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Case Study 2 – General Insurance

Guide: P. Vishnuvardhan



Institute of Actuaries of India

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Introduction



For the segment, Fire & Allied Perils





The IRDAI noted Economic losses are much higher than insured losses!
Particularly for dwellings, offices, hotels, shops etc. and for MSMEs.



To increase the penetration, the IRDAI set up a working group to revisit the product structure. This involved consulting all stakeholders and thoroughly considering their views.







language, etc.

Target Market Statistics



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Vulnerability

National Disaster Management Authority (Gol)1:

58% of the landmass is prone to earthquakes;

12% of its land is prone to floods & river erosion;

75% of the coastline is prone to cyclones and tsunamis;

68% of its cultivable area is vulnerable to droughts; The hilly areas are at risk from landslides and avalanches.

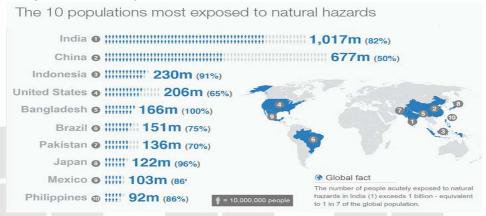
Some of the Major Catastrophes

- Kerala Floods 2018
- Cyclone Fani 2019
- Cyclone Gaja 2018
- Uttarakhand Floods 2013
- J&K Floods 2014
- HudHud Cyclone 2014

- · Chennai Floods 2015
- Bihar Floods 2008
- Mumbai Floods 2005 & 2007
- Indian Ocean Tsunami 2004
- Gujarat Earthquake 2001

Risk is inevitable. Resilience is everything.

As per Verisk Maplecraft's Natural Hazards Vulnerability Index, India ranked 49th (out of the 198 countries) meaning that it is a 'high-risk' country.²



Projected land underwater by 2050 during high tide - Mumbai³:



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- 1. http://www.ndma.gov.in/en/vulnerability-profile.html
- 2.https://www.maplecroft.com/insights/analysis/south-asia-faces-severe-risks-as-struggles-to-build-resilience/
- 3.https://coastal.climatecentral.org/map/15/72.8597/19.185/?theme=sea_level_rise&map_type=coastal_dem_comparison&elevation_model=coastal_dem&forecast_year=2050&pathway=rcp45&percentile=p50&return_level=return_level_1&slr_model=kopp_2014

Current Market Statistics

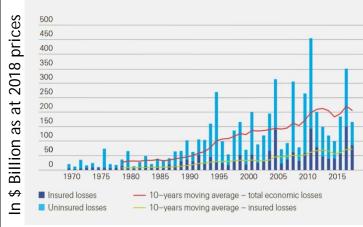


CAT events - Financial Impact

Losses ->	Economic	Insured
Uttarakhand Floods	INR 6,600 Cr.	INR 3,000 Cr.
Cyclone Phailin	INR 3,800 Cr.	INR 600 Cr.
Cyclone Hudhud	INR 65,000 Cr.	INR 4,000 Cr.
Kerala Floods	INR 19,500 Cr.	INR 1,000 Cr.
Chennai Floods	\$ 2,200 Mn	\$ 755 Mn
Cyclone Vardah	\$ 1,000 Mn	\$ 52 Mn

Source: News Paper Articles

In 2019 H1, the ratio of insured to economic losses stood at 43% globally¹



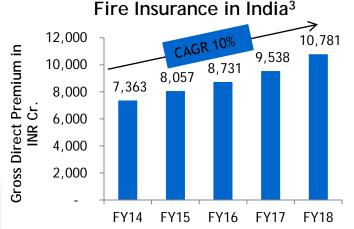
Source: https://www.swissre.com/dam/jcr:c37eb0e4-c0b9-4a9f-9954-3d0bb4339bfd/sigma2_2019_en.pdf

Property Insurance Market

In 2014 ²	India	USA
Property Insurance Premium GDP of the Country	0.07%	1%

The discussed Report states a penetration of <1% (11.84 Lakh dwellings were insured in FY2014 out of 24.35 Crore dwellings as per 2011 census)





^{1. &}lt;a href="https://www.swissre.com/media/news-releases/nr_20190815_preliminary_sigma_catastrophe_estimates_for_first_half_of_2019.html">https://www.swissre.com/media/news-releases/nr_20190815_preliminary_sigma_catastrophe_estimates_for_first_half_of_2019.html

^{2.} Swiss Re Sigma Report 2015 'Underinsurance of property risks: closing the gap

^{3.}IRDAI HANDBOOK ON INDIAN INSURANCE STATISTICS F.Y. 2017-18

Current Product Structure



1. Product Design:

- i. The base product structure is standard and is based on AIFT
- ii. Coverage for 12 perils
- iii. Add-ons available
- iv. Long term products allowed for dwellings (minimum 3 years).

2. Indemnity Provisions:

- Sum Insured Market Value v/s Reinstatement Value
- ii. Depreciation
- iii. Underinsurance and Average Clause
- iv. Excess.

Current issues and recommendations



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Current Issues	Recommendations	
 Existing insurance product was conceptualized for large commercial customers: mis selling or underselling or selling inappropriate insurance cover due to lack of understanding 	 Three different versions of the product with varying degree of product refinement: standardised product structure across insurers take care of relative insurance literacy of customer segments 	
 Customers may not be fully aware of perils covered: customer may doubt how a Fire policy can cover perils like Flood some other covers are available by way of Add-on covers like earthquake, terrorism etc. 	Peril relevant to the segment to be covered in base product: • avoid mis-selling and inadequate coverage for unsuspecting customers	
Principle of indemnity and use terms like "Market Value", "Reinstatement Value", "Average Clause / Under insurance", "Excess" the average clause endeavours to bring equity amongst insureds underinsurance of assets due to lack of understanding and knowledge of such terms	 No deduction for depreciation and wear & tear "New for Old" basis for home building as well as contents "New for Old" basis for commercial buildings and trade equipment; and purchase price of stock in trade Waiver of underinsurance: complete waiver for home owners up to 30% waiver for commercial risks up to 5 crores up to 15% waiver for commercial risks up to 50 crores No excess for dwellings and replace excess with franchise for commercial risks 	

Current issues and recommendations



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Current Issues	Recommendations	
 Customers to decide the Sum Insured for dwellings: insurers play very little role in helping them decide the correct sum insured that afforded adequate protection some customers may insure the homes for their purchase price which includes land value also without any benefit 	Default sum insured - a reasonable approximation of the correct value of construction cost of the building: • GI council and IIB to create a database of cost of construction by geography and construction type • insured to declare only the carpet area • contents @50% of the cost of construction • flexibility to customers to change the SI	
 Total loss of multi-storied apartments: payment after reinstatement of apartment or payment of depreciated cost of construction reinstatement beyond control of individual policyholder 	Total sellable price of apartment based on Ready Reckoner rates published by state governments: option with policyholder to increase the rate but not reduce it	
 Lack of clarity about which asset is covered. Usual exclusions unless specifically declared include: boundary walls, internal roads, out house excluded from dwellings cover goods held in trust from commercial establishment cover 	Standard definitions that clearly define what is covered: no confusion regarding assets covered under policy	
Unavailability of long term content insurance along with long term building insurance for dwellings. Lapse of contents cover at the time of renewal	Duration of contents insurance be aligned with duration of building insurance	

Current issues and recommendations



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Current Issues	Recommendations	
Financial risks to insurers due to very long term dwelling structure policies: • solvency pressure due insignificant growth in ASM compared to growth in RSM • stress due to upfront commission payment and non-allowance of DAC • uncertainty about future reinsurance cost	Restrict the tenure of dwelling structure policies to 5 years: Iess uncertainties in 5 year cover aligned with thoughts of regulators of maximum tenure of 5 years for non-life products	
Exclusion of losses due to theft from event site by anti-social elements	Removing the exclusion for theft following any insured peril	
Upfront discount on long term dwelling insurance with flat sum insured: • risk of underinsurance	No upfront discount and in-built sum insured with auto-escalation at the rate of 10% per annum	
Upfront payment of premium for long term dwelling policies: unaffordable premiums for some policyholders risk of remaining uninsured in case of delayed renewal or no renewal	 Auto renewal of insurance though ECS: reduce the burden of upfront payment of a large premium electronic ECS mandate for auto renewal. Policyholders have rights to cancel the mandate 	
Complex policy wordings full legal and technical terminology: difficult to comprehend for the policyholders disputes at the time of claim settlement	Issuance of simplified "Key Features Document": simple and non-technical language common legal policy wordings across insurers	

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Other recommendations



- Promotion of following intermediaries in high need and low penetration areas:
 - Post offices
 - Utility companies
 - Property tax departments
 - Municipal tax offices
 - Common Service Center, which have a wonderful reach to remote villages
 - Point of Sales Person
- The Authority to encourage insurers to create a package including other related perils apart from fire and allied perils:
- Mandatory KYC (preferably e-KYC) for all buyers of the products
- Collection of granular data by IIB for this segment at much by enforcing higher level of discipline so that the data is statistically amenable for future pricing and analysis
- Campaigns by General Insurance Council creating awareness about non-life insurance

Proposed Product Structure



Three Insurance Products are proposed for the identified segments:

- Home Insurance (for home building and contents)
- Micro Commercial Insurance (value at risk at one location is up to 5 crores)
- Small Commercial Insurance (value at risk at one location exceeds 5 crores but less than 50 crores)

Additional Requirements Proposed:

- Separate product proposed for natural catastrophes.
- Construction of the Policy Contract (Key Feature Document)
- Contents of Main Policy Contract
- Proposed Definitions
- Breakdown and Burglary losses may be specifically excluded. However, burglary or theft within 7 days of loss caused due to insured peril covered.
- Additional Add On desired by any insurer should be routed through GI
 council for uniformity in wordings across the industry.
- All existing products covering fire and allied perils for above segments should cease to exist.

Home Insurance



- Perils: Basic SFSP along with EQ, Loss of rent, Terrorism, Death due to cylinder explosion, Impact Damage, Rent for Alternative Accommodation.
- Sum Insured: Replacement Value Basis Super structure basis for multistoried buildings - 10% higher for bungalows - Housing Society only structure covered.
 - Option to opt for higher SI
 - Auto Escalation Provision
 - No limit on SI
 - Contents (cover on Loss Limit basis at 50% of the value of structure)
- Average Clause: No underinsurance applicable to either building or contents. The claims of contents will be settled on Loss limit basis.
- Depreciation: Claims not subject to any deduction for depreciation.
- Excess: No excess or franchise.

Home Insurance (cont'd)



Coverage:

- **Building**: All civil works like compound wall, garage, plinth and foundation, electrical wiring and other permanent fittings etc. are covered. Any alterations up to 10% of the sum insured shall be deemed covered. Specific question on risk in basement to be included in proposal form and answered by insured else, would not be covered.
- Contents: Contents including furniture, gardening equipment, any additions made during currency of policy on loss limit basis up to 50% of building value. Things in open like furniture, dish antenna etc. will be held covered within the contents sum insured. Valuables and personal effects are covered as part of contents.
- Auto escalation @10% pa in line building sum insured.
- Duration: The tenure of dwelling policies (buildings and contents) is restricted to 5 years. Auto-renewal facility through ECS mandate is proposed for willing customers each year. Escalation of sum insured will continue as usual even though premium is paid annually. One time payment option also available.

Micro Commercial Insurance



- Perils: Basic SFSP along with EQ, Impact Damage, Spontaneous Combustion, Terrorism, Temporary Removal of stock, Omission to insure cover.
- *Sum Insured:* Replacement Value Basis Raw Material on Current Purchase Price basis and Stock in Manufacturing cost basis. For more than one location covered, declared stock as single value will be on floater basis.
- Average Clause: Underinsurance waiver proposed up to 30% for each item.
 Special Provision available to apply average clause on selected items.
- Depreciation: Claims not subject to any deduction for depreciation.
- *Excess:* Provision of franchise of Rs. 10000/- for these policyholders provided sum insured at a location does not exceed 5 crore.
- *Coverage:* Goods or machinery held in trust covered up to the extent of SI declared. Specific question on risk in basement to be included in proposal form and answered by insured else, would not be covered.
- Duration: The policy period of one year only for this product.

Small Commercial Insurance



- Perils: Basic SFSP along with EQ, Impact Damage, Spontaneous Combustion, Terrorism, Temporary Removal of stock, Omission to insure cover. Other Add ons also available
- *Sum Insured:* Reinstatement Value Basis Raw Material on Current Purchase Price basis and Stock in Manufacturing cost basis.
- Average Clause: Underinsurance waiver proposed up to 15% for each item.
 Special Provision available to apply average clause on selected items.
- Depreciation: Claims not subject to any deduction for depreciation.
- *Excess:* Excess as applicable to current SFSP policy shall also apply to this product.
- Coverage: All Goods within the insured compound including insured's own Plant and Machinery and Stock, goods or machinery held in trust covered up to the extent of SI declared.
- Duration: The policy period of one year only for this product.

Challenges Creating awareness





Customers

- Conveying the new product features and removal / modification of existing features
- Conveying the modification in add-on covers selling
- WG has recommended a 'Key Features Document' which should go long way to create awareness

Intermediaries

- The point of contact for most customers
- Important to educate w.r.t new product structure
- Report also recommends creation of new distribution channels
- So adequate training of both existing and new intermediaries is required to improve awareness and avoid mis-selling

Challenges Premium Rates



Appointed Actuary Regulations, 2017

The duties include -

- To render actuarial advice on product design and pricing
- To ensure that the premium rates of the insurance products are fair

APS 21

- 'The Appointed Actuary must satisfy himself that the premium rates....are fair, i.e. are neither excessive nor inadequate
- Premium rate components -
 - Must analyze own experience
 - Compare with industry experience

Challenges



- Arriving at the indicative Sum Insured for dwellings
 - GI council / IIB to create a database of cost of construction by geography and construction type
 - Also a challenge to arrive at appropriate SI until the database is prepared
- Monitoring any 'Morale Hazard' due to removal / modification of underinsurance clause
 - The insuring public may start insuring their assets (such as Contents) at a lesser value
- Doing away with all existing products covering fire and allied perils for these segments.

Challenges



- Report recommends that IIB collect data for this segment at much more granular level so that the data is statistically amenable for future pricing and analysis:
 - Until such data is available, pricing will be a challenge
- Actuaries will need to build assumptions for pricing, such as:
 - The target insured segments have higher frequency and range bound severity compared to risks with higher SI
 - New product features and additional perils
- Report mentions that actuaries must try to reduce cross subsidies or at least the extent of cross subsidies:
 - This is a challenge since it would require detailed data
 - Vulnerability to natural catastrophes varies by geographical location

Conclusion



- The insurance penetration is expected to increase with the new product structure in the most vulnerable sections of the society
- Standardized policy wording across the industry
- A major challenge would be to create awareness among the customers as well as intermediaries
- IIB to collect and analyze data; Pricing will be a challenge initially
- Actuaries to refer to APS 21 and extant Regulations