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Case Study 4 – General Insurance: Current regulatory framework and challenges for FRB's (Foreign Reinsurance Branches)

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Agenda

- Reinsurance Regulations – Background
- Impact on Non Life Insurers and Reinsurers
- Components of IRDAI ALSM Regulation, 2016
- ALSM – Asset Valuation
- ALSM – Estimation of Liabilities
- ALSM – Solvency determination
- Areas of Challenges
- Relevant APS – Discussion
- Questions and Answers

Reinsurance Regulations

…..Over the years

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1938	2013	2015	2016	2017	2018
Insurance Act	**IRDA General Insurance - Reinsurance Regulation**	**2015 IRDAI registration & operations of Branch Offices of Foreign Reinsurers, Lloyds regulation 2016**	**IRDAI ALSM Regulations**	**IRDA Circular : IRDA/ACT/CIR/MISC/147/06/2017: submission of Actuarial Reports**	**IRDAI Reinsurance Regulations 2018**
No limits in reinsurance ceded	Limits on Reinsurance ceded	Regulations for Foreign Reinsurers to registration as FRB	Prescribes methodology for Asset Valuation, estimation of Liabilities & Solvency determination for FRB	Actuarial Submissions to be done by FRB	Regulation for Indian Insurance/Reinsurance companies for ceding their business

Objectives of the Authority

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Authority ensures that each Reinsurance Programme of an Indian Insurer is guided by the following objectives-

- Maximize retention within the country;
- Develop adequate technical capability and financial capacity;
- Secure the best possible protection for the reinsurance costs incurred;
- (Retro)cedants at a reasonable cost;
- Simplify the administration of the business.

FRB Regulations 2015/16

IRDAI (Registration and Operation of Branch Offices of Foreign Reinsurers other than Lloyd's) Regulation

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Eligibility

- Obtained prior approval/clearance from home regulator
- Registered/certified in a country having DTA(Double Taxation Avoidance) agreement with India
- Retain 50% **(30% in case of 4 (b) category) of the Indian reinsurance business,** the remaining 50% could be retroceded to the parent office
- Minimum 10 years in business already
- Minimum credit rating, good financial security for the last 3 years

Capital requirements and Surplus

- Net owned-funds - INR 5,000 Cr at any time
- Infuse minimum capital of Rs 100 crore into the branch office
- Repatriation of Surplus is allowed, subject to meeting certain requirements
- Annual Fee shall be higher of
  - o 5 lakh rupees or,
  - o 1/20th of 1% of total premium of reinsurance accepted during last FY, maximum of INR 10 Cr

Operational Aspects

- Retain core activities - Underwriting, Claims settlement, Investments & Regulatory compliance
- Appointments & Remuneration of senior management, needs IRDAI approval
- Investment and accounting as per IRDAI regulations
- Shall commence business within 12 months of registration
- Need to comply with investment & reinsurance regulation's

FRB Regulations 2015/16 contd…

Reporting Requirements from FRB’s

a) Financial Reporting
b) Actuarial Reporting
c) Business Reporting
d) Board approved Reinsurance Programme
e) Board approved Underwriting Policy
f) Downgrading Reporting: shall immediately report along with relevant documents to the Authority any downgrade in rating by any internationally renowned credit rating agency.
g) Erosion of Net Owned Fund: shall immediately report to the Authority more than 5% erosion in Net owned Fund of the Foreign reinsurer.
h) Reinsurance arrangement in respect to catastrophe accumulations, approved by the Board of Directors before filing with the Authority

Reinsurance Regulations 2018

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Overview of the latest reinsurance regulations

a) Objectives of the Authority are same.

b) Add on to reinsurer classification other than FRB:

- IIO - International Financial Service Centre (IFSC) Insurance Office - branch office, of an insurer or a Re-insurer domiciled in India or outside granted a certificate of registration by the Authority to set up its office in IFSC-SEZ, to transact insurance business or re-insurance business or both;
- CBR - Cross Border Re-insurer - foreign re-insurer including Lloyd's Syndicates, whose place of business is established outside India and which is supervised by its home country regulator. Cross Border Re-insurer includes:
  - A. Parent or Group companies of the FRBs;
  - B. Parent or Group companies of the IIOs;

Indian Insurer shall place its business with any CBR if:

- Its home country has Double Taxation Avoidance Agreement with India
- Credit rating of at least BBB from internationally renowned credit agency
- Maintained minimum solvency margin for past 3 continuous years

Reinsurance Regulations 2018

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Regulation (5) 1. Conditions on Reinsurance Placements

A. Cedants shall seek terms at least from all Indian Re-insurers, who have been transacting Re-insurance business (other than emanating from obligatory cession) during the immediate past three continuous years and at least from four FRBs.

B. No cedant shall seek terms from:

   a. IIOs having credit rating below A- from Standard & Poor’s or equivalent rating from any other International Rating Agency, or

   b. CBRs having credit rating below A- from Standard & Poor’s or equivalent rating from any other International Rating Agency.

C. No cedant shall seek terms from any Indian Insurer, not registered with the Authority to transact reinsurance business.

Rating of the CBR as per Standard & Poor or equivalent	Maximum overall cession limits allowed per CBR
Greater than A+	20%
Greater than BBB+ and up to and including A+	15%
BBB & BBB+	10%

FRB Regulations 2015/16 Vs Reinsurance Regulations 2018

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Order of Preference for cessions by Indian insurers (2015/16 regulations)	Order of Preference for cessions by Indian insurers (2018 regulations)
a) To the Indian re-insurer or Foreign reinsurer under regulation 4 (a) i.e. retaining minimum 50% of business within India; b) To those who registered under regulation 4 (b) i.e. retaining minimum 30% of business within India, only after having offered to at least 3 entities in (a) above; c) Branch offices of foreign reinsurers set up in Special Economic Zone, only after having offered to all entities in (a) and (b) above; d) Balance may then be offered to overseas reinsurers, only after having offered to at least 3 entities in each of (a), (b) and (c) above	a) to Indian Re-insurers, transacting re-insurance business (other than emanating from obligatory cession) during the immediate past three continuous financial years; b) to other Indian Re-insurers and FRBs; c) to the IIO as under regulation 5(1)(B)(a) which provided the best and lead terms with capacity of not less than 10%; d) to the CBR as under regulation 5(1)(B)(b) which provided the best and lead terms with capacity of not less than 10%; e) to other IIOs; f) to other Indian Insurers (only Facultative) and CBRs.

Non Life FRB in India as at date

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General Insurance Corporation of India
Global Reinsurance Solutions
GIC Re

RGA

SCOR
The Art & Science of Risk

Allianz

Munich RE

Swiss Re

Gen Re

XL CATLIN

hannover re

AXA

LLOYD'S

Non Life FRB in India as at date

Assigned Capital as at 31st March 2017	1117.81cr
Capital Infusion during FY 2017-18	1452.54cr
Assigned Capital as at 31st March 2018	2570.35cr

Solvency Margin March 2018	Value
GIC	1.7
RGA	1.2
Other private reinsurers	>1.5

Profit after tax reported by 3 reinsurers

Swiss Re	60.96cr
Axa France	7.67cr
Lloyds India	1.69cr

However, total Loss of all 9 FRB's was 323.03crores

Foreign Reinsurance Branch	Gross RI Premium Income (Indian Business)	Gross RI Premium Income (Foreign Business)	Gross RI Premium Income (Indian and Foreign Business)
GIC Re	29,812.9	11,986.5	41,799.4
Swiss Re	2,114.0	3.0	2,117.0
Munich Re	1,287.4	19.5	1,306.8
SCOR	1,189.8	0.0	1,189.8
Hannover	570.6	0.0	570.6
Axa Vie	515.0	0.0	515.0
XL Cat	177.3	0.0	177.3
Gen Re	67.3	0.0	67.3
RGA	48.9	0.0	48.9
Amlin (Lloyd's)	26.0	0.0	26.0
Grand Total	35,809.3	12,008.9	47,818.2

Source: IRDAI Annual report 2017-18

Impact of Regulations

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Insurance Industry

- Better control over directly monitored branches
- Ease of doing business
- Secure best reinsurance arrangements, protect policyholders & insurers' interests
- Developing expertise within India
  - India is poised to become a reinsurance hub going ahead, said the IRDAI chairman
  - GIFT (Gujarat International Finance Tec) City
- India – 2nd largest Protection Gap (92%) in the world after China,
  - offers huge potential for growth in the Indian insurance market
  - Insurance penetration in India – 3.7% as against world average of 6.31%
  - Manifold growth in Health Insurance is expected with PMJAY

Protection Gap - difference between insured losses and economic losses, that is, uninsured losses)

PMJAY – Pradhan Mantri Jan Arogya Yojna (covers 40% of population)

Impact of Regulations

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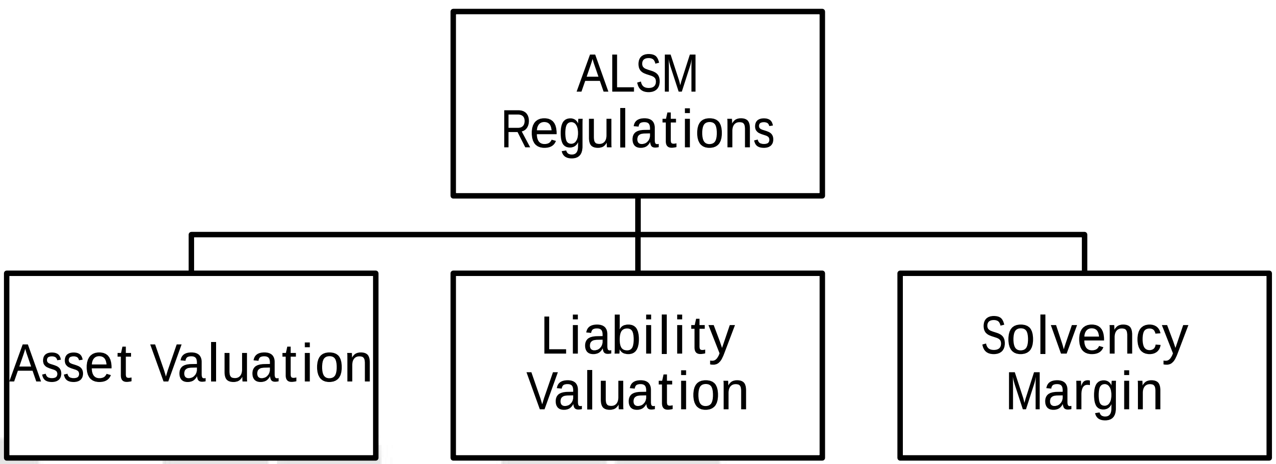
General Insurers

- Scope of innovation in insurance products and solutions would be witnessed
- Alternative source of capital: Explore non-traditional reinsurance, Financial Reinsurance & Quota share solutions
- Essential part of the insurer's risk management toolkit
- Long-term partner & co-creating general insurance products
- Underwriting and Claims support
- Viable and sustainable reinsurance business model needed

ALSM Regulations 2016

- FRBs to comply with Asset, Liability and Solvency Margin (ALSM) regulations 2016
- Standard formula (factor based approach) for capital requirements
- Same approach as for Direct General Insurers
- Might lead to a different/higher capital requirements if parent company is following risk based capital (RBC) or solvency 2 approach



Valuation of Liabilities

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Premium Reserves

- Unearned Premium Reserve (UPR)
  - Part of premium attributable to future period
  - As per prescribed formula
  - 50% of the Net Written Premium (post retrocession)

    Or
  - 1/365th uniform earning method
- Premium Deficiency Reserves (PDR)
  - UPR insufficient to cover expected claim and related expenses
  - Maintained at entity level
- Unexpired Risk Reserves (**URR**) = UPR + PDR

Valuation of Liabilities

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Claim Reserves

- Outstanding Case Reserves (OS Reserves)
  - Known liability to be provided in full
  - Estimation of other by ‘case to case method’
  - Can use statistical method if deemed appropriate
  - Set across standard 28 LOB (Motor, Health, PA, Travel, Fire, Marine, Other Misc.)
- Incurred But Not Reported Claims Reserve (IBNR)
  - Estimated using actuarial methods
  - Should not discount the future development
  - Gross and Net of Retrocession
  - Set across standard 28 LOB (Motor, Health, PA, Travel, Fire, Marine, Other Misc.)

Valuation of Liabilities

- Other Liabilities
  - Provision of bad and doubtful debt
  - Reserves for dividend declared/recommended
  - Provision of taxation
  - Foreign exchange reserve
  - Sundry creditors and other business expenses

Valuation of Assets

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- Investment can be made in approved asset class
- Maintaining mix of investment as specified by IRDAI
- Assets are valued as a mixture of book value and market value
- IT/Computer software on written down value basis with at least 1/12 depreciation per quarter – recent regulation
- Following assets should be placed with zero value
  - Furniture, fixtures etc.
  - Deferred expenses
  - Unrealizable sundry debts
  - Outstanding premiums, not realized within 30 days
  - Other reinsurer balance outstanding for more than 180 days…etc.

Solvency Margin

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Available Solvency Margin (ASM)

- Excess of assets over liabilities, subject to specific adjustments

Required Solvency Margin (RSM)

- Using a standard formula and specified factors for 9 line of business (LOB)
- Factors are provided by regulator
- RSM 1 is derived by using Gross and Net premium
  - Premium of trailing 12 months
- RSM 2 is derived by using Gross and Net Incurred claims
  - Claims of trailing 12 months or trailing 36 months divided by 3, whichever is higher

Solvency Margin

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RSM Factors

Line of Business	Factor A/B
Fire	0.50
Marine Cargo	0.60
Marine Other	0.50
Motor	0.75
Engineering	0.50
Aviation	0.50
Liability	0.75
Health*	0.75
Miscellaneous	0.70

» RSM 1 = 20% of higher of Net premium or gross premium times Factor A (Depending on LOB)

» RSM 2 = 30% of higher of Net incurred claims or gross incurred times Factor B (Depending on LOB)

» RSM = Higher of RSM 1 or 2

*PA & Travel part of Health

Solvency Margin

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- RSM is higher of premium based (RSM 1) and claims based (RSM 2)
- Aggregate of individual RSMs for all LOB

Solvency Ratio (SR)

- Ratio of ASM to RSM
- Minimum SR of 150%, breaching which can lead to regulatory actions

Solvency Margin

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Advantages

- Simplicity and uniformity
- Automatically captures the size of company
- Prudent provisioning
- Quarterly monitoring and public disclosures

Limitations

- Does not vary to capture various risks
- No allowance of aggregation/diversification of risks
- No allowance for future movement of business
- Not in line with global Solvency requirements
- Prudent reserves leads to higher capital requirements

Challenges faced by FRBs

- Inadmissible assets
- Solvency estimation
- Data availability
- Claims and IBNR
- Premiums, UPR and PDR
- Other considerations:
  - Pricing
  - Obligatory Cession
  - Minimum Retention

Approach to Challenges

- Various professional approaches:
  - Enquire about **industry practices** and international best practices
  - **Ask for clarifications** from the regulator
  - Calculate the financial results using the extant regulations **with and without the required modifications**
  - Compare the results under the two approaches
  - **Communicate the results** under both approaches in the management reports and regulatory reports
  - Discuss the issues and provide recommendations in **regulatory committees and forums**

Inadmissible Assets

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- Assets with zero value for the purpose of demonstrating solvencyAvailability of Premium information:

Existing provision	Suggested provisions
Agents' balances within/outside India- 30 days/unrealisable	Balance due from Intermediaries – 30 days
Co-insurer's balance outstanding - 90 days	Balance due from co-reinsurers
Balances of Indian Reinsurers and FRB /other reinsurers- 365 days/180 days	Balance due from retrocessionaire
Outstanding premiums within/outside India- 30 days/unrealisable	Balances/premiums due from insurers/cedants – 90 days
Premiums receivables on government sponsored schemes -180 days (e.g. crop)	Not Applicable

Solvency Estimation

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- Challenge 1:
  - Different solvency regulations applicable to FRB and its home office
- Recommendation 1:
  - In line with global trends, FRB may be allowed to demonstrate solvency as per their Home Country regulations
- For –
  - International best practice
  - Consistent basis (ALSM 2016 / Solvency II / other RBC regimes)
  - Centralized Enterprise Risk Management for each reinsurer if single set of regulations apply to a reinsurer
  - Easier for the home country to consolidate the accounts of various branches in various countries

Solvency Estimation (contd.)

- Against –
  - Depending on the home country regulation, different regulations applicable to different FRBs
  - Lack of comparability between two FRBs if they follow different regulations
  - Difficulties in Regulatory supervision
  - Home country regulations may not be suitable for Indian reinsurance environment
  - May affect the financial strength of the FRB

Solvency Estimation (contd.)

- Recommendation 2:
  - Adoption of international best practices such as IFRS and RBC regime.
- Current status –
  - Already under way; may get an implementation plan in the coming 3-4 years
  - As per REC 2015 recommendations,

RSM 1 (Premium) factor	20%	30%

  - In order to check repatriation of surplus,

Minimum Solvency Margin	1.5	1.75

  - Higher capital requirements to allow for higher volatility / uncertainty compared to insurers
  - Lesser data compared to insurers

Solvency Estimation (contd.)

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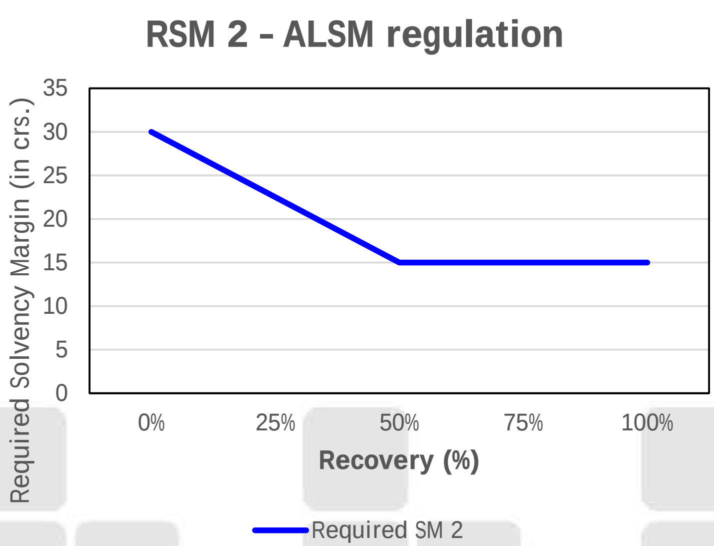
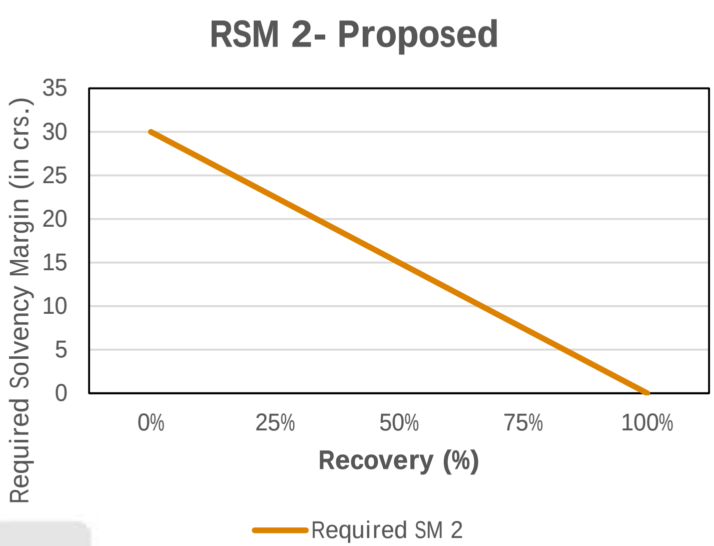
- Challenge 2:
  - RSM 2 factors (applied on reinsurance claims) does NOT allow for 100% credit for retrocession
- Recommendation:
  - Consider Net incurred claims for RSM 2 instead of higher of Gross incurred claims and net incurred claims
- For –
  - Undue capital strain, particularly for catastrophic or large risk losses due to huge recoveries

Solvency Estimation (contd.)

- Against –
  - Weaker solvency position
  - Insolvency of retrocessionaire. Currently, credit risk is not separately accounted for.
  - Uncertainty/dispute on the recovery amount between the reinsurer and retrocessionaire





FIRE RSM Factor = 50%

Data Availability

- Data format:
  - Bordereaux format;
  - Periodic data dumps; or
  - Both
- Resultant issues:
  - Reconciliation issues between different datasets
  - Delays in receipt of information
  - Full extent of exposure not known at a given point
  - May need to calculate approximate figures first and revise them later

Claims and IBNR

- Issues in triangulation of data:
  - Bordereaux data will affect the development periods chosen
  - Proportional RI covers:
    - Triangles based on UW cohorts
    - Need for additional assumptions to calculate the IBNR
  - Non Proportional RI covers:
    - Lack of claims volume
    - Including claims operating under different limits and attachment points
  - Line of business definition:
    - Requirement for 28 lines of business
    - Less detailed grouping may be needed,
    - For example, Bundled cover, Whole account XoL, Multi-line Stop Loss, etc.

Claims and IBNR (contd.)

- IBNR calculation:
  - Data credibility:
    - Trends in data affected by difference in claims handling practices of different insurers
    - Lack of adequate history since experience is fairly new
    - May need some benchmarks to estimate IBNR, like,
    - Similar business written elsewhere: may differ in coverages, business mix, market conditions etc., or
    - Indian market related information: may only have from GIC Re reports, or
    - Development patterns from cedants but can be based on different basis
  - Prudence in IBNR estimates:
    - *… If estimate of IBNR provision for any year of occurrence is negative, the Appointed Actuary shall re-examine the underlying assumptions. Even after re-examination, if the mathematics produces negative value, the Appointed Actuary shall ignore the IBNR provision for that year of occurrence …*
    - May lead to prudence if there is significant over-reserving at the start (or in auto case reserves) which are released later.

Premiums, UPR and PDR

- Availability of Premium information:
  - The exact written premium information may be delayed
  - Delay in booking of premiums, for example, crop insurance
  - May need triangles for premium realization/recognition leading to additional uncertainty in reserves
- UPR calculation:
  - May need to rely on earning pattern based on estimated (and not exact) exposure to be applied on written premiums
- PDR Calculation:
  - No guidelines around the calculations
  - No allowance for negative PDR (or URR < UPR)

Other Challenges

- Pricing
  - FRB's may incline towards follow than lead in RI treaties
  - Due to lack of data for pricing, including inadequate exposure information for catastrophe risks

- Inuring Reinsurance
  - Obligatory 5% cession to GIC Re

- Minimum Retention guidelines
  - Mandatory retention of at least 50% of the Indian business

Applicable APS – APS 21

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- APS 21: Appointed Actuary and General Insurance Business
  - The modified norms for Actuaries working with FRB’s include:
    - Fellow member of the Institute of Actuaries of India
    - Valid Certificate of Practice (CoP) in General Insurance issued by Institute of Actuaries of India to work as an Appointed Actuary
    - Age not more than 70 years as at the date of certification of actuarial reports
    - At least 5 years post qualification relevant experience in respective field
    - Not an employee of any other insurance / reinsurance company / branch office in India
    - Not disciplined by any professional body / any insurance regulator
    - Not adjudicated bankrupt during the last 10 years

Applicable APS – APS 21 (contd.)

- Challenges:
  - Availability of qualified actuaries within the Indian markets working in GI area with requisite knowledge of RI business

- Solution provided:
  - In case, where a suitable actuary is not available with the reinsurer for its Indian branch office, services of any actuary from the '**Panel of Actuaries**' may be utilized

  - But,
  - May not be considered as the most suitable approach by FRB's
  - May be more comfortable to use the services of their Group / Regional Actuary or Actuarial function head

Other Regulations & Standards

- IRDA Guidelines
  - IBNR Forms and Annexures can be more tailored to suit the FRB’s as there are requirements which may be difficult for a reinsurance entity to produce, like data in quarterly format, closed claims, claims closed at nil, etc.

- APS 33: Peer Review in General Insurance
  - Should be applicable to FRB’s as well to maintain the quality of work that the actuaries perform

Disclaimer

- *The views and possible actions expressed during this presentation are personal and presented for the purpose of IFS only. They are relevant in the context of the IFS case study only.*

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Thank You

Any Questions?