Institute of Actuaries of India

the Actuary INDIA

INDIAN ACTUARIAL PROFESSION
Serving the Cause of Public Interest

www.actuariesindia.org

THE MAGAZINE OF THE INSTITUTE OF ACTUARIES OF INDIA

VOL. VIII • ISSUE 10 | OCTOBER 2016 ISSUE | Pages 28 • ₹ 20



For Private Circulation Only

Institute of Actuaries of India

302, Indian Globe Chambers,142, Fort Street, Off D N Road, Mumbai - 400 001
☎ + 91 22 67843333 + 91 22 67843330 gururaj@actuariesindia.org

26th India Fellowship Seminar

DATE	15-16 December, 2016
VENUE	Hotel Sea Princess, Plot No. 969, Juhu Tara Road, Near Juhu Beach, Santa Cruz West, Mumbai, Maharashtra 400049, Phone:022 2646 9500
REPORTING	9:00 am on 15th December, 2016
PROGRAMME TYPE	Non-Residential
CPD CREDIT	12 hours (Professional) , as per APS 9 version 2
PARTICIPATION FEE	Rs. 10,000/- +15 % Service Tax (Indian Rupees Ten Thousand Only) for Fellows attending for CPD. Rs. 15000/ - +15 % Service Tax (Indian Rupees Fifteen Thousand Only) for Students/Affiliates attending for admission as Fellows. **Login to your account on IAI website to Register & pay online (Kindly ensure that your subscription is up to date for the year 2016-17.)**
PARTICIPANTS	The programme is open to; 1) All IAI Members for CPD requirement under APS 9 Ver. 2; 2) Student Members who have passed all the examinations or are close to qualifying as FIAI for fulfilling requirement for admission as FIAI. 3) Affiliate Members as a requirement for admission as FIAI.
REGISTRATION AND CONDITIONS	Login to your account on IAI website and Register latest by **30th October, 2016.** On successful completion of registration you will receive receipt from **Noreply@actuariesindia.org.** In view of the fact that all participants have to be assigned roles and responsibilities, there will be **NO registrations after 30th October, 2016**
NOTES	1. Those participating for admission as FIAI will be subject to assessment of their performance by an Assessment committee consisting of Advisory Group on PEC members attending the programme. The assessment by such committee will be final. 2. All participants will be assigned roles and responsibilities such as a Presentation, as a Guide or Chairing a session, by the Advisory Group on PEC and this will be communicated in advance. 3. Registration will be on first come - first served basis
DRESS CODE	Smart Casuals

Sanjeeb Kumar
President
IAI

Anil Kumar Singh
Chair – Advisory Group on Professionalism, Ethics and Conduct

Visit us at: www.actuariesindia.org

the Actuary INDIA
www.actuariesindia.org

CONTENTS

CHIEF EDITOR

Sunil Sharma
Email: sunil.sharma@kotak.com

EDITOR

Dinesh Khansili
Email: dinesh.khansili@mithrasconsultants.com

LIBRARIAN

Akshata Damre
Email: library@actuariesindia.org

COUNTRY REPORTERS

Krishen Sukdev
South Africa
Email: krishen.sukdev@gpaa.gov.za

Frank Munro
Srilanka
Email: Frank.Munro@aia.com

Anshuman Anand
Indonesia
Email: anand.anshuman@gmail.com

John Laurence Smith
New Zealand
Email: johns@fidelitylife.co.nz

Nauman Cheema
Pakistan
Email: info@naumanassociates.com

Vijay Balgobin
Mauritius
Email: vijay.balgobin@sicom.intnet.mu

Kedar Mulgund
Canada
Email: kedar.mulgund@sunlife.com

For circulation to members, connected individuals and organizations only.

"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"

MESSAGE FROM PRESIDENT
Mr. Sanjeeb Kumar 4

MESSAGE FROM EDITOR
Mr. D C Khansili 6

FEATURES
After the Storm by
Mr. K Subrahmanyam 7

Service Dominant Logic –
A Paradigm for the future by
Mr. Venkatesh Ganapathy 9

KNOW YOUR PRESIDENT
Mr. Sanjeeb Kumar 14

INTERVIEW
Mr. Trevor Bull, CEO & MD,
Aviva Life Insurance Co; India 16

STUDENT COLUMN
What is the True Growth Rate:
Reconciling the Old and New GDP
Estimates by Mr. Saket Hishilkar 18

PEOPLE'S MOVE
Mr. Prasun Sarkar 23

INDUSTRY UPDATE
Top 10 Life Insurance Insights –
June 2016 to August 2016 by
Mr. Vivek Jalan 24

COUNTRY REPORT
Pakistan by Mr. Nauman Cheema 26

EMPLOYMENT OPPORTUNITY
Canara HSBC 13

Bharti Axa Life Insurance 8

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 Gururaj Nayak, Head of the Operation, Institute of Actuaries of India at ACME PACKS AND PRINTS (INDIA) PRIVATE LIMITED, A Wing, Gala No. 55, Ground Floor, Virwani Industrial Estate, Vishweshwar Nagar Road, Goregaon (E), Mumbai-63. for Institute of Actuaries of India : 302, Indian Globe Chambers, 142, Fort Street, Off D N Road, Near CST (VT) Station, Mumbai 400 001. • Tel +91 22 6784 3325 / 6784 3333 Fax +91 22 6784 3330 • Email : library@actuariesindia.org Webside : www.actuariesindia.org



From the Desk of the President

– Mr. Sanjeeb Kumar

Let me start with wishing all of you *a very Happy and Prosperous Diwali.*

I thank the Council for showing confidence and electing me as President to lead our esteemed profession. I would take this opportunity to thank the outgoing President Dr. Rajesh Dalmia and other three Council members, Mr. Liyaquat Khan, Mr. K S Gopalakrishnan and Mr. Saket Singhal and congratulate them and the other fellow Council members in the previous Councils for taking the Institute to the current position and will seek their continued support in all our future endeavors. Finally, I would like to thank all the members and other stakeholders for their continued support to the Institute.

Since this is my first communication as President, I understand many of our students and members would expect me to talk of the priorities of the Institute in days and months to come. It reminds me the theme of the recent GCA "Sea of changes, waves of opportunities" which appropriately encapsulates the current business environment in insurance and other financial services sectors. The current business environment around us witnessed sea of changes and has waves of opportunities. The Indian actuarial profession needs to gear up and ensure that we actuarial professionals do make best use of most of these opportunities and serve in the public interest. It is, therefore, important that our priorities are aligned to achieve short, medium and long term objectives.

Let me first start with the priorities for the student members. I see there are three immediate priority areas a) increasing employment opportunities for those who are yet to start their career and upskilling those who are in job, b) creating/ increasing opportunity for actuarial students in wider fields i.e. beyond traditional areas of insurance and employee benefits and c) to improve the infrastructure facilities at the Exam Centre enabling the students to make the best use of available time and maximize the marks. I assure the students that the Institute has initiated action on all the above areas and I shall update the members on the progress/ outcomes on these areas in coming months through this page and other forums.

Further for students, the Institute has announced recently the online coaching for 5 CTpapers at nominal cost. I would encourage you to make best use of this coaching facility. Additionally, we are planning to provide face to face coaching sessions on "Improving your exam techniques" for selected papers including ST and SA level papers. This is aimed at addressing low pass rate in those actuarial examinations. These sessions shall be conducted in January/ February 2017 in Mumbai or Delhi depending upon where we have the students and where get facilities. The overarching aim here is to increase both the demand and supply of fellows during the next few years. As we try to increase the demand by exploring non-traditional areas and skill development, simultaneously we will be working towards increasing the supply of the qualified actuaries by study support and exam techniques.

For our fellow members, the key priority are – a) capacity building in the areas of general insurance, health insurance, risk management and related areas through workshops and seminars, b) making more CPD opportunities available across all areas, c) enhancing the standards of

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)

Indian Actuarial Profession Serving the Cause of Public Interest

professionalism so as to instill more confidence in all of our stakeholders and d) increasing the visibility of the Indian actuarial profession. In some of these areas, the Institute has already commenced working and for others we are developing the plan of action.

In this backdrop I would say that in order to be meaningful, the skill development needs to be aligned with the requirements of the industry who are and likely to use actuarial students and fellows. Therefore, we would not hesitate to bring in industry professionals and experts (local as well as International) to ensure that the Institute achieves its objectives. Engagement with the industry would also help us explore alternative areas of employment for the students (including non insurance areas) and the skill set required for the same. The long term objectives is to increase the employment opportunities for the actuarial professionals and to make them more competitive.

Along with working towards achieving above mentioned objectives we also aim to put in place a robust culture of discussion, scrutiny, review and clear communication in our decision making processes. This is to ensure that the members are aware of the decisions being made & changes being brought and the manner in which it impacts them. In this context we would also increase the amount of communication with all the members including students. As you would witness there would be greater value placed on your opinion on areas that impact you.

However none of these plans can achieve the objectives to the optimum level without your support and active participation. I would, therefore, like to use this opportunity to appeal all the members for a meaningful participation and contributions in these initiatives. Many of you understand that volunteers run the actuarial profession. Many volunteers including myself are working day and night, investing their weekends and holidays to grow our profession and needless to mention we all have, including myself, grown by receiving the dividends of the work done by the preceding volunteers. Please do come forward and write to me at "president@actuariesindia.org" mentioning your area of interest and how you can contribute to the profession if you are yet to start giving back some of your time to the profession. We would need many more working groups to take up important projects and I shall really appreciate your contributions.

An important and prestigious event is on our way in few weeks time. The volunteers are occupied in the preparation of the 20th Asian Actuarial Conference (AAC) which is the flagship conference for the professionals practicing across Asian countries. It is a momentous event for the India as it is the first time that India is hosting the AAC, which brings together experts in various relevant domain from across the world. The theme of the conference "Changing Asian Societies: Challenges and Opportunities", focuses on challenges and the opportunities that the prevailing political, economic and demographic evolution create for the global actuarial and other professional communities that work in the financial services sector. The event expects to have 700+ participants including top professional, business leaders and the Regulators across the globe. I would encourage you to participate actively and make the conference successful.

I wish good luck to all our students who wrote exams recently and awaiting for the results.

Use any smart device (Android & iOS) to interact with 20th AAC on a more digital level and stay organized

Download 20th Asian Actuarial Conference Mobile App Now!!!

Android QR CODE

iOS QR CODE



GET it on Google Play
Download on the App store

https://play.google.com/store/apps/details?id=com.persource.android.eventedge.aac2016
https://itunes.apple.com/us/app/20th-asian-actuarial-conference/id1156441716?ls=1&mt=8



From the Desk of the Editor

– Mr. D C Khansili

The October month is awaited by general Indian public for the month and upcoming festivities. The month remains curious about Nobel Prizes. This year and onwardsit would also be month of dreaming results for IAI students!

The Nobel Prize in Economics, not a direct Nobel prize but SverigesRiksbank Prize in Economic Science in memory of Alfred Nobel, was awarded this year jointly to Oliver Hart and Bengt Holmstromfor contribution to contract theory. The theory concludes that pay packages are best tailored to avoid either punishing or rewarding CEOs for happenings beyond their control.I relate it to part performance bonuses payment to sales personnel in insurance companies based on the persistency experience of the business brought in.

The other learnings are for general insurers, how best to write an auto insurance policy to protect drivers from financial loss without lulling them into carelessness? What types of tasks should government agencies outsource to private contractors? Similarly concern about private prisons where profit-seeking contractors overemphasized cost-cutting over maintaining quality? Likewise, companies fare best when they establish pay packages that incentivize executives to prioritize the long term as much as the short term, to avoid focusing too much on quarterly profit expectations. There could be clauses to avoid insiders to unload their stock options as was seen in case of an international energy firm that fell into a death spiral. The problem was not the options but the way people could sell out.

The new council of IAI is in place and the newly elected President has set the tone. All the Best. It is expected that all important communication would flow through the Actuary India.

At beginning of the month we were struggling with articles but Library request could attract enough articles. Some of them shall flow in next month. Thanks for support.

The Chief Editor had mentioned in last editorial to make AAC successful and same feelings have been echoed in President column. Your presence and volunteers support would make the conference successful. Please join us encouraging volunteers and participation;

The 10-year Sovereign Bonds are the deep market and so the yields on these bonds are perceived to be anticipating investing firms/public sentiments about future expected economic scenario. 10-year G Sec annualised rates as at 31-Mar-2016, 30th June 2016 and 30-Sep-2016 were 7.60%, 7.59% and 6.93% respectively. The falling interest rates would be closely monitored by Insurers for existing business in light of guarantees offered in savings products, annuity rates, reinvestment of new money, coupons and/or capital, etc. The view on future interest rate scenario could be strengthened as time progresses. The traditional tools available with Actuaries to mitigate some or all risks are ALM, use of permissible derivatives, revision of products, review investment strategy, transfer the risk where possible, bring new products with lower guarantees, etc. Any residual/systemic risk would be borne by the shareholders in non- par business and in par both the par policy holders and shareholders.

The model developers on terrorism might be concerned with increasing violent incidences impacting insurance claims subject to exclusions clause, regulatory and legal view. They might consider the impact of outcome on terrorism of BRICS summit held in Goa in Oct 2016 month.

In search of latest info on what is happening in actuarial world, I landed on a paper titled "Treatment of Sex Offenders" published by Springer. The paper warns our profession usual advice -do not assume but remain on facts. The advice reminded a question on mortality- Whether divers have higher mortality rates or 60-year judge. The immediate reply would be divers but data based reply would bedifferent. Similarly, the paper states that shift is strange. No talk about progress in cognitive neuroscience, brain imaging, genetics, predisposing or protective factors and disturbances but Paraphilia's! Such contribution from actuarial profession could be to serve the public interest.

Best wishes to students and upcoming AAC seminar; volunteers are working hard

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)

Indian Actuarial Profession Serving the Cause of Public Interest



After the Storm

After the storm comes calm. Elections are over. Members should have taken active part in voting. There are always two sides of a coin—Head or Tail. Win or lose. Members are members. Every member shall pay his debt to the profession from which benefits are received.

We are a profession and render services in Life Insurance, General Insurance, Health Insurance, Reinsurance, Pension and other Employee Benefits, Finance, Investment and management, Offices of Insurance Regulator, etc.

We are spread through out India, mostly in Mumbai, Delhi, Kolkata, Chennai, Hyderabad and Bangalore. We will be near to those places where our actuarial services are needed and used.

Council contains 12 elected members and other government nominees one of them is from IRDA. If we analyze the elected members—

The three office bearers are appointed actuaries of insurers;

5 AAs, 2 are working with insurers, and 5 are consultants;

10 Indians and 2 foreigners;

6 Working in offices of Life Insurers: 6 are consultants in different fields.

4 from Mumbai, 2 from Delhi, 1 from Chennai, 1 from Hyderabad, 1 from Bengaluru; 3 overseas.

Young and old members.

No further analytics.

The Council is well represented, that is what can be said.

The Council is for the members, by the members, and to the members. [Institute has 324 fellows and 159 associates –total active members as on 31.3.2016 is 483. We have over 10000 student members].

We notice there is unemployment among student members. Our prime aim is to solve this.

We also notice that there are a good number of student members and associate members close to fellowship. We want them to be fellows soon.

In fact, it is because of IRDA, there is lot of actuarial activity, which is growing; and the insurers are looking for experienced young actuaries. Consultancy profession is growing. Please cooperate with the insurance regulator and central government who made us successful and will make us still successful. It is also because of efforts of first chairman of IRDA, the Actuaries Act, 2006 came into existence. Government of India has given due importance to the actuarial profession by an Act in Parliament. I still remember an incident in a standing committee meeting [The Committee comprised Members of Parliament who were discussing about the Bill on Actuaries Act], where I was present. Chair of the Committee asked a member: "why you do not wish that ASI should become an IAI, when government wants to recognize the actuarial profession in India?" Replies were heartening.

We need to do still more competing with the professional bodies like Institute and Faculty of Actuaries (IFoA), Society of Actuaries, Casualty Actuarial Society [entire actuarial profession is regulated by Academy of Actuaries in USA] in various fields—research, investigations, quality papers on embedded value, actuarial opinion on mergers and take overs; innovative design of products; risk management, rate making techniques for general insurance products, agricultural insurance, offshore activities, actuarial software, etc.

Today every professional body is concerned for higher standards and professional ethics. It is because many insurers, employers, trustees, regulators and governments make use of actuaries. Image of profession is more important. So standards are more important.

IFoA recently made a statement on higher standards; and further stated that if a member X notices that another member Y is not complying with any standard, law, rule, regulation, etc, it is the responsibility of member X to report to the Institute about member Y. The intent is to ensure quality of services.

Academy of Actuaries is concerned with the quality of services provided by the actuaries. I saw a video where an actuary refuses to compromise with practice standards to benefit his client.

In fact, the law protects the Indian actuarial profession well in section 37 of the Actuaries Act:

37. Penalty for falsely claiming to be a member, etc. - Subject to the provisions of section 10, any person who, -

(a) Not being a member of the Institute, -

(i) Represents that he is a member of the Institute in any of the manners mentioned in section 7; or

(ii) Uses the designation "Actuary"; or

(iii) Uses the letters "AIAI" or "FIAI" after his name; or

(iv) Practices the profession of an Actuary; or

(b) Being a member of the Institute, but not having a certificate of practice, represents that he is in practice, or practices as an Actuary,

Shall be punishable on first conviction with fine which may extend to one lakh rupees, and on any subsequent conviction with imprisonment which may extend to one year, or with fine which may extend to two lakh rupees, or with both.

This shows the concern the Parliament has towards the Indian actuarial profession.

We cannot bring success to actuarial profession unless we work together to provide best services to all our users.

About the author

Mr. K. Subrahmanyam



ksmanyam52@ymail.com

Fellow member

IAI

EMPLOYMENT OPPORTUNITY

Career Opportunity in Bharti AXA Life Insurance!

Bharti AXA Life is a life insurance player that was started in 2006. It brings together strong financial expertise of the Paris-headquartered AXA Group and Bharti Enterprises - One of India's leading business groups with interests in telecom, agricultural business, financial services, and retail. The joint venture has a 51% stake from Bharti and 49% stake from AXA. It launched national operations in December 2006. Today, Bharti AXA Life has a national footprint of distributors trained to provide quality financial advice and insurance solutions to the large Indian customer base.

Bharti AXA Life offers a range of innovative products and services that cater to specific insurance and wealth management needs of customers.

Role: Actuary | Associate Manager / Manager (Shareholder Reporting)

Job Description

Location: Mumbai – Head Office

Reporting to AVP – Shareholder Reporting, the key deliverables of the role will be:

- To own and manage the actuarial valuation, business planning process and other actuarial investigations (such as ALM and Risk Analysis).
- Assist in carrying out Shareholder reporting on IFRS & MCEV basis – valuation, preparing analysis of experience and business planning.
- Be responsible for risk management portfolio involving different parameters – ALM, risk appetite framework, liquidity analysis, etc.
- Ensures that tools for valuation and related analyses are implemented and maintained in accordance with established standards and assumptions.
- Ensures that all data, assumptions, etc. submitted for analyses are consistent and accurate.
- Estimates the IFRS/MCEV earnings and change in earnings.
- Conducts financial projections for planning purposes.

Desired Profile

- Actuarial student at least 2 years of actuarial work experience and 5+ papers cleared.
- Strong technical skills and understanding of key aspects of actuarial, investment and financial disciplines
- Strong analytical and communication skills
- Good Knowledge of Prophet (Actuarial Software)
- Good knowledge of Excel including VBA programming

Interested candidates may share their updated resumes with Beena Upadhyay on beena.upadhyay@bharti-axalife.com

bharti AXA
jeevan suraksha ka naya nazariya

SERVICE DOMINANT LOGIC – A PARADIGM FOR THE FUTURE

Introduction Services have made a major contribution to India's economy in the last few years. Contribution of services to GDP has grown to 64% which is much more than the contribution of manufacturing. The impressive growth of IT sector and ITES has spawned a host of services in India that are market driven. Various reasons have been attributed for this growth. The impact of globalization, disintegration of geographical barriers, the FDI policy changes, growth in outsourcing and off shoring, automation – all these have contributed to the growth of services in no small measure. Technology has redefined the way services are managed – be it banking, insurance, logistics, food delivery, transportation, health care. In this scheme of things, Service Dominant Logic (SDL) presents a contrarian view about the services economy. This article traces the evolution of SDL and its growing importance.

So, what is unique about SDL?

Service research has pointed out the challenges in measuring performance of service supply chains due to the inherent differences between goods and services – namely the IIHP attributes. IIHP stands for intangibility, inseparability, heterogeneity and perish ability and this is a classical view about the characteristics of services. SDL views this from a different lens and highlights the fact that these attributes could be actually a blessing in disguise.SDL also asserts that service economy always existed and it was due to dominance and visibility of goods dominant logic that the relevance of services never got highlighted. However, with growth in outsourcing trends, services have now got the visibility that they deserved.

Tracing the history and progress of SDL

Two academic scholars – Stephen Vargo and Robert Lusch were working for close to 10 years when their research effort on SDL saw the light of the day in 2004. Their paper is now considered a seminal one and it has been cited many times. Since then, Vargo and Lusch have been updating their research every two years.

In 2004, Vargo and Lusch offered eight foundational premises in support of their logic. They refused their logic to be branded as a theory arguing that the logic was still evolving. Later on, in 2008 they added two more foundational premises. In 2015, they have added the eleventh foundational premise and have declared four of the premises as "axioms". Axioms are propositions that are considered established.

A Service Dominant-Logic View

Christian Gronroos, a thought-leader in customer experience believes that service is tough for companies who think that they have done their job once they sell the product. Such firms believe that value is exchanged when a transaction is completed.

Customer perception of value gets created when a company interacts with them to educate, engage and enlighten them. The perceived value of customer lies in value-in-use and not just in the price that they pay for the product or service. It is also important to educate the customer that he is a co-creator of value.

When we buy a washing machine, the maintenance of the machine comes along with it. The same applies when you buy a car or a bike. Thus service is an integral aspect of every product that we purchase.

SDL emphasizes that value is co created by the consumer along with other network players and unless one looks at the customer's point of view, true value is not delivered to the customer.

Differences between Goods Centered View and Service Dominant Logic

GD logic views the customer as an operand resource – a resource to be acted upon. SD logic advocates viewing the customer as an operant resource – a resource that is capable of acting on other resources, a collaborative partner who co-creates value with the firm.

SDL says that the application of competences for the benefit of others is the foundation of economic exchange. SDL argues that there was always a service economy but it was invisible due to the focus and attention on goods dominant logic.

Goods dominant logic

- Economic activity concerns making and distributing things that can be sold.
- Things are embedded with utility and value during production and distribution; the products offer consumer superior value in relation to competitor's offerings.

- Decision variables are at a level where profit can be maximized.
- Goods are standardized and produced away from the market.
- Goods are inventoried until demanded by the market and then they are delivered to consumers at a profit.

If value was something added to goods, did marketing contribute to value?

Service centered logic

- Marketing is a continuous series of social and economic processes largely focused on operant resources with which the firm is constantly striving to make better value propositions than its competitors.
- Marketing is a continuous learning process.
- Identify or develop core competencies (the fundamental knowledge and skills of an economic entity that represents competitive advantage)
- Identify potential customers that could benefit from competencies
- Involve customers in developing value propositions
- Gauge marketplace feedback by analyzing financial performance from exchange to learn how to improve firm's offering to customers and improve firm performance.
- Prahlad and Hamel (1990) – Core competences are collective learning in the organization – especially how to coordinate diverse production skills. Core competence is communication, involvement and a deep commitment to working across organizational boundaries. Channel intermediaries and network partners represent core competences.

The service centered view is customer centric and market driven. It talks about collaboration and learning from customers. How can services adapt to individual and dynamic needs of customers. Value is defined and co created with consumer.

Services have now come into focus due to increasing ability to separate, transport and exchange information and the development of increasing specialization. Innovation is not defined just by what firms produce as output but how firms can produce better service. Example – a customer who purchases a smart phone is looking at the various apps (which are services again) which can be accessed via the phone and the ease with which the phone can be serviced and maintained. In that sense, product innovations also have a service element bundled into them.

The foundational premises of SDL

1. Specialized skills and knowledge as fundamental unit of exchange
2. Indirect exchange masks the fundamental basis of exchange.
3. Goods are distribution mechanisms for service provision.
4. Operant resources are the fundamental source of *strategic benefit.*
5. All economies are service economies
6. Value is co-created by multiple actors, always including the beneficiary.
7. Actors cannot deliver value but can participate in the creation and offering of value propositions
8. A service centered view is inherently beneficiary oriented and relational.
9. All social and economic actors are resource integrators
10. Value is always uniquely and phenomenologically determined by the beneficiary.
11. Value co creation is co-ordinated through actor generated institutions and institutional arrangement

Today's markets are more about co-operation than competition. In 2015, Stephen Vargo and Robert Lusch have reduced the 10 foundational premises to four axioms - namely propositions 1, 6, 9 & 10 They added a new (11th) premise that has also been declared as an axiom..

Service ecosystem is a relatively self-contained, self-adjusting system of resource integrating actions connected by shared institutional arrangements and mutual value creation through service exchange. Service systems is defined as a configuration of people, technologies and other resources that interact with other service systems to create mutual value.

Role of institutions in value co creation

1. Institutions enable actors to accomplish an ever increasing level of service exchange and value co-creation under time and cognitive constraints.
2. Institutions when shared by actors result in a network effect with increasing returns. In fact, the more actors share an institution the greater the potential coordination benefit to all actors. Therefore, institutions can play a central role in value co creation and service exchange.
3. Recognition of the central role of institutions and institutional arrangements and the resultant heuristics that emerge foster co-operative and coordinated behavior among actors in an evolving service ecosystem. This is central to a more complete and realistic portrayal of markets and marketing.

Essence of Service dominant logic

1. Maximize customer involvement, assist customer in process of specialization and value creation. Customer should also know that he is also contributing to value creation.

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)
Indian Actuarial Profession Serving the Cause of Public Interest

2. Marketing is core competence of the organization. Whether it is New Product Development or Customer Relationship Management or Supply chain management, all the processes must be market driven and customer centric.

3. The need to focus on core competence has led to the emergence of outsourcing strategy. Proper utilization of resource networks and clear understanding of the risks involved is important for success of outsourcing strategy. Companies who have outsourced often lose control leading to deterioration in quality and so some of them have been forced to retract their outsourcing decisions. Just like CRM, managing network relationships is equally important.

4. Marketing is a network integrator that pools resources from different network members. The success of marketing efforts in this direction leads to competitive advantage.

5. Services can replace manufacturing in the following manner. If additional investments are made in manufacturing wherewithal, then need for capacity utilization will make the firm move away from customer focus and deploy a push strategy. When manufacturing is outsourced then it improves customer focus and agility and responsiveness to market demands and customer needs. This is why outsourcing is a viable option but it has to be managed well. Also if a product is maintained well (service) then its life can be prolonged and innovation of new products can be delayed.

Marketing is often claimed to be playing a key role in customer experience management. However, for the networks to be effective and competent there has to be proper risk management, training, coordination and information flow. Customer experience is a combination of both technical quality and functional quality as propounded by Christian Gronroos. Often customer perceptions are based on functional quality (ie the way the service is rendered) and so service operations also has to be given greater importance in the scheme of things.

Changing role of Marketing

Until the 50's marketing was about production and products that had to be supplied to the market. It was then that marketing began to focus on the consumer. With the passage of time, the drive towards cost savings and operational efficiency led companies to outsource. But outsourcing presented its own risks. With outsourcing, cost savings were achieved but quality suffered. This led to the TQM (Total Quality Management) movement.

Manufacturing efficiency relied on marketing efficiency. If marketing was able to forecast demand well then it meant effective capacity utilization for manufacturing operations. New investments in plant, equipment and machinery had an adverse impact of responsiveness of marketing function. With new investments, company had to strive to increase capacity utilization and adopt a "push" strategy of introducing products in the market. This dictated marketing to focus on promotional techniques to market and sell such products.

Companies that had outsourced their manufacturing operations realized to their chagrin that outsourcing involved risks in the form of hidden costs. Some of these companies had to retreat their steps and revert to in-sourcing.

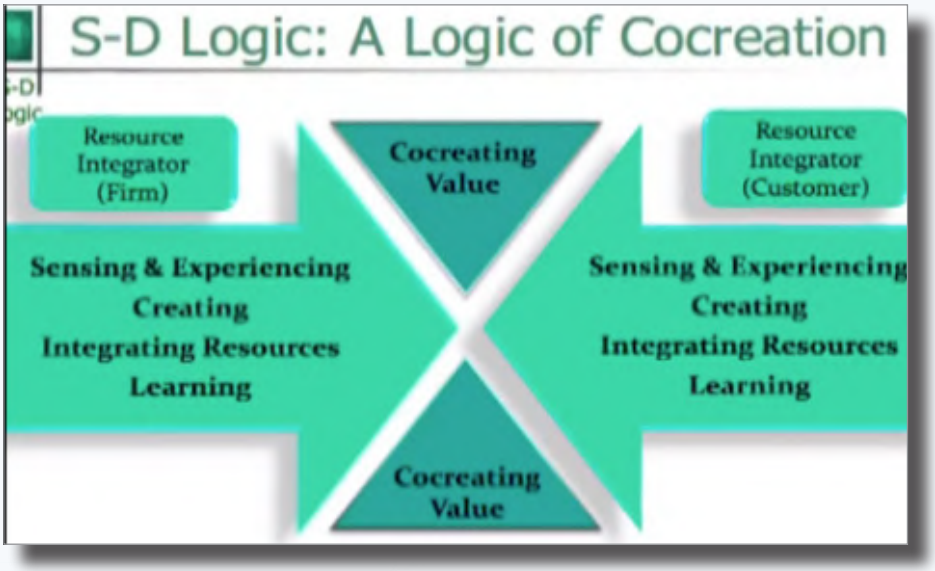
The decision by businesses to outsource was an outcome of path breaking work by C K Prahlad and Gary Hamel who proposed their theory on core competence (1990). Core competence is the unique strength of an organization that cannot be imitated by a company's competitors. Core competences are collective learning in the organization – especially how to coordinate diverse production skills. Core competence is communication, involvement and a deep commitment to working across organizational boundaries.

Today marketing is more relational than transactional. Customer relationship management has become essential to retain loyal customers of a firm. Successful companies are using technology to influence customer satisfaction.

However, according to SDL, marketing has a more serious role to play.

The pronounced role of marketing as per SDL

SDL postulates that marketing has a wider canvas as all economies are essentially service economies. When a consumer purchases a product, value is obtained only when the consumer uses the product. Customers are co-creators of value along with the service provider. However, value is created by the entire service network of which customer plays a major role in value creation.



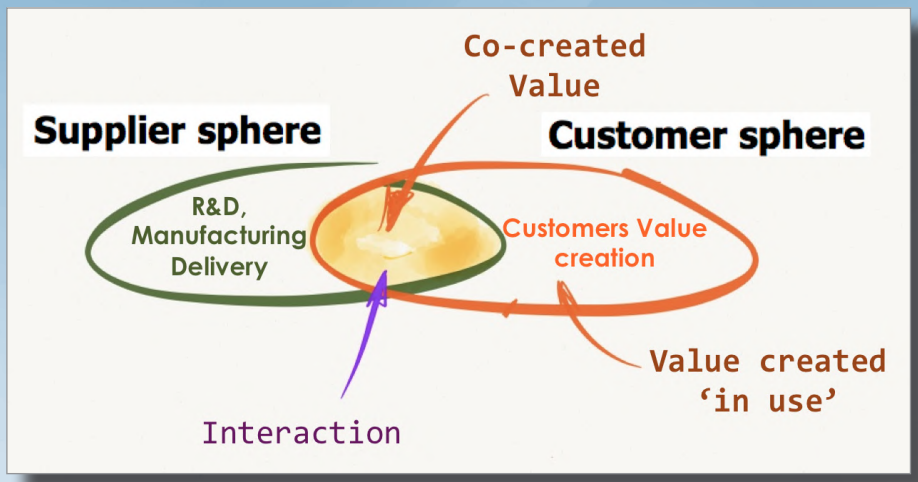
Today in the era of specialization and micro specialization several actors come together in value creation and so marketing acts as a network integrator ensuring the collaboration, coordination and cooperation of all network members. In layman terms, marketing has to be part of an organization's strategic ecosystem. However SDL has touched upon the role and relevance of networks only in the latest revision of its logic.

The role of marketing is not restricted to market research, branding, advertising, sales promotion etc. It has to ensure integration of these efforts with the efforts of other stakeholders in the organization. Marketing has to lead the effort of designing and building cross functional business processes. Traditional marketing theory would use customer feedback to improve the processes. However, in SDL, customer feedback needs to be mapped with financial performance in the market to identify which areas/ processes need fine tuning/ refinement.

SDL emphasizes that value is co created by the consumer along with other network players and unless one looks at the customer's point of view, true value is not delivered to the customer.

The Gap in SDL

While SDL argues that intangibility is of not much relevance, it is silent on "perishability" of services. If services are not utilized during a point of time, they are lost forever. While marketing is at the fulcrum of value proposition, service operations play a crucial role too. Whether it is suppliers of services or products, implementation of new product designs or service blue printing, service operations is a crucial link to the performance of the firm that leads to meeting the requirements of customers; Dealing with perishability aspect of services involves efficiently matching capacity with demand. Services are characterized by uncertainty and variability of demand. Service establishments have often used flexible capacity to meet the vagaries of demand.



Conclusion

Service dominant logic has evolved in the last decade as a logic that has highlighted the pronounced role of marketing as a network integrator that integrates the resources from various networks to deliver the customer what he wants. The logic claims that all economies are essentially service economies as goods are only provisions for services. Value of a good or a service lies in consumption. So customers are co creators of value along with other stakeholders in the network. The need for focusing on core competence has led businesses to outsource and this has presented unique challenges. However these challenges can be met with proper risk management and control and information sharing among the networks. Growth in outsourcing highlights the fact that specializations and microspecializations of different network partners have to be collaborated to deliver a value proposition to the customer. Customer has to be engaged with to explain to him that he is a co creator of value. Customer feedback has to be mapped with financial results from the market so that corrective actions can be taken.

SDL is a logic that highlights commitment needed to generate collaborative processes with customers, partners and employees. It is a logic that challenges management at all levels to be of service to all the stakeholders. It is a logic that recognizes the firm and its exchange partners who are engaged in the co creation of value through reciprocal service provision.

Presenting a contrarian view SDL highlights that the differences between services and goods is something that works in favor of services. Two areas need attention. The SDL does not talk about the challenges associated with perishability of services. Service operations need to be part of strategic landscape as much as marketing.

Value of a good or a service lies in consumption. So customers are co creators of value -along with other stakeholders in the network.

About the author

Mr. Venkatesh Ganapathy



gvenkatesh69@gmail.com

Associate Professor

Presidency Business School, Bangalore

Canara HSBC OBC Life Insurance

Applications are invited for the following positions in Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd., Gurgaon.

Position Title: AVP - Actuarial (Pricing)

Role - This role involves product designing and pricing of new products as well as redesigning/repricing of existing products, taking into account the fine balance between various stakeholders. Assist Pricing Head and AA in ensuring that products meet risk appetite of the Company, identify financial risks and suggest mitigating strategies, provide pricing related support to internal/external stakeholders and to take decisions in all relevant areas, viz., generating ideas/ designing/pricing.

Location - Gurgaon
Experience - 8 Years (Minimum)
Papers - 10+ papers (ST2 must)

Position Title: DM - Actuarial (Pricing)

Role - The individual will be responsible for developing robust pricing models built on sound Actuarial principles. Role would also involve providing pricing related support to internal/external stakeholders, including providing group quotes.

Location - Gurgaon
Experience - 2 Years (Minimum)
Papers - 5+ papers (CT5 must)

Position Title: DM - Actuarial (Prophet)

Role - The individual will be responsible for development of actuarial models (Prophet, Stochastic, ALS, etc.) for reserving, reporting, profitability investigation, analysis of earnings, risk management and business planning exercises. Role would also involve detailed testing and adequate documentation of the changes made to the existing models.

Location - Gurgaon
Experience - 2 Years (Minimum)
Papers - 5+ papers (CT5 must)

Apply with your CV to Email id - naina.juneja@canarahsbclife.in

Corporate Office Address:
Canara HSBC Oriental Bank of Commerce
Life Insurance Company Limited (IRDAI Regn. No. 136)
2nd Floor, Orchid Business Park, Sector – 48, Sohna Road,
Gurgaon – 122018, Haryana, India

KNOW YOUR PRESIDENT



Sanjeeb has been a highly respected Industry leader in the Life Insurance market for several years. He has acted as Vice President of the Actuarial Society prior to the well deserved recognition his peers granted by recently asking him to become President. He has been at the forefront of Industry opinion and development almost since the beginning of the private Life Insurance development and has rightly gained the respect of the Insurance Regulator and our own Board of Directors and Shareholders. Not one to be indecisive or vague, he provides clear-cut insights, opinions and decisions based on his analytic strengths and experience. He contributes beyond his specific Appointed Actuarial domain as a key Leader within Aviva India. As a Company we are indeed fortunate to be able to leverage both his knowledge and leadership

– Mr. Trevor Bull

I know Sanjeeb for many years as a friend. We worked together during our LIC days and also in Aviva India life insurance and Max New York Life Insurance. Sanjeeb is very helpful in nature. He makes genuine efforts and spares time to help others. I saw our common friends and co- workers coming to Sanjeeb to seek advice not only on official matters but also on their personal matters. He was instrumental in making number of us house owners at the right time. In LIC, he used to give lessons on Insurance Institute of India examinations to our non-actuarial co-workers after office hours when he himself was writing Actuarial exams. He takes great interest in health and wellbeing . His encouragement made number of us participate in half marathon with him and completed a quite a few of half marathons together. He has ability to think differently and objectively and not unduly get influenced by popular view. I am sure as a President of Institute of Actuaries of India, Sanjeeb will contribute a lot and serve the profession well. I wish him success and good luck.

– Mr. Pradeep Kumar Thapliyal

I have worked with Sanjeeb Sir for more than 5 years at Aviva India and I admire him for his leadership qualities and for his foresightedness.He is a person with clear vision and does all his work in a very planned manner. His power to foresee a risk or an opportunity is just amazing. He always encourage his team members to follow correct way of doing any project/ work and always takes strong stand in front of other departments to protect his team members.The way he keeps a close eye on his professional responsibilities, similarly he keeps a very close eye on his calories intake. Yes, he is very health conscious and runs marathon from last 4-5 years. Lastly, I must say he is also very helpful for someone in need. And I have witnessed such instances where he has silently helped many people. Let's welcome him in his new role as President of the Institute of Actuaries of India.

- Ms. Sapna Malhotra

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)

Indian Actuarial Profession Serving the Cause of Public Interest



I have known Sanjeeb for over 8 years. I first met him while working at AEGON Life in 2008 and we interacted on many occasions on work and personal aspects even though I didn't directly report to him. I always found him approachable, supportive and filled with positive energy. He empowers his team members, provides opportunities to take next level roles and at the same time he is candid in providing feedback. He likes to challenge the status quo and we used to have many debates on actuarial issues specially on assumption setting and at times success of new product launches. His strong grasp on numbers and logical reasoning helped me gain from these debates. We still have these debates sometimes even though we work and live in different cities and I am happy that our relationship has grown strong over the years. I look up to him as my mentor and get inspired by his high integrity and ethical values.

He also possesses exceptional leadership skills and always held a firm ground for his team whenever needed.

He is determined and likes to keep himself active. He took up the challenge of running half marathon at age of 40+ (I think) and completed it successfully. He has been participating in Half-Marathons for the last 5-6 years and each year he strives to beat his previous run timings.

I wish him all the best in his new role as the president of the Institute of Actuaries.

– Mr. Chetan Toshniwal



RECOGNITION

Actuary India is pleased to know that the paper titled "Traditional Vs Market Consistent Product pricing" submitted by Sanjeeb Kumar during 11th GCA has been selected by Society Of Actuaries, USA for their study material for the candidates taking the ILA exam.



Sanjeeb is a thorough business actuary who is not only strong on the technical side of the subject but also as sharp on all facets of the business be it financials, marketing or operations. He is one of the few people in the industry who has been driving and leading innovation in products design, keeping customer proposition at the core of it. He is an astute professional, does not hesitate to speak his mind and push the boundaries for those who work for him as well those who work with him for organization's collective benefit. I have personally benefited a lot from Sanjeeb's wisdom.

– Mr. Munish Sharda

I know Mr. Sanjeeb from his student days just before year 2000. He progressed very fast in actuarial exams. Right from beginning he is a man of few words. He chooses words carefully, before he speaks.

He does not react immediately whenever a problem comes. He analyses critically and solves it in a convincing manner. I like his simplicity and articulation. Council rightly asked him to wear the mask of 'President' and 'President's medal on occasions' to do good to the Indian actuarial profession.

I am sure he will be a jewel of the Council and the profession. I am sure that all will derive actuarial happiness from him. Best wishes for his presidential years.

- Mr. K Subrahmanyam

INTERVIEW



Mr. Trevor Bull

CEO & MD, Aviva Life Insurance Co; India

Personal

What qualifications and experience do you think is appropriate for a CEO of a Life Insurance Company to be successful?

Wider exposure to different areas of business in the early part of career helps CEO to be effective. Especially, experience in understanding customers and putting customers first in the decision making process is extremely important for a CEO to be successful.

What are the key qualities one should possess to be a successful CEO What are the challenges that you faced on the route to becoming a CEO?

To be a successful CEO, one needs the ability to establish a vision or roadmap that all stakeholders buy into. If a business has to succeed, there needs to be a win-win for all the stakeholders such as customers, shareholders, employees, partners etc. So, having the ability to manage all the stakeholders is also key to success.

The biggest challenge for any CEO is to get the entire organization to work as a team to drive execution.

What are your hobbies and how do you manage your work life balance?

I am interested in Gardening, Swimming and socializing with friends. Maintaining work life balance is always a challenge. I rely on my wife ("Boss at home") to plan and organize the required breaks and vacations.

Profession

What is your typical day at work?

I spend a lot of my time in working on our strategy for long term success of the company. I believe that a CEO needs to spend more time in creating something new, as compared to managing the day-to-day business. I also spend a significant amount of time in meeting, encouraging, challenging and mentoring people.

What can you tell us about the future employment outlook in insurance sector for actuaries?

Future of insurance industry in India is very good in view of the current levels of under penetration and growing disposable income. Actuaries, being the backbone of this industry, will get many exciting opportunities in the coming years. But, in the fast paced digitized world, the role of actuaries will also evolve and undergo a change.

What do you consider to be the key areas where actuaries add value to the business?

Insurance is a business with long term outlook and Actuaries are the ones who play a key role in forecasting this long term outlook by using their analytical skills in assessing risks and future projections. Knowing the business realities on ground can help actuaries add tremendous value to the business.

What impact do actuaries have on consumers and society? What should they do to connect with the society?

Actuarial service touches almost every part of an insurance business. For example, Economic outlook, Premium income and expense assumptions, Company's ALM position etc are considered and influenced by actuaries for long term sustainability of the business. By virtue of their impact on the sustainability of insurance industry, actuaries are impacting both consumers and society at large.

For greater impact on business and society, actuaries should not only limit themselves to the technical side of Actuarial function, but gain wider exposure to all business areas.

How do you think Institute of actuaries of India can support better its members?

Institute of actuaries should create an ecosystem to break the technical silos and encourage its members to become business practitioners.

How do you see actuaries taking Business roles in Life insurance companies? What values can they add to the business in the area of Finance, Sales, Marketing and Risk management?

Actuaries have a big advantage that they come with an analytical bent of mind and thus can analyze any issue from all angles. To assume wider business roles, they need to also understand the customer and the ground realities of the business. In addition, they need to be able to develop their ability to take decisions under uncertainty.

Insurance Industry in India

What trends do you see for this industry in the next 3 to 5 years?

Today, most insurers recognize the lack of technological advancement as one of the biggest drawbacks for the industry. I think digital advancements and innovations in processes and in the overall customer experience are strong focus points for most insurance companies today. I also hope to see more stress on providing quality financial advice and professional distribution. Overall, I think the insurance industry will come up leaps and bounds in the next five to ten years with big enhancements to the customer experience.

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)

Are there things that the IRDA or the Government should have or should not have done to assist the industry?

In the past few years, there have been many progressive regulatory changes in the industry and I want to appreciate the regulator for it. But there are certain challenges which remain for the industry. High volume of regulatory changes at times comes in the way of planning a roadmap for long-term sustainability for life insurers. This is in no way a criticism, but as these one-off regulations keep coming up, life insurances companies need to change things to comply. So industry is always reacting and changing the model to fall in line with the new regulation. I find this a bit of a challenge for the industry. There is a need for a comprehensive regulatory roadmap. Regulator has taken cognizance of this and developing "Vision 2030" by jointly working with the industry.

What market share do you see the private sector players having in ten years time?

The outlook in the life insurance market in India is very positive. After the increase in the FDI limit, large foreign players are investing in the Indian insurance market. The market dynamics have also changed, with fresh ideas and new capital coming in. One company has also gone for IPO. So, overall sentiment in the market is positive. In the future too, things seem positive both for the insurers, and the customers. Since India is such a big market with an enormous potential, I think all life insurers, private and government, have a big opportunity to grow. I believe that there will be many innovations in the industry and private industry will be able to increase its market share in the long run.

What are the top three issues facing the Insurance sector in India?

One of the biggest issues with the life insurance industry today is the lack of digital intervention. The world today has changed, and so has the way customers are living their lives. Customers today are used to the e-commerce experience. They order something online, and the next day it is delivered to their doorstep. But when they buy insurance, they are made to go through tons of paperwork. The industry needs to align itself to the changing lifestyles of the customers and provide them an experience they deserve, by building a digital ecosystem that offers value and convenience.

The second concern for the life insurance industry is low levels of customer trust. Trust is low due to lack of maturity and quality in some distribution channels. In many cases, the advice given at the point of sale is perhaps not in line with the customer's needs and expectations. This lack of trust translates to low levels of Persistency. Another reason for low persistency is the lack of financial literacy among people. Insurance needs to be seen as an assurance to protect the future of your family, not as an investment tool for short term gains.

Lastly, as an industry, we need to be engaged with the customer much more. Companies sell the policy, and one year later, they remind customers about due premium. Currently, it's a cold relationship. We need to truly partner the customers during their journey and engage with them regularly.

What do you believe are the inefficiencies in the insurance industry? How do you think such inefficiencies can be overcome?

The industry has to win the trust of customers by increasingly adopting need based selling approach and keeping a constant engagement with the customer throughout his/her association. Industry also has a long way to go in terms of technology. There is way too much paperwork currently. We need to build a quality digital ecosystem that enhances the customer experience and provide right advice to the customers. Currently, there is too much focus on "Selling" rather than "Advising". We need to advise customers on how to make informed decisions that will help them secure the future of their families and help them plan for their life-stage goals.

What do you think are the strengths of Indian Insurance Industry?

The biggest strength is the massive opportunity that the Indian life insurance industry presents. Indian insurance industry has the potential to become one of the largest in the world because of low penetration and increasing disposable income.

How do you keep abreast with latest happenings in insurance sector in India and across globe particularly Life Insurance and overall economy?

Since Aviva is a global entity with presence in 16 countries across Europe, Asia and Canada, leaders from all Aviva markets regularly interact and keep others informed about the major happenings in insurance industry in different countries. There is a lot of exchange of information, ideas and opinions that help us learn from each other and understand the global market. At a local level, most of us at Aviva are constantly following the happenings in the insurance industry, and also in the overall Banking and Financial Services Sector. We also constantly meet leaders from the industry to exchange our views. The advent of social media has made staying connected really convenient.

However, the best way to understand your market and identify trends is to stay closely connected with the customer at all times. At Aviva, we are trying to ensure that our relationship with the customer is long term, and our interactions are not limited just to the time of sale and when premiums are due. We truly aim to partner our customers throughout their journey with us by offering advice and insurance solutions that are meaningful and valuable to them. We are also making great efforts to understand today's customers and their lifestyle, through research.

STUDENT COLUMN

What is the True Growth Rate: Reconciling the Old and New GDP Estimates



1. Introduction

The Central Statistical Organisation (CSO) released its new Gross Domestic Product (GDP) estimates with base year 2011-12 in 2015. The growth rates were revised substantially upwards based on new a methodology, larger sample sizes and recent census figures for general population, livestock and Small and Medium Enterprises (SME). The new estimates were in line with the United Nations System of National Accounts (UN SNA) 2008 standards, the successor of earlier UN SNA 1993 standard.

The estimates, since their release, have drawn fair amount of criticism, their accuracy and reliability questioned. The criticism fall in many categories - such as choice of methodology used by CSO, the accuracy of the method chosen, reliability of data used in deriving the estimates. One of the main reasons why the new estimates have been frowned upon is that growth rates have been revised upwards by 100 basis points (bps) in the overlapping periods of Financial Year (FY) 2012-13 and FY14 (for which growth from old and new are available) and there have been downward revisions in 1st Revised estimates and subsequent revisions in new series. Moreover, the latest growth rate in FY16 at 7.19% is not corroborated by trends in secondary indicators like decrease credit of take, contraction in Index of Industrial Production (IIP) for protracted period, contraction in exports, rise in asset distress in the banking system and governments' ability to garner revenues only by repeated changes in tax rate and imposition of fresh tax such as the *Swatch Bharat* cess and the *Krishi Kalyan* cess. Furthermore, there are inherent contradictions within the estimates themselves, such as a declining trend in the savings/ investment rate is not compatible with acceleration in real GDP rate during the same period.

The present study therefore revisits the new GDP estimates provided by CSO and in light of the scrutiny the estimates have already received, tries to deduce what had been the growth scenario for India during the period FY11 to FY16. It is clarified at the onset that this exercise is not to correct the CSO growth estimates or question their accuracy, for such an approach is futile; in theory it is impossible to estimate the true growth rate with absolute accuracy. The study takes the CSO estimates as given but will modify the estimates based on some tangible economic logic.

The study from hear on will proceed in the following fashion. I first survey the change in methodology of CSO and gauge how this has impacted the new estimates. Then I rework estimates of GDP growth rates for the period under study. We will briefly comment on the crucial role of UN SNA 2008 in complicating the present understanding of GDP wherever necessary. The article concludes after this section.

2. GDP estimates from Base 2005 to Base 2012

The CSO's exercise of changing the base of GDP in effect did two important changes in GDP measurement. The change of base was merely a statistical one, the adoption of UN SNA 2008 was by far the most important, as this changes not only introduced new terminology but altered the very prism through which economic activity is looked and understood. We start with the terminologies first then build upon these differences through a literature survey.

A notion has taken ground in the popular perception that the Gross Value Added (GVA) is some new measure and is different from previous estimates. This perception is erroneous. Since the very beginning GDP measured the change in value add - the difference between the final outputs net of intermediate inputs. But there is one new addition to list of terminologies and that is the introduction of concept of 'basic prices'. Earlier there were only two notions - the 'market prices' and 'factor cost'. The new estimates report GVA at basic prices and market prices. Hence the use of estimates at factor cost has been discontinued and this is the first source of confusion resulting in breakup of continuity is comparing old and new estimates. The old estimates invariably used the factor cost estimates and any comparisons should reduce the new estimates to their factor cost equivalent which is not difficult. This convention is

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)

Indian Actuarial Profession Serving the Cause of Public Interest

followed in this exercise to compare rates from the older series in Graph 1 (off course with some compromise).

Private Corporate Sector

Since their release in January 2015, the new estimates have been examined for their use of Ministry of Corporate Affair's (MCA) MCA-21 database to derive the estimates for Private Corporate Sector (PCS) and the resultant impact on estimates of savings by PCS. Nagaraj (2015) and Rao (2015) have given detailed argument on these lines, questioning both the quality of data and choice of methods used. Nagaraj's criticism was clarified to an extent by CSO [See CSO, 2015] but the moot point about the doubt on size of savings estimate of PCS using the MCA-21 have not dispelled with by CSO.

Another aspect of the PCS estimate is the inclusion of the Quasi Corporate (QS) category which includes the production units under the household in the unorganized sector. This inclusion has resulted in increase in share of the manufacturing sector in the overall GDP and may partly explain the steep rise in growth rates under this category. Vaidyanathan (2016) has in detail commented on this inclusion of an unorganised sector category under the organized sector. Furthermore, Vaidyanathan also noted that "there is no statement 76.1—which contained the separate share of organised and unorganised sector in NAS 2015 as was the case in NAS 2014". In a nutshell, the new estimates try to portray the economy as transformed into more organised form which not the case.

With regard to unorganised sector it is also important to note that this category was included in UN SNA 1993 because of the failure of development policies in third world countries, when it was observed that integration into salaried employment is much slower than had been hoped, and that many of those left behind would never become part of the "formal" economy. The third revision of the UN SNA 1993 thus defined the informal economy's place in national accounts [See Chiapello, 2009]. This change resulted in creation of two tables as observed above to track this sector. What prompted their discontinuity in UN SNA 2008 is something that need closer investigation because such a representation will not aid in successfully tracking the benefits of MUDRA which targets informal/ unorganised sector.

Research and Development and Defence

The most important changes in the UN SNA 2008, which reflects in CSOs new estimates and will have impact on headline indicators such as GDP, concern the "capitalisation" of expenditures on Research and Development (R&D) and, military weapons systems. In UN SNA 1993 purchases of R&D were treated as intermediate consumption, but the new standards prescribe their recording as investments. This change from intermediate consumption to investments increases value added, and thus GDP. Similarly, UN SNA 1993 treated durable goods purchased by defence as intermediate consumption, unless these are actually used in much the same way as in any other type of production. As a consequence, military weapons systems were treated as intermediate consumption, and not as fixed capital formation.

This expansion in the production boundary in the UN SNA 2008 has also contributed to higher estimate of Gross Capital Formation (GCF). Under the new estimates, for the four year under consideration, FY12 to FY15, the R&D expenditure average at 3.12% of the current GVA at basic prices. *Prima facie* this estimate appears on the higher side because in response to a question in the Rajya Sabha, the Minister for Science & Technology and Earth Sciences, Dr. Harsh Vardhan said "India had invested 0.88% of its Gross Domestic Product (GDP) towards Research and Development (R&D), whereas USA and South Korea spent 2.79% and 3.36% respectively during 2011-12. The Minister said the Science, Technology and Innovation (STI) Policy, 2013 envisages increasing R&D expenditure to 2% of GDP with enhanced participation of private sector through policy and reform processes" [See PIB, 2015]. The obvious disconnect between CSO estimates, the policy objective and another ministries estimates on R&D needs no further explanation!

Savings and Treatment of Gold

In the new series, CSO has also changed the convention on savings rate. Saving rate in the new series is measures as 'Gross Savings as per cent of Gross National Disposable Income (GNDP) from the earlier of Gross Savings as per cent of GDP current at market prices. However, investment rate is still measured as GCF as per cent of GDP. Hence if one has to calculate the resource gap a direct netting of ratios is incorrect and the appropriate adjustment in denominator is necessary.

Another important change in respect of savings is the inclusion of a part of the gold holdings as financial assets of the household. Under UN SNA 1993 and also UN SNA 2008 gold is classified as: i) monetary gold, ii) gold held as store of value and iii) used as industrial purposes. The first category of gold (monetary gold) is kept with Central Banks is treated for financial purposes while the transaction of gold in remaining two category (non-monetary gold) is treated as transaction in commodity. Furthermore, under the UN SNA 1993 which CSO implemented in 2000, the valuables were placed under GCF as a separate heading, while reducing the savings and also private final consumption expenditure (PFCE) as gold purchases are not to be treated as part of consumption under UN SNA 1993.

Hence, until the UN SNA 2008 was adopted in India, neither the popular perception that the household purchase of gold constitutes physical savings nor the perception that it consumption by household is reflected in national income accounting. This anomaly, that is, classifying valuables under GCF while not accounting them

in savings or consumption implies valuables portion of GCF have no saving (financing) counterpart [See Kumar, 2011].

To an extent the aforesaid criticism of UN SNA 1993 stands addressed with CSO by including a small part of the savings in valuables as assets of the household. But the conceptual problem that UN SNA 1993 has continues to plague that UN SNA 2008 because it is not in conformity with customs and preferences of the Indian household who save in gold irrespective of it's from as bullion or jewellery. Furthermore, the distortions in savings and valuables portions of GCF is even more glaring as 'valuables constitute a negligible 1% of the total saving, whereas under GCF, "valuables" constitute about 7.5%' [See Rajakumar *et. al.*; 2015].

Central Bank Output

Up till now an impression has been created that all changes by CSO have inflated the GDP figures. This is not true in general. Bhuyan (2016) has investigated the impact of UN SNA 2008 on output of Reserve Bank of India (RBI) by CSO. Bhuyan particularly notes that the measurement of central bank output is one of the critical issues arising from UN SNA 2008. In the earlier series of GDP, output of RBI compiled by CSO was partly market and partly non-market. Entire output of RBI, however, is now treated by CSO as non-market in the new series of GDP. Thus there is a downward revision of 87% in the GVA of RBI estimates based on this new method. This however, should not lead to huge under estimation of the output. But this conclusion is specific to RBI and may not apply to other central banks such as Federal Reserve, Bank of Japan and Swiss National Banks whose balance sheets have grown sizably relative to the respective GDP since 2008.

3. Reworked Estimates of Real GDP

The trends in growth rate derived from the new estimates have puzzled every knowledgeable person on the subject. The best summary of the problem was given by the Government in the Mid-Year Economic Analysis 2015-16. "The latest GDP estimates suggest that real GDP in the first half of 2015-16 grew at 7.2 percent as compared to 7.5 percent in the first half of FY 2015. In contrast, nominal GDP growth declined substantially from 13.5 percent in H1 FY 2015 to 7.4 percent in H1 FY 2016" noted the report on page 5. This contrasting performances of nominal and real GDP growth raise interesting issues. The report offers an explanation in Box 3 wherein reasons are forwarded for this peculiar trend in nominal and real GDP growth rates. Essentially the argument is based on the wedge between the CPI based inflation and the WPI inflation which could be the source of possible error in real growth estimation. Another of potential measurement error relates to the use of volume indicators [such as IIP] as proxies for real value added growth. "If production efficiencies are increasing, as suggested by manufacturing data, real value added growth can be under-estimated. In the national accounts, about 11-12 percent of gross value added is computed using volume proxies".

While this author agrees partially with the aforesaid analysis, this is a considerable simplification of the problem by taking refuge under technicalities. The explanations do not provide any economic rationale for this anomalous case – real growth exceeding nominal growth. What explains such a divergence between the inflation based on CPI and that based on GDP deflator? In the opinion of this author answers lie in changing demand patterns both domestically and abroad. A possible explanation is now presented by drawing from the literature on index number theory.

The real GDP is in effect a Laspeyres (L) quantity index and the nominal GDP a Paasche (P) quantity index. Laspeyres volume indexes are mostly higher than those of Paashce volume indexes (L > P) if there is a substitution effect in the economy, i.e. a decrease in the relative price of a product shifts expenditures to another product. In the general case J R Hicks postulated that:

where I is the income effect and S is the substitution effect. Independently of Hicks, Samuelson and Swamy (1974) in their survey said if preferences are non-homothetic with real-income changes inducing a relative expansion in demand for those goods whose prices have relatively fallen, then I □ 0, which reinforces the positive substitution effect *S* □ 0 then L > P. However, they cautioned the user to restrict the use of these indexes to local changes in **p**. "These indexes can be used to determine bounds for the true index which may not be known". L-P >0 is generally the assumption under which national accounts are complied. However there is no guarantee that this is always the case in practice; preference will change dramatically due to factors such as demographic aging, persistent unemployment and impaired household balance sheet.

While discussing the anomalous case of L-P < 0, Samuelson and Swamy observed that; under this case the observed relative prices are not negatively correlated with the observed relative quantities as expected with homothetic changes. This is a rather problematic case, where aggregation is not possible. Even Fisher's "ideal" index, which consists in the geometric mean of the Laspeyres and Paasche

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)
Indian Actuarial Profession Serving the Cause of Public Interest

indexes, falling between these two indexes, is farther than this last ones from both "true" economic indexes. They concluded under this case "the Ideal index cannot give high-powered approximation to the true index in the general, non-homothetic case".

Hence if there are reasons to believe that general demand is not governed by rational behaviour and/or the preferences are non-homothetic with a negative and strong enough income effect so that real-income change induces a relative expansion in demand for those goods whose prices have relatively risen. A strong negative income effect offsets a positive substitution effect ($I + S < 0$); then GDP growth rates derived from such measures can be misleading. It should be obvious to the readers that when $L < P$ then it is possible that nominal GDP growth will fall behind the real growth rate. The GDP deflator, which is derived index (P/L), will be overstated, implying the implicit inflation based on GDP deflator will turn negative at some point in time; may also diverge significantly from other measures of inflation. This in fact is the case in annual data in FY16 [See Row 6, Table 1]. Furthermore, when subsidies are deflated by such a GDP deflator as noted in Box 3, it may seriously distort the estimates.

If the one were to accept the above explanation then it is imperative that symptoms of such uncharacteristic demand patterns are located. At the face of it, there is enough evidence to believe that general demand curve may have deviated from its usual downward sloping shape. Firstly, the inflation expectation in RBI's Inflation Expectation Survey at 9% plus and Consumer Confidence Survey have not adjusted to same extent as the actual CPI inflation. Recurring bouts in prices of essential and staple food items has been attributed downward rigidity in inflation expectation. Thus, in expectation the real income has reduced and negative correlation with actual relative prices tracked by CPI broken, particularly for consumer goods. This argument can be further supported by the fact that nominal wages in India do not adjust to inflation due to informal nature of labour markets and production process thus eroding the purchasing power of wage income in the informal sector [See Rakshit, 2016]. Secondly, the rapid fall in international prices of crude oil and commodities (which violate the locality condition of Samuelson and Swamy) have been transmitted disproportionately to various sectors of the economy. This has resulted in gains in terms of trade but no corresponding improvement in exports or local demand as evident in protracted periods of contraction in IIP. The former has implications for GDP deflator as explained below latter. Thirdly, income and price elasticity of demand varies considerably across rural and urban areas, and across various income groups. With two successive droughts - FY15 and FY16, a rare natural disaster in last 115 year, [Rathore, 2016] ensured that positive benefits of income effect due to fall in CPI did not accrue to the rural population. This is also proved by a consistently higher rural CPI vis-à-vis the urban CPI. Lastly, repeated intervention through increase in indirect taxes on crude oil and services prevented any correction in price expectation formation of households.

Revised Growth Rates

Based on the above discussion, how can the growth rates be best assessed for the study period. It is not the first time that such a divergence has been seen between the CPI based inflation and those derived from GDP deflator. Such a phenomenon was seen in Japan as well in 2003. Koga (2003) suggested the following decomposition of the GDP deflator to understand how it changes in response to changes in terms of trade and changes in relative weights of demand component:

The GDP deflator is based on the notion that both the output price decreases and the input price increases cause the deflator to decline, because both of them lower profits. This is natural since the GDP deflator is a part of the GDP statistics, which try to capture the value-added. Hence, it is in line with this principle that the fall in oil and commodity prices (inputs) will increase the GDP deflator and the fall in export prices (output) will lower the deflator. Imports having a higher share in GDP (30%) than exports (24.3%), a relatively faster fall in export prices have not dominated over fall in import prices until FY16 causing the deflator to rise [See row 5, Table 1].

Based on above decomposition the GDP growth rates are reworked as follows. We start with the GDP estimates from the expenditure side. Using the weights assigned to each of components for each year Private final consumption expenditure (PFCE), Government final consumption expenditure (GFCE) so an and so forth, a new series of deflators in calculated. The inflation proxy for each of the component is CPI (combined) for PFCE, CPI –IW for GFCE, gold prices for valuables, WPI inflation for GCF, export and import prices derived from prices indices provided by RBI. This is summarised in Table 1 below row 10. Using the revised deflators, the growth rate of real GDP at factor cost in FY16 is close to 5% [See row 12 and 13 in Table 1]. The corresponding growth rate in GVA at basic prices is close to 5.1% in FY16.

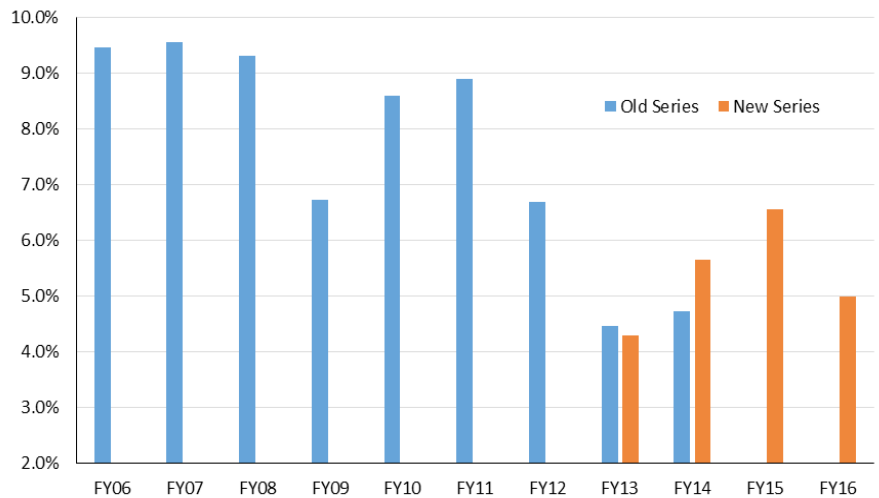
Table 1: Summary of the CSO Growth rates and Reworked Growth rates						
		FY12	FY13	FY14	FY15	FY16
1	**Current GVA at Basic Prices**	**8,106,656**	**9,210,023**	**10,380,813**	**11,472,409**	**12,279,410**
2	Growth rate		13.61%	12.71%	10.52%	7.03%
3	**Constant GVA at Basic Prices**	**8,106,656**	**8,546,552**	**9,084,369**	**9,727,490**	**10,427,191**
4	Growth rate		5.43%	6.29%	7.08%	7.19%
5	**GVA Deflator**	**100.0**	**107.8**	**114.3**	**117.9**	**117.8**
6	Growth rate		7.76%	6.04%	3.21%	-0.15%
7	**Current GDP at Factor Cost**	**8,100,207**	**9,196,722**	**10,383,785**	**11,481,551**	**12,288,551**
8	Growth rate		13.54%	12.91%	10.57%	7.03%
9						
10	**Reworked Deflator(s)**		8.86%	6.87%	3.77%	1.94%
11	**Reworked Constant GDP at Factor Cost**	**8,100,207**	**8,448,212**	**8,925,159**	**9,509,937**	**9,984,675**
12	Growth rate		4.30%	5.65%	6.55%	4.99%
13	**Growth rate using Fishers approximation [(8)-(10)]**		4.68%	6.03%	6.80%	5.09%
Source: CSO, Author's calculations						

Graph 1 gives a comparison of growth rates GDP FC from old and new series. One can conclude that the growth had picked up after the new government took charge, touching a high of 5.5%. The growth rate in FY16 has suffered mostly due to full impact of two successive years of droughts in FY15, and FY16.

The reworked growth rates now correctly align with trends in other secondary indicators such as credit growth, IIP, capacity utilization etc.

However, before we conclude, it is pertinent to ask why this method resulted in such a sharp correction in growth estimates. One of the explanations is, this method closely corresponds to the double deflation method suggested by Rajakumar and Shetty (2015). Their re-estimates of the GVA for manufacturing sector using this method also resulted in downward revision in manufacturing growth rates. The procedure in this study has attempted double deflation at the level of highest aggregation. By using separate inflation rates for imports and exports, new deflator estimates the rate of implicit inflation higher than GDP deflator. This procedure is more accurate because import intensity of the economy has increased from 15% in 2003 to 19% by 2008 [See Paul, 2014]. In particular, the import intensity of manufacturing increased by 5% to 30% during the same period. Hence segregation better captures the movements in relative prices resulting in better deflator.

Graph 1: Comparing Real GDP FC Growth in Old and New Series



4. Conclusions and Discussions

Samuelson in 1947 warned against "the tendency to attach [too much] significance to the numerical value of the index computed" because any application of index number theory is doomed to give misleading results. In light of this advice, the results in this study are all the more puzzling. However, the reworked figures draw some credence from the fact that they are more in conformity with trends observed in secondary indicators. Thus one can conclude, off course with some caution that GDP growth is still to achieve the high growth trajectory of pre-crisis period.

In light of this exercise, even if very simple, compels us to think whether inflation targeting as tool to demand management will work at all in the long-run. In the similar vein one may also question if the purported benefits of GST will accrue given the high negative income effect. The share of taxes in monthly per capita expenditure is 0.3% in rural areas and 0.8% in urban areas is bound to increase with higher revenue neutral rate under GST [NSSO, 2014].

Before closing it is important to state that use of UN SNA 2008 has complicated the understanding of how Indian economy functions and operates. Since most of the times pros and cons of these standards are scarcely discussed or debated, the benefits from their adoption are not visible at the first sight. In fact economist have rarely studied economic and distributional consequences of adopting such global standards and their implication on policy formulation (See R&D example above). In a game theoretic framework, actors involved in standard setting exercise can be characterized by game of Battle of Sexes and those with first movers advantage stands to benefit the most. Thus widening the production boundary by including R&D and defence gives advantage to those countries who are ahead in knowledge and defence manufacturing and not those who are in catch-up phase.

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)
Indian Actuarial Profession Serving the Cause of Public Interest

References

Bhuyan, P (2016); "Measurement of Central Bank Output – Methodological Issues for India", RBI Working Paper, WPS (DEPR): 06/2016.

Chiapello, E (2009); "The Accounting Construction of the Economy", English translation of the paper in German: *Die Konstruktion des Wirtschaft durch das Rechnungswesen, 2009. in: "Dizskurs und* Ökonomie. *Diskursanalytische Perspektiven auf Märkte und Organisationen", Diaz-Bone Rainer, Krell Gertraude (eds)., Wiesbaden: Verlag für Sozialwissenschaften (VS-Verlag), 125-149* (Reference available on request from the author)

CSO (2015); "No Room for Doubts on New GDP Numbers", Economic and Political Weekly, Vol L No. 16, pg 86-89.

Koga, Maiko (2003), "Why is the Rate of Decline in the GDP Deflator So Large? —Exploring the background against the discrepancy from the Consumer Price Index", Bank of Japan, Research and Statistics Department, July 2003

Kumar, R. (2011). "Treatment of Valuables as Capital Formation in India: Some Issues and Perspectives". RBI Working Paper, W P S (DEPR): 9 / 2011.

Kumar, Praduman, Anjani Kumar, Shinoj Parappurathu and S.S. Raju (2011); "Estimation of Demand Elasticity for Food Commodities in India"; Agricultural Economics Research Review, Vol. 24 January-June 2011 pp 1-14

Mattli, Walter and Tim Büthe (2003); "Setting International Standards: Technological Rationality or Primacy of Power?"; World Politics, 56 (October 2003), pg 1–42

Milana, Carlo (2009); "Solving the Index-Number Problem in a Historical Perspective", EU KLEMS Project, Working paper no. 43.

Nagaraj, R (2015); "Seeds of Doubt on New GDP Numbers: Private Corporate Sector Overestimated?", Economic and Politically Weekly, Vol L No. 13, pg 14-17.

NSSO (2014), "Household Consumption of Various Goods and Services in India 2011-12", NSS 68th Round

OECD (2015); "New standards for compiling national accounts: what's the impact on GDP and other macro -economic indicators?, OECD Statistics Brief, No 20, Feb 2015

Paul, Mahua (2014); "Import Intensity and Its Impact On Exports, Out and Employment, Institute for Studies in Industrial Development, Working Paper 167.

Paul Samuelson and Subramanian Swamy (1974); "Invariant Economic Index numbers and Canonical Duality", American Economic Review, Vol. 64, No. 4 (Sep., 1974), pp. 566-593.

PIB (2015); "Move to increase R&D Expenditure to two percent of GDP" Available at PIB: http://pib.nic.in/newsite/PrintRelease.aspx?relid=118574 (Assessed in July 16, 2016)

Pons, Nathalie (2011); "Food and Prices in India: Impact of Rising Food Prices on Welfare", Paper presented at 7th Annual Conference on Economic Growth and Development, Indian Statistical Institute, New Delhi, December 15-17, 2011

Rajakumar, Dennis J, Vijayata B Sawant & Anita B Shetty (2015); "New Estimates of Saving and Capital Formation Larger Numbers in a Declining Trend" , Economic and Political Weekly, Vol L No. 12, pg 64-66.

Rajakumar, Dennis J and S L, Shetty (2015); "Gross Value Added Why Not the Double Deflation Method for Estimation?; Economic and Political Weekly, Vol L No. 33, pg 78-81.

Rakshit, M (2016); "India's Post-crisis Macroeconomic Slowdown: Some Perspectives", ICRA Bulletin, Money and Finance, April 2016, pg 49-80

Rao, Subba K G K (2015); "Mystery of Private Corporate Sector Saving", Economic and Political Weekly, Vol L No. 22, pg 158-162.

Rathore, L S (2016); "Why IMD got the seasonal forecast of 2015 southwest monsoon rainfall right", Current Science, Vol. 109, No. 12, pg 2167-68

Vaidyanathan, R (2016); "GDP Numbers—How Reliable?", Available at https://rvaidya2000.com/2016/02/26/gdp-numbers-how-reliable/ (Accessed on July 16, 2016).

About the author

Mr. Saket Hishilkar

saket.hishikar@gmail.com.

Economist

PSU Bank



PEOPLE'S MOVE



Mr. Prasun Sarkar has recently joined National Insurance Company Limited as the Appointed Actuary. Prasun has over 11 years of General Insurance experience. Formerly, in the capacity of Associate Vice President, Actuarial in Magma HDI General Insurance Co. Ltd, he was handling the Risk Management function as Chief Risk Officer, Reinsurance and Product Development as well in addition to all the actuarial functions. Prior to his he held actuarial position in SBI General Insurance Co. Ltd looking after Pricing and Reserving of commercial lines of business and was also responsible for all special projects. Before this he was handling Investment Mid Office at Reliance General Insurance Co. Ltd and Business Intelligence at ICICI Lombard General Insurance Co. Ltd. Prasun is based in Kolkata Head Office of National Insurance Co. Ltd.

TOP 10 Life Insurance Insights

June 2016 to August 2016



The insurance sector in India witnessed its first public listing of an insurance company by ICICI Prudential Life through an Initial Public Offer (IPO), with the issue getting over-subscribed by 10.45 times its offer size. HDFC Life and Max Life have progressed with their proposed merger following the approval from their respective Boards, and details of the transaction have also been worked out. With the industry witnessing greater focus on health insurance products, including cancer care products, the regulator has released guidelines on the same, among other guidelines and exposure drafts. The industry commenced FY2016-17 with a strong positive growth of 22.6% in weighted new business premium collection for the first quarter, driven by 32.5% year-on-year growth recorded by state-owned LIC. We summarise below these and the top ten key trends and developments that shaped the life insurance market in India for the period June 2016 to August 2016.

10 *With an aim of increasing insurance penetration, the Regulator has released an exposure draft on developing e-commerce in the Industry*

The Insurance Regulatory and Development Authority of India (IRDAI) has proposed norms relating to selling and servicing insurance products through e-commerce with an aim of promoting online distribution platform. The draft prescribes the set-up of Insurance Self-network Platforms (ISNPs) for undertaking insurance e-commerce activities in a cost effective manner. It also specifies details about control systems and safeguard procedures that must be implemented by each ISNP. The guidelines are expected to expand insurance reach and lead to the development of the online distribution space.

For further coverage of these and other market developments, visit https://www.towerswatson.com/en-IN/Insights/Newsletters/Asia-Pacific/india-market-life-insurance

9 Increasing bancassurance tie-ups between insurers and various banks and non-banking finance companies

The industry witnessed more bancassurance tie-ups under the open architecture model which allows banks and non-banking finance companies to offer products of more than one insurer. The highlight for the reporting period includes the partnership between state-owned insurer LIC and Axis Bank, along with various other tie-ups between other insurers and some regional banks. Insurers are targeting to use synergies from such tie-ups to enhance customer satisfaction and deepen their access to remote markets.

8 Positive profits reported by 12 private life insurers

Of the 21 private life insurers to have disclosed their financial results at the end of first quarter of FY2016-17, 12 have reported profits; against 15 insurers reporting profit in corresponding period in the previous fiscal out of 22 insurers which made such disclosure. Amongst the insurers reporting profits, 10 have recorded a positive year-on-year growth in profits. The total profit after tax for private life insurers has increased by 2.9% from INR11.02 billion in Q1 FY2015-2016 to INR11.34 billion in the corresponding period this year.

7 IRDAI forms Committee on Risk Based Capital (RBC) Approach and Market Consistent Valuation of Liabilities

The IRDAI has formed a committee comprising of six members in order to review the RBC approach and liability valuation methods given the recent developments on Indian Accounting Standards (Ind-AS). The Committee shall:

- Examine the changes needed in the liability valuation methods in light of the Ind-AS implementations on assets side.
- Undertake a comparative study of the current solvency regime and the RBC regime for the insurance sector in the Indian context.

The Committee has been asked to present its complete report by the end of 2016.

6 Quarterly results round-up: Industry records healthy premium growth of 22.6% in first quarter of FY2016-17

Weighted new business premium collection by the life Insurance industry, (measured as 100% of regular premium and 10% of single premium), for the first three months of FY2016-17 amounted to INR112 billion, resulting in a year-on-year growth of 22.6%, as per statistics released by the IRDAI. State-owned Life Insurance Corporation of India registered a strong positive growth of 32.5% in its weighted new business premium collections, owing to an impressive growth of 95.6% in

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)
Indian Actuarial Profession Serving the Cause of Public Interest

its group business. Private players comparatively underperformed during the above-mentioned period, posting a year-on-year growth of 12.7% which led to a fall in its market share from 47.3% to 43.3%.

5 Increasing focus on health offerings by life insurers

The industry is witnessing an increased focus on health products offered by life insurers as eight health products have been launched during the reporting period. There is also a greater focus on cancer care products, with four such product launches witnessed over the past year, with two of them being launched in the last three months. Also, more companies have expressed their interest in offering health products as part of their product portfolio

4 The Regulator issues a comprehensive set of guidelines on health insurance business

Given the increasing focus on health insurance offerings, the Authority has released the IRDAI (Health Insurance) Regulations, 2016. Key highlights of the guidelines are:

- Insurers transacting life insurance business shall not offer indemnity based products and single premium health products under unit-linked platform.
- The premium rates for health products offered by life insurers shall remain same for a minimum of three years, post which review may be done.
- New individual health insurance policies with a term greater than one year will have a free-look period of 15 days from the receipt of the policy.
- Each insurer needs to set up a Board approved underwriting policy which should be reviewed regularly.
- "Combi-products" offering elements of health and life insurance shall be filed as per the procedure specified in the guidelines.

3 Stake transfers to foreign partners continue in the life insurance industry

Subsequent to the completion of stake transfer process by seven life insurers to increase the stake of their respective foreign partners to 49% recently, three more have come further along in the process during the reporting period:

- Bank of India has sold 18% stake in Star Union Dai-ichi Life to Dai-Ichi Life, thereby increasing the stake of the foreign partner to 44% in the joint venture.
- SBI has reportedly offered BNP Paribas Cardiff a 10% stake in their joint venture, SBI Life. Post the deal, Cardiff's stake in the joint venture will go up to 36%. Notably, SBI Life has disclosed its embedded value of INR130 billion for the first time.
- Reportedly, Prudential Financial has also signed definitive agreements to increase its stake from 26% to 49% in DHFL Pramerica Life.

2 HDFC Life and Max Life finalise the merger of their businesses: details of the transaction worked out

The merger of Max Financial Services (MFS) and Max Life with HDFC Life has been approved by the Boards of the respective companies, to create the largest private life insurer in the country. The merged entity will be called HDFC Life with expected assets under management of around INR1,100 billion. The merger will be executed in two phases: first being the merger of Max Life and MFS (its parent entity which is listed), followed by the combined entity's merger with HDFC Life which will result in the automatic listing of HDFC Life. The share swap ratio has been finalised at 7 shares of HDFC Life for every 3 shares of MFS (after merger with Max Life). A non-compete fee of INR8.5 billion will be paid to Promoter Group of MFS from Shareholder's account of the merged company. This has been approved by the shareholders of Max Life and MFS. The merger is expected to be completed within next 12 to 15 months, subject to approvals from the IRDAI, the Securities and Exchange Board of India, the Competition Commission of India and other relevant authorities for approval.

1 ICICI Prudential Life gets listed through an IPO, the first by an insurer in India and biggest in the country in six years

ICICI Prudential Life has launched an IPO of 12.56% of its equity share capital, for cash, through an offer for sale by ICICI Bank to become the first listed insurer in the country. A total of 181.34 million shares have been offered at a price band of INR300 to INR334 per share, with the issue price determined at INR334. The IPO, country's biggest in six years, closed with a subscription of 10.45 times the issue size. The insurer has raised an estimated capital of INR60.57 billion through this public offer. On the opening day, the share price closed 10.88% lower at INR297.65, on the Bombay Stock Exchange, against the issue price of INR334.

About the author

Mr. Vivek Jalan



vivek.jalan@willistowerswatson.com

Director & Practice Leader – Insurance Consulting

Willis Towers Watson India

COUNTRY REPORT

Pakistan
Life Insurance Update



The insurance sector in Pakistan is relatively small compared to its peers in the region. The insurance penetration and density have also been on a lower side. However, in the recent few years, the Life Insurance Sector in Pakistan has experienced significant growth. Out of six private sector life insurance companies, two life insurance companies (which represent 82% of the private sector market share in GWP) have more than doubled their aggregate first year individual life premium acquisition in the last five years. This growth is mainly driven by the aggressive expansion of bancassurance distribution channel. In the recent two to three years the life insurers have also played an important part in creating awareness about the importance of life Insurance among general public through advertisement campaigns, which has also lead to generating increased business volumes.

Corporate groups have shown interest in bringing life insurance business under their umbrella. Despite the growth in the life insurance sector, a few small players in the market have faced difficulties in expanding their business, which has led to an increase in acquisitions within the sector. More recently, TPL Trakker Limited (which is a TPL Holdings Company) has acquired 100 percent shares of Asia Care Health and Life Insurance Company through a share purchase agreement signed in early 2016, whereas Army Welfare Trust has also shown interest in buying a majority shareholding in East West Life Assurance Company. With the major life Insurers in the private sector also launching Window Takaful Operations, it is anticipated that the life insurance sector in Pakistan will further expand in the coming years.

With the recent growth and substantial expansion expected ahead, Securities and Exchange Commission of Pakistan (SECP) has come out strong in ensuring policyholders' interests are protected. In 2016, new Illustration Guidelines and Bancassurance Regulations have both been implemented, with the aim to educate the policyholders and reduce unfair practices from the market. SECP has also notified Small Dispute Resolution Committee (Constitution and Procedure) Rules 2015, and formed committees in Karachi, Lahore and Islamabad to resolve grievances of the policyholders towards insurers pertaining to claims.

The new Illustration Guidelines have been implemented in July 2016. Unit linked plans with savings and protection element are the most prominent plans offered by private sector life insurers in Pakistan, and hence illustrations form an essential part of the sales process. The main addition to the Guidelines is the requirement of illustration to be presented in the national language Urdu as well as in English. With a low literacy rate and Life Insurance not being one of the top desired financial product, this addition will enhance policyholders' understanding about the product, and familiarize them with the terms and conditions of the benefits offered. The Guidelines also mandate the life insurers to illustrate Inflation Adjusted Cash Values along with Nominal Cash Value for the maturity year, and also present the historical performance of the Funds. This should enable the potential customers to understand and gauge the impact of inflation and help to make a logical and informed decision.

Aggressive expansion of Bancassurance Distribution Channel has made it one of the main sources of Business Acquisition for Life Insurers. The implementation of the new Bancassurance Regulations from January 2016 is an effort by the SECP to improve market conduct and provide relief to the policyholders. With a high difference between the first and second year commissions and low persistency levels maintained by Banks, the new Regulations have reduced the maximum first year commission while detailing the levels for persistency bonus to incentivize Banks on maintaining good second year and renewal persistency levels. The sales process has also been laid down in the Regulations which includes an after sales call by Insurer to each policyholder. The Regulation mandates the life insurers to claw back commission from the Bank and return 100% Premium to the policyholder, in case a miss-selling is intimated to the life insurer within thirteen months after issuance of the Policy and it is proved per investigation that the policy was miss-sold as per the Rules set out in the Regulation. The excessive reduction clause has also been introduced which would require Insurers to claw-back differential commissions from banks

NOV - 2016 9-12 20th Asian Actuarial Conference CHANGING ASIAN SOCIETIES: CHALLENGES AND OPPORTUNITIES Hyatt Regency, Gurgaon (NCR)
Indian Actuarial Profession Serving the Cause of Public Interest

and convert excessive premium in first year to ad-hoc premium (after adjusting allocation charges), if the premium is reduced by more than 25% in the second policy year. With the addition of these clauses, SECP has tried to address miss-selling which has been one of the most common complaint of policyholders in the life insurance industry.

Pakistan does not have an independent Insurance Authority and Life Insurance Sector is regulated by Insurance Division within SECP. With the Implementation of the Bancassurance Regulation, SECP would have to ensure that the objectives of the regulations are met. The response of the Industry to reduced Commission and the impact of lower commission that has been passed on to the policyholders needs to be looked into. Since the onus of investigating miss-selling is on the Insurer, SECP would have to perform audits and monitor the role of the Insurers at a micro level which would be a greater challenge for SECP with the resources it possesses. SECP would need to play a greater role than it has played in the past in monitoring the Regulation so the purpose and spirit of the Regulation is achieved.

About the author

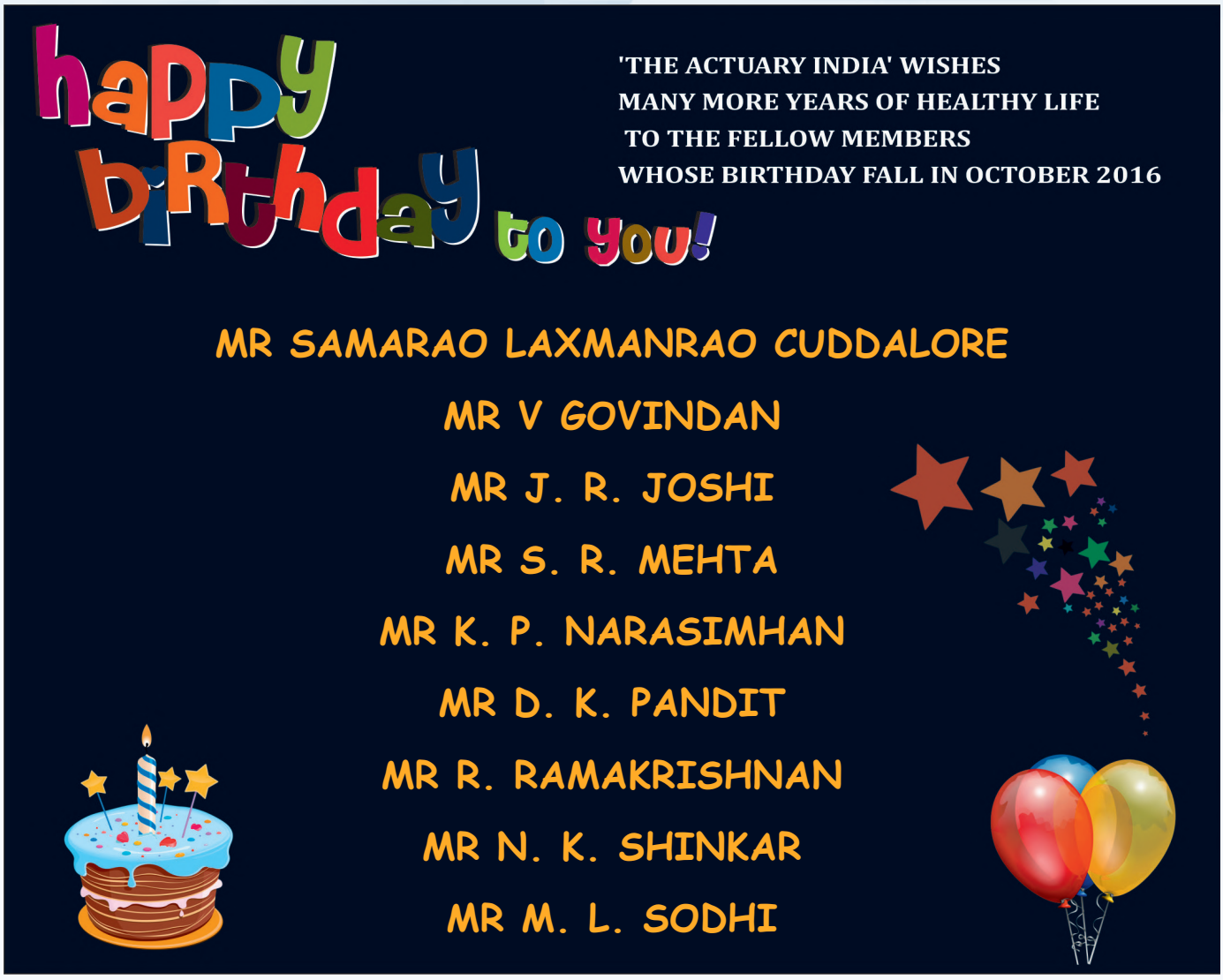
Mr. Nauman Cheema



info@naumanassociates.com

Chief Executive

Nauman Associates



RNI No. MAHENG/2009/28427
Published on 16th of every month

Postal Registration No. MCS/057/2015-17
Posting Date: 21, 22 & 23 of every month



All around the world, the protection gap still yawns. There are millions of potential customers out there. But how do you reach them on their terms? What insights do you have about how they behave? And what can you do to increase the chances they'll say yes to life or disability cover? At Swiss Re, we've developed tools that inform, streamline and customise the whole business of underwriting. We'll help you extract actionable insights from ever-growing pools of data, and connect with your customers better by understanding what makes them tick. So you can build confidence in your decisions, build the ideal customer experience and – ultimately – help build better lives. **We're smarter together.**

swissre.com