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the Actuary INDIA

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INDIAN ACTUARIAL PROFESSION
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Mega online event

Virtual Actuarial Conclave (VAC 2021)

"Navigating Through Uncertainty"

10th to 13th March, 2021

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"A noble man's thoughts will never go in vain. -Mahatma Gandhi."
"I hold every person a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavour themselves by way of amends to help and ornament thereunto - Francis Bacon"

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From Chief Editor's Desk

Ms. Bhavna Verma

Greetings to everyone for the New Year! 2021 appears to have started with a ray of hope, especially in India with the Covid-19 numbers falling continuously. India has now successfully launched the Covid-19 vaccine and at the time of writing; over 65 lakh people have received the vaccination. Corona isn't over yet, but hopefully the worst is behind us and there will be gradual economic recovery across industries during the rest of the financial year.

The Budget was announced recently with some important broadcasts for the insurance sector. The Foreign Direct Investment (FDI) limit for the insurance sector is proposed to be raised from 49% to 74% through an amendment to the Insurance Act to allow foreign ownership and control with safeguards. The under-penetrated Indian insurance sector is likely to attract good foreign investment providing capital assistance to insurers for recovering from the effects of the pandemic, growth and development and digitization and innovations. Overall, this is being viewed as a positive move.

In the Budget speech, the Finance Minister also reiterated the government's plans to list state owned Life Insurance Corporation of India (LIC) in FY2021-22 which will be India's largest ever Initial Public Offering (IPO). This event is likely to keep several life insurance actuaries busy; in brainstorming and conversations or technical valuation and number crunching! This issue of the magazine includes a feature on the LIC IPO authored by an experienced actuary; Part 1 was published by the May 2020 issue for those interested.

The buzz around Insuretech continues with reports of several successful capital raising exercises by Insuretech ventures in India. Insuretech will indeed be instrumental in deepening insurance penetration in India in the post pandemic world, particularly protection business. Globally too, Insuretech funding is reported to have hit an all-time high in 2020. As a consequence, predictive analytics and digitalisation will see quantum leaps alongside.

Social distancing has made way for the first Virtual Actuarial Conclave (VAC 2021) in the month of March, appropriately themed "Navigating through uncertainty". Look forward to meeting many colleagues virtually this year!

As usual, I request members of the fraternity to be generous in sharing their knowledge and thoughts for the publication. Please continue to write into us at library@actuariesindia.org.

From President's Desk

Mr. Subhendu Bal

While "entanglement" may be the most appropriate word to represent the year 2020, year 2021 brought in many solutions and opportunities to disentangle most of the situations in life. One of the biggest change driven by the entangled situation was the adoption and upgradation of technology in all fronts of life which have offered a much brighter path to many existing problems though winds still murmur *"uncertainty is the only certainty"*.

The IAI have been successful in clearing all its backlogs in the later months of the year 2020 itself, be it on examination front or professional front. The ball started rolling little faster than ever; lead to conducting and scheduling two rounds of ACET and regular examinations. Declaration of results of November 2020 examinations have done within a record time to accommodate another round of exams due in March 2021 so that all candidates will get due number of regular attempts of a year. Two rounds of ACET exams also offered in online mode; later one is scheduled in the month of March. Results of CB3 January exams are out and next round of exam is scheduled in June 2021. It has been a remarkable achievement in clearing all examination related backlogs.

The registration for accessing online coaching videos for students appearing for regular examinations have always been kept open irrespective of examination schedules. This has enabled students to make advance planning for their time and preparation irrespective of announcement of dates of regular exam diets.

In the recruitment front, there were few existing vacancies quickly filled in by the office which includes a long pending appointment of a Chartered Accountant in order to strengthen the Accounts department. Few junior level recruitments in HR, IT, Marketing and Education & Training departments are in progress, targeted to board before the end of this financial year.

One of the toughest decisions taken by the Council is to conduct a Virtual Actuarial Conclave 2021 (VAC 2021) spread over four full days in the Month of March, which will ideally replace the 22nd GCA & AGFA 2021. The four days conference scheduled on 10th-13th March 2021 running on a virtual platform with participation of dignitaries and speakers all around the world. The prestigious conclave also envisaged to strengthen actuarial thoughts in various topics which are relevant to the times with the theme "Navigating through Uncertainty". Elaborate arrangements have been set in place to make the function a grand success. A detailed coverage of VAC 2021 will be available in the next edition of the magazine. I invite you all to the first ever, prestigious conclave.

Seminars conducted by various advisory groups continue to adopt webinar mode in view of restrictions on physical meetings; few of them have conducted on a split up basis which spread over more than a day. Few seminars, viz., 16th CILA, 5th Webinar on Health Insurance and 34th IFS are held in the month of January, whereas 7th Capacity building webinar on retirement benefits scheduled on 5th Feb. Other seminars are taken a pause due to VAC 2021 to be held on 10th-13th March. In the other professional front, the drafts of APS 9 and APS 34 are notified for public comments in Dec 2020, the checklist for compliance with APS 27, effective from 1st April have been notified for pension and other benefit practitioners.

The New Year 2021 have so far been eventful which indicates that the IAI activities will continue with the same pace irrespective of upcoming new waves of COVID 19. While the world is recovering setbacks of year 2020 by all efforts, including vaccination against COVID 19, the IAI have already shown indications of its strong coming back in most of its fronts. I would thank and appreciate the relentless work done by all volunteers of the profession and IAI staff members who made it possible.

We continue to cherish our dreams to work and contribute for social cause by identifying, evaluating, quantifying and mitigating all existing and emerging risks in the horizon. It is our endeavour to create a strong path to develop and strengthen the actuarial profession with dedication and commitment.

Announcement

Dear All,

As you may be aware IAI's first Virtual Actuarial Conclave 2021 is right around the corner.

Looking beyond COVID-19, picking up the ropes from the aftermath of the rage of this pandemic, we have chosen "**Navigating through uncertainty**" as the theme for this event. With the fast changing dynamics of the world economy being armed with responses to various possible (and impossible!) scenarios is the only way forward. With a futuristic approach, the speakers and panellists endeavour to discuss and deliberate on a variety of topics critical to financial services industry in time to come.

You will have opportunity to meet with and learn from industry veterans, get one-on-one time with seasoned experts, and participate in various technical and professional sessions. We are currently offering early bird discount till 20th February 2021.

We encourage you to register on or before 20th February, 2021 to avail Early Bird Discount.
To register, please visit www.actuariesindia.org.

Following is the Registration Fees in INR (Exclusive of 18% GST) applicable for VAC 2021:

Category	Early Bird Rates (12 Feb to 20 Feb, 2021)	Standard Rates (21 Feb to 5 Mar, 2021)
IAI Students	3,000	4,000
IAI Associates	6,000	8,000
IAI Fellows above 70 years of age as on 9th March, 2021	6,000	8,000
IAI Affiliates/ IAI Fellows/ Members of other actuarial professional bodies *	9,000	12,000
ACET students (attempted/ not cleared) *(The fee is Per Day)*	750	1,000
Non Members (For members of ICAI, CFA, III, IIRM, ISI) *(The fee is per day)*	1,500	2,000

* Members of Actuarial Profession bodies, which are member of International Actuarial Association (IAA)

CPD credits: IAI Members can claim a maximum of 18 hours CPD for 4 days - IAI Members can claim maximum of 4.5 hours CPD per day i.e. 18 hours CPD for 4 days. 1.5 hours per day for technical, 1.5 hours per day for professional and 1.5 hours per day as per the choice of the attendees.

Student Events: various sessions are planned for the student members on all days along with lots of networking opportunities.

For all queries, please write to marketing@actuariesindia.org

For Invoice and GST related queries, please write to accounts@actuariesindia.org

Looking forward to connecting with you there.

Virtual Actuarial Conclave 2021

10th–13th March, 2021

NAVIGATING THROUGH UNCERTAINTY
VIRTUAL ACTUARIAL CONCLAVE 2021

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#VAC2021

Webinar on Actuarial Valuation of Employee Benefits under US GAAP

Date: 31st October 2020; Saturday **Time:** 17:00 - 18:30 IST

Chair: Kulin Patel, Chairperson of Advisory Group on Pensions, Other Employee Benefits and Social Security

Moderator: Jenil Shah, Member of Advisory Group on Pensions, Other Employee Benefits and Social Security

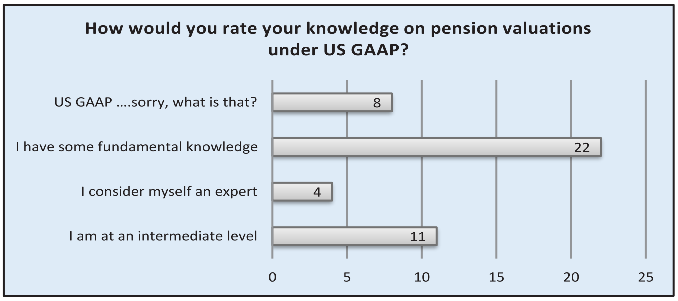
Speakers: Sreoshi Sarkar (Sr. Manager), Nikita Goendi, Saurabh Kumar from Deloitte's US Consulting Practice

Introduction

MNC's / US based Companies in India will require the actuarial valuation of Defined Benefit Plans under US GAAP for Internal / Global reporting as they approach the year-end. Kulin Patel started the session by setting up the context of the webinar, he talked about the relevance of disclosure requirements under US GAAP considering how the businesses have been going through in the current pandemic situation.

The objective of this webinar conducted by the Institute of Actuaries of India was to cover the technical aspects of accounting under US GAAP for any Special Events (Plan Amendments / Settlements / Curtailments) including the assumptions setting process and the disclosure requirements.

Sreoshi Sarker started with the Poll Question "How would you rate your knowledge on pension valuations under US GAAP?". The poll results are disclosed below. She discussed the Employee Defined Benefit Landscape in US and gave a background on different forms of qualified Defined Benefit Pension Plans (Flat Dollar, Final / Career Average Pay / Cash Balance Plans), SERP and Multi-Employer Plans along with the relevant Accounting Standard Codifications.



ASC 715 covers the financial accounting and reporting for an employer that offers Post-Retirement benefits including pension, gratuity, PRMB, etc. ASU 2018-14 provides guidance on the recent changes proposed in disclosure requirements for DB Plans under ASC 715-20, however, this may be implemented by the end of this year.

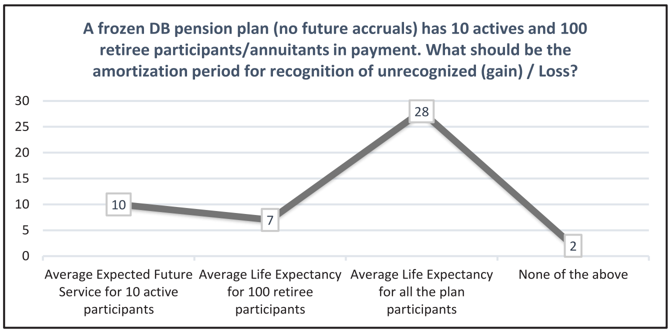
Saurabh and Nikita provided an overview on the Components of the Income Statement and AOCI and highlighted the key differences in the accounting of various components like Prior Service Cost and Actuarial Gain / Loss under US GAAP and Ind AS / IAS.

Amortization of Prior Service Cost / (Credit) and Actuarial (Gain) / Loss

Saurabh described the accounting of Prior Service Cost which arises when an enterprise introduces a plan amendment that increases or decreases benefits for past service and explained the method of amortization of Prior Service cost for Defined Benefit Pension Plan.

ASC 715 requires prior service cost to be initially recognized in Other Comprehensive Income (OCI) with subsequent charge to the Net Periodic Benefit Cost. This charge is generally equally spread to each remaining year of service of active participants. However, if the majority of the participants are inactive or there are no active participants, an entity can use total life expectancy.

Saurabh asked a poll question on the amortization period of actuarial gains and losses wherein A frozen DB pension plan (no future accruals) has 10 actives and 100 retiree participants/annuitants in payment. He also described the methodology of amortization required under US GAAP with a practical example followed by the Poll results.



The actuarial (gain) / loss which arises because the assumptions are not borne out in practice are immediately recognized in AOCI and subsequently, accumulated gains and losses over and above 10% corridor are recognized as an income or expenses component of Net periodic benefit cost. However, more rapid or immediate amortization methods are also allowed.

Example on Amortization of (Gain) / Loss -

Particulars		As on Valuation Date
Pension Benefit Obligation (PBO)		₹ 4,15,50,000
Market Value of Plan Assets (MVA)		₹ 4,56,50,000
Average Expected Future Service for Active Employees		9.51 years
Actuarial (Gain) / Loss subject to Amortization		₹ 1,20,00,000
Working-		
Actuarial Gain / Loss subject to Amortization	(a.)	₹ 1,20,00,000
Corridor (10% of higher of PBO or MVA)	(b.)	₹ 45,65,000
Net (Gain) / Loss in Excess of Corridor	(a-b)	₹ 74,35,000
Amortization years	(c.)	9.51 years
Amortization of Net (Gain) / Loss for a year	((a-b)/c)	₹ 7,81,809

Key Differences in US GAAP and Ind AS 19 / IAS 19

Sreoshi explained the key differences in the disclosure requirements of US GAAP and Ind AS 19 / IAS 19 as highlighted below -

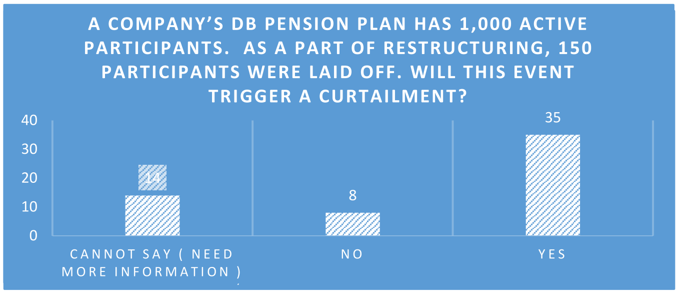
Particulars	US GAAP	IND AS 19 / IAS 19
Balance Sheet Presentation	Funded Status on Balance Sheet, Gain/Loss and Prior Service Cost not yet recognized in Income Statement are in OCI	Balance sheet = funded status
Plan Assets	Can use Fair Value or Market Related Value of Assets	Must use Fair Value, bid price for securities quoted in an active market
Actuarial Gains / Losses	The standard permits deferring Gains/Losses through the use of the corridor approach (or any other systematic method that results in faster recognition).	Gains/losses are recognized immediately in OCI. There is no option to recognize gains/losses in profit or loss (except for other long-term benefits).
Expected return on plan assets	Expected return is based on an expected rate of return on plan assets. Plan assets are measured at fair value for disclosure purposes.	Investment Income is calculated by applying the discount rate to the value of the plan assets.
Prior Service Costs/Credits	Requires PSC to be initially recognized in OCI and then amortized through net income over future periods	Requires immediate recognition in income statement for the effects of plan amendments that create an increase (or decrease) to the benefit obligation
Discount Rate	The discount rate is based on the rate at which the benefit obligation could be effectively settled. Companies may look to the rate of return on high-quality, fixed-income investments with appropriate durations, no guidance where no deep markets exist.	Determined by reference to market yields at the end of the reporting period on high quality corporate bonds, or Government bond yield if no deep market (or Government bond yields under IND AS19).
Asset Ceiling	There is no limitation on the size of the net pension asset that can be recorded on the balance sheet.	Asset ceiling (IFRIC 14) based on recoverability of surplus

There are few more differences in approach of Assumption selection under US GAAP. FASB ASC 715-30-35 requires that the mortality assumption should be based on the recent tables published and reflect the employee base covered under the plan to the extent such plan experience is credible. Also, the accounting treatment for curtailments and settlement under US GAAP varies from IND AS 19 / IAS 19.

Accounting Treatment for Curtailment and Settlement under US GAAP

Seroshi briefed on the event with help of examples that triggers the curtailment under US GAAP like plant closing, restructuring, divesture or etc. which significantly reduce the expected future service years for active employees (generally, a decrease of 10% or more is considered as a significant event) and the determination of significance is a matter of judgement. However, the Curtailment under Ind AS 19 / IAS 19 occurs when an entity significantly reduces the number of employees which may arise from an isolated event.

She started with the Polling question as shown below and described the measuring effects of a curtailment under US GAAP with numerical example.



Example on Measurement of Curtailment under US GAAP

In this particular example, PBO is reduced by 400 and there is 10% reduction in future service. This results in an immediate recognition of 10% of Un-recognized PSC of 30 in Income statement and the recognition of gain of 50 (400 -350) after curtailment effect.

Particulars	Before Curtailment	Effect of Curtailment	After Curtailment	
PBO	-2,000	400	-1,600	
FVA	1,500	0	1,500	
Funded Status	-500	400	-100	
Unrecognized PSC	300	-30*	270	10% of PSC recognize in IS
Unrecognized (G)/L	350	-350	0	(400) - 350 = (50)
Total AOCI	650	-380	270	

A net gain of 20 recognized in expense

The timing of recognition of Curtailment gain / loss varies under US GAAP and Ind AS 19 / IAS 19. Under US GAAP, losses are recognized when they become probable which may be before the announcement and the gains are recognized when the amendments are adopted i.e. after the commitment. Under Ind AS 19 / IAS 19, gains / losses are recognized at the earlier of when the event occurs or when an entity recognizes the related restructuring costs or termination costs.

Nikita provided an overview on the measurement and the accounting treatment of Settlement under US GAAP. It arises if the transaction meets the three criteria i.e. i.) should be an irrevocable action, ii.) relieves employers of primary responsibility for pension benefit obligation, and iii.) eliminates significant risks related to benefit obligation and assets used to effect settlement. It recognizes when the required assets have been transferred and the settlement is fully executed. Under US GAAP, settlement occurs when the settled benefit payments are higher than the service cost and the interest cost for the year whereas under Ind AS 19 / IAS 19, only extraordinary payments are considered as settlements. For example: Under Ind AS 19 / IAS 19, If the plan offers Lump Sum as a form of payment and actuarial assumptions include them, then it won't be considered as settlement even if lump sum settlement is greater than service cost and interest cost for the year.

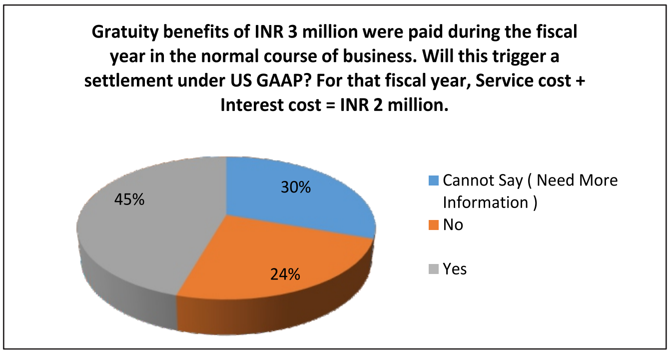
The following example represents the Measuring Effects of Settlement under US GAAP

In this example, there is change in PBO and FVA by 400 and the effect is measured as recognition of proportionate amount of unrecognized net gain / loss and unrecognized transition (asset) or obligation, if any. The precent of PBO settled times of Unrecognized gain / loss is the settlement gain / loss.

Particulars	Before Settlement	Effect of Settlement	After Settlement
PBO	-2,000	400	-1,600
FVA	1,500	-400	1,100
Funded Status	-500	0	-500
Unrecognized PSC in AOCI	300	0	300
Unrecognized (G)/L in AOCI	500	-100	400
Total AOCI	800	-100	700

The settlement charge recognized in Expense is 100 (i.e. 400/2000 * 500)

Nikita ended up with a polling question "Gratuity benefits of INR 3 million were paid during the fiscal year in the normal course of business. Will this trigger a settlement under US GAAP? For that fiscal year, Service cost + Interest cost = INR 2 million."



Key Learnings and the way forward

This webinar provided insight on the actuarial valuations of Retirement benefits carried out under US GAAP. It helped in developing the technical knowledge on actuarial as well as accounting concepts.

The webinar was concluded with Vote of Thanks from Kulin Patel and Jenil Shah on behalf of Advisory Group on Pensions, Other Employee Benefits and Social Securities.

Written by

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EVENT REPORT

Webinar on Data Analytics

Date: 7th November 2020; Saturday **Time:** 15:00 - 16:30 IST

Chair: Heerak Basu (Chair, Advisory Group for Data Science & Analytics, IAI)

Moderator: Mahidhara Davangere (Secretary, Advisory Group for Data Science & Analytics, IAI)

Speakers: Hash Piperdy (FIA) Managing Director, Epitome, Singapore

Yashica Nagpaul, Head of Data & Analytics - Middle East & Africa, Cigna

Introduction

Today's digital world is one where, data is generated at every instance of time. Our proclivity to consume these mammoth amounts of data in real time, has become second nature to us. We start our day with real-time Instagram feeds, travel daily with uber rides being fed by real time traffic-data, enjoy personalized food and track our physical activities with our personal smart-watch. These smooth-talking IoT devices preclude us from noticing the mammoth amount of data being floated around the world as well as being analyzed on a real time basis to make our lives safer and qualitatively richer.

Such colossal magnitudes of data challenge the best of the minds and the computers available to analyze the ocean of information, in a systematic manner as well as to leverage it for competitive advantage. This webinar was orchestrated by the Institute to provide insights into this enchanting world of data and its analysis, in simple language for anyone interested to delve deep. Some of the key topics, that were deliberated upon encompassed the realms of Machine Learning and Artificial Intelligence along with their actuarial applications.

The session commenced with Mr. Heerak Basu drawing the attention of the audience on the lucrative opportunities, that the universe of data science and analytics holds for the actuarial profession. He further complemented the list of opportunities with the list of initiatives undertaken by the Institute to help its members gain expertise in the field of Data Science and Analytics. While passing the dais to Mahidhara Davangere, he stressed on the need for the actuarial profession to imbibe the skills of the future.

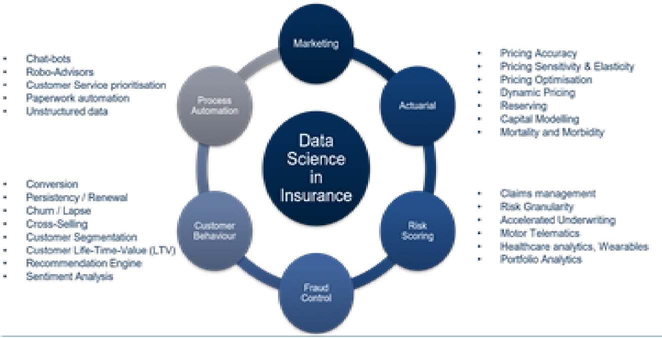
Mahidhara Davangere, as one of the most multi-faceted entrepreneurs and the secretary of the Advisory Group of Data science and analytics, introduced the audience to Hash Piperdy and set the stage for a very interactive and enlightening discussion. Transcending the world of traditional actuarial consulting and data analytics, Hash Piperdy put the spotlight on the need for broader skillset amongst actuaries given the drive for cost-efficiencies, especially in data architectures for various actuarial and financial functions handling amongst other things the work related to IFRS and LDTI. This was further supplemented by highlighting the significant similarities and some differences amongst the worlds of actuaries and data scientists.

	Actuary	Data Scientist
Strengths	• Professionalism, highly regulated, statutory roles • Deep insurance domain expertise • Robust and proven approaches to solving common actuarial problems with extensive structured data	• Ability to "think outside the box" for solving data problems • Working with unstructured data (text, audio, video) • Work in wide range of industries/functions (data is data) • Strong coding skills
Weaknesses?	• Deep and narrow technical competencies • Focus on financial problems	• Can lack business centric perspective ie how model results will impact commercial decisions?
What influences our approaches?	• Hierarchical career path • Actuarial Control Cycle and Professional Standards • Stochastic/probabilistic approach to quantifying risk and uncertainty • Parsimony, understand proportionality/materiality • Professional peer review is essential • Interpreting and communicating model results of critical importance • **Focus on predictive analytics at the "average" level** e.g. calculating BEL within nearest £10m might be just fine. Getting the overall result right for the cohort is more important than for any individual policyholder What is the average lapse rate for this book?	• Less structured approach, unregulated • Peer review (in actuarial sense) is optional. Models are validated with a tech/developer mindset (automated regression tests, cross validation). • "Data Driven Approach" – doesn't matter if model is "explainable" or not, results are what count • Tech mindset, less formal structures and career paths (many freelance) • Industry agnostic, Data Science is the profession • Informal approach to modelling • **Focus on predictive analytics at the individual data point level** e.g. what should Netflix engine recommend for Hash? what ads should google display at the top of Hash's screen? what is the best individualised product for Hash as a policyholder?
Toolkit	• Excel • Pre developed systems and software (for specific purposes e.g. pricing, valuation, capital modelling, ALM etc) that use Structured Data • **Models are proprietary, source code shrouded in secrecy**	• Systems architects and developers, code themselves and constantly develop new algorithms • **An "Open Source" sense of sharing knowledge.** Models are shared publicly and constantly improved upon within the wider developer community

The discussion traversed the coveted topics of 'AI' algorithms like 'Knowledge Based Systems', 'Deep Learning' and 'Artificial Intelligence' before navigating to give the audience a quick flavour of machine learning and some of the different Supervised and Unsupervised machine learning algorithms. The audience was given a sneak peek into unsupervised algorithms like Generalized Linear Models (GLM); Deep Learning (ANN); Random Forests; Gradient Boosting Machines (GBM); Support Vector Machines (SVM); Natural Language Processing (NLP).

Once the audience's interest was awakened to these algorithms, it was led to the realms of 'Deep Learning', which essentially endeavors to mimic the human brain, although at a considerably simpler scale. It is a powerful 'learning' algorithm which 'learns' from the data and is widely used across various sectors like banking, engineering, telecoms, manufacturing, automotive, transportation, medical etc. Though being a staple of various sectors, it is yet to be leveraged extensively amongst actuaries. While, the traditional data and analysis techniques have served the actuarial profession for over more than 300 years, some investment into harnessing the potential of algorithms like these ,are likely to result in high returns for the actuarial profession. Seen below are some of the key uses of data sciences in the insurance industry.

Data Science applications in Insurance

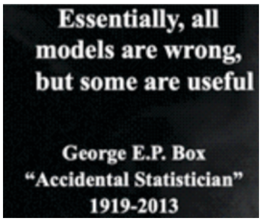


Not to be left behind in harnessing the powers of analytics and computing to their full potential, insurers are now at the forefront of leveraging analytics. A quick peek was convincing enough for the audience about the different needs which are being met by using some of these powerful algorithms.

Continuing on this path, three different illustrations of uses of some of these techniques were given and the audience was encouraged to further read into these case-studies which are available publicly. The illustrations included those of image recognition being leveraged in underwriting and pricing, fraud management using AI and machine learning techniques being used to enhance pricing models amongst insurers.

While the powerful algorithms provide unprecedented advantages, there exist enough opportunities to improve their efficiencies, transparencies and accuracies. A hybrid approach, combining the traditional and advanced techniques could probably be the preferred option amongst all.

This enriching discussion, after raising the enthusiasm and a plethora of questions from the audience was wrapped with the famous and most apt quote:



The ball was then set in the motion once more for the already captivated audience by the second speaker Yashica Nagpaul. She took the audience through her own journey into the world of data science besides introduced AI and Machine Learning and discussing its widespread applications in the insurance industry.

Data Science and Actuaries

While focusing on the deep insurance domain expertise possessed by the actuaries the discussion brought forward the wide spectrum of expertise commanded by the data scientists working in a wide range of industries and creating solutions for a diverse set of problems. This once more indicated the significant overlap as well as opportunities of collaboration amongst actuaries and data scientists.

Both actuaries and data scientists leverage the power of data to create solutions using predictive analytics. While actuaries focus on predictive analytics at the "average" level, the data scientists focus on predictive analytics at individual data point level. In addition, for actuaries, interpreting and communicating model results is of key importance while for data scientists, results of the model hold focus.

Artificial Intelligence (AI) use cases

Artificial Intelligence (AI) in broad terms is the human-like intelligence displayed by machines. The enablers and driving force for it being, the availability of data, low cost of storage, cheaper processing using cloud computing and the variety of data. AI can perform tasks that are complex and time consuming, besides helping in deeper analysis, more accurate pricing and risk assessments as well as creating a competitive advantage. Such advantages have obviously resulted in widespread applications across almost all traditional actuarial work like Life, Pensions, P&C, Reinsurance, and Investment.

Challenges for AI Adoption

However, the journey of AI has not been bereft of challenges for its adoption amongst the various industries. Some common impediments to the adoption of AI being:

- Talent Gap
- Data quality & quantity
- Not recognizing the need for AI
- Difficulty in identifying appropriate business cases.
- Weak technical infrastructure and tooling
- Legal concerns, risks or compliance issues

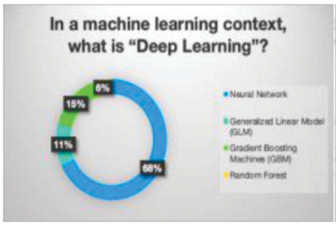
Some of the most revered use of AI is its use in credit card fraud detection where AI uses the data to build model that predicts the trustworthiness of the given transaction and evolves with the evolving data about the various frauds and associated fraudsters' behaviors. The other widespread implementation is in the domain of medical image detection. Medical image records are combined with label for the underlying medical condition and its severity, to enable early and accurate detection. Benefits of AI have also been harnessed in precision agricultures, in both pest control as well as in using robotic farming equipment.

Key Takeaways and Way Forward

Institute of Actuaries of India is taking numerous initiatives to spread awareness about data science and the limitless opportunities it provides actuaries, starting with organizing various webinars and offering specialized courses in data science. Thus, it is essential that actuaries of current and future generation:

- explore data science and find ways to combine the acquired skills with the actuarial knowledge
- develop more efficient and high precision models for better judgments using enhanced programs and tools
- strategically integrate the knowledge of data science to arrive at solutions for complex problems for various business process.
- Throughout the session the responses from the involved audience, to all poll questions was exhilarating; the snapshot below being a testament to some of the palpable enthusiasm amongst them.

The session was marked with exhilarating responses from the involved audience to the poll questions; the snapshot below, being a testament to the palpable enthusiasm.



The curtains were brought down with appreciation and gratitude for the speakers by Mahidhara Davangere on behalf of the Institute and the audience.

Tune in to www.actuariesindia.org for many more stimulating webinar.

Written by

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3rd Webinar on Health insurance

Date: 9th December 2020; Wednesday Time: 15:00 - 17:00 IST

Chair: Mr. Subhendu Bal, President, IAI

Moderator: Mr. Vishwanath Mahendra, Chair, Advisory Group on Health Care Insurance, IAI

Speakers: Mr. Mason Choy, Individual Health Actuary, Cigna International Markets

Mr. Sumit Ramani, Consulting Actuary & co-founder ProtectMeWell.com

Mrs. Yogita Arora, Member, Advisory Group on Health Care Insurance

Introduction

The objective of **this webinar** was to cover recent **Trends in Health Insurance across Asian markets** and the application of data science in insurance. With the COVID-19 pandemic spreading; health insurance is today's focus area for all the world especially densely populated Asia.

Mr. Vishwanath Mahendra started the session by introducing speakers, which was followed by the presidential address by Mr. Subhendu Bal.

Mr. Choy introduced audience to different health insurance regimes in different major Asian markets followed by Mr. Sumit Ramani and Mrs. Yogita Arora presented findings from their recent research in the field of data science.

Current Health care system and role of private insurance in Asia

In almost all the major Asian economy's health care expenditure as % of GDP is lower as compared to developed markets. With 8% south Korea has the highest % of GDP amongst Asian countries compared to around 17% in the USA. Japan, South Korea, Taiwan have standardized health care for all the citizens and private health insurance provides coverage against out of pocket expenses. In Hong Kong, India, Indonesia, Malaysia, Philippines and Thailand health insurance provides access to private medical network. China and Singapore health insurance is purchased for accessing the VIP wards of private health service providers. Most of mass-market products are offered with coinsurance/ disease wise limits whereas for affluent customers coverage is on an actual basis. This is to make health care coverage on an affordable basis.

Recent Healthcare and health insurance Reform in Asian markets

Asian health insurance markets have undergone changes to accommodate new paradigms in health care. China has allowed for repricing of long term products from December-19. Hong Kong launched the Voluntary Health Insurance Scheme(VHIS) in Apr 2019. In India standardized health insurance product Arogya Sanjeevani has launched from April-2020. Singapore has made it compulsory to join the health insurance scheme. In Thailand, long term visa holders were mandated health insurance from October 2019.

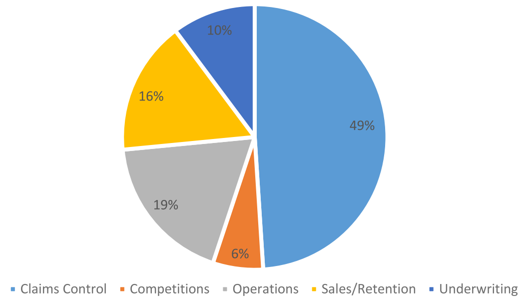
Scope and recent trends in health insurance products

Mr. Choy explained traditional role of health insurance was limited to provide indemnification against hospitalization but it is nowadays covering the discharge/ recovery phase; going forward it will encompass coverage for wellness/ prevention care part of health care as well.

Mr. Choy noted changes in health insurance industry with COVID-19. Most prominent change on health insurance industry was the use of internet e.g. video consultation, e claim submission, etc.

Poll Question results:

What's the most challenging area faced by medical products in India?



% = Proportion of respondents who feels this is a challenging area faced by medical products in India

Application of Data Science in Health Insurance

The agenda is to understand data science and machine learning from an insurer perspective, its implications for insurance applications and functions. Current status and key challenges for data science solutions. And are actuaries ready for it?

ML Applications

It used in customer engagement like AI Bots. 97% interaction happens with AI bots applying for coverage, checking benefits, File claims. (**By ZhongAn Insurance**). It used in claim management for submission, standardization, adjudication, reporting & Analytics. (**By CoverSelf**). It used to predicts when a customer is likely to visit an emergency room. (**By Prognos**)

Data Science in the Insurance Industry?

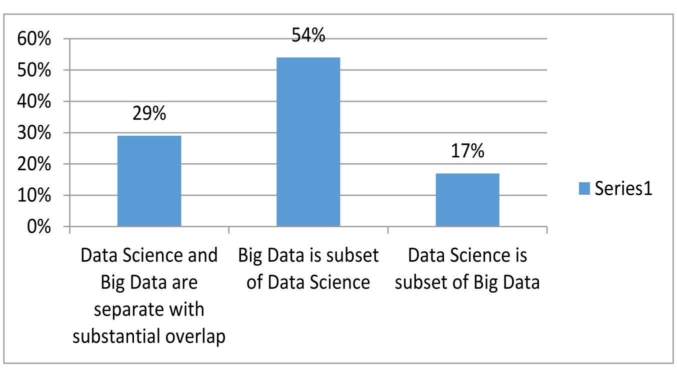
Indian Insurance is broadly categorized into three categories for taking data science into consideration. First, who have carried insurance functions in an old and traditional way? The next one is to modify their few functions as per data science like Claims management, Fraud Analytics, underwriting, Sales, Actuarial. And others are leaders in implementing data science projects.

Challenges :

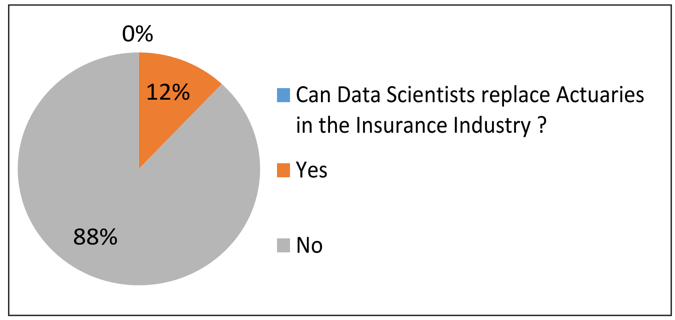
1. The main challenge is not able to implement data science functions due to a Lack of commitment & vision from management. Lack of proper understanding of data and data sources. Lack of right technique, right skill set, right area to invest, right storytelling.

Poll Question: Which One is true?

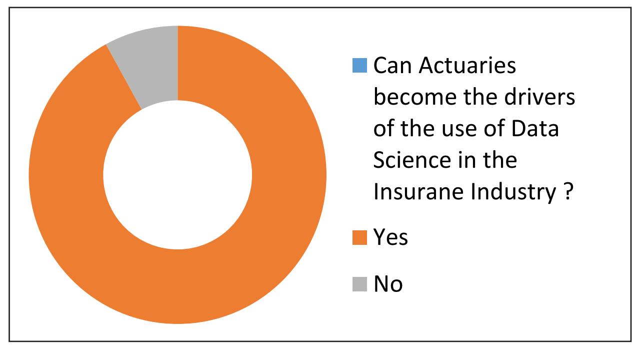
a) Data Science and Big Data are separate with substantial overlap.
b) Big Data is a subset of Data Science.
c) Data Science is a subset of Big Data.



Poll Question: Can Data Scientists replace Actuaries in the Insurance Industry?



Poll Question: Can Actuaries become the drivers of the use of Data Science in the Insurance Industry?



Key Takeaways:

Most of Asian markets have lower healthcare expenditure as % of GDP when compared with western economies. There is a wide variety of health insurance products catering to need to customers as per the need of that market. Most of the markets differentiate products basis on whom the product caters to e.g. mass-market products try to be cost-effective by imposing some restrictions e.g. coinsurance. Currently, health insurance helps patients till the recovery phase going forward it will encompass the wellness part into it as well.

Actuaries need to adapt to Data Science and contribute meaningfully to the Industry. Data Science not be looked at in isolation instead it should look as an integral part of how the world is changing and how we need to adapt to it.

Written by

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4th Webinar on Health Insurance

Date: 18th December 2020; Friday **Time:** 17:00 - 19:00 IST

Chair: Vishwanath Mahendra, Chairperson, Advisory Group for Health Insurance, IAI

Moderator: Sumit Ramani, Secretary, Advisory Group for Health Insurance, IAI

Speakers: Joanne Buckle, Principal and Consulting Actuary, Milliman

Jim Dolstad, Vice President, Actuarial Consulting, Optum

Introduction

The Institute of Actuaries of India (IAI) has been organising various webinars on relevant topics in Health insurance. The 4th Webinar on Health Insurance is conducted by the Advisory Group on Health Insurance on December 18, 2020. The objective of this webinar was to discuss the Risk based Capital (RBC) requirements for health insurers under Solvency II in the first segment and the impacts of Covid-19 on the healthcare industry in the second segment.

Vishwanath started the session by introducing the speakers.

In the first segment, Joanne covered the topic of RBC for health insurers: Lessons from Solvency II.

Solvency Capital Requirement (SCR)

She started her presentation by describing the SCR as the capital required to meet all quantifiable risks on insurer's existing portfolio and expected sales volume over the next year. It is calibrated in such a way that "Probability of ruin" is 1/200 over one year.

She further elaborated on the methodology and said that SCR can be estimated using the Standard Formula provided by the regulator or an insurer could use a full or partial internal model. Use of internal model requires regulatory approval. Internal models are required if the Standard Formula does not capture the special features of insurer's product or the insurer may opt to use an internal model if it considers the Standard Formula to be overly conservative.

The SCR calculation is a modular, risk-based approach where modules are calculated either via changes to net assets under stressed scenario approaches or factor-based approaches.

Health Underwriting Risk

For health business that is deemed similar to life techniques (SLT) SCR, stresses (changes in assumptions) are in line with life underwriting risk SCR such as mortality, longevity etc. but without catastrophe risk sub-module. For health business that is designated not similar to life (nSLT) techniques, stresses are similar to those from non-life underwriting risk SCR such as premium and claim reserve risk and lapse risk. Health catastrophe risk SCR includes three sub-modules: Mass accident, Accident concentration and Pandemic.

Under the Standard Formula, an insurer can still opt to use Undertaking Specific Parameters (USPs) which means they can replace Standard Formula parameters for Underwriting Risk with company-specific parameters, as long as the methodology to estimate these parameters is approved in advance by the national regulator.

Impacts of Covid-19 on Healthcare Industry

In the second segment of the webinar, Jim talked about the impact of the ongoing pandemic on the US healthcare industry. He observed that a small percentage of counties drive the majority of cases in the country. Also, the abatement or deferring the services has a huge impact on the country's healthcare costs.

Covid-19 Impacted total cost is a sum of baseline cost, direct Covid-19 cost, increase in demand for prescription drugs minus eliminated and deferred costs.

The economic downturn is changing the mix of insurer's business and hence provider group reimbursement. Commercial coverage is decreasing with the increasing unemployment rates. According to Jim, Medicaid expansion states will observe increases in Medicaid enrollment and non-Medicaid expansion states will see a minor increase in ACA enrollment and a big increase in the number of uninsured.

Key learnings and the way forward

There is a significant impact of Covid-19 on all aspects of health care industry. As per Jim, a global economic pull-back with a slow recovery, will continue for around next three years. He further predicted that the immediate impact of this pandemic will be felt for at least one to three years, including ongoing social distancing and returning outbreaks. These will result in some permanent change to the health care industry. Jim suggested that health plans must lower medical spend and admin costs, foster innovation, achieve member-centricity and scale analytics to overcome these challenges.

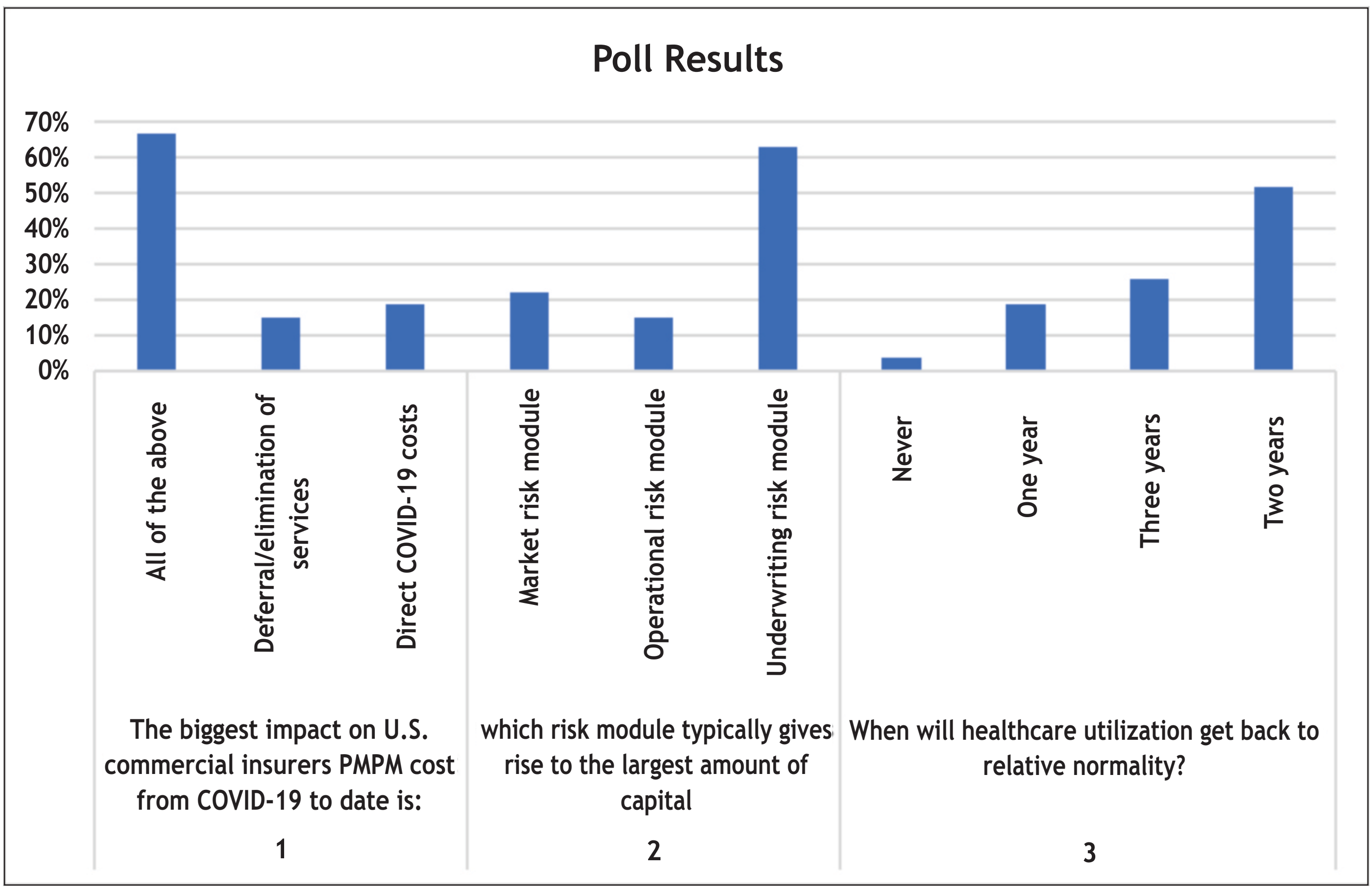
The Webinar was concluded with Vote of Thanks from Sumit Ramani on behalf of the Advisory Group for Health Insurance, IAI.

In order to make the webinar more interactive, the coordinators also arranged for few online poll questions.

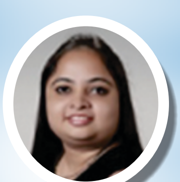
1. What is the biggest impact on U.S. commercial insurers PMPM cost from COVID-19?

2. Under Solvency II, which risk module typically gives rise to the largest amount of capital for health insurers?

3. When will healthcare utilisation gets back to relative normality?



Written by



Heena Arora

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Heena Arora is currently working in Milliman India Pvt Ltd as Senior Actuarial Analyst.

Webinar on Banking, Finance and Investments

Date: 19th December 2020; Saturday **Time:** 15:00 - 16:30 IST

Chair: Phanesh Modukuru, Advisory Group for Banking Finance and Investments, IAI

Moderator: Mahidhara Davangere, Member, Advisory Group on Banking Finance and Investments, IAI

Speaker: Iain Allan, FIA, Banking Actuary, UK

Introduction

Banks structure the foundation of an economy. Moving towards untrodden pathways for actuaries, the Institute of Actuaries of India is putting huge efforts to help candidates make an informed decision as banking seems to be the "road less travelled by". Tapping into the experiences of international experts when India is looking to implement RBC and IFRS 17, the **webinar revolved around the discussion of the assessment of capital adequacy and product pricing in banking sector**. The objective of the webinar was to **inform how actuaries can contribute to the banking sector**.

Mahidhara Davangere started the session which was followed by some thoughts provided by the chairperson of the Advisory Group for Banking Finance and Investments, IAI, Phanesh Modukuru.

Snapshot of the Current Situation

The skills of actuaries working in insurance are very much transferable to the banking sector. The current issues involve the movement of Basel III, IFRS 9, Expected Credit Losses, climate change and data science.

Our training of doing numbers with understanding and judgement is absolutely appropriate and that is how Iain justifies his work in NatWest acquisition.

Encapsulation of Important Points

- Main risks in the bank comprise- Credit Risk in loans, market risk in securities and operational risk in regular activities. The banks have to hold capital against possible losses in the value of the assets and hold liquidity in case some deposits are withdrawn. Thereby, it is not so different from insurance.
- Basel regulation which is similar to Solvency II.
  Pillar 1: Quantification of capital requirement and liquidity requirement.
  Pillar 2: Risk management and supervisory review process.
  Pillar 3: Requirements for public disclosures

  Regulatory Submission:
  Internal Capital Adequacy Assessment Process (ICAAP)
  Internal Liquidity Adequacy Assessment Process (ILAAP)
- In an ICAAP there are two parts- the first part deals with financial forecast which include how much capital a bank is expected to have whereas the second with risk appetite statement and control environment.
- The chart below shows minimum capital requirements are defined as percentage of total Risk Weighted Assets (RWAs).

Capital	% of total RWAs
Total	8%
Common Equity Tier 1 (CET1)	At least 4.5%
Additional Equity Tier 1 (AT1)	Up to 1.5%
Tier 2 (T2)	Up to 2%

- By the rules in banking, if it has any losses, it can only be offset against equity capital (CET1). Among AT1, banks can have convertible capital that could be converted into CET1. Therefore, CET1 capital is the most important in banking.
- Few risks have not been allowed for under Basel Regulations under Pillar 1. One important additional risk is credit concentration risk. In this context, the speaker talks about the collateralized debt obligations (CDOs) that caused the Banking crisis.
- An interesting area for actuaries is to decide the capital buffer after looking into various scenarios as it requires understanding and judgement of the inherent risks and capital position.

Product pricing and Profitability

- Credit loss is an area that is very similar to the work of reserves for claims- an area where actuaries can add value in banking.

- Banks need to hold capital for unexpected losses. Risk based pricing is the prime objective and we want to therefore allocate right amount of capital to loans. Actuaries bring specific skills and experience that add value working with experienced bankers or quant modelers.

- In banking, the basic skills required are communication, understanding of numbers and problem solving.

Future of Actuaries in Banking

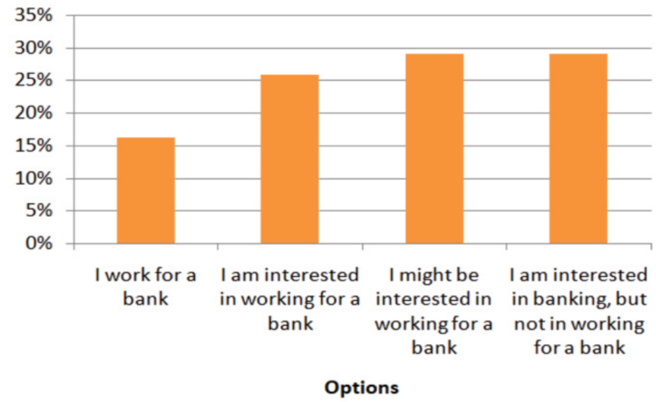
Banking is changing. From Basel II to Basel III, incurred to expected credit losses, climate change stress testing- are the way forward. **Many regulations are coming in from Januray 1, 2023**. For bankers, it is a threat because they will have to change the framework for each of the main risks but for actuaries it is good as it reduces barriers to entry.

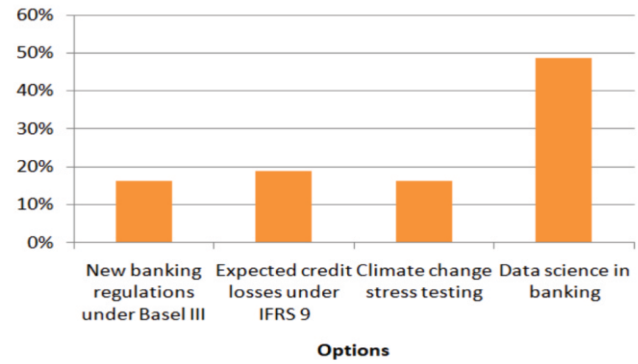
Fraud detection, Credit Scoring, Automated advice are some of the upcoming opportunities in terms of data science in banking. There is scope in banking because banks deal with a large amount of data. Open APIs are giving wings to data science in banking. The speaker believes that the current training is sufficient for students and professionals to move into banking.

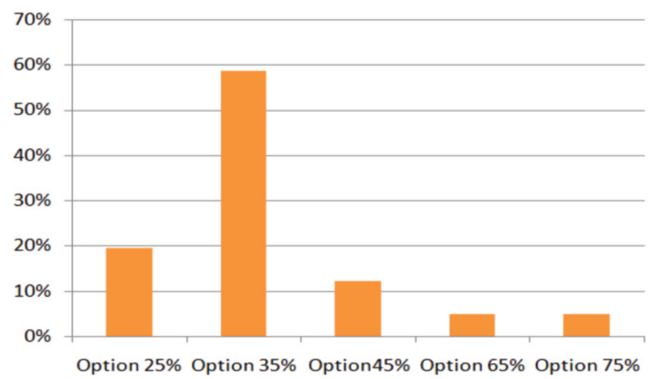
The webinar concluded with a Vote of Thanks from Mahidhara Davangere on behalf of Advisory Group for Banking Finance and Investments, IAI.

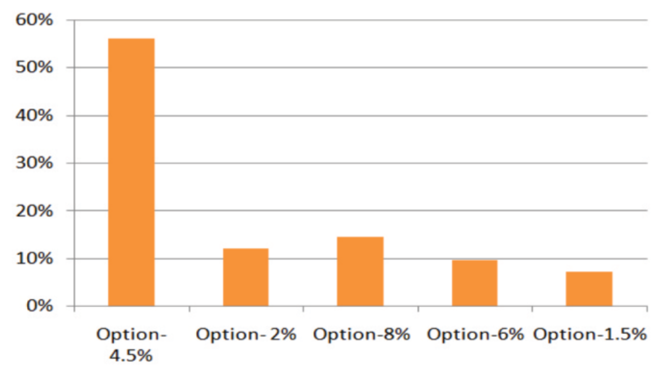
In order to make the webinar more appealing, the organizers arranged for a few online voting questions.

1. Which of these statements is appropriate for you?
2. In which of the following current issues are you most interested?
3. What is the Standardized Approach risk weight on mortgages?
4. What is the minimum amount of equity capital (CET1 capital) that a bank must hold, as a percentage of its total risk-weighted assets (RWAs)?









Written by

Ritika Agarwal

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Ritika is a student member of IAI and IFoA, working as an actuarial intern at Pramartha Group. She is also a Finance and Investment Banking Working Party Member at IFoA.

Webinar on Covid19 – Life insurance business implications and way forward

Date: 7th January 2021; Thursday Time: 14:00 - 17:30 IST

Moderators: Vivek Jalan, Member, Advisory Group on Life Insurance

Sunayana Mahansaria, Secretary, Advisory Group on Life Insurance

Speakers: Andres Webersinke, Global Chief Underwriting Officer - Life/Health, Gen Re

Dr. Himanshu Bhatia, Chief Medical Officer, Gen Re - India, ASEAN, Hong Kong

Panelists: Abhay Tewari, Joint President - Corporate & Chief Actuary, Star Union Dai-ichi Life Insurance Co. Ltd.

Bikash Choudhary - Appointed Actuary & Chief Risk Officer, Future Generali Life Insurance Co. Ltd.

Mahaveer Chandiwala - Chief Underwriting & Claims Officer, Munich Re India Branch

Yusuf Pachmariwala - Executive Vice President & Head - Operations at Tata AIA Life Insurance Co. Ltd.

Introduction

In the wake of COVID-19 pandemic, awareness of life insurance among Indians is showing steep rise while the impact of the outbreak has started casting a shadow on the Insurance sector. As the social distancing has become the new normal, the Institute of Actuaries of India is proactively conducting webinars on various relevant topics. As a part of CILA, the second module was a webinar based session on Covid-19, conducted by the Life Insurance Advisory Group on January 7, 2021. The objective of this webinar was to cover the impact of COVID-19 on Indian and Global Life Insurance ecosystem and their journey.

Vivek Jalan outlined the day's schedule. Sunayana Mahansaria started the session by providing her key observations on COVID-19 impacts on mortality across the globe, the response to pandemic and the possible impact of the same.

Andres Webersinke and Dr. Himanshu Bhatia discussed the current situation of the pandemic and its risk management measures taken by different countries along with the emerging insurance landscape post COVID-19. Andres and Dr. Himanshu discussed the impact of this pandemic on global and Indian economy along with the implication on various stakeholders in life insurance business. They concluded the webinar with the way forward for the industry to continue being resilient against such situations.

Snapshot of Current Situation

Based on the Financial Times there are 77 million cases confirmed globally for Covid-19 of which 1.69 million people have died. There has been a steep increase from rolling average daily deaths from 423 to 11,208. While countries across the globe have experienced excess mortality, Korea has stood out as a great example for good pandemic management. Lockdowns have been popular to help control the spread of the pandemic; however, their stringency has changed for different countries at different times. Some of the prominent vaccines that have been approved are Pfizer, Moderna and Bharat BioTech.

The pandemic has resulted in economic slowdown leading to lower growth of premium rates, low interest rates which have impacted the product mix as well as poor mortality and morbidity experience in certain businesses.

Overall there has been a rise in the demand for protection business. The decreased interest rates have made the maintenance of solvency position and cashflows very critical for insurers.

Hence, a clear trend of increased need-based demand can be seen in Life Insurance business.

Emerging Insurance Landscape post Covid-19

From insurer's perspective, there is increased focus on policy renewals, which is being addressed by new innovative measures and more adaptation of digital route for selling and underwriting. However, biggest concern is the increased average severity against the usual industry benchmark.

From consumer's perspective, increased awareness of the life insurance coverages can be seen, which is resulting into increased demand for the protection insurance products. However, cyber risk and the complexity of life insurance terms and conditions are the concerns to target business digitally.

Health care workers are operating in a reduced capacity. As a result, non-emergency treatments are being deferred. Hence, there is an expectation of accumulation risk of such treatments at a later point in time, thereby directly affecting the claims outgo of insurance providers.

However, Work from Home setup and increased digitization is helping business to sustain in this environment. Also, increased awareness of healthcare and hygiene practices are helping the community face these challenges positively.

India experience and implication for various stakeholders

Number of cases are growing day by day despite the imposed lockdown. However, the observed contagion rate is much lower compared to the other countries. Low testing and tracing capacity of our country is of course the major contributor towards the same.

Major implication of this pandemic on life insurance business are:

- Business Continuity Planning through increased digitisation, changes in consumer preferences, regulatory & shareholder reporting, employee engagement, distribution and underwriting are showing inclination towards the online and digital channels compared to the traditional methods.
- Asset management – The meltdown in global equity markets including India in the wake of the coronavirus outbreak has posed significant impact on the Fair Value change in Equity, especially since the beginning of March 2020.This is likely to impact solvency position of the Insurers.

Key learnings and the way forward

This pandemic has impacted all spheres of the economy. Despite the various challenges, Life Insurance business is expected to grow due to the increased awareness in the market. Continuous support is being provided by the Government and the Regulatory Authority to support customer needs and insurers' viewpoints.

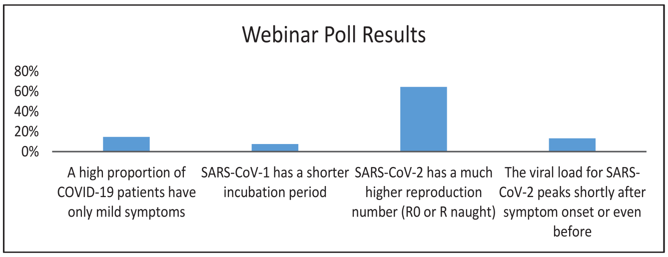
However, to take advantage of the increased demand and to sustain the same in the long term few areas need to be considered further:

- Digital readiness
- More engagement with customers and distributors
- Address shift in customer preference towards online purchase, social distancing, holistic health insurance cover including wellness and engagement
- Smart work and development of new capabilities to deal with the emerging eco system

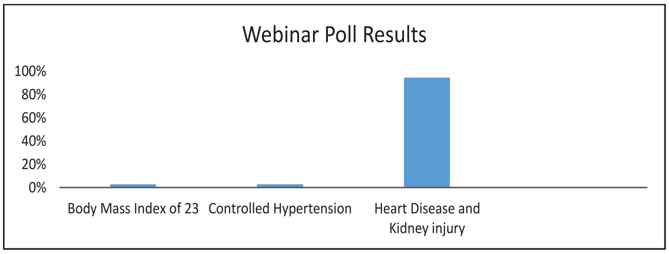
The Webinar was concluded with Vote of Thanks from Sunayana Mahansaria on behalf of the Advisory Group of Life Insurance, IAI.

In order to make the webinar more interactive, the organizers also arranged for few online poll questions.

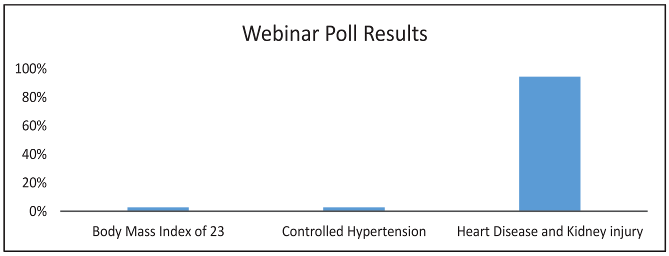
1. Why does the SARAS-CoV-2 spread more easily than the SARS (SARS-COV-1) virus?



2. Between you, your relatives and close friends, how many have got infected by SARS-CoV-2?



3. Which of the below pre-existing factors worsen the impact on mortality and morbidity in those who get COVID 19?



Written by

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Saloni is a Qualified Life Actuary from Institute & Faculty of Actuaries of UK. She is the Prophet Modelling Lead in EY GDS.

16th CILA - PAR - PRODUCTS

Date: 16th January 2021; Saturday **Time:** 14:00 - 17:30 IST

Chair: Shubendu Kumar Bal, President, IAI

Moderator: Asha Murali, Member LIAG

Speakers: D Sai Srinivas - Consulting Actuary , SV Actuarial LLP

Jose John - Director and Appointed Actuary , Max Life Insurance

Lee Jiat Liauw - Chief Actuary , Prudential Singapore

Vote of thanks: Ranabir Ghosh, Member LIAG

Introduction

Prithesh Chaubey started the session with introduction to 16th CILA. After much deliberations, the topics for current CILA were selected as PAR Products, Navigating the world of COVID-19, Recent developments and trends in Life Insurance Products, Shareholder value disclosures and Risk Based Capital.

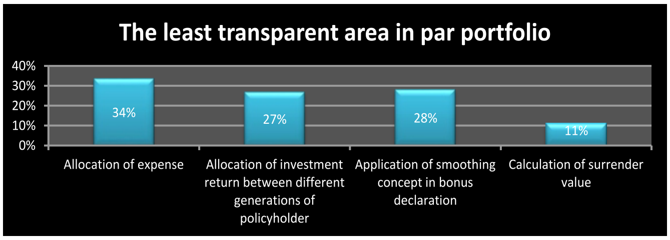
Par Products

As at December 2020 Par portfolio has 38% of total Individual premium share in the Industry. 70% of the people think that PAR product has relevance in the future too, however changes needs to be made on various fronts. To guides us through the possible list of these changes, three topics were discussed - With Profit Committees, Implication on capital for Par business in RBC regime and Par- Fund Solvency. Below are the key points emerging out of the discussions.

With Profit Committees

A with profit committee is a Board level committee overseeing par management. The committee brings some objectivity to the process. Its role is to govern fair distribution of surplus and disclosures.

With profit committee could be further strengthened by having an executive with profit committee who would report into board WPC in matters like are returns fair, is policyholder getting his due share, how do we minimize expenses charged to par fund, focus on terminal bonus.



Other measure to improve transparency could include:

a. Principles and Practices of Financial Management - PPFM
   A regular communication to par policyholders on with profit philosophy, amounts payable under a with profits policy; Investment strategy; Business Risk; Charges and Expenses; Management of inherited estate;
b. Some high level overview of company's experience and projected view for next period
c. Independent review on with profit management

Risk Based Capital and Par Fund - Singapore

In Singapore, Par business is very strong , Par business accounts for 41.5% of total weighted premium (linked, par, non-par) as of the YTD Q3 2020, of which annual premium policies account for 62% .

Risk based Capital was first introduced in 2004 and RBC-2 was introduced in March 2020.

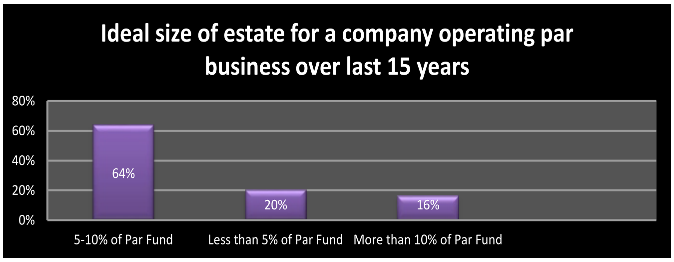
Risk Based Capital has had below affects:

a. It has led to increased complexity in calculation with introduction of diversification benefits and new asset risk charges.
b. Requires adequate actuarial and modeling capabilities.
c. Certain product features have become more costly like Long term single premium par products ,high guarantees and high equity backing ratio
d. Insurers will have to find ways to optimize investment strategy in order to continue to make Par products attractive to the customer
e. It has also offered capital management

opportunities through

I. Review investment strategies and hedge out unwanted risks
ii. Leverage benefits of diversification across all type of risks
iii. Consider reinsurance initiatives
iv. Understand the risk-adjusted returns across all business lines and investments and seek out opportunities

Par Fund Solvency



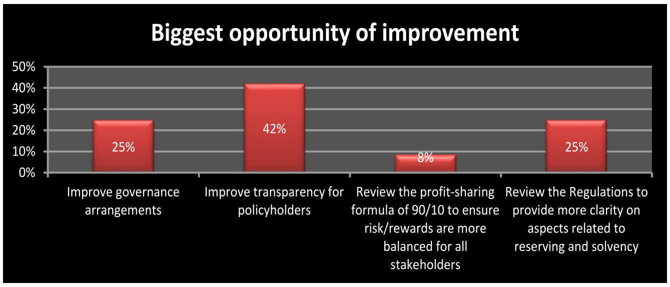
Smoothening is a unique value proposition offered to the par customers. But smoothening has a cost and hence has to be funded. Fund for Future Appropriation (FFA) is required to ensure returns can be smoothened. High FFA also has a competitive advantage where a fund can take more investment risks.

There is also need for modification of regulations especially to deal with situations like fall in value of equity the one that occurred as at March 20. There are solutions to handle negative equity Mark to Market (MTM) but none of them are perfect i.e. if reserves remain unchanged there would be an inconsistency for solvency purpose. On other hand if reserves are revised downward, P&L would be inconsistent.

Summary

To ensure that Par Products continue to prosper in India few aspects to be taken care of will be:

1. Sharing the surplus from various sources
2. Should not bear the brunt of inefficient expense management
3. Being fair to a discontinuing policy
4. Equity between different generations of policyholder
5. Transparency
6. Modification in Regulations
7. Adequate build-up of the FFA



Written by

Apeksha Momaya

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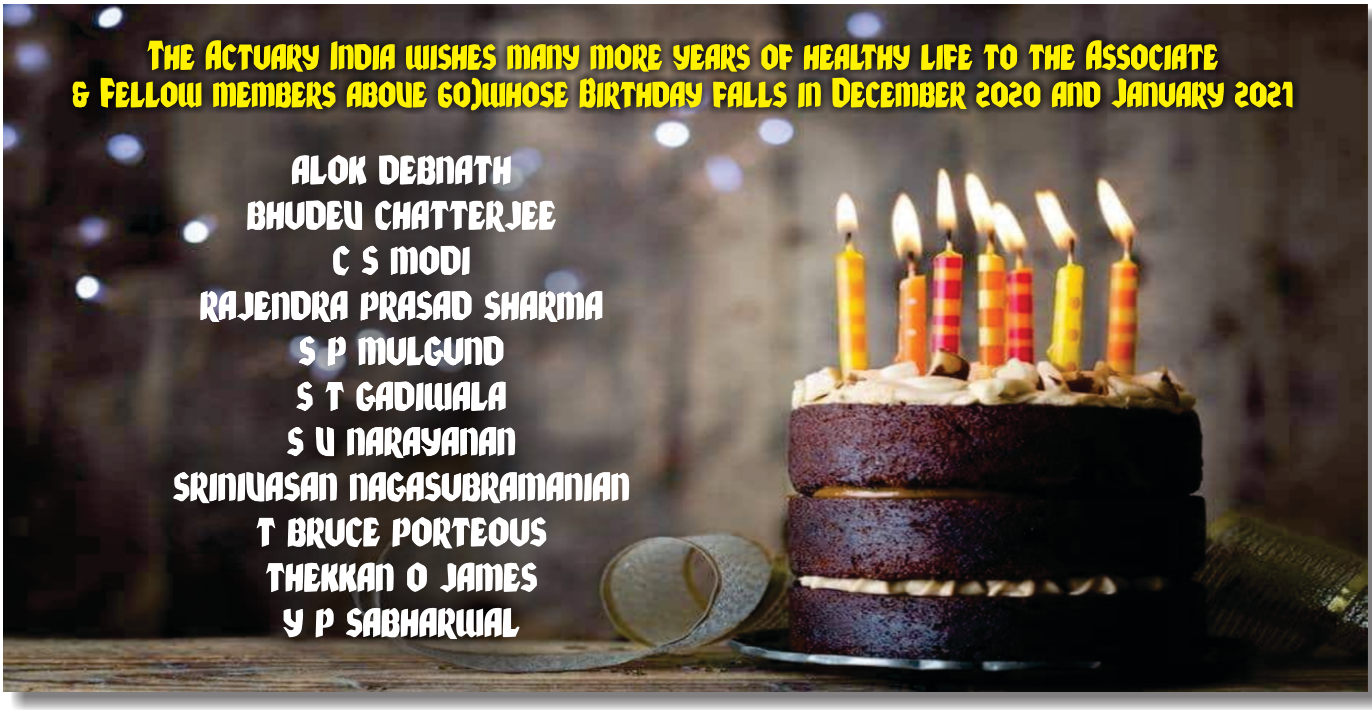
Apeksha is currently working in the Actuarial department (pricing) of Star Union Dai-ichi Life Insurance from August 2019.



Interacting with the legendary Actuary, Sh. N K Shinkar Saheb

Sh. N K Shinkar Saheb is former Chairman, LIC of India and at one time the consulting Actuary of IRDAI. My first interaction with Sh. Shinkar was in early 90's (perhaps in 1983-84) when he visited Kotdwar Branch Office under Divisional office Meerut and then Northern Zonal Office (Now North central), Kanpur UP. My Branch was a remotest possible Branch of those days. The Division In-charge would seldom visit the office and what to say of Zonal Manager. A news flashed out that Zonal Manager is going to visit the Branch office. The branch premises were cleaned and files and papers were arranged properly. Every organization has a tradition and tradition those days was to serve tea, samosa (stuffed potato roll) and one piece of sweet. Be it welcome of new employee, farewell or visit of seniors. I remember that Shinkar Saheb mixed well with the youngsters having average age of 23-24. So, a fear evaporated. Who knew then that he will superannuate as Chairman, LICI and I would interact with him as Deputy Director (Actuarial), IRDA (IRDAI now) in his capacity of Consulting Actuary, IRDAI after two decades? I had no inkling of Actuarial Science then and in snail mail era did not know that Shinkar Saheb is an Actuary by profession. The IRDA office was initially situated at Jeevan Bharati and a wing at Jeevan Tara building New Delhi. I was working as officer in Machine Section (MS) Department (IT now) of Northern Zonal Office and one fine day I got a communication that you have been posted on deputation to IRDAI. I had no practical exposure to actual Actuarial work. In MS Department I got to learn MS office and had shouldered two important projects- one Y2K implementation in 320 Branches, 15 Divisional Office and one Zonal Office and another was identification of Duplicate Policy series- Policies numbers overlapping of one branch to another and thus leading to many customer complaints. Except playing with the numbers, I had not undertaken core actuarial job. On deputation to IRDAI office, I was given file and use circular and a product. The Product was combination of unit linked and Universal Life. Three funds having minimum specified guarantee and above all combining endowment, money back and whole life features in one. I had seven days and then to discuss the product first with the Executive Director (Actuarial) and Consulting Actuary, Sh. Shinkar Saheb before discussions with the Appointed Actuary of the life insurance company. Seven days and I did not move anywhere from my seat during office hours and extra. No actuarial colleague was around as two officers were away from office on their respective personnel and official duties. I revised the unit linked chapter of life contingencies, read the universal life paper presented in GCA along with F& U circular and application. Searched the desk top for proforma designed for regulator's comments. Thoroughly went through the multiple pages ranging to 100 plus of F&U application. But a miracle happened that after seven days everything was crystal clear to me. I confidently discussed first with Executive Director (Actuarial) and thereafter with Sh. Shinkar Saheb, the Consulting Actuary. Shinkar Saheb was smiling on his own way. The smile still exists on his picture taken one and half year back from today. The Head of Operation and me then in the capacity of the Executive Director of IAI had gone to see ailing Sh. MG Diwan, Sir just before his death. He resided in a building which houses many former Chairpersons of LICI and Sh. Shinkar Saheb has also accommodation there.

The IRDAI office got shifted to the Hyderabad from Delhi where I had discussed the first F&U with Sihinkar Saheb. There as Deputy Director (Actuarial), I had installed first series of desk top at Parishram Bhavnam (IRDAI headquarter before current premises at jubilee hills) along with then Deputy Director (Investment). I was sharing a table with Sh Shinkar Saheb and suddenly it became emotional moments. I remembered twenty years journey, my actuarial journey years after Sh Shinkar Saheb visit to our remote branch, his reaching to top position in LICI and now guiding the industry. I also developed personally and professionally. That moment I was reviewing form NLB-1 of valuation report of a company now having 1 lac plus crore assets. On reconciliation of forms, NLB-1 and NLB-2, I was getting some difference. I had spent most of the night because there was pressure on me that it has been signed by seasoned Appointed Actuary having a full-fledged actuarial team and he himself a person of minor details. Anyways I was in air as I have traced some mistake(?) in valuation report. I took it to Shinkar Saheb and he smiled and first appreciated me for my going through the report in detail but then added that some figures are hidden/overlapped and there is no line item to show the difference and so the difference. I was completely taken a back. I struggled 4-5 extra hours and this person just looking to the figures explained the reason. This appreciation continued when I got chance to review the R1 of a life company which license was yet to be issued. I got to know how accounts are read and how the inner meaning of the accounts reveals its true meaning. This was a great learning which we do not get by reading the books or study material.

I also read the reinsurance treaties as part of my job and understood in detail. Now I can imagine I would be asking the silly questions as during our studies we may ask from the teacher. I never saw Shinkar Saheb irritating. He always encouraged to clear the actuarial exams.

I wish to thank Gururaj who immediately agreed to take me to another floor of building where Shinkar Saheb lived and fulfilled my long-time desire to visit Shinkar Saheb. I also wish to thank Shinkar Saheb son, who took both of us to the room where Saheb is living peacefully in the olden days and agreeing to take a photograph. A person who is appreciated by neighbours- A thorough gentleman, which I endorse completely!

The views expressed are personal and may need not be the views of IAI.

Dinesh Chandra Khansili
Former, Executive Director, IAI

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THE ORIENTAL INSURANCE COMPANY LIMITED

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CIN : U66010DL1947GOI007158 **Website : http://www.orientalinsurance.org.in**

APPOINTMENT OF PEER REVIEWER - ACTUARY

Applications are invited for peer review of the all statutory actuarial valuations carried out the Appointed Actuary of our Company for the Financial Year 2020-21 in compliance of APS 33 of Institute of Actuaries of India. Interested persons may submit application on or before 28.03.2021.

Please log on to our website https://orientalinsurance.org.in/web/guest/tenders for details.

Deputy General Manager (Actuarial)
mukesh.kapoor@orientalinsurance.co.in

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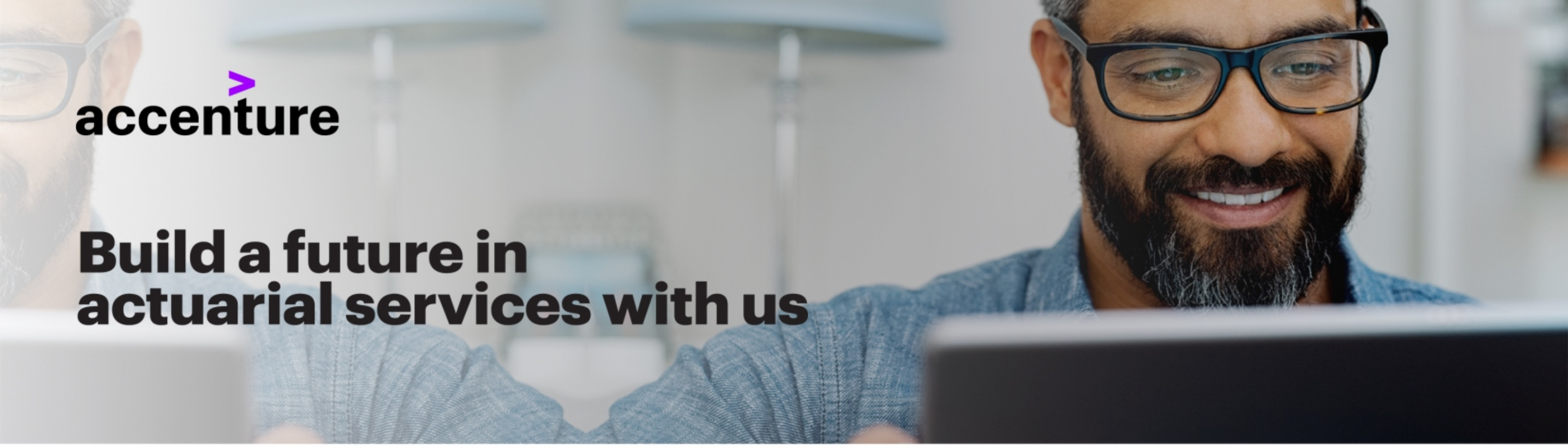
Applications are invited for the post of Full Time "Äppointed Actuary" from the candidates who are ordinarily resident in India as per IRDAI (Appointed Actuary) Regulations, 2017.

Name of the Post	Appointed Actuary
Number of Posts	One (1)
Eligibility	• The candidate should be a Fellow member in accordance with the Actuaries Act, 2006 • Passed specialization subject in General Insurance (Specialist Application level subject as prescribed by the Institute of Actuaris of India) or exempted from requirement of passing the subject specialisation as provided under IRDAI (Appointed Actuary) Regulations, 2017. • The candidate should have minimum 7 years relevant experience in General Insurance out of which at least 2 years shall be post fellowship experience. • The candidate should have at least 1 year post fellowship experience in annual statutory valuation of a general insurer. • The candidate should satisfy all requirements as specified in IRDAI (Appointed Actuary) Regualtions, 2017 (including amendments/modification, if any).
Emoluments and Benefits	Negotiable. Please Indicate your expectations
Duties and Obligations	As per IRDAI (Appointed Actuary) Regulations, 2017 and amendments/ modifications, if any
Place of Posting	New Delhi
Service Conditions	• Should be a resident of India, • During appointment he/she cannot work as an Appointed Actuary of any other Insurance Company nor can work in any other capacity in any General Insurance Company, • As specified in IRDAI (Appointed Actuary) Regulations, 2017.
Selection Procedure	Interview. The employment will be on contract basis.
How to Apply	Application complete with a details of past work experience, copies of relevant certificates/ documents and information with regard to compliance with requirements as stipulated in IRDAI (Appointed Actuary) Regulations, 2017 in a tabular format should be mailed to rsbahlan@orientalinsurance.co.in by **12th Feb 2021**. The hard copy of the application along with recent photograph may be sent on the following address:
	Dy. General Manager(P), The Oriental Insurance Company Limited **"Oriental House", Head Office, A-25/27, Asaf Ali Road, New Delhi-110002**

General Instructions:

1. Company reserves the right to reject any Application without assigning a reason
2. The decision of the Company will be final and binding in all the matters.
3. In case it is found at any stage of recruitment that the candidate does not fulfil the eligibility criteria and/or he/she has furnished any incorrect/false/incomplete information or has suppressed any material fact(s), the candidature will stand cancelled. If any of these shortcomings are noticed even after appointment his/her services are liable to be terminated forthwith. Before applying for any post, the candidate should ensure that he/she fulfils the eligibility and any other norms mentioned in this advertisement. The decision of the Company in respect of the matters concerning eligibility of the candidate, the stages at which such scrutiny of eligibility is to be undertaken, the documents to be produced for the purpose of conduct of interview selection and other matters relating to recruitment will be final and binding on the candidate.
4. The Company shall not entertain any correspondence or personal enquires. Canvassing in any form will disqualify the candidate.
5. Appointment will be subject to approval of Insurance Regulatory Development Authority of India.



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- Sound knowledge of actuarial principles including estimation and review of reserves, pricing and reporting (for Life & Annuity and Property & Casualty)
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Sahara India Life Insurance Company Ltd. which is based out of Lucknow, UP, India, incorporated in the year 2004, has a position for an **APPOINTED ACTUARY**.

The applicant should be a Fellow Member of the Institute of Actuaries of India and should satisfy all terms and conditions of the IRDAI (Appointed Actuary) Regulations 2017.

The selection will be based on the interview by the Selection Committee and approval of the Board besides the ultimate approval of the Insurance Regulatory and Development Authority of India.

Compensation package will be at par with the prevailing market rate for similar profile.

Position will be at Lucknow / Mumbai Corporate Office of Sahara India Life Insurance Company Ltd.

saharalife/2020-21/15

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Sahara India Life Insurance Co. Ltd.

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E-mail: hrd.silicl@sahara.in or yuvraj.singh@sahara.in | www.saharalife.com
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78th Foundation Day

We, M/s. K. A. Pandit Consultants and Actuaries turn 78 on 1st February 2021.

On this special day, we acknowledge the support and faith our clients and well-wishers have bestowed on us, making it the biggest drive towards our continued growth.

We sincerely thank you for inspiring and endorsing us all these years and trust to receive this continued support in the future.

We endeavour to partner in your growth and look forward to the best in the coming years!

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