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INDIAN ACTUARIAL PROFESSION
Serving the Cause of Public Interest

THE ORIENTAL INSURANCE COMPANY LIMITED

(A Govt. of India Undertaking)
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CONTENTS

"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 THE DESK OF CHIEF EDITOR
Ms. Bhavna Verma 4

EVENT REPORT
6th Seminar on ERM
Ms. Somya Tandon 6

31st India Fellowship Seminar (IFS)
Mr. Varun Agarwal & Mr. Sukanta Roy Chowdhury 13

ANNOUNCEMENT
16th Current Issues Seminar in Retirement Benefits (16th CIRB) 19
6th Seminar on Current Issues in General Insurance (6th CIGI) 20
Webinar on Analytics in Banking by Vineet Khanna 29

FEATURES
New Product Regulations
Mr. Joydeep K Roy & Mr. Sunny Aggarwal 21

Actuaries Shake Hands with Finance
Mr. Suresh Sindhi 25

Impact of Registered Valuer Certification on the work of Actuaries
Mr. Jenil Shah 27

COUNTRY REPORT
South Africa
Mr. Krishen Sukdev 30

CAREER CORNER
The Oriental Insurance Company Limited 2
Deposit Insurance and Credit Guarantee Corporation 5

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From the Desk of Chief Editor

Ms. Bhavna Verma

Greetings everyone! As the second Actuaries Day approaches near, I was looking back at my own journey in this profession and thought I'll pen down some of the reasons why I believe being an actuary deserves celebration. Here are my top seven.

- As an actuary, I have potentially learnt the most practical applications of varied fields of study which are relevant in the real world.

- I set off on a laborious journey called actuarial qualification which although challenging, was as enjoyable as the destination. But nothing succeeded like success, and by that I mean Fellowship.

- Along the way, I learnt how to balance work and study with life's increasing responsibilities, potentially the most important 'life' skill one needs to have in the increasingly complex and time crunched world. Learning is a way of life now.

- I have a globally relevant and industry-agnostic qualification which is the ideal springboard to leaping into multiple areas.

- I have great mentors who inspire and guide me, brilliant colleagues who are ever ready to engage in subject matter discussions, and enthusiastic young talent on their own journeys.

- I have developed the ability to wear different hats and evaluate all stakeholder positions when analyzing any situation.

- **Being an actuary is a position of privilege, we just need to use it wisely.**

Nevertheless, coming back to business, the level of activity in the economy, industry and profession does not leave too much time to reminisce. On the life insurance side, the Product Regulations 2019 have been released which will keep companies busy for the next few months; a feature on the same is included in this issue. Among other pieces, this edition also covers reportage of the recently held ERM seminar and the 31st Fellowship seminar, which had some interesting case studies on technical matters and professionalism aspects. Happy reading!

Block Your Dates

UPCOMING EVENTS

Upcoming Events scheduled in the month of August and September, 2019

6th Seminar on Current Issues in General Insurance (CIGI) on 29 & 30 August, 2019 in Hotel Sea Princess, Mumbai

16th Seminar on Current Issues in Retirement Benefits (CIRB) on 5 & 6 September, 2019 in Hotel Sea Princess, Mumbai

Seminar on Crop Insurance on 26 September, 2019 at Hotel Sea Princess, Mumbai.

Actuaries Day on 21 August, 2019

WEBINARS

Analytics in Banking by Vineet Khanna, Executive Director, SAS Institute India (Pvt) Ltd. – 10 August 2019, 12.00 to 1.00 pm

Opportunities for Actuaries in Insurance Industry by Phanesh Modukuru, SVP, SwissRe Global Business Solutions India Pvt Ltd – 31 August 2019, 12.00 to 1.00 pm

For more information visit www.actuariesindia.org

निक्षेप बीमा और प्रत्यय गारंटी निगम

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निविदा सूचना

निगम के बीमांकिक दायित्व के आकलन हेतु बीमांकिक फर्म / कंपनी की नियुक्ति के लिए निक्षेप बीमा और प्रत्यय गारंटी निगम (निबीप्रगानि) दो भागों (तकनीकी बोली और मूल्य बोली (अलग–अलग लिफाफों में))में सीलबंद निविदा आमंत्रित करता है। प्रस्तावों को एक बड़े लिफाफे में रखा जाए जिसपर स्पष्ट अक्षरों में "बीमांकिक की नियुक्ति / Appointment of Actuary" लिखा हो और वह सीलबंद हो और प्रस्ताव 23 अगस्त, 2019 को शाम 04.00 बजे तक या उसके पहले प्रस्तुत किया जाए। निविदाएं 26 अगस्त, 2019 को दोपहर 03.30 बजे खोली जाएंगी।

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उप महाप्रबंधक

Deposit Insurance and Credit Guarantee Corporation

www.dicgc.org.in

Tender Notice

Deposit Insurance and Credit Guarantee Corporation (DICGC) invites sealed tenders in two parts (Technical Bid and Price Bid (in separate envelopes)) for appointment of Actuary Firm / Company for estimating the actuarial liability of the Corporation. The proposals should be put in a large envelope super scribed “Appointment of Actuary” and should be sealed and submitted to the Corporation on or before August 23, 2019 at 04:00 pm. The tenders will be opened on August 26, 2019 at 03:30 pm.

The details regarding participation for this tender can be obtained by logging on to www.dicgc.org.in

Deepak Narang
Deputy General Manager

6th Seminar on ERM

Organised by: Advisory Group on Risk Management
Venue: Hotel Sea Princess, Mumbai Date: 28th June, 2019

Session: Inaugural Address & Expectations
Speaker: Mr. Sunil Sharma

With close to 29 years of diversified experience in the insurance and reinsurance sector, **Mr. Sunil Sharma** has worked across countries. He is currently the Chief Actuary and Chief Risk Officer for Kotak Mahindra Life Insurance Company India Ltd (Kotak Life) and also serves as the President of IAI.

Session Highlights

Mr. Sunil Sharma greeted by stating that "the biggest risk is not taking risk". He was glad to announce the uniqueness of this seminar highlighting that professionals from many fields were in attendance with a significant proportion from non-actuarial background. His excitement fueled the sessions during the day with the next one being on Crop Insurance.

Session: Welcome and Introduction
Speaker: Mr. Kailash Mittal

Mr. Kailash Mittal has a diverse background with extensive experience in risk management, pricing, statutory reporting, shareholder reporting and business planning. Currently, he is a Partner of Financial Risk Management practice in KPMG India and is also serving as Chairperson of Advisory Group on Risk Management.

Session Highlights

Mr. Kailash Mittal extended a warm welcome to all and gave a brief of the agenda to be followed during the course of the day. He started by showing clippings from The Economic Times emphasizing upon the fact that risk and risk management is relevant everywhere, within an organization, across industries in fact in our daily lives.

He conducted a live poll with one word answers to certain questions to ascertain audience preferences to Risk and these answers based on majority preferences opened the session for the day.

Session: Credit risk - What is a true AAA rated paper, learnings from experience?
Speakers: Mr. Rajosik Banerjee & Mr. Ajay Sirikonda

Mr. Rajosik Banerjee leads the Financial Risk

Management practice in KPMG India and has over 16 years of experience in risk management, banking and financial instruments. He has extensive experience of implementing treasury solutions and has led several Basel and treasury related implementation projects across banks. He has also been associated with the top management of corporates to supplement delivery of services and drive the strategic vision.

Mr. Ajay Sirikonda has over 12 years of experience in credit risk and enterprise risk management (ERM). He has worked with over 30 Banks in 10 plus countries covering India, Switzerland, UK, ASEAN countries, Middle East and Africa. He is an expert in credit risk modelling, Basel & IFRS9 implementations. Currently, he leads the Credit Risk advisory practice as part of Financial Service Risk management practice of EY.

Session Highlights

Mr. Rajosik Banerjee commenced the session by questioning the shortcoming of credit ratings with typical example of downfall of Lehman Brothers and Infrastructure Leasing & Financial Services Limited (IL&FS). He corroborated that presently credit ratings do not account for rapidly moving markets and impact of external factors.

The concept of credit risk was briefly explained highlighting the importance of strong risk management governance, robust credit rating framework and frequency of refreshing financial information by the issuer. Further, the process of creating a credit risk scorecard was discussed that included defining parameters for credit rating, assigning weights to parameters, validating their relevance in dynamic market and also testing under stressed scenario. He further highlighted the importance of applying stress at macro level, micro level and adhoc (such as political issues impacting parameters) instead of relying on individual parameter testing.

Mr. Ajay Sirikonda acknowledged the discussion and elaborated on ways to identify early warning signals (EWS). This included choosing the right set of signals, defining thresholds and limits and identifying mitigation action along with periodic review. The sources of EWS were also discussed at length with sources being both internal and external. Internal sources included financial statements of organizations and external included RBI database, statutory returns, Financial website (Bloomberg), CIBIL, Moody's etc.

Both the speakers concluded by appreciating SEBI's recent move to issue stricter disclosure guidelines for credit rating agencies where they will have to make nuanced disclosures on factors such as rating process, default studies, linkages with subsidiaries to avoid conflict of interest etc.

Session: Crop Insurance - Acceptance since launch and affordable pricing in an uncertain market!

Speaker: Ms. Harini Kannan

Ms. Harini Kannan is a senior market underwriter in Swiss Re India branch and oversees all lines of business including strategy and business development. Prior to this, she was the Head of Agriculture Reinsurance portfolio for Asia Pacific (excluding China) at Swiss Re Singapore. Her areas of interest include micro-insurance, financial instruments, actuarial and statistical applications and risk management.

Session Highlights

The session provided an overview on Crop Insurance business in India and the challenges faced in pricing these products due to overdependence on weather and fragmented land holdings.

The speaker highlighted how agriculture insurance industry has evolved over the years in India and moved from indemnity based insurance, followed by weather based crop insurance schemes in 2007 to actuarially

priced, reinsured, subsidized schemes like Pradhan Mantri Fasal Bima Yojana in 2016. Further, the speaker underlined several deterrents of crop insurance industry such as delayed subsidies, lack of historical data, inadequacy in estimation, spurious enrollments, non-prudent (tender based) pricing, claims management etc. The types of products available in Indian market were also briefly explained. The speaker asserted that currently government's Pradhan Mantri Fasal Bima Yojana dominates the market with claims ratio of 90% and a loss ratio of 110%.

Additionally, the importance of de-trending to improve distorted data sets and improvements in granularity of data were discussed. The session concluded with hindrances in accurate reserving due to lack of expertise on rural claims issues and the ever continuing debate on using a parametric approach or an indemnity approach of reserving.

Session: Cyber Risk - How to really assess it??

Speaker: Mr. Kunal Pande

Mr. Kunal Pande heads Financial Services Risk Consulting business for KPMG in India. In his career spanning two decades, he has provided advisory services to a large number multinational and Indian clients in BFSI and Telcom IT verticals. He was a wide range of experience in technology enabled transformation, and risk management initiatives like technology risk, cyber security, data governance, etc.

Session Highlights

The speaker started the session with the impact of Cyber Risk by displaying images of CEOs of four large firms who lost their jobs within 19 days to 24 months. He explained what Cyber Risk is and touched upon the recent rise in multimedia risk.

He continued by posing a question that "Whether Cyber Risk is digital or physical or both?" which led to a discussion around how it can be both. The speaker further explained the physical nature of Cyber Risk with an example of Tesla car being taken over and misused by an individual. The speaker highlighted the impact of security breach, such as business interruption, reputational damage, increased liability etc. Further, the key drivers of increasing Cyber Risk complexity were elucidated like regulatory changes, dynamic markets with ever increasing cyber threats and exposure, paradigm shift in technology etc. The importance of acting swiftly in case of a cyber-threat was also emphasized upon by separately laying out its immediate and long term impact.

The session concluded with ways to protect an organization from Cyber threat such as employing cyber business intelligence, developing robust models to incorporate dynamic nature of the market and quantifying risks by carrying out cyber stress testing at an industry level.

Session: Risk Based Capital - Regimes in Asia and lessons for India, including an update on RBC in India

Speakers: Mr. Heerak Basu & Mr. Philip Jackson

Mr. Heerak Basu is a consulting actuary with Milliman's Life Insurance consulting practice in India. Prior to Milliman, he was working with Tata AIA Life for more than 12 years as their Appointed Actuary. Mr. Basu has also served on the Council of the Institute of Actuaries and was Chairman of the Institute's Life Insurance Advisory Board. He currently sits on the Appellate Authority constituted by the Government of India.

Mr. Philip Jackson is a Principal in Milliman's life insurance practice, based in Mumbai. He supports projects in India and the Asia-Pacific region, primarily working on embedded value and M&A projects.

Session Highlights

The speaker began by highlighting the similarities in

concept of Indian Embedded Value (IEV) reporting, Risk Based Capital (RBC) and IRFS while also underlining the different objectives achieved by each of them. It was emphasized that though both IEV and IFRS are methods of value creation for stakeholders, they do not consider each type of risk unlike Risk Based Capital approach which is more risk sensitive.

The session then continued with Global overview of the RBC framework with a focus on Asia pacific region. It was shared that Japan, South Korea, Taiwan and India currently follow factor-based Solvency I. Further, Singapore is one of the first Asian countries to adopt RBC - I in 2004 and is expected to evolve to RBC II by 2020.

The speakers further discussed about the parameters of RBC including asset valuation, risk margins, risk charges, diversification, negative reserves, discount rates etc. He also highlighted the complications associated with these parameters for India and steps taken by Singapore and other Asian markets to overcome these complications. The speakers concluded the session by presenting both positive and negative implications of RBC for various product types compared to the current approach.

Session: Annuity - A business opportunity OR a risky proposition?

Speakers: Mr. Kailash Mittal (on behalf of Mr. Pawan Sharma) & Mr. Dinesh Pant

Mr. Kailash Mittal has a diverse background having extensively worked across areas related to risk management, pricing, statutory reporting, shareholder reporting and business planning. Currently, he is a Partner of Financial Risk Management practice in KPMG India and is also serving as Chairperson of Advisory Group on Risk Management.

With more than 28 years of experience, **Mr. Dinesh Pant** is a strong financial services professional having held senior management positions in India and abroad in various areas - Actuarial, Investments, Managerial and Operational. He is currently the Appointed Actuary of Life Insurance Corporation, the largest life insurance company in India.

Session Highlights

The session provided an overview on the opportunities, challenges and risks associated with annuity business. The speaker stated that opportunity under annuity is the associated risks itself. The risks in annuity business were briefly discussed including longevity, guarantees under the product and asset liability matching (ALM). The discussion on methodology of ALM matching entailed the use of bootstrapping method to identify best asset classes to match expected outgoes, grouping liabilities in 5 year buckets and investing a small proportion in equities to uplift the asset value. Further, the use of stochastic modelling to determine the proportion of equity investment was emphasized upon. The concept of borrowing from shareholders in case of lack of capital to fund payouts was also described by the speaker.

The session continued with a discussion on challenges in annuity business which primarily included regulatory limitations and the capability of insurers to assess and manage the risk. The speaker elaborated on regulatory challenges such as limitation on annuity structure, restriction on investment in below AA bonds, lack of availability of long term and index linked assets, competition to offer better annuities despite reducing in interest rates etc.

The speaker ended the session by emphasizing on the need to strike a balance between prudent and realistic assumptions and move towards carving practical

Session: Liquidity Risk - Better be 'liquid' to stay afloat

Speaker: Mr. Kuntal Sur

Mr. Kuntal Sur has over 22 years of experience across 14 countries as an Economist, Banker and Risk Management consultant with number of leading financial institutions and corporates on risk strategy and governance,

analytics & Basel issues. He also specializes in advising corporates on currency & commodity risk management, hedging strategy, hedging instruments and pricing.

Session Highlights

Mr. Kuntal Sur initiated by discussing what liquidity risk is and the need to manage this risk as the number of financial institutions failing due to liquidity is higher than those failing due to insolvency. He then underlined the liquidity crisis in Indian market citing example of IL&FS. He discussed how IL&FS's reliance on short term borrowing to meet long term liabilities posed reinvestment risk and thus led to a domino effect.

Further, evolution of Indian market was elaborated upon steps taken, such as RBI increasing the Liquidity Coverage Ratio (LCR) requirement for Banks from 60% in 2015 to 100% in 2019. Further, guidelines on ILAAP (Internal Liquidity Adequacy Assessment Process) been published for identification, measurement, management and monitoring of liquidity has also contributed to this evolution.

The speaker quickly listed the factors to consider for creating a strong liquidity framework including strong governance, a funding strategy with effective diversification, risk monitoring etc. In addition to above, the need for stress testing, scenario analysis and a contingency funding plan was also emphasized upon by the speaker.

The session concluded with a discussion on key liquidity compliance metrics to be analyzed and how ILAAP would bring a holistic and forward looking approach to liquidity with robust controls and structured liquidity management practices.

Session: Catastrophic Risk (General Insurance) - Pricing and using Reinsurance for risk management

Speaker: Mr. Jyoti Majumdar

Mr. Jyoti Majumdar is the business head of reinsurance business for India and the subcontinent at Willis Towers Watson India Insurance Brokers Private Ltd. At Willis Towers Watson, he is responsible for expanding the reinsurance broking and consulting business for India and the subcontinent. His focus areas are agriculture, health and customized reinsurance solutions for specific client needs.

Session Highlights

The session started with a refresher on concept of reinsurance including its significance and types. The significance of reinsurance included risk transfer, industry knowledge, risk financing, protection from catastrophic events, enhance underwriting capability etc. Further, the challenges for reinsurers including taxation and stringent regulatory barriers for setting up reinsurance branches in India were highlighted by the speaker.

The session came to an interesting point with the discussion on alternate capital to convert insurance risk into investment opportunities. The speaker listed the types of instruments for alternate capital including Insurance Linked Securities (ILS), catastrophe bonds, Industry Loss Warranty (ILW), Syndicate sidecars etc. The speaker explained the fundamentals of ILS, a collateralized reinsurance product that provides insurance or reinsurance capacity to issuers. ILS investments have low volatility and low correlation with economic and capital market movements and the

Session: Systematic Risk reduction in counterparty credit risk in OTC Derivative contracts: A case study

Speaker: Mr. Anupam K. Mitra

Mr. Anupam K. Mitra is Head Derivatives, Trade Repository & LOU at Clearing Corporation of India Limited (CCIL). He has worked with CCIL to contribute to the strengthening of risk management framework for the entire banking system and reduce systemic risk arising out of bilateral derivatives OTC markets.

Session Highlights

The speaker commenced the session by stating examples of companies like Freddie & Fannie, Bear Stearns and Lehman Brothers that failed in 2008 as a part of the Great Recession primarily due to the subprime mortgage crises. He highlighted how these companies were subsequently sold or rescued by financial institutions and the US government.

He continued by sharing key decisions made during G20 leaders Pittsburg summit held in 2009 with the most important being the issuance of guidelines on trading, reporting and clearing of standardized over-the-counter (OTC) derivative contracts. The following future developments in OTC markets were also touched upon:

- Central Clearing Counterparty (CCP) to facilitate trading;
- Legal Entity Identifier (LEI) to identify legal entities participating in financial transactions;
- ASTROID – a IRS trading platform developed by CCIL etc.

The speaker concluded by briefly discussing the sluggish progress of India in derivative implementation due to lack of floating rate benchmarks, RBI's conservative and protective nature towards derivative contracts etc.

Session: CRO Roundtable - Effectiveness of a CRO in a fast changing environment!

Moderators: Mr. Heerak Basu and Mr. Kailash Mittal

Panelists: Mr. Gavin R. Maistry, Mr. Shailendra Kothavale, Mr. Muzammil Patel, Mr. Anupam K. Mitra, Mr. Sachin Saxena, Mr. Delzad D. Jivaasha and Mr. Siddharth Kaushik

Session Highlights

The panel discussion was based on questions (Q) from **Mr. Heerak Basu** and **Mr. Kailash Mittal** as moderators and responses (A) by panelists on the role of CRO in the dynamic environment:

Q: How has the expectation of Board from the CRO changed over the last 10 years?

A: Mr. Shailendra Kothavale responded first stating that CRO's role has always been regulated by the Authority, however with evolution in organization strategy and business planning the CRO is no longer required to think long term alone but also short term. **Mr. Delzad D. Jivaasha** added that earlier the CRO was expected to be involved in reporting and give assurance to the Board. However, today the CRO is expected to be in a position to make the organization duck every single bullet coming its way by not only stating the risks but also proposing solutions. He/ she is expected not only to be conscious keeper but also a person to give confidence to the Board that the organization will be sustainable in the future.

Q: As a consequence, is CRO as a proposition diluted? Are we questioning the second or third line of defense while taking steps as a CRO?

A: Mr. Gavin R. Maistry having international experience highlighted that many countries under Solvency II regime have established the three lines of defense. However, while taking decisions the second and third line of defense contracts and expands depending on the situation. Nevertheless, he suggested that the CRO needs to maintain a balance between the level of independence and early involvement in decision making. **Mr. Sachin Saxena** supplemented that CROs are also expected to work with first lines such as submitting an independent report to the Board with strategic review of business plan, measure of success and ways to monitor risks.

Q: What obstacles do CROs come across?

A: Mr. Delzad D. Jivaasha responded that the biggest obstacle is gaining the acceptance of people to risk management, making them accept that CRO is a well-wisher and not a fault finder or an obstruction to business. According to **Mr. Shailendra Kothavale**, earning a seat at the table can be challenge for a CRO for which one needs to go against the tide by predicting unforeseen events or identifying early warnings and proposing ways to maneuver around them. He emphasized that these are not only obstacles but opportunities for a CRO. **Mr. Gavin R.**

Maistry added based on his experience that a CROs job becomes smooth with the support from the CEO. Mr. Sachin Saxena echoed other panelist's views and summarized that CROs are now the new COO, that is Chief Opportunity Officers who can earn a seat on the table by bringing an upside to the business with new approaches to manage risks.

Q: How equipped are the CROs now as compared to the last decade?

A: Mr. Muzammil Patel responded that over the last decade the quality of talent has improved and a more meaningful risk metric is in place with an incentive mechanism to do the right things. However, he was discontent that there is still a gap in our technology both for monitoring and quantifying risks. Mr. Anupam K. Mitra suggested that advancements in machine learning, artificial intelligence and Natural Language Processing (NLP) can help CROs to identify any risk emanating for the business.

Q: With the growth of guaranteed products in the market offering high returns, what tools are available to the CRO to hedge the interest rate risk?

A: Mr. Muzammil Patel replied that there are various hedging instruments available to manage interest rate risks such as Interest Rate Swaps (IRS), Interest Rate Futures, Option Structures and in theory Forward Rate Agreements (FRA). However, they have their limitations including RBI's conservative view on structure of FRAs and therefore there is a need for CROs to also look at delta in duration and convexity of the product apart from regular ALM.

Mr. Sachin Saxena acknowledged Mr. Muzammil Patel's views and summarized that interest rate risk is a sticky issue for the industry as a whole and there is no easy solution to manage this risk. Nevertheless, the CRO can ensure that moderate and short term guaranteed products are offered, regularly monitor the capital requirements for such products, manage with partial hedging instruments, and create ample awareness of the risk to the Board.

Q: What are the capital management tools that CROs can bring to the table?

A: Mr. Gavin R. Maistry displayed excitement about Financial Reinsurance being allowed as a well-established tool to raise capital which can be a competitive as well a complex tool. Mr. Delzad D. Jivaasha corroborated Mr. Gavin R. Maistry and highlighted that CROs are now expected to be a part of internal capital adequacy assessment and present its outcomes to the Board. Therefore, it has become imperative for CROs to have a strong grip of the business, identify types of catastrophic risks, identify support that can be provided by reinsurers like Financial Reinsurance etc. Further, they are required to understand the impact of risks on business and then quantify the capital requirement to restore solvency margin. With tools like reinsurance models and various catastrophic models, the CRO can assess the types of catastrophic risk the Company's exposed to and their impact on the business.

The moderators then opened the floor to questions from attendees. One of the questions was, whether the insurance industry welcomes actuaries as CROs, to which Mr. Gavin R. Maistry responded that majority of the CRO's present in the panelists were actuaries. Further, Mr. Heerak Basu reinforced that actuaries can be CROs as they have complete knowledge of the business and are equipped to manage mortality risks, ALM mis-matching risk etc. Concerns were also raised by one of the attendees on whether actuaries can be CROs in other than insurance industry. Responding to a question on how CROs alone can manage risks that span across the organization and are a responsibility of everyone, Mr. Delzad D. Jivaasha mentioned that this battle can be won primarily by convincing everyone about top risks for the company. Further, by having interpersonal interactions with teams, organizing training programs and sharing experiences/ impacts faced by other organizations through emailers can help the CRO to get the cooperation of everyone to manage risks.

Vote of Thanks

The seminar was concluded by a vote of thanks by Mr. Suranjan Banerjee, who thanked the speakers and all participants for an insightful and meaningful seminar. He also took the opportunity to thank all members of the Advisory Group on Risk Management and noted that this seminar was possible due to the hard work and perseverance of the committee members and the organizing staff of IAI.

Written by

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"Ms. Somya Tandon is a student member of IAI and currently working with Max Life Insurance Co. Ltd. in Financial Risk Management and Reinsurance team."

31st India Fellowship Seminar (IFS)

Organised by: Advisory Group on Professionalism, Ethics & Conduct
Venue: Hotel Sea Princess, Mumbai **Date:** 4th & 5th July, 2019

Session: Welcome Address

The 31st India Fellowship Seminar (IFS) started with a welcome address from **Mr. K. S. Gopalakrishnan**, Chairperson, Professionalism, Ethics & Conduct Advisory Group, IAI.

Session: Presidential Address

This was followed by presidential address from **Mr. Sunil Sharma**, President, IAI. Mr. Sunil urged actuaries to go beyond the traditional areas. In this context he briefly talked about the unexplored domains of General insurance, Risk Management, Banking, Artificial intelligence and Data science.

Session: Keynote Address

Ms. Pournima Gupte, Member (Actuary), IRDAI, shared her insights on what professionalism is. Ms. Pournima touched upon several examples of professional behavior, drawn from her rich experience. She also emphasized the importance of complying in spirit rather than by the word of law. Being fair to all the stakeholders was another aspect of professionalism touched upon. This was further clarified by stating an example of cross-subsidies between policyholders of different age-groups if a single premium rate was offered by Insurer. She also touched upon possible situations of conflict of interest in the life of an actuary and how to deal with them. She also emphasized the importance of Integrity in a professional environment stating few examples from the Industry.

Session: Health Insurance Case Study - Standardization of Exclusion Clauses in Health Insurance Contracts

Guide: Ms. Anuradha Sriram

Speakers: Mr. Manish Sen, Ms. Swati Jaiswal, Mr. Sandeep Chakraborty

Session Highlights

The team kick-started the session by emphasizing the

importance of health insurance business in the country by presenting some key statistics including the high health cost inflation. The team then gave a detailed presentation of the recent regulatory proposed guidelines on standardization in health insurance covering both opportunities and challenges involved. Specific focus was given to the proposed guideline on HIV/AIDS wherein customers, infected with HIV/AIDS, cannot be discriminated against with respect to denial/unfair treatment in the provision of insurance.

The team also gave a glimpse of the current practice in international markets regarding various aspects related to standardization and policy exclusions. The team finally concluded the session by giving some key recommendations for the government, industry and regulatory bodies.

Session: Life Insurance - Technical Topic Case Study

Guide: Mr. Bikash Choudhary

Speakers: Ms. Nidhi Pandey, Mr. Sachin Somani, Ms. Dhwani Vinit Gupta, Mr. Anoop Michael

Session Highlights

The team assessed the fairness of the Guaranteed Surrender Value (GSV) factors prescribed under Product Regulations during the early duration of the policy. In doing so, the team made considerations to the trend of high lapses of life insurance policies during early duration and the Policyholders' Reasonable Expectations (PRE) created through Benefit Illustrations and other documents provider to policyholders.

The team set the context by highlighting various facts about persistency trends, complaints received by policyholders, governing regulations & guidelines and possible reasons for surrender at early policy duration. The team also discussed several factors that could be taken into account while setting surrender values. This includes points important from a policyholders' perspective as well as points important from insurer's perspective. The team made several recommendations on ways to improve surrender values. Lastly, the team concluded by suggesting alternative solutions to improve the trust deficit between the insurer & policyholder and improve customer satisfaction.

Session: General Insurance Case Study: Current regulatory framework and challenges for FRBs (Foreign Reinsurance Branches)

Guide: Mr. A V Karthikeyan

Speakers: Mr. Anshul Mittal, Ms. Isha Khera, Mr. Sushant Jain, Ms. Anubhooti Atul Jain

Session Highlights

The team began the session by giving a very detailed overview of how the reinsurance regulations have been amended since 1938 in India and what the key objective of the regulator has been. Reinsurance placements, including the order of preference for cessions by Indian insurers, was one of the major reinsurance regulations.

This was followed by a detailed analysis on the various opportunities and challenges faced by Insurers and Foreign Reinsurance Branches (FRBs). Compliance with various laws notably -- The Assets, Liabilities and Solvency Margin (ALSM) Regulations 2016, was emphasized to be one of the major challenges facing FRBs. Other challenges include availability of suitable & credible data for reserving and pricing, minimum retention guidelines for insurers leading to limited business for the Reinsurer, norms for appointing an Actuary per APS 21, and APS 33 (Peer review) among others.

Session: Pension & Annuity: Roadblocks, Suggestion and Way Ahead

Guide: Mr. Abhishek Chadha

Speakers: Mr. Ankit Maheshwari, Mr. Sujeet Sanjeev Shetty, Ms. Deepika Sachdeva

Session Highlights

The team kick-started the session by giving some facts about the penetration of annuity market in India. The team highlighted some of the key demographic trends in the country to demonstrate the opportunity the insurers have in developing the pension market in the country. However, there are several roadblocks in this direction, both for the customer and insurer, as per the team. Lack of product flexibility, inflation risk, unfavorable tax laws, low financial literacy, low disposable income, lower returns on annuity are some of the roadblocks for the customer. On the other hand, insurer faces the challenges on increasing longevity, unavailability of long term assets, lack of longevity swap market, lack of reinsurer support, competition from other financial instruments to name a few.

Finally, the team made several recommendations for various stakeholders viz. Insurers, Regulator and Government to increase the penetration of pension/annuity market in the country.

Session: Professionalism Case Study

Guide: Ms. Rajeshwarie VS

Speakers: Ms. Chehak Jain, Mr. Arindam Chakraborty, Mr. Rahul Gupta

Session Highlights

The team analyzed a very interesting case-study wherein a Partner of a Start-up Actuarial Firm, involved in actuarial audit of an Insurer, finds a key actuarial assumption to be unacceptable. The CA of the Insurer is not of the view of changing the assumption. The Partner is now in a tricky situation as the CA has been his mentor since many years and has also been the key person to give the assignment to Partner's Firm.

The team touched upon various guidance and professional standards available to the Partner to make a decision. This includes aspects on conflict of interest, confidentiality issues if advice is sought from a third party, potential regulatory breach among others. The team then presented three options available to the Partner, highlighting the implications of each and the choice of best option as per each of the team member.

Session: IAI Disciplinary Process

Speaker: Mr. Richard Holloway, FIAI

Mr. Richard Holloway is the managing director of Milliman's South East Asia and India life consulting businesses, based in Singapore. He joined the Firm in 2010. Prior to Milliman, Richard spent 23 years with Watson Wyatt the last 16 of which were in Asia Pacific.

Session Highlights

Richard gave a very interesting overview of the IAI

disciplinary process highlighting some aspects from the UK Actuarial Institute as well.

The first part of the session gave a detailed overview of the disciplinary process followed by the Institute of Actuaries of India. Richard highlighted that the process has much resemblance to the process on court proceedings.

A video, taken from the Institute and Faculty of Actuaries, UK was played next. The video brought home the importance of having a whistleblowing process and to assess all complaints before they are formalized.

Mr. Richard then presented few key statistics of complaints received by the UK Actuarial institute. It was observed that very few of these complaints are related to core professional issues related to actuarial practice while most relate to routine compliance related aspects.

Session: Professionalism Case Study

Guide: Mr. Sabyasachi Sarkar

Speakers: Mr. Vivek Pradeep Datta, Mr. Krishna Singla, Mr. Shaikh Thaika

Session Highlights

The team presented an interesting case-study wherein a life insurer, looking to expand in the term insurance segment, considers hiring a pricing actuary of a competitor. In the interview the CA of the Insurer asks very probing questions regarding the assumptions and profitability of the competitor. The pricing actuary, the interviewee, is faced with the dilemma of successfully clearing the interview at the cost of company specific sensitive information.

The team began the session by explaining the key guiding principles for an actuarial professional. This

includes aspects about conflict of interest, professional conduct, integrity, confidentiality, contractual obligations with the employer, professional communication among others. The team thereby discussed at length the various considerations that should be taken by Pricing actuary (interviewee) and Chief Actuary (Interviewer). The team then assessed the various options available to the interviewee. The team finally concluded the session by emphasizing that Actuaries should maintain high professional standards by strictly following Ethics, professional conduct standards, various guidance notes and actuarial practice standards.

Session: Insurance - Professionalism Case Study

Guide: Mr. Heerak Basu

Speakers: Mr. Tanay Chandra, Ms. Gayathri Khanna, Mr. Sreejith Sivarama Pillai, Mr. Gaurav Taneja

Session Highlights

Another interesting case study presented was with respect to a situation wherein a recently appointed actuary, responsible for projecting solvency margin, finds that the solvency ratio at the end of May is 144%, well below the company's targets, while the forecast

in April was greater than 170% for the next 6 months. It is stated that the Chief Financial Officer (CFO) is not concerned about the situation because the solvency is externally reported only at end of each Quarter.

The team began the session by explaining various regulations on this topic viz. Insurance Laws (Amendment) Act 2015, ALSM Regulations 2016, AA Regulation 2017, relevant Actuarial Practice Standards and Professional Conduct Standards. The team then recommended a course of action for the actuary. This includes the validation and analysis of current and projected solvency positions. The team finally analyzed in detail three options available to the actuary and the impact of each.

Session: Life Insurance/ Investment Technical Topic Case Study

Guide: Mr. Sumit Ramani

Speakers: Ms. Timsi Sethi, Mr. Rahul Sharma, Mr. Anirudh Somani, Mr. Amruth Krishnan

Session Highlights

The team discussed an interesting case study where in the management of a company intends to offer high guaranteed investment return for at least 3 years policy sale on Group traditional/ ULIP business.

The team started off by giving a brief overview of various benefits for which an Insurer manages funds under Group traditional/ ULIP schemes. The team also gave a quick overview of the features of a typical Group traditional/ ULIP product offered in the Indian market. The team then gave a very detailed snapshot of all the available guidance, standards and regulations regarding investments and guarantees offered in group insurance product. Concerns were expressed over the volatility of 10yr G-Sec bonds during the previous two decades and thereby the risk involved in offering investment guarantees. The team highlighted several advantages & disadvantages of offering a guaranteed return and discussed in detail the options available to the Insurer to manage the underlying risk. Hedging risk using interest rate derivatives, smoothening of returns, continuance monitoring, stochastic modeling to measure the cost of guarantee, proper governance of investment strategy are some of the recommendations to manage the risk around the investment guarantee.

The team finally concluded the session by presenting a historic example of Japan where the interest rates suddenly declined during 1980's and remained low for extended periods. This includes the risk mitigation actions taken by the Japanese insurers.

Session: Professionalism Case Studies - Group discussion

Moderators: Ms. Anuradha Lal, Mr. Heerak Basu

Session Highlights

The students and Fellow Actuaries, divided into 8 groups, discussed couple of very interesting case studies taken from the UK Actuarial Institute.

The first case study was with respect to a conflict between a CEO & Trustee with the pension scheme actuary regarding making contributions to the scheme fund. The case study was discussed in detail among the participants along with their mentors/ guides. The participants discussed several aspects viz. conflict of interests, importance of peer review, industry vs company specific experience, acceptance of gifts from clients, importance of speaking to the preceding scheme actuary, confidentiality, comparison with other similar schemes etc. to name a few.

The second case study was with respect to a General

Insurer that has been taking a lot of new kinds of risks viz. cyber risk in its books. Under this situation the Valuation actuary of the Insurer was with conflict with the CFO who felt that the reserves suggested by the valuation actuary was too pessimistic and hence overstated. The participants discussed several aspects viz. peer review, stress/scenario testing and the various background checks/ analysis that the actuary could have done to convince the board and CFO about the validity of his reserves. The participants also emphasized the importance of challenging the underlying assumptions in any actuarial assessment. The importance of breaking up the reserves into several elements like line of business, risks etc was also emphasized.

Session: Professionalism & Ethics

Speaker: Mr. Sumit Mullick *(Chief Information Commissioner of Maharashtra)*

Mr. Sumit Mullick, Chief Information Commissioner of Maharashtra, is an IAS officer from the 1982 batch. Mr. Sumit belongs to Kolkata, where he spent the formative years of his life. He relocated to Mumbai after entering the Indian Administrative Service. He has held several senior positions in various government departments. Mr. Sumit is also a great writer and has published 3 novels.

Session Highlights

The event was concluded with the much awaited session by **Mr. Sumit Mullick**, the Chief Information

Commissioner of Maharashtra, on Professionalism and Ethics. Mr. Sumit gave a very interesting overview of how humankind had been defining the word ethics by taking the audience to the historic era. Mr. Sumit highlighted that there have been various schools of thoughts on this topic and there is never a right or wrong answer. The "Utility" principle being one of the principles which states that an action is ethical if maximum number of species get benefited from it. Another principle being the "Universal law" according to which an action is ethical if it can become a universal law. Mr. Sumit also highlighted the importance of stepping into another person's shoes to decide if an action is ethical. Mr. Sumit drew from various past experiences and situations which required him to take decisions that were favorable to one set of stakeholders while unfavorable to others. Mr. Sumit also emphasized the importance of taking decisions from a holistic view point rather than strictly abiding by the law of the land.

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ANNOUNCEMENT

16th Current Issues Seminar in Retirement Benefits (16th CIRB)

Organised by: Advisory Group on Pension, Other Employee Benefits and Social Security
Venue: Hotel Sea Princess, Mumbai **Date:** 5th & 6th September, 2019 **Time:** Day 1 – 9:15am to 5:45pm; Day 2 – 9am to 4:50pm

The IAI is pleased to announce a unique platform and seminar on **Current Issues in Retirement Benefits (16th CIRB) on 5th and 6th September, 2019** at Hotel Sea Princess in Mumbai.

Day 1 - 5th September, 2019; Thursday
Theme "Beyond the Horizon"

The aim on Day 1 is to have a wide range of participation from inside and outside the actuarial profession. The IAI is keen to have non-members attend from corporates, financial institutions, policy makers and regulators to bring diversity in thought and learnings to all participants. We will be aiming to have eminent speakers to outline macro issues from the Government, Regulators, Policy Makers and Financial Institutions. We will also have case studies of how some of the issues have been tackled in some parts of India and abroad. Debates will centre around the direction of existing initiatives what else can be done going forward.

The topics to be covered will include

- Macro economic influences on social security programs
- The role of long term financing in supporting the economy and longer term social security programs and the retirement landscape
- What's on the horizon for labour law reforms for social security and how may they impact employers and employees
- Examples and updates from emerging solutions in the retirement product landscape covering financial institutional products, the organized corporate sector and broader social security
- How actuaries see things in the area of social security and where their role is so critical going forwards

Who Should Attend?
Any current or potential professionals in the area of social security, employee benefits and retirement plans. This seminar is useful for not just Fellows/ Associates, but all stakeholders.

Day 2 - 6th September, 2019; Friday
Theme "Helping the profession to seize the opportunity"

Day 2 will take a more technical stance and is aimed primarily at practitioners. Day 2 will continue from some themes from the November 2018 CIRB. There are several broader pertinent technical aspects relating to employee benefits that require continued education and debate. There will be some focus on the investment side of pensions and employee benefits, as well as learnings from overseas in actuaries and risk management in pensions. Finally, there will be sessions for participants to update themselves on professional developments and the Advisory Group to update members of the work done by the group since the last CIRB session.

The day would include the following topics

- Update from the AGPEBSS on progress and feedback since 15th CIRB
- Investment strategies and actuaries advising pension plans - ALMs/Liability driven investments. Lessons from overseas.
- Case study on Actuaries working in social security
- Regional Asia trends in employer pensions and how actuaries are evolving
- Mortality improvements the new Assured lives table - impact on Pension / PRMS valuations.
- Updates from the IAI on registered valuers regulations /opportunities

Who Should Attend?
Any current or potential future practitioners in the area of employee benefits. This seminar is useful for not just Fellows/ Associates, but also student actuaries who are looking to develop a career in the area of employee benefits in India.

Registration Fees (Excluding 18% GST)

Categories	Amount in INR
Students & Associate Members	6,000
Affiliate & Fellow Members	12,000
Non Members (Day 1)	6,000
Non Members (Day 1 & 2)	12,000

General Points

- **Register at:** http://www.actuariesindia.org/SeminarRegistration.aspx
- **CPD Credit for IAI members (2 days):** 12 hrs. Technical- Pensions and Employee Benefits (APS 9 Ver. 3)
- **Point of Contact:** Ambreen Surve (Ambreen@actuariesindia.org)

ANNOUNCEMENT

6th Seminar on Current Issues in General Insurance (6th CIGI)

Organised by: Advisory Group on General Insurance
Venue: Hotel Sea Princess, Mumbai **Date:** 29th & 30th August, 2019 **Time:** 9am to 6pm

The Institute of Actuaries of India (IAI) is pleased to announce the 6th CIGI Seminar. In FY 2018-19 - The General Insurance Industry grew at 13% touching GDPI of ₹1.70 lakh crores. In the current business environment, which is marked by regulatory and technological changes, the need of the sound actuarial practices is a key to the sound management of the Companies. The objective of this seminar is to enhance the skills of the actuaries and other professionals working in the domain of the General Insurance. This seminar will help in bringing out the latest developments and best practices in the field of General Insurance to the forefront and will provide participants with a practical perspective.

The Seminar would focus on the following topics

- Current Challenges facing General Insurance Industry and Actuarial work
- Panel Discussions on the Current GI Industry Opportunities and Challenges - CEOs Panel Discussion
- Investments Challenges in GI Industry
- Innovations in the GI industry - Global & Indian perspective
- Developments in Insure-tech, AI & Blockchain world
- IFRS 17 - CFOs & AAs viewpoint
- Standardization of Commercial Products- Underwriter's view
- Stakeholder's Expectations and Challenges - AAs Panel Discussion
- GIC perspective on Crop and Property Insurance

Presenters

CEOs, CFOs, Appointed Actuaries, Regulator, senior consultants in GI, Reinsurer, Intermediary, Consumer activists, CRO, Experienced consultants in GI Space from Actuarial and Finance Space, Actuaries from Reinsurer/ Intermediary, RI Head of the Insurance Company, etc.

Who Should Attend?

The seminar is open to all who wish to enhance their skills in General Insurance domain. Non-members are welcome to attend.

Registration Fees (Excluding 18% GST)

Categories	Amount in INR
Students & Associate Members	6,000
Fellow Members	12,000
Non Members	12,500

General Points

- **Register at:** http://www.actuariesindia.org/SeminarRegistration.aspx
- **CPD Credit for IAI members:** 12 hrs. Technical in General Insurance (As per APS 9 -Rev. Ver 3)
- **Point of Contact:** Ambreen Surve (Ambreen@actuariesindia.org)

New Product Regulations

Disclaimer: The views and opinions expressed in this article are those of the authors.

Overview

In a bid to improve the product proposition, the Insurance Regulatory and Development Authority of India (IRDAI) has released the new Non-Linked and Linked product regulations on 15th July'2019, 15 months after it published its exposure draft on the product regulations. These regulations are focused towards -

- Adapting the changing economic and insurance market environment,
- Product flexibility and innovations,
- Better value of money for policyholders,
- Safeguarding policyholders, and
- Innovative ways of distribution.

The new regulations has modified the rules for pension products, traditional plans and Unit Linked Insurance Plans by easing various norms for these products.

Major changes in the regulations

The below table summarizes major changes within the non-linked and linked regulations respectively.

Scope	Non-Linked Regulations,2013	Non-Linked Regulations,2019
Death Benefit - General	Minimum death benefit - **Entry age less than 45** - Maximum of 10 times of annualized premium, 105% of accumulated premium or guaranteed sum assured on maturity **Entry age 45 or above** - Maximum of 7 times of annualized premium, 105% of accumulated premium or guaranteed sum assured on maturity	Minimum death benefit is consistent for all policyholders as - Maximum of 7 times of annualized premium or 105% of accumulated benefits
Death Benefit - pension products	No minimum death benefit condition for pension products	For all individual pension products and deferred annuity products during deferment period, the minimum benefit payable on death shall not be less than 105% of all premiums paid upto date of death.
Minor Life	For policies issued on minor life, the date of commencement of policy and date of commencement of risk shall be same.	For policies issued on minor's life, the date of commencement of risk may start anytime on or upto two years from the date of commencement of the policy or on the policy anniversary after attainment of majority, whichever is earlier.
Policy Term	Minimum policy term was 5 years for all individual products	Individual pure risk premium product, group term, group credit Life and micro insurance products can be offered with a policy term of one month
Lock-in period	Surrender value was applicable based on the premium paying term of the policy - **PPT less than 10 years -** 2 annualized premium **PPT 10 years and above -** 3 annualized premium.	Surrender value to be offered after the payment of 2 annualized premium irrespective of PPT

Scope	Non-Linked Regulations,2013	Non-Linked Regulations,2019
Premium flexibility	The premium chosen at the outset shall become payable throughout the premium paying term of the policy and shall not be altered during the term of the policy. Such premium shall be level/ uniform and shall not vary over the term of the policy.	After payment of premiums for first five completed policy years, the policyholder may be given an option to decrease the premium upto 50% of the original Annualized Premium, subject to the minimum premium limits under the product of the insurer. Once reduced, the premium cannot be subsequently increased. Benefits may be revised subject to the minimum death benefit as stated by the regulations.
Revival period	Revival Period of two consecutive years from the date of first unpaid premium.	Revival Period of five consecutive years from the date of first unpaid premium.
Pension products	For pension products, the surrender or maturity proceeds can be commuted up to 30% and the balance amount to be utilized to purchase immediate/ deferred annuity from the same Insurer	For pension products, the surrender or maturity proceeds can be commuted up to 60% and utilize the balance amount to purchase immediate/ deferred annuity from the same insurer or any other insurer (only upto 50% of the total proceeds net of commutation for other insurers)

Scope	Linked Regulations,2013	Linked Regulations,2019
Death Benefit	Minimum death benefit - Entry age less than 45 **SP -** 125% of single premium, **Life Products -** 10 times of annualized premium for life products **Health Products -** 5 times of annualized premium for health products Entry age 45 or above **-** 110% of single premium, 7 times of annualized premium for life products or 5 times of annualized premium for health products	Minimum sum assured is consistent for all policyholders as - 125% of single premium, 7 times of annualized premium for life products or 5 times of annualized premium for health products
Pension Products - Partial withdrawal	No partial withdrawals shall be allowed in case of linked pension products	In case of Linked pension products, partial withdrawal: • Allowed after lock-in period. • Shall not exceed 25% of the fund value at the time of partial withdrawal. • Allowed only three times during the entire term of the policy. • It shall be allowed only against the stipulated reasons: I. Higher education of children. II. Marriage of children. III. For the purchase or construction of residential house. IV. For treatment of critical illnesses of self or spouse.
Revival Period	Revival Period of two consecutive years from the date of first unpaid premium.	Revival Period of three consecutive years from the date of first unpaid premium.
Premium flexibility	The premium chosen at the outset shall become payable throughout the premium paying term of the policy and shall not be altered during the term of the policy. Such premium shall be level/ uniform and shall not vary over the term of the policy.	After payment of premiums for first five completed policy years, the policyholder may be given an option to decrease the premium upto 50% of the original Annualized Premium, subject to the minimum premium limits under the product of the insurer. Once reduced, the premium cannot be subsequently increased. Benefits may be revised subject to the minimum death benefit as stated by the regulations.

Scope	Non-Linked Regulations,2013	Non-Linked Regulations,2019
Pension products	For pension products, the surrender or maturity proceeds can be commuted up to 30% and utilize the balance amount to purchase immediate/ deferred annuity from the same insurer	For pension products, the surrender or maturity proceeds can be commuted up to 60% and utilize the balance amount to purchase immediate/ deferred annuity from the same insurer or any other insurer (only upto 50% of the total proceeds net of commutation for other insurers)
Rider Coverage	Cost of rider cover can be levied only by deducting a rider charge to the unit-linked contract	Cost of rider cover can be levied by deducting a rider charge to the unit-linked contract or by a level rider premium which may be payable in addition to the base premium

Implications for the Insurers

The new regulations are mostly on the expected lines of the life insurers, however the tight timeline of four months to comply with these regulations may be a challenging task for most of the companies. As was expected, the regulations are mostly focused on encouraging the pension and annuity business in the Indian market and providing greater benefits to the policyholders in terms of simplified & innovative products and better surrender benefits Apart from the obvious need to reprice all the products in light of the new requirements below are some of the important implications for the Indian life insurers -

1. **Systems Upgradation:** Simplification in the death benefit and surrender value applicability will reduce the complexity for the products but the companies will still need to update their existing IT systems which will be struggle given the tight timelines.

2. **Policy Persistency:** It is expected that the increase in the revival period and the premium flexibility after the first five years will improve the persistency for the insurers and will enable that the companies are able to cover their fixed expenses by ensuring that the policies are within the system.

3. **Product Strategy:** The options and inclusion of guaranteed benefits for pension products will encourage the demand of these products in the market. Given the trend in the market for the last 2 years in terms of the demand for the recently launched pension products, this might make the insurers direct their product strategy towards pension and annuity products.

4. **Innovative Protection Products:** The option to offer pure risk term products with a minimum period of one month may offer a market of innovative pure risk products with the companies looking to identify ways of offering such products through cheaper channels and minimum administration cost to make these financially viable.

5. **Stronger With-Profit Management:** Strengthening of the with-profit committee with the inclusion of CFO in the committee and the option to include experts from other departments will lead to a more robust, tighten and consistent with-profit management. This will increase the administration but might also bring the required confidence of various stakeholders in the management of with-profit business.

6. **Flexible unit-linked Riders:** The riders attached to the linked products could be more innovative and will be better marketed through the additional level premium structure enabling the company to better administer these products and offer a wider range of riders to the unit-linked customers.

7. **Compliance to Net-Reduction Yield:** The removal of the requirement for the insurers to continuously monitor and add any non-negative additions to the unit fund/policy account value to comply with the maximum allowable reduction in yield will pass the entire market risk of these policies to the policyholder.

8. **Existing Inforce policies:** Adjusting the surrender values for existing non-linked savings policies which have a premium paying term of 10 years and above will create additional strain as these products were originally offered with 0 surrender value during the second year. There is an additional risk of lapse and re-entry if these changes are not offered to the existing customers.

9. **Protection vs Savings:** The flooring of guaranteed sum assured on maturity has been removed from the definition of death benefit. This is one area of the new regulations which will be widely speculated and this might deviate the life insurers towards some of the earlier savings products where the maturity benefit was greater than the death benefit. However, in order to pass the benefit of section 10(10D) of the income tax act which states that the maturity benefits are tax free in the hands of policyholders premium should not exceed 10% of minimum sum assured, it is highly unlikely that the companies will

offer a death benefit which is lower than 11 times of annualized premium.

Implications for the Policyholders

From a policyholder point of view, these regulations will present them with an added advantage of taking up pension/annuity products and at the same time removing the unnecessary complexity within the product structures which were at times not so clear to the underlying agents as well. These are some of the implications for the policyholders:

1. **Attractive Pension Products:** The inclusion of guaranteed death benefit, partial withdrawals, increase in level of commutation etc. within the pension products will provide the prospective customers a better value for money through such products

2. **Flexibility in use of Pension Proceeds:** The biggest surprise for the insurers came in terms of the pension products where only a 50% of the total proceeds net of commutation can be used to purchase annuity for any other insurer in contrast to the proposed option to use the entire 100% to purchase annuity from other insurers. This however will give the policyholders the relaxation of moving to a different insurer who might be offering better annuity rates

3. **Premium Flexibility:** The flexibility of the premium after the first five years will enable them to alter the products as per their changing need as well as their perception of the market.

Conclusion

The new product regulations is one of the many changes which we are going to see in the Indian Insurance market in the next 4 years. On one hand where these regulations have simplified the product structures and given extra flexibility to the companies as well as the policyholders, they may also lead to an advent of unique set of different products which may be first of their kind the industry would have seen as well as may lead to increased cost to the insurers. Many of the insurers were prepared for these regulations and are right on track to ensure smooth transition but the challenge of completing this in a limited time and for a large number of products will still present a challenge to the industry. We will wait to see how the market responds and where we are heading with respect to these regulations.

Written by

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CALL FOR ARTICLES

Institute of Actuaries of India

We invite articles from the members and non members with subject area being issues related to actuarial field, developments in the field and other related topics which are beneficial for the students of the institute.

The font size of the article ought to be 9.5. Also request you **to mark one or two sentences that represents gist of the article.** We will place it as **'break-out' box** as it will improve readability. Also it will be great help if you can suggest some **pictures that can be used with the article, just to make it attractive.** Articles should be original and not previously published. All the articles published in the magazine are guided by **EDITORIAL POLICY of the Institute.** The guidelines and cut-off date for submitting the articles are available at http://actuariesindia.org.in/subMenu.aspx?id=106&val=submit_article

Actuaries Shake Hands with Finance

Introduction

There has been a buzz around implementation of IFRS 17 from 1st January 2022 and comparable of financials before this period. The Indian version of this standard might be implemented sooner than this date.

In light of the implementation of this standard, there is lot of excitement as well as apprehension among both actuarial and finance fraternity.

In particular, everyone is aware that lot of work is going to be involved during the transition phase from current standard to new IFRS 17. Main tasks could be:

1. Tweaking existing finance systems, administration system, actuarial software, other IT systems etc.
2. Model office testing of many new functionalities under IFRS 17.
3. Ensuring completion of new system developments and system stabilisation
4. Making stakeholders understand and interpret the financials which will be in new format

and so on and so forth...

Role of Actuary

As per the existing reporting standard (IFRS 4 or Indian equivalent standard), main role of valuation actuary is to compute and share the value of policyholders' liability figures on every reporting date to finance that is included both in the preparation of balance sheet and the revenue account of the insurer.

However, IFRS 17 is demanding bigger role of an actuary beyond computing the value of policyholders' liability.

Let me deep dive more into it.

IFRS 17 could be more complex standard to implement; yet very useful to all stakeholders and decision makers of the insurance companies.

The biggest challenge is the transition phase moving from an existing regime into a new regime.

In particular, during the transition phase, actuary will have to initially compute Contractual Service Margin (CSM) and other components as per modified retrospective methods or other methods as prescribed in the standard.

Further, as part of regular activities, actuary will be providing various workings to finance such as Contractual Service Margin (CSM), CSM reconciliation, expected claims and insurance service expenses, fulfilment cash flows, Risk Adjustments (RAs), asset & liability reconciliations from opening to closing and any changes in these components between consecutive reporting periods.

Whether Insurance Companies are prepared?

This is the right time for insurance companies to buckle up this work. Initially, companies may prefer to engage consultants to carry out work during transition phase. However, it would be better for insurance companies to nurture the inhouse actuarial talent and encourage actuaries to work with finance team on regular basis on this standard.

In particular, insurance companies could think of setting up a team of actuaries, finance & IT under the tag say 'Finance Actuary' for implementation and subsequent reporting on regular basis as per IFRS-17.

It is believed that most of the insurance companies have already started the leg work on the same and it is a wake-up call for those, who have not yet started implementation of IFRS 17; this may lead to very complex and cumbersome situation for them at a later stage.

Actuaries shake hands with Finance

Thus, I feel that the regular dialogue between Actuary and the Finance would increase significantly for implementation of IFRS-17 standard. This will be learning opportunity for both actuaries and finance how they view on various risk & finance related aspects and how their thinking would converge through implementation of IFRS 17.

Moreover, it would help to break any silos between actuarial and finance teams and enhance active engagement and collaboration between teams.

Moreover, it is a good opportunity for actuaries to acquire required skills in IFRS 17 at the earliest as one

more door is now opening to actuaries to apply their actuarial skills in this domain.

Disclaimer: Above view are personal and does not carry my current or previous employers. The above article is just for education & information purpose only and someone may have different views.

It is a wake-up call for those, who have not yet started implementation of IFRS 17; this may lead to very complex and cumbersome situation for them at a later stage.

Good opportunity for actuaries to acquire required skills in IFRS 17 at the earliest as one more door is now opening to actuaries to apply their actuarial skills in this domain.

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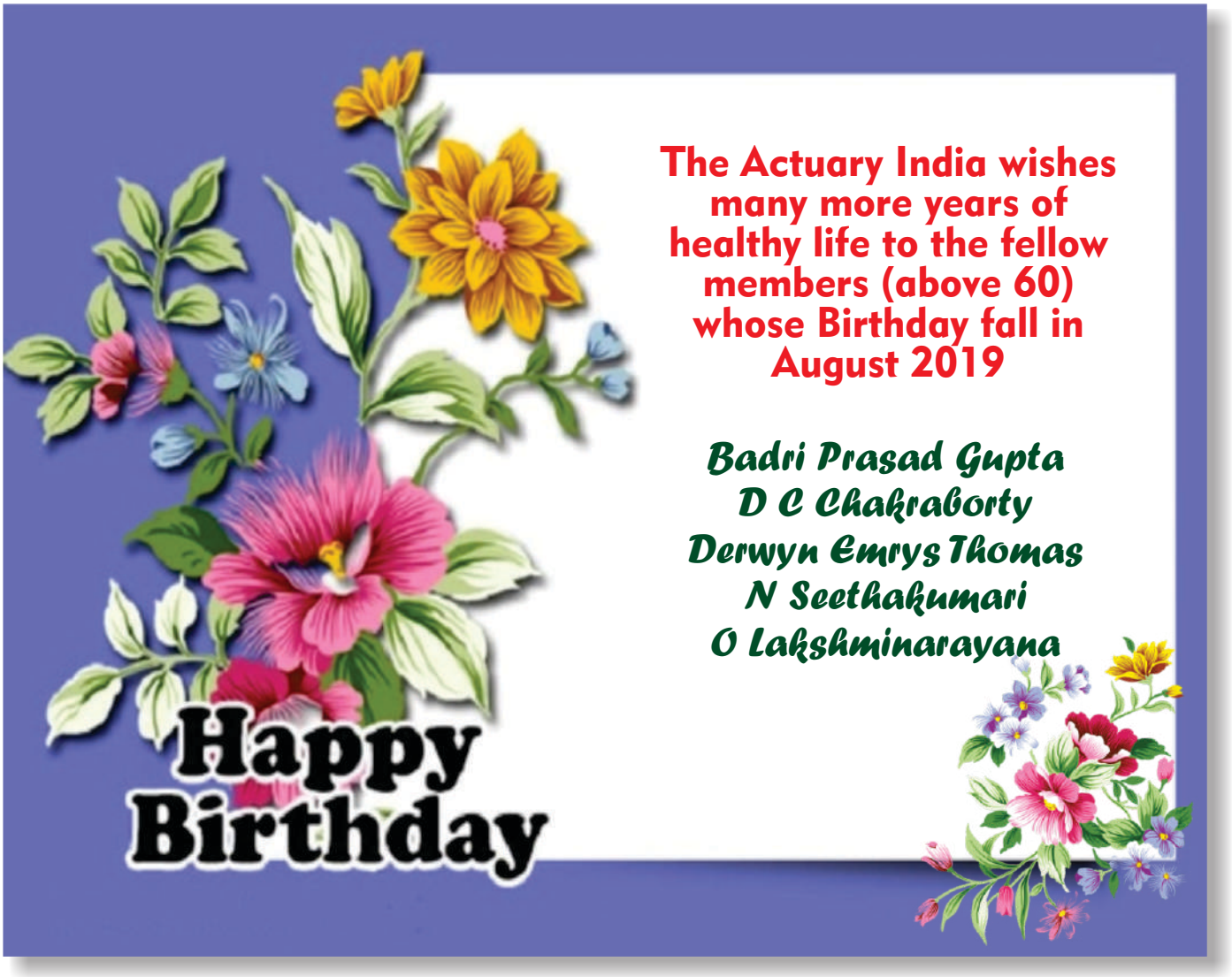

Impact of Registered Valuer Certification on the work of Actuaries

Content touched upon:

- Timelines
- Governance & Structure
- Scope of Work of Registered Valuer as defined by Companies Act, 2013
- Valuation Areas not covered under the Current Governance Structure
- Impact on work of Actuaries
- Is IAI seeking Certificate of Recognition as a RVO under IBBI?

Timelines

The Companies Act, 2013 (the Act) replaced The Companies Act, 1956 (in a partial manner) after receiving the assent of the President of India on 29 August 2013.

The concept of "Registered Valuers" first come into light under section 247 of "The Companies Act, 2013 (the Act)" to regulate the practice of Valuation in India and to standardize the Valuation in line with International standards. However, back then, the valuer's exact scope of work, qualification and experience criteria were not notified.

On 1st October, 2016, Insolvency and Bankruptcy Board of India (IBBI) was constituted for overseeing insolvency proceedings and entities like Insolvency Professional Agencies (IPA), Insolvency Professionals (IP) and Information Utilities (IU) in India. It was given statutory powers through the Insolvency and Bankruptcy Code to speed up the resolution process for stressed assets in the country.

In 18th October, 2017, The Ministry of Corporate Affairs (MCA) notified the provisions governing Valuation by Registered Valuers' [section 247 of the Companies Act, 2013 (the Act)] and the Companies (Registered Valuers' and Valuation) Rules, 2017 (the Rules).

On 23rd October, 2017, MCA specified that the Insolvency and Bankruptcy Board of India (IBBI) shall be the Regulator and the Responsible Authority to administer and perform functions under the said rules.

On September 25, 2018 with respect to 3rd Amendment to Companies (Registered Valuers' and Valuation) Rules, 2017 and in Rule 11, it was stated that "Any person who may be rendering valuation services under the Act, on the date of commencement of these rules, may continue to render valuation services without a certificate of registration under these rules upto 31st January, 2019."

Governance & Structure

In India, the valuation work of different asset classes was governed by different Institutes and Professional Bodies based on their area of expertise and competence. Large part of the valuation work is unregulated. Long term vision of Govt is to regulate the work of valuers and their will be one regulator for the same. TO implement this vision, IBBI is selected as regulator for Valuer's work. In order to bring all the asset classes under one umbrella and be an aggregator, IBBI is authorising various non profit professional bodies as Registered Valuers Organization on fulfilling set of conditions and going through application procedure.

Registered Valuers' Organizations are Entities which have been granted Certificate of Recognition (COR) by IBBI to enrol members eligible, conduct training, lay down and enforce code of conduct for members, provide for continuing education, monitor and review the functioning and quality of service provided by valuers and have a mechanism to address grievances and conduct disciplinary proceedings against valuers.

Currently, there are 11 RVOs which have been granted Certificate of Recognition by IBBI. The details of the same can be found out on https://ibbi.gov.in/service-provider/valuer-organisations.

Each RVO depending on the competence of their members and the objectives of RVO have obtained COR for either all Asset Classes or Specific Asset Classes Currently, three Asset Classes have been defined for which RVOs can enrol members based on their competence & eligibility. These are:

- Land & Building
- Plant & Machinery
- Securities & Financial Assets

For example, The Indian Institution of Valuers has obtained certification of all asset classes whereas ICAI Registered Valuers Organisation or ICSI Registered

Valuers Organisation has obtained certification for only one asset class i.e. Securities or Financial Assets.

So any individual who has meets the required qualification and criteria has to first enrol under any of the 11 RVOs' as a member and then after meeting the Training Criteria and Exam Criteria apply for certification with IBBI.

In broader terms, IBBI can be looked upon as a Mumbai University or a Maharashtra State Board and RVOs' can be looked upon as Colleges or Schools and individuals can be looked upon as students enrolling to colleges and schools who provide admissions, conduct examinations but certifications are granted by the Universities or State Boards (in our case IBBI).

The first two categories, Plant & Machinery and Land & Building are generally classified as Technical Valuations and not covered in this article.

Valuation of Securities & Financial Assets has the following eligibility criteria:

Qualification Criteria: Member of ICAI, ICSI, ICMAI, MBA or PG in Business Management (Finance Specialization)

Experience Criteria: Three year experience in specified discipline

Training Criteria: Mandatory Training of 50 hours with an Registered Valuers' Organization

Exam Criteria: Passing the exam conducted by IBBI though affiliated agency with 60%. Questions are multiple choice with 25% negative marking

Enrolment Criteria: Enroll as a Member with IBBI

Scope of Work of Registered Valuer as defined by Companies Act, 2013

Section 247 of the Companies Act, 2013 reads that *"where a valuation is required to be made in respect of any property, stocks, shares, debentures, securities or goodwill or any other assets (herein referred to as the assets) or net worth of a company or its liabilities under the provisions of this Act, it shall be valued by a Valuer in such manner, on such terms and conditions as may be prescribed and appointed by the audit committee or in its absence by the Board of Directors of that company."*

Further Rule 3 of the Companies (Registered Valuers' and Valuation) Rules reads that, *"Valuation in respect of any property, stocks, shares, debentures, securities or goodwill or any other assets or net worth of a Company or its liabilities* ***under the provision of the Act or these rules****. It is hereby clarified that conduct of valuation under any other law other than the Act or these rules by any person shall not be affected by virtue of coming into effect of these rules."*

What this means:

If a valuation is required by provisions of Companies Act, 2013 or it's Rules, it will be done only by a Registered Valuer (RV) with effect from 1st February, 2019. If any other Law, Standard or Rules require a valuation of a specific asset class or liability to be conducted by persons specified in the Law or Standard or Rules, then they supersede the Act and these Rules.

Example: Rule 11 UA of the Income Tax Rules requires valuation of securities by a Merchant Banker

Valuation Areas not covered under the Current Governance Structure

Currently, a Registered Valuer could be registered with IBBI through a RVO for valuation of either:

- Plant & Machinery
- Land & Building
- Securities & Financial Assets

However, valuation of asset classes which require special competence or specialized knowledge like Valuation of Gold, Diamond, Art or Actuarial Valuation of Insurance Contracts and Actuarial Valuation of Pension Liabilities are not covered.

Impact on work of Actuaries

As far as the valuation of Insurance contracts governed by IND AS 104 or Valuation of Employee Benefit Liabilities as governed by IND AS 19 is concerned, I think there is no impact as the accounting standards read with auditing standards, require an entity to seek services of a qualified actuary.

As far as the other areas of the Standards are concerned, like IND AS 102 - ESOPs' or IND AS 113 - Fair Value Measurement, since the standard does not specify the use of a specific expert for the valuations, my sense is that this work will be passed on to the Registered Valuers registered as "Securities & Financial Assets". This is because the standard is silent regarding the use of an expert and Companies Act requires valuation of these asset classes to be done by a "Registered Valuer" post 31st January, 2019.

So on an overall basis, the current impact is not much,

as most our current work surrounds around Ind AS 104 and Ind AS 19 valuations. However, potential impact could be big as the work spectrum under IND AS 113 or under IND AS 102 is huge and thus it will impact the consulting actuaries in terms of broadening the areas of their work.

So, are we in the process of creating an RVO and enrolling our members?

IAI is working on setting up the RVO and at application stage with IBBI. By definition Fellows of IAI are eligible to take up the work of Registered valuers after going through mandatory training and passing the valuer exam. Though the Fellows members of IAI are not specifically covered by guidelines specifying the eligible professions for Valuers but Valuer's regulations cover the members of institutes setup by act of Parliament. Fellows of IAI need to register with IAI RVO to undergo mandatory training and then appear for IBBI exam. In next couple of months IAI RVO will be functional post approval from IBBI.

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ANNOUNCEMENT

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Invites you for Webinar on

Analytics in Banking

Speaker

Vineet Khanna
Executive Director
SAS Institute India (Pvt) Ltd.
Qualified Actuary (FIAI), FRM and
MBA Finance FMS Delhi

Date : 10th August, 2019 Time : 12 PM

Analytics in Banking

- Background and Trends in Analytics / AI & ML
- Challenges faced by the banking industry.
- A few examples of adoption of Analytics by banks:
  - Risk Management
  - Anti-Money Laundering
  - Marketing
  - Evolving Areas

Key Takeaways

- Analytics is a rapidly changing & fast growing area
- Banks are adopting Analytics to solve business problems
- Demand for data scientists is quite high
- An Actuary brings a lot more to the table
- It's a win-win situation for Banks and Actuaries

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South Africa

Key Developments

South Africa held National Parliamentary Elections in May 2019, marking 25 years of freedom after the end of apartheid. The elections were won by the African National Congress (ANC) with a reduced majority. President Cyril Ramaphosa was sworn in as the President of the Republic on 25 May 2019. The President stressed the need to revitalize the economy and create jobs; particularly for the youth. Key to this was the building of an ethical state free of corruption and wastage and which attracts domestic and international investment. The President committed to transform the country in line with the Digital Revolution.

Economic Overview

South Africa is the world's 31st largest economy with a GDP of about US$385Bn. Financial Services makes up the largest sector; making up just over 20% of the GDP. The South African economy has been performing below par (in line with the performance of the South African cricket team). The economy contracted by 3.2% in the first quarter of 2019 with the forecast growth being 1% for the year. A vibrant economy is critical to economy growth and job creation. The unemployment rate has been persistently high and has increased to 28%. The South African rand has been relatively stable recently.

Retirement Funds

The Public Sector is dominated by the Government Employees Pension Fund (GEPF). The Fund is the sixth largest Retirement Fund in the world with about 1.27m active members and about 350K pensioners. The assets are approximately US$150Bn. The Fund invests in Africa and internationally and also invests in Unquoted investments. The President recently set up a Commission of Enquiry to look into the Investment of the Fund's assets.

The Private Sector is dominated by Defined Contribution Funds. A trend is the emergence of Umbrella Funds where monies are invested in plans with specified portions allocated to retirement, risk and expenses.

Recently legislation has been amended to allow for default portfolios. Default portfolios aim to support savings by encouraging members to preserve their benefits on exit and to take their benefits in a phased manner at retirement instead of taking a lump sum. In addition the Trustees must provide appropriate risk profiled investment portfolios for members to invest their monies over their working lifetime.

Health Care

South African actuaries play a pivotal role in the Health Care Sector. The traditional roles include product development, pricing, reserving and also serving in general management. A key development requiring critical actuarial skills is the development of the proposed National Health Insurance (NHI) Fund.

One of the most glaring inequities in South Africa is the disparities in the provision of Health Care. The Private Health facilities are extremely advanced; yet very expensive and caters for less than 20% of the population. A key indicator is that 4.5% of the GDP goes to serve 16% of the population and the other 4.2% of the GDP goes to serve the remaining 84% of the population. It is envisaged that NHI will provide high quality Healthcare for those who cannot afford private medical care. There are still uncertainties though regarding the costs of the proposed scheme and how this will be funded.

Use of Artificial Intelligence

The Actuarial Society of South Africa (ASSA) issued a media release in May 2019 espousing the benefits of Artificial Intelligence in the financial services industry. Actuary Ronald Rickmann has cited potential benefits including enhancing products, reducing costs and simplifying processes. By processing large quantities of data, computers have the ability to effectively "teach themselves" through machine learning. There are many practical applications including issuing of policies and assessing claims in a timeous manner.

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