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INDIAN ACTUARIAL PROFESSION
Serving the Cause of Public Interest



20th Global Conference of Actuaries

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Strengthening the Core”**

4th, 5th & 6th March, 2019

at

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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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15th Seminar on Current Issues in Retirement Benefits

Organised by: Advisory Group on Pension, Other Employee Benefits and Social Security, IAI
Venue: Hotel Sea Princess, Mumbai **Date:** 29th & 30th November, 2018

DAY 1

Session : Welcome and Inaugural address
Speakers: Mr. Kulin Patel, Mr. Sunil Sharma



Mr. Kulin welcomed the participants and explained the agenda for 2 days and introduced President IAI Mr. Sunil Sharma and asked him to address participants.



Mr. Sunil welcomed the participants and thanked veteran Actuaries with whom he has worked from his initial LIC days.

He also mentioned about 3 new advisory groups created recently: IFRS 17, Data Science & Analytics and Banking, Finance & Investments. And proposed Actuarial work to be introduced to GOI where our expertise is required.

Session : Macroeconomic factor/state of economy and Where are we heading for bond yields and corporate bonds

Speaker: Mr. K Boovendran



Session Highlights

Mr. K Boovendran started his presentation with introducing valuation of Govt securities and corporate bonds. He also explained relation between interest rate & inflation with Fishers equation: $(1+N) = (1+R) \times (1+IE)$ where N is nominal interest rate, R is real interest rate & IE is inflation expected. He explained CPI index, introduced in 2013 and how inflation is calculated based on annual growth compared to Y-o-Y. He also showed expected inflation for next 5 (2019-23) years along with expected interest rate. He mentioned about special agreement between RBI & government to keep inflation level 4.00% p.a. and based on same RBI keeps changing rates. He also explained fiscal deficit & budget deficit as % of GDP and government borrowing from the market. And concluding he pointed out daily trading of government v/s corporate bonds (approx. 86,000 Cr. v/s 5,000 Cr. respectively).

Session : Update from members on APS 27 - practical experience, insights and challenges post implementation

Speaker: Ms. Preeti Chandrashekhar



Session Highlights

Based on survey on APS 27 for in-house participants, **Ms. Preeti** pointed out client awareness and assumption analyses and briefed about APS 27. She then invited few practitioners from participants to share experience on APS 27:



1. Mr. A D Gupta: He explained how new APS 27 was designed keeping in mind updated accounting standards (Ind AS 19) which were not available in old APS or AS 15.



2. Mr. Kushwant Pahwa: He described his 3-part

agenda:

- Basic Check list.
- Additional requirements like classification of liability for pensioners or family pensioners.
- General applications like reasonableness, legal requirements (if any), and most important professional judgement.



3. Mr. Jayesh Pandit: He pointed out few important thoughts like data comments (if received from 3rd party like Payroll vendors). He also mentioned about commenting in reports for benefits schemes (i.e. DA merger or DA indexation etc) and finally asked to comment on funding methodology like values considered from audited account or unaudited accounts.



4. Mr. Suranjan Banerjee: He suggested early engagement with client and auditors (where possible) for assumptions setting instead of last moment requirements. He also pointed out of using mortality improvements for the valuations.

Old APS was rule based viz-a-viz new APS 27 is principle based which is today's requirement and its compliance can be self-monitoring & professional integrity.

Session : Managing and Valuation of Exempt Provident Funds (Valuation issues and challenges, Disclosure for exempt PF under Ind AS 19, ALM aspects and interest rate declaration)

Speakers: Ms. Chitra Jaisimha, Mr. Hemanshu Jain



Session Highlights

Ms. Chitra started session by explaining EPF, its structure (in total CTC). She also explained regarding fund value to be considered at book value under PF Act whereas accounting standard ask for fair value and held till maturity.

maturity profile of all assets. Finally, assumptions: attrition, discount rate, mortality and expected future return.

Then he talked about challenges, like mismatching durations of assets & liabilities (where ALM is needed), Reinvestment risk, deterministic approach considers constant returns, credit risk (like discount rate is assumed to be including credit premium). Finally he discussed on sample disclosures where net surplus is available, so asset is matched with PF liability.

And session concluded with specific guidance needed for all practitioners as all have their own judgement due to disclosure requirements are subjective in nature.

Panel Discussion : Importance of assumptions under new Accounting Standards & Leave valuations

Moderator: Ms. Preeti Chandrashekhar

Panellists: Mr. Arpan Thanawala, Mr. Viraf Mehta, Ms. R Hemlatha



Session Highlights

How assumptions are derived:

Ms. R Hemlata: assumptions are provided in discussion with Finance & Accounts (considering in business projections) / HR team (looking retention policy) & again which are reasonable & justifiable to Actuary & Auditors.

How assumptions are set by you while auditing?

Mr. Viraf Mehta: we rely on experts (Actuary) but still they are checked for reasonableness before signing final reports.

Views on Actual v/s expected assumptions.

Mr. Arpan Thanawala: assumption setting is mutual agreement which required series of analyses (salary escalation, attrition, leave availment rate) backed by past data (say 3-4 years). Also, comparison of interest rate v/s inflation, HR retention policy, salary structure, business planning, industry practices.



Mr. Hemanshu started discussion with reference to GN 29 which specifies 3 approaches:

1. Deterministic: where 3 scenario generated with base scenario along with increasing rate and decreasing rate using probability.
2. Stock option Pricing: using log-normal distribution.
3. Stochastic: it is used with gilt rates to be projected for future using probabilities.

He started with valuation process using data like DOB, DOJ, individual PF corpus, past data on investment returns, Asset data i.e. fair value as on date of valuation,

Continuing with **Mr. Viraf:** as to where they as auditors expect more analysis? Firstly he pointed out “tone at the top” an i.e. management view in consultation with auditors, but issues arises when data goes directly from HR without internal communication. Lastly significance & magnitude will decide approach to change in assumptions (or relooking).

How new accounting standard is viewed as a client for reasonableness?

Ms. Hemlata: mainly assumptions are conveyed to auditors backed by some analysis, but from point of view of disclosures it's more clarified and brought transparency.

How financials made easier with P&L and OCI introduction and New APS?

Mr. Viraf: fluctuations in assumptions are now routed through OCI (affecting gross reserves) and P&L made smoothened (less volatile EPS), more disclosures more clarity.

Mr. Arpan: Ind AS 19 & APS 27 gave more responsibility with more clarity & transparency for various stock holders. Debate might be what's more important EPS or Net Worth!

Discussion concluded with below remarks:

Most important balance is required between assumptions (salary escalation & attrition). Auditors will have comfort for assumptions if they are backed by proper analysis and documentation (in actuarial report or separate report). Any change in assumptions from last valuation to be documented with justifying changes (basis shorter or long term in nature).

Session : Attrition Rate Analysis and Impact on Actuarial Valuation

Speaker: Mr. Kartikey Kandoi, Mr. Ganesh Sudrik



Session Highlights

Mr. Kartikey started with reasons for attrition analysis and how data collated for 2013 to 2017 for continuing

employees and how rates were separated (age wise, service wise, industry wise, company wise). Analysis provided results as higher attrition at lower ages, lower attrition at matured ages and little higher for age above 50 years due to early retirement or ill health. Similar results were arrived considering service slabs i.e. higher attrition at lower service say 0-1-year, lower attrition at service level 2 years to 25 years and little higher for service above 26 years due to early retirement or ill health. Highest attrition rate was seen in Outsourced / BPO / KPO whereas lowest attrition was seen in banking sector. Similarly, highest attrition was seen in small or medium companies' and lowest attrition was seen in Big & Large companies.



Mr. Ganesh took over further impact of same analysis on liability for 2 samples i.e. 2 years' service & 8 years of service and results showed lower liability for non-vested benefits and higher liability for vested benefits.

Conclusion: Regular review advised and materiality to be checked with significance looking at experience gains or losses values.

Session : Certain commercial and governance considerations for actuaries and actuarial firms

Speaker: Mr. Khushwant Pahwa



Session Highlights

Mr. Khushwant started with some query, which was

regarding registered valuer requirement for liabilities. Under companies act 2013 section 247, which talks about valuation of liabilities by registered valuer. But company rules 2017 notified in July 2017 explained the rules and everything was in context of assets and no mention of liabilities. Then he touched upon few additional requirements like IT security, which might be imposed on firms & actuaries with few data checks like End point security, access controls & rights, office control, data encryption, retention & deletion and protection, mail security, vendors & third-party management, NDA & independent audits etc. Finally, he explained migration process to AS 19 (like Ind AS 19) from AS 15 whom Ind AS 19 is not applicable like unlisted organization with net worth less than 250 Crs.

Session : Corporate transactions and role of actuaries

Speaker: Ms. Kavita Singh Sehrawat



Session Highlights

Ms. Kavita introduced actuaries' role in corporate transactions specially in case of Mergers & Acquisitions (M&A). Where she pointed out understanding client like: strategic buyer or financial buyer; or is it an asset deal or share (stock) deal? She explained terminologies like buyer, target (seller), Day 0, Day 1 and so on. Final deliverables will be summary of report on due diligence with focus on areas like potential impacts on costs, executive compensations, employee benefit obligations, value to be created for old vendors with renegotiations. Key issues might be transferring EPF & EPS.

Vote of thanks and felicitation : Mr. Kartikey Kandoi

First day ended with vote of thanks by Mr. Kartikey and he summarized events of the day.

DAY 2

Day one was more towards the current issues (technical) however day two was on the practical aspects or issues in retirement benefit practice area and it began with a warm welcome by **Mr. Kulin Patel**.

Session : Retirement solutions for Indian population - external perspectives

Speakers: Mr. Ajay Prabhu, Mr. Sumit Shukla



Session Highlights

Mr. Ajay concentrated more towards the funding ratios and platforms available for funding the group employee benefit obligations not primarily based on traditional investment plan but by talking the case for Unit linked products which are designed with keeping trustees risk appetite in mind. He believed significant underfunding or lack of funding in ME/SME's is the concern and can be communicated in strong way if an Actuary and other client facing agencies manage to collaborate. He concluded with ALM as need, instead of only tax advantage for funding.



In continuation, **Mr. Sumit**, shared his concern on need for retirement solutions for India. Primary reason for

retirement protection plans is need of time due to a) Improvement in life expectancy b) increased dependency ratio of elderly age population c) limited population has access to pension benefits offered by the employer d) Confused Customers!! - Country with multiple regulators, multiple products with different tax benefits and tax treatments makes the product complicated for the customer and hence only 14.00% of total saving goes into provident / pension funds. In his view, situation can be changed by increasing the awareness of retirement benefit plans and by strengthening the product proposition, annuity products and taking necessary steps to strengthen distribution network by offering handsome incentives.

Session : Key Regulatory Retirement Developments & Introduction to the Draft Labour Code

Speaker: Mr. Jehangir Damkevalat



Session Highlights

Mr. Jehangir, a speaker with huge experience on rules and regulation on retirement benefits in India, touched upon the regulatory development in recent past such as a) Change in EPFO pay-out rate b) amendment in PoGA & Employee Deposit linked Insurance c) Transfer of Unclaimed PF to lying for 7 years + to SCWF and other phases d) SC decision on uncapped pension, with an option exercise the option with retrospective effect e) Introduction of Composite form w.e.f. Feb 20, 2017, has increased the PF claim experience and it seems to be major cause of concern as its defeating the purpose of Social Security of "Savings towards the Post-retirement life.

He even touched the draft labour code made available by MoL&E which was made available on public domain in March 2017 for feedback from stakeholders and/or experts followed by second draft in March 2018. Draft code is primarily talks in the rationale that all have a right to a denied living and no person/dependents need

suffer in adverse times. As per draft code most of the act/legislation related to employee-employer arrangements may get subsumed, fully/partially. Scheme/Benefit structure, contribution rate, registration process and exclusions criteria was also briefed by him.

Session : Labour Code - Influence on social security, employers and actuaries

Speakers: Mr. Kulin Patel, Mr. Hemanshu Jain



Session Highlights

After the last session where speaker introduced the draft labour code, continuation session was much needed as to understand how it will influence the social security status in India & to employers. More importantly on how an "Actuary" can add value for the all stakeholders. This is was the core objective of both the speakers, **Mr. Kulin and Mr. Himanshu**.

The new code has proposed to bring tectonic shift in Social Security system as the list of defined schemes are proposed to get merged under one umbrella with a mandatory contribution rate specified under draft code. This arrangement will bring more security to the employees due to mandatory funding arrangements. However group was of the opinion that things will be more challenging at predefined contribution for those scheme which are linked to final salary.

As a practicing actuary, we as a group has a more opportunities by way of advising more on Gratuity, Exempt Provident Fund. Definition of "Wages" is clear and all encompassing (with some small exceptions) with advisors of State Social Security organizations. Group may also target to contribute for increase public awareness on significance of Actuarial work and play a key role in a system that is likely to impact 500 million people.

Session : Factors affecting Population Mortality Improvements (MI)

Speaker: Mr. Abhijit Pal



Session Highlights

Mr. Abhijit, started with his definition on mortality improvement, it is the reduction /improvement in the transitional probability of mortality between two ages. In other words, it is the improvement over time in the survival probability of a life aged x between time t and $t+1$. For a developing country like India, the population is likely to continue to experience faster mortality improvements than developed nations for a foreseeable future. He even touched on below parameters that affects the MI rates

- ♦ Infant Mortality rate
- ♦ Maternal Mortality Rate
- ♦ Levels of malnutrition
- ♦ Net National Income per capital
- ♦ Urban population
- ♦ Literacy rates
- ♦ Tobacco Use
- ♦ Access to healthcare
- ♦ Accidental Death rates
- ♦ Advancement in Medical sciences
- ♦ Deaths due to Non-communicable diseases

It was surprise to read a fact stated by Google, “that a human could live for 500 YEARS”. On conclusion, Mortality improvements are difficult to articulate and estimate particularly for insured population and the insured lives too are likely to exhibit higher mortality improvements than the population due to improving socio-economic profile.

Session : Proportionality in actuarial valuations

Speaker: Mr. Mayur Ankolekar

Session Highlights

A practitioner with over two decades of extensive



experience in employee benefits, talked about the proportionality in employee benefits. Proportionality in employee benefits means maintaining a balance between fulfilling client requirements and abiding by the rules and suggestions given by the standard. He concentrated on entity classifications and principles scripted in AS15 & Ind AS19. It's better to give deliverables based on needs specified in the standard with appropriate para references while talking with end user. Even for quarterly reporting rather than submitting full disclosure an abridged or necessary figure can be submitted based on interim valuation (can be roll-forward or full valuation).

Session : Working Group on Consulting Issues - Introduction

Speakers: Mr. Liyaquat Khan



Session Highlights

Mr. Liyaquat Khan as the Chairperson introduced “the Consulting Issues Working Group (CIWG)” formed in the council's meeting. A group of 5 will be primarily working on matters relating to allowing Associate members to Practice and categorized as “actuary-in practice” within the meaning of Sec 2 (2) of the Actuaries Act, 2006. He even discussed various Term of References and issues

which may arise in future and requested everyone to suggest their views on future activities for the newly formed group.

Session : Role play depicting professional situations and challenges facing benefit actuaries

Speaker: Ms. Preeti Chandrashekhar



Session Highlights

Ms. Preeti introduced, Mr. Nandan, Mr. Suranjan and Ms. Chitra who were supposed to act on real life situations where most of the practicing consultants faces in day-to-day activities for valuation process.

Situation 1 - Transition to a New Actuary a) with a request for result on priority b) with “account receivable” of existing actuary.

Situation was perfectly narrated and acted by all 3 players with following conclusions a) no matter how much the urgent request is from client, new actuary should take No Objection Certificate from previous/existing actuary. Before taking the work it's recommend to speak or share any issues which may arise after issuing of assignment, including valid account receivables.

Survey results were categorized in to multiple layers and most common activities were included on the conclusions.

The key Conclusions - Agenda of the AGPEBSS will primarily concentrate on a) Strengthening public image b) Bringing More visibility within the profession c) Keeping abreast of matters d) Finding new/more areas of work.

Slido Results

Session	Survey Question		Total Participants
Introduction to Slido	How are you feeling this morning?		29
	Very Happy	38%	
	Happy	31%	
	Okay	17%	
	Could do with more sleep	31%	
	Not too happy	3%	

Situation 2 - Assumptions' determination

Assumptions are integral part of valuation process and for provision purpose they should come from client as a best and reasonable estimate for future. The situation where no appropriate caveats or agreeance of assumptions (preferably over email and not on call) were done before sharing the final/preliminary deliverables with auditor by client. It's concluded that, principle-based APS 27 should follow for the assumptions with appropriate comments or caveats in reports for future references.

Session : Participants opportunity to shape the practice area agenda: Have desktop breakout groups to discuss how we prioritise / shape the agenda of the AGPEBSS in next two years

Speakers: Ms. Chitra Jaisimha, Ms. Neha Agarwala



Session Highlights

On day 1, all participants were requested to fill the survey form on 8 defined mission for AGPEBSS over next 2 years. Priority for each defined mission was requested to allocate based on individual perception. Before, Ms. Neha shared the survey results, where all participants were segregated into 8 teams and each team was supposed address each of the point allotted.

Session	Survey Question	Total Participants
S5	What do you think would be lowest Attrition Rate Industry?	27
	Manufacturing	
	Service	
	Textile	
	Banking	
S5	What do you think would be Highest Attrition Rate Industry?	28
	Advertising, Marketing & Public Relations	
	Retail Consumer Products	
	Online Services	
	Outplacement Services / BPO / KPO	
S2	In your belief what would be most likely impact on Actuarial Liability of Increasing Attrition Rate for a Non-vested Gratuity Benefit.	27
	Decrease	
	Increase	
	No Change	
	Can't Say	
S5	How have you used to APS 27 in your valuation work?	26
	I use an APS 27 compliance checklist for every report I make	
	I have developed a new standard report format to comply with APS27	
	I have used APS 27 to increase the awareness of actuaries responsibilities to my clients	
	I have encouraged clients to conduct more assumptions analyses because of APS 27	
	I keep APS 27 in the back of my mind but have not taken any concrete actions	
	I don't understand APS 27 and need more education about it, hence have not used it	
S14	Is 'Accounts receivable' of an existing Actuary fall under the ambit of Para 7.2?	19
	Yes	
	No	
	Depends	
S4	Which is the methodology used by you for calculating the PF Interest Rate guarantee?	26
	Deterministic	
	Stochastic	
	Option Pricing	
S4	Which of these method of reporting disclosure for PF under Ind AS 19 is most commonly used?	26
	Full Disclosure (with sensitivity/ cashflow etc)	
	Part Disclosure	
	Reported just Asset, liability, PF shortfall amount.	
S13	Did you know about CIWG before this CIRB program?	26
	Yes	
	No	
S13	If Yes, Are you in favour of allowing Associates to practice?	26
	Yes	
	No	
S14	Have you evaluated the historical experience for the client from the historical data, or only guided the client?	20
	Personally evaluated	
	Only guidance	
	Not questioned the methodology	
S14	In your opinion, what could serve as a reasonable time frame for the existing actuary to respond to an email under Para 7.2?	20
	1-2 days	
	2-5 days	
	5-10 days	
	No limit	

**Vote of thanks and felicitation :
Mr. Kartikey Kandoi**

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“Both the authors are currently working with M/s. K. A. Pandit as Senior Actuarial Manager taking care of employee benefits team.”

7th Young Actuaries Connect

Organised by: Institute of Actuaries in India

Venue: Marriott Fairfield, Bengaluru

Date: 5th December 2018

Session : Education Curriculum 2019 & Examination System

Speakers: Dr. K Sriram, Mr. Souvik Jash

Mr. Souvik commenced the session by sharing his initial footsteps in the field of actuaries. Later in the session he detailed on the study material, exam structure and assessment pattern which was complemented by an interactive session. The change in the curriculum is an inevitable adaptation for the dynamic skill set required by the industry. He also elaborated on the various rearrangements, inclusions and exclusions amongst the papers. He stated that actuaries being a global qualification, alternative regimes across the globe has been incorporated into the curriculum. The inclusions of practicals: R and excel were deliberated. He commented that he hopes a future walk of actuarial curriculum where machine learning will be a subject. He added that the society pass rates might increase with the implementation of the new curriculum. Dr. Sriram later took over the session and gave insights on exam preparations. He emphasized on the importance of practice being the key in cracking the exam.

Session : Interaction with Students

Speakers: Mr. Dinesh Khansili, Mr. Souvik Jash, Dr. K Sriram



During the interaction students had various queries on the study material, preparation techniques,

restructuring of syllabus, work experience vis-à-vis clearing papers, studying abroad and future exemptions from various societies. The panel addressed the queries and gave relevant insights regarding preparations and material. They insinuated the probability of change in diet schedule for the coming year. Mr. Khansili reassured students about the cost-effective study material to be released in the coming few weeks and implied ongoing dialogues between the societies regarding their future association. The panel suggested actuarial profession demands a balance between experience and knowledge which could be further catered by capsule sessions by IAI. At the end of the session announcement regarding the Global Conference of Actuaries, scheduled for Mar 4th, 5th and 6th was made and young actuaries were invited to participate for the cultural event. Mr. Rangarajan later felicitated Dr. K Sriram and Mr. Souvik Jash.

Session : Opportunities in Insurance Areas

Speakers: Dr. K Sriram, Mr. B N Rangarajan



Mr. Rangarajan kicked off his speech by encouraging young actuaries to view the bigger picture to tackle complex scenarios efficiently. He emphasized on qualification just being one of the dimensions for an actuary. He enumerated on the numerous designations awaiting young actuaries in the field of product design and pricing, modelling, valuation reporting, experience monitoring and risk management. He said the wider arena of merger and acquisition, actuarial consultant, regulatory bodies and KPOs are opening new doors for actuaries. He substantiated the burgeoning

opportunities for youngsters with implementation of IFRS 17 and reinsurers branching out to India. Postal life insurance and academics paves out another platform for actuaries. Mr. Rangarajan inferred that a successful actuary thinks across the verticals, and frames the best productive solutions.



Dr. Sriram presented the three dimensions of actuarial career. The first being intersection areas-Business planning, sales and marketing and underwriting which needs an inescapable knowledge on the complete sense of business. The second dimension involves around new venture creations like framing employee benefit policies. He suggested that market still face demand and supply gap for such firms. The third dimension spoke about penetration into non-traditional sectors like investment banking and credit rating. He opined that the adaption of Basel II & III has widened the platform for actuaries.

This was continued by an active discussion on scope of actuaries in fields-namely HR Analytics, Employee benefit plans, Employee stock options, Sports Analytics and Loyalty points in Airlines.

Mr. Rangarajan was felicitated at the end of the session.

Session : Opportunities in wider areas

Speakers: Mr. Mahidhara Davangere



Mr. Mahidhara defines an Actuary as a specialist with a

generalistic view. He talked about the viscous circle of Traditional paths, Innovation & Research and Non-Traditional paths. During the introductory session he remembered the pioneers of the industries and motivated the youngsters to follow them. Mr. Mahidhara brought in view a few alternative career paths such as Finance & Investments, Data Science, Climate Change, Risk Management, Governance and Science & Innovation. The knowledge in economics and commerce equips an actuary in the areas of Banking, Investment Banking, Asset Management and Alternate Assets. Having had a practical knowledge in statistics and programming an Actuary has a cutting edge in the fields of Big Data, Predictive Modelling, Artificial Intelligence, Machine Learning and Risk analysis. He acknowledged that the actuaries in India are working in areas of Energy Pricing, Carbon Pricing, Catastrophe Bonds and Climate Change Modelling. He also shed light on scope of actuaries in Weather Derivatives, Data Analytics for Farming, Disaster Management and crop insurance. He discussed about the development in actuarial fields in nations like Australia and Zimbabwe. He briefed the working of advisory groups and proposal for innovation cell at IAI. In conclusion, he urged young actuaries to volunteer for IAI and keep the professionalism and ethics of an Actuary.

Dr. Sriram felicitated **Mr. Mahidhara**.

Session : Moving between markets (India and abroad) - opportunities and challenges

Moderator: Mr. Mahidhara Davangere

Panellists: Mr. MSVS Phanesh & Mr. Aravind Sethumadhavan



Mr. Phanesh and **Mr. Arvind** elucidated that India is a proliferating hub of opportunities, A discussion on skillset proposed and **Mr. Arvind** replied that skillset must be gained with complete understanding of the application. He inferred that the advent of Solvency II BREXIT and PRA Regime attributes to an inorganic growth in demand. He iterated that communication is one of the prime skills for an actuary. **Mr. Phanesh** added that understanding and

applying the first principle, end to end knowledge and sound technical skills are also significant. Later the discussions unfolded the queries on options to move abroad, to which **Mr. Arvind** suggested that moving within the organization once recognized as an expert would be facile. They also elaborated that while developing countries, provide an opportunity to learn more and create a social impact, the developed countries have complete date with advanced market providing innovation opportunities. However, working in MNCs provides its employees a global visibility. On discussion regarding talent pool the speakers suggested technical and business skills with end to end ownership and greater accountability is important. Furthermore, the conversation progressed and a few untrodden paths such as mathematical modeling of biological assets were mentioned.

Mr. Aravind stressed on importance of fellowship, understanding business, developing expertise and having role specific ambition.

Session : Cracking the recruitment & selection process

Speakers: Mr. Dishank Raj & Ms. Fiona Johnson



The speakers commenced by briefing on their respective companies. The professionals then gave insights on various techniques to crack the interview. They laid out fundamental expectations from a resume and reasoned the importance of social media hygiene. They stated that the business environment is Volatile, Uncertain, Complex, Ambiguous (VUCA) and subject to cost pressure and emerging technologies. On concluding, they encouraged candidates to have an aesthetic but honest LinkedIn profile to bring unique perspective, to stay inquisitive, to network and to build proactive solutions. This was followed by an interview role play.

Mr. Mahidhara felicitated the speakers.

Open Discussion forum



The open forum included panelists **Mr. Dishank Raj**, **Mr. Mahidhara Davangere** and two among the conference participants. The open forum discussions from the view point of the industry implied that a greater confidence. The understanding of the bigger socio-economic picture, diverse knowledge with specification would be well appreciated. The need of marketing of the actuarial profession and the steps taken for the same were discussed and **Mr. Mahidhara** assured that the society is working towards the same.

Vote of Thanks: Mr. Mahidhara Davangere

Mr. Mahidhara concluded the event by thanking the IAI President, Mr. Sunil Sharma, executive director Mr. Dinesh Khanisili the speakers Dr. K Sriram, Mr. Souvik Jash, Mr. B N Rangarajan, Mr. MSVS Phanesh and Mr. Aravind Sethumadhavan, Ms. Fiona Johnson, Mr. Dishank Raj and marketing committee of IAI, Ms. Ambreen Surve and volunteers. He expressed his heart felt gratitude to Swiss Re for the event. He also thanked Ms. Chahak the Emcee of the event, Ms. Shwetha and Ms. Aruna of Pramatha for organizing the event.



Written by



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“Both the authors are student member of Institute of Actuaries of India.”

30th India Fellowship Seminar (IFS)

Organised by: Advisory Group on Professionalism, IAI Ethics & Conduct, IAI
Venue: Hotel Sea Princess, Mumbai **Date:** 17th & 18th December 2018

Session: Welcome Address

The 30th India Fellowship Seminar (IFS) started with a welcome address from **Mr. K. S. Gopalakrishnan**, Chairperson, Professionalism, Ethics & Conduct Advisory Group, IAI, followed by speeches from **Mr. Sunil Sharma**, President, IAI and **Ms. Pournima Gupte**, Member (Actuary), IRDAI. They talked about various aspects of professionalism including Actuaries Act and Professional Conduct Standards (PCS). These were followed by sessions from newly/nearly qualified actuaries supported by experienced guides.



time and availability of better alternate. Also, insurers levy penalty charges to discourage surrender, balance the initial acquisition cost and to cover the loss of future profit. But this leads to loss of trust among the customers which further leads to lower penetration and lower sales.

The solution to improve the sales of saving type Life Insurance products include Digitization, Optimization, variable cost model, simplified product structure, monitoring sales, maximizing investment portfolio, justifying surrender profits, increased transparency and disclosure, better sales literature, deferred tax benefit, adoption of global practise like benefit guarantee, limit attrition of intermediary and use alternate channels.

Session : Traditional Savings type life insurance products - low policy persistency and low surrender values (vis-à-vis premiums paid) in the context of PRE - implications for the industry and profession and suggestions to address these issues

Guide : Mr. Satyan Jambunathan

Speakers: Ms. Surekha Tambe, Ms. Surbhi Narang, Ms. Johannes Gilliam Van Helsdingen

The speakers started the session talking about the stats of the life insurance industry. The insurance penetration as percentage of GDP in India is very low at 2.7%. Even the insurance density stands at USD 55 compared with global average of USD 300. Also, the persistency ratio is low in India. The factors for the same include lack of need-based selling, mis-selling, change in customer need over

Session : IRDAI circular on "Implementation of the Directions of the Hon'ble Supreme Court of India in the matter of WP No.295/2012 of Shri. S. Rajaseekaran vs Union of India and Ors"- implication for Motor Business, impact on product design and pricing, implication for customers and intermediaries and insurers

Guide : Mr. R.Arunachalam

Speakers: Ms. Radhika Bijlani, Mr. Arpit Bhagat, Mr. Param Dharamshi

The speakers introduced the need of the circular by casting the Supreme court ruling on the petition filed by Dr.S.Rajaseekaran for road safety. They comprehended this by stating that 66% of the vehicles on-road don't have insurance. Beginning 1st Sep 2018, it is mandatory



for a 3 years Third Party cover for private car and 5 years Third Party (TP) cover for two-wheelers.

The impact of the circular was considered on renewals, cancellations, recognition of premium in various years, IDV, lumpsum collection of premium, slight increase in TP premium rates when compared with current 1-year TP rates, long term cover for OD, standalone OD cover, long term addons, NCB structure, commissions, policy administration system & new filing.

In terms of pricing impact, factors such as change in customer behaviour, different NCB structure, add-on pricing, investment income benefit & reduced administrative cost were discussed.

Overall, the new guideline is expected to increase the Motor TP exposure for the General Insurance companies. No immediate effect is seen on reserving and capital calculation. The customers would have to bear the burden of upfront premium. Also, the level of awareness among customers would need to be increased by educating them about various available options. The intermediaries would gain from the additional commission, but they would need to modify their systems and gain additional product knowledge.

Session : Health insurance - challenges and opportunities in designing and pricing of products with wellness apps/wearables in an Indian context

Guide : Mr. Irvinder Singh Kohli

Speakers: Mr. Ashish Gupta, Ms. Neha Taneja, Mr. Mohit Gupta

The team started with the introduction to various wearable devices available in the market including Fitness trackers, skin patch sensors, smart contact lenses, etc. Also, various apps like Couch to 5k, Headspace, Apple health kit & Health Jinn were discussed. Various benefits like regular risk assessment, increased customer engagement, avoidance of lifestyle diseases and incentive for good health were also presented.

The products based on wellness app/wearables would help in better pricing of health insurance policies due to continuous availability of health parameters as compared to limited data in traditional products. However, challenges like correlation between the health indicators and illness, incorporation of new research, new target segment, privacy of data, cost and quality of the wearable, & limited use of rewards were also presented.



The team concluded by stating that wellness can be used as an effective communication tool and can promote a healthier lifestyle. But the success depends on the design and implementation and robust data strategy.

Session : Life Insurance - competitiveness of individual term insurance premium rates in India vs comparable countries- discussions on appropriateness and sustainability of mortality assumptions

Guide : Mr. Bharat Venkataramani

Speakers: Mr. Sudarshan Mall, Mr. Abhinav Kumar, Ms. Sanya Gupta



For protection market, the sum insured to GDP ratio for India is one of the lowest & its protection gap is one of the highest. Still, the private sector has made marked growth in this business. The growth driver includes restriction on ULIP products, increased customer awareness and lowering of rates.

The rates vary company to company significantly. The life expectancy in India is one of the lowest as compared with developed countries, but in contrast so are the premium rates.

Various challenges in pricing, particularly regarding mortality assumption were presented. The pricing and business monitoring are governed by various actuarial practice standards (APS). Various levers to control loss experience like medical and lifestyle underwriting, claim checks and experience analysis were suggested.

The discussion was concluded by raising concerns around uncertainty in the market, mortality, persistency, effectiveness of control and the impact these uncertainties could have on the premium rates.

Session : Analysis of success or otherwise on use of derivatives to hedge investment risks in India (reference - IRDAI guidelines)

Guide : Mr. Rajesh Dalmia

Speakers: Mr. Pratik Agarwal, Mr. Rushabh Shah

derivative market is in its nascent stage and further changes in regulations are required to increase the penetration of the market.



Address on Professionalism & Ethics

Day 1 was ended with a presentation from guest speaker Shri Deepak Pandey, IPS, Spl IGP and Jt Managing Director, MSPHC & Director in MSPHC Board, on professionalism and ethics. He provided several real-life examples to the audience to explain these two terms effectively. He said that ethics are the hygiene factor while professionalism is the motivation factor. As per him, Imran Khan, the Cricketer, is a living example of professionalism and ethics combined. He became a fast bowler after starting his career as a medium pacer. Also, he introduced neutral umpires for cricket matches.

As per him, working for employer professionalism is the key, while working for citizens ethical code is the key. And the real challenge is to balance the two, ethics and professionalism.



Various risks affecting the investment were discussed with specific focus on interest rate and credit risk. Credit Default Swaps (CDS) can be used to hedge corporate bonds, but the market for the same is not liquid. Also, non-convertible debenture can't be hedged using CDS and, as well, there are restrictions on who can sell CDS. Other alternatives available include credit spread options and credit insurance cover.

Interest rate risk has the highest impact on non-par non-linked policies and medium impact on par non-linked policies. Regulations for the use of derivatives came in 2000, but the interest rate derivatives were allowed in 2014. The derivatives include Interest Rate Future (IRF), Interest Rate Swaps (IRS) and Forward Rate Agreement (FRA). These derivatives are allowed in plain vanilla form only.

It was concluded that the volatility of Embedded Value is very high if the risks are allowed unhedged. But the

Session : GI Case Study - Reserving Philosophy

Guide : Dr. Asha Joshi

Speakers: Ms. Smita Tibrewal, Mr. Pushkar Deodhar, Mr. Balakrishnan S Iyer



Reserving philosophy is important as one needs to allow

for changes in business mix, claim handling, case reserving, deductibles and limits, reinsurance, economic changes, etc. The philosophy should be consistent with company's philosophy and in line with statutory and professional guidelines. This should include data accuracy and completeness, appropriate methodology, actual vs expected comparison.

The case study given to the speakers was to provide reserves for third party motor liability while balancing the solvency, dividend payment and reserving strength. Various regulations were discussed which provide guidance to the actuary on reserving including APS 21, Professional Conduct Standards (PCS) and various other regulations related to investment.

Various solutions discussed included setting adequate reserves, writing a detailed report to management & board, inform the regulator and engage external consultant.

Session : GI Case Study - Professional Standards

Guide : Mr. A V Karthikeyan

Speakers: Mr. Piyush Jain, Ms. Suruchi Bhargava, Ms. Gurpreet Singh



The case study given to the speakers was regarding APS 33. This standard was introduced by IAI framing the peer review guidelines for general insurance actuary. Basis this standard, it became compulsory to have peer review of year end valuations. However, the industry body suggested that the standard may be put on hold. As a result, the management of various companies asked the actuary to put the peer review on hold. Due to limitation of time, it became 'touch and go' activity to complete the peer review work.

To discuss what actuaries can do in such a situation, roles of various industry bodies, power of IAI, regulator, compliance officer and company's board were considered. It was apparent that IAI has the power to issue such practise standards. Since, the peer review report was to be submitted to Appointed Actuary, it was

his responsibility to follow the practise standard.

It was concluded that the appointed actuary needs to be in compliance with the professional standard. He needs to communicate the challenge to management, and start with the year-end valuation.

Session : LI Case Study - Mentor Actuary

Guide : Mr. S Raju

Speakers: Mr. Vikrant Sawant, Ms. Kruti Malde, Mr. Amit Khurana, Mr. Anand Prakash



Before taking the mentor role, the actuary should be clear about the roles and responsibilities & eligibility. He should consider the Professional Conduct Standard, IRDAI AA regulations and APS. In particular, the speakers talked about focus on PCS 5, PCS 6 and PCS 7. In case of any conflict, the mentor should decline the role.

The mentor could have disagreement with the appointed actuary on various assumptions, valuation methodology, determination of Margin for Adverse Deviation, allocation of surplus, etc. These disagreements should lead to healthy debate. In case of conflict, this could lead to delay in valuation, filing of new product and may lead to regulatory intervention. The conflicts could also arise due to difference in interpretation of regulation, lesser involvement of mentor in internal decision making & limited access to data. However, both Appointed Actuary and Mentor have joint reporting to the insurance regulator.

There are few open ends to the Mentor regulation. Even in overseas countries, there is no clear regulation for mentor. Even in some countries, Appointed Actuary regulation is not detailed. Thus, it was concluded that the Mentor guidelines should be similar to Appointed Actuary regulations, but at the same time, they should be open-ended to act in best possible way in any given situation.

Session : RERA Act - need for new insurance products, provisions of the RERA Act, insurance needs of the property developers, title insurance, Inherent defects insurance- coverages, rating factors, pricing and reserving challenges

Guide : Mr. Saket Singhal

Speakers: Mr. Kunal Jha, Mr. Ryan Rakitha Samaratunga, Mr. Arun Vijay S



The real estate market contributes 12%-15% to the GDP on India. However, before RERA there was no act to protect the interest of end customers. The end buyers were on the back foot as they had to bear for the delay in construction, charges were on super area, & the agreements were one-sided.

RERA is a 40 page act which brings RERA number as a requirement for the developer. The two important aspects of RERA which could fuel the demand for General Insurance in property space include resolution of ownership of legal title and rectification of structural defects by the developer. The current general insurance products do not cater to these needs. Thus, insurance companies need to come up with new products.

The features of title insurance include long-term nature, high operational cost but good loss ratios and wide market. There would be need of title servicing administrator (TSA) for underwriting and claims administration. The success factors for India would include Digitization, addressing regional differences, develop and train TSA and collection of data.

The Inherent defect insurance would cater to defective design and any consequential losses thereafter. The cover would be on indemnity basis with sum insured being the value of the property. Various factors like limited data, heterogeneous risk, economic and systemic risk & uncertain legal environment makes the product complex to price.

RERA is expected to increase the demand for commercial insurance. The insurance companies would need to build capability to deliver protection for this emerging area.

Session : Professionalism Case Studies- Group Discussions

Speakers: Ms. Anuradha Lal, Mr. Heerak Basu

Ms. Anuradha Lal highlighted professionalism using visual case studies. The first video was 'lost in transmission' where the findings and assumptions of the report were condensed when communicated to the next level. As a result, only the final message was communicated to the board without any pros and cons of it. Basis this video, the audience were asked to suggest on what went wrong and who should be held responsible for it.

Similarly, second video was presented on 'Factor Fiction: Pension Actuary' where an increased factor was suggested to the actuary to encash certain part of the pension without her been done with the calculations. Audience were asked to suggest on how she could react to such a situation.

Session : IAI Disciplinary Process

Speaker : Mr. R Arunachalam

Mr. R. Arunachalam discussed about the disciplinary framework, members of disciplinary committee, and Section 31 of the act. The Section 31 states the professional misconduct in relation to the members of the Institute in Practise, members of the Institute in Practise, members of the Institute generally and other misconduct in relation to the member of the institute generally.

The Prosecution Director (PD) shall create a Prima facie opinion based on the complaint, the rejoinder and any other documents. This opinion is placed in front of DC (Disciplinary Committee) along with all relevant documents. The DC will agree or disagree with the Prima facie opinion and accordingly advice the PD or the council.

Any institute member aggrieved by the order of the council can prefer an appeal to Appellate Authority within 90 days from the date of order.

Day 2 was concluded with thanks giving note by Mr. K. S. Gopalakrishnan.



Submitted by



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“Mr. Gaurav holds the Appointed Actuary position in Bajaj Allianz General Insurance Company Ltd.”

ANNOUNCEMENT

14th Current Issues Seminar in Life Assurance (14th CILA)

Advisory Group: Advisory Group on Life Insurance

Venue: Hotel Sea Princess, Mumbai

Date: 22nd & 23rd January, 2019

Background

14th CILA is the flagship event of the Institute of Actuaries India, in the Life Insurance area, scheduled on 22-23 January, 2019 in Mumbai. It is an annual seminar organized by the 'Advisory Group on Life Insurance' of the Institute. The objective of the seminar is to present, discuss and deliberate on the various issues and possible solutions that are of significance today to the Indian Life Insurance Industry. The seminar is a combination of speeches, presentation and panel discussions. The coverage is broad so as to be of interest to a diverse set of participants working in different areas of the life insurance industry. The content, in large parts is non-actuarial, non-technical and hence of relevance to the non-actuarial audience as well. In the past, we have seen a significant part of the audience drawn from very diverse areas of Life Insurance practice.

Seminar: Structure and Topics

- Session 1 - Stakeholder Expectation - Role of Actuary
- Session 2 - Stakeholder Expectation - Role of Actuary (continued..)
- Session 3 - Reinsurance Regulations 2018 - New Opportunities, New Challenges
- Session 4 - Term Insurance - Debate on Sustainability of the rates
- Session 5 - Financial Risk Management - Getting better or Prone to more risks

Who Should Attend?

All financial professionals associated with the Life Insurance industry.

General Points

Registration Fees (Excluding 18% GST):

Categories	INR
Students & Associate Members	3,750
Affiliate & Fellow Members	7,500
Non Members	9,000

CPD Credit for IAI members (2 Days): 12 hrs. Technical in Life Insurance (As per APS 9 Ver.3)

Registration last date : 17th January, 2019 Thursday; Registration on first come & first serve basis

Dress Code : Business Casual

Point of Contact : ambreen@actuariesindia.org

Register now at : <http://www.actuariesindia.org/SeminarRegistration.aspx>

20th GCA Theme Contest Winner

**HEARTIEST CONGRATULATIONS
TO**

20th Global Conference of Actuaries

Theme Contest Winners

Mr. Nikhil Kamdar & Mr. Prasham Rambhia

**Theme for the 20th Global Conference of Actuaries will be
“Expanding the Horizon - Strengthening the Core”**



**Nikhil submitted the theme
Strengthen the Core....Look Beyond!!.**

**Prasham submitted the theme
Broadening Horizons, Deepening Expertise.**



Life Insurance Insights

Top 10 – news, views and trends

“New business premium collection by the life insurance industry grew by 5.2% year-on-year, with a rise in private insurers' market share from 49.0% to 52.0% for April to November 2018. SBI Life continued to remain the market leader amongst private insurers with a share of 20.6% in terms of weighted new business premiums.

The industry remained abuzz with transaction activity as press reports suggested that BNP Paribas Cardif has put up its (part) stake in SBI Life for sale and zeroed in on Carlyle Group and Singapore's GIC as the potential buyers. Various public-sector banks, namely Oriental Bank of Commerce, Andhra Bank and Bank of India, expressed interest or announced plans to offload stakes in their insurance ventures - Canara HSBC OBC Life, India First Life and Star Union Dai-ichi Life respectively, to fund capital needs of the core banking operations.

On the regulatory front, the IRDAI has proposed changes to Linked and Non-Linked Insurance Products regulations. The Authority also plans to implement the Risk Based Supervisory framework. Following is a summary of the top ten key trends and developments that shaped the life insurance market in India during the period of October to December 2018.”

10

LIC's open offer to acquire 26% stake in IDBI Bank

Reportedly, the state-owned insurer, the Life Insurance Corporation of India (LIC) has announced an open offer to purchase additional 26% shares from minority shareholders of IDBI Bank at INR61.73 per share between 26 December 2018 and 8 January 2019, comprising a total payout of over INR126 billion. As per the Securities and Exchange Board of India (SEBI) takeover code rules, the acquiring company should give an open offer to shareholders of the target company for purchase of shares or voting rights of 25% or more. Media reports suggest that the Competition Commission of India and Reserve Bank of India have also approved the deal while the government has decided not to participate in the LIC's open offer.

9

Update on new product launches

The life insurance industry has witnessed launch of a number of new products during the reporting period. Most of these new products were traditional non-linked products, similar to the previously observed trend. Among other launches, Future Generali Life has introduced a unit-linked plan that offers additional allocation of units on every premium payment. Health products continued to gain traction among insurers with Reliance Nippon Life marking its footprint in this segment with the launch of 'Cancer Protection Plus' plan. Point of Sale (PoS) products also continued to remain popular as Aegon Life launched a PoS product during the reporting period.

8

New business premium collections: Private insurers surpass LIC in terms of market share; register healthy growth

As per data released by the Insurance Regulatory and Development Authority of India (IRDAI), weighted new business premium (calculated as 100% of regular premium and 10% of single premium) collection for the life insurance industry amounted to INR480.8 billion during April to November 2018 as compared to INR457.2 billion for the same period previous year, recording a year-on-year growth of 5.2%. SBI Life retained its position as the largest private life insurer demonstrating impressive growth of 10.5% by writing weighted new business premiums worth INR51.6 billion, compared to INR46.7 billion in the corresponding period in previous fiscal. Private life insurers as a whole surpassed LIC as their market share increased from 49.0% to 52.0% registering a growth in weighted premium income of 11.5% year-on-year. LIC, on the other hand, witnessed a decline of 0.9% in its weighted new business collections.

7

Update on the distribution landscape

The regulator has proposed to broaden the scope of insurance marketing by enabling them to shift from being insurance agents to Insurance Service Providers (ISP). In addition to selling insurance products, ISPs would also be allowed to market mutual funds, pension products and other financial products.

Other distribution related updates include:

- Paytm has partnered with LIC to provide online

premium payment solutions on its platform enabling easy renewal of policies online using the policyholders' preferred mode of payment.

- Digital financial services firm, MobiKwik has also entered into insurance sector through the launch of digital insurance service on its platform. The company is offering insurance at INR20 per year which provides a cover of INR0.1 million for accidental death and permanent total disability. The firm also plans to partner with other insurers to expand its range of offerings.
- Bajaj Allianz Life has partnered with Kerala-based ESAF Small Finance Bank to service remote parts of the country.
- Uber has partnered with HDFC Life to launch Uber Care, a platform to provide easy access to term insurance cover with sum assured ranging from INR0.2 million to INR1 million to its driver partners.

6 IRDAI gives approval to stake transfer in IndiaFirst Life, PNB MetLife gets the SEBI approval for the proposed IPO

The IRDAI has given an in-principle approval to Legal & General to sell its stake of 26% in IndiaFirst Life to private equity firm, Warburg Pincus. The deal, announced earlier this year, is reportedly amounts to INR7.1 billion, valuing the insurer at INR27.3 billion. As per media reports, final approval is contingent on setting up of Special Purpose Vehicles (SPV) which is mandatory for private equity investments in insurance companies to complete share transfer.

PNB MetLife has received approval from the SEBI to float its Initial Public Offer (IPO). The issue, already approved by IRDAI, will reportedly comprise sale of 495.9 million shares of face value of INR10 each, constituting 24.6% stake on post-issue basis.

5 The Authority planning to implement 'Risk Based Supervisory' framework

The IRDAI is planning to implement Risk Based Supervisory (RBS) framework for supervision of the insurance companies in India. This will be a shift away from the current compliance based approach to a more holistic approach based on the 'risk profile' of companies. It has been proposed to roll out the RBS framework in a phased manner in order to ensure that it is efficient and effective. This paradigm shift to a more outcome based approach to supervision is expected to lead to a more focused approach to identifying high risk entities, thus more efficient supervision through off-site monitoring, on-site inspections and structured meeting with the entities. Assessment would involve identification of the inherent risks and building control mechanisms around

those risks. The regulator has earlier expressed plans to move to a risk-based capital (RBC) framework for solvency requirements, from the current factor-based solvency regime.

4 Listed life insurers disclose Indian Embedded Value (IEV) results for H1 FY2018-19

All the three listed life insurers have reported their Indian Embedded Value (IEV) results for the first half of FY2018-19. HDFC Life witnessed the highest growth in reported IEV of 7.6% over the first half of this fiscal year, followed by SBI Life and ICICI Prudential Life which recorded growth of 4.4% and 2.4% respectively. The details of reported IEV, profitability margin on new business and implied valuation multiples based on market price have been summarised in a table below.

3 IRDAI proposes changes to the Linked and Non-linked Insurance Products regulations

Following a consultative approach, the Authority has proposed various changes to the Linked and Non-Linked Insurance Product regulations. The proposed changes, if implemented, are expected to make life insurance product structures more flexible as well as customer friendly. These developments should foster healthy competition in the industry and provide much needed opportunity for smaller players to find niche segments to differentiate themselves. The key proposed changes have been summarised below:

- Death benefit is proposed to be floored to 7 times the annualised premium for regular premium products and 1.25 times for single premium products.
- For non-linked policies, revival period has been extended to five years from the current two years.
- Nil surrender value period has been reduced from three to two years. Guaranteed surrender value factors have also been revised.
- For linked policies, settlement option period has also been extended to 10 years or original policy term whichever is lower; and fund switches are also allowed during this period.
- Compliance with Reduction in Yield (RIY) requirements have been relaxed: these are required to be demonstrated only at the time of filing of product and upon policy maturity.
- For pension products, commutation of up to 60% has been allowed at policy surrender or maturity; and up to 100% on policyholder's death.

- For annuities, open market option has now been allowed, instead of the current requirement to purchase from the same insurer.
- Insurers have been given greater flexibility in terms of policy terms for individual term, group term and credit, and micro insurance products.
- Category of linked variable product has been removed and provisions related to non-linked products simplified.
- Provisions dealing with operational aspects taken out of the product regulations as it is felt that separate instructions for the same better accommodates the emerging requirements.
- Provisions for 'With Profit Management Committee' have been revised, in order to widen the scope of the Committee and strengthen governance. Eligibility criteria for Independent Actuary has also been introduced.

Further guidelines from the regulator on the transition approach are expected in the due course.

2 Carlyle Group and GIC to pick up stake in SBI Life

As per reports, US-based private equity firm Carlyle Group and Singapore's sovereign wealth fund GIC have formed a consortium to buy stake in SBI Life. Reportedly, the consortium will buy shares at a discounted price of INR510-520 per share, compared to the then prevailing market price of around INR572. The deal is expected to be valued at around INR5 billion. Notably, a portion of BNP Paribas Cardif's stake is up for sale in order to meet the minimum public shareholding norms of SEBI, which requires listed entities to have a public float of at least

25%. Media reports suggest that other players like KKR, Blackstone and Temasek Holdings were also in race to buy the said stake. State Bank of India currently owns 62.1% while BNP Paribas Cardif holds 22% in the joint venture, SBI Life which got listed in September 2017.



Public-sector banks express plans to offload stake in insurance ventures

- Oriental Bank of Commerce (OBC) is planning to sell its 23% stake in Canara HSBC OBC Life to recapitalise its core banking operations. Reportedly, ICICI Securities has been appointed as the financial advisor for the proposed transaction. Media reports suggest that the bank is aiming to complete the transaction before 31 March 2019 for a consideration of INR15 billion, which will value the insurer at roughly INR65 billion. The insurer is a joint venture between Canara Bank, HSBC Insurance Holdings and Oriental Bank of Commerce which hold 51%, 26% and 23% in the insurer respectively.
- Following the stake sale by Legal & General, Andhra Bank is also planning to divest its stake, either partially or fully, in IndiaFirst Life. The move is a part of Andhra Bank's decision to sell stake in its various joint ventures, including ASREC India and India International Bank (Malaysia) Berhad, as per the regulatory filing. Andhra Bank currently holds 30% stake in IndiaFirst Life. As per stock market filing, the bank has floated a request for proposal (RFP) to appoint a valuer and investment bank for the potential transaction.
- Bank of India plans to sell its entire stake in Star Union Dai-ichi Life and aims at raising INR10 to INR12 billion from the transaction. Star Union Dai-ichi Life is a joint venture between Bank of India, Union Bank of India and Japanese insurer Dai-ichi Life holding around 29%, 25% and 46% stakes respectively.

Disclosures by listed life insurers as at 30 September 2018

all figures are in INR billion

Metric	SBI Life	ICICI Prudential Life	HDFC Life
Embedded Value (EV)	199.1	192.5	163.8
Value of new business* (VNB)	6.4	5.9	6.1
VNB Margin	17.3%	17.5%	24.3%
Market capitalisation (based on share price as at 28 Sep 2018)	511.6	479.1	788.6
EV multiple	2.6x	2.5x	4.8x

* Value of new business is for six months period from 1 April 2018 to 30 September 2018.

Submitted by



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Enhanced role of the With-Profits committee

In the draft product regulations dated 26 October 2018 as proposed by the IRDAI the role of the With-Profits committee (WPC) has been greatly expanded. In this article we set out possible implications for life insurers of these greater duties and responsibilities of the WPC.

Enhanced responsibilities for the WPC

While the establishment of a WPC has been a regulatory requirement since 2013, the only regulatory purpose of this committee has been the approval of asset shares (which represents policyholders' interest in the participating fund), as stated below:

"The detailed working of the asset share, the expenses allowed for, the investment income earned on the fund etc. which are represented in the asset share shall be approved by a with profits committee."

Although for some insurers, the terms of references of their WPCs are already wider than the stated regulatory purpose, for other insurers, they are confined only to the stated regulatory purpose, which is approval of asset shares.

Under the proposed regulations, the mandate of the WPC has been greatly expanded to include:

- ♦ Recommendation of discretionary benefits to a company's Board of Directors, based on the advice of the Appointed Actuary and the Independent Actuary;
- ♦ Ensuring that equity and fairness are maintained between different generations and groups of policyholders in bonus declarations and reviewing the treatment of the residual assets in the fund ("Funds for Future Appropriation");
- ♦ An articulation of how policyholders' reasonable expectations ("PRE") have been met;
- ♦ Reviewing the appropriateness of expenses debited to the participating fund; and
- ♦ Justification of surrender values.

The expansion of the role of the WPC from merely approving the asset shares to overseeing other aspects of the management of the participating fund as a whole may appear to be subtle but is, in fact, significant and leads to much bigger questions to be addressed and assessed such as inter-generational fairness and the balancing of the interests of shareholders and policyholders.

Some key aspects of the wider focus areas of the WPC are discussed in the following paragraphs.

Bonus declaration

The approval of asset shares have previously been under the remit of the WPC, and although not explicitly stated in the earlier regulations, these asset shares were indeed used by many companies in the bonus setting process. However, the requirement to recommend the discretionary benefits (i.e. bonus rates) is a significant increase in responsibility for the WPC. To date, the Appointed Actuary has been responsible for recommending bonus rates to the Board of Directors. The proposed regulations now shifts this responsibility to the WPC.

For some companies in India, the asset shares alone have not been the basis for the determination of bonus rates, given the start-up nature of the business and / or the participating fund. For these insurers, the WPC will now need to look in detail at how bonuses are finally determined and that these bonuses accord with the principles of fairness, equity and consistency.

Even for companies where there is a strong correlation between asset shares and discretionary benefits, the WPC will need to review the bonus rate derivation exercise and understand how this link is applied in practice, given that the WPC is expected to make the recommendations of the proposed bonus rates.

Policyholders' Reasonable Expectations ("PRE")

The WPC report will be required to disclose the Company's interpretation of PRE and how it has been met through the declared discretionary benefits. This can have far-reaching implications for the business, including the level of shareholder support that may be required in the future to deliver discretionary benefits.

Those companies that do not yet have a clear view on how on the interpretation of PRE, may first be required to articulate this.

This is an area which also requires all the WPC members to be fully engaged with the issue of how PRE is shaped, the factors that go into shaping the PRE (e.g. benefit illustrations, policy contracts, any published bonus management/asset share calculation framework, bonus declaration history etc.) and most importantly, how these can change over time (e.g. through various forms of communication to policyholders).

Expenses

Previously, the WPC was required only to approve the expenses allocated to asset shares. This did not warrant a review of the allocation of expenses to the participating fund itself, and so did not cover the impact on the participating fund of those expenses not allocated to asset shares, which often relate to acquisition expenses that can be significant.

There are currently differences in the approach adopted by insurers in the allocation of expenses to the participating fund and going forward, each insurer will need to clearly justify the approach it has adopted to its WPC. As the quantum of expenses allocated to the participating fund affects the profitability of the insurer, this is clearly an area which will require the utmost care by members of the WPC to ensure both policyholders and shareholders are being fairly treated.

The FFA

The FFA for many companies represents assets of the participating fund that are not currently allocated to any particular policyholder. Typically the FFA has been built up through a combination of working capital injected in initial phase of the fund, profits/losses on matured/surrendered policies, explicit charges levied on the asset shares and/or costs that have not been allocated to asset shares of the policies (such as excess policy acquisition costs).

WPC members will now need to opine on the use of such assets and plans to distribute them. While the asset share is usually allocated to policyholders in a systematic way, the FFA is often simply a single balance amount. This makes it particularly difficult to judge whether a particular use (say to fund acquisition expenses, or to provide capital support) is fair to policyholders and shareholders, or equitable amongst different generations of policyholders.

Surrender values

In addition, it appears that the WPC will also need to justify any changes to surrender values offered to the participating policies. Since surrender profits can be an important source of the build up of the FFA, WPC members will need to clearly understand how equity between policyholders who surrender and those who remain in-force is established and monitored.

Conclusions

The proposed draft regulations have introduced several additional responsibilities for the WPC. It is important that all members of the WPC (including the non-actuarial members such as the CEO and the Independent Director) enhance their understanding of the nuances of the management of with profits business, as their actions can have very significant impact on the overall health of the life insurer as well as returns to participating policyholders.

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The Actuary India wishes many more years of healthy life to the fellow members (above 60) whose Birthday fall in January 2019

**Mr Bhudev Chatterjee
Mr N K Parikh
Mr Rajendra Prasad Sharma
Mr Srinivasan Nagasubramanian**

Actuarially Unreasonable: Working as a Data Scientist at an InsureTech.

Introduction

Pradnya Nimkar is an associate of Casualty actuarial society. She started her actuarial career in Pune with Bajaj Allianz as an actuarial trainee. Later, she moved to the United States and was working with Aon risk consulting for seven years where her main job responsibility was to opine on IBNR estimates.

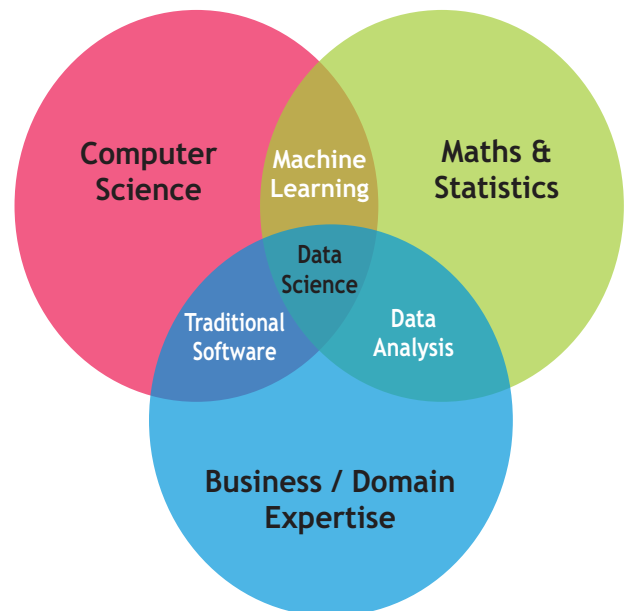
Two years ago, I quit my job of seven years as a consulting actuary at Aon to pursue a data science bootcamp. Today, I am working as a data scientist at an InsureTech startup in the Silicon Valley. I have received queries about the motivation behind this decision, about how this journey has been. This article is an attempt to answer those questions. As any professional actuary would, I am attaching a disclaimer to this article. This article represents my own experiences of transitioning from traditional actuarial role to building modern machine learning algorithms. The opinions expressed in this article are mine and should not be taken as opinions of any actuarial body.

investment in 144 companies in 2015 to \$4 billion investment with 328 companies in 2017.

- Many insurance careers have started IoT initiatives in the last few years. E.g Allstate has Arity. This produces new data streams which requires advanced data analytics capabilities.
- InsureTechs like Lemonade are already making headlines with the use of machine learning algorithms and artificial intelligence. The latest unicorn in the industry is root insurance company.
- Not to mention Tech giants like Amazon have expressed interest in insurance.

These trends were enough to jog my interest in the subject of Data Science and InsureTech.

One of the earlier and the most apt description of skill sets required by data scientist was done by Drew Conway is his famous article “The data science Venn diagram”. Following is a modified version of his original Venn diagram that describes the three skill sets of a typical data scientist which are -- Math/ Statistics skillsets, Business acumen and Compute science expertise.



Actuaries have excellent math/stat skillset and are the subject matter experts for insurance. The only skill that is lacking in a typical actuary when compared to a data scientist is computer science skillset (I know this is not true for all and actuaries have different educational

My journey in and out of traditional actuarial world:

While studying for a Bachelors degree in Statistics in a college in Mumbai, India, I discovered my love for the subject of Statistics. I wanted to take it further by specializing in one of the branches of applied statistics. That's when I stumbled upon actuarial science. Ever since, if there was one question I knew the answer to was, “what do you want to become in life” - an actuary of course!. I had thought once I got my actuarial credential, I will be happily practicing as an actuary ever after. But, turns out what they say about best laid plans is true. After working for seven years into traditional actuarial reserving work, I recently transitioned over to the data science side.

Why Data Science:

These days it is hard to find a professional who has not heard of the phrase “data science” and how it is causing disruption in many industries. While going through different articles on data science, I noticed following trends specific to Insurance industry.

- The InsureTech market has gone from a \$1.4billion

backgrounds and skillsets hence the disclaimer at the beginning!).

The only problem was the most common programming language for data science these days is python (or R - let's not get into that debate).

How to get those missing skillsets?

The two most common ways to gain these skill sets are through online classes offered by websites like Udemy/ Coursera/ Udacity etc. or through traditional classroom setting.

I gained the python coding skills by online courses. For data science skills, I enrolled myself in a three month bootcamp in San Francisco called Metis. (Metis also enrolls international students. Here is their website: (<https://www.thisismetis.com/>) A bootcamp is a full time intensive training course. It focuses on improving your coding skills, teaches machine learning concepts and algorithms from linear regression to deep learning. During this process, one also get to build five projects in Data science from scratch. This was a perfect setting for me which led me to leaving my job and enrolling in a full time bootcamp.

Life at bootcamp:

It was intense. They are not kidding when they call it "bootcamps" a term that originates from US military. Each day would start with pair programming, followed by lectures on machine learning techniques, followed by time to work on our projects. My classmates ranged from CTO, to Hollywood Lighting Technical Director, to economist, to lawyer. Every one of them had excelled in their own fields and were looking to expand their toolkit.

At the end of three months, we had the opportunity to present our pet project in front of bunch of employers.

How has it been working on the other side?

I still get to use my domain knowledge but get to experiment with data in a new fashion. I have newer techniques like natural language processing and deep learning in my toolkit which can be applied to unstructured data like file notes, accident description etc.

Does being an actuary help to be a good data scientist?

A typical machine learning project does not end at deploying a model in production. It needs to be converted into impact analysis or ROI analysis. Which one of these sentences will get the management's attention - I built a model with precision of 0.95 OR I just built a model that can save us \$100 per claim. A good data scientist is able to connect these dots. An actuary gets this training during exams as the exams span over multiple areas of business ranging from probability & statistics to financial mathematics, accounting, laws affecting the business etc.

Currently, some of the most misused words in data science are 'big data' and 'AI' as there are no standard guidelines to use these words. On the contrary, actuarial profession is guided by different standards of practice which provides consistency in the practice of the profession. Actuaries can utilize their expertise to bring this consistency in the data science profession and in turn learning newer cutting edge technology from data science side, unleashing the full potential of the insurance industry.

Reference: 1. <http://drewconway.com/zia/2013/3/26/the-data-science-venn-diagram>

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FAREWELL MESSAGE

Mrs. Samidha Parab had been a part of IAI family as Sr. Manager-IT. During her tenure in IAI, she found very sincere, hard working and cooperative with each one. We wish her great success and happiness for her future ahead.



Understanding co-morbidity: An application of Association Rules Mining

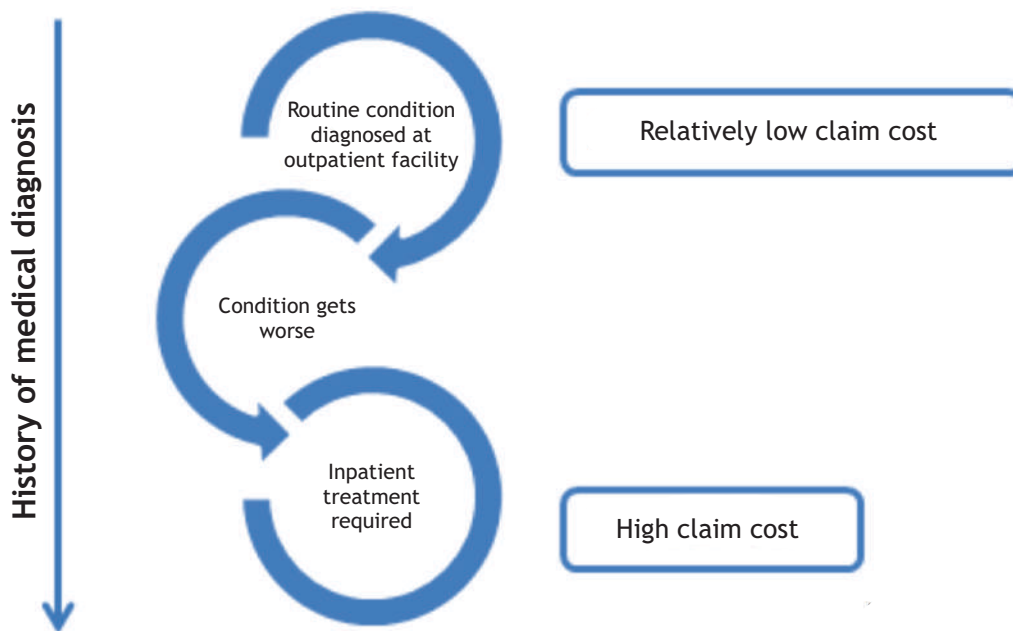
Abstract: This paper describes how the application of data mining technique, such as Association Rules, can be used in the space of insurance claims analytics to gain useful business insights. Association Rules technique can be used to decipher the pattern of disease co-existence and to help in finding how sequence of disease leading to large claims. Early identification of disease pattern can potentially help the business to reduce claims expense through managing claims more effectively.

Key word: Association Rules; co-morbidity; Diagnosis codes; medical claims

1. Introduction:

As per National Institute on Drug Abuse definition, when two disorders or illnesses occur on the same person, simultaneously or sequentially, they are described as comorbid. Now, there are many papers talk about the medical side of it, i.e. prevalence, causes, and effects of diagnostic co-morbidity. In this paper, the aim is not to decipher the medical reasoning behind it but to understand this phenomenon from a statistical viewpoint.

The study has its genesis from identification of the drivers behind large medical claims. Inevitably, diagnosis codes play an important role in deciding the cost of a medical claim. The idea is to find out if a pattern of disease could lead to a high claim cost. The following illustration at a high level captures the idea behind this paper,



The above illustration explains that if the pattern behind outpatient & inpatient diagnosis codes is understood then it can be said with prudence whether a low cost outpatient claim could turn out to be a large inpatient claim over the period of time.

The context of this discussion is to analyze the disease history of individuals during an agreeable period of study & bring out any pattern of disease coexistence. Now it is imperative that here we are not restricting ourselves to disease pattern findings only. We are hoping that the pattern identification could help us to manage future medical claims more appropriately & underwrite future risks more accurately. In other words, we are after those disease patterns, which are responsible for significantly high claim costs.

2. Association Rules:

In the age of online shopping, we frequently come across dilemmas like, "Customers, who bought this, also bought..." Now what does this mean? It is nothing but to comprehend the buying pattern of a customer. The online stores or for that matter a retail store would analyze the shopping history of an individual & suggest the individual or the "like-shopping-minded" individuals what to buy next based on historical shopping patterns. The motto of this discussion is not to talk about e-commerce analytics, but how we can customize this concept for an insurance analytics problem, in particular claims analytics.

Association rule mining generally used to find objects or attributes that frequently occur together - for example,

products often bought together during a shopping session or, in our case, diseases that tend to occur together during a study period. Such information can be used to recommend products to shoppers, to place frequently bundled items together on store shelves or to inform a health insurer about the possibility of a particular disease code leading to claim based on the occurrence of another.

The unit of "togetherness" when mining association rule is called a transaction. Depending on the problem, a transaction could be a single shopping basket, the diagnosis list of a selected population or even an individual's medical history. The objects that constitute a transaction, referred to as items in an item set: the products in the shopping basket, diagnosis codes in the list. Sometimes transactions referred to as baskets, from the shopping basket analogy. Mining for association rules occurs in two steps:

1. Look for all the item-sets (subsets of transactions) that occur more often than in a minimum fraction of the transactions.
2. Turn those item-sets into rules.

Now if we want to elaborate the first point above then we have to introduce two terms, namely, support & confidence. Support of the rule "if X then Y", means that every time you see the item-set X in the transaction, you expect to also see Y (with a given confidence). While Confidence of the rule "if X then Y", defined as, support (union(X, Y))/support (X), where union(X, Y) means that you are referring to item-sets that contain both the items in X and the items in Y. The goal in association rule mining is to find all the meaningful rules in the database with at least a given minimum support and a minimum given confidence.

Let us explain Association Rules using a simplified numerical illustration,

	Diagnosis Code 1	Diagnosis Code 2	Diagnosis Code 3	Diagnosis Code 4
Patient A	1	1	0	0
Patient B	0	1	1	0
Patient C	0	0	0	1
Patient D	1	1	1	0
Patient E	0	1	0	0

The above table is a hypothetical diagnosis code data, commonly known as transaction matrix. Each row represents a patient and columns are the diagnosis codes. For example, Patient A diagnosed with code 1 & 2 but not 3 & 4.

Now, suppose the goal is to find out the probability that a patient with diagnosis code 3, also diagnosed with codes 1 & 2. This statement (the goal or rule) written in the form:

{Diagnosis Code 1, Diagnosis Code 2} => {Diagnosis Code 3}.

Before we continue with the illustration, we need to define a few definitions.

In the above rule:

{Diagnosis Code 1, Diagnosis Code 2} called antecedent (left-hand-side or LHS, the "if" part of the rule).

Diagnosis Code 3 is called consequent (right-hand-side or RHS, the "then" part of the rule).

In the above, 20% (1 out of 5) of patients is diagnosed with Code 1, Code 2 & Code 3 together. This is the unconditional probability of diagnosed with code 1 & code 2 together. This quantity known as the Support for the item set {Diagnosis code 1, Diagnosis code 2 & Diagnosis code 3}. Support indicates how frequently certain combinations of items in both antecedent and consequent occur together in the data.

Of the two patients with both diagnosis code 1 and diagnosis code 2, one of them also had diagnosis code 3 also. This means 50% of the customers who had diagnosis code 1 and diagnosis code 2, also got diagnosis code 3. This conditional probability is the Confidence. It is a measure of how often the consequent is true, given that the antecedent is also true. A large value of Confidence means the rule is pointing to a strong association between the antecedents ("if" part of the rule) and the consequent ("then" part of the rule).

Lift is a measure of how predictive the rule is, compared to random association. Also defined as the ratio of the

observed confidence to expected confidence. When Lift is greater than 1, then the resulting rule is better at predicting the result than a random guess. In our example, the Lift is calculated to be $\text{Prob. \{Diagnosis 1, 2 AND 3\}} / (\text{Prob. \{Diagnosis 1, 2\}} \times \text{Prob. \{Diagnosis 3\}}) = 0.2 / (0.4 \times 0.4) = 1.25$.

3. Business objective:

Typically, an Association Rules algorithm will give rise to many rules. Depending upon the choice of Support & Confidence thresholds the number of rules will vary. Another important aspect of Association Rules is that the algorithm is frequency driven, in other words, items with maximum occurrences would dominate the resulting rules. The business objective is to find diagnosis codes leading to large claims but these diagnosis codes are very less frequent. Hence, traditional way of applying association rules will probably not get us those high amount diagnosis codes. We need to redefine our transaction matrix intelligently so that the algorithm takes care of "high-valued" diagnosis codes.

In order to accommodate high cost angle to the association rules algorithm, we add a high cost indicator against each patient/enrollee. The high cost based on the claim cost distribution. Typically a 98th /99th percentile point of the distribution would determine whether it is high cost or not. The claim cost is the total amount spent on both inpatient & outpatient treatments. The new transaction matrix would look like the below with an additional column called high cost indicator, where 1 indicates it to be a high cost and 0 otherwise.

	Diagnosis Code 1	Diagnosis Code 2	Diagnosis Code 3	Diagnosis Code 4	High cost indicator
Patient A	1	1	0	0	1
Patient B	0	1	1	0	0
Patient C	0	0	0	1	0
Patient D	1	1	1	0	0
Patient E	0	1	0	0	1

It indicates that for Patient A and Patient E the costs were high. Now we can mine the association rules to see which inpatient-outpatient diagnosis codes combine to give high claim. We can even see this phenomenon for inpatient & outpatient diagnosis codes in isolation. The association rules provide a customized mining by fixing the consequent and then mine to see what all antecedents contribute. In our problem, we can deliberately fix the High cost indicator as the consequent and use all diagnosis codes as antecedents.

4. Implementation:

To deal with thousands of diagnosis codes, as defined by International Classification of Diseases (ICD), we group them first. HCUP codes can help in bringing down the dimension of diagnosis (Dx) codes by grouping similar conditions.

There are many statistical packages available for association rules mining. Most of these packages apply apriori algorithm for rules mining. The approach starts by calculating the frequency of occurrence of single item set and extends it to nth item set until further extension not found.

As mentioned earlier, in the algorithm one needs to experiment with minimum support & confidence levels for the analysis. Level of support & confidence values will dictate the resulting number of rules from the analysis. If the level of support & confidence were set smaller values then the resulting rules would be too many whereas higher values would restrict the number of rules to few. Although, setting the level too high would never bring forward some of the potentially meaningful rules, as they do not occur too frequently. We can start with relatively small values of support and confidence and subsequently meaningful rules identified through careful judgements.

It is important from a business standpoint that the "unconventional" rules must be carefully examined, not the more obvious or trivial ones. If the support & confidence levels are set at a lower value then there will too many high frequency trivial rules, providing no new insights.

In addition, there will be some rules providing no extra knowledge. In other words, when a rule is a super rule of another rule and the former has the same or a lower Lift, the former rule considered redundant. In the following illustrative example, rule 2 is a super rule of rule 1 and the former has the same or a lower Lift, hence rule 2 considered redundant. To deal with such redundant rules, pruning is required.

Rule	Antecedent	Consequent	Support	Confidence	Lift
1	{Dx 1, Dx 2}	{High cost}	0.011	1.000	3.096
2	{Dx1, Dx2, Dx3}	{High cost}	0.006	1.000	3.096
3	{Dx1, Dx10}	{Low cost}	0.064	0.973	3.012
.....					

Close examination of all the resulting rules may reveal some interesting and useful patterns, which are not only statistically significant but also actionable with a clear noticeable value addition to the business process.

One possible drawback of this rule mining is that it does not provide the insights on the chronology of the occurrence of items. In other words, if we take rule 2 in the above example it can be said that Dx1, Dx2 & Dx3 co-occurring to give rise to a high cost claim, but it cannot be said with prudence which of them occurred first & which one in the end.

5. Conclusion:

In this article, we have explained how a data mining technique known as Association Rules, predominantly used in e-commerce business, can be successfully applied in the analysis of insurance claim data to gain useful insights. These insights can potentially help better claim management at the right time. Looking at the disease pattern the insurer can enhance its claims management system by coming up with better TPA strategy to manage “potential” high cost claims.

Reference: Practical Data Science with R by Nina Zumel, John Mount

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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

UAE Insurance Business statistics - 2017

The Insurance Authority published their 2017 Annual report on the insurance sector of The United Arab Emirates. There are 62 insurance companies in UAE. Gross written premiums for all insurance classes amounted to AED 44.8 billion (INR 87.4k Cr), accounting for an increase of 12% as compared to 2016.

Foreign companies account for 37% of total GWP (Life & Non-Life combined). However, 80% of Life business is dominated by foreign players and vice versa for Property & Casualty business.

The importance of Insurance sector and its vital role to the national economy is demonstrated by the volume of funds invested therein, which amounted to AED 60.7 billion (INR 118.4k Cr) in 2017, of which 37% is invested in stocks and bonds, followed by 26% in deposits. Shareholders' total equity in the national insurance companies amounted to AED 20.3 billion (INR 39.6k Cr).

Weighted average loss ratio and combined ratio is on a decreasing trend over the last few years across the industry particularly led by favorable experience in Motor.

IFRS 17 Update

Insurance Authority conducted an IFRS-17 workshop in association with KPMG and Milliman to apprise the industry on the developments and expectations.

All companies are required to finalize their gap analysis before Feb 2019. Insurance Authority has proposed the following framework for companies operating in UAE.

Phase I- Assessment

- ♦ Internal Gap Analysis - assess current status compliance against IFRS 17, including evaluation of expected financial and operational impacts of implementing IFRS17.
Due Date- 28 Feb 2019
- ♦ Report on Gap Analysis duly signed by CEO, submission to IA in English. Must incl. Roadmap for implementation by end of 2020
Due Date- 15 March 2019

Phase II- Design

- ♦ Produce quarterly progress report against Road map, duly signed by CEO
Due Date- 15 days after end of each quarter of years 2019 and 2020

Phase III- Implementation

- ♦ Implement new systems and perform quarterly evaluation of results
- ♦ Parallel reporting of results under current and IFRS 17 standards for year end 2020 results
- ♦ Period Jan-Dec 2021 companies to finalize all open implementation issues so year-end 2021 results are only reported using IFRS 17 standards in 2022

Basmah

Basmah is an initiative of the Dubai Health Authority (DHA) for cancer and hepatitis C screening and treatment for all Dubai residents as part of the basic benefit plan of the mandatory health insurance scheme prevalent in the country.

It's a reserve pool managed by a third party (Tru Doc) where all insurance companies operating in Dubai are required to set aside a reserve of AED 19 (INR 370) for each active member holding Dubai resident visa.

Motor TP Medical Expenses

Insurance Authority issued a clarification that any treatment costs of the third party injured persons by Motor vehicle accidents would be borne by the Motor Insurance company and not the Medical Insurer as the proximate cause of loss is the accident.

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Vintage is our Vantage



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