


- Life Insurance
- Health Insurance
- General Insurance
- Pensions



Agenda

- GI Market in Ireland
- GI Products
- What do GI actuaries?
- Hot Topics





Names you might recognise...



PartnerRe



RSA

Arch | Re

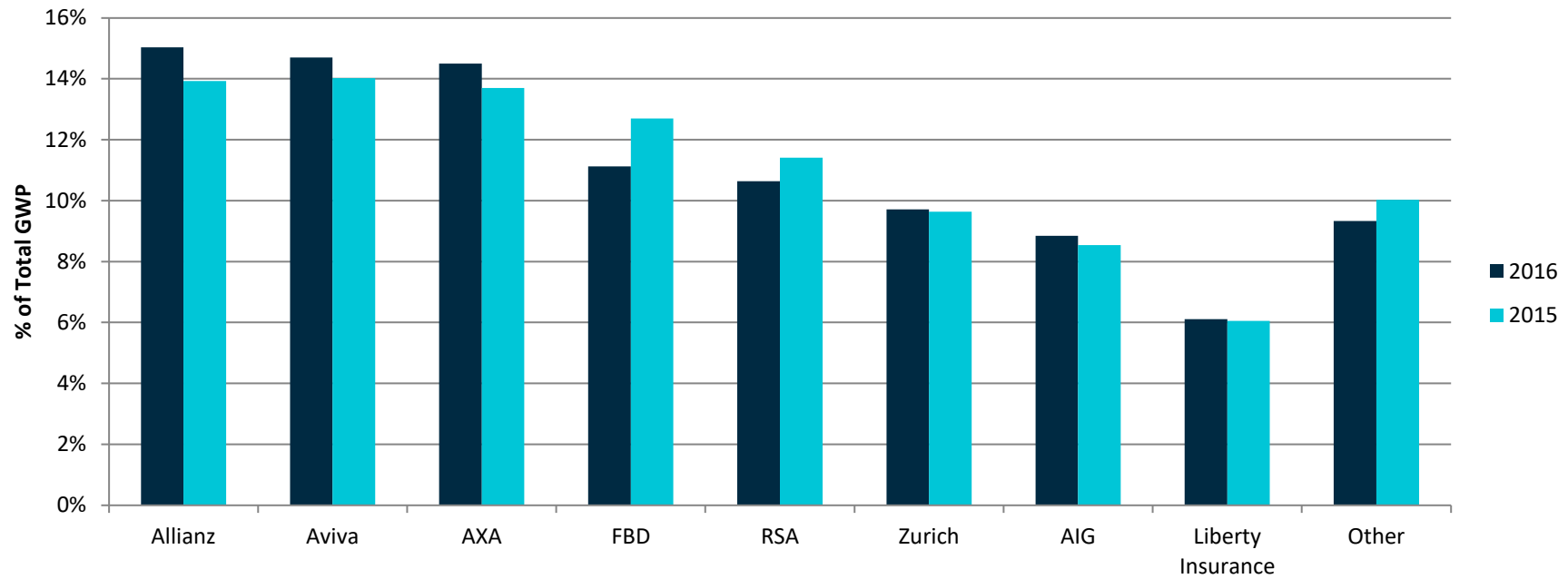


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Distribution of market share

Non-Life Market Share Ireland - GWP %



Source: Insurance Ireland Factfile



Range of GI Product Types

- **Personal Lines**

- Private Motor
- Household
- Personal Accident
- Travel
- Pet

- **Commercial Lines**

- Commercial Property
- Commercial Motor
- Liability
- Marine and Aviation
- Cyber
- Catastrophe





What does a GI actuary do?

- **Reserving**

- Estimating future claims costs
- Run-off triangles
- Analysing uncertainty
- QRTs, SFCRs, RSRs

Claims Triangle				
	Development year			
Accident year	0	1	2	3
2012	100	140	160	170
2013	120	150	190	
2014	150	190		
2015	140			

Turning triangle
into a rectangle!!!

Claims Triangle				
	Development year			
Accident year	0	1	2	3
2012	100	140	160	170
2013	120	150	190	202
2014	150	190	229	243
2015	140	183	220	234

- **Capital Modelling**

- Solvency Capital Requirement
- Internal model or Standard Formula
- IFRS17 Readiness





What does a GI actuary do?

- **Pricing**

- Identifying factors which predict level of risk of customers
- Analysis of business performance
- Big data and predictive analytics



- **Risk**

- Identifying, measuring and monitoring risk
- Own Risk and Solvency Assessment (ORSA)
- KRIs





Current topics

- **Differential Pricing:**



- Differential pricing is where customers with a similar risk and cost of service are charged different premiums for reasons other than risk and cost of service.
- Current pricing practices can lead to unfair outcomes for car and home insurance consumers.
 - Price walking ban
 - Providers review their pricing policies and processes annually
 - Consumer consent and disclosure requirements



Current topics

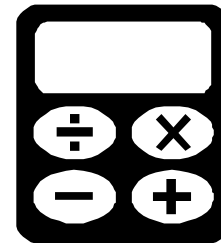
- **Data Analytics**

- Machine Learning
- Telematics/Usage-Based Insurance
- Fair price regulation



- **IFRS 17**

- New accounting standard for insurance contracts
- Comes into force in 2023
- Premium Allocation approach
- Structure : BEL + RA + CSM





Society of Actuaries in Ireland

Role of the Society & Welcome to the Society of Actuaries in Ireland

Declan Lavelle



What is a profession?

- A paid occupation, especially one that involves prolonged training and a formal qualification.
- A profession is a disciplined group of individuals who adhere to ***ethical standards***. This group positions itself as possessing ***special knowledge and skills***...derived from research, education and training at a high level, and is ***recognised by the public*** as such. A profession is also prepared to apply this knowledge and exercise these skills in the ***interest of others***.



Society of Actuaries in Ireland - Vision

Actuaries are trusted as experts
in evaluating risk and financial uncertainty.



Society of Actuaries in Ireland - Mission

- To support actuaries throughout their career so that they have the skills, attributes and knowledge appropriate to their roles and the current and future needs of actuarial practice;
- To develop, maintain and enforce actuarial standards that require actuaries to advise their clients with integrity, professionalism and objectivity;
- To serve the public interest by promoting thought leadership and contributing as an independent voice on matters where an actuarial perspective can add value.



Strategy 2020 - 2023





Career Development

Seek a range
of experience

Role Models
& Mentors

Feedback

Develop
a network



Resilience

Balance work and
study/exams

Work (Exams!) / Life
Balance

Focus on what you
can change

Ups and Downs



A final quote

*“Things work out best for those
who make the best of how things
work out.”*

John Wooden



Society of Actuaries in Ireland

Summary & Close

Sarah Larmour, Chair of the Recent Qualifier's Committee



General Advice

- Be proactive – initiate regular discussions with your manager about your career progression
- Be adaptable and flexible in your working life
- Work Life Balance
- Get involved in committees & working groups



Next Steps

1. Register as a Student with the Institute and Faculty of Actuaries
 - <https://www.actuaries.org.uk/membership/types-membership/student-membership>
2. Register as a Student with the Society of Actuaries in Ireland
 - <https://web.actuaries.ie/about/membership/application>
3. Additional Information
 - IFoA Queries: Education.Services@actuaries.org.uk
 - Guide for Student Actuaries: <https://web.actuaries.ie/students/guide-student-actuaries-ireland>
 - Member Support Service: <https://web.actuaries.ie/mentoring-support-services>