

# REINSURANCE PERFORMANCE REVIEW 2023



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# MESSAGE FROM COMMISSIONER



I am delighted to present the technical report on the reinsurance business in Pakistan, an addition to the series of reports published by the SECP over the last 18 months. The report presents a deep-dive into Pakistan's reinsurance market, particularly in the backdrop of slow insurance sector growth, and weak domestic risk retention. Valuable insights on issues in the (re)insurance market are presented in the report and important areas of work are highlighted for all stakeholders, (re)insurance industry, policymakers and regulators.

Optimization of reinsurance capacity is one of the objectives of the five-year strategic plan of the SECP's "Journey to an Insured Pakistan" launched in December 2023. Accordingly, a thorough review of reinsurance market performance for the last five years has been undertaken to highlight issues, opportunities and potential work areas in the reinsurance market in Pakistan.

The report highlights the major lines of business such as Property & Fire Damage, Marine Cargo & Hull, General Liability, and Miscellaneous lines of business that are ceded to reinsurers. The health, motor and agriculture risks are mostly retained due lack of adequate reinsurance arrangements. I have come across three major issues which require immediate attention:

Firstly, there are significant reinsurance payments settlement concerns in the insurance industry comprising of outstanding payments among multiple stakeholders. This includes corporate policyholders, insurance companies, Pakistan Reinsurance Company Limited (PRCL), foreign reinsurance companies and (re) insurance brokers as well. Our Policy team has led substantial efforts to work between stakeholders to resolve outstanding payables and receivables and significant progress has been made. However, it is critical to consider systematic and standard reinsurance reconciliation processes across the industry to ensure timely settlement of payables and receivables between all stakeholders. Also, it is imperative to monitor compliance to terms and conditions of settlement stipulated in reinsurance contracts.

Second, there is a lingering need for review of paid-up capital requirements of non-life insurance companies as presently, the major lines of business of small insurance companies are substantially reinsured, with minimal or no risk retention. This is akin to acting as fronting or broking offices. Contrastingly, reinsurance retention capacity for major life insurance companies is adequate due to smaller risk size of policyholders and the large strong capital base and financial strength (although with exceptions). The major lines of business are significantly reinsured across the industry through facultative placements even for the large companies with strong shareholders equity, resulting in excessive reinsurance cession to foreign markets and repatriation.

Thirdly, the pricing and underwriting requirements need to be evaluated for the insurance as well as the reinsurance market. It needs to be ensured that adequate gross and reinsurance rates are

negotiated through technically justified data and experience-adjusted pricing basis, keeping in view the catastrophe and climate change impact as well as local market experience. Currently, there is no actuarial involvement (to reflect upon strategic impact on businesses and the financial health of the companies) on the reinsurance front, with the rating mainly driven by historical practices and negotiations among stakeholders.

In a nutshell, the existing processes, practices and protocols of reinsurance placements need to be reviewed for pricing, underwriting, payment settlement issues among multiple stakeholders, under-utilization of treaty capacities and undue foreign placement leading to deteriorating domestic insurance market capacity and flight of forex abroad. It is critical to ensure that the reinsurance decision-making in the insurance companies is aligned with the holistic risk management strategies and the company's risk appetite and tolerance. Needless to say, the reinsurance practices and requirements need an overhaul that requires participation and ownership of all industry stakeholders.

The industry can explore the options of (re)insurance pool formation to create domestic risk retention capacity, the detailed mechanics of which are highlighted in our report on "Insured Pakistan: Pool Dynamics". The SECP has also proposed amendments to the Insurance Ordinance, 2000 to allow private insurers to insure the public property, for which, statutory monopoly is vested with the National Insurance Company Limited under the Insurance Ordinance, 2000. The recent decision by the Competition Commission of Pakistan to open up our reinsurance market to private insurance companies is also a positive development and in-line with the SECP's proposed amendments to Insurance Ordinance, 2000 in this regard. This step will encourage competition, strengthen the local market capacity, and help retain more business domestically.

Finally, I extend my sincere gratitude to industry participants who contributed to this comprehensive reinsurance performance report and provided the required information on templates with multiple engagements, discussions and refinements. A special thanks goes to Falak Sher Haider Soomro (Advisor Insurance), M. Nasir Khan Yousufzai (AJD), Nimra Sultan, and Esha Imran for their tireless efforts in conducting the underlying work and preparing this thorough and technical report.

### Aamir Khan

Commissioner Insurance

### 1. WHY IS REINSURANCE IMPORTANT?

Simply put, reinsurance is the insurance of the insurance business. Technically speaking, the reinsurance market serves as an important pillar of the insurance business management as it serves as a risk management mechanism by transferring part or all of its risks from the insurer to the reinsurer through various products and services.

The below figure represents the reinsurance interrelationships and potential dependencies of the insurance market. The role of the reinsurer-insurer is the same as that of the insurer-insured.

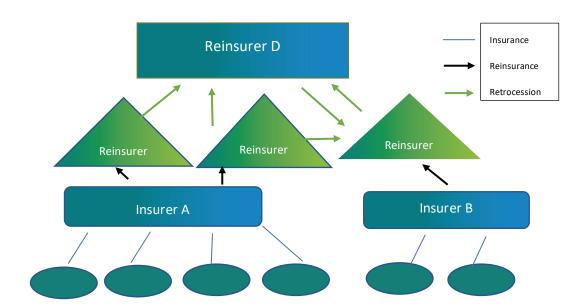


Figure 1 - Insured, Insurer, Reinsurer and Retrocessionaire Relationship

As per the definition within the Insurance Ordinance 2000, Reinsurance is defined as "a contract of insurance under which, the event, specified in the contract, contingent upon the happening of which, payment is promised to be made to the policyholder thereunder, is payment by the policyholder of a claim or claim made against that policyholder under another contract or contracts of insurance issued by that policyholder."

Depending on the insurer's needs, strategy and market dynamics, there can be one or many reasons insurers want to purchase reinsurance. These include:

Table 1 - Reasons for Seeking Reinsurance/Retakaful

#		Reasoning
1	Balance Sheet Protection	Assists in minimising ruin chances and contributes to shareholders' value
2	Stability of the Net Profit Stream	Volatility in profits can be smoothed as claims are capped
3	Increased Risk Capacity	Allows exposure increase on limited capital base through additional capacity to write large risks
4	Gaining Experience in New Markets and Product Areas	Leverage reinsurance experience from different markets for new product development and provide technical assistance in different markets
5	Advance Commission & Cash Flow Assistance	The reinsurance commission supports cash flow management and provides additional revenue for smaller and new companies
6	Management of Statutory Solvency Margin	Helps manage solvency margins due to the share of risk being taken by reinsurers
7	Arbitrage	Taking benefit of reinsurance rates differences to book future profits
8	Balanced Portfolio	Assistance in reinsurance unbalanced portfolio outside of business plans by swapping tranches of business with others

It is in this pursuit the insurance companies strive to find a balance in the reinsurance markets against its own capital available, business needs, capacity and underwriting practices and the risk appetite. Broadly speaking, the reinsurance arrangements are placed either collectively, known as 'Treaty business', or placed on case-to-case basis known as 'Facultative business'. A comparison table below reflects the reasons for selecting either Treaty placement or Facultative placement

Table 2 - Differences between Treaty & Facultative Placements

Treaty	Facultative
<ul> <li>Obligations are imposed on insurer to offer risks</li> <li>Reinsurer to accept the risks that fall within the treaty agreement</li> <li>Pre-agreed automatic cover is available</li> <li>Lower cost- ceding &amp; profit commission Remove the element of choice for both insurer &amp; reinsurer</li> </ul>	<ul> <li>Each risk considered as a separate insurance contract</li> <li>Reinsurers can accept at their option</li> <li>Offers flexible solution in one-off circumstances</li> <li>Negotiate tailor-made covers and premiums</li> <li>Lack of certainty and high administration costs</li> </ul>

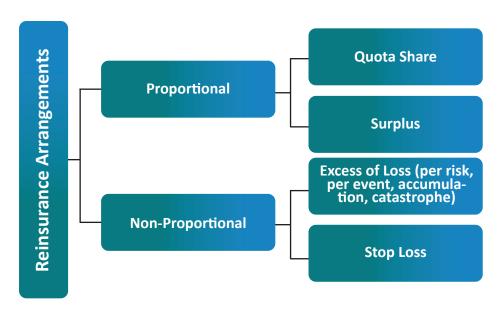


Figure 2 - Reinsurance Arrangement Types

The reinsurance arrangements are typically done on proportional bases (i.e. sharing bases) and non-proportional bases (i.e. based on limits and caps). Quota Share and Surplus arrangements are part of the proportional business where claims and premiums are shared on defined percentage level between insurer and reinsurer. On the other hand, Excess of Loss (XOL) arrangements such as risk XOL, event XOL and accumulation XOL as well as catastrophe XOL and Stop Loss arrangements are part of non-proportional bases.

### 2. PAKISTAN REINSURANCE MARKET OVERVIEW

The reinsurance business (RI) of direct insurers has increased from PKR 76.20b in 2021 to PKR 133.28b in 2023 for the Non-Life business whereas the Life business has increased from PKR 5.16b in 2021 to PKR 6.29b for the Life business. As it can be seen from the chart below, the reinsurance (RI) market is mostly concentrated in the Non-Life insurance sector. During the last three years, on average, the Non-Life reinsurance premiums represent c. 94.6% of total RI premiums whereas Life reinsurance premiums represent only 5.4% of total RI premiums.

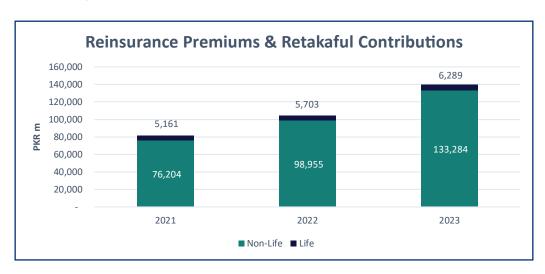


Figure 3 - Reinsurance Premiums & Retakaful Contributions

The reasons for lower RI business in Life insurance sector include (a) less reinsurance being taken by larger Life companies as their capital base is strong against risks per life, (b) smaller Life companies take reinsurance but their sizes are not substantial to the overall market (c) better medical underwriting and risk management techniques adopted, and (d) different reinsurance arrangements in place with higher retention limits. However, the nature of Non-Life businesses is different and hence more need for reinsurance support to protect their balance sheets and capital bases for reasons touched upon below.

The table - 3 reflects the retention ratios for Life and Non-Life insurance business over the last three years. It indicates that the Non-Life business has more reinsurance premiums ceded and retained less compared to Life companies.

PKR m	Life			Non-Life			
	2021	2022	2023	2021	2022	2023	
Gross Premiums & Contributions (A)	330,442	412,695	452,279	139,950	178,473	226,627	
Net Premiums & Contributions (B)	325,281	406,992	445,990	63,746	79,519	93,343	
Retention Ratio (=B/A)	98.4%	98.6%	98.6%	45.5%	44.6%	41.2%	

Table 3 - Historical Retention Ratio for Life and Non-Life

Information extracted from Financial Statements of companies where Reinsurance Premiums are derived as Gross Premiums and Contributions less Net Premiums Revenue. The retrocession business of PRCL (i.e. the reinsurance of reinsurance) is not included in this data

The reinsurance business (RI) of direct insurers has increased from PKR 76.20b in 2021 to PKR 133.28b in 2023 for the Non-Life business whereas the Life business has increased from PKR 5.16b in 2021 to PKR 6.29b for the Life business. As it can be seen from the chart below, the reinsurance (RI) market is mostly concentrated in the Non-Life insurance sector. During the last three years, on average, the Non-Life reinsurance premiums represent c. 94.6% of total RI premiums whereas Life reinsurance premiums represent only 5.4% of total RI premiums.

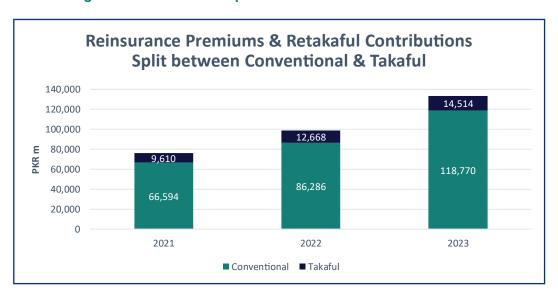


Figure 4 - Reinsurance Split between Conventional & Takaful

In Pakistan, the reinsurance landscape is shaped by various factors emanating from local and international markets. Globally, climate change is increasing the frequency and severity of natural disasters resulting in ever-increasing claims losses across different industries. This eventually results in high claims for reinsurance markets and naturally gets passed onto the insurers through increasing rates and/or withdrawal of capacity from the business line. The impact of course is different for different companies and business lines.

Locally, Pakistan faces a series of compounding challenges including the impact of climate change on the economy and on insurance business such as recent large losses emanating from the paper and textile industry (Bulleh Shah claims and Engro Powergen Thar Limited claim to name a few), limited capital sizes of companies and capacity issues, devaluation of PKR against USD and controls on foreign exchange repatriation, and issues with re-takaful placements. These issues are intertwined with each other and responsibility for resolution of these issues lies on stakeholders collectively.

The only reinsurer of Pakistan, the Pakistan Reinsurance Company Limited plays a critical role in the context of reinsurance for local insurers. It holds a mandate of 35% of reinsurance business by having first right of refusal. This means that all insurers in Pakistan need to insure at least 35% through PRCL, however, PRCL has a right to refuse the business. This allows the state-run reinsurer to be selective in taking risks or not depending on its appetite and can sometimes work against the protection interest of insurers through selective underwriting such as partially taking business and refusing others, refusing completely and/or taking the full risks. Needless to say, the PRCL also places its business to the international reinsurance market, normally called Retrocession and the three-year summary of the same is provided in the figure 5 and table 4 below:

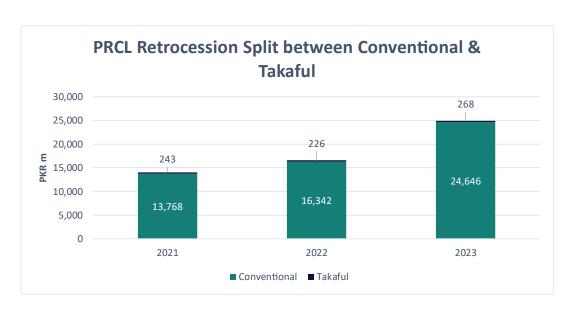


Figure 5 - PRCL Retrocession Split between Conventional & Takaful

The Retro-takaful contributions only represent 1.4% of total retrocession business of the PRCL over average of last three years, whereas remaining business is on the conventional side representing 98.6% on the average of past three years.

Conventional **Takaful Total** PKR (m) 2021 2022 2023 2021 2022 2023 2021 2022 2023 **Gross Premiums** 20,994 24,271 33,969 933 1,205 1,517 21,927 25,477 35,487 & Contributions **Net Premiums** 7,226 7,929 9,323 690 979 1,249 7,916 8,908 10,573 & Contributions 34.4% 32.7% 27.4% 74.0% 81.2% 82.3% 36.1% 35.0% **Retention Ratio** 29.8%

Table 4 - PRCL Retention Ratio

The retention ratio of the PRCL business over the last three years has been tapering down from 36.1% in 2021 to 29.8% in 2023 for the total business. This is primarily driven from conventional business, with retention reducing from 34.4% in 2021 to 27.4% in 2023 whereas for takaful business, albeit minute exposure, this has improved from 74.0% in 2021 to 82.3% in 2023.

In addition, there are no other reinsurers/retakaful operators in Pakistan and the business other than PRCL business gets placed in international markets on ratings and terms and conditions dictated by the reinsurance brokers licensed in Pakistan. The dependency on international reinsurance not only increases costs but also exposes Pakistani insurers to the global market's volatility due to climate change-related events which effect the reinsurance markets globally.

# 3. WHY & HOW IS THIS STUDY PREPARED?

First of its kind in Pakistan, this report is prepared to specially focus on reinsurance market of Pakistan, covering areas such as historical reinsurance premiums, claims and commission at a granular level of segmentation discussed below, capacities of insurance companies and capital sizes through balance sheet assessment, reinsurer's quality assessment and ratings, and segmental treaty and facultative business performances through key performance indicators review.

The findings of this study are intended to offer valuable insights for insurance companies, regulators, and policymakers, helping them to foster a more robust reinsurance market and formulate the efficient and robust framework to support Pakistan's insurance industry.

By strengthening local reinsurance capacity and optimizing risk management, the study aims to reduce the economic burden of foreign exchange outflows and improve the stability of domestic insurers, through ability to absorb more risks by retaining more and enhancing their capacities to expand more business, better reinsurance rating from global reinsurance markets and developing local technical skills and knowledge base. These improvements not only contribute to a more resilient local insurance sector but also enhance Pakistan's economic stability. This report would also open up opportunities for international insurance and reinsurance market to consider Pakistan as their insurance expansion destination admiring the possibilities of growth within the country.

This section discusses the approach on which this report has been prepared, the disclosures and the limitations that have been considered in populating, compiling and presenting the results along with inherent uncertainties associated in this the working. The report results should be read in full context and in totality and partial use of this report may lead to incorrect or undesired conclusions.

To conduct this study, the Insurance team prepared an RI template for the selected participants of the Non-Life industry having sound RI technical knowledge and processes to understand and complete the template. Multiple discussions were held with each company to ensure data and the information compiled is accurately populated and any concerns with regards to clarity and technical areas were explained on one-on-one-sessions with companies.

The template focused on five-year historical assessment on the areas including financial data (through financial reporting and statutory classes of businesses) covering revenue account and balance sheet items of the companies, Reinsurance panel review, financials and solvency statuses, RI reserves break-up, and the performance analyses of treaty and facultative business. The assessment of three-years and five-years information covered in this report have been completed for different objectives of reinsurance analyses and are elaborated in each report.

### **IMPORTANT CONSIDERATIONS**

The terminology for the retakaful and reinsurance is used interchangeably and collectively it can also be referred to as Reinsurance, as the retakaful experience is not significant as observed in the earlier section. The context in each section is critical as the report discusses various technical analyses with parameters from different angles. Therefore, appropriate context must be understood and read in totality to ensure the analyses and results are understood in right perspective.

This data and the report is prepared from the perspective of the insurers, so RI premiums and earned premiums are treated as outflow (negative movement, due to pay-out from the insurers to reinsurers) and the claims, commission income and solvency benefit is treated as inflow for insurers (positive movement, as payments are received by the insurers from the reinsurers).

At the time of preparation of the data, the selected companies communicated that the financial statements for the year 2023 were not finalized and audited. Therefore, unaudited figures were provided within the template and hence, were relied upon.

Takaful business figures were treated in a similar manner as conventional figures due to smaller business size and nature of the businesses underwritten were same. As a result, total figures were compiled for the analyses covered in this report.

### **DATA CONSIDERATIONS**

The data considered in this study covered 10 non-life insurers which were significant players on the gross and the reinsurance side. However, as discussed above, in order to gain credible dataset and accuracy, takaful and conventional business were assessed collectively to gain meaningful results and granularity. The selected companies' names are not disclosed in order to maintain confidentiality of the statistics. The table below represents the statistics overall being considered in the study out of the total industry data available.

Table 5 - Industry & Selected Data in terms of Gross Written Premiums & Contributions

PKR m	Total Non <sub>-</sub> Life			Selected Companies			
Year	2021	2022 2023		2021	2022	2023	
Conventional	123,842	157,107	201,366	89,054	112,839	146,563	
Takaful	16,108	21,366	25,261	9,232	11,959	13,803	
Total	139,950	178,473	226,627	98,286	124,798	160,366	

As communicated above, the analyses would be conducted on totals data in order to ensure credibility and accuracy of the results. On the gross written premiums and contributions basis, the 10 selected companies covered roughly 70%–71% of the total market experience of Non-Life business. This represents that the gross business is highly concentrated in these 10 companies and that they form major part of the total industry. Whereas the remaining 19 are quite small to deduce sensible results on the individual company bases and on granular statutory segmentation levels, along with internal capacity and data handling inabilities to produce the desired templates.

### **LINE OF BUSINESS SEGMENTATION**

This study has been prepared on two segments; financial reporting segment and the statutory reporting segments. The financial reporting segments are those that are used by the insurance companies in their financial statements whereas the statutory segments are more granular segments in line with "Similar Risks Managed Together" definition and are generally consistent with international segments that are followed globally. The statutory segments provide granular information on the reinsurance business and the insights gained from them shall help improve the reinsurance arrangements in Pakistan. Following are the segments considered:

Table 6 – Lines of Business Segmentation

Financial Reporting Segments			Statutory Segments				
(ii) M (iii) M (iv) He	re & Property Damage larine Aviation & Transport lotor ealth liscellaneous	(i) (ii) (iii) (iv) (v) (vi) (vii) (viii) (ix)	Property & Fire Damage Engineering Marine Aviation & Transport Motor Accident & Health Liability - General Credit & Suretyship Agriculture Miscellaneous				

Note here that we have placed reliance on the way the companies have done their reporting segmentation. We have attempted to align the reporting segments as much as possible, however due to inherent differences in operational and underwriting practices of each company, the results shall be viewed keeping this limitation in mind.

#### **CALCULATION APPROACH**

The working completed on this report is based on two approaches. The first assessment is in line with the financial statements prepared and submitted by the selected companies. Second approach considers the assessment on five-year cumulative bases as at year-end 2023 and it provides the recent and most updated position of the results from the past five-years using compiled data. Before each assessment, relevant approach is highlighted in order to direct the results in the right perspectives.

In order to assess the results, different calculations are performed for the construction; following key performance indicators are assessed:

- Reinsurance ratio (i.e. RI premiums to Gross Premiums ratio) and retention ratio (i.e. Net Premiums to Gross Premiums ratio),
- Financials and solvency related ratios such as excess solvency ratio, reinsurance receivables and payables ratio, leverage ratios, etc.
- RI Performance Indicators such as loss ratio, commission ratio, combined ratio (loss ratio + commission ratio - total expenses are not used) by line of business.

Following table provides all the formulae used in this report:

Table 7 - Formulae Table

Name	Formula
Excess Solvency Ratio	(Excess Solvency Margin / Required Solvency Margin) * 100
Net RI Payables / Receivables	Reinsurance Payables less Reinsurance Receivables
Reinsurance Receivable Ratio	Total Reinsurance Receivables / Total Equity * 100
Reinsurance Payable Ratio	Total Reinsurance Payable / Total Equity * 100
RI Loss Ratio	RI Claims Incurred / RI Earned Premiums
RI Commission Ratio	RI Commissions / RI Earned Premiums
RI Combined Ratio	RI Loss Ratio + RI Commission Ratio

# 4. REINSURANCE STATISTICS & RATIO ANALYSES

This section touches upon various statistics of the reinsurance business of Pakistan over the last five-year period, from 2019 to 2023. The statistics only cover the insurers' perspective, since only the reinsurance analyses are made. These indicators provide various assessments of the reinsurance business in totality and for each year for statutory segments considered.

It is important to note here that although the assessment is carried out on statutory segments, the reinsurance business placement is generally done on a bouquet basis, i.e. as a combination of multiple arrangements encompassing different statutory segments. Furthermore, the statutory segments considered are more granular compared to financial reporting segments, which are typically consolidated by companies based on their understanding. Therefore, the results are dependent on the information and the segmentations given by the company.

### **REINSURANCE STATISTICS**

#### **REINSURANCE PREMIUMS**

Reinsurance Written Premiums during 2019-2023 shows a prominent increase from PKR 39,954m to PKR 96,876m with CAGR of 19.4%. The Property & Fire Damage and Engineering which together made up the majority of the total where Property & Fire Damage premiums rose from PKR 18,751m in 2019 to PKR 49,043m in 2023, and Engineering premiums grew from PKR 8,675 m to PKR 26,048 m. While other line of business grow with relatively small segments. Overall, total premiums nearly doubled over the five years, indicating significant growth in the reinsurance market.

TCIP covers 10.9 million homes across Turkey against earthquake risks, about 54.7% of housing stock, according to Atlas, an insurance magazine 2023 article. There is differential pricing applicable under this scheme according to seven different earthquake zones within Turkey and construction type (i.e. reinforced concrete and other construction), according to TCIP website2 on the next page. The premium is then determined by applying area covered in m2 multiplied by tariff according to construction type an earthquake zone location.

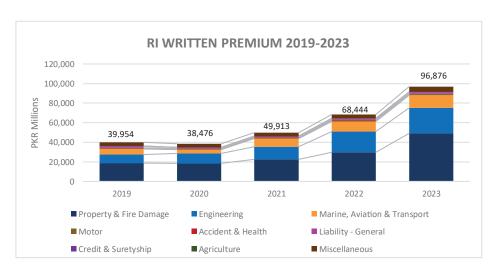


Figure 6 - Reinsurance Written Premiums 2019 - 2023

The increase in the last three years were attributable to increase in asset values of the insured properties, which in turn have increased gross premiums and resultantly the reinsurance premiums. The depreciation of PKR in Pakistan in 2021–2022 lead to revaluation of assets within the country, resulting in increased in Insured value, i.e. Sum Insured.

As observed, major proportion of Reinsurance premiums is concentrated in three lines: Property & Fire Damage, Engineering and Marine Aviation & Transport business. These major lines take around total of 91% during year 2023 (47%, 27% and 14% for Property & Fire Damage, Engineering and Marine Aviation & Transport respectively). Miscellaneous lines reinsurance is around 7% of total RI business in 2023 whereas remaining lines such as Motor, Accident & Health, Liability General, Credit & Suretyship and Agriculture business have experienced very low reinsurance share over the last five years (in the range of c. 0%-2%).

#### **REINSURANCE CLAIMS**

Reinsurance Claims 2019–2023 shows a notable increase in overall claims, with the total rising from PKR 10,148m in 2019 to PKR 17,707 m in 2023. Property & Fire Damage and Engineering claims increased significantly in 2023. However, Marine, Aviation & Transport saw fluctuating claim amounts, ending lower in 2023 than in 2019. Overall, claims in most categories showed varying trends, with the total claims reflecting an upward movement across the period.

The variations in claims is due to the nature of business where the number of claims (frequency) and amounts of claims (severity) are unknown for the period of coverage. There is substantial uncertainty associated with low frequency and high severity businesses, generally within commercial lines. As a result, the claims experience has been fluctuating on totality as well as by lines of businesses as seen above in figure 7.

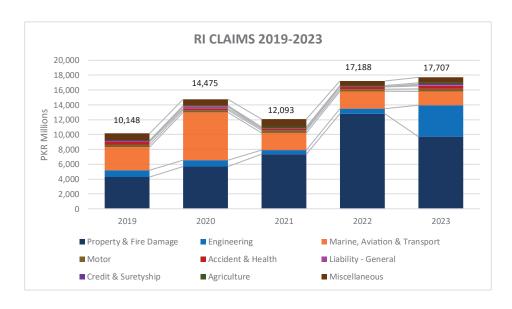


Figure 7 - Reinsurance Claims 2019 - 2023

#### REINSURANCE COMMISSIONS

Reinsurance Commissions 2019-2023 indicates steady growth, with the total commission rising from PKR 3,905 m in 2019 to PKR 6,797 m in 2023. Property & Fire Damage accounted for the largest share over the five years with a noticeable increase in 2023. Other categories, such as Engineering and Marine, Aviation & Transport, also saw gradual increases in commissions. Overall, each line of business in contributing to the growth in reinsurance commissions during this period.

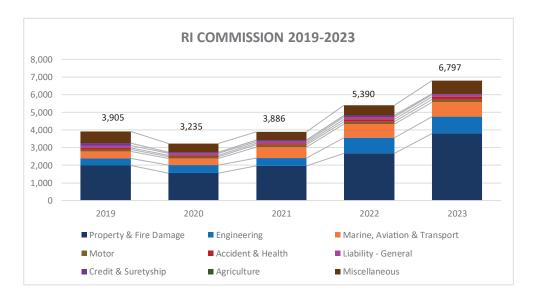


Figure 8 - Reinsurance C`ommissions 2019 - 2023

### **REINSURANCE RATIO ANALYSES**

#### REINSURANCE PREMIUMS TO GROSS PREMIUMS RATIOS

This ratio reflects RI premiums paid out concerning Gross Premiums received by the insurer for reinsuring the lines of business. The higher this ratio is, the higher the reinsurance of the portfolio is. Based on the overall assessment, the reinsurance of total portfolio has been increasing from 47.9% in 2020 to 60.5% in 2023 and the five-years average stands at 54.1%, as show in totals bar in the chart below.

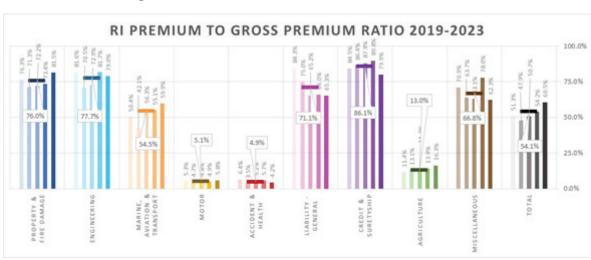


Figure 9 - RI Premiums to Gross Premiums Ratio

Looking at the reinsurance for Motor and Accident & Health, there has not been much reinsurance cover available for these lines, as the average five years stand at 5.1% and 4.9%. This is because of inherent issues in Motor and Accident & Health business, where there is limited controls on underwriting, claims management and generally lower reinsurance capacity for these markets. Furthermore, the smaller reinsurance is either for the high value or luxury vehicles in Motor and some coinsurance arrangements and International Private Health Insurance plans offered by some insurers, leading to low reinsurance placements. Similar, the Agriculture insurance business has recently gained traction but substantial quantum has not picked up and the impact of climate change on the insurance risks, the reinsurance premiums against gross premiums are slowly increasing.

The other lines of business such as Property & Fire, Engineering have relatively high reinsurance ratio as the average of 5 years stands at 76.0% and 77.7% respectively. In contrast, Marine & Aviation has seen an increase in the reinsurance premium in recent years, increasing from 55%–56% in 2021–2022 to 60% in 2023. The Liability–General line has seen the decrease in its reinsurance portfolio dropping from 84.3% in 2019 to 65.3% in 2023. The Credit & Suretyship business has experienced substantial RI Premium against the Gross Premium paid, with weighted average of 86.1%, although there is a decrease in reinsurance premium in 2023.

Excluding Motor, Accident & Health and Agriculture business, the reinsurance premiums ratio stand at 71.6% as the overall average over the last five years increased. The above assessment indicates that reinsurance business has been increasing in the recent years, especially for Property & Fire Damage, Engineering and Marine Aviation Transport business as these are the primary sources of reinsurance business, resulting in cashflow outgo.

### **REINSURANCE CLAIMS TO GROSS CLAIMS RATIOS**

The reinsurance claims to gross claims ratio reflects the proportion of an insurer's total claims that are recoverable from reinsurance. It indicates how much of the insurer's claims exposure is mitigated through reinsurance arrangements. The lower ratio indicate that the insurer retains a large portion of the risk itself, leading to greater volatility in financial results due to claims fluctuations. Based on the overall assessment, the reinsurance of total portfolio over the last five-years average stands at 41.3% and has remained in the range of 36.7% to 46.6% during 2019 to 2023, as shown in the total bars in the chart below.



Figure 10 - RI Claims to Gross Claims Ratio

Looking at the reinsurance for Property & Fire, Engineering has higher reinsurance claim ratio as the average of 5 years stands at 76.3% and 69.6% respectively. The Property & Fire business experienced higher RI claims payouts during 2022, however has remained near average. On the other hand, the RI claims recovery were in a decreasing trend except 2023 where the RI claims recovery spiked to 93.8%. The Liability–General and Marine Aviation & Transport has seen variation in RI claims recoveries due to inherent claim nature with five–year average standing at 67.8% and 63.3% respectively.

For Credit & Suretyship business, there was a declining trend in RI Claims recovery from 2019 to 2021, however in 2022 (116.5%) and 2023 (114%) observed higher RI claims recoveries (up from 66.9% in 2021) due to economic instability leading to claims triggers. Similar to Credit & Surety business, the Miscellaneous business has experienced decreasing trend from 64.7% in 2019 to 36.1% in 2022, however RI claims recovery increased for the 2023 resulting in five-year weighted average of 54%. Agriculture insurance also experienced spikes to the tune of 70% in 2021 and 2023 due to flood and climate-related claim triggers. The Motor (3.9%) and Accident & Health (4.2%) did not experience much of RI claims recovery as the reinsurance arrangements in these business lines have been low.

### RI COMMISSIONS TO RI PREMIUMS RATIO

The Reinsurance commission to reinsurance premium ratio is used to evaluate the RI commissions paid by reinsurer to insurer against the premium paid by the insurer to the reinsurer. A higher ratio indicates that a larger portion of reinsurance premium is going towards paying out the RI commission to insurance companies. However, there could be the impact of lower business as well in the case of Motor and Accident & Health. The RI commissions support the insurers with cashflows and its costs whereas higher RI commission paid by reinsurer attracts the placement of RI business. On assessing the overall portfolio, the five-year weighted average at 7.9%, and have been decreasing from 9.8% in 2019 to 7.0% in 2023. This could be also due to the increase in the RI premiums as observed.

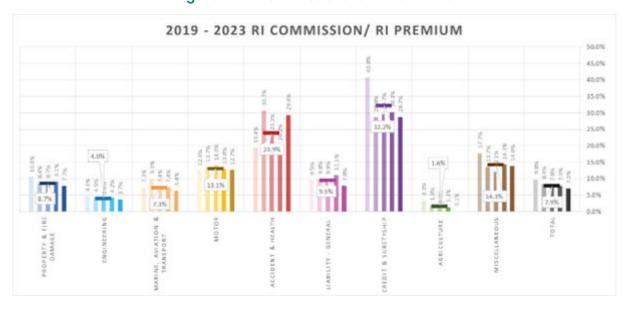


Figure 11 - RI Commissions to RI Premiums

The lines of business such as Property & Fire Damage, Engineering, Marine & Aviation has relatively standard RI commission ratio as the average for 5 years stands at 8.7%, 4.0% and 7.3% respectively. The Agriculture business has held low RI commissions due to higher risk in nature and undeveloped RI market amidst climate change, reducing from 3.3% in 2019 to 0.1% to 2023. These reasons of decrease could be due to withdrawal of RI capacity.

Furthermore, Motor and Accident & Health businesses have higher ratios due to base being quite low as there is no substantial reinsurance support offered. The Credit & Suretyship RI commission ratio has started decreasing because of higher business being written but the commission ratio is higher than average market.

### REINSURANCE COMMISSIONS TO GROSS COMMISSIONS RATIO

The reinsurance commission to gross commission ratio evaluates reinsurance commission support against the commission paid out on gross side. The reasons of RI commission being paid by reinsurers include support in direct acquisition costs, administrative costs and also profitability commissions. A lower ratio implies reinsurance commissions are low compared to gross commissions, as in the case of Motor, Accident & Health and Credit & Suretyship, indicating the business is undertaken by insurance. Ratios over 100% means that insurers are earning higher RI commission income than gross commissions paid and is supporting its cashflows requirements. Overall, the five-year average ratio stands at 60.9%, reflecting that for every PKR 100 commission paid, the insurer has received PKR 61 on average over the last five years. However, this ratio has been decreasing from 67.2% to 61.8% due to squeeze on RI profitability globally.

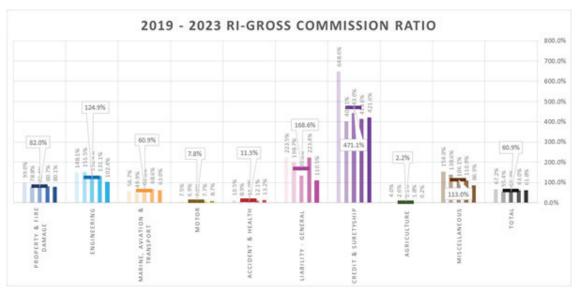


Figure 12 - RI Commissions to Gross Commissions

The Credit and suretyship business has experienced substantial RI Commissions against the Gross Commissions paid, with a weighted average of 471%, although this has stabilized over the last four years. The Agriculture business's RI commissions to gross commissions are low due to lower reinsurance capacity. They have reduced from 4% to 0.2% in the last five years, which is consistent with other RI observations discussed previously.

As for Property & Fire, Engineering, Marine Aviation & Transport, Liability – General and Miscellaneous lines, the reinsurance commissions received are quite high (with five-year weighted averages of 82%, 124.9%, 60.9%, 168.6% and 113.0% respectively) but has been on the downward trend.

# 5. INTERACTION BETWEEN FINANCIAL HEALTH & REINSURANCE

### **BALANCE SHEET & SOLVENCY ASSESSMENT**

Balance sheet health is the first and foremost criterion for gaining quality reinsurance arrangements for the reinsurers. This effectively means the healthier the company and its capital size, the better terms of reinsurance, support and capital given to the insurance company. However, this can also be detrimental for reinsurers as insurers can leverage internal balance sheets by retaining more. The primary area of validation is paid-up capital and shareholders' equity, on which both parties assess their exposure levels in terms of sums insured, either to retain more business or to cede more business, depending on internal business objectives (discussed in Table 1).

The following table provides a snapshot of selected companies' balance sheet positions, net admissible assets and solvency positions from 2019 to 2023.

PKR m	2019	2020	2021	2022	2023
Total Assets	219,224	237,228	271,103	332,786	406,708
Total Liabilities	123,639	133,766	168,835	215,011	267,548
Total Shareholders' Equity	95,584	103,462	102,268	117,775	139,160
Total Paid Up Capital	14,354	14,611	14,611	14,696	15,257
Net Admissible Assets	54,050	60,151	61,512	65,688	76,333
Required Solvency Margin	9,039	8,971	9,789	12,206	14,636
<b>Excess on Solvency Margin</b>	45,011	51,180	51,722	53,482	61,697
<b>Excess Solvency Ratio</b>	498.0%	570.5%	528.4%	438.2%	421.5%

Table 8 - Balance Sheet & Solvency Assessment

Total assets have shown consistent growth from PKR 219.2b in 2019 to PKR 406b in 2023, with a CAGR of 13.1%, mainly because of retained earnings from a year-on-year basis and growth in investment portfolios. The liabilities have also grown by a CAGR of 16.7%, increasing from PKR 123.6b in 2019 to PKR 267.5b in 2023 and the reasonings for such increase is due to increasing business resulting in higher technical reserves and payables.

Furthermore, the shareholders' equity increased from PKR 95.6b to PKR 139.2b over the five years, resulting in a CAGR of 7.8%, however, the paid-up capital has increased by 6.3%, from PKR 14.4b in 2019 to PKR 15.3b in 2023.

Net Admissible Assets have shown moderate growth from 2019 to 2022, followed by a significant increase in 2023, possibly due to movement in investment portfolio to safer investments such as treasuries and deposits, which have lower inadmissibility impacts resulting in improvement in assets base. The Required Solvency Margin remained stable in 2019 and 2022, however, increased thereon at a 3-year CAGR of 17.7%.

The Excess Solvency Ratio decreased over time from 528.4% to 421.5%, despite a 13.7% increase from 2019 to 2020. Despite this reduction, the excess capital indicates that the balance sheet has

been under-utilized in terms of business expansion, reinsurance protection, capital and investments from the risk management perspective.

This dramatic reduction suggests that although the company maintains a solid excess on its solvency margin, the margin is growing at a slower rate compared to the increase in the required solvency margin. This trend might indicate that while the company is still in a strong financial position, the gap between its assets and liabilities is narrowing relative to the risks.

### LEVERAGE OF GROSS WRITTEN PREMIUMS AND REINSURANCE WRITTEN PREMIUMS

The leverage ratios reflect the ability of insurers to expand business and reinsurance against the paid-up capital and shareholders' equity. This reflects the insurers' ability and willingness to stretch their balance sheets against insurance risks to expand the business and/or cede reinsurance.

PKR m and Multiples	2020	2021	2022	20	23
Gross Written Premiums	77,809	80,402	98,286	124,799	160,367
Reinsurance Written Premiums	39,954	38,476	49,913	68,444	96,876
GWP / Paid Up Capital	5.42	5.50	6.73	8.49	10.51
RI WP / Paid Up Capital	2.78	2.63	3.42	4.66	6.35
GWP / Shareholders' Equity	0.81	0.78	0.96	1.06	1.15
RI WP / Shareholders' Equity	0.42	0.37	0.49	0.58	0.70

Table 9 - Leverage of Gross Written Premiums and Reinsurance Written premiums

The GWP / Paid Up Capital ratio increased from 5.42x in 2019 to 10.51x in 2023, reflecting a CAGR of 14.2% over the five years considered. This indicates a significant improvement in the industry's ability to write more premiums on the paid-up capital base. The increasing trend suggests that the insurers are effectively using their capital to write more policies, reflecting growth and potentially better market positioning or expansion in underwriting capacity.

A similar ratio for RI is increasing from 2.78x to 6.35x, reflecting a CAGR of 17.9% over the same period. This indicates that the reinsurance ceded growth against paid-up capital has been more than a gross premium expansion on the paid-up capital, implying more reinsurance has been taken by insurers to preserve their capital base.

GWP / Shareholders' Equity from 2019 to 2023 stretched from 0.81 to 1.15 respectively, indicating improved equity utilization, expanding its business operations or taking advantage of favorable market conditions. Anything below 1 indicates that the shareholder's equity was underutilized; however, this trend has changed during the period as insurers are now leveraging more on shareholders' equity in the recent two years.

However, consistent with the RI-to-paid-up capital ratio, a similar trend is observed in premium to shareholders' equity ratio where the reinsurance leverage has increased at a CAGR of 10.8% from 0.42x in 2019 to 0.70x in 2023 against gross leverage with a CAGR of 7.3%, from 0.81x in 2019 to 1.15x in 2023.

These ratios reflect the importance of having a strong capital and equity base on which the reinsurers place business with the companies. The higher the paid-up capital, the more the reinsurance business can be retained given the ability to digest more claims and losses. This certainly has to be linked with the insurer's risk appetite on the underwriting activities and the lines of business they are engaged with, resulting in a need to balance the business strategy on core business activities of insurance and investments management.

### REINSURANCE PAYABLES & RECEIVABLES

The reinsurance payables are amounts that the insurance company owes to the reinsurer(s) and predominantly include reinsurance premiums and adjustment premiums on treaties/facultative placements and reinsurance share of claims salvage and subrogation recoveries (if any) and RI commissions-refunds due to poor performance. The RI receivables reflect amounts that reinsurers owe to insurance companies and typically include reinsurance claims and RI commissions.

This information has been received from the participating companies and covers only the reinsurance balances and does not cover other payables or receivables such as agents, policyholders and others. The ratios are derived from shareholders' equity to see how much exposure is taken by shareholders on payables and receivables from the insurance business activities for the last five years and are segregated for PRCL, local industry and foreign reinsurers.

PKR m	2019	2020	2021	2022	2023
Reinsurance Payables _ PRCL	6,208	12,313	12,164	14,599	21,546
Reinsurance Payables _ Other Local	1,472	1,674	2,279	3,230	8,840
Reinsurance Payables _ Foreign	10,241	9,532	12,520	19,655	16,473
Reinsurance Payables _ Total	17,921	23,519	26,963	37,484	46,859
Reinsurance Payables Ratio _ PRCL	6.5%	11.9%	11.9%	12.4%	15.5%
Reinsurance Payables Ratio _ Other Local	1.5%	1.6%	2.2%	2.7%	6.4%
Reinsurance Payables Ratio _ Foreign	10.7%	9.2%	12.2%	16.7%	11.8%
RI Payables Ratios	18.7%	22.7%	26.4%	31.8%	33.7%

Table 10 - Reinsurance Payables

The total RI payables of considered companies increased from PKR 17,921m to PKR 46,859m over the past five years, with CAGR of 21.2%. As at year-end 2023, the RI payables of selected companies to PRCL, other local insurers and foreign reinsurers stand at PKR 21,546m, PKR 8,840m and PKR 16,473m respectively. As a percentage of equity, PRCL payables stand highest in the year 2023 at 15.5% (due to issues discussed below), followed by foreign reinsurers at 11.8% and then local companies at 6.4%. The reasons for increase in foreign reinsurers payables are limitations on dollar-repatriation to reinsurers, which also lead to interest charge for non-payments as per reinsurance arrangements, however, support from international reinsurers is extended to local insurance companies.

PKR m 2019 2020 2021 2022 2023 Reinsurance Receivables \_ PRCL 9,676 22.112 24,696 25,735 29,682 Reinsurance Receivables Other Local 570 831 839 333 1,889 Reinsurance Receivables \_ Foreign 890 2.653 2.079 1.361 3.598 Reinsurance Receivables \_ Total 10,900 24,043 28,180 31,222 32,600 21.4% 24.1% Reinsurance Receivables PRCL 10.1% 21.9% 21.3% Reinsurance Receivables \_ Other Local 0.3% 0.6% 0.8% 1.6% 0.6% 0.9% 2.6% Reinsurance Receivables \_ Foreign 1.3% 3.1% 1.5% Reinsurance Receivables \_ Total 11.4% 23.2% 27.6% 26.5% 23.4%

Table 11 - Reinsurance Receivables

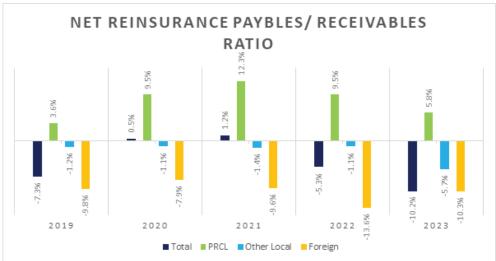
The total receivables of the considered companies increased from PKR 10,900m in 2019 to PKR 32,600m in 2023, with five-year CAGR of 24.5%. As at year-end 2023, the RI receivables of selected companies from PRCL, other local insurers and foreign reinsurers stand at PKR 29,682m, PKR 839m and PKR 2,079m respectively. Major part of receivables come from PRCL (circa. 91%), causing settlement issues on payables and between different parties. The receivables from foreign reinsurers are normally settled on timely basis, reflected from low RI receivables.

The table and the chart below reflect net RI payables or receivables for each of the five years, reflecting relationship of movement in the payments between PRCL, other local insurers and foreign reinsurers. Negative figures reflect payables by companies and positive figures reflect receivables to companies.

Table 12 - Net Payables / Receive
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PKR m	2019	2020	2021	2022	2023
Reinsurance Net _ PRCL	3,468	9,799	12,532	11,136	8,136
Reinsurance Net _ Other Local	-1,139	-1,104	-1,448	-1,341	-8,001
Reinsurance Net _ Foreign	-9,351	-8,171	-9,867	-16,057	-14,394
Reinsurance Net _ Total	-7,021	524	1,217	-6,262	-14,259
Reinsurance Net Ratio _ PRCL	3.6%	9.5%	12.3%	9.5%	5.8%
	-1.2%	-1.1%	-1.4%	-1.1%	-5.7%
Reinsurance Net Ratio _ Foreign	-9.8%	-7.9%	-9.6%	-13.6%	-10.3%
	-7.3%	0.5%	1.2%	-5.3%	-10.2%

Figure 13 - RI Net Payables / Receivables Ratio



On totality, the industry has payables of PKR 14,259m (PRCL: receivable of PKR 8,136 and payables of Other Local: PKR -8,001m and Foreign RI: -14,394m) as at year-end 2023. In 2020 and 2021, this situation was much better as payables and receivables were in balance to the companies as observed in the chart above. However this situation has worsened much more in 2022 and 2023 due to impact of various macroeconomic factors such as increase in deposit rates (where companies are cashing in higher investments returns), restrictions on repatriation of dollars to reinsurers as well as lack of adequate data recording mechanisms between PRCL and the industry (due to ineffective reconciliation balances and reinsurance bordereau of premiums and claims recording at seriatim exposure levels of insurance companies and reinsurers).

This phenomenon is not recent and in order to keep the RI payables/RI receivables in check, it is critical to hold a systematic repository housed to either IAP or regulatory body, assessment of premiums and claims settlements on holistic basis on financial planning including aging assessment for gross premiums and management of investments on timely basis for all companies.

Furthermore, it is critical to understand payables and receivables from gross side perspective in tandem with reinsurance side to ensure that the aging is timely and matched from the holistic business management perspective. However, this matter should be addressed by companies when IFRS 17 is implemented which requires gross and reinsurance payables and receivables to be addressed within insurance and reinsurance service income and insurance and reinsurance expenses. This would incorporate credit risk impact within company's financial position and profitability.

# 6. REINSURANCE PERFORMANCE ANALYSES

### PERFORMANCE RATIO ANALYSES

This section discusses the reinsurance business performance analyses from the company's perspective. It considers the reinsurance loss ratio and reinsurance commission ratio and subsequently sum of the two, defined as reinsurance combined ratio. The RI loss ratio is ratio of RI claims incurred to RI earned premiums whereas RI Commissions ratio is a ratio of RI Commissions to RI earned Premiums. Note that the RI combined ratio here only considers commission component and not expenses components as companies do not allocate underwriting and management expenses to the reinsurance component given the arrangements.

The analyses below are carried out as at 31 December 2023 for all years and hence, it reflects the updated position of unfolding experience. For example, for the year 2020 the experience of claims accounting for that year up until its 2023 development.

The charts below represent 5-year historical losses and commissions ratios for each year in bars and 5-year weighted average in callouts.

#### **RI LOSS RATIO**

From the company's perspective, the RI Loss ratio is used to evaluate the reinsurance losses share recovered to reinsurance earned premiums. The ratio above 100% indicates that reinsurance recoveries on claims are higher than reinsurance earned premiums, which is beneficial for the company as it is recovering more from reinsurer than paying it. The Figure 14 below represents the historical RI Loss Ratios from 2019 – 2023.

On totality basis, the RI loss ratio has increased from 65% in 2019 to 94.6% in 2023, with a spike in losses in 2022 emanating primarily from Property & Fire Damage losses in 2022 and 2023. Over the past 5-years, the RI loss ratio reported by companies has been around 90%.

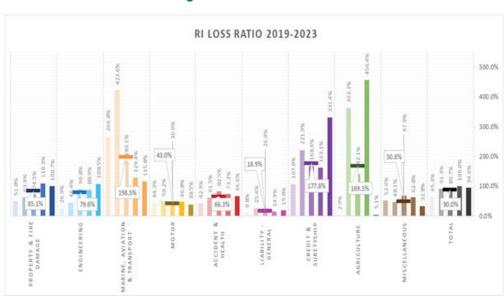


Figure 14 - RI Loss Ratio

The table below represents the results reflected in the chart above.

Table 13 - RI Loss Ratios

LOB	2019	2020	2021	2022	2023	5 Years
Property & Fire Damage	51.8%	63.9%	74.5%	110.3%	100.7%	85.1%
Engineering	26.9%	46.4%	90.8%	88.9%	108.5%	79.6%
Marine, Aviation & Transport	266.8%	423.6%	183.1%	129.4%	115.8%	198.5%
Motor	44.3%	50.2%	36.0%	46.8%	38.5%	43.0%
Accident & Health	42.9%	61.5%	82.5%	73.3%	66.6%	66.3%
Liability - General	9.8%	25.6%	26.0%	14.9%	19.8%	18.9%
Credit & Suretyship	107.0%	221.9%	168.6%	163.1%	331.4%	177.8%
Agriculture	2.9%	363.3%	142.1%	456.4%	5.1%	169.3%
Miscellaneous	52.6%	48.1%	67.9%	62.8%	32.8%	50.8%
Total	65.3%	91.3%	89.7%	100.0%	94.6%	90.0%

The lines of business such as Motor, Liability – General and Accident & Health has experienced lower RI loss ratio which reflects a favorable profitability outlook as the average of 5 years stands at 43.0%, 18.9% and 66.3% respectively. It is important to note that Motor and Accident & Health markets have reinsurance business. The Engineering and Property & Damage business RI loss ratios with a weighted average of 5-year weighted average of 79.6% and 85.1% respectively.

Furthermore, Marine & Aviation, Credit & Suretyship and Agriculture have higher ratios due to the higher losses relative to the earned premium. In Agriculture, there has been more losses in 2022 due to flood. The extensive damage caused significant increase in insurance claims as farmers sought compensation for their losses, leading to elevated loss ratios for agricultural insurers. Marine & Aviation has a higher loss ratio with a decreasing trend in the recent years dropping from 423.6% in 2020 to 115.8% in 2023 with the weighted average at 198.5% over the 5 years. In Credit & Suretyship, there has been an increasing trend in the recent year with a loss ratio increasing from 163.1% in 2022 to 331.4% in 2023 due to the economic fluctuations and market conditions contributing to higher loss ratios as the weighted average stands at 177.8% for the past 5 years.

### **RI COMMISSION RATIO:**

The RI commission ratio indicates commission paid by reinsurer to the company for placing reinsurance premiums to it. This RI commission ratio is critical since the companies rely on reinsurance commission income for P&L management and is a one of the key sources of revenue. A lower ratio suggests that lower RI Commissions are paid by reinsurer to the insurer for the premiums ceded.

On assessing overall portfolio, the five years average stood at 11.0% and there has been downward trend from 13.2% in 2019 to 10.5% in 2023. This is mainly due to denominator effect with RI earned premiums increasing from 2019 due to impact of asset revaluations.

Table 14 - RI Commissions Ratio

LOB	2019	2020	2021	2022	2023	5 Years
Property & Fire Damage	13.6%	11.5%	12.5%	11.7%	11.0%	11.9%
Engineering	5.8%	4.8%	4.2%	3.9%	6.3%	4.9%
Marine, Aviation & Transport	14.9%	13.8%	14.0%	14.3%	13.0%	13.9%
Motor	12.9%	15.3%	16.5%	14.9%	15.1%	14.9%
Accident & Health	17.8%	28.2%	20.6%	16.7%	23.6%	20.2%
Liability - General	14.8%	13.0%	13.6%	11.6%	10.7%	12.8%
Credit & Suretyship	37.1%	27.6%	31.8%	24.6%	31.5%	30.8%
Agriculture	2.1%	2.9%	0.6%	0.9%	0.0%	1.3%
Miscellaneous	18.4%	12.9%	15.1%	15.4%	11.8%	14.5%
Total	13.2%	10.7%	11.2%	10.2%	10.5%	11.0%

Figure 15 - RI Commissions Ratio



The lines of business such as Engineering and Agriculture has significantly low RI commission ratio with the weighted average standing at 4.9% and 1.3% respectively for 5 years but with an increasing trend in Engineering line in the recent year escalating from 3.9% in 2022 to 6.3% in 2023. Whereas, Property & Damage, Marine & Aviation, Motor and Liability has standard commission ratios as the average for 5 years stands at 11.9%, 13.9%, 14.9% and 12.8% respectively.

Moreover, Credit & Suretyship has relatively higher RI commission ratios escalating in the recent year from 24.6% in 2022 and 31.5% in 2023 with a weighted average of 30.8% for 5 years. Accident & Health has shown an increase in RI commission ratio in the recent years rising from 16.7% in 2022 to 23.6% in 2023 with a weighted average at 20.2 % for 5 years.

The smaller companies are heavily reliant upon RI Commissions as the business is mostly reinsured. This can be a challenge for companies' sustainability as they are not diversified enough to maintain their revenues streams or to keep other sources of income optimized and materialized. As a result, dependence on reinsurance commissions is risky.

### RI COMBINED RATIO:

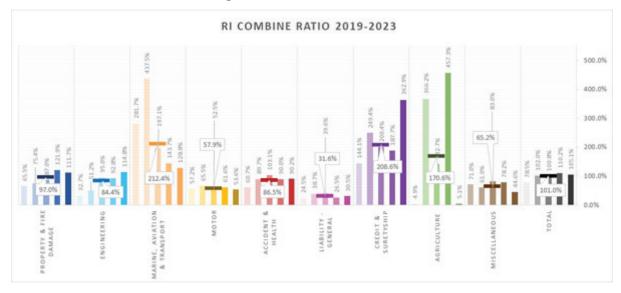
The RI combined ratio measures the performance of the reinsurance operations and is calculated by adding the loss ratio to the commission ratio. This helps insurer assess how well their reinsurance operation are performing, separate from their direct insurance activities.

A ratio above 100% indicates profitability, indicating that the company receives more in reinsurance claims and commissions than paying premiums to reinsurers. As can be seen from table and figure below, this has been volatile for different lines of business. On assessing overall portfolio, the five years average at 101.0% but a recent two years witness a downward trend from 110.2% in 2022 to 105.1% in 2023.

Table 15 - RI Combined Ratio

LOB	2019	2020	2021	2022	2023	5 Years
Property & Fire Damage	65.5%	75.4%	87.0%	121.9%	111.7%	97.0%
Engineering	32.7%	51.2%	95.0%	92.8%	114.8%	84.4%
Marine, Aviation & Transport	281.7%	437.5%	197.1%	143.7%	128.8%	212.4%
Motor	57.2%	65.5%	52.5%	61.6%	53.6%	57.9%
Accident & Health	60.7%	89.7%	103.1%	90.0%	90.2%	86.5%
Liability - General	24.5%	38.7%	39.6%	26.5%	30.5%	31.6%
Credit & Suretyship	144.1%	249.4%	200.4%	187.7%	362.9%	208.6%
Agriculture	4.9%	366.2%	142.7%	457.3%	5.1%	170.6%
Miscellaneous	71.0%	61.0%	83.0%	78.2%	44.6%	65.2%
Total	78.5%	102.0%	100.8%	110.2%	105.1%	101.0%

Figure 16 - RI Combined Ratio



Furthermore, the Marine & Aviation line has a significantly higher 5 years average standing at 212.4% with a ratio declining in the recent years from 437.5% in 2020 to 128.8% in 2023. The Credit & Suretyship and Agriculture line has relatively higher weighted average for 5 years standing at 208.6% and 170.6% respectively with a notable decrease in the Agriculture line in the recent year declining the ratio from 457.3% in 2022 to 5.1% in 2023.

The line of business such as Motor and Liability-General are more profitable as their weighted average for 5 years stands at 57.9% and 31.6% respectively. Whereas, the Property & Damage, Engineering and Accident & Health are also profitable as their 5 years average stands at 97.0%, 84.4% and 86.5% respectively.

### 5-YEAR REINSURANCE INFLOWS & OUTFLOWS

The analyses covered here looks at five-year (2019 – 2023) cumulative performance of RI business from the insurance company's perspective, looking at outflows and inflows of reinsurers. This helps in assessing the long-term assessment of reinsurance business written by the companies to ascertain the reinsurance performance. Full annual year assessment of the same exercise is reflected in Appendices.

In this assessment, we are illustrating whether the company has gained profitability from reinsurance activities in light of solvency margins it has gained. The immediate focus is to look for outflows and inflows by lines of business, along with solvency benefits achieved from RI arrangements, provides an overall picture on companies' reinsurance performance. Solvency benefit is determined using existing solvency calculations of SECP, however considered on RI component only with limits being applied.

LOB (PKR m)	RI Earned Contributions (-)	Total RI Claims (+)	Total RI Comm (+)	Net RI Outflow / Inflow (-)/(+)	RI Solvency benefit (+)	Total RI Surplus / (Deficit)
Property & Fire Damage	-87,355	74,336	10,424	-2,596	8,736	6,140
Engineering	-40,954	32,587	1,989	-6,378	4,095	-2,283
Marine, Aviation & Transport	-17,561	34,858	2,449	19,747	1,918	21,665
Motor	-4,531	1,946	677	-1,908	453	-1,455
Accident & Health	-2,117	1,404	428	-285	212	-73
Liability - General	-5,641	1,064	720	-3,857	564	-3,293
Credit & Suretyship	-1,506	2,677	464	1,635	262	1,897
Agriculture	-441	747	6	311	44	356
Miscellaneous	-14,236	7,228	2,058	-4,950	1,424	-3,526
Total	-174,342	156,847	19,215	1,719	17,707	19,426

Table 16 - Five Year Reinsurance Inflows & Outflows

Over the five year cumulative periods, the total outflows for insurance companies stand at PKR174.3 b whereas the total inflows stand at PKR 176.1 b (RI Claims of PKR 156.8 b and RI Commissions of PKR 19.2 b, resulting in income of PKR 1.8 b for insurance companies.) Adding to this, a solvency benefit savings of PKR 17.7 b, results in total company savings of PKR 19.4 b over the last five years. Business-wise analyses is discussed below.

- Property & Fire Damage: Over the five-year period from 2019 to 2023, the RI claims amounting to PKR 74,336 m were received along with total RI commission of PKR 10,424 m, in comparison to PKR 87,355 m earned premiums paid out from companies. This produced a net outflow to reinsurers of PKR 2,596 m before accounting for solvency requirements, indicating a loss to companies on overall bases. However, after considering the solvency benefit of PKR 8,736 m, the deficit turns to surplus of PKR 6,140 m.
- Engineering: RI claims totalling PKR 32,587 m were recovered along with RI commission of PKR 1,989 m. Whereas the outgo of RI earned premiums was PKR 40,954 m, resulting in total net outflow of PKR 6,378 m before accounting for solvency requirements. After incorporating the solvency benefit adjustment of PKR 4,095 m, the company's paid out PKR 2,283 m to reinsurers.

- Marine, Aviation & Transport: RI claims amounting to PKR 34,858 m were recovered along with RI Commission of PKR 2,449 m, whereas the outflows were around PKR 17,561 m. This resulted in a surplus of PKR 19,747 m. After accounting for the solvency requirement of PKR 1,918 m, the surplus increased to 21,665 m. This is an indication that over the last five years, MAT business experienced substantial losses for reinsurers, making insurers more profitable.
- Motor: As there is a very low reinsurance available for this line in the market, there has been a
  deficit of PKR 1,908 m, stemming from RI earned premiums outflow of PKR 4,531 and RI claims
  recoveries and RI commissions income of total PKR 677 m. Topping up with solvency benefit
  impact of PKR 453 m over the last five years, the companies paid out PKR 1,455 m to reinsurers in
  aggregate.
- Accident & Health: Similarly, reinsurance is low in this segment. Over the five-year period (2019 2023), RI claims recovered amounted to PKR 1,404 m with RI commission of PKR 428 m, against an outflow of RI earned premiums of PKR 2,117 m. This resulted in excess payout of PKR 285 m. Considering the solvency benefit, of PKR 212 m, the loss reduced to PKR 73 m.
- Liability-General: During the same period, RI claims and RI Commissions inflows were around PKR 1,064 m and PKR 720 m respectively, whereas RI earned premium outgo amounted to PKR 5,641. This has resulted in total net outflow of PKR 3,857 m and considering the solvency benefit of PKR 564 m, there overall outflow of PKR 3,293 m of the companies.
- Credit & Suretyship: On the other hand, this business experienced surplus of PKR 1,897 m. This is due to RI claims recovery, RI commission income and solvency benefit totaling PKR 3,403 m versus RI earned premiums outgo of PKR 1,506 m.
- Agriculture: Albeit low reinsurance and smaller business size (as discussed in detail in previous sections), the insurance companies have recovered more than they have shared in totality. Before and after solvency benefit impact stands at PKR 311 m and PKR 356 m respectively, reflecting companies have earned surplus on these lines.
- Miscellaneous: In the last five years, companies have had deficit of PKR 3,526 m post solvency benefit impact and the pre-solvency impact is also a deficit of PKR 4,950 m. This is because of the higher reinsurance earned premium paid out (PKR 14,236) compared to total recoveries from reinsurers (of PKR 7,228 m in RI claims and PKR 2,058 m in RI commissions).

It is important to note that most of the reinsurance arrangements are made through bouquet and there are generally cross-subsidies between lines of business considered above in order to make the business profitable. It is critical to understand how the reinsurance arrangements are being considered with the solvency benefit through RI.

# 7. CONCLUSIONS, KEY RECOMMENDATIONS & WAY FORWARD

### **CONCLUSIONS**

### Table 17 - Summary Conclusions

Limited Retention Capacity	Many insurance companies in Pakistan struggle with low retention capacity, making them heavily dependent on reinsurance. Optimizing reinsurance helps increase their risk-bearing capacity, enabling them to handle larger claims without financial strain.
Outflow of Premiums on Major Business Lines	A significant portion of premiums is ceded to foreign reinsurers, leading to a substantial outflow of capital. Reinsurance optimization can reduce this by retaining more risk domestically or securing better terms from international reinsurers, ultimately benefiting the local market.
Undefined Risk Appetite	Without a clear risk appetite for reinsurance, insurers may over-reinsure or under-reinsure, either increasing costs or exposing themselves to excessive risk. Optimization aligns reinsurance strategies with the company's specific risk tolerance for balanced protection and cost efficiency.
Reinsurance Placement by the Same Brokers Handling Gross Business	The common practice of using the same brokers for both gross business and reinsurance placement creates potential conflicts of interest. Optimizing this process by separating roles or increasing oversight ensures reinsurance placements are made in the insurer's best interest.
Routine Reinsurance for Commission Income	Reinsurance is often approached as a routine activity focused on commission income rather than risk management. Optimization encourages a more strategic approach, reviewing existing reinsurance relationships to prioritize effective risk management over traditional commission-driven placements.
Lack of Dynamic Financial Analysis (DFA)	Many insurers overlook DFA, which is crucial for evaluating how reinsurance impacts financial health under different scenarios. Introducing DFA into reinsurance strategies ensures that programs are resilient and cost-effective, even under changing market conditions or catastrophic events.
High Exposure to Catastrophic Events	Pakistan is highly exposed to natural disasters like floods and earthquakes, making reinsurance essential. Reinsurance optimization ensures adequate coverage for high-risk exposures, preventing severe financial consequences from catastrophic events.
Tightening Reinsurance Market	With the global reinsurance market becoming more restrictive due to economic and environmental factors, optimizing reinsurance is critical. It allows insurers to negotiate better terms, access alternative capital, and avoid being exposed to unfavorable market conditions.

### **KEY RECOMMENDATIONS**

Table 18 - Key Recommendations

#	Area	Description
1	Reconciliation of Reinsurance Systems	Companies must ensure that their reinsurance systems are fully reconciled and aligned with their financial systems and adhere to reinsurance arrangements' terms and conditions for submitting the required data (premiums and claims bordereaux) by adopting international standards and best practices.
		Accurate reconciliation on a timely basis mitigates the reinsurance discrepancy issues between local and foreign reinsurers and insurance companies. Accurate data recording would assist in digitization, ensuring compliance and enhancing trust in the processes between stakeholders. This would also assist in optimal reinsurance monitoring and management from the risk management perspective.
		This process will also streamline reinsurance's administrative and operational aspects, leading to more efficient operational handling and better risk management.
2	Open Local Reinsurance Market & establish more	Expanding and liberalising the local reinsurance market is essential for fostering competition and innovation. A more open market encourages competitive pricing, better terms, and enhanced coverage while reducing dependence on foreign reinsurers. A robust domestic reinsurance market also fosters local expertise and capacity, ultimately strengthening the entire insurance ecosystem in Pakistan.
	reinsurers.	Regulatory bodies should actively promote the establishment of new reinsurance companies in the local market. The market has tremendous potential for reinsurance, especially for retakaful arrangements, which would allow diversification of risk-bearing capacities, improve competition, provide local insurers with more reinsurance, reduce financial strain on the economy because of repatriation of forex reserves, and create a more dynamic insurance landscape.
3	Adequate Paid-Up Capital	Maintaining adequate paid-up capital is fundamental to an insurer's financial health and regulatory compliance. Sufficient capitalization enables companies to absorb larger risks, negotiate more favorable reinsurance contracts, and withstand market fluctuations. Moreover, strong capital reserves improve the company's standing with rating agencies and reinsurers, enhancing credibility and negotiating power.
		In this regard, the SECP policy team has prepared a concept paper of increasing the paid-up capital of life and non-life companies to increase it up-to PKR 3,000m and PKR 2,000m respectively by 2028. This is in line with SECP's 5-year strategic plan "Journey to an Insured Pakistan."
4	Segmented Underwriting for Better Reinsurance	Adopting a segmented approach to underwriting is crucial for refining risk assessment and categorization. By accurately profiling risks, companies can secure more precise and cost-effective reinsurance coverage, reducing overall expenses and optimizing risk transfer. This segmentation ensures that insurers can match specific risks to appropriate reinsurance programs, minimizing exposure while maximizing reinsurance benefits.
4	Align Existing Ratings	It is vital to align underwriting ratings between gross and reinsurance (RI) levels to ensure that reserves, particularly for catastrophic events, are appropriately maintained. This alignment helps preserve solvency and guarantees that insurers are well-prepared for unforeseen events. Properly aligned ratings also enhance transparency with reinsurers and stakeholders, ensuring that both parties are accurately assessing and pricing risks.

Table 18 - Key Recommendations

#	Area	Description
6	Construct a National Reinsurance Pool	The feasibility of establishing a national reinsurance pool should be explored. A national pool would encourage higher retention levels, enabling local insurers to retain more premiums and manage larger risks collaboratively. This would reduce reliance on external reinsurers, keeping more funds within the country, and improving the overall financial strength of the local insurance industry. Such a pool could also serve as a buffer during catastrophic events, distributing risk more evenly across participating insurers.
7	Continuous Review of Reinsurance Performance & Conducting Reinsurance Optimization Exercise.	Globally Companies should conduct internal technical studies on reinsurance market to assess reinsurance optimization strategies in light of business strategies, lines of business, capital and solvency position, treaty and facultative arrangements limits and sub-limits, distribution fittings on frequency and severity or on aggregate claims as well as localized exposure curves. The usual way to go about this approach is to evaluate the following areas:  • Reinsurance data (premiums and claims) gather and reconciliation process on financial and underwriting year,  • Solvency, Risk appetite and tolerance review for insurance risk, market (investment) risk, credit risk, catastrophe risk and operational risks  • Treaty and facultative arrangements monitoring and Reinsurance Panel monitoring.  • Exposure management (city/district, provincial and country level),  • Performance review of treaty and facultative arrangements over the long-term period to ensure holistic consideration  • Scenario-testing analysis and sensitivity testing  • DFA review and basis for modelling on loss events (simulation-based analysis)  • Results and recommendations for appraisal and engagement to Board.
8	Need to review Treaty & Facultative Placements	The internal processes of approvals for Facultative and Treaty placements need to be revisited to assess what, where, when and how the businesses and risks are being insured. This should have a systematic comparison on risk positions on reinsurance retention previous year, this year and the next year to ensure excess business is not parked outside the country. This would need a complete overview of reinsurance placements approval process.

### **WAY FORWARD**

Table 19 - Way Forward

#	Action Items	Stakeholders	Timelines
1	Industry Consultation through Roundtable to discuss the findings of the Reinsurance Performance Report	Securities & Exchange Commission of Pakistan	Short-term
	Discuss issues relating to Reinsurance matters of	State Bank of Pakistan	
	the industry including placement of re-takaful and reconciliation of outstanding payables and receivables	Ministry of Commerce	
		Pakistan Reinsurance Company Limited	
		International Reinsurance Operators	
		Insurance Brokers	
		Insurance Association of Pakistan	
		Pakistan Society of Actuaries	
2	Reconciliation of Outstanding Payables/Receivables	SECP	Medium-term
	Setting up of Reinsurance Data Templates for reconciliation process covering all aspects of reinsurance premiums and claims database across industry	PRCL	
3	Discussions paper covering the need to conduct the reinsurance optimisation for (Re)Insurance/ (Re)Takaful companies.	SECP	Medium-term
4	Development of reinsurance guidelines according to International Association of Insurance Supervisors' Insurance Core Principle 13 - Reinsurance and Other Forms of Risk Transfer	SECP Pakistan Society of Actuaries	Long-term
	Reinsurance Adequacy Analyses Instructions for Companies to conduct Reinsurance Optimisation through Data-driven, Loss and Exposure distribution modelling, risk capacity assessment and impact through Dynamic Financial assessments on business plans.		

## 8. APPENDICES

### **STATUTORY SEGMENTS:**

#	Classes in Statutory Segments	Sub-Classes
1	Property & Fire Damage	Household, Commercial Fire, Consequential Loss, Others
2	Engineering	Erection/Construction All risks, Machinery Electronic Equipment & Others, Comprehensive Projects, Others
3	Marine Aviation & Transport	Marine Cargo, Marine Hull, Aviation, Transport, Others
4	Motor	Third Party (Individual, Individual Motorcycle, Group
		Comprehensive (Individual, Individual Motorcycle, Group
5	Accident & Health	Health (Individuals, Govt Schemes, Group
		Personal Accident (Individuals, Govt Schemes, Group)
		Others
6	Liability – General	Workmen Compensation/ Employers Liability, Medical
		Malpractice/Defense, Directors & Officers Liability, Professional Indemnity, Product Liability, Others
7	Credit & Suretyship	Bonds, Guarantees, Credit, Others
8	Agriculture	Crop, Livestock, Others
9	Miscellaneous	Travel, Cyber, Extended Warranty, Terrorism, Bankers Blanket, Others

### FIVE-YEAR GROSS & RI STATISTICS

Gross Premium (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	24,586	25,861	31,288	40,278	60,198	182,211
Engineering	10,633	14,447	17,312	25,979	32,958	101,328
Marine, Aviation & Transport	11,055	9,047	14,973	19,032	21,459	75,566
Motor	16,440	15,891	18,407	20,935	21,781	93,454
Accident & Health	6,691	7,108	8,157	10,814	12,276	45,048
Liability - General	1,880	1,492	1,337	1,772	2,356	8,837
Credit & Suretyship	355	239	358	319	206	1,477
Agriculture	997	595	583	543	523	3,242
Miscellaneous	5,171	5,722	5,870	5,128	8,610	30,501
Total	77,809	80,402	98,286	124,799	160,367	541,664

Gross Claims (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	6,233	7,602	9,903	15,132	13,357	52,227
Engineering	1,417	1,421	1,139	1,958	4,496	10,431
Marine, Aviation & Transport	5,119	7,789	3,923	2,943	3,888	23,662
Motor	7,798	7,208	7,957	9,543	9,982	42,488
Accident & Health	5,095	5,412	6,132	7,600	10,223	34,462
Liability - General	136	311	95	70	194	805
Credit & Suretyship	139	36	5	-27	122	274
Agriculture	300	530	270	686	226	2,012
Miscellaneous	1,439	1,333	2,031	1,677	1,317	7,796
Total	27,675	31,642	31,456	39,581	43,803	174,157

Gross Commission (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	2,000	1,974	2,566	3,324	4,742	14,606
Engineering	271	300	344	675	930	2,520
Marine, Aviation & Transport	715	758	1,021	1,126	1,300	4,919
Motor	1,439	1,465	1,582	1,742	1,857	8,085
Accident & Health	787	857	820	1,037	1,141	4,641
Liability - General	68	55	64	58	109	354
Credit & Suretyship	19	15	21	21	11	87
Agriculture	95	53	56	57	51	313
Miscellaneous	422	359	422	517	862	2,583
Total	5,815	5,836	6,897	8,556	11,004	38,108

Reinsurance Premiums (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	18,751	18,431	22,603	29,567	49,043	138,395
Engineering	8,675	10,191	12,614	21,214	26,048	78,743
Marine, Aviation & Transport	5,568	3,812	8,432	10,484	12,854	41,150
Motor	869	745	887	1,030	1,265	4,795
Accident & Health	426	249	421	619	513	2,228
Liability - General	1,585	1,118	872	1,169	1,538	6,282
Credit & Suretyship	300	206	314	287	164	1,272
Agriculture	114	78	68	76	85	421
Miscellaneous	3,666	3,644	3,701	3,998	5,366	20,375
Total	39,954	38,476	49,913	68,444	96,876	293,662

Reinsurance Claims (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	4,278	5,670	7,352	12,809	9,726	39,835
Engineering	920	896	547	677	4,217	7,258
Marine, Aviation & Transport	3,102	6,426	2,304	2,343	1,857	16,032
Motor	354	318	359	273	361	1,665
Accident & Health	355	182	212	321	380	1,450
Liability - General	66	268	38	15	122	510
Credit & Suretyship	122	28	3	-31	139	261
Agriculture	21	101	206	175	165	667
Miscellaneous	930	861	1,072	606	741	4,210
Total	10,148	14,752	12,093	17,188	17,707	71,888

Reinsurance Commission (PKR M)	2019	2020	2021	2022	2023	Total
Property & Fire Damage	1,981	1,556	1,960	2,683	3,797	11,976
Engineering	401	455	456	884	953	3,149
Marine, Aviation & Transport	405	378	621	773	819	2,996
Motor	108	102	124	134	161	629
Accident & Health	83	77	98	125	151	533
Liability - General	151	109	86	129	120	596
Credit & Suretyship	123	59	93	87	47	409
Agriculture	4	1	1	1	0	7
Miscellaneous	650	498	448	574	749	2,919
Total	3,905	3,235	3,886	5,390	6,797	23,214

### **FIVE YEAR RATIO RESULTS**

RI-to-Gross Premiums	2019	2020	2021	2022	2023	Total
Property & Fire Damage	76.3%	71.3%	72.2%	73.4%	81.5%	76.0%
Engineering	81.6%	70.5%	72.9%	81.7%	79.0%	77.7%
Marine, Aviation & Transport	50.4%	42.1%	56.3%	55.1%	59.9%	54.5%
Motor	5.3%	4.7%	4.8%	4.9%	5.8%	5.1%
Accident & Health	6.4%	3.5%	5.2%	5.7%	4.2%	4.9%
Liability - General	84.3%	75.0%	65.2%	66.0%	65.3%	71.1%
Credit & Suretyship	84.5%	86.4%	87.9%	89.8%	79.9%	86.1%
Agriculture	11.4%	13.1%	11.7%	13.9%	16.3%	13.0%
Miscellaneous	70.9%	63.7%	63.1%	78.0%	62.3%	66.8%
Total	51.3%	47.9%	50.7%	54.2%	60.5%	54.1%

RI Claims-to-Gross Claims	2019	2020	2021	2022	2023	Total
Property & Fire Damage	68.6%	74.6%	74.2%	84.6%	72.8%	76.3%
Engineering	65.0%	63.1%	48.0%	34.6%	93.8%	69.6%
Marine, Aviation & Transport	60.6%	82.5%	58.7%	79.6%	47.8%	67.8%
Motor	4.5%	4.4%	4.5%	2.9%	3.6%	3.9%
Accident & Health	7.0%	3.4%	3.5%	4.2%	3.7%	4.2%
Liability - General	48.6%	86.1%	40.4%	22.0%	63.1%	63.3%
Credit & Suretyship	87.9%	80.1%	66.9%	116.5%	114.0%	95.3%
Agriculture	7.1%	19.1%	76.0%	25.5%	72.7%	33.2%
Miscellaneous	64.7%	64.6%	52.8%	36.1%	56.2%	54.0%
Total	36.7%	46.6%	38.4%	43.4%	40.4%	41.3%

RI Commission Ratio	2019	2020	2021	2022	2023	Total
Property & Fire Damage	10.6%	8.4%	8.7%	9.1%	7.7%	8.7%
Engineering	4.6%	4.5%	3.6%	4.2%	3.7%	4.0%
Marine, Aviation & Transport	7.3%	9.9%	7.4%	7.4%	6.4%	7.3%
Motor	12.4%	13.7%	14.0%	13.0%	12.7%	13.1%
Accident & Health	19.4%	30.7%	23.3%	20.2%	29.4%	23.9%
Liability - General	9.5%	9.8%	9.9%	11.1%	7.8%	9.5%
Credit & Suretyship	40.8%	28.8%	29.7%	30.3%	28.7%	32.2%
Agriculture	3.3%	1.8%	0.9%	1.3%	0.1%	1.6%
Miscellaneous	17.7%	13.7%	12.1%	14.3%	14.0%	14.3%
Total	9.8%	8.4%	7.8%	7.9%	7.0%	7.9%

Gross Commission Ratio	2019	2020	2021	2022	2023	Total
Property & Fire Damage	8.1%	7.6%	8.2%	8.3%	7.9%	8.0%
Engineering	2.5%	2.1%	2.0%	2.6%	2.8%	2.5%
Marine, Aviation & Transport	6.5%	8.4%	6.8%	5.9%	6.1%	6.5%
Motor	8.8%	9.2%	8.6%	8.3%	8.5%	8.7%
Accident & Health	11.8%	12.1%	10.1%	9.6%	9.3%	10.3%
Liability - General	3.6%	3.7%	4.8%	3.3%	4.6%	4.0%
Credit & Suretyship	5.3%	6.2%	5.9%	6.6%	5.4%	5.9%
Agriculture	9.5%	8.9%	9.7%	10.6%	9.8%	9.6%
Miscellaneous	8.2%	6.3%	7.2%	10.1%	10.0%	8.5%
Total	7.5%	7.3%	7.0%	6.9%	6.9%	7.0%

RI Commission / Gross Commission	2019	2020	2021	2022	2023	Total
Property & Fire Damage	99.0%	78.8%	76.4%	80.7%	80.1%	82.0%
Engineering	148.1%	151.5%	132.4%	131.1%	102.4%	124.9%
Marine, Aviation & Transport	56.7%	49.9%	60.8%	68.6%	63.0%	60.9%
Motor	7.5%	6.9%	7.9%	7.7%	8.7%	7.8%
Accident & Health	10.5%	8.9%	11.9%	12.1%	13.2%	11.5%
Liability - General	223.5%	198.7%	133.8%	223.4%	110.5%	168.6%
Credit & Suretyship	648.6%	403.1%	443.0%	413.6%	421.6%	471.1%
Agriculture	4.0%	2.6%	1.1%	1.8%	0.2%	2.2%
Miscellaneous	154.0%	138.6%	106.1%	110.9%	86.9%	113.0%
Total	67.2%	55.4%	56.3%	63.0%	61.8%	60.9%

### 5-YEAR ANNUAL REINSURANCE INFLOWS & OUTFLOWS ASSESSMENTS

	RI Earned Contribut ions	Total RI Claims	Total RI	Net RI Outflow/I nflow	RI Solvency benefit	Total RI Benefit /
YEAR 2019 LOB (PKR m)	(-)	(+)	Comm (+)	(-)/(+)	(+)	(Loss)
Property & Fire Damage	-14,007	7,260	1,912	-4,835	1,401	-3,434
Engineering	-5,048	1,358	293	-3,397	505	-2,892
Marine, Aviation & Transport	-2,503	6,677	373	4,548	366	4,914
Motor	-809	358	104	-346	81	-265
Accident & Health	-434	186	77	-171	43	-127
Liability - General	-1,260	123	186	-951	126	-825
Credit & Suretyship	-405	434	150	179	42	221
Agriculture	-111	3	2	-105	11	-94
Miscellaneous	-2,677	1,408	491	-777	268	-509
Total	-27,253	17,808	3,589	-5,855	2,842	-3,013

YEAR 2020 & LOB (PKR m)	RI Earned Contribut ions (-)	Total RI Claims (+)	Total RI Comm (+)	Net RI Outflow/I nflow (-)/(+)	RI Solvency benefit (+)	Total RI Benefit / (Loss)
Property & Fire Damage	-13,113	8,375	1,511	-3,227	1,311	-1,915
Engineering	-6,262	2,905	300	-3,057	626	-2,430
Marine, Aviation & Transport	-2,479	10,502	343	8,365	401	8,767
Motor	-790	397	121	-272	79	-193
Accident & Health	-244	150	69	-25	24	-1
Liability - General	-1,218	312	159	-747	122	-625
Credit & Suretyship	-224	496	62	334	49	383
Agriculture	-78	284	2	208	8	216
Miscellaneous	-2,658	1,278	343	-1,037	266	-771
Total	-27,065	24,698	2,909	543	2,887	3,429

YEAR 2021 & LOB (PKR m)	RI Earned Contribut ions (-)	Total RI Claims (+)	Total RI Comm (+)	Net RI Outflow/I nflow (-)/(+)	RI Solvency benefit (+)	Total RI Benefit / (Loss)
Property & Fire Damage	-15,360	11,449	1,921	-1,991	1,536	-455
Engineering	-8,050	7,312	336	-402	805	403
Marine, Aviation & Transport	-3,734	6,838	523	3,627	434	4,061
Motor	-808	291	133	-384	81	-303
Accident & Health	-411	339	85	13	41	54
Liability - General	-915	238	125	-553	92	-461
Credit & Suretyship	-331	558	105	332	55	387
Agriculture	-82	117	0	35	8	43
Miscellaneous	-2,389	1,621	361	-407	239	-168
Total	-32,080	28,762	3,589	271	3,291	3,561

YEAR 2022 & LOB (PKR m)	RI Earned Contribut ions (-)	Total RI Claims (+)	Total RI Comm (+)	Net RI Outflow/I nflow (-)/(+)	RI Solvency benefit (+)	Total RI Benefit / (Loss)
Property & Fire Damage	-21,644	23,866	2,525	4,748	2,164	6,912
Engineering	-12,366	10,999	477	-891	1,237	346
Marine, Aviation & Transport	-4,411	5,708	633	1,930	441	2,371
Motor	-1,000	468	149	-384	100	-284
Accident & Health	-657	481	110	-66	66	0
Liability - General	-1,129	169	131	-830	113	-717
Credit & Suretyship	-368	600	91	323	59	382
Agriculture	-74	338	1	265	7	272
Miscellaneous	-2,621	1,646	404	-572	262	-309
Total	-44,271	44,275	4,520	4,524	4,449	8,973

2023 & LOB (PKR m)	RI Earned Contribut ions (-)	Total RI Claims (+)	Total RI Comm (+)	Net RI Outflow/I nflow (-)/(+)	RI Solvency benefit (+)	Total RI Benefit / (Loss)
Property & Fire Damage	-23,232	23,386	2,555	2,709	2,323	• •
Property & Fire Damage	-23,232	23,360	2,555	2,709	2,323	5,032
Engineering	-9,229	10,014	583	1,368	923	2,291
Marine, Aviation & Transport	-4,434	5,133	577	1,276	443	1,720
Motor	-1,124	432	170	-522	112	-409
Accident & Health	-371	247	88	-36	37	1
Liability - General	-1,118	221	120	-777	112	-665
Credit & Suretyship	-178	589	56	467	56	524
Agriculture	-96	5	0	-91	10	-82
Miscellaneous	-3,891	1,275	459	-2,157	389	-1,768
Total	-43,673	41,303	4,607	2,237	4,406	6,643



SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN

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