



Institute of Actuaries of India

www.actuariesindia.org

the **Actuary** **INDIA**

THE MAGAZINE OF THE INSTITUTE OF ACTUARIES OF INDIA

July 2017 Issue

Vol. IX - Issue 7

Pages 28 • ₹ 20

INDIAN ACTUARIAL PROFESSION
Serving the Cause of Public Interest

INSURANCE



Health insurance



Property insurance



Travel insurance



Theft insurance



Income protection
insurance



Casualty insurance



Life insurance



Auto insurance

ENSURING YOUR
**BRIGHTER
FUTURE**



ACTUARIAL Group was established in 1995 and is specialized in giving services to insurers, reinsurers, pension funds, banks and other related corporations.

Our long experience in general insurance, life insurance, pension funds, investments, software design, actuarial science and enterprise risk management gives us the opportunity to offer you a broad range of services and products designed to add value to your company.

We have four areas of activity:

ACTUARIAL SERVICES

Actuarial services in general and life insurance, pensions and investments.

SOFTWARE SOLUTIONS

Software solutions for insurers and pension funds management.

BACK OFFICE MANAGEMENT

Back office management of insurers and pension funds.

TRAINING

Training in insurance and pensions.

The group works in several countries in Europe, Latin America, Africa, Middle East and Southeast Asia.

CONTACT US

#231, #232 Access Lower Parel,
Level 2, Upper Level, Kamala House,
Senapati Bapat Marg, Kamala City
Mumbai 400013, India

Tel +91 22 6179 3841 / +91 22 6179 3842
infoMumbai@actuarial.pt

www.actuarial.pt

CONTENTS

CHIEF EDITOR

Sunil Sharma

Email: sunil.sharma@kotak.com

EDITOR

Dinesh Khansili

Email: dineshkhansili111@gmail.com

COUNTRY REPORTERS

Nauman Cheema
Pakistan

Email: info@naumanassociates.com

Kedar Mulgund
Canada

Email: kedar.mulgund@sunlife.com

T Bruce Porteous
United Kingdom

Email: bruce_porteous@standardlife.com

Vijay Balgobin
Mauritius

Email: vijay.balgobin@sicom.intnet.mu

Rajesh S
Singapore

Email: prasannarajesh30198@yahoo.co.in

Devadeep Gupta
Hongkong

Email: devadeep.gupta@prudential.com.hk

John Smith
New Zealand

Email: johns@fidelitylife.co.nz

Frank Munro
Srilanka

Email: Frank.Munro@aia.com

Krishen Sukdev
South Africa

Email: krishen.sukdev@gpaa.gov.za

For circulation to members, connected individuals and organizations only.

MESSAGE FROM PRESIDENT

Mr. Sanjeeb Kumar 04

MESSAGE FROM CHEFEDITOR

Mr. Sunil Sharma 05

WELCOME ED

Mr. Dinesh Chandra Khansili 06

EVENT REPORT

27th India Fellowship Seminar
by Mr. Sunil Savalkar 07

FEATURE

Actuary – Investment Advisor
by Mr. K. Subrahmanyam 14

Why insurance works better with some adverse selection
by Mr. Pradip Tapadar & Mr. Guy Thomas 17

INDUSTRY UPDATE

Top 10 - Life Insurance Insights
by Mr. Vivek Jalan 19

STUDENT EXAMINATION

List of Candidates Scoring Highest Marks in March 2017 exam 21

STUDENT COLUMN

The American Health Care act – Bill replacing Obama care
by Mr. Rishab Gupta & Mr. Jasmeet Singh 22

COUNTRY REPORT

Mauritius: Pure Captive Insurance
by Mr. Vijay Balagobin 24

UPCOMING EVENT

Economic Capital Pricing in Life Insurance 26

5th Capacity Building seminar and 13th Seminar on Current Issues 27

Disclaimer: Responsibility for authenticity of the contents or opinions expressed in any material published in this Magazine is solely of its author and the Institute of Actuaries of India, any of its editors, the staff working on it or "the Actuary India" is in no way holds responsibility there for. In respect of the advertisements, the advertisers are solely responsible for contents and legality of such advertisements and implications of the same.

The tariff rates for advertisement in the Actuary India are as under:

Back Page colour ₹ 38,500/-

Full page colour ₹ 30,000/-

Half Page colour ₹ 20,000/-

Your reply along with the details/art work of advertisement should be sent to library@actuariesindia.org

ENQUIRIES ABOUT PUBLICATION OF ARTICLES OR NEWS

Please address all your enquiries with regard to the magazine by e-mail at library@actuariesindia.org.
Kindly do not send it to editor or any other functionaries.

Printed and Published monthly by Vinod Kumar Kuttierath, Head of the Education and Training,
Institute of Actuaries of India at PRINT VISION, 75/77, 1st floor, Punjani Ind. Estate, Near Abhishek Hotel,
Khopat, Thane (W) 400 601, for Institute of Actuaries of India L & T Seawoods Ltd.,
Plot No. R-1, Tower II, Wing F, Level 2, Unit 206, Sector 40, Seawoods Railway Station, Navi Mumbai 400 706
Email: library@actuariesindia.org, Web: www.actuariesindia.org



I would like to begin this column with a news that Mr. Dinesh Chandra Khansili, who is really a veteran from our profession has joined our Institute full time as Executive Director couple of weeks ago. With his leadership and passion, I am sure the services to the students and members will improve substantially. His joining the IAI together with the office moving to its own premise in Navi Mumbai with many new facilities will help the profession growing faster.

In the past I have always used this column to update our members on the latest developments in various fields and steps being taken by the IAI in order to heads up or to prepare our students for future opportunities & challenges. In this issue, I would like to briefly touch upon various developments & opportunities for actuaries in the area of General Insurance. I strongly believe that it is the general insurance and the risk management areas which will throw up more and more growth opportunities than traditional life insurance in India. The young students and qualified actuaries should sincerely and carefully watch these growing areas for any potential opportunity.

In general insurance market there is a

renewed interest in India and number of new companies including some niche players like online only companies will enter the market soon. Basis my discussions with some global experts, they are very excited on the opportunities in general insurance market in India because the Indian economy is in the phase of rapid asset creation and general insurance growth is bound to follow.

Recently IAI organised the 4th Seminar on Current Issues in General Insurance (CIGI). The seminar covered variety of topics ranging from Risk and Challenges in the M&A of General Insurance Companies, issues related to crop insurance, third party liability claims management and role of technology for digital insurance. With data analytics & linear programming gaining prominence, the pricing in general insurance will become more and more sophisticated and pricing driven by the risks, the data, the knowledge and the expertise will become more important and valued in future. A combination of risk and behavior based personalized products and pricing for small group of customers or even for individual customers is not very far. To support such concepts and product offerings would require a lot analytical infrastructure and Actuarial resources. All these developments

point towards advent of risk based analytical pricing where actuaries will have an ever increasingly important role.

In Asia many companies have moved to risk based capital/ solvency. Sooner or later, the IRDAI will also move to the RBC regime. In general insurance, there are many risks and the nature of those risks are also different when compared to life insurance risks. Actuaries can therefore play an important role in efficient capital planning and its management when RBC regime kicks off or even at the preparatory stage.

On the behalf of IAI I would like to reiterate our commitment and continuous focus on the skill building in the area of General Insurance. We would in the near future be organizing workshops and would attempt to help the students and members to rise to the emerging challenges in the area of General Insurance. Additionally for professionals who are working in other areas but are keen on working in General Insurance, IAI would enable a smooth transition for such professionals.

As always I would like to conclude by stressing on the importance of contribution required from the members to further the cause of learning. While we would try our best to build an infrastructure aimed at learning and skill developments but it could be achieved only if we receive active and enthusiastic participation from our members. May I request our senior members in general insurance to drop me a line at president@actuariesindia.org in case you would like to contribute to the profession in any way.

If we were to do a quick comparison of number of players in the insurance industry in India and other markets, we will note that we have relatively lesser number of insurers in Indian market. It was expected that after Insurance Amendment Act and allowing upto 49% holding to foreign partners, the number of insurers in the Indian insurance sector will go up significantly. However, we have not observed any rise in number of players operating in India recently.

Let's look at the number of insurers and demographic information for few Asian countries:



Country	Population (million)	GDP (bUSD)	Nos. of Insurers#	Insurers per million people	Insurance penetration#
Singapore	5.6	297	167	29.82	7.15
Hong Kong	7.4	310	160	21.62	17.60
Malaysia	30	296	27	0.90	4.77
Japan	127	4,939	94	0.74	9.51
Indonesia	258	932	130	0.50	2.15
China	1,388	11,199	132	0.10	4.15
India	1,310	2,264	55	0.04	3.49

(# life and non-life together)

It can be seen from the table that India has lowest number of insurers per million people in the country. Well, merely 55 insurance companies are not enough to meet the need of such an enormous population. It can also be seen that there are 132 life insurers operating in China against 55 in India for a similar population. India seems to have the lowest insurance penetration among countries shown in table above except Indonesia. However, Indonesia seems to have geared up to take penetration to next level by having 130 insurance players in their market.

The data clearly demonstrates that we as a nation really need to look at what to do differently to attract

more global/domestic insurance companies in India. In order to make an improvement in penetration rate, we really need to more than double the number of insurers in the market.

The government planning and policy makers may perhaps need to look at how we could make India as attractive destination for insurers to set up their business. Few questions which may be looked at:

✧ What can we learn from markets like Indonesia, Hong Kong, Singapore, Japan and china who have attracted large global insurers in their market place?

✧ What do policy makers need to do to make India as preferred

destination for FDI in insurance?

✧ What needs to be done to make new insurers sustainable in Indian market?

✧ What needs to be done to bring more innovation in the Indian Insurance Products and distribution in India?

If we manage to answer and address some of these questions, this will surely help us to grow the number of insurance players in India and therefore increase the reach to people thereby raising the insurance penetration to a respectable level.

With this message I would like to sign off for now.



Welcome to the Institute of Actuaries of India.



It is with great pleasure, we welcome our new Executive Director, **Mr. Dinesh Chandra Khansili**.

Mr. Khansili joined as Executive Director(ED) of the Institute of Actuaries of India (IAI) on 27th June 2017. He has combined three decades plus experience of Actuarial, Insurance and Pension working and teaching. He has unique experience of working in public sector insurance company, insurance regulator office,

multinational insurance company in India; Lagos based insurance company, teaching and actuarial consulting area.

He has been trained in IAIS core principles and regulatory aspects at NAIC, Kansas city, USA, on Pension from APEC Study Centre Melbourne, Australia and regulatory aspects at Bank Negara, Malaysia.

He has worked almost in all the work

areas of a Life Insurance Company. He was General Manager (Technical-Actuarial) in ARM Life and had a stint as an Actuarial Consultant before joining as ED. He helped reviewing actuarial, reinsurance and group insurance processes of many life insurance companies. He has reviewed licensing process of insurance and reinsurance companies. He is determined to take IAI activities ahead in timely manner and seek your support.

(Members can reach to Executive Director, IAI)
ed@actuariesindia.org

COMMUNICATION FROM THE INSTITUTE OF ACTUARIES OF INDIA (IAI)

Organized by: Advisory Group on Professionalism, Ethics and Conduct, IAI
Venue: Hotel Sea Princess, Mumbai **Date:** 1st and 2nd June 2017

Day 1:



The seminar started with a brief introduction by **Mr. Anil Kumar Singh**, Chairperson, PEC AG. Firstly, he welcomed all the members attending the seminar and then he briefly explained the outline of seminar. He specifically stated that the objective of the seminar was not to examine the technical ability of the presenters but at the same time presenters were expected not speak anything technically wrong. With this he wished good wishes to all the presenters and invited **Mr. Chandan Khasnobis**, Chairperson, Professionalism Committee, IAI.



Mr. Khasnobis welcomed all the participants and explained in brief the importance of professionalism for the actuaries. After this, Mr. Anil Kumar Singh announced beginning of the presentations.

Session 1: Increasing the share of protection business - promise and pitfalls

Chairperson: Mr. Abhishek Anil Saraf

Presenters: Ms. Kashvi Jagnani, Mr. Khalid Ahmad and Ms. Satyavani Cherla



The group started with macro-perspective by showing the protection gap in India as compared to the other countries. The group also showed how the protection gap in India has been increasing at alarmingly high rate and talked about the possible factors for such protection gap.

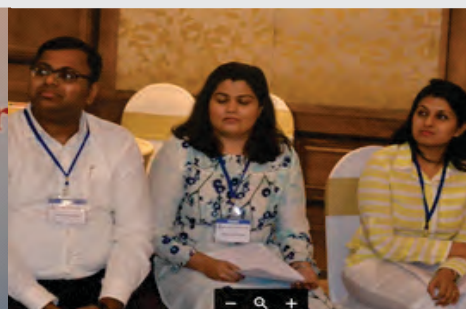
The group then briefly discussed various categories available under protection segment and then presented the perspective of various stakeholders on offering the protection solutions. After this, the group presented the various potential solutions to fulfil the promise.

The group concluded the presentation saying that in order to improve the share of protection business strong partnership with each stakeholder is needed.

Session 2: How critical the built up of estate is in participating fund and how best it can be utilised for the benefit of all stakeholders.

Chairperson: Mr. Philip Jackson

Presenters: Mr. Sunil Savalkar, Ms. Shalmalee Paralkar, Ms. Neha Aggarwal.



This group started with basic definitions related to participating (par) business and explained the various sources for formation of estate. The group then discussed various stakeholders in the participating business.

After this, the group presented various uses of estate and then discussed the 'best' utilisation of the

estate for benefit of stakeholders. In this segment they showed how estate can be used maintaining the balance in needs of stakeholders.

Finally, the group concluded by discussing whether there can be a concept of ideal level estate and how that can be achieved while best utilising the estate.

Session 3: General Insurance - Changes in the reserving methods as IRDAI ALSM 2016, Impact on solvency and reserving.

Chairperson: Mr. Palreddy Vishnuvardhan

Presenters: Mr. Varun Jain, Ms. Deepanjali Talwar and Mr. Girinker Aggarwal

computation of solvency margin. The group further pointed out that under the latest regulation, the Appointed Actuary (AA) will have to sign-off the asset valuations. The group then covered the thresholds specified in regulation, controls on solvency monitoring, computation of required solvency margin (RSM) and the revised factors for computation of RSM.

which have direct implications on business of foreign reinsurers.

The presentation then covered the challenges faced by foreign reinsurers e.g. absence of level playing field as preference goes to Indian reinsurers, regulatory uncertainty as further changes in the regulations are expected and regulatory restrictions.

The group then moved on to discuss the opportunities available for foreign reinsurers as well as for the Indian reinsurers.

Finally, the group talked about the impact on life insurance industry and covered points like operational challenges, increased time to launch the products, redistribution of reinsured business and possibility of not getting the best deal, product innovation that may come from foreign reinsurers. The group concluded the presentation by summarising the points covered.

The group as a part of overview of the IRDAI ALSM regulations 2016, explained points related to the valuation of assets, estimation of liabilities and determination of solvency margin.

While presenting the changes related

to reserving, the group explained that the reserves need to be held for 28 lines of business as against 10 lines of business earlier. The group further stated that the motor insurance segment is split into 8 lines, health is split into 4 lines and 5 new lines of business that are recognised in the regulation. The group also covered other areas like estimating outstanding

reserves, estimating incurred but not reported (IBNR) reserves and estimating unexpired risk reserves.

The group then explained the implication of ALSM regulation on

Session 4: Opportunity and Challenges for life reinsurers post regulatory changes and impact on insurance industry.

Chairperson: Mr. Souvik Jash

Presenters: Mr. Kapil Aggarwal, Mr. Sumit Ramani

The group began their presentation by giving the brief background on regulations for reinsurers. They covered highlights of regulations and then covered concepts of Best Terms and First Right of Refusal



Session 5: Success of Crop Insurance in India - Issues for Actuaries in pricing and reserving

Chairperson: Mr. Himanshu Garg

Presenters: Mr. Paul Kruger Zondagh, Mr. Sukanta Roy Chowdhury, Ms. Divya Dadlani

The group started their presentation by giving a brief background of crop insurance in India and explained major features

of Pradhan Mantri Fasal Bima Yojna (PMFBY) that was launched in January 2016. The group also explained about the professional challenges for actuaries in crop insurance e.g. fast growth, lack of credible data and established models, volatile nature of business etc.

The group then presented various regulations, professional standards (APS 21) and guidance notes (GN31)

related to this class of business. After this, the group covered technical matters related to pricing and reserving. This mainly included various issues relating to data, complications in burning cost calculation, loading for various uncertainties, inconsistency in claim settlement along with its impact on Chain-ladder method used for reserving etc.



Session 6: Offering products via digital media - Is health insurance the next big thing after term life insurance: Challenges and benefits

Chairperson: Mr. Balachandra Joshi

Presenters: Mr. Chandra Shekhar Dwivedi, Ms. Ridhi Gupta, Mr. Prabhat Chaubey

The group showed the increasing use of internet in India over last few years. They informed that use of digital channel has been resulting in better persistency and lower cost and also showed the potential of digital platform over coming years. The group then gave an overview of health insurance business in India and showed that in terms of online sales, health insurance is growing slower than the term insurance. The

group then covered various challenges and benefits for online term insurance and health insurance.

Finally, the group covered future trends for health insurance in India and discussed the factors affecting online health insurance sale. The group touched upon professional and ethical issues involved in digital sale and also discussed advantage and disadvantages of digital channel.



Session 7: Effectiveness of Derivatives products in India to hedge investment guarantees of Life Insurers.

Chairperson: Mr. V Rajagopalan

Presenters: Mr. Rakesh Kumar, Mr. Ranjan Gupta, Mr. Prasham Rambhia



The group initially covered the various types of products available in India and the investment guarantees offered under these products. Then the group discussed various types derivatives available in India and those allowed by IRDAI. After this the group discussed advantages and disadvantages of such derivatives. The group stated that in India, derivatives offer limited benefit due to the non-availability of long-term derivative instruments. The group finally discussed the use of derivatives by overseas life insurers.

Session 8: Increasing insurance penetration through POS; Challenges and solutions

Chairperson: Mr. Bikash Chaudhary

Presenters: Ms. Richa Mathur

Session 9: Motor Vehicle Act - Background and Implication of changes in the Act.

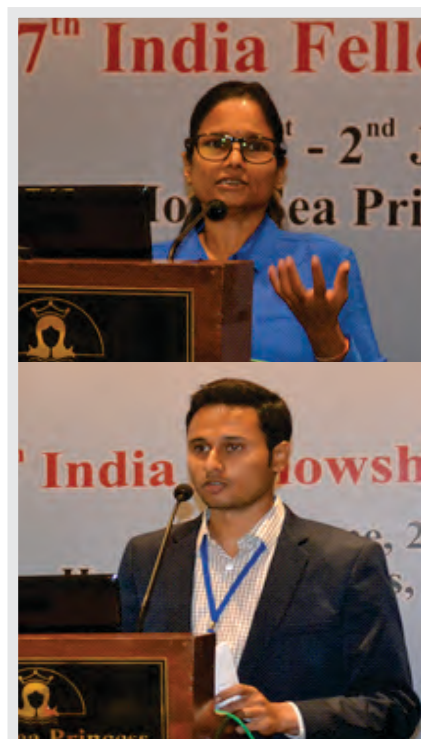
Chairperson: Ms. Kirti Kothari

Presenters: Mr. Venkata Shiva Sai
Aditya Telikicherla



The presenter started by showing insurance penetration and density in India and the regulations related to POS. After this she presented regulatory requirement for POS life insurance product. She also covered entities authorised to sell such products.

Then, she discussed the requirement of POS person. Finally covered how POS can be taken as an opportunity and also presented challenges likely to be faced due to POS along with possible solutions.



The presenter started with history of Motor Vehicle Act (MVA) and covered the insertions and amendment in MVA. He then discussed the implication of all these changes insurers and touched upon the factors that may lead to lower costs. He also discussed the likely factors that may lead to increasing the costs for insurers.

Sanghvi with his unique style and humorous touch made it very engaging. The key message from his speech was "... both ends and means need to be pure ...". He meant, not just start and end of any activity but also the means to achieve these ends need to be clean.

At the end of the session, Mr. Anil Kumar Singh thanked Mr. Sanghvi for such an inspiring speech and presented him with a memento.

Day 2:

Session 10: Pre - Dinner Address - Is it practical to have an ethical practice?

Presenters: CA Rashmin Sanghvi; Founder Partner, Rashmin Sanghvi & Associates

The day 2 began with welcome address by Mr. Anil Kumar Singh and he provided an overview of the proceedings for the day. After this Mr. Sanjeeb Kumar, the President, IAI shared his thoughts and urged the new actuaries to actively contribute to the profession.

Health Insurance - different considerations for standalone critical illness cover vs multistage critical illness

Chairperson: Mr. Irvinder Singh Kohli

Presenters: Mr. Dharemndra Shrivastava, Ms. Seema Mali, Ms. Sandhya Kudumulukunta and Mr. DNKLNK Chakrabarti



The highlight of day 1 was preserved for the end and that was the address by noted Chartered Accountant Mr. Rashmin C Sanghvi, founder partner of Rashmin Sanghvi and Associates. During his address, Mr. Sanghvi covered his life story and the struggle he had gone through in meeting his ethics in practice. He is a true admirer of Mahatma Gandhi and follower of his principles. He did have challenging times in following his ethics in practice; however, he stated that despite sacrificing so many opportunities, nothing could stop him from being successful. Although the session was on such a serious topic, Mr.



The group started with origin of critical illness (CI) along with features of standalone (SCI) and multistage CI (MCI) covers. Then the group covered health insurance regulations and tax exemptions available on health insurance products. The group also compared the customer needs under SCI and MCI.

After this, the group presented various CI products available in other markets. The group then covered challenges in designing and pricing these products and these included availability of data, uncertainty in assumption setting and expenses. Finally, the group discussed other considerations like reinsurance arrangement, admin/claims system etc and also the preferences of various stakeholders.

Group Discussion and Video Case Studies



After completion of all presentations, Ms Anuradha Lal conducted sessions on case studies. She explained initially that these videos show an actuary into a conflicting situation and then the participants were expected to discuss the questions relating to such situation. She also requested senior actuaries to guide the new actuaries in the discussion.

The first video presented was about an actuary who had worked on a capital modelling and he had to go out for 3 years to work on other areas. When returns back to head the capital modelling team, he found that although the business had grown by 80% during these years, the capital had gone up by just 10%. So he seriously thinks that

something is going wrong and finds that the model has been peer reviewed, the board has also approved the results and also there were no questions raised by regulator. He had tried to go through the documentation but it didn't provide much help and discussions with team led to many technical jargons. With this background the video was paused to discuss certain questions like should he continue to ask questions or just let it go, how should he find that the new model is robust or whether the he is prepared for the role.

There was an active discussion on these questions and Ms Lal ensured that all the young actuaries were

actively participating. The case study led to important insights related to professionalism and how to tackle such situations which occur in real world as well.

The second video was related to two young and talented actuaries forming a partnership firm. They enter into a contract with an insurance company of setting up system to model product design and while entering into the contract they quoted unreasonably high price which unexpectedly got accepted by the insurance company. However, during the course of the project these two actuaries came to know that the project required capability of setting up more complex product

design than what they had understood and the price agreed was not sufficient to meet all the needs. The company representative had threatened to spoil their image if work doesn't get completed by the agreed timeline. One of the two partners agreed to not going through the details of the contract and changes suggested by the other partner, In such a conflicting situation, he even thought of delivering the system capable of modelling simple design and the company would realise it much later but he dropped that idea. At this point the video was paused to discuss what can be done to clear gaps in understanding, what resources and capital can be used to complete the task without breaching NDA and what the actuaries do in regard to integrity, competence and care, partiality

and communication.

There was an engaging discussion among all the participants. This video highlighted the importance of professional conduct, ethics and that in such a situation, the actuaries can take help from the other actuaries in profession or from the institute itself.

The last case study was related to the new APS X2 that was issued by Institute and Faculty of Actuaries UK. This APS requires actuaries to get their work reviewed independently. The video showed two actuarial friends talking about this requirement and agree to review each other's work. They also agree to go easy on each other but demonstrate it to be independent. The video also showed another

actuary who is not in actuarial department and hence is convinced that she should not be bothered about this APS. The video then showed the actuary (one of the earlier two) telling his manager about this requirement but the manager informs him that the routine task like this need not be reviewed and that she being a manager the responsibility would be hers. With this background the discussion took place and it concluded that seemingly independent mutual review of work is never proper, also the review requirement is for all actuaries irrespective of whether or not the actuary is in actuarial team and finally that although manager is taking the responsibility the actuary submitting the work is also responsible.

IAI Disciplinary Process

Presenter: Mr. GLN Sarma

After the end of video case studies, the final section of IFS had a presentation by **Mr. GLN Sarma**. Mr. Sarma informed the participants about disciplinary process and the related sections of Actuaries act.

Vote of Thanks:

Mr. Anil Kumar Singh

Mr. Anil Kumar thanked the participants and the organisers for such an important seminar and after his vote of thanks; the seminar was brought to end.



About the author

MR. SUNIL V. SAVALKAR



sunil.savalkar@birlasunlife.com



Assistant Vice President



Birla Sun Life Insurance Co. Ltd.



1. Very few of our consulting actuaries act as investment advisors. Even our associate members can practice as investment advisers. He can get certificate of registration from SEBI.

2. This is an important area where our members shall think, explore and take up the profession of investment advisor.

3. I am writing this article to benefit our own members. Good opportunities for our members exist in this area.

4. Many of you know that SEBI [Securities Exchange Board of India] regulates all the securities traded in Stock Exchanges, Mutual Fund Schemes, etc.. SEBI has notified SEBI (Investment Advisers) Regulations, 2013 [The Gazette of India, Extraordinary, Part -III - Section 4, Published by Authority, New Delhi, January, 21, 2013, SEBI Notification, Mumbai, the 21st Jan, 2013].

5. As per the said Regulations, a person must obtain a certificate of registration to act as investment advisor, from SEBI. In case of our members, it is not required to seek registration under regulation 3 subject to the fulfillment of conditions stipulated therein:

(f) Any member of Institute of Chartered Accountants of India, Institute of Company Secretaries of India, Institute of Cost and Works Accountants of India, Actuarial Society of India or any other professional body as may be specified by the Board, who provides investment advice to their clients, incidental to his professional service;

6. If any of our member wants to be investment advisor, which is not

incidental to his professional service, he may seek for registration and obtain certificate of registration from SEBI. Members may go through the Regulations for more details—some given below.

7. Chapter III of the Regulations mention about the general obligations and Responsibilities of investment advisors:

General responsibility. 15. (1) *An investment adviser shall act in a fiduciary capacity towards its clients and shall disclose all conflicts of interests as and when they arise.*

(2) *An investment adviser shall not receive any consideration by way of remuneration or compensation or in any other form from any person other than the client being advised, in respect of the underlying products or securities for which advice is provided.*

(3) *An investment adviser shall maintain an arms-length relationship between its activities as an investment adviser and other activities.*

(4) *An investment adviser which is also engaged in activities other than investment advisory services shall ensure that its investment advisory services are clearly segregated from all its other activities, in the manner as prescribed hereunder.*

(5) *An investment adviser shall ensure that in case of any conflict of interest of the investment advisory activities with other activities, such conflict of interest shall be disclosed to the client.*

(6) *An investment adviser shall not divulge any confidential information about its client, which has come to its knowledge, without taking prior*

permission of its clients, except where such disclosures are required to be made in compliance with any law for the time being in force.

(7) *An investment adviser shall not enter into transactions on its own account which is contrary to its advice given to clients for a period of fifteen days from the day of such advice.*

Provided that during the period of such fifteen days, if the investment adviser is of the opinion that the situation has changed, then it may enter into such a transaction on its own account after giving such revised assessment to the client at least 24 hours in advance of entering into such transaction.

(8) *An investment adviser shall follow Know Your Client procedure as specified by the Board from time to time.*

(9) *An investment adviser shall abide by Code of Conduct as specified in Third Schedule.*

(10) *An investment adviser shall not act on its own account, knowingly to sell securities or investment products to or purchase securities or investment product from a client.*

(11) *In case of change in control of the investment adviser, prior approval from the Board shall be taken.*

(12) *Investment advisers shall furnish to the Board information and reports as may be specified by the Board from time to time.*

(13) *It shall be the responsibility of the Investment Adviser to ensure that its representatives and partners, as applicable, comply with the certification and qualification*

requirements under Regulation 7 at all times.

Risk profiling. 16. Investment adviser shall ensure that,-

(a) it obtains from the client, such information as is necessary for the purpose of giving investment advice, including the following:-

- (i) age;
- (ii) investment objectives including time for which they wish to stay invested, the purposes of the investment ;
- (iii) income details;
- (iv) existing investments/ assets;
- (v) risk appetite/ tolerance;
- (vi) liability/borrowing details.

(b) it has a process for assessing the risk a client is willing and able to take, including:

- (i) assessing a client's capacity for absorbing loss;
- (ii) identifying whether client is unwilling or unable to accept the risk of loss of capital;
- (iii) appropriately interpreting client responses to questions and not attributing inappropriate weight to certain answers.

(c) where tools are used for risk profiling, it should be ensured that the tools are fit for the purpose and any limitations are identified and mitigated;

(d) any questions or description in any questionnaires used to establish the risk a client is willing and able to take are fair, clear and not misleading, and should ensure that:

- (i) questionnaire is not vague or use double negatives or in a complex language that the client may not understand;
- (ii) questionnaire is not structured in a way that it contains leading questions.

(e) risk profile of the client is communicated to the client after risk assessment is done;

(f) information provided by clients and their risk assessment is updated periodically.

Suitability. 17. Investment adviser shall ensure that,-

(a) All investments on which investment advice is provided is appropriate to the risk profile of the client;

(b) It has a documented process for selecting investments based on client's investment objectives and financial situation;

(c) It understands the nature and risks of products or assets selected for clients;

(d) It has a reasonable basis for believing that a recommendation or transaction entered into:

- (i) meets the client's investment objectives;
- (ii) is such that the client is able to bear any related investment risks consistent with its investment objectives and risk tolerance;
- (iii) is such that the client has the necessary experience and knowledge to understand the risks involved in the transaction.

(e) Whenever a recommendation is given to a client to purchase of a particular complex financial product, such recommendation or advice is based upon a reasonable assessment that the structure and risk reward profile of financial product is consistent with clients experience, knowledge, investment objectives, risk appetite and capacity for absorbing loss.

Disclosures to clients.

18. (1) An investment adviser shall

disclose to a prospective client, all material information about itself including its business, disciplinary history, the terms and conditions on which it offers advisory services, affiliations with other intermediaries and such other information as is necessary to take an informed decision on whether or not to avail its services.

(2) An investment adviser shall disclose to its client, any consideration by way of remuneration or compensation or in any other form whatsoever, received or receivable by it or any of its associates or subsidiaries for any distribution or execution services in respect of the products or securities for which the investment advice is provided to the client.

(3) An investment adviser shall, before recommending the services of a stock broker or other intermediary to a client, disclose any consideration by way of remuneration or compensation or in any other form whatsoever, if any, received or receivable by the investment adviser, if the client desires to avail the services of such intermediary.

(4) An investment adviser shall disclose to the client its holding or position, if any, in the financial products or securities which are subject matter of advice.

(5) An investment adviser shall disclose to the client any actual or potential conflicts of interest arising from any connection to or association with any issuer of products/ securities, including any material information or facts that might compromise its objectivity or independence in the carrying on of investment advisory services.

(6) An investment adviser shall, while making an investment advice, make adequate disclosure to the client of all material facts relating to the key features of the products or securities, particularly, performance track record.

(7) An investment adviser shall draw the client's attention to the warnings, disclaimers in documents, advertising materials relating to an investment product which it is recommending to the client.

Maintenance of records.

19. (1) An investment adviser shall maintain the following records,-

- (a) Know Your Client records of the client;
- (b) Risk profiling and risk assessment of the client;
- (c) Suitability assessment of the advice being provided;
- (d) Copies of agreements with clients, if any;

(e) Investment advice provided, whether written or oral;

(f) Rationale for arriving at investment advice, duly signed and dated;

(g) A register or record containing list of the clients, the date of advice, nature of the advice, the products/securities in which advice was rendered and fee, if any charged for such advice.

(2) All records shall be maintained either in physical or electronic form and preserved for a minimum period of five years:

Provided that where records are

required to be duly signed and are maintained in electronic form, such records shall be digitally signed.

(3) An investment adviser shall conduct yearly audit in respect of compliance with these regulations from a member of Institute of Chartered Accountants of India or Institute of Company Secretaries of India.

About the author

MR. K. SUBRAHMANYAM



ksmanyam52@gmail.com



Fellow Member



IAI



The Actuary India wishes many more years of healthy life to the fellow members whose Birthday fall in July 2017

HAPPY BIRTHDAY

**MR. A D GUPTA
MR. A K GARG
MR. H L JAIN
MR. JAGADISH S SALUNKHE
MR. K K WADHWA
MR. K N VISHWANATHAN
MR. K.V.Y SASTRY
MR. MICHAEL JOSEPH L. WOOD
MR. R SRINIVASAN**

Adverse selection is a concern for insurers in all insurance markets. The usual defence is underwriting. Insurers in India are free to use any information - medical, social or financial - in underwriting insurance applicants.

In other countries, regulatory restrictions on underwriting are common. Health insurance premiums can be varied only by the customer's age at entry in Australia, and only to age, geographic location, and smoking status in the USA. Many countries limit the use of genetic tests in insurance underwriting. Such restrictions are motivated by social objectives, but they can also lead to adverse selection. Actuaries usually argue that this is a bad thing.

This article gives a contrary view. We

argue that from a social perspective, insurance works better with some adverse selection. The argument is made from the viewpoint of an insurance regulator considering whether and how to regulate underwriting; the viewpoint of insurers will be considered briefly at the end.

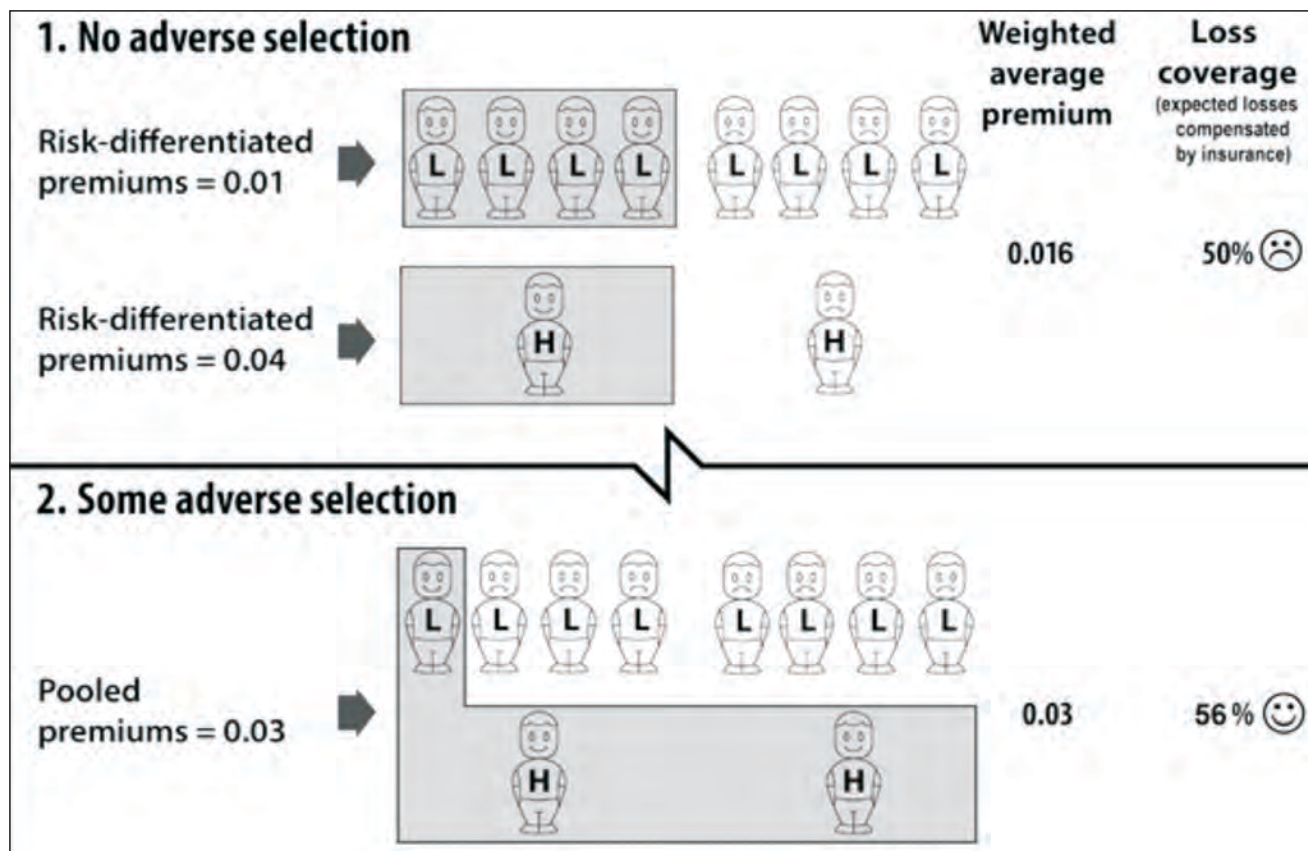
To provide context, think of life insurance, where we typically observe a majority of 'standard' lives and a small number of much higher risk lives (say with a pre-existing condition). Our argument can then be illustrated by the following example. The numbers are simplified and exaggerated for clarity, but the underlying argument is quite general.

Imagine the population consists of just ten lives, with two alternative

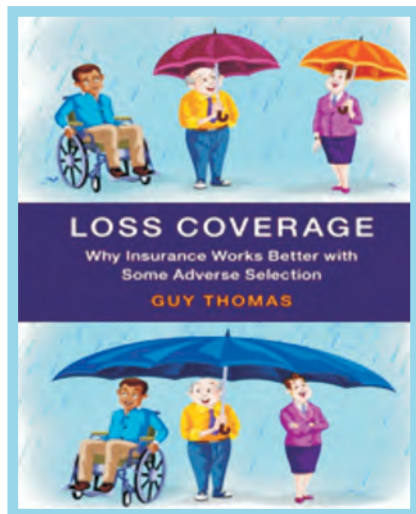
scenarios for life insurance underwriting. First, all risks are fully underwritten, and a group of lives buys insurance. Second, all underwriting is banned, leading to adverse selection: a different (smaller) group of lives buys insurance. Assume that all losses and insurance cover are for unit amounts (this simplifies the example, but it is not necessary).

The two scenarios are represented in the upper and lower parts of the illustration. The 'H' are high risks (probability of loss 0.04) and the 'L' are low risks (probability of loss 0.01). In each scenario, the shaded 'cover' above some of the 'H' and 'L' denote risks covered by insurance.

Illustration: Two scenarios: (1) Full underwriting (2) no underwriting



(A better file of the diagram is supplied separately.)



In Scenario 1, fully underwritten premiums (actuarially fair premiums) are charged. The response of each risk-group to an actuarially fair price is the same: exactly half the members of each risk-group choose to buy insurance. The shading shows that a total of five risks are covered. .

The weighted average of the premiums paid in Scenario 1 is $(4 \times 0.01 + 1 \times 0.04)/5 = 0.016$. Since higher and lower risks are insured in the same proportions as they exist in the population, there is no adverse selection.

Exactly half the population's expected losses are compensated by insurance. We describe this as 'loss coverage' of 50%. (The calculation is $(4 \times 0.01 + 1 \times 0.04) / (8 \times 0.01 + 2 \times 0.04) = 0.50$.)

In Scenario 2, all underwriting is banned, and so insurers have to charge a common 'pooled' premium to both higher and lower risks. Higher risks buy more insurance, and lower risks buy less. The shading shows that three risks (compared with five previously) are now covered. The pooled premium is set as the weighted average of the true risks, so that expected profits on low risks exactly offset expected losses on high risks. This weighted average premium is $(1 \times 0.01 + 2 \times 0.04)/3 = 0.03$.

Note that the weighted average premium is higher in Scenario 2, and

the number of risks insured is lower. These are the essential features of adverse selection. But there is a surprise: with the adverse selection in Scenario 2, the loss coverage is higher. That is, 56% of the population's expected losses are now compensated by insurance, compared with 50% before. (The calculation is $(1 \times 0.01 + 2 \times 0.04) / (8 \times 0.01 + 2 \times 0.04) = 0.56$.)

We argue that Scenario 2, with a higher expected fraction of the population's losses compensated by insurance - higher loss coverage - is superior from a social viewpoint to Scenario 1. The superiority of Scenario 2 arises not despite adverse selection, but because of adverse selection.

We suggest that for an insurance regulator, loss coverage is a reasonable metric for the performance of insurance in meeting the needs of society as a whole. We say this because compensation of the population's losses is the main social purpose of insurance, which public policy often seeks to promote, for example by tax relief on premiums (e.g. in India, under section 80C of the Income Tax Act).

Regulators may therefore prefer risk classification regulations which lead to higher loss coverage. In practice this will probably not require banning all underwriting, as in our simplified example. But it may require some

restrictions on underwriting, such as those that apply in health insurance in many countries. Restrictions on underwriting should be enough to produce the optimal level of adverse selection - the level which maximises loss coverage.

Our argument so far has been made from the viewpoint of regulators. What about the viewpoint of insurers? Restrictions on underwriting may seem an unwelcome imposition. But provided that the restrictions apply equally to all insurers, it can be expected that the competitive level of premiums will adjust upwards to anticipate the adverse selection which the regulator has deliberately induced. Furthermore, if profit margins are roughly proportional to premiums, the new higher level of premiums implies higher profits.

Finally, some astute readers may have noticed that if the adverse selection progresses beyond Scenario 2 to its logical extreme, so that only a single higher risk remains insured, then loss coverage will be lower than with no adverse selection. This point is considered further in Guy's recent book *Loss Coverage: Why Insurance Works Better with Some Adverse Selection*. For now, we merely repeat that our message is one of moderation: we say that insurance works better with some adverse selection, not with any amount of adverse selection.

About the authors



MR. PRADIP TAPADAR



P.Tapadar@kent.ac.uk



Senior Lecturer



University of Kent, United Kingdom

MR. GUY THOMAS



r.g.thomas@kent.ac.uk



Honorary Lecturer



University of Kent, United Kingdom



Trends, News and Views

“State Bank has decided to introduce an IPO of SBI Life this fiscal and various developments have been made in this regard, including appointment of the lead managers. Kotak Mahindra Bank will buy out Old Mutual's 26% stake in Kotak Life, subject to regulatory approvals. The proposed merger between HDFC Life and Max Life has been turned down by the regulator and the entities are said to be considering other possible merger structures.

Life insurance industry continued its good performance in weighted new business premium collections as it recorded a growth of 18.8% in FY2016-17. Private life insurers, collectively, outpaced state-owned LIC with a growth of 22.0% against 15.8% of the latter. First Point of Sale (PoS) product has also made its way into the market, amongst various other product launches during the reporting period. Further, amongst various key regulatory developments, the regulator has notified additional eligibility requirements for appointment of an Appointed Actuary. We summarise below these and the top ten key trends and developments that shaped the life insurance market in India for the period March to May 2017.”

10 Formation of stewardship code as per the new guidelines

In order to help improve the corporate governance and hence decision making in investee companies of insurers, the Authority has implemented a code of stewardship which comes into effect from FY2017-18. This is a set of principles which will be in sync with those adopted by institutional investors such as Mutual Funds, Pension Funds etc., and requires the insurers to have a policy pertaining to their conduct and voting policies at general meetings of the investee companies and related disclosures. All insurers need to furnish such policy in their stewardship code within six months of the issuance of these guidelines and the same should be disclosed on their websites within 30 days of Board's approval along with the disclosures.

9 Launch of the first product under Point of Sale arrangement, LIC also launches Aadhaar based products

After the issue of the IRDAI norms regarding the use of Point of Sale

(PoS) medium as a new channel of distribution, insurance industry has witnessed the launch of first product to be offered via the channel. PoS Saral Nivesh is an endowment product that has been introduced by Edelweiss Life. Further, LIC has launched two endowments products for which the applicants are required to have Aadhaar Card issued in their names. HDFC Life has also partnered with ETMONEY to introduce first of its kind data-led exclusive group term insurance policy which will reportedly be based on spend pattern of the users. Life insurance industry saw 17 new product launches in total during March to May 2017, where non-linked products continued to dominate insurers' proposition as only four linked products have been introduced during the reporting period.

8 Positive profits reported by 16 private life insurers for FY2016-17

As per financial results disclosed by 22 private life insurers, 16 have reported profit for FY2016-17, compared to 17 out of 22 insurers in the previous fiscal. Amongst the 16 insurers to have reported profit, 12 have recorded a positive year-on-year growth compared to the profit figures reported for FY2015-16. The total profit after tax for private life

insurers making such disclosure has increased by 12.3% from INR48.91 billion in FY2015-16 to INR54.95 billion in FY2016-17.

7 DHFL transfers stake in DHFL Pramerica Life to a wholly-owned subsidiary

As per filing with the stock exchanges, the Board of DHFL has approved the transfer of its entire 50% stake in DHFL Pramerica Life to DHFL Investments Limited (DIL) which is a wholly owned subsidiary of DHFL; pegging the value of the stake at INR20.0 billion. Press reports suggest that DIL will issue Compulsory Convertible Debentures with a conversion period of 100 months to Wadhwan Global Capital Pvt. Ltd, which is the promoter entity of DHFL, however DHFL will also have an option agreement with the lenders.

6 Increase in the number of bancassurance tie ups, DBS becomes first bank in India to adopt open architecture model

Reportedly, DBS Bank has become the first bank in India to adopt open architecture by offering products of Aviva Life, Birla Sun Life and Tata AIA Life on a single platform. The

industry has also witnessed an increase in number of tie-ups between insurers and various regional and digital banking and non-banking financial institutions to accelerate their growth. These have been summarised below:

- HDFC Life has tied up with Catholic Syrian Bank and Suryoday Small Finance Bank to sell its insurance products.
- Kotak Life has entered into a bancassurance partnership with Suryoday Small Finance Bank.
- Reliance Nippon Life has tied up with Equitas Small Finance Bank Ltd.
- Exide Life and ICICI Prudential Life have also inked a deal with Fino Paytech to sell their products through the payment bank's platform.

5 *The Authority releases new guidelines on appointment of an Appointed Actuary*

The Authority has released the IRDAI (Appointed Actuary) Regulations, 2017 which supersedes the IRDAI (Appointed Actuary) Regulations, 2000. The new eligibility criteria for Appointed Actuary (AA) specify that a Fellow member should have passed the Specialist Application subject in life insurance and have at least 10 years of experience in life insurance industry out of which at least five years should be post acquiring the fellowship. He/she should also have at least three years of experience in annual statutory valuation of a life insurer. The existing AA's shall stand exempted from the requirement of passing the specialization subject provided that he/she has worked for at least five years as AA of a life insurer during seven years preceding the date of notification of these guidelines.

4 *Industry performance: Life insurers continue to exhibit positive growth in new business collections, book 18.8% growth in FY2016-17*

Weighted new business premiums (measured as 100% of regular premium and 10% of single premium) for the life insurance industry amounted to INR708.6 billion, representing a year-on-year growth of 18.8% in FY2016-17, as per statistics released by the IRDAI. New business premium income for state-owned LIC increased by 15.8%, aided by rise of 32.8% in single premium collections. Private insurers outperformed LIC by achieving growth of 22.0% in the financial year, leading to an increase in their market share to 49.1%, up from 47.8% in FY2015-16. Private life insurers have collectively reported weighted new business premium collections of INR348.2 billion in FY2016-17. SBI Life, the new market leader amongst private insurers, also became the first private life insurer to surpass the INR100 billion mark in unweighted new business premium collections.

3 *Kotak Mahindra Bank to fully own Kotak Life, buys out Old Mutual's 26% stake*

As per filing with the stock exchanges, Kotak Mahindra Bank, the majority stakeholder in Kotak Life, has entered into a Share Purchase Agreement with Old Mutual plc to buy

its 26% stake for an amount of INR12.9 billion. Post the transaction, Kotak Mahindra Bank along with its subsidiaries, will own 100% stake in Kotak Life. The transaction is subject to regulatory approvals and is expected to be completed in the second half of 2017.

2 *SBI Life to launch an Initial Public Offering (IPO) this fiscal*

Reportedly, the board of State Bank of India (SBI) has approved the sale of a part of its stake in SBI Life through an IPO this fiscal. Further, it is reported that SBI plans to dilute 8% stake through the IPO while its joint venture partner BNP Paribas Cardif will dilute 4%. Three foreign banks and five local banks have been appointed to manage the offering.

1 *HDFC Life - Max Life merger deal to be reworked*

The proposed merger between HDFC Life and Max Life has been rejected by the IRDAI after it had initially expressed concerns regarding the deal structure based on Section 35 of the Insurance Act. The regulator had sought the approval of the Attorney General (AG) for the deal but the AG returned the papers, seeking his opinion, to the insurance regulator without any comment. Media reports suggest that the two companies are working on an alternate merger structure which would either involve the two life insurers merging first or HDFC Life first coming out with an IPO and then merging with Max Life.

About the author

MR. VIVEK JALAN



vivek.jalan@willistowerswatson.com



Director & Practice Leader - Insurance Consulting



Willis Towers Watson India



PRIZE MONEY FOR STUDENTS SCORING HIGHEST MARKS IN MARCH 2017 EXAMINATION

STUDENT EXAMINATION



THE PRIZE FUND FOR HIGHEST MARKS IS INSTITUTED BY CONTRIBUTION GIVEN BY VARIOUS DONORS TO INSTITUTE OF ACTUARIES OF INDIA.

THIS PRIZE FUND HAS BEEN CONSTITUTED FOR STUDENT SCORING HIGHEST MARKS IN MARCH/SEPTEMBER EXAM DIET.

SR. NO	SUB	SUBJECT NAME	PRIZE FUND	CANDIDATE NAME	MEMBERSHIP ID	PLACE
1	CT1	FINANCIAL MATHEMATICS	SHRI R. KRISHNASWAMY MEMORIAL PRIZE FUND	SUCHIT JAIN	33717	DEHRADUN
2	CT2	FINANCE AND FINANCIAL REPORTING	Shree Atma Ram, Shri Chhaju Ram & Smt Parvati Devi Memorial Scholarship Endowment	RAGHAV GUPTA	32883	KOLKATA
3	CT3	PROBABILITY AND MATHEMATICAL STATISTICS	SHRI H V KRISHNAMURTHY PRIZE FUND	EVA MUKESH JAIN	33804	MUMBAI
4	CT4	MODELS	SHRI R. KRISHNASWAMY PRIZE FUND	TANVI MILAN DOSHI	31940	MUMBAI
5	CT5	GENERAL INSURANCE, LIFE & HEALTH CONTINGENCIES	SMT. VIDHYA WATI AND SMT. SANTOSH KUMARI MEMORIAL SCHOLARSHIP ENDOWMENT	DEEPANSH JAIN	29284	JAIPUR
6	CT6	STATISTICAL METHODS	-	MAYURESH VINAYAK DHARAP	25267	MUMBAI
7	CT7	BUSINESS ECONOMICS	PROF R M JOSHI PRIZE FUND	STUTI BAWA	34403	DELHI
8	CT8	FINANCIAL ECONOMICS	PROF G S DIWAN CENTENARY COMMEMORATION PRIZE	GEETA MAHENDRAWADA	3705	HYDERABAD
9	CA1	ACTUARIAL RISK MANAGEMENT	THE FUTURE ACTUARY PRIZE FUND	DIVYA GUPTA	2317	DELHI
10	CA3	COMMUNICATION- (APRIL 2017)	JR JOSHI PRIZE	K SHASHIKIRAN	5772	BANGALORE
11	ST1	HEALTH & CARE INSURANCE	G S DIWAN 100TH BIRTH ANNIVERSARY MEMORIAL EDUCATION FUND	SURABHI AGARWAL	30483	MUMBAI
12	ST2	LIFE INSURANCE	LATE SHRI JANARDAN PUNDALIK NERURKAR PRIZE FUND	GULSHAN JAL GARDIA	8099	MUMBAI
13	ST4	PENSION & OTHER EMPLOYEE BENEFITS	SHRI K A PANDIT MEMORIAL PRIZE FUND	SILKY LAMBA	22682	GURGAON
14	ST5	FINANCE AND INVESTMENT A	MR. KAMAL KUMAR NORANGAL PODAR PRIZE FUND	AKANKSHA KUMAR	30799	GURGAON
15	ST6	FINANCE AND INVESTMENT B	LATE D BASU PRIZE FUND	ANIRUDH SOMANI	31901	MUMBAI
16	ST7	GENERAL INSURANCE - RESERVING & CAPITAL MODELLING	MR. PETER AKERS PRIZE FUND	VARUN JAIN	2765	MUMBAI
17	ST8	GENERAL INSURANCE : PRICING	-	PRIYA SHARMA	5715	DELHI
18	SA1	HEALTH & CARE INSURANCE	G S DIWAN 100TH BIRTH ANNIVERSARY MEMORIAL EDUCATION FUND	LAKSHMI RAMASWAMY	7520	MUMBAI
19	SA2	LIFE INSURANCE	PROF G S DIWAN'S MEMORIAL PRIZE FUND	NEELASREE DEB	1681	MUMBAI
20	SA3	GENERAL INSURANCE	LATE SHRI K P SARMA MEMORIAL PRIZE FOR THE MERITORIOUS IN GENERAL INSURANCE	SHARAD S RAMNARAYANAN	5012	MUMBAI
21	SA4	PENSION & OTHER EMPLOYEE BENEFITS	CANADA LIFE SCHOLARSHIP ENDOWMENT FUND	KAILASAM ARUMUGAM	796	MUMBAI
22	SA5	FINANCE	-	GOPALAN V. S. NIGAMMA	27477	HYDERABAD
23	SA6	INVESTMENT	PROF G S DIWAN MEMORIAL SCHOLARSHIP FUND	ANUJ BUDHIA	1304	MUMBAI

The American Health Care act - Bill replacing Obama care

STUDENT COLUMN

Introduction:

Trumpcare is the bill proposed by congress to repeal the ACA (Affordable Care Act), based on a plan first publicly released by House Republicans on March 6, 2017, and the first part of it's a 3-phase plan to repeal the act. On May 4, 2017, the United States House of Representatives voted to pass the American Health Care Act (and thereby repeal most of the ACA) by a narrow margin of 217 to 213, sending the bill to the Senate for deliberation.



Overview of USA market:

Healthcare cost is the 2nd biggest expense for USA economy. As these costs are high, this forces the premiums to be high leading to less penetration in individual market. During 2002 to 2008, 25% of the senior citizens declared bankruptcy due to medical expenses and 43% were forced to sell/mortgage their primary residence, this made the regulators to put some mandates to curb on uninsured population and hence "Obamacare" was introduced.

Some of the factors such as ageing, less focus towards preventive care,

lack of transparency escalate the medical cost. Obamacare puts its focus to cover the major block of uninsured population, along with promoting the use of technology (Precision Medicine Initiative) to put focus on analyzing the historical claims data and genomic data of the patients; thus by bringing more elaborative picture to set the efficient treatment, curb on the leakages which were prevailing at high rate and by shifting the focus from volume based reimbursements to value (outcome) based reimbursements (to reduce on re-hospitalization etc.).

Current regulations (Obamacare):

- ♦ The insurance mandate states that if someone does not have a qualified health insurance plan or is not enrolled under Medicare/Medicaid, then the person will have to pay a fine towards his/her federal income taxes
- ♦ Insurers are required to offer at least ten essential health benefits (Minimum Essential Coverage) under the qualified insurance plan

- ♦ Income-based subsidies on premiums given to individuals
- ♦ Tax credits, along with annual limits on coinsurance, copays, and other costs were imposed
- ♦ Matching federal funds to states for anyone who qualifies expanded eligibility to 138% of poverty level income
- ♦ Person with the age 65 years were charged only up to three times as much as younger customers by the insurer
- ♦ Insurers are prohibited from denying coverage basis pre-existing conditions
- ♦ No cap on yearly benefit limits, target Loss ratio to be kept at least 80% for small employers and 85% for large market segment
- ♦ Cadillac tax* on high-cost employer plans to be implemented in 2020

*Cadillac Tax - The Obamacare (ACA) imposes an annual 40% excise tax on plans with annual premiums exceeding \$10,800 for individuals or \$29,500 for a family starting in 2020, to be paid by insurers.

Trump care:

ACA was introduced to make health coverage accessible and affordable to all irrespective of Gender, Health status, Income level, education background etc. But by giving more relaxation; it reduced the uninsured population, but insurers were hit most by adverse selection. Also insurers were having less control on deciding the premium levels across different risk. The profitability for insurers falls like anything especially on Individual exchanges, leading

The American Health Care act - Bill replacing Obama care



insurers to make an exit. To make corrections in insurance market, "Trumpcare" has been proposed to curb on extravagant medical expenses, reducing federal expenditure along with giving some more discretions to states.■

Proposed regulations (Trumpcare):

- **No individual/employer mandate.**
- **No individual/employer mandate.** Insurers can impose a one-year 30% surcharge on consumers if the lapse in coverage is more than 63 days
- States can apply for waivers exempting insurers to have essential health benefits under the basic insurance plan, also states are permitted to opt-out of mandating coverage for pre-existing conditions
- Age-based tax credits for premium for those who earn less than \$75,000 or \$150,000 for joint filers (Both spouse) and no tax credits for Out of Pocket expenses
- Federal funds granted to states based on a capped, per-capita basis starting in 2020. However states can opt to expand Medicaid eligibility, but would receive less federal support for those additional person

- Insurers can charge older customers up to five times as much as younger customers; states can apply for waivers exempting insurers from this limit.

Introducing annual and lifetime limits for the individual coverage

•Introducing annual and lifetime limits for the individual coverage

- HSA limit has been increased. Now individuals can put \$6,550 and families can put \$13,100 into a tax-free health savings account
- Cadillac tax on high-cost employer plans to be implemented in 2025

Key concerns identified by health-care experts were -

- (1) Tax credits funded at proposed levels are insufficient to pay for individual insurance and may lead to dropping of healthy people from the health insurance market (adverse selection) causing insurer "death

spirals" that would decrease choice.

(2) Bill's elimination of the ACA's community rating provision would increase cost disparities between age groups and would increase premiums for Americans more prone to illness, leaving people to remain uninsured.

(3) Phase out of the Medicaid expansion is likely to result in healthcare loss for poorer Americans.

It is currently believed that Mr. Trump's plan to repeal and replace Obamacare would cost between \$270 billion and nearly \$500 billion over ten years with economic growth anticipated. These losses can be lowered by cuts in Medicare funding and tax increases from the current health care system. A full ACA repeal results in savings of about \$1.1 trillion and the repeal of the legislation's tax increases and Medicare cuts would increase costs by a combined \$1.5 trillion. In total, **repeal could cost \$420 billion and may impact almost 21 million people to lose their insurance coverage.**

repeal could cost \$420 billion and may impact almost 21 million people to lose their insurance coverage.

About the authors



MR. RISHAB GUPTA



rish.0429@gmail.com



Student Member



IAI

MR. JASMEET SINGH



jasmeetjohars007@yahoo.com



Student Member



IAI



Captive Insurance Legislation (Act No 32 2015) was introduced for the first time in Mauritius in 2015 and came into force on 29 January 2016 bringing in an innovation in insurance activities in Mauritius.

The Act deals mainly with the Licensing and Scope, as well as the Management of Captive insurers in Mauritius.

Further to the main legislation, the Captive Insurance (Pure Captive Insurance Business) Rules Mauritius was issued by the Financial Services Commission (FSC) in 2016. (Government Notice No 105 of Mauritius).

The Rules focus on the Capital and Solvency Requirements and its method of computation, as well as solvency ratio, asset valuation and investments. Auditors and actuaries reports are required regularly at balance sheet dates, as well as solvency certificate from the Actuary. The Rules state that the reserves just need to follow internationally accepted methodology. There is no prescribed methodology or basis.■

What is captive insurance?

A captive insurer is an insurance company which is wholly owned by its parent company. It is a wholly owned subsidiary created to provide insurance to the parent companies. It allows the parent company to retain part of its risks internally. It operates just like a commercial Insurance company issuing the policy in exchange for payment of premiums. It therefore assumes the risk of the parent company. The captive will require to be licensed.

The first captive was created by Fred Reiss, a Steel Insurance Company in

1953. He is the father of the term captive insurance. A captive which insures its own parent is called a pure captive or single parent captive. There are captives which operate for an industry and are called group captives. There are also other specialised types of captives on the market.

In the 60's there were some 100 captives. Currently there were some 7000 captives.

Bermuda is the world's leading offshore captive domicile.

Captives may cover lines business such as worker's compensation, vehicle insurance, property damage are quite commonly covered.

Captives have become a very risk management tool. It should be noted that in the case of single parent captives, negative results will impact negatively the parent company. Therefore captives are not for risk averse parent companies.■

Why a Captive?

The main purpose of opening a captive is to avoid using commercial insurance companies. By setting up a captive the parent company aims.

Reducing & stabilisation of its costs:

Insurance market prices are volatile and may increase for reasons which are not related to the parent company. The parent company may have a loss experience which has not changed over the years but sees its premium increasing. Setting up a captive may override it to some extent and produce a more stable budget, making use of retained earnings as appropriate.■

Insure risks which are not easily available

For various reasons commercial insurance companies may not offer certain lines of insurance. Some insureds have grouped themselves to set up captives to offer insurance not available on the commercial market.

Direct Access to Reinsurance

A parent company gets direct access to the wholesale on more efficient terms. Since reinsurers have a larger client base and can offer better terms.■

Bargaining tool

Having a captive has the benefit of increasing the negotiating power of the owner in discussions with the insurance market. It has been seen that insurers adjust their rates to avoid losing business to a captive.

Profit Centre & Taxation

Depending on the structure and jurisdiction some captives may offer tax advantages. Furthermore some captives are also used to insure third party risks related to the business of the parent, for example customers and suppliers.■

Data management

Many insureds depend on the insurer to manage its claims and policy data. A captive enables data and claims administration to be kept internal and used to support decision making in respect of insurance. It also renders data more accessible as compared to data kept by insurers.

For whom are captives?

Dedicated resources and time

A captive is a complex matter having to deal with specific accounting, tax and regulations and these may be totally unfamiliar to the parent company. It therefore requires dedicated resources and time and leadership of senior management.■

Good Premium turnover

A good premium size is required to handle setting up costs, so it is a tool mostly for large business concerns.

Good Loss experience

A company with good claims experience but which sees increasing premiums due to market cycles is a good prospect for captive insurance.

Companies which operate in specialised lines of business which are rare and therefore overcharged will usually consider operating a captive should the size justify it and it hires the relevant expertise.

Risk appetite

Finally risk averse management should avoid captives.

Caution

Not all captives have been successful. Many fail miserably by trying to compete with the commercial insurer. Others fail because they have been set up only tax benefit reasons.

Successful captives usually originate from financially strong parents, who are able to provide the capital.

Successful captives are those which created for risk management reasons, with a long term commitment and not short term cash flow or profit generation.

Captive programs should be regularly reviewed in light of insurance market developments, changes in

regulations, availability of insurance on the commercial market.

Capital Requirements for Pure Captives set up in Mauritius

A pure captive insurer shall have and maintain at all times an unimpaired paid up capital of not less than 3 million rupees.

A pure captive insurer shall at all times maintain a solvency ratio of at least 100% of the minimum capital requirement.

The minimum capital requirement of a pure captive in Mauritius shall be the sum of (i) Asset Capital + (ii) Underwriting Capital

ASSET CAPITAL

Is the sum of margins on each asset class as per table below:

Cash , short term deposits and receivables outstanding for less than 12 months	0 %
Money Market placements , government and semi government bonds	1%
Term deposits over 12 months , premiums receivable outstanding for more than one year, intragroup loans	2%
Non premium receivables outstanding for more than 2 months, bond funds, corporate bonds with acceptable rating and asset backed securities with acceptable rating.	4 %
Corporate bonds below acceptable rating or unrated and asset backed securities below acceptable rating or unrated property, listed equities	8 %
Intangible assets	100%
Assets not listed above	17% or such amount as may be approved by the FSC.

UNDERWRITING CAPITAL

Underwriting Capital shall be calculated as 10% of the higher of
(a) Gross written premiums or earned premium whichever is the higher minus approved ceded premiums

(b) Gross outstanding claim liability including incurred but not reported claims minus reinsurers share in technical provisions.

About the author**MR. VIJAY BALAGOBIN**

vjayb7@gmail.com



Currently acting as local representative of QED Actuaries & Consultants (South Africa) and providing actuary consultancy services to long term funds in Mauritius



Mauritius



Seminar at Gurgaon

Date: 31st July 2017, Monday

Venue: Plazzio Hotel, 292-296, Sector 29, City Center, Gurugram, Haryana 122001

Seminar at Mumbai

Date: 11th August 2017, Friday

Venue: Institute of Actuaries of India, Unit no. F-206, 2nd Floor, 'F' Wing in Tower 2, Seawoods Grand Central, Plot no R-1, Sector 40, Seawoods, Near Seawoods Railway Station, Navi Mumbai - 400 706, Tel: 022- 39686060.

(The venue for Mumbai may be shifted to larger location, if the registration crosses 30).

Brief Background

With global evolution of risk management practices, it is now of utmost importance to understand the nature of the business, the risks that the business is exposed to, how the various risks interact and therefore, the amount of Capital (or Economic Capital) a company will need to hold to remain solvent under extreme scenarios. In transitioning to a new framework from the traditional pricing approach in India, it is imperative to acknowledge the relevance of economic capital metrics and also understand the importance of using them for decision-making and for strategic choices like allocating capital optimally to different product lines.

Economic capital pricing is the approach to determining premiums on life insurance contracts which separately quantifies the risks under each policy and the cost for holding economic capital for those risks. The aim of this workshop is to assimilate the concepts under Economic Capital pricing and analyse the differences against the traditional method of pricing and profit testing. The content, in large parts is technical and basic knowledge of traditional pricing will be important.

Speaker

Mr. Sanjeeb Kumar; Appointed Actuary and Chief Risk Officer, Aviva Life Insurance Company India Ltd.

Pre-Requisites

All the participants are requested to carry their laptops since this is hands-on training workshop. Please ensure that your laptops should be with working USB port so as to be able to share data/ excel model (if any). Hence office laptops may not work in case you have restrictions on the usage of USB ports.

Who Should Attend?

All actuarial and financial professionals associated with the Life Insurance industry.

General Matters

- ~ Registration Fees for **Fellow Members: Rs. 5000/-** (+18% GST)
- ~ Registration Fees for **Student & Associate Members: Rs. 2500/-** (+18% GST)
- ~ Registration Fees for **Non Members: Rs. 6000/-** (+18% GST)
- ~ Registration closing date for Gurgaon is 25/07/2017 & for Mumbai is 8/08/2017
- ~ Register Now at: <http://www.actuariesindia.org/SeminarRegistration.aspx>
- ~ CPD Credit for IAI Members: 6hours - Technical (As per APS 9 -Rev. Ver 2)
- ~ Point of Contact for any query: Quintus Mendonca (quintus@actuariesindia.org)



Advisory Group on Pension, Other Employee Benefits & Social Security

Date : 10th & 11th August, 2017

Venue : Hotel Sea Princess, Mumbai

Seminar Topics

Day 1- Capacity building

- ✎ Context, Background and Overview of the Principles of the new APS
- ✎ Discussion on Technical Application Section of the new APS
- ✎ ESOPs: What are ESOPs and why do they exist?
- ✎ ESOPs: Introduction and Discussion on Ind AS 102 Share Based Payments
- ✎ Practical example and insights into valuation and reporting of ESOPs

Day 2- Current Issues

- ✎ Panel discussion on Challenges and Learnings in implementation of Ind AS 19
- ✎ Increase in gratuity ceiling to Rs. 20 Lacs: Impacts and Considerations
- ✎ Study of funding strategies adopted by companies
- ✎ Innovation in area of employee benefits: going beyond the minimum mandated benefits
- ✎ Valuation of companies outside India carried out by practicing actuaries in India: Challenges, considerations and experiences
- ✎ Discussion on certain critical issues in implementation of new APS and Ind AS 19

Who Should Attend?

The seminar is open to all who wish to enhance their understanding of issues and challenges in area of employee benefits and build capacity in the area of valuation and reporting of ESOPs.



General Points

1. Participation Fees:

Particulars	IAI Members	Non - Members
Registration Fees for both days	Rs. 7,500/- (plus 18% GST)	Rs. 9,000/- (Plus 18% GST)

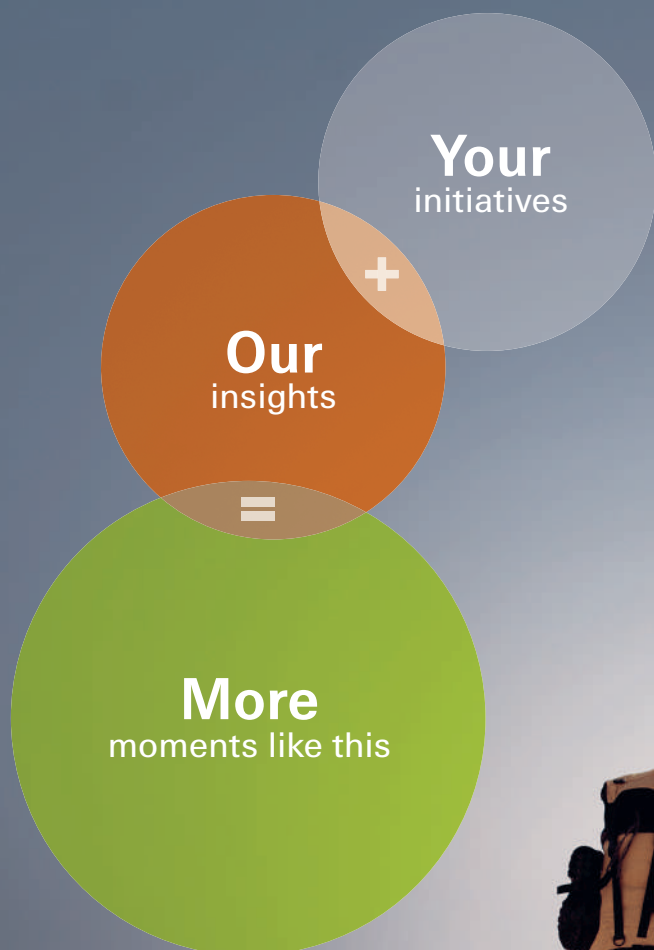
2. Note: This is a two day seminar and registration is for both days is required. Registration for one day is not allowed.

3. Registration: http://www.actuariesindia.org/SeminarRegistration.aspx=Upcoming_Seminars_within_India

4. Dress Code: Business Casual

5. CPD Credit for IAI members: 12 hours (Technical), as per APS 9 (Ver. 02)

6. Contact: Quintus Mendonca at quintus@actuariesindia.org for any assistance.



With a mortality protection gap of a staggering US\$ 58 trillion in Asia Pacific and a shortfall in healthcare funding forecast to reach nearly US\$ 200 billion by the end of this decade, talk about mountains to climb! With more than 100 years' experience working together with insurers in Asia, Swiss Re understands the benefits of pooling our resources. By combining our extensive insights into ageing Asian communities with our global capabilities in analytics and risk management expertise, we can help grow your business, protect more customers and close Asia's protection gap. Let's set our sights on the summit. **We're smarter together.**

www.swissre.com