



Vol. 13 - September 2023





#### **ABOUT US**

Founded in October 2018, the Malaysian Actuarial Student Association (MASA) has been actively developing actuarial science students' potential in Malaysia and empowering them to be the next generation of actuarial leaders.

As of January 2022, MASA has over 900 active members from both public and private universities nationwide. MASA has also affiliated with actuarial societies from 11 universities in Malaysia.

# TABLE OF CONTENTS

President's Foreword	1
MASA's Board of Directors	2
MASA's Executives	3
MASA Past events	4
Actuarial Professional Exam Tips	. 7
Hot Topics from The Actuary Magazine	9
Questionnaire / Puzzle	11



Low Joxin

# **President's Foreword**

I am thrilled to bring you the latest edition of our newsletter, Vol. 13. Within these pages, you will discover a wealth of information about the events we have successfully organized and the exciting activities awaiting you from our affiliated societies. Additionally, this edition provides an opportunity to get acquainted with our new committee members!

As MASA continues to shine brightly, we take immense pride in our ongoing efforts to enhance and elevate our activities while making positive contributions to the actuarial profession. This is also a moment for me to extend my deepest appreciation to all our committee members who work tirelessly behind the scenes, enabling us to achieve remarkable milestones. Without everyone's unwavering commitment, none of this would be attainable.

As we venture into this quarter, our commitment remains steadfast—to serve and unite Actuarial Science students across Malaysia, aligning with our vision. Together, we will forge a brighter future for the actuarial community!

# MASA BOARD OF DIRECTORS















# MASA EXECUTIVES



**Communication** 

### **MASA PAST EVENTS**

# MASA'S E-Orientation 2023/2024

Date: 29 July 2023

Time: 2.00 - 3.30PM

**Platform: Microsoft Teams** 



In pursuit of its objectives, MASA's committee organized a concise yet enlightening 1.5-hour interactive E-Orientation on 29 July 2023. This event, which brought together Actuarial Science enthusiasts of all levels, served as a rich source of knowledge and connection. Within this brief timeframe, participants embarked on a journey that illuminated the core of MASA's mission, vision, and the intricate world of Actuarial Science. The event was meticulously designed to provide a comprehensive understanding of the Actuarial Science field and MASA organization.

The MASA committee took pride in presenting the vision and missions for the 2023/2024 term, with a strong emphasis on empowering Actuarial Science students and fostering a close-knit community of aspiring actuaries. During this event, the virtual room resonated with laughter and camaraderie as students from diverse backgrounds came together to celebrate their shared passion for Actuarial Science.

MASA firmly believes that knowledge should be accessible to all, irrespective of one's background. The E-Orientation exemplified our unwavering commitment to this principle. The active participation and presence of all participants were instrumental in making this event a resounding success.

### **MASA PAST EVENTS**

### **Career Series 1.0**

Date: 26 August 2023

Time: 2.00 - 3.30PM **Platform: Microsoft Teams** 



MASA Career Series 1.0: Dive into Pricing & Valuation

**Meet Our Speaker** 



Kelvin Hii

- Chief Risk Officer of MSIG Insurance (Malaysia) Bhd Previous roles include Group/Chief Actuary, Appoi
- Immediate Past President of the Actuarial Society of Malaysia Fellow of the Institute of Actuaries of Australia (FIAA) Fellow of the Actuarial Society of Malaysia (FASM)

- The prestigious Young ASEAN Manager Award (YAMA) by the ASEAN Insurance Council in 2018

  Since 2005, he is only the third Malaysian (and the first Malaysian general insurance personn

Affiliated society:



📴 general@masassociation.org www.masassociation.org

MASA conducted a 1.5 hour sharing session titled "MASA Career Series 1.0: Dive into Pricing & Valuation" to expose students with the latest industrial trend before stepping into the industrial world.

Mr Kelvin Hii, the Chief Risk Officer of MSIG Insurance (Malaysia) Bhd and Immediate Past President of the Actuarial Society of Malaysia, covered a wide array of topics within the realms of pricing and valuation.

During the session, Mr. Hii provided a comprehensive overview of pricing and valuation, emphasising their significance in actuarial science. He highlighted the pivotal role actuaries play in making financial decisions and managing risks in the insurance industry. Attendees gained a deeper understanding of the distinctions between pricing and valuation, along with insights into navigating challenges. Practical strategies and industry-specific best practices were also discussed, culminating in a forward-looking perspective on promising career opportunities in insurance-related pricing and valuation, leaving students both informed and inspired to explore this specialised field.

### **MASA PAST EVENTS**



The selection process involves a thorough assessment of candidates' backgrounds, focusing on involvement in MASA or its affiliated societies, prior experience and areas of expertise. This inclusive approach that newly appointed ensures executives collectively possess skills ranging from problem solving to effective communication. One-hour interviews are also conducted with the Vice Presidents of the two departments the candidate interested in joining to learn more about the candidate's suitability for the position.

# MASA Executive Recruitment 2023/2024

The Malaysian Actuarial Student Association (MASA) has concluded executive recruitment for the 2023/2024 term, a key step in its mission to benefit Malaysian actuarial students. This rigorous selection process seeks MASA members who not only demonstrate interest but also have the experience and skills necessary to contribute to a collaborative team.

Under the leadership of MASA Excos and the execution of Masa Executives, this year will be one of growth, collaboration and achievement for MASA and actuarial students in Malaysia, laying the foundation for a brighter and stronger future for the actuarial profession.





# ACTUARIAL PROFESSIONAL EXAM TIPS

In our quest for excellence, learning from those who've blazed the trail is priceless. Becoming a certified actuary is no different —it's a journey filled with challenges. In this Q&A session, successful exam takers, who are students from different university, share their experiences, tips, and words of wisdom, guiding aspiring actuaries on this transformative journey.





What study resources or textbooks did you find most helpful when preparing for the actuarial science exam?



I recommend getting the **ACTEX Study Manual** for its comprehensive content and abundant examples. While **YouTube**, the **Rumi the Math Person's channel** also a great exam prep resource which provides SOA sample questions with clear explanations. -- Yap Wei Han --



I chose the **ASM study manual** for its detailed explanations and formula derivations, which enhance my understanding. Despite its high cost, I found **Coaching Actuaries** to be a worthwhile investment for exam preparation.

-- Yap Yao Jun --



I prefer **ASM** as my main textbook for its **detailed explanations**, but I'll also work on **sample questions from both ASM and Actex** to enhance my understandings. -- *Ng Sinn Yee* --

### How did you effectively manage your time while balancing coursework and exam preparation?



Balancing coursework and exam prep can be tough for me as I get overwhelmed easily. One solution is **scheduling exams during semester breaks**, allowing for ample preparation time without jeopardizing studies."

-- Yap Yao Jun --



Serious planning is key. Each night, I plan my tasks for the next day. As long as the task planned is complete, I would be satisfied with my progress.

-- Teo Wason --



Can you share your preferred study schedule or routine for optimal exam prep?



I prefer **studying whenever I have free time** and no other commitments. -- *Low Joxin* --



Since I have studied the equivalent subject for Exam FM in my university, I spent **one month revising all the chapter** and **another month** attempting as many **practice questions** as possible. -- Yap Yao Jun --



On average, I study at least one hour a day starting one to two months before an exam. Two weeks before the exam, I increase to at least four hours daily for a better grasp. Make sure to complete all the past year and sample questions!

-- Yap Wei Han --



# ACTUARIAL PROFESSIONAL EXAM TIPS (CON'T)

Were there any specific study techniques or strategies that you found particularly effective for grasping complex actuarial concepts?



Make sure you understand the topic thoroughly before

moving on to the next topic, as a weak foundation will give you troubles in the topics behind.

-- Low Joxin --



I **take notes twice**. The **first is a draft** based on my initial understanding of the topic.

After completing the course and practice questions, I create a more comprehensive version.

-- Teo Wason --



When tackling **complex** actuarial concepts, I read sentences repeatedly and **break them down into simpler ones**. I also use formula **derivation** to memorize complex equations.

-- Yap Wei Han --



What are some common mistakes or misconceptions that you think students should avoid during their actuarial science exam preparation?



First-time exam takers must be aware of necessary preparations, including meeting **SOA's** identification and calculator requirements.

-- Low Joxin --



**Don't procrastinate**; start early in your actuarial exam preparation to build confidence over time."

-- Chan Jia Wan --



A common misconception is that some **underestimate or overestimate exam difficulty**. Underestimators study too little, while overestimators fear the exam. In truth, exams are manageable with proper preparation.

-- Yap Wei Han --

What advice do you have for university students who may feel overwhelmed by the depth and breadth of actuarial science material? How can they stay confident and maintain a positive mindset throughout their preparation?



Try to take a **short break** when u feel overwhelmed by the materials.

-- Ng Sinn Yee --



Register for exams when fully prepared. Failure is common; keep trying. **Progress at your pace**; don't rush due to others' success. Embrace your unique academic journey.

-- Yap Yao Jun --

Always begin with easier questions to boost confidence, then return to complex problems later. **Think of the improvement**you've made, it doesn't seem that bad.

-- Teo Wason --



To not think too much and just **try your best.** 

-- Chan Jia Wan --

# HOT TOPICS FROM THE ACTUARY MAGAZINE (AUG)

# Why GDP, Inflation, and Mortality Metrics Fall Short in Forecasting and Modeling

When it comes to evaluating the health and well-being of a nation, we often turn to three key metrics: Gross Domestic Product (GDP), inflation, and mortality rates. These metrics have long been used as indicators of a country's success and economic stability. However, as our world grows more intricate, marked by pressing concerns such as sustainability and equality, it becomes increasingly clear that these traditional measures alone may prove inadequate for effectively forecasting and modelling the challenges that lie ahead.

#### GDP

GDP, the measure of a nation's economic output, has been the standard for assessing economic performance. A rise in GDP is traditionally hailed as a sign of economic prosperity, while a fall suggests a recession. However, this sole focus on economic growth can pose problems when confronting urgent issues like climate change and resource scarcity. GDP, as a metric, falls short in considering the sustainability of this growth and its environmental repercussions. Furthermore, it overlooks essential social dimensions such as human wellbeing, voluntary work, and income inequality, rendering it an incomplete gauge of a nation's health and stability.

While GDP, inflation, and mortality rates have served as critical metrics for assessing a nation's well-being, their limitations become evident when facing the complexities of the modern world. As we challenges confront climate change, resource and unforeseen scarcity, global events, relying solely on these traditional measures insufficient may be effective forecasting modelling. Moving forward, it is crucial to develop more and comprehensive adaptable that models consider a broader spectrum factors, including sustainability, and human well-being.

#### Inflation

Low and stable inflation has been the norm for the past three decades. However, recent double-digit inflation in the UK has raised concerns. The Bank of England's consistent inaccurate predictions regarding the speed of inflation reduction are due to their models not accounting for rising energy and food costs. The Bank of England's chief economist has admitted that these models have become outdated due to shifts in the economy. The evolution of the UK's economic landscape, driven by technological advances and the growing service industry, has rendered traditional inflation models less effective. Factors such as a shrinking working-age population leading to higher wages, resource depletion causing price increases, and climate change impacting food costs contribute to the persisting inflation challenge.

#### **Mortality Rates**

Mortality rates, particularly life expectancy, are essential for assessing the health and welfare of a population. Still, they too may fall short in forecasting future trends. The COVID-19 pandemic highlighted the uncertainties surrounding long-term mortality predictions. Moreover, as our understanding of healthcare and medical advancements evolves, traditional mortality models may not adequately capture the potential for breakthroughs in disease prevention and treatment. Additionally, they often fail to account for factors like the potential consequences of ongoing environmental challenges or new pandemics on life expectancy.

# HOT TOPICS FROM THE ACTUARY MAGAZINE (SEP)

# The Impact of Changing Interest Rates on Pension Funds

As student actuaries, we are constantly learning about the complex world of pensions. One critical factor that affects pension funds and the promises they make to retirees is interest rates. In this article, we'll explore how changing interest rates can have a significant impact on pension funds and why it's essential for us to understand this relationship.

#### Why Interest Rates Matter

Interest rates, in the context of pensions, primarily refer to the rates at which pension funds invest the money they receive from contributions. These rates affect the amount of money a pension fund has available to pay future benefits.

#### The Inverse Relationship

Here's the key concept to grasp: when interest rates go up, the value of pension fund liabilities tends to go down, and when interest rates go down, the value of those liabilities tends to go up. This is due to the way pension funds calculate the future value of benefits they owe to retirees.

Changing interest rates plays a vital role in the financial shaping health of pension funds. As student actuaries, it's essential to grasp the basics of this relationship because it will continue to impact the world of pensions throughout our careers. So, the next time you hear about interest rates, remember the piggy bank analogy, and you'll have a better understanding of their impact on pension funds.

#### Let's Break It Down

Imagine you have a piggy bank, and you plan to put \$100 into it every month for the next 30 years. If your piggy bank earns 5% interest annually, you can calculate how much money you'll have in 30 years. Now, what if the interest rate increases to 8%? You'll end up with more money in your piggy bank because it's earning a higher rate of return.

In the pension world, a similar principle applies. Pension funds invest contributions and use an assumed interest rate to calculate how much money they'll need to pay future benefits. If interest rates are high, they need less money today to meet those future obligations.

#### The Impact on Pension Funding

So, how does this affect pension funds? When interest rates are low, pension funds must set aside more money today to ensure they can cover future benefits. This can strain the finances of the fund and, in some cases, may require increased contributions from employers or employees to make up the difference.

Conversely, when interest rates are high, pension funds can set aside less money today because they expect the investments to grow at a faster rate. This can ease the financial burden on both employers and employees.

#### **The Balance Act**

Understanding this dynamic helps us appreciate the challenge pension actuaries face. They must strike a balance between providing secure retirement benefits and managing the financial health of the pension fund. This balance is especially crucial in an environment where interest rates can change over time.

### QUESTIONNAIRE/PUZZLE

## **QUESTION 1**

There is a room with a door (closed) and three light bulbs inside the room. Outside the room, there are three switches, connected to the bulbs. You may manipulate the switches as you wish, but once you open the door you can't change them. All bulbs are in working condition and you can open the door only once. **Identify each switch with respect to its bulb.** 







#### Solution:

Let the bulbs be X, Y, and Z. Turn on switch X for 5 to 10 minutes. Turn it off and turn on switch Y. Open the door and touch the light bulb.

1. the light is on from the bulb, it is Y Now we will check the other two off bulbs

2. the bulb which is hot, is X

3. the bulb which is cold, is Z

### **QUESTION 2**

Four people are crossing a bridge at night, so they all need a torch—but they just have one that only lasts 15 minutes. Alice can cross in one minute, Ben in two minutes, Cindy in five minutes and Don in eight minutes. No more than two people can cross at a time; and when two cross, they have to go at the slower person's pace. **How do they get across in** 

15 minutes?



Alice and Ben cross first in two minutes, and Alice crosses back alone with the torch in one minute. Then the two slowest people, Cindy and Don, cross in eight minutes. Ben returns in two minutes, and Alice and Ben return in two minutes. They just made it in 15 minutes exactly.

MASA Corporate Relations		
Lee Han Yang	Designer	
Khoo Li En	Content	
Je Jia Min	Content	
Teh Jin Hwei	Content	
President		
Low Joxin	President	
Vice President		
Peyton Ong	Internal Affairs	
Yap Yao Jun	Finance	
Lin Hui Wen	Corporate Relations	
Lee Zhi Jun	Communication	
Chow Joe Ee	Operations	
Assistant Vice Pr	esident	
Sharveshini Saravaranan	Corporate Relations	
Thea Ee Shuen	Operations	
MASA Student Representative Council		
Ethan Lee Jia Hua	Sunway	
Muhammad Syahril bin Jamsuri	USIM	
Yap Wei Han	Taylor's	
Muhammad Syaddad	UKM	
Law Zhe Wei	UTAR	
Ong Win Jia	UCSI	
Tan Jie Fei	APU	
Pearlyn Tee Pei Lin	HWUM	
Tan Kai Ziang	UM	
Muhammad Hanif Husaini	UiTM	
Bryan Lim Poh Eng	UoSM	

#### **CONTACT US**

Send us your feedback!

We are concerned about expectation. Feel free to contribute by submitting articles to us.



Interested in becoming part of us? Wish to stay connected? Scan the QR code for more info!



Stay connected with us!











More enquiries, drop us an email at generalemasassociation.org

This publication is for general information purposes only. While all reasonable efforts are made to provide correct information, the Malaysian Actuarial Student Association does not guarantee that the information provided is complete, reliable and accurate in every aspect.



