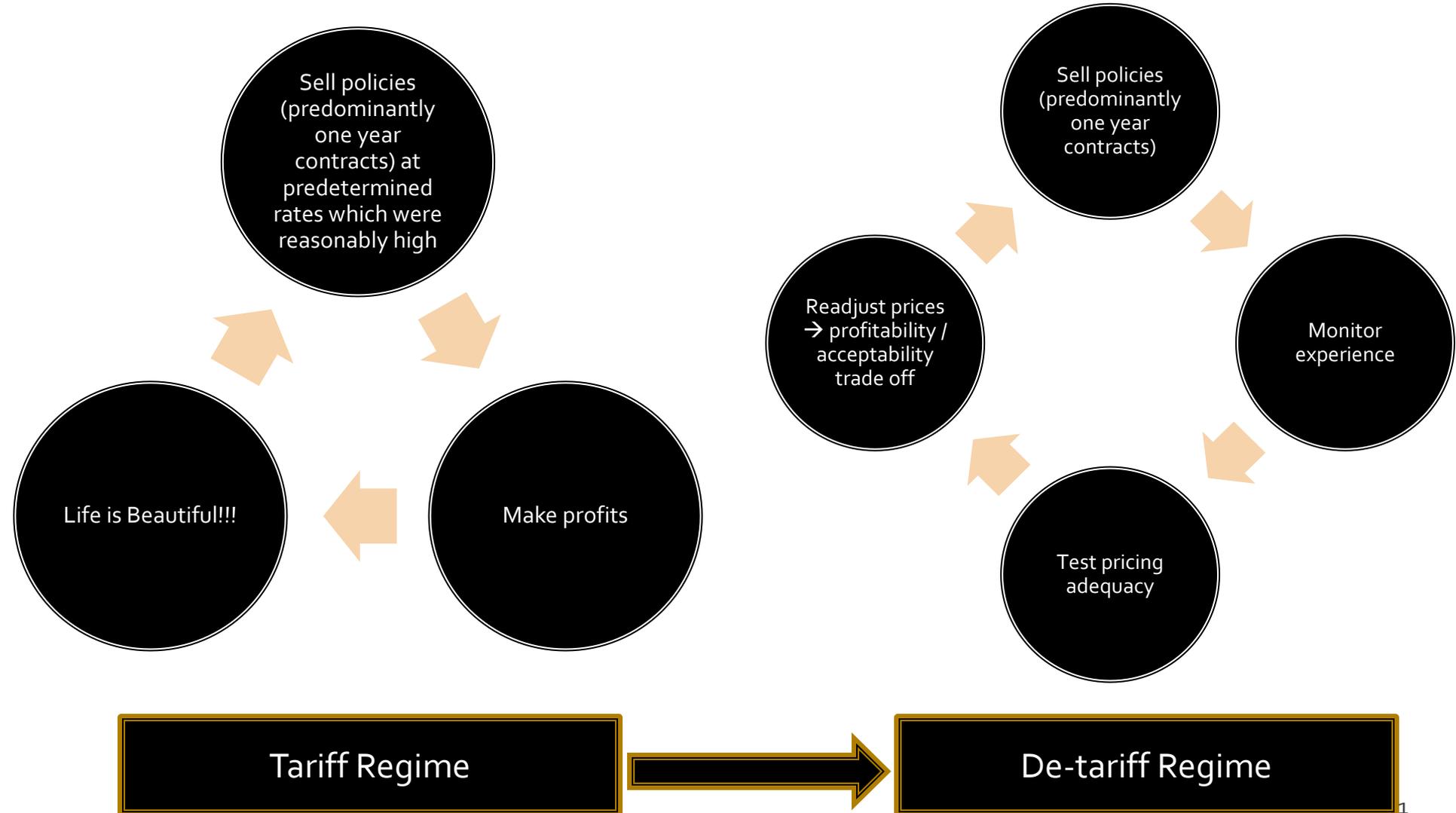
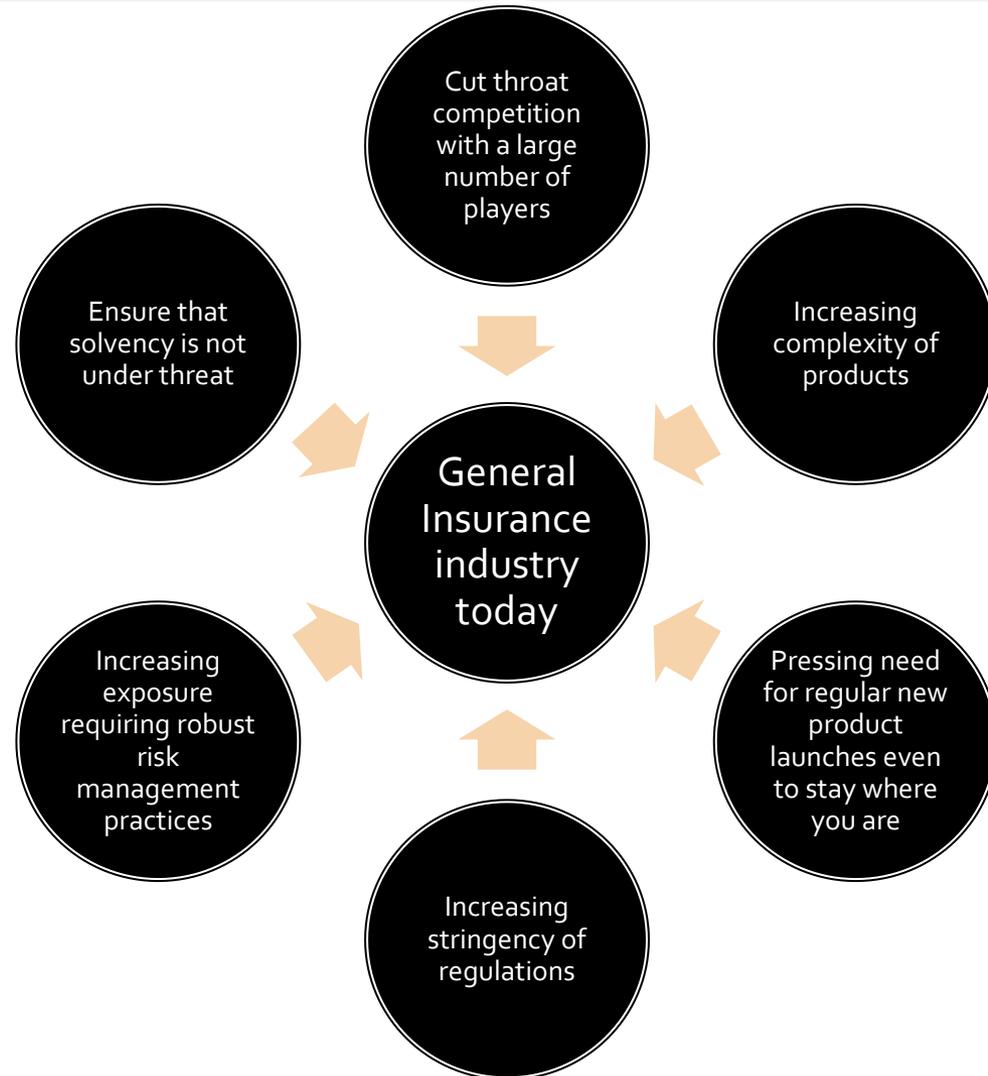


Evolution of the industry



Multiple headwinds affecting the industry today

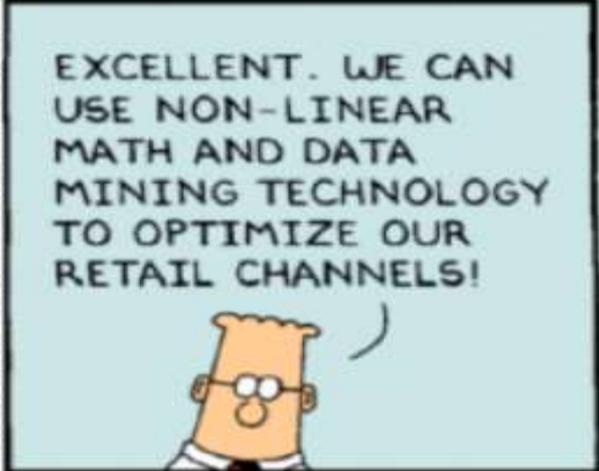


Role of actuaries has increased substantially with the exponential leap in information technology and availability of massive amounts of data



WE HAVE A GIGANTIC DATABASE FULL OF CUSTOMER BEHAVIOR INFORMATION.

www.dilbert.com scottadams@aol.com



EXCELLENT. WE CAN USE NON-LINEAR MATH AND DATA MINING TECHNOLOGY TO OPTIMIZE OUR RETAIL CHANNELS!

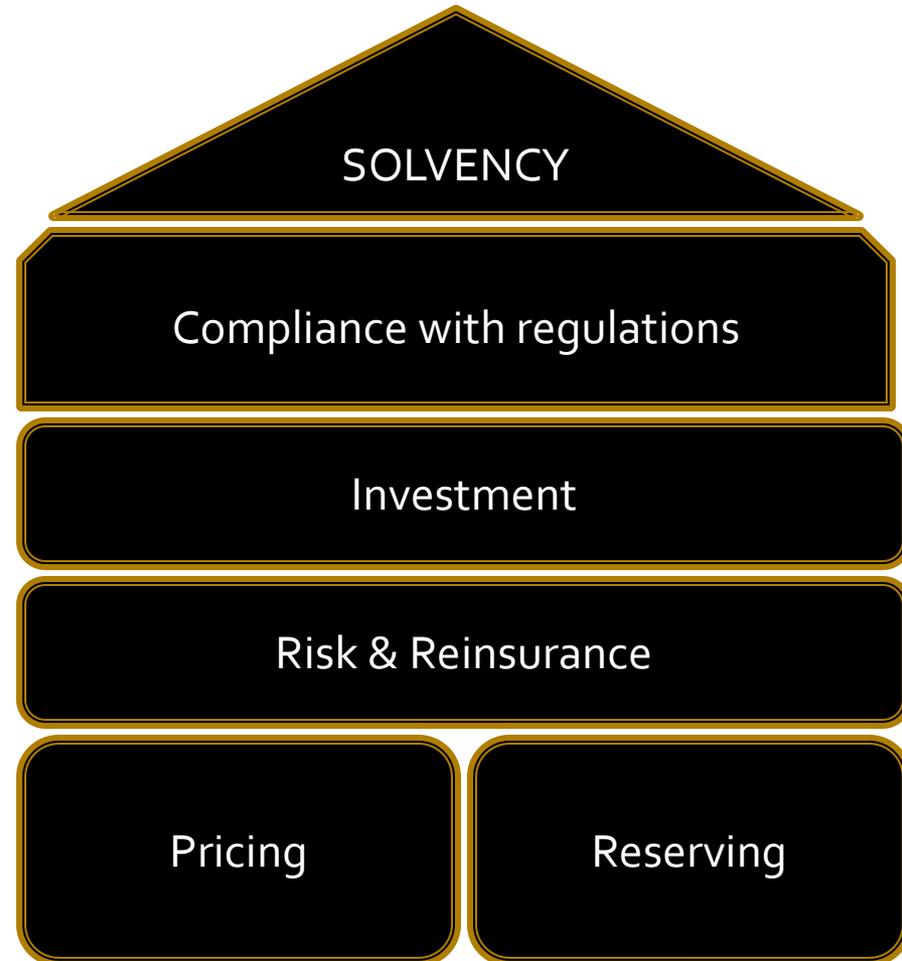
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IF THAT'S THE SAME THING AS SPAM, WE'RE HAVING A GOOD MEETING HERE.

Role of Actuaries in GI

- IRDA Appointed Actuary regulations 2000 requires every GI company to necessarily have an Appointed Actuary on a full time or on a consultancy basis
- Further notification in Feb 2013 which mandates GI companies to have the AA on a full time basis



Pricing

- Adequacy of pricing
 - Pricing for new products
 - Experience monitoring of existing products
 - Identifying unprofitable segments
 - Suggest the pricing action that needs to be taken
- Develop models for pricing complex products when available data is sparse
 - Pricing has gone beyond simple frequency severity analysis with methods like GLM gaining prominence
- Helping underwriters with pricing of commercial lines
- Unearth patterns from raw data which can help in improving rating factors

Reserving

- Calculation of IBNR reserves
 - Auditors rely on actuary's estimate
 - Direct bearing on
 - Solvency
 - Profitability
 - Balance the interests of various stakeholders
 - Regulator → Impact on solvency
 - Shareholders → Impact on profits
 - Income Tax → Impact on profits and hence on taxes
 - Customers → Impact on product prices
 - Himself → Impact on his career 😊

Risk & Reinsurance

- Actuary has a good understanding of the company's balance sheet:
 - Ability of the company to bear a particular risk – what to bear and how much to cede
 - Commenting on adequacy of premium
 - Quantifying impact on balance sheet before accepting a risk
 - Assess the reinsurance programme of the company and point out areas where he is not comfortable
 - Provide inputs in setting up the reinsurance policy for each year
 - Apprise the management/board in case he finds the impact on net account of certain risks on the higher side and suggest reinsurance options
 - Interpret reports on catastrophe modelling – earthquake, cyclone etc.
 - Exposure analysis
- Reinsurance issue mainly arises in commercial lines where underwriter's role is much more than the actuary – but actuary's inputs remain valuable

Investment

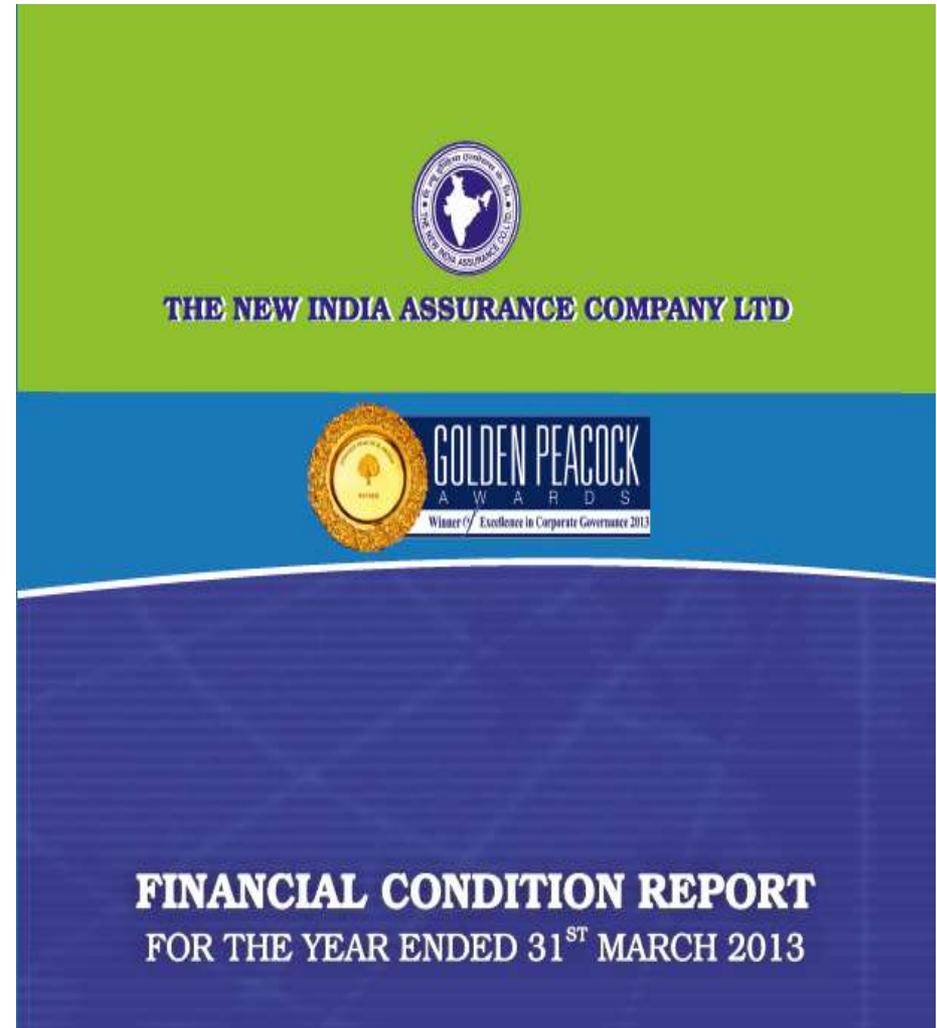
- Underwriting profits continue to elude most insurers
- Investment is not incidental to the business
- Insurance business brings in the cash – investment income brings in the profit
- AA is a member of the investment committee where his views are taken very seriously
 - Actuary can help the Management with Asset Liability Management (ALM)
 - Provide inputs on tactical and strategic asset allocation
 - Independent analysis of the investment team's performance
 - Inputs on what can be done better is expected to be provided to the management/board

Regulatory Requirements

- AA is the IRDA's representative in the company and often the point of contact for the regulator
- Authority has clearly prescribed the AA's role in the company
 - Reserving (IBNR)
 - New product pricing (F&U) now needing a detailed actuarial note for approval
 - IBNR detailed report
 - Financial Condition Report
 - Economic Capital Report

Financial Condition Report (FCR)

- Akin to an Annual Report but prepared by AA
- Highlights the AA's observations about the company with clear recommendations on what needs to be done
- His views on pricing, reserving, investments, reinsurance, ALM, solvency, current and future financial condition are all captured in the report
- Presented to the Board and the Board takes it very seriously
- Regulator also takes the report very seriously and can pull up the management if something is amiss



Issues to be addressed

- Industry needs many more fully qualified general insurance actuaries
 - Supply is marginally better on life side – but roles are very different
 - IAI recognizes this as Certificate of Practice is separately issued for life and non-life actuaries
- IAI should try to increase the supply on GI side without compromising on quality
 - IRDA requires Appointed Actuaries to be less than 65 years old
 - Supply of qualified actuaries happening at “Hindu rate of growth”
 - That too on a low base ☹️

Year	Size of GI Industry (Cr)	Total No. Of Actuaries (From IAI website)
F04	10,000	204
F13	60,000	259

- Remove *life* actuaries, remove “experienced” actuaries more than 65 years old, remove actuaries working abroad – industry left with very few to choose from

Issues to be addressed

- Lack of quality database at industry level
- Need to develop some standards
 - An actuary seldom agrees with another actuary (or with the management 😊)
 - More guidance notes so that room for ambiguity is lower
- Actuary versus the underwriter
 - Commercial versus Personal lines
 - Commercial → Role of underwriter is higher
 - Personal → Actuary has more role to play
- Move towards risk based solvency
 - AA is responsible for the solvency of the company
 - But method of calculation of solvency can be improved
 - Current method ignores the riskiness of different exposures
- Collaboration between the profession and the GI industry

Conclusion

- An actuary is a valuable resource for every GI company and they need to tap his expertise to the maximum
- An actuary acts as an *independent* 2nd pair of eyes for the management and the regulator
- Recent IRDA notification requires that all Appointed Actuaries for GI companies should be on a full time basis – a recognition of the growing importance of the actuaries in the general insurance business
- The role of Actuaries in GI can only increase from here on

Thank You