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Insurance Authority's Review of Actuarial Reports on Reinsurance Adequacy and Investment & ALM Year 2025



The year 2025 marks the sixth consecutive cycle of actuarial reports submitted by insurance companies under the Actuarial Work Rules (AWR), issued in March 2020. The AWR aim to enhance the role and responsibilities of actuaries in the insurance sector in order to facilitate informed decision-making by management and to provide greater technical support to the business as the market sophistication continues to grow in the Kingdom.

Under these Rules, the Appointed Actuary is obligated to perform a number of actuarial analyses, at least annually, and convey to the Senior Management, Board of Directors and the Insurance Authority (IA) the outcome of those analyses in the form of an actuarial report, prepared separately on each individual topic.

A number of important observations emerged from our review. We would like to share those observations with the Company's management, together with our expectations in respect of those observations, in anticipation that the management will consider each of those observations and recommendations diligently, internal discussions will be held at the Board of Directors' level and with all relevant functions, and appropriate actions will be taken by management.

Furthermore, similar to last year, a separate brief document accompanies this letter that summarizes IA's expectations on each topic mentioned in this letter.

The document contains the below sections:

1. Reinsurance Adequacy Report 2025
2. Investment and Asset Liability Management Report 2025
3. Actuarial Function's Contribution

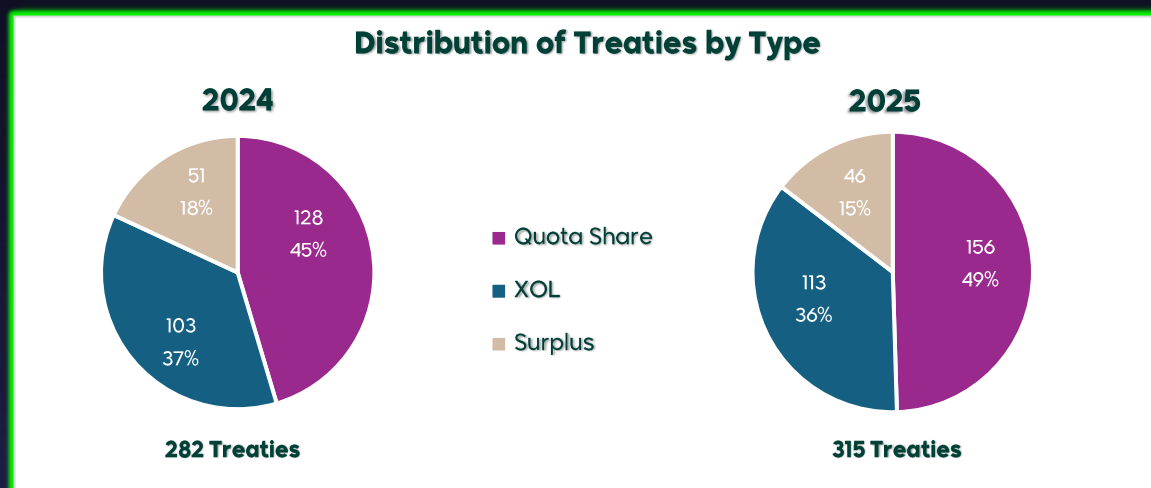
1. Reinsurance Adequacy Report 2025

For Property & Casualty insurance, the majority of insurers in Saudi Arabia rely heavily on reinsurance companies as a large proportion of business is ceded to them. It is therefore important that each insurance company assesses its reinsurance requirements using a sound technical basis, and with due regard to its risk appetite.

The Actuarial Work Rules 2020 require an annual report from the Appointed Actuary, assessing the appropriateness of the Company's reinsurance arrangements and risk retention levels for each line of business. The Appointed Actuary is also required to make recommendations for an optimal reinsurance arrangement to the Board of Directors and Senior Management. The task requires application of sophisticated actuarial modeling techniques and is commensurate with the IA's objective to raise the standards of actuarial practice in the Kingdom.

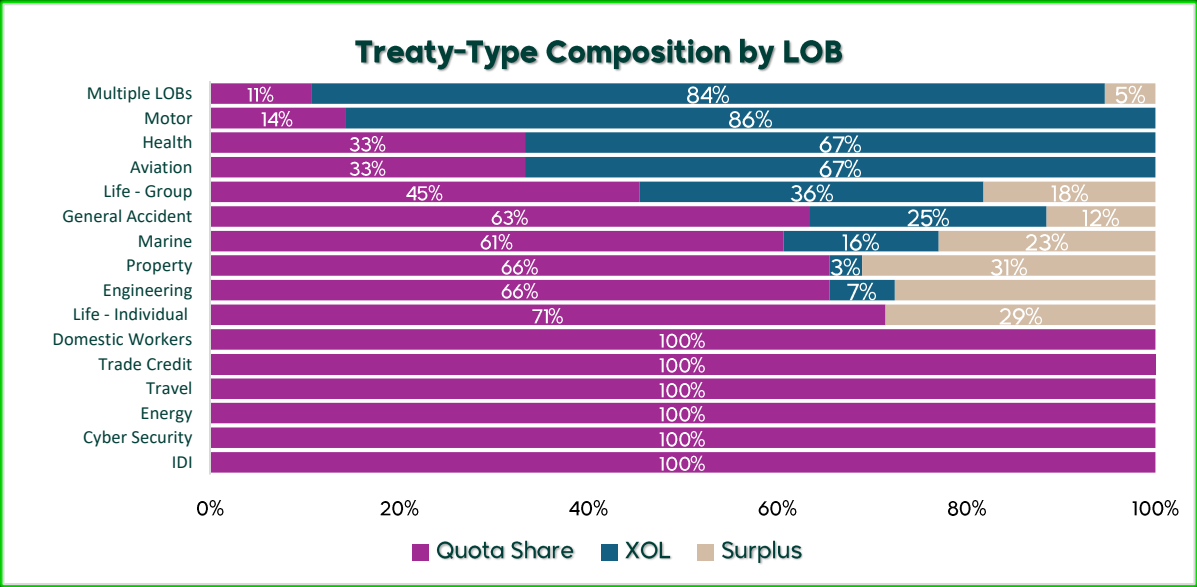
1.1 Treaty-Type Composition

The graph below shows the distribution of treaties by their type, purchased by insurance companies in 2025 compared to those purchased in 2024.



It can be seen that proportional treaties, particularly Quota Share, continue to dominate the reinsurance market, with a further increase this year in both number and proportion.

The graph below shows the distribution of existing treaties in 2025 by type for each line of business.



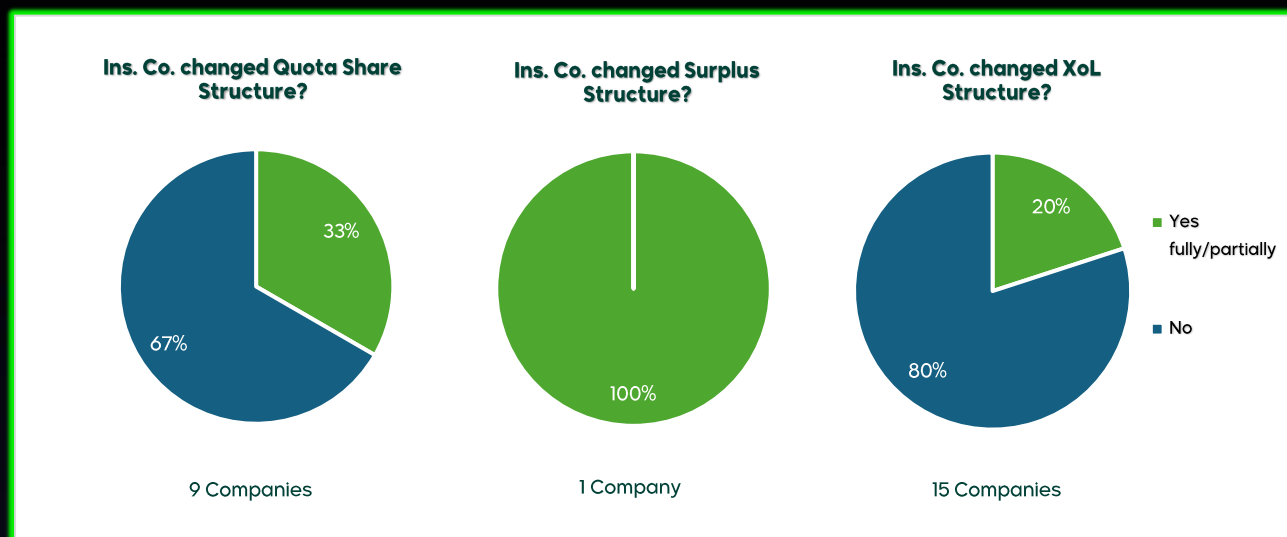
For Motor and Health, while majority of the treaties are of Excess of Loss type, there remains a noticeable proportion of companies using proportional structures, in particular of Quota Share type. Moreover, we note an increase in the share of proportional treaties in health (33% v 20% last year). This may seem somewhat counterintuitive given the ‘high frequency and low severity’ nature of these LOBs and the wealth of historical data available to insurance companies. It is also noted that some of these proportional arrangements could be driven by capital relief considerations for smaller companies.

For P&C lines, it can be seen that proportional arrangements, in particular of Quota Share type, dominate the treaties purchased by insurance companies, indicating less underwriting sophistication and low risk tolerance among insurance companies for these risks.

The IA expects the Company’s management to carefully consider the treaty type most appropriate for its portfolio, and ensure its alignment with the Company’s risk appetite, financial objectives, and market conditions.

1.2 Management's Response to the Appointed Actuary's Recommendations from Previous Exercise

The graph below assesses how the Board of Directors responded to the Appointed Actuary's recommendations for improvements to the reinsurance arrangements made in the previous year's Reinsurance Adequacy Report.



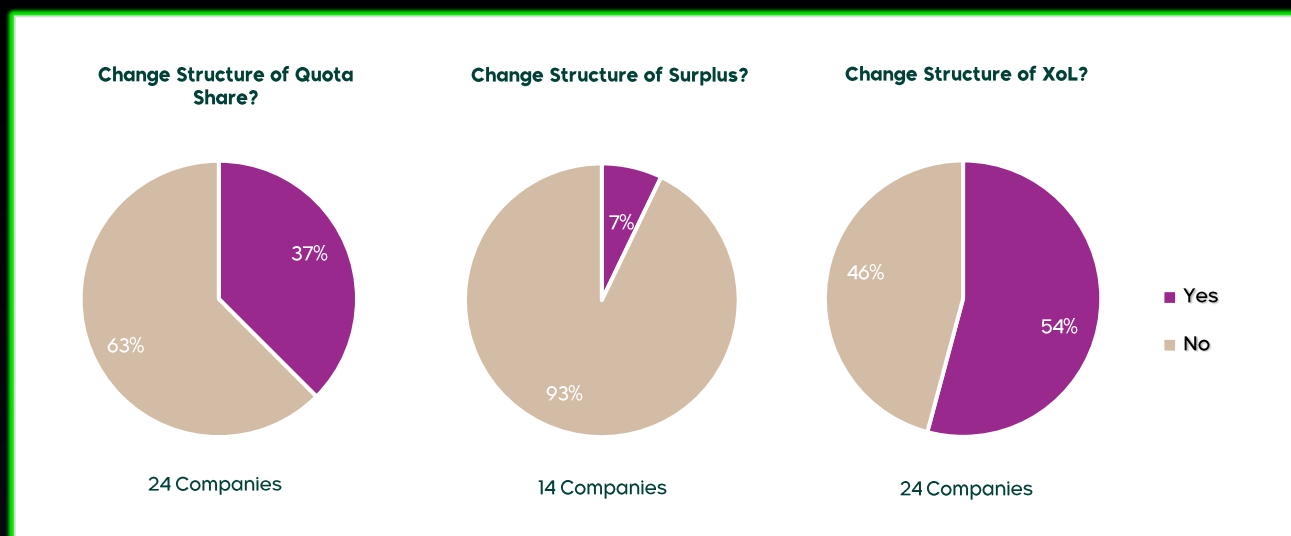
Adoption of recommendations varies by treaty type from 20% to 100%, although the Surplus results reflect a single company. Overall, a notable proportion of Boards accepted the recommendation from their Appointed Actuary to change the structure, and management went ahead with making those changes, in part or in full.

These treaty amendments remain significant, as Appointed Actuaries usually form their recommendations without full visibility of reinsurance market conditions. At the same time, the results highlight potentially large room for improvement that still remains.

When making reinsurance purchase decisions, the IA expects the Board of Directors and Senior Management to actively consider the recommendations of their Appointed Actuary, with due input from Underwriting and Reinsurance functions.

1.3 Changes Recommended for Treaties in Reinsurance Adequacy Report 2025

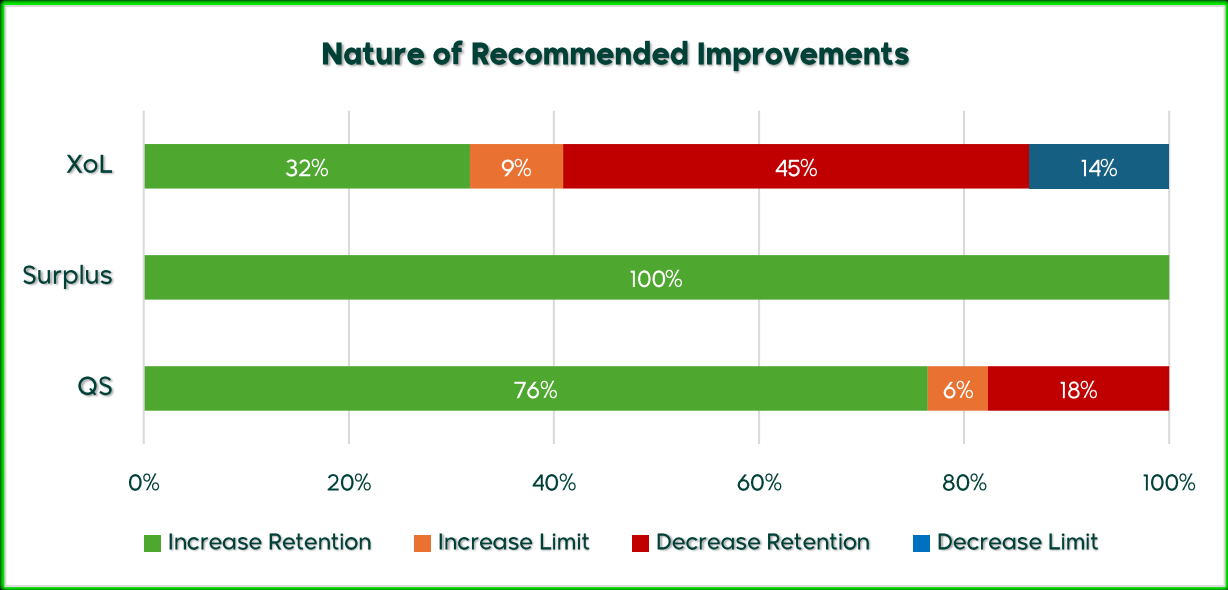
The graph below shows the outcome of the actuarial analysis performed in year 2025 and recommendations made by Appointed Actuaries as a result.



It can be observed that Appointed Actuaries have identified inefficiencies in more than half of the current Excess of Loss arrangements purchased by insurance companies, with Quota Share arrangements not far behind. In contrast, very few recommendations were made for the existing Surplus arrangements, which may suggest that either those are relatively more efficient, or those have received less attention given their smaller numbers and/or lesser materiality compared to the other two types.

Furthermore, compared with last year's recommendations, as reported in last year's market feedback, the number of recommendations for changes has remained broadly stable. This may appear counterintuitive considering that a number of recommendations made last year were already addressed by management, as noted in Section 1.2. On the other hand, it could be an indicator of improvements in the sophistication and rigor of actuarial analysis performed by the Appointed Actuaries compared to last year. It may also be indicative of the market's ongoing preparation for the transition to the Risk-Based Capital (RBC) framework, which is likely to lead to more comprehensive reviews and, consequently, a greater number of observations and recommendations in the years ahead.

The graph below illustrates the nature of recommended changes for each treaty type.



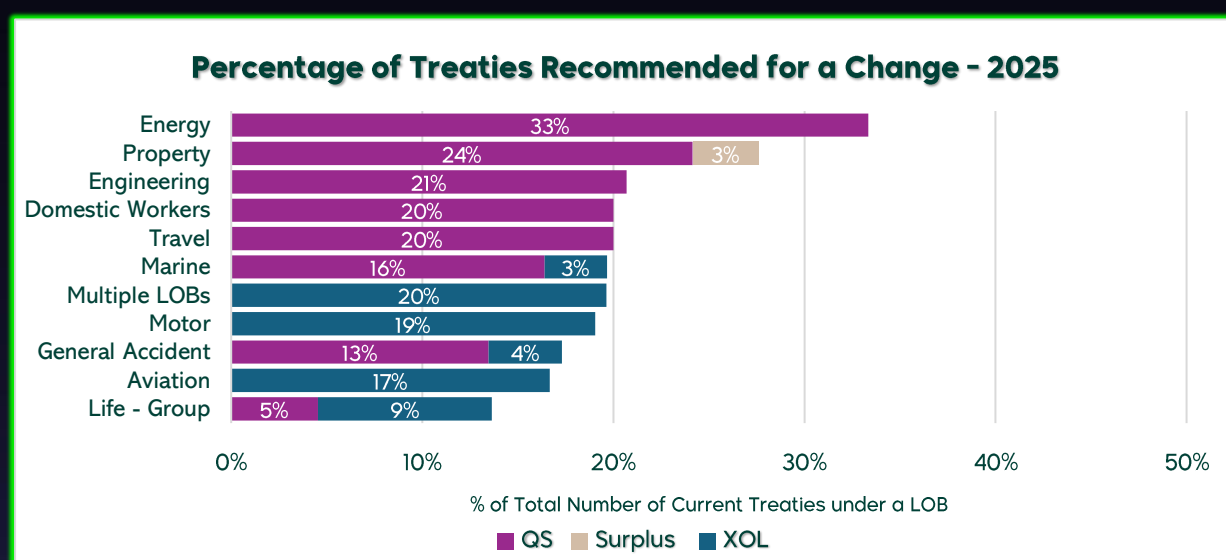
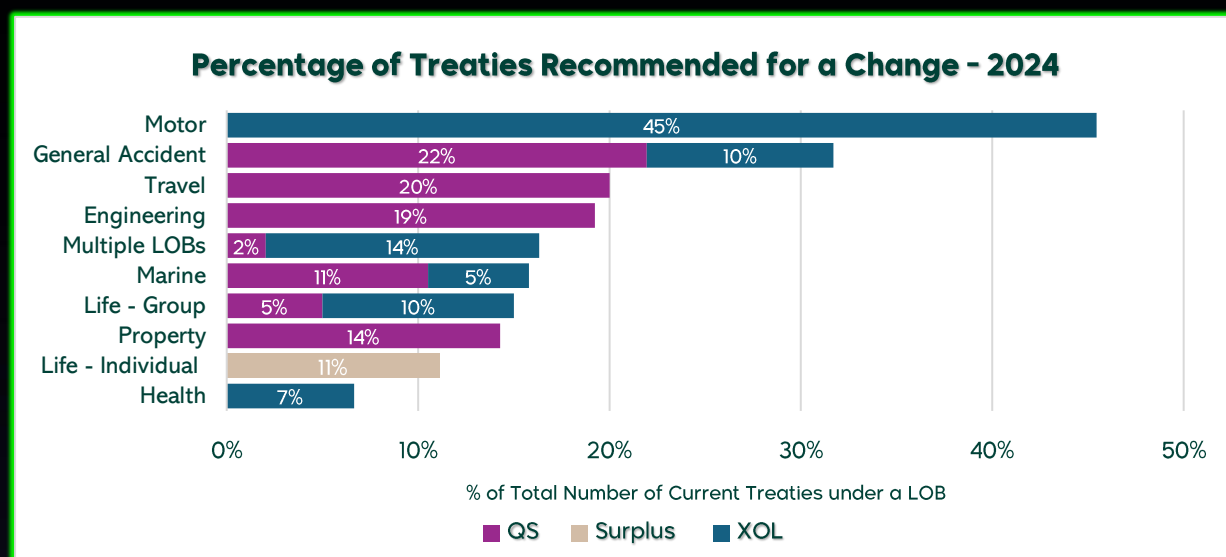
It can be observed that the majority of recommendations for proportional treaties suggest increasing the retention levels. For XoL treaties, however, a notable proportion of recommendations suggest a decrease in retention. It should be noted that the graph does not visualize the recommended changes to the reinsurance programme as a whole.

The IA expects the Board of Directors to seek to fully understand the rationale behind the recommendations of its Appointed Actuary, including the impact of any changes to actuarial models and methodologies used, and actively consider those recommendations, with due consideration of the reinsurance market conditions, and the Company’s own risk appetite.

The IA further expects that, where not already in place, RBC considerations are incorporated into reinsurance purchasing decisions.

1.4 Percentage of Treaties Recommended for a Change by Line of Business

The graphs below show the percentage of treaties recommended for a change by type for each LOB, comparing 2025 to the previous year.



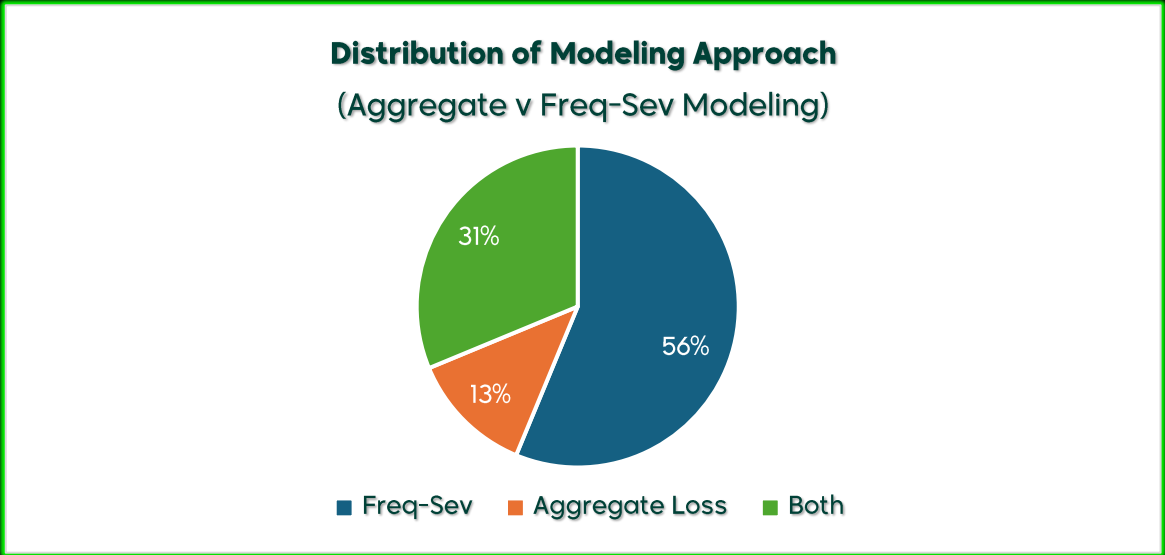
It is evident that in 2025, Energy and Property have the highest proportion of sub-optimal treaties, as identified by Appointed Actuaries. This represents a shift from last year, when treaties covering Motor and General Accidents had the highest proportion of treaties recommended for change.

Moreover, while the total number of recommendations remained broadly stable, the highest proportion noted for any single line of business declined from 45% for motor last year to 33% for energy this year.

The IA expects management to consider the optimal treaty structure for each line of business individually so that any decision around purchasing a bouquet of treaties can be taken from an informed position.

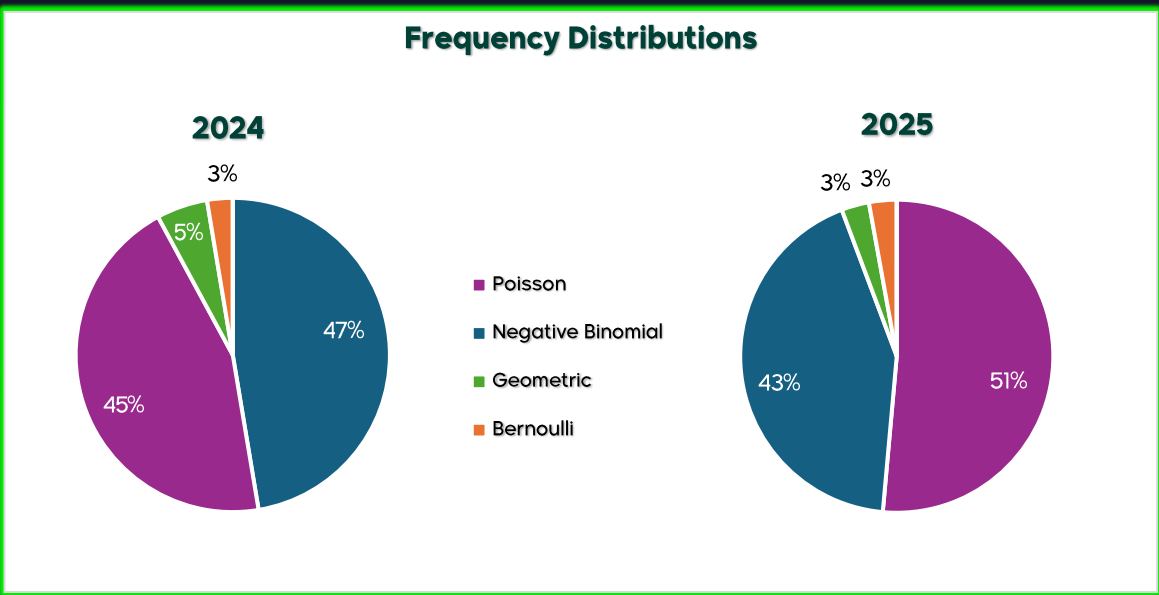
1.5 Distribution of Frequency, Severity, and Aggregate Loss

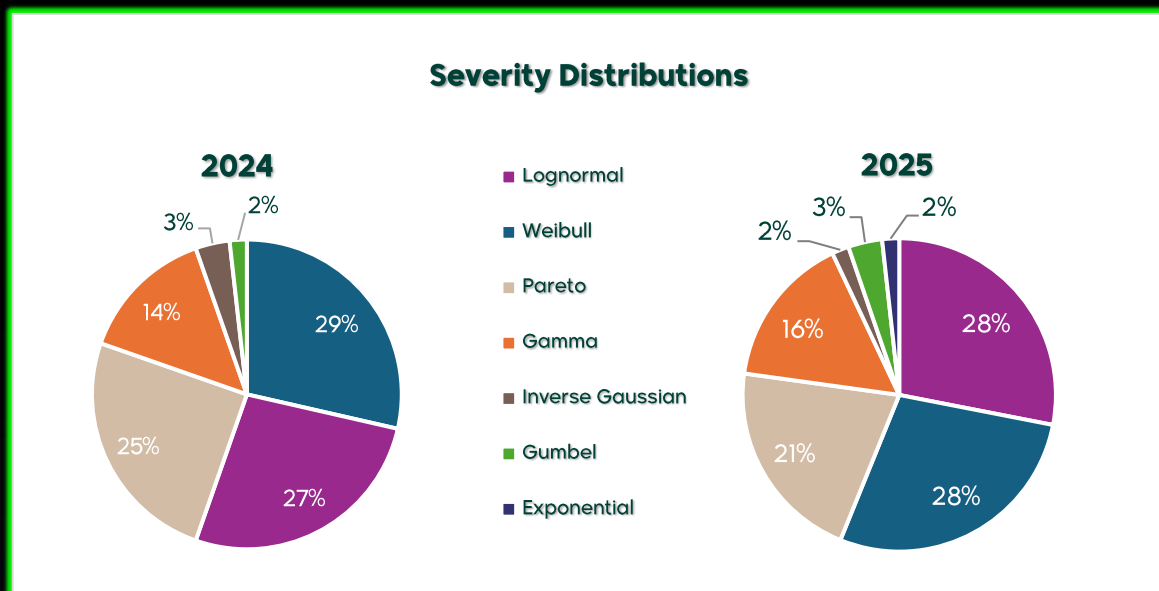
The IA continues to encourage Appointed Actuaries to enhance the sophistication of modeling techniques when performing the reinsurance adequacy analysis. The graph below shows the distribution of the modeling approaches used by actuaries.



It can be seen that the majority of actuaries adopt the frequency-severity approach. Additionally, around one-third apply both the frequency-severity and aggregate loss approaches for the same LOB. This indicates that some actuaries are leveraging multiple methods to enhance modeling accuracy or to cross-validate results.

The graphs below show the range of statistical distributions used by Appointed Actuaries for modeling the frequency and severity of claims, along with their comparison with approaches used last year.

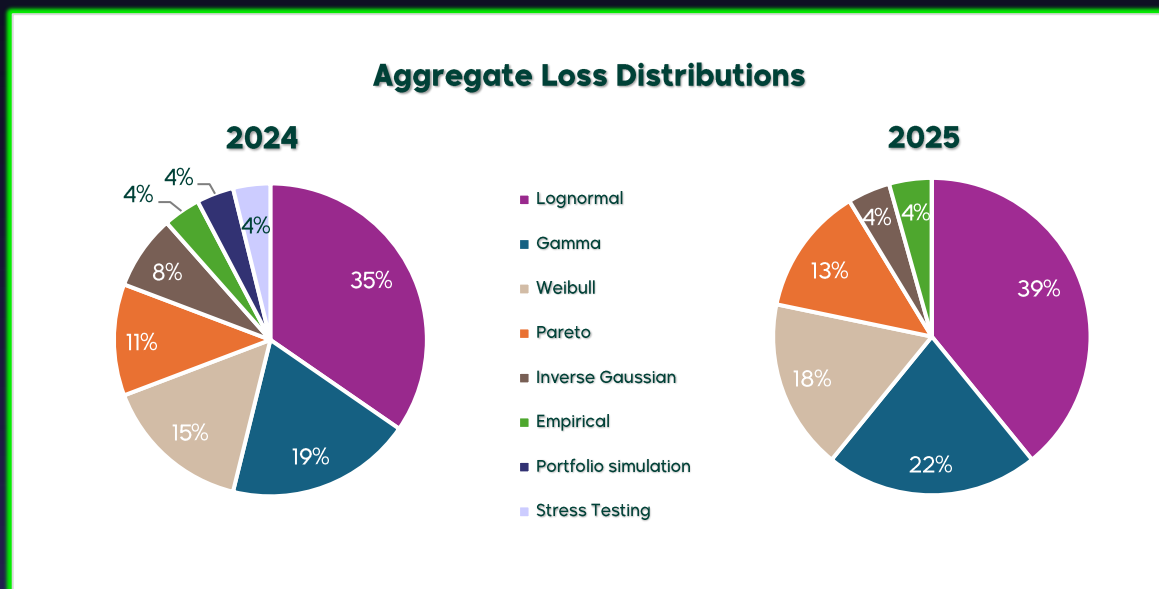




Relatively similar frequency and severity distributions were observed compared to last year. For frequency modeling, Poisson was the most commonly used distribution, followed closely by Negative Binomial. For severity modeling, both Lognormal and Weibull were the distribution of choice for many, followed by Pareto distribution.

While the graphs present distributions overall, most companies reported that they model attritional and large losses separately. This granularity will be explicitly captured in the future reporting cycles.

The graph below shows the range of statistical distributions used by Appointed Actuaries for modeling aggregate losses and compares it with last year.

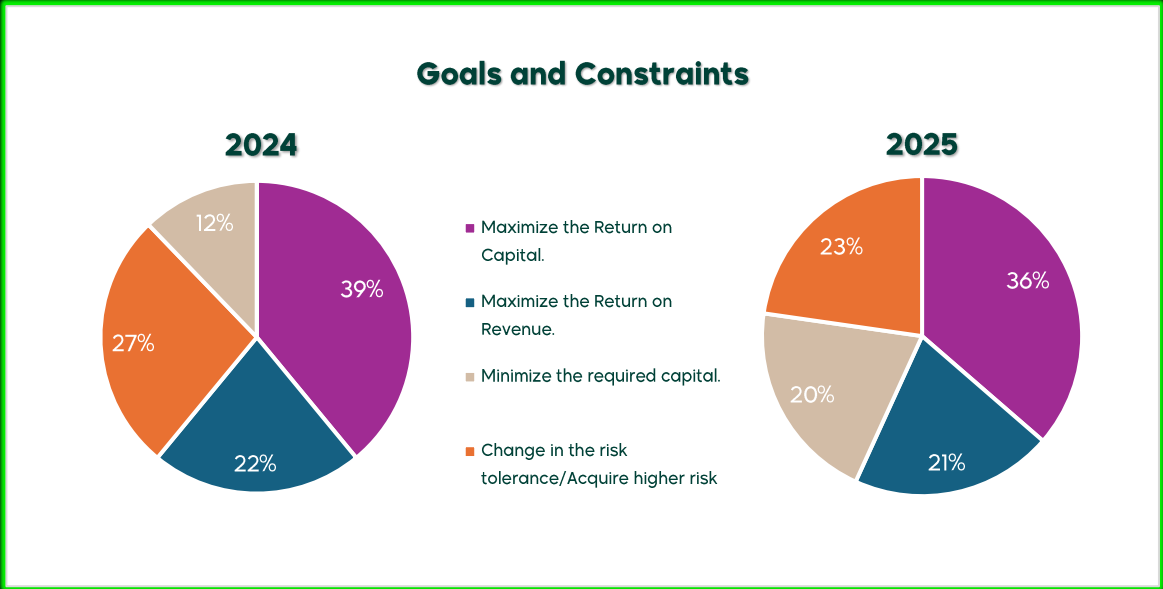


In 2025, similar to last year, the Lognormal distribution was the most commonly used, followed by Gamma and Weibull distributions.

The IA expects each Appointed Actuary to remain abreast of the latest professional developments in the area of reinsurance optimization and continue to explore and implement more sophisticated modeling techniques.

1.6 Goals and Constraints

In order to perform the actuarial analysis for treaty optimization, it is important for the Board of Directors and Senior Management to set a clear goal(s) for the Appointed Actuary. The graph below shows the distribution of goals and constraints used by Appointed Actuaries to guide their analysis.



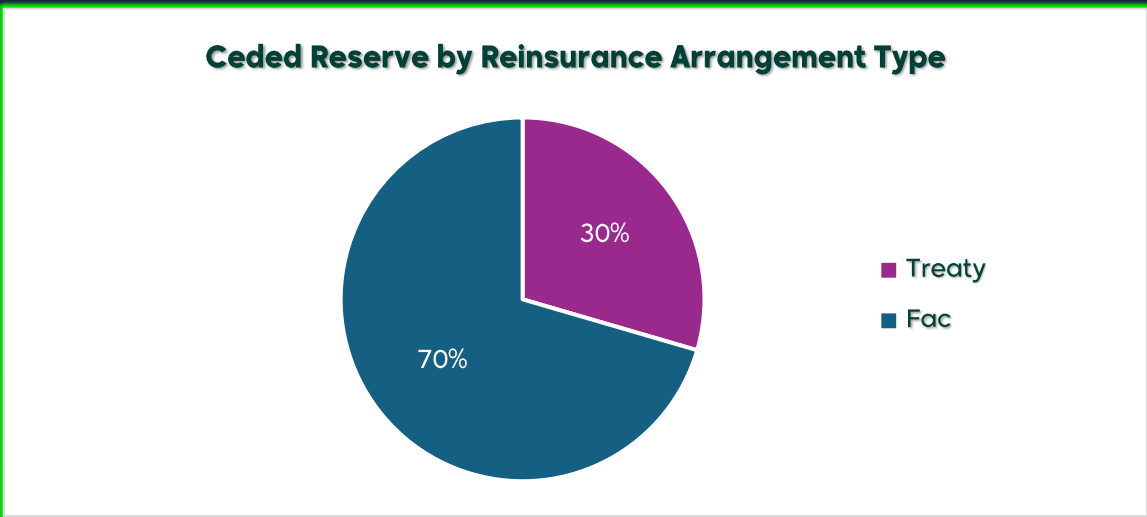
Similar to last year, the majority of Appointed Actuaries identified maximizing return on capital as the primary objective of their reinsurance optimization analyses.

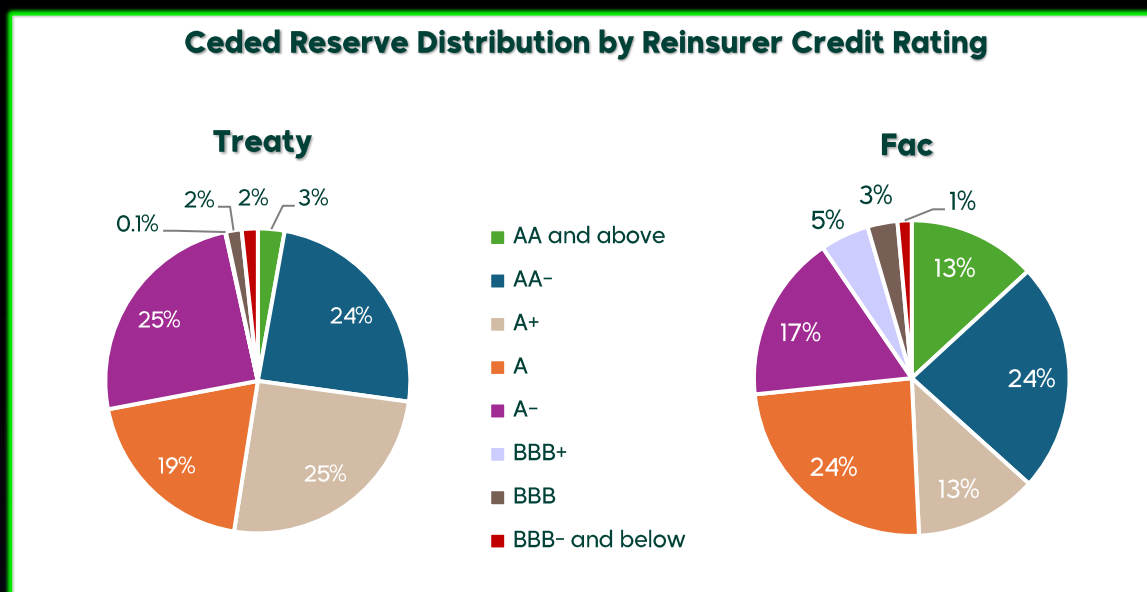
It is worth noting that the underlying capital metrics currently still reflect the existing capital regime for the majority of companies. As the market transitions to the RBC framework, these metrics, including capital savings, are expected to shift accordingly over the upcoming reporting cycles.

The IA expects the Board of Directors and Senior Management to set clear goal(s) for the Appointed Actuary so that the output generated is in line with the expectations and business requirements of management.

1.7 Reinsurers' Credit Rating – Treaty & Facultative

The graphs below show the split of reinsurance reserves between treaty and fac arrangements, and the distribution of reserves by the credit rating of reinsurers for each arrangement-type. The credit ratings shown follow the S&P rating scale.





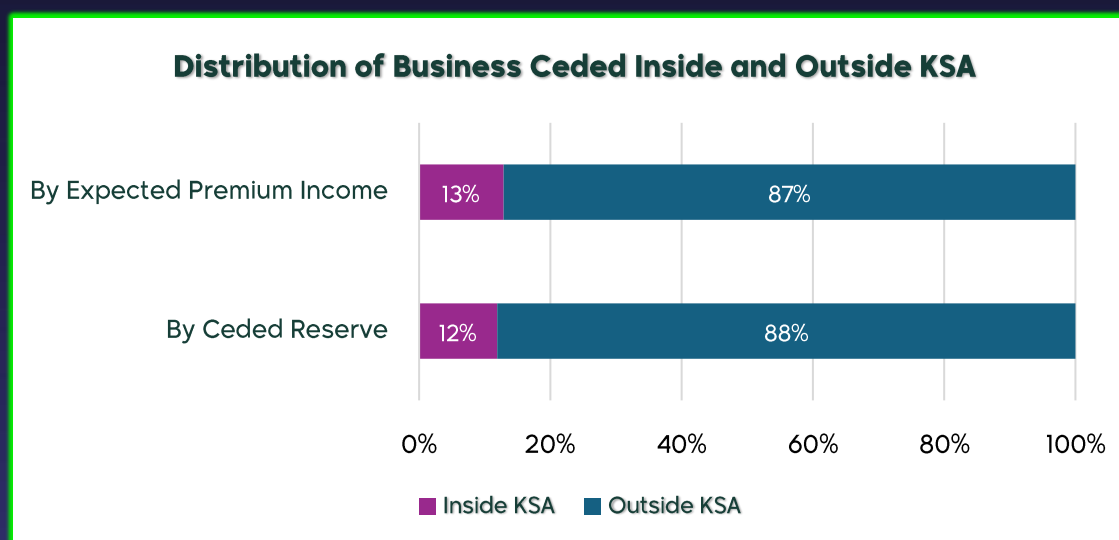
Similar to that noted last year, it can be observed that insurance companies cede the bulk of the reserves (IBNR + Case Reserves) to high-grade reinsurers for both treaty and fac arrangements, thus reducing their default risk.

This is an important consideration under IFRS 17, where an insurance company must make allowance for the risk of non-performance by its reinsurer(s) when estimating the reinsurance contract assets. It is also a key consideration under the RBC framework, as reinsurer credit rating directly affects the Counterparty Default Risk capital charge.

The IA expects the Board of Directors and Senior Management to seek to understand the impact of the credit ratings of its reinsurers on the reinsurance contract assets under IFRS 17 and on the credit risk capital charge under the RBC framework, and to ensure that its selection of reinsurers considers the attractiveness of the terms & conditions as well as the financial strength of the reinsurer, while also complying with the relevant IA regulations in this regard.

1.8 Share of Business Ceded Inside and Outside KSA

The graph below shows the distribution of the ceded business between domestic and international reinsurers.



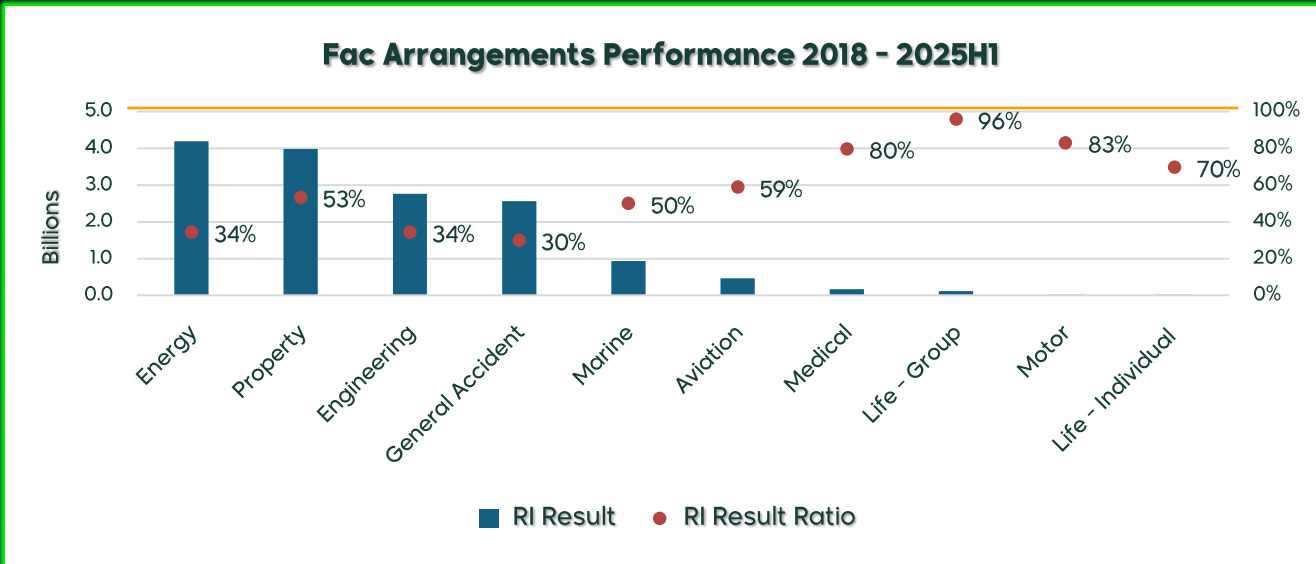
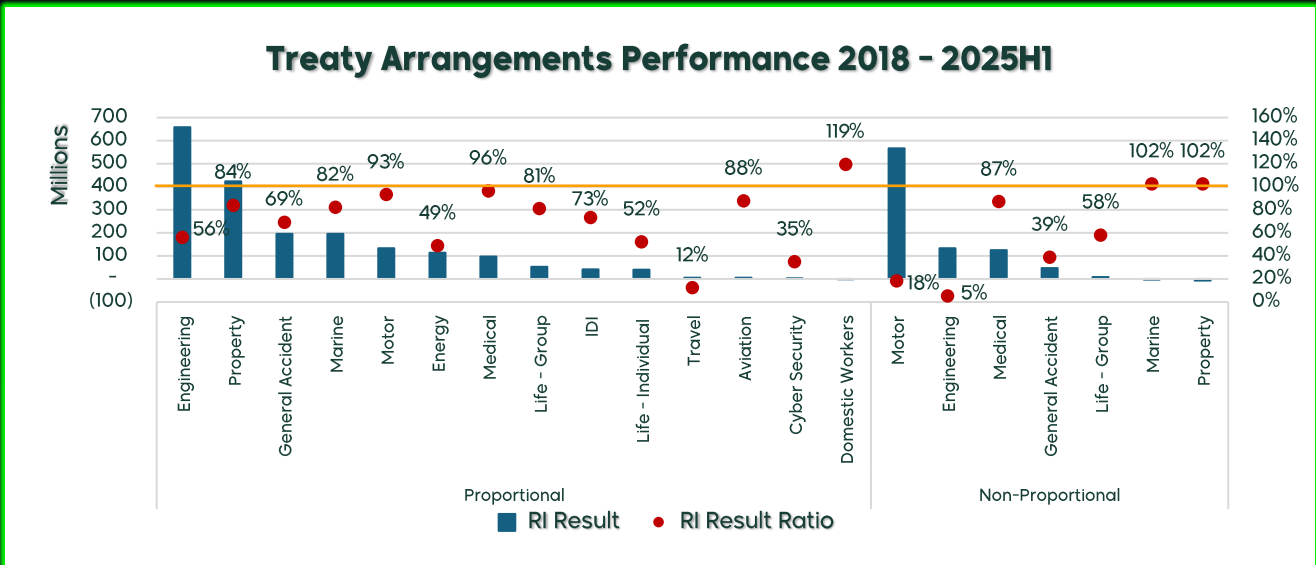
On both ceded premium and ceded reserves bases, less than one-fifth share is retained within KSA, showing a heavy reliance on international reinsurance market.

With the local-cession requirement, insurance companies are required to offer at least 30% of both treaty and facultative reinsurance business to domestic reinsurers, it is expected that domestic reinsurers will seek to benefit from this opportunity on a technically reliable and financially sound basis, and the share of reinsurance business retained within the Kingdom will grow over time.

The IA encourages companies to explore opportunities to strengthen the domestic reinsurance market and retain more business within the Kingdom, while ensuring they diversify their reinsurance book to mitigate the accumulation risk as well as counterparty default risk, and maintain a balanced approach to risk management.

1.9 Performance of Treaty and Facultative Reinsurance Arrangements

The graphs below show the performance under treaty and facultative arrangements for the period 2018 to 2025H1, as reported by Appointed Actuaries in their Reinsurance Adequacy reports.



Note:
 RI Result = RI Premium Ceded – RI Claims – RI Commission
 RI Result Ratio = (RI Claims + RI Commission) / RI Premium Ceded

For treaty arrangements, the positive RI results under the majority of portfolios suggest that significant profits have been ceded to reinsurers over the last seven-and-one-half years, particularly under Property and Engineering proportional treaties and Motor non-proportional treaties.

Notably, the reinsurance result ratio reaches or exceeds 100% for Domestic Workers under proportional treaties, and for Property and Marine under non-proportional treaties. In the case of Property, the ratio now shows 102% (v 23% last year).

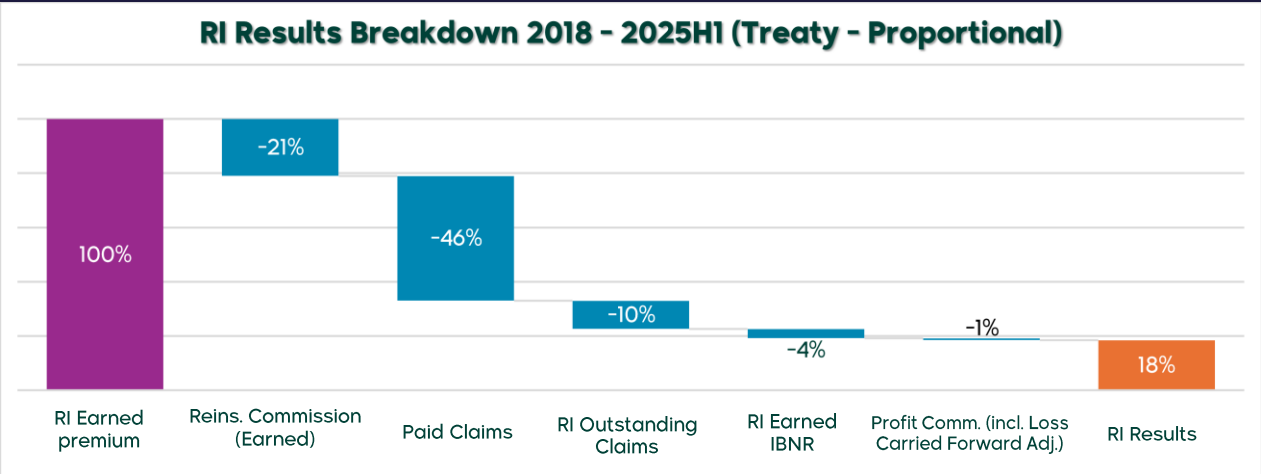
This change appears to be primarily driven by a shift in reporting, as some companies that previously combined Property performance with other lines of business under the same treaty have now reported them separately by LOB. This reflects an improvement in reporting granularity for 2025, providing greater insights into each LOB's performance.

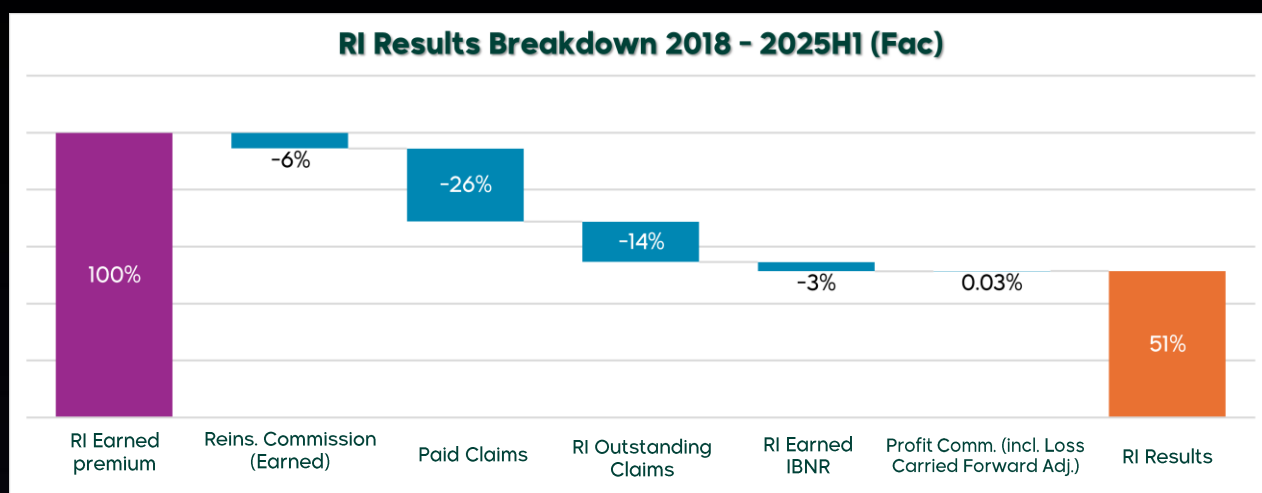
For facultative arrangements, the volume of profits ceded to reinsurers over the same period far exceeds that observed under treaty arrangements. The profits ceded under Energy facultative alone are almost double the total profits ceded under all treaties combined over the last seven-and-one-half years. The reinsurance result ratio for each line of business remains below 100%, with General Accident having the lowest reinsurance result ratio, while Life - Group has the highest. Notably, the aggregate reinsurance result increased by around four billion SAR compared to last year. Upon follow-up with relevant companies, this was found to be driven by a combination of prior year claims development and data issues in last year's results.

Significant changes in past performance results compared to last year have been observed across both older and recent years, as well as across all LOBs. To address potential data issues and better understand common causes, the IA has updated the template for the next reporting cycle to include validation checks that flag significant changes—particularly for older years—requiring companies to provide justifications, enhancing data accuracy.

It is worth noting that the above performance summary does not account for the savings in capital that insurance companies achieved due to those reinsurance arrangements.

The below graphs show the breakdown of Reinsurance Results for treaty and facultative arrangements as a percentage of RI Earned premium.





For the proportional treaty arrangements, it can be observed that there is a low profit commission despite generating material profits, suggesting potential inefficiencies in the current treaties and possible room for renegotiation of higher commissions. A similar albeit more pronounced trend is seen in the facultative arrangements, although in some cases, this may be due to fronting arrangements controlled by brokers.

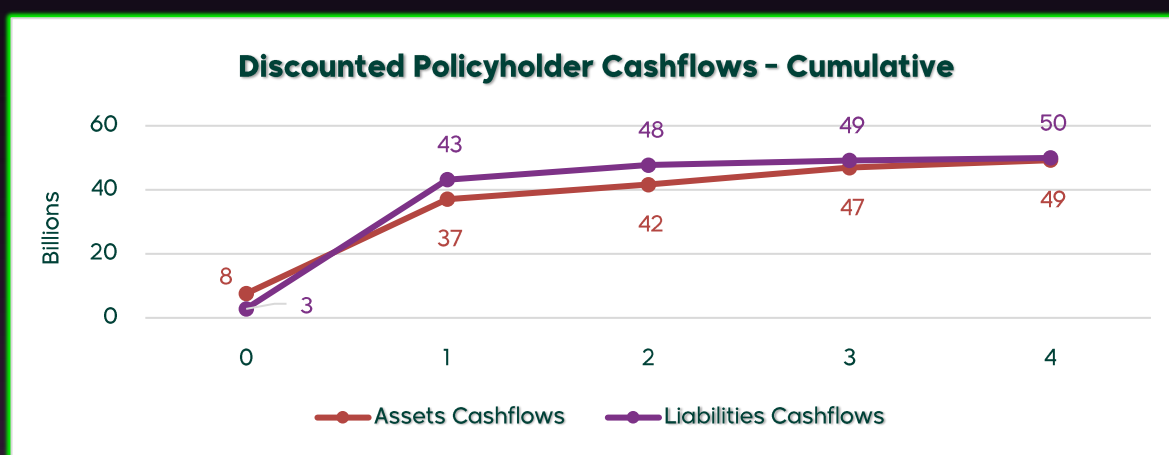
The IA expects management to put in place robust processes for providing underwriting, risk and actuarial support in aid to the reinsurance purchase decisions, thus ensuring that placement of risks under treaty and facultative arrangements is done at optimal terms for the Company.

2. Investment and Asset Liability Management Report 2025

Under the Actuarial Work Rules 2020, an Appointed Actuary is required to coordinate with the Investment Committee and investment manager of the insurance company and provide recommendations to the Company's Senior Management and Board of Directors regarding the Company's investment policy and asset liability management strategy, keeping in view the nature and timing of assets and liabilities and the availability of appropriate assets.

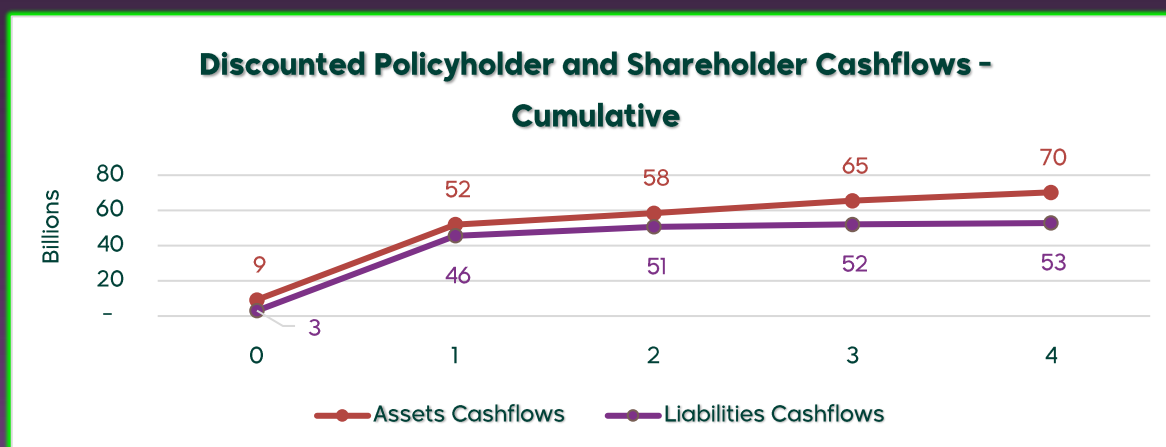
2.1 Asset Liability Discounted Cashflows

The graph below illustrates the discounted cumulative cashflows for policyholder assets and policyholder liabilities, in aggregate for all insurance companies, over a four-year period as projected by Appointed Actuaries in the above reports.



It can be seen above that asset cashflows are higher than liabilities at very early durations, implying relatively high liquidity, thus generating lower yields, and potentially, also exposing companies to some reinvestment risk.

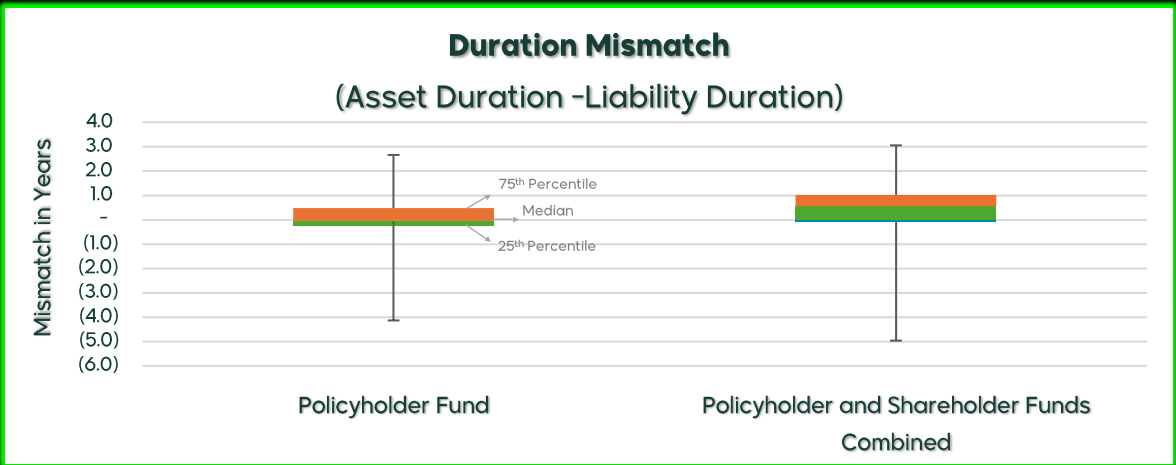
For both policyholder and shareholder funds combined, the graph below shows that asset cashflows remain higher than liabilities throughout the entire period shown, with the excess driven by the addition of shareholders' equity.



A similar observation regarding the opportunity cost of excessive liquidity can be made here as well. Together, these graphs emphasize the importance and need for effective asset liability management practices by the insurance sector as a whole.

2.2 Asset Liability Duration Mismatch

The graph below shows the extent of mismatch between the asset and liability durations, separately for the policyholder fund and for the policyholder and shareholder funds combined, depicting the median, inter-quartile range, and minimum and maximum values for each category.



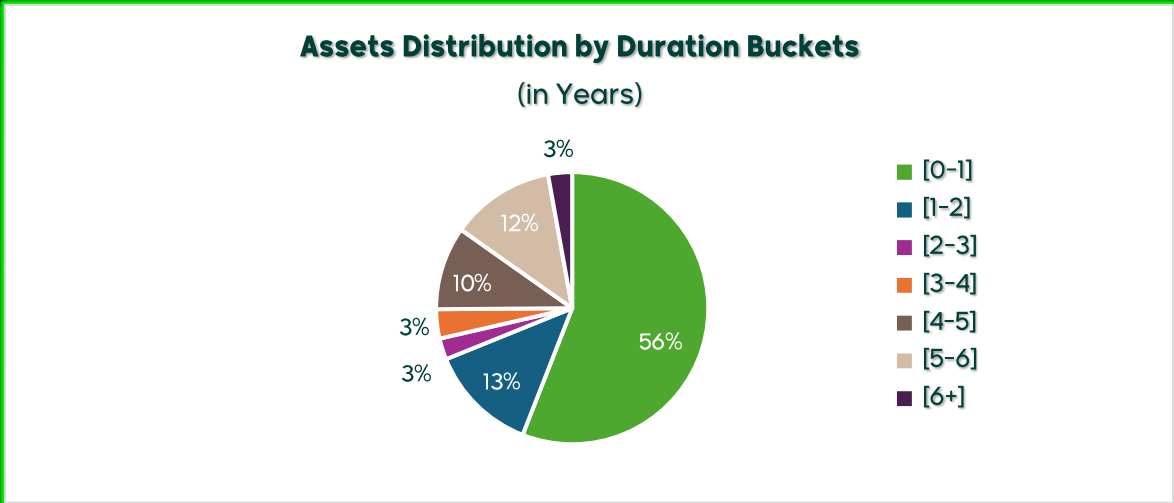
The assets and liabilities of the policyholder fund are generally well-aligned, as evidenced by the median being just below zero and a narrow interquartile range. This suggests that insurance companies effectively match their investments with the duration of their liabilities. When considering the combined policyholder and shareholder funds, the interquartile range is slightly wider, indicating that insurance companies are more willing to take on additional risk with shareholder funds to achieve higher investment returns.

Significant mismatches have been observed in at least one company, where the duration of policyholder assets exceeds liabilities by around three years, and conversely, in another company where the duration of liabilities exceeds assets by almost five years.

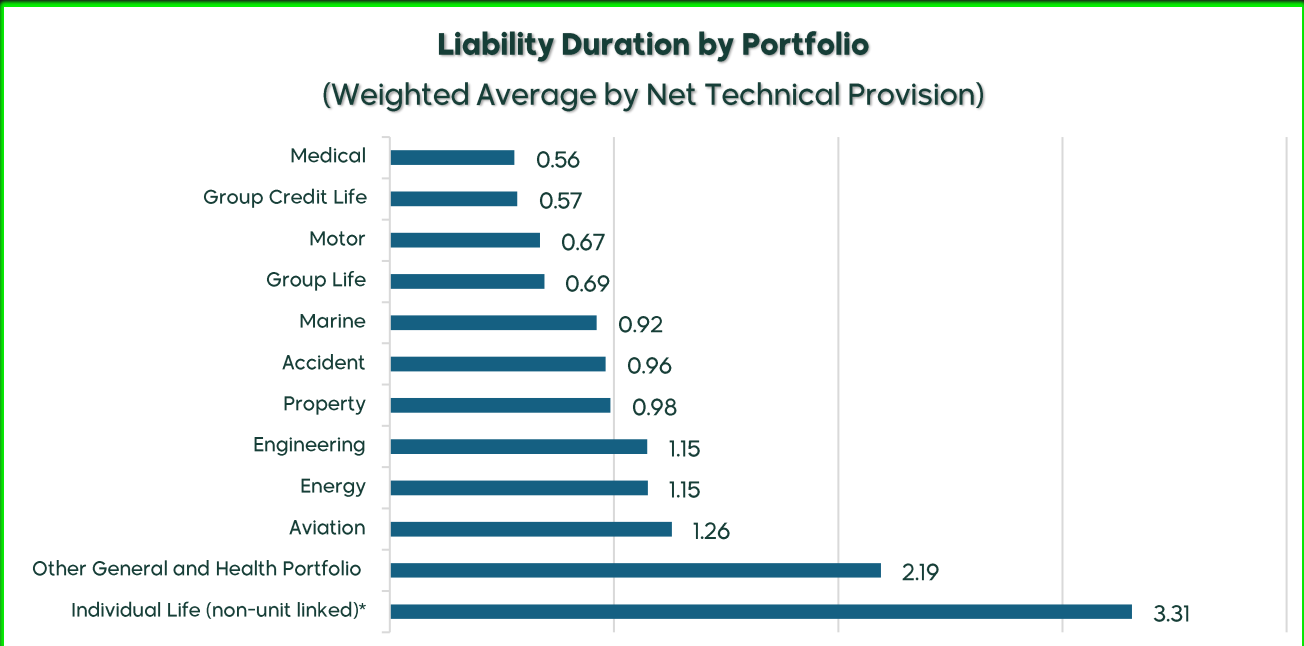
These mismatches expose companies to liquidity risk, reinvestment risk, and other financial risks. They may also amplify the impact of interest rate movements on the valuation of assets and liabilities, potentially resulting in higher interest rate risk capital requirements under the RBC framework. The companies' Risk Functions and relevant controls are expected to investigate these mismatches as a priority and ensure appropriate corrective action is taken.

2.3 Detailed Analysis of Assets and Liabilities Duration

A deeper look into the duration of assets and liabilities was introduced this year, with companies providing a more granular view, showing assets broken down by duration buckets and liabilities' duration by portfolio.



The majority of companies' assets fall within the [0-2] year duration bucket, indicating a predominantly short-duration asset profile across the market. This is consistent with the short-term nature of the market's liabilities.



*Note: For individual life, the technical provision weight has been adjusted to be gross of unit-linked business to avoid distortion arising from negative net of unit-linked TP, which is the case for many companies.

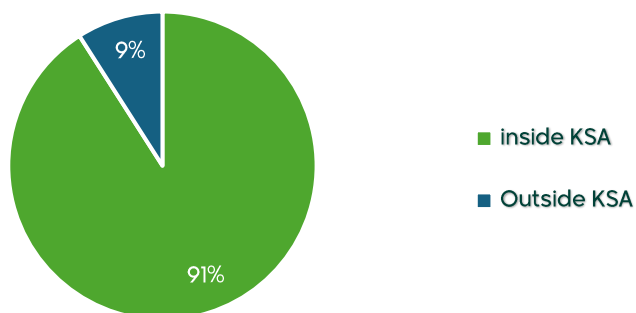
Medical and group credit life portfolios have the shortest liability durations, just above 0.5 years. The 'Individual Life' portfolio has the longest liability duration as expected, followed by 'Other Portfolios,' which include general and health insurance products (e.g., IDI, Employers Delinquency, and Surety Bonds) contributing to the higher duration.

For the 'Engineering' portfolio, the average liability duration is around 1.15 years, likely reflecting a focus on machinery breakdown and small construction projects, rather than long-term infrastructure projects.

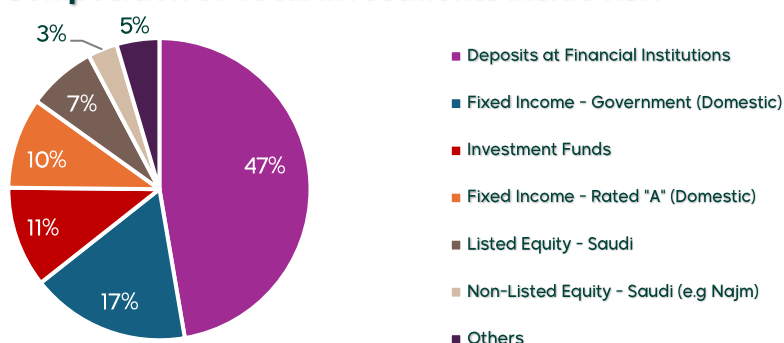
2.4 Investments Inside versus Outside the Country

The graphs below show the split of total investments by insurance companies into domestic and foreign investments, the composition of those investments by type, as well as the split of the foreign investments by country and currency.

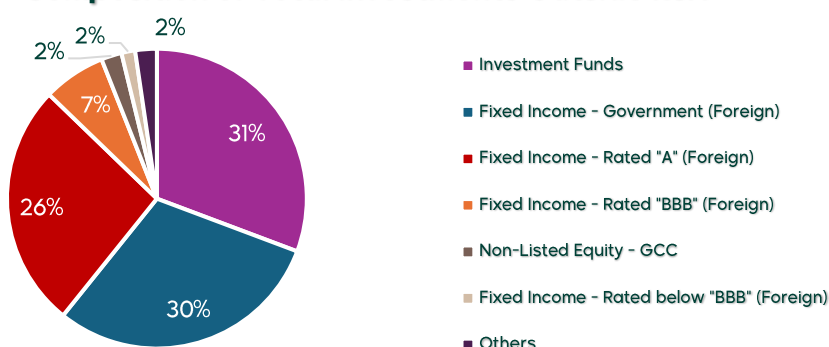
Distribution of Total Investments



Composition of Total Investments Inside KSA



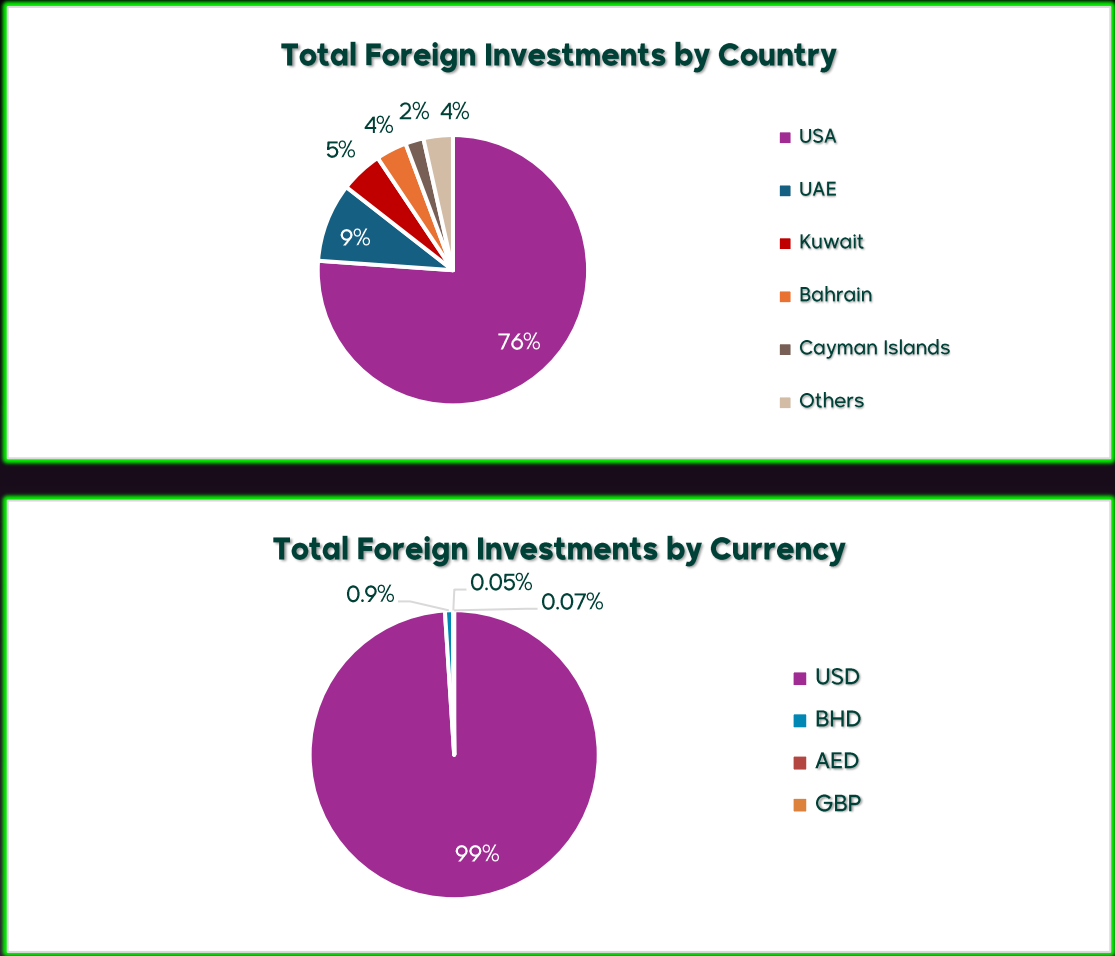
Composition of Total Investments Outside KSA



Foreign investments have increased compared to last year (9% v 5%), while domestically, deposits at financial institutions continue to be the first choice for insurance companies, reflecting insurers' liquidity needs, consistent with the short-term nature of their liabilities. However, their share has decreased compared to last year (47% v 56%).

Foreign investments are primarily allocated to investment funds this year, followed closely by foreign government fixed income, which has increased significantly (30% v 9% last year), with most of these investments concentrated in GCC countries. Moreover, the share of fixed income instruments rated BBB or below has decreased significantly compared to last year (9% v 36%), when it represented the highest share of foreign investments.

The graphs below show the distribution, by country and by currency, of foreign investments by insurance companies.

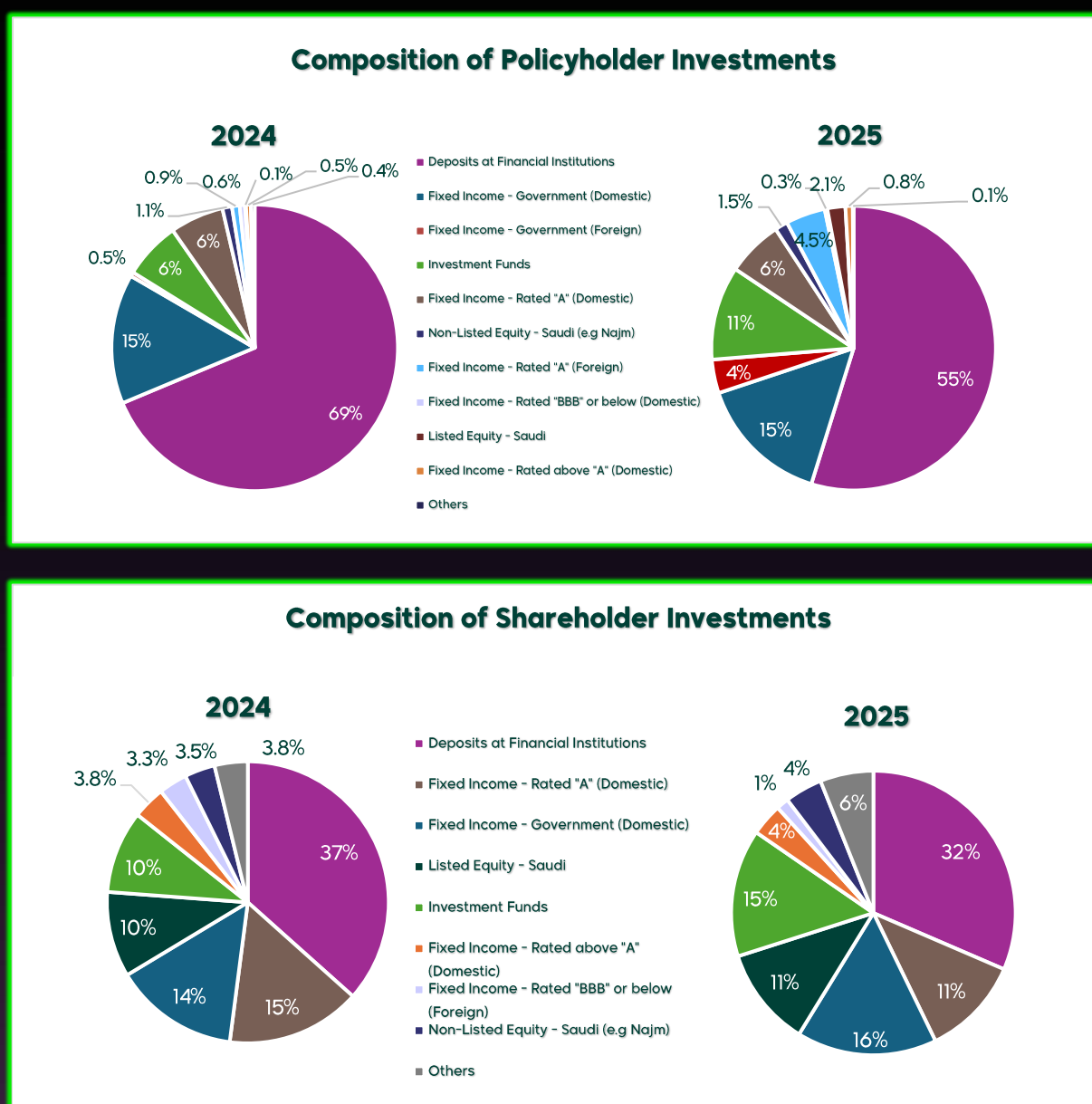


As observed above, the majority of these investments are located in the USA which has increased significantly (76% v 33% last year), potentially to align with US-denominated liabilities. In terms of the currency mix, the US Dollar remains by far the leading foreign currency of investments.

As the market transitions to the RBC framework, capital considerations are expected to play an increasingly important role in companies' investment strategies, including the investment mix, investment duration, issuer credit quality, and issuer concentration.

2.5 Composition of Investments of Policyholder Fund versus Shareholder Fund

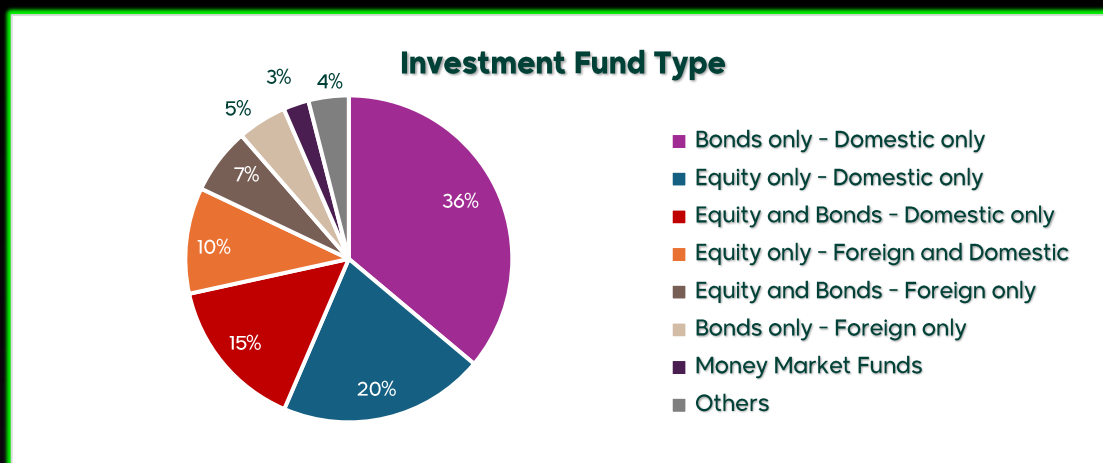
The graphs below show the difference in the composition of investments between policyholder fund and shareholder fund for all insurance companies in aggregate.



For policyholder funds, it can be observed that deposits with financial institutions still constituted the biggest share of investments. However, the share decreased during 2025 compared to 2024. This is followed by domestic government bonds and investment funds, whose share has gone up compared to last year.

Similarly for shareholder funds, the largest share of investments is in the form of deposits with financial institutions, though their share has reduced this year. High quality bonds, as with policyholder funds, form the second biggest category of investments, split into corporate and government bonds. When compared to policyholder funds, the share of equities is materially higher for shareholder funds, reflecting greater tolerance for volatility in search of higher returns.

The graph below shows the composition of underlying investment instruments within investment funds of insurance companies.



It can be observed that the largest share is held by funds investing exclusively in domestic bonds, followed by those investing exclusively in domestic equities, while money market funds have seen a significant decline (3% v 16% last year).

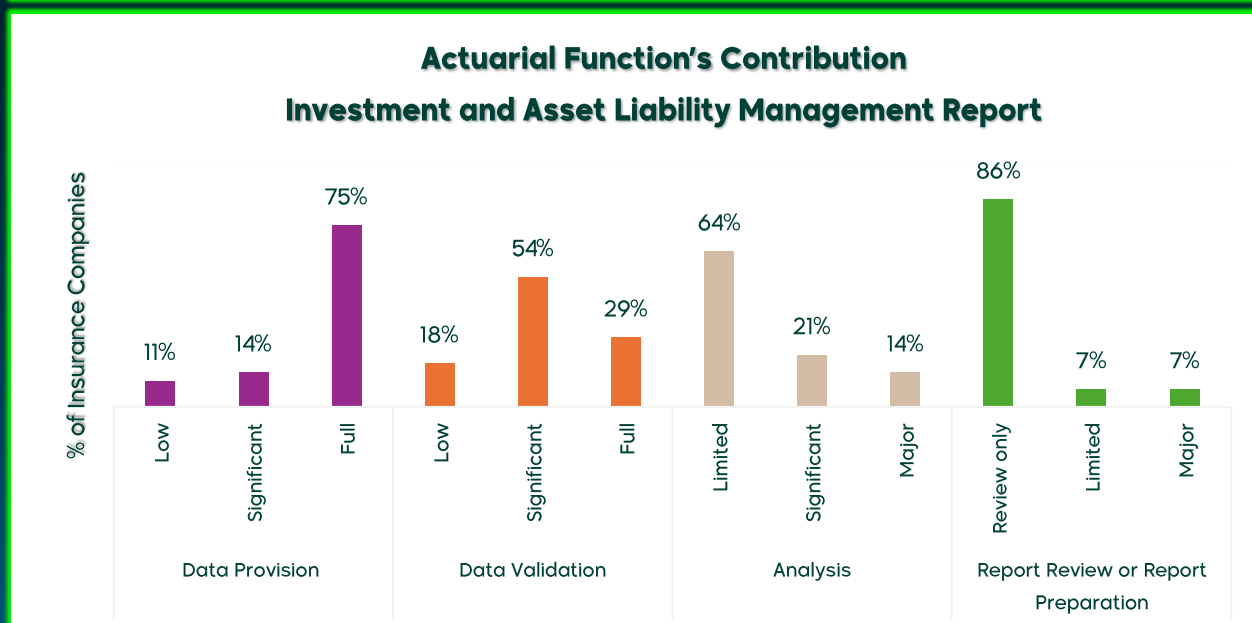
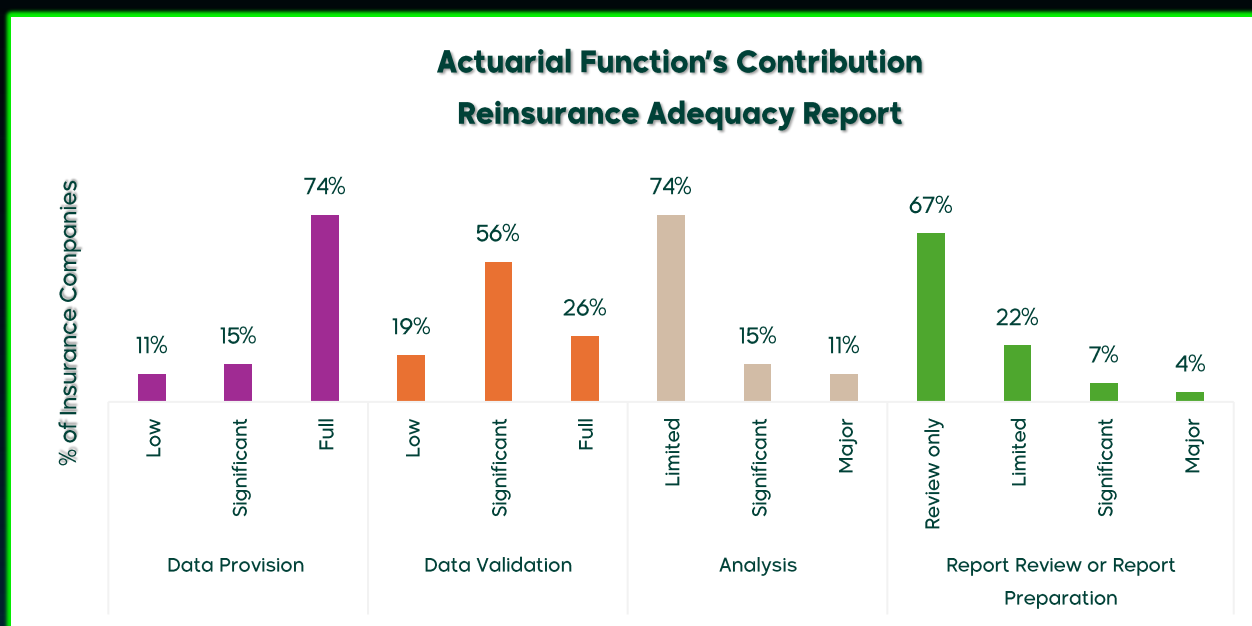
Separately, equities represent a much higher share within investment funds compared to direct equity investments, which reinforces the importance of look-through visibility into underlying holdings. In this context, companies are expected to engage with fund managers to obtain more granular, accurate, and timely data to support a more effective look-through approach in line with RBC requirements.

The IA expects:

- The Appointed Actuary to perform thorough analysis and provide clear recommendations to the investment team and Senior Management that are insightful and assist in informed decision-making in the process of making suitable investment choices.
- The investment team, Senior Management, and Board of Directors to critically assess and understand the recommendations made by the Appointed Actuary, including implications of the current investment choices and alternatives available, on the Company's ability to meet its liabilities with sufficient confidence and in a timely manner.
- Companies to increasingly embed capital considerations into their investment decision-making process, and to define policies and processes for the Prudent Person Principle during 2026, to be approved by the Board of Directors of each insurance or reinsurance company in line with their risk appetite and solvency needs.
- The risk function, as the function ultimately responsible for overseeing and embedding RBC results within the Company's enterprise risk management framework, to monitor the Company's investment position against relevant market benchmarks and RBC metrics, and where the Company is identified as an outlier, seek appropriate justification or require corrective action from the investment team.

3. Actuarial Function's Contribution

The graphs below show the contribution of the actuarial functions of insurance companies at each of the four major steps involved in preparing the Reinsurance Adequacy, Investment and Asset Liability Management reports, namely, data provision, data validation, analysis, and report preparation and review.



The graphs illustrate varying levels of responsibility and contribution across each step of the process. For Data Provision, the majority of internal actuarial functions retained full responsibility in both reports. A similar trend is observed for Data Validation, with the majority of internal actuarial functions assuming either full or significant responsibility.

For the core Analysis step, in the Reinsurance Adequacy Report, the majority of internal actuarial functions are reported to have played only a limited role in performing the analysis. A similar pattern is observed in the Investments and Asset Liability Management Report.

As regards documenting the analysis and its results, as well as preparing the actuarial report, the majority of internal actuarial functions were primarily limited to reviewing the reports prepared by their Appointed Actuaries for both reports. This review-only pattern is more pronounced in the Investment and Asset Liability Management Report.

Overall, the level of actuarial functions' contribution reported above is not in line with the IA's expectations, particularly given that unlike in the past, almost all internal actuarial functions are headed/supported by qualified Fellow actuaries.

The IA expects the contribution of the Actuarial Function in each insurance company to increase over time in all areas, such that the overall contribution leading to the production of each actuarial report is deemed significant. In particular, the IA expects to see all internal actuarial functions playing an active role in the Analysis step, followed by an increase in their role in preparing the actuarial reports. The Insurance Authority sees this active participation as an essential tool for the professional development of the internal actuarial function of the Company, in particular for actuarial candidates working within those actuarial functions.

The IA expects the Company Management to provide adequate resources (human and technological) to the internal actuarial function, thus enabling it to play a significant role in producing the above statutory reports.