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Actuarial framework in the regulatory supervision of the insurance industry: A comparison of requirements across nine countries

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The evolving supervision of the insurance industry

The insurance industry plays a significant role in the management of risks for individuals and other stakeholders. An effective and sustainable insurance sector supports economic stability for individuals, organizations, and a nation's economy as a whole.

As risks and insurance products have become more complex, and risk management capabilities have improved, regulatory oversight of the insurance industry has evolved over the last decade to address these changes. A key part of this evolution has been the shift toward risk-based capital (RBC) management, which essentially measures capital requirements for insurers based on the risks inherent in their assets and liabilities, including interactions between different risk types. The goal is to better measure and mitigate downside risks that could affect an insurer's ability to fulfill its obligations. These changes are typically supported by regulatory requirements for insurers to communicate more clearly with internal and external stakeholders about their risk exposures and how those risks are managed.

Actuaries play a central role for insurers in many areas, and particularly in the assessment of liabilities and risk. With the movement to RBC, the need for actuarial capacity and expertise has increased. Actuarial calculations and processes are embedded in many of the risk-based calculations that support the RBC results.

Actuarial requirements by country

The shift toward more effective and accurate risk management of insurers is global, but countries are at different stages of progress. Countries with more advanced economies and strong actuarial capacity are generally further along, with many changes already incorporated into their risk management frameworks. Developing economies, by contrast, are still working through these changes at varying stages.

Even among developed countries, approaches to RBC implementation vary. Some require complex reporting with detailed risk management metrics for stakeholders, while others have taken a more pragmatic, streamlined approach. The key is that reporting requirements should be appropriate for each jurisdiction. Many regulators also considered existing disclosure requirements when developing RBC disclosure rules to help insurers transition more smoothly.

A comparison across nine countries

This report summarizes insurance regulatory requirements across nine countries.

This comparison was initiated for the Securities and Exchange Commission of Pakistan (SECP), Pakistan's primary insurance regulator. Like many countries, Pakistan is undergoing regulatory enhancements, including moving toward IFRS 17 and RBC oversight, along with related regulatory changes. A broad understanding of the actuarial framework across countries is the intent. Accordingly, this report focuses on how the actuarial frameworks are incorporated into regulatory requirements and does not cover many other regulatory requirements.

Information is presented in alphabetical order by country: India, Jordan, Kenya, Malaysia, Nigeria, Pakistan, Saudi Arabia, Sri Lanka, and the United Arab Emirates. The countries vary considerably in population and economic size, as well as in the maturity of their insurance regulatory frameworks. All are located in Asia or Africa. They provide a range of countries of different sizes and stages of insurance regulatory development.

A country's ability to adopt an advanced risk management framework depends not only on the size of its population and economy, but also on its actuarial capacity. In many countries, actuarial capacity does not align with the size of the economy. Insurance markets also differ between countries, so the need for RBC may vary depending on the underlying insured risks.

The report may also be useful not only to insurance regulators in the nine countries covered, but also to regulators in other jurisdictions pursuing RBC reforms.

Information collection process

Population and real gross domestic product (GDP) figures are based on 2024 public data (unless otherwise noted) provided by the World Bank via https://data.worldbank.org.

Other information is based on desk research, personal experience, and outreach to in-country subject matter experts. Although we could not independently verify all items against publicly available sources, we believe the information is useful for the purposes of this study.

Requirements and regulations are constantly changing. This study reflects research conducted in late 2025 and early 2026, and some countries may have proposed or adopted changes not reflected in this report.

India

Capital City: New Delhi

Population: 1.45 billion

Real GDP: $3.48 trillion ($2,400 per capita)

OVERVIEW OF INSURANCE MARKET

India's insurance sector is dominated by two types of insurance providers: public sector companies and private sector companies. The public sector companies are owned by the Indian government and have been in operation for several decades. The private sector companies have been allowed to operate in India since 2000, resulting in increased competition and innovation in the sector. There is a sole national reinsurer: the General Insurance Corporation of India (GIC Re).

Life insurance is the most significant segment of the Indian insurance market, accounting for approximately 75% of the total market share, although life insurance coverage among Indians is relatively low, covering just 3% of the population. Health insurance is the second largest segment, followed by motor insurance. Currently, only 10% of Indians have some form of health insurance.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

Institute of Actuaries of India (IAI)

Number of Credentialed Actuaries In Country

Approximately 560 (less than 1 per million citizens)

Organization That Approves Responsible Actuaries

Insurance Regulatory and Development Authority of India (IRDAI)

Qualifications of Responsible Actuary

Must be fellow members of the IAI and meet specific experience requirements in the relevant insurance field with post-fellowship experience.

The individual must also be an Indian resident, have at least three years of middle or senior management experience, and possess a Certificate of Practice issued by IAI. Additionally, they must be an employee of the insurer, have no professional misconduct, and be under 70 years of age.

Requirement for Internal Actuarial Function

An internal actuarial function is mandatory according to IRDAI, wherein the appointed actuary (AA) is an internal employee of the company and shall have a certificate of practice and not serve as the AA of another company.

For life insurance, at least two actuaries are mandatory in addition to the AA, with one focused on pricing and the other on reserving. For general insurance, health, and reinsurers, at least one additional actuary is required in addition to the AA.

Outsourcing may be considered under limited circumstances with required governance controls defining the roles and responsibilities at minimum with more responsibility on the companies.

Powers of Appointed Actuary

The AA:

- Shall have access to all such information and documents in possession or under control of the insurer as necessary for the proper and effective performance of their functions and duties
- May seek any information for the purpose of certain regulatory provisions from any officer or employee of the insurer
- Shall be entitled to attend, speak, and discuss any matter in meetings of the management, including directors meeting of the insurer and in meetings of the shareholders or policyholders of the insurer relating to:
  - Actuarial advice given to directors
  - Solvency of the insurer
  - The ability of the insurer to meet reasonable expectations of the policyholders
  - On which actuarial advice is necessary
- May make any statement to the insurer for the purpose of the performance of AA duties

The AA must report directly to the CEO and must not also serve as the chief risk officer (CRO).

Actuarial Capacity Within The Insurance Regulator

There is no requirement to have actuaries on staff. However, the regulator does have a large actuarial staff of roughly 50 qualified actuaries.

ACTUARIAL VALUATIONS

Life Insurers

An annual actuarial valuation is required. A principal officer of the insurer must certify that full and accurate particulars of every policy have been furnished to the actuary for the purpose of the valuation. Valuation must be based on prudent assumptions including margins for adverse deviation—margins may not decrease reserves.

All assets and liabilities are to be measured according to Schedule II and other regulations with certain asset values set equal to zero.

Liabilities must be valued according to regulations and reflect "reasonable expectations of policyholders" regarding bonuses and benefits. Liabilities must reflect the value of options and guarantees.

Reserves cannot be less than surrender value and cannot be less than zero.

Method is gross premium valuation (GPV) (unexpired premium reserve (UPR) allowed for short-term contracts). Incurred but not reported (IBNR) should be included for individual business.

Cash flows to be valued include all benefits and premiums, commissions, maintenance expenses and the costs of taxation and allocation of profit to shareholders for participating business.

The discount rate is based on expected asset earned rate on assets backing the liabilities and yields expected to be earned in the future, adjusted for risk of collection and expenses of investing and adjusted by a margin for adverse deviation.

General Insurers

An annual valuation is required. All assets and liabilities are to be measured according to Schedule II and other regulations with certain asset values set equal to zero.

Liabilities to be held include unexpired risk reserves (unearned premium reserves and premium deficiency reserves) and claim reserves (outstanding claims, IBNR, and incurred but insufficient).

Special regulations apply for reserves and required capital on reinsurance.

SOLVENCY AND CAPITAL FRAMEWORK

Current Requirements

Insurers are required to have at least 50% of the minimum capital as stated under section 6.

Control level of solvency margin is 150% of the required solvency margin.

Every insurer must maintain solvency margin not below the control solvency margin.

RISK-BASED CAPITAL

The current required capital framework is not risk based; however, the IRDAI is in the process of moving to a risk-based framework. In 2023, the IRDAI released the first quantitative impact study (QIS) on RBC, with all insurers and reinsurance branches participating. While the RBC framework is still under development, some broad themes emerged, as follows:

- The regime appears to be based on the International Association of Insurance Supervisors' International Capital Standard framework, with the capital calibrated to be sufficient to meet a 1-in-200-year event over a one-year time horizon (99.5% confidence interval).

- There will be a standard list of risk modules.
- It is a market-consistent approach, with assets and liabilities measured at fair value.
- There will be largely stress-based capital calculations with an allowance for diversification between certain risks through a correlation matrix.

PRODUCT PRICING REQUIREMENTS

New Products

Retail protection and unit-linked and group products can be launched without prior regulatory approval. Explicit regulatory approval is required prior to launch for all other products. Filing includes a certification from the AA that the pricing complies with the applicable regulations.

There are regulations regarding maximum charges that can apply to investment-linked and universal life-type products and soft requirements on minimum policyholder internal rate of return on traditional nonlinked savings products.

Illustrations of benefits are required to be provided based on assumed annual investment returns of 4% and 8%. In addition, there are limits on the level of commissions and overrides that can be paid to distributors of insurance products. The limits vary by product type and premium period.

Pricing Review

Modifications to existing products can be implemented without prior regulatory approval.

All products must be reviewed by the AA at least once a year, considering:

The reasonable expectations of all stakeholders, including policyholders

- Financial viability of the products
- Emerging risks and experience under the products
- Any other relevant factors

The AA shall present the results of such review to the board of directors constituted by the Product Management Committee (PMC) and make suitable recommendations for any modifications or withdrawal of the product.

Any revision of the premium rates, the corresponding benefits, or both with respect to the existing products shall be based on credible underlying experience of relevant risk parameters. The revision shall also consider the analysis of policyholders' grievances and market feedback, if any.

ADDITIONAL PROVISIONS

Reinsurance

IRDAI Consolidated Reinsurance Regulations do not mention actuaries. However, reinsurance branches need a certifying actuary, and local reinsurers need an AA.

Own Risk Solvency Assessment (ORSA)

A financial condition report is required annually, but this is not a true ORSA filing.

Enterprise Risk Management (ERM)

There is a requirement for the Board of Directors to establish a Risk Committee that is responsible for ERM and asset-liability management (ALM). There is also a requirement to establish a CRO. However, there are no requirements as to what individuals in those posts need to do within the organization or whether an actuary needs to be involved in ERM.

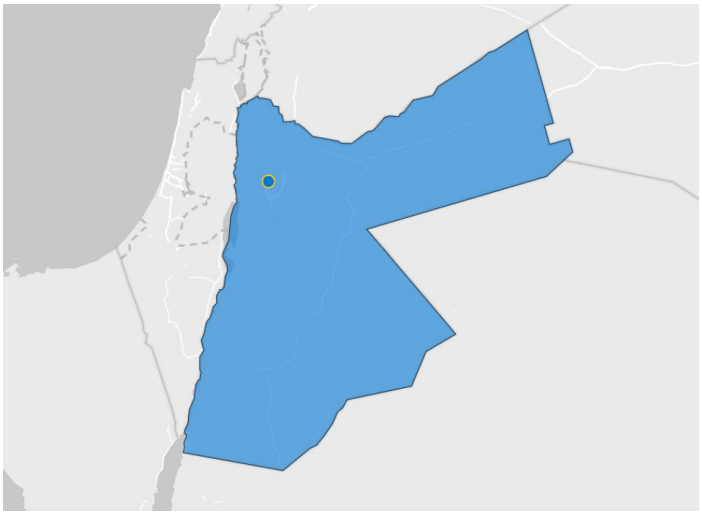
Asset-Liability Management (ALM)

There are limits to the types of assets that can be used to back insurance liabilities, but there are no requirements in relation to liabilities in the Indian insurance regulations.

Expense Management

The AA and the chief financial officer (CFO) shall be responsible for ensuring that the allocation and apportionment of the expenses of management are in accordance with the Board-approved policy.

Jordan



Capital City: Amman

Population: 11.6 million

Real GDP: $46.4 billion ($4,000 per capita)

OVERVIEW OF INSURANCE MARKET

Insurance companies in Jordan can write life insurance, general (property and casualty) insurance, or both. Motor and medical insurance constitute the largest portion of underwritten premium.

Insurance supervision in Jordan has evolved in recent decades, with three key milestones:

1. The enactment of Insurance Act No. 33 of 1999, establishing the Insurance Commission (IC) as an independent regulator of the insurance sector. From 1999 to 2014, the IC introduced many new regulations, which transformed the regulatory framework in which insurance companies in Jordan operate.
2. In 2014, due to government budget constraints, the IC was decommissioned and all its responsibilities were transferred to the Insurance Department at the Ministry of Industry and Trade.
3. In June 2021, the Central Bank of Jordan (CBJ) resumed regulatory supervision of insurance companies under Insurance Act No. 12 of 2021.

Since the CBJ took over, many new regulations were introduced, with great focus on corporate governance, capital requirements, and financial reporting. CBJ took a strict approach toward companies not meeting solvency requirements, liquidating four insurance companies that did not do so.

By law, insurance companies in Jordan must be publicly listed limited liability companies, which also brings them under relevant regulations of the Jordan Securities Commission (JSC) and Companies Law.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

Jordan does not have an independent national actuarial association. Instead, the profession is supported by international and regional organizations operating within the country.

Number of Credentialed Actuaries In Country

Approximately 16 actuarial consultants are registered with the Central Bank of Jordan; two reside in Jordan, and the rest live abroad.

Organization that Approves Responsible Actuaries

Central Bank of Jordan (CBJ)

Qualifications of Responsible Actuary

In order to practice the actuarial profession in Jordan, an individual must be licensed by the CBJ pursuant to Instructions No 3 for 2003, “Licensing the Actuary and Regulating Actuarial Conduct.” The requirements to register as an actuary in summary are to be:

- A fellow of an approved actuarial body, which includes the Society of Actuaries (SOA) in the U.S., the Institute & Faculty of Actuaries (IFoA) in the U.K., and the Canadian Institute of Actuaries
- An associate of an approved actuarial body that has an actuarial experience of at least five years since attaining the associateship under the supervision of a fellow

Powers of Appointed Actuary

Jordan's insurance regulations require insurance companies to appoint an AA within 30 days of obtaining their license. This requirement is stipulated in Insurance Regulatory Act No. 12 of 2021, which mandates that the AA fulfill actuarial functions related to the company's financial health and solvency.

The general statutory responsibilities of the AA are stated in Instructions No. 3 for 2003, “Licensing the Actuary and Regulating Actuarial Conduct.”

In practice, the following are the two key areas of practice for AAs in Jordan:

1. Provide a statement of actuarial opinion on the sufficiency of technical reserves held by insurance companies on a semiannual basis as per the requirements of Instructions 29/2024.

2. Provide a certificate confirming the sufficiency of pricing of new insurance products when the insurance company seeks regulatory approval.

There are no requirements for peer review. In one draft regulation, the regulator suggested that AAs should have their work reviewed by a peer, but this was removed in the final regulation because of limited actuarial resources.

CBJ requires the auditor to have an actuarial consultant review the work of the AA related to the annual statement of actuarial opinion on technical reserves.

Actuarial Capacity Within The Insurance Regulator

Currently, the regulator does not have a fully qualified in-house actuary and relies solely on foreign external actuarial consultancy companies for all matters related to actuarial supervision.

The regulator is working to build internal actuarial capacity, but this effort is expected to take time.

ACTUARIAL VALUATIONS

The key role of the AA is to provide a statement of actuarial opinion on the sufficiency technical reserves held by the insurance company as per the requirements of Instructions No. 29 for 2024, Basis of Calculation of Underwriting Liabilities. These instructions laid down all regulatory requirements after the implementation of IFRS 17 effective January 1, 2023.

Instructions No. 29 for 2024 are accompanied by:

- Form of the Certificate of the Actuary for General Insurance Business
- Form of the Certificate of the Actuary for Life Insurance Business
- Regulatory forms

Historically, the AA was required to provide an opinion on the sufficiency of the company's technical reserves, with all insurers using a December 31 year-end. Following the implementation of IFRS 17, CBJ now requires detailed valuation twice a year—on June 30 and December 31. For the mid-year valuation, companies conduct a full valuation and complete only the regulatory forms, without issuing detailed valuation reports.

SOLVENCY AND CAPITAL FRAMEWORK

Solvency Capital Framework

Two requirements have been issued by CBJ that amended previous instructions issued by IC:

- Instruction No. 6 of 2023 with regard to minimum capital requirements (MCRs) for insurance and reinsurance companies
- Instructions No. 7 of 2023 with regard to solvency margin requirements for insurance companies

The MCR was JOD 4 million (~$5.6 million) for the life insurance license and JOD 4 million for the general insurance license. CBJ increased the MCR for each license to JOD 8 million as of March 31, 2025. While the MCR for composite companies is now JOD 16 million, there is no clear asset segregation requirement between life and general insurance business. Reinsurance companies must maintain minimum capital of JOD 100 million, although no specialized reinsurance companies currently operate in Jordan.

Composite insurance companies with total capital of JOD 8 million that did not meet the deadline to increase their capital to JOD 16 million by March 31, 2025, had their life insurance license canceled by the Central Bank. They now comply by having capital of JOD 8 million but can only sell general insurance business.

Under Instructions No 7 for 2023, the minimum solvency margin required by regulator shall be 150% for insurance companies without branches abroad and 200% for insurance companies with branches abroad. The solvency margin is calculated by the following formulas:

- Available capital is calculated based on paid-up capital, adjusted for prescribed items such as retained earnings, proposed dividend distributions, and changes in the fair value of assets through other comprehensive income.
- Required capital is calculated using prescribed weights by category, including asset risks such as credit risk and market risk, required capital against underwriting liability risk, and reinsurance risk. For example:
  - Deposits for less than one year at banks classified in group 1: 0.1%
  - Deposits 1–5 years at banks classified in group 1: 0.3%
  - Receivables from agent/brokers due in 90 days: 20%
  - Net unearned premium reserve for motor third-party liability: 30%
  - Net claims reserves for motor third-party liability: 20%

Insurance companies must submit solvency information quarterly. Solvency margin must be included in the annual financial statements of the insurance company.

The AA is not required to be involved with any requirement related to the calculation of solvency margin that is submitted to the regulator.

Risk-Based Capital

The current regulatory approach to solvency is a factor-based margin approach, rather than a risk-based approach.

PRODUCT PRICING REQUIREMENTS

New Products

All new insurance products—life and non-life—must be submitted to and approved by the CBJ. This requirement was set by the IC, the predecessor of CBJ. New product filings must include an actuarial certificate confirming the appropriateness of pricing.

Products sold before actuarial involvement was introduced for new product licensing do not require a pricing certificate. As a result, actuaries are not involved in pricing several major market lines, including:

- Motor third-party liability
- Motor comprehensive coverage, including own damage and third-party liability
- Medical insurance

Motor third-party liability insurance is compulsory in Jordan. Prices are set by the government, and no actuarial certificate is required for pricing. However, the prices set by the government are not sufficient, and insurance companies incur significant losses from this line of business.

Pricing Review

An actuarial pricing certificate is required only for new products at the time of filing, with no prescribed format or content and no requirement for subsequent pricing adequacy reviews.

ADDITIONAL PROVISIONS

Reinsurance

Jordan does not have a national reinsurer, so its reinsurance market is served primarily by international providers. As highly rated global reinsurers tighten underwriting requirements, African reinsurers and other market participants are becoming more involved.

Instructions No. 4 of 2002 governs the standards that insurance companies must follow when dealing with reinsurers. Among other requirements, it requires insurance companies to:

- Have a reinsurance policy approved by the insurance company board
- File the reinsurance policy approved by the board with the regulator on an annual basis
- Classify reinsurers into four groups based on credit ratings, consistent with solvency requirements, with Group 1 representing the highest-rated reinsurers

As part of risk management and solvency reporting, the regulator requires disclosures concerning retention levels, reinsurer ratings, and treaty structures. Insurers must also file information on their exposure to each reinsurer group, with limits on exposure to lower-rated groups.

Own Risk Solvency Assessment (ORSA)

There are no requirements in Jordan regarding ORSA. However, if the solvency margin of an insurance company drops below the minimum regulatory requirement of 150%, they are required to submit a recovery plan to CBJ.

Asset-Liability Management (ALM)

The AA looks at the liability side of the balance sheet of insurance companies but has no required involvement in the suitability of assets to meet the liability profile.

Instructions No 1 for 2006, Basis of Investing the Funds of Insurance Companies, stipulates the investment regulatory requirements and constraints.

The board of the insurance company must establish an investment strategy that addresses the following:

- Permitted and prohibited investments
- Geographical limits
- Concentration limits
- Investment authority within the company
- Nature of the company's liabilities
- Market, credit, and liquidity risk

The investment strategy must be reviewed annually.

The instructions also require that the weight of certain asset categories does not exceed a fixed percentage of total assets/equity. For example:

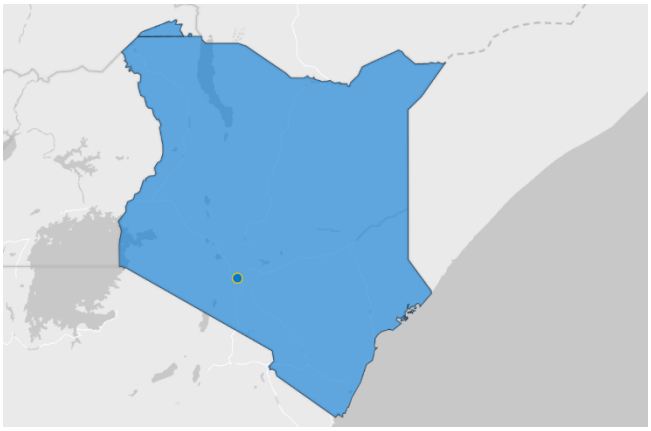
- Unlisted securities: max 10% of net equity
- Foreign investment: max 10% of net equity
- Real estate: max 20% of total assets for general insurance companies; max 30% of total assets for life insurance companies.

Certain investments are explicitly prohibited.

Enterprise Risk Management (ERM)

Jordan has no explicit regulatory instructions on ERM requirements, though certain areas are addressed indirectly through related instructions.

Kenya



Location: East Africa

Capital City: Nairobi

Population: 56.4 million

Real GDP: $105 billion ($1,800 per capita)

OVERVIEW OF INSURANCE MARKET

Based on premiums of $3 billion, Kenya ranks fourth in the African insurance market after South Africa, Morocco, and Egypt. Total insurance assets are $8 billion, driven primarily by long-term insurers, and equal roughly 60% the total market capitalization of the Kenya Stock Exchange.

The market includes 55 insurance companies: 32 general insurers, 20 long-term insurers, and 3 composite insurers. It also includes five locally incorporated reinsurers—three composite and two general insurance—along with two regionally licensed reinsurers and one microinsurance company.

The market is 53% general insurance (mainly composed of medical, motor, and fire) and 47% long-term life insurance (mainly deposit administration, life, and group life). Deposit administration contracts are group savings or retirement arrangement plans managed by a life insurance company.

Eighty-two percent of total premiums come from Nairobi County, with 50% from agents, 30% from insurance brokers, and 20% direct.

The top five long-term life insurers and top seven general insurers account for 65% and 55% of total premiums, respectively.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

The Actuarial Society of Kenya (TASK)

Number of Credentialed Actuaries In Country

Approximately 110 (2 per million citizens)

Organization that Approves Responsible Actuaries

TASK and the Insurance Regulatory Authority (IRA)

Qualifications of A Responsible Actuary

Associate membership requirements:

- Must be an associate of a professional body recognized by the TASK Council
- Must have at least two years of relevant working experience

Fellow membership requirements:

- Must be a fellow of a recognized professional body
- Must be a fully qualified actuary of a body that is a full member of the International Actuarial Association (IAA)

Most actuaries pursue the IFOA exam path to qualification.

Requirement for Internal Actuarial Function

An actuarial function must be approved by the IRA. Within the organization, the actuarial function must be well positioned, resourced, authorized, and staffed to operate effectively to avoid any form of conflict of interest.

Key deliverables relate to ensuring evaluation and advice on product development, pricing, underwriting, data quality, technical provisions, solvency, risk assessment, risk modeling, related stress and scenario testing, and reinsurance arrangements.

Must have access to and periodically report to the board on actuarial matters, including adequacy of provisions, solvency, and material risks. Reporting to the IRA includes quarterly valuation and solvency statements.

Powers of Appointed Actuary

The AA must have a qualification of a fellow of TASK or equivalent and be approved by the IRA.

They must be independent and free from conflicts of interest that could compromise the role.

The AA annually prepares and signs an annual valuation report. The report must contain a statement of compliance with guidelines, actuarial opinion on valuation, and detailed description of valuation, including data quality, methods, assumptions, differences from prior years, adequacy of reserving, etc.

The AA annually prepares and signs the financial condition report (FCR, comparable to ORSA under Solvency II), which assesses the data quality; recent experience, profitability, and current pricing adequacy; the adequacy of past estimates and current insurance liability valuation; capital adequacy; ALM; reinsurance arrangements; and other risk management matters, and includes comments and recommendations.

The AA prepares annual valuation reports to the board and annual FCRs for both the board and IRA and must report immediately to the IRA in certain risk situations, such as lack of reinsurance cover, solvency breaches, or legal contraventions that could harm policyholders.

The AA must have access to the board, as well as internal and external auditors.

If the AA is replaced or resigns, the insurer must notify IRA with reasons and disclose any disagreements.

Actuarial Capacity Within The Insurance Regulator

As per the IRA Strategic Plan for 2023–2027, the organizational chart and staff needs call for a total of 121 approved positions. The actuarial and data analytics function falls under the directorate of supervision, with five positions approved, two fulfilled, and three others to recruit for. Apparently, no qualified actuaries have been recruited yet at the IRA.

ACTUARIAL VALUATIONS

The following actuarial valuation related reports/returns must be submitted to the IRA.

Quarterly (within 1 month of the quarter-end):

- Valuation report prepared by head of actuarial function (HAF)
- Unaudited regulatory returns

Annually (within 3 months of the financial year-end):

- Valuation report prepared by AA
- Audited regulatory returns
- FCR submitted to the board within three months and to the IRA within four months of each financial year

As per the Legal Notice No. 38 of 2017 issued by the IRA under the Insurance Act, the following are guidelines for the valuation of technical provisions for long-term insurance business.

Valuation methods:

- Market-consistent approach.
- Assets valued at fair market exchange price.
- Liabilities valued at the amount payable to transfer/settle them.
- Mark-to-market preferred; mark-to-model allowed if no market prices exist.
- Valuation method and assumptions cannot change without prior IRA approval.
- As per Circular No. IC 01/2024, dated March 18, 2024, policyholder liabilities are now required to be calculated according to IFRS 17 requirements. Prior to this, policyholder liabilities were calculated as the best estimate liability (BEL) plus a risk margin, where the risk margin was calculated as a factor-based increase to the best estimate assumptions.

Non-economic assumptions:

- Best estimate (BE) assumptions with no margins.
- Allow for all expected decrements and policyholder actions, including lapses.
- Refer to Legal Notice No. 38 of 2017: Appendix 1 on guidance when setting BE non-economic assumptions.

Economic assumptions:

- Use government bond yield curve from Nairobi Securities Exchange as default risk-free rate.
- Flat extrapolation beyond available yield curve term.
- Investment expenses included in cash flows, not discount rates.

As per Legal Notice No. 37 of 2017 issued by the IRA under the Insurance Act, the following are guidelines for the valuation of technical provisions for general insurance business.

Premium reserves:

- Insurers must determine and disclose unearned premium reserves per class of business.
  - Approved methods include the 8ths method (quarterly)—only for reinsurer reserving on a quarterly basis—the 24ths method (monthly), the 365ths method (daily), or any other method approved by the IRA.
  - Reserve adequacy tests are required; if inadequate, a premium deficiency reserve must be set.
- Unexpired risk reserves must also be calculated and done separately for each class of business.

Claims reserves:

- Outstanding claims reported shall be valued prudently using case estimates, average cost per claim, or other approved methods.
- IBNR claims shall be valued using at least two approved methods (e.g., chain-ladder, Bornhuetter-Ferguson, Cape Cod, stochastic methods).
- Methods for the valuation of the claim reserves shall reflect the characteristics of the class of business, reliability of the available data, past experience of the insurer, robustness of the valuation models, and materiality.
- Claims reserves must include claim adjustment expenses.
- Reserve adequacy tests are required; deficiencies must be addressed with a claims deficiency reserve margin.

Reporting requirements for both long-term and general insurance businesses are as follows.

Annual reserve valuation report (signed by the AA) must include:

- Compliance statement
- Actuarial opinion
- Detailed methodology, assumptions, and reserve adequacy assessment
- Explanation of changes from previous methods and their effects
- Data quality assessment

Quarterly reserve valuation report (signed by HAF and principal officer) must include:

- Compliance statement
- Reserve value per business line
- Relevant influencing factors

As per Circular No. IC 01/2024, issued by the IRA in March 2024, the prescribed basis was updated, requiring insurers to prepare published reports in compliance with IFRS 17 and to align the statutory risk-based to IFRS 17 as well.

The circular focuses on the level of aggregation, determination of discount rates, and risk adjustment. On the level of aggregation, IRA requires insurers to create portfolios based on the classes and subclasses of insurance business as defined in the Insurance Act that the insurer underwrites. The regulator allows the insurer to use either the bottom-up or top-down approach when determining the discount rates; however they are required to provide a justification for the choice and details of the inputs into the computation of the discount rate. IRA has recommended that insurers should adopt at least a 75% confidence level for risk adjustment.

Insurers are required to prepare financial year-end returns and statements as per sections 54–59 of the Insurance Act. These financial year-end returns and statements are to be prepared on the IFRS 17 basis. These financial year-end returns and statements are required to be submitted to the IRA within three months after the financial year-end. Quarterly unaudited returns and statements must be submitted within 30 days of the quarter-end.

SOLVENCY AND CAPITAL FRAMEWORK

As per sections 23, 41, and 42 of the Insurance Act, Legal Notice No. 38 of 2017, and Circular No. IC01/2024, the following are five regulatory requirements and guidelines for the determination of insurance capital adequacy.

1. **Capital adequacy obligations**
    - Maintain adequate capital at all times.
    - Have an internal capital management policy.
    - Maintain a capital adequacy ratio (CAR) of at least 100% of the MCR. The MCR is the highest of:
        - KES 400 million for life insurers, KES 600 million for general insurers
        - RBC requirements, equal to 5% of liabilities of the life insurance business, or 20% of the net earned premiums for the general insurance business.
        - The IRA may direct an insurer to increase their MCR depending on the nature, scale, complexity, and risk profile of the insurer.
    - However, the prescribed capital requirement (PCR) is at least 200% of the MCR.
        - Failure to meet this ratio does not imply solvency but may trigger additional oversight and restrictions by the IRA.
2. **Capital available**
    - Tier 1 capital: Highest quality (e.g., ordinary shares, reserves, retained earnings, cash, government securities).
    - Tier 2 capital: Lower quality but still admissible (e.g., preference shares, subordinated loans, general reserves).
    - Certain assets are inadmissible (e.g., goodwill, deferred tax assets, pledged assets, excess concentrations, inventory).
    - There are caps on exposure to single institutions, property, and related parties (which varies for life and general insurers).
    - Assets are valued on a market-consistent basis. The IRA may require independent revaluation.

3. Asset and liability basis for regulatory reporting

- Assets and liabilities other than policyholder liabilities should be valued on a market-consistent basis.
- As per Circular No. IC 01/2024, dated March 18, 2024, policyholder liabilities are required to be calculated according to IFRS 17 requirements.

4. RBC requirement calculation

- The RBC of an insurer is based on four risk categories as provided in the following formula:

$$\sqrt{insurance\ risk^2 + market\ risk^2 + credit\ risk^2} + operational\ risk$$

- Insurance risk
  - General insurance, including group policies: capital against fluctuations in premium and claim reserves, plus catastrophe risk.
  - Life insurance: capital against adverse experience from mortality, longevity, morbidity, expenses, lapses, and catastrophe risks.
  - Deposit administration and group pension savings plans: a 1% risk charge applies to the fund amount.
  - Specific stresses and factors listed in Legal Notice No. 38 of 2017, Appendices 1 & 2.
- Market risk
  - Capital against volatility in asset values due to equity, property, interest rate, currency risks.
  - Specific capital charges and stress scenarios listed in Legal Notice No. 38 of 2017, Appendix 4.
- Credit risk
  - Capital against counterparty default.
  - Risk charges vary by asset type and counterparty rating as listed in Legal Notice No. 38 of 2017, Appendix 3.
- Operational risk
  - Cushion for losses from failed processes, systems, or people.
  - Calculated as the higher of:
    - 30% of combined square root of insurance, market, and credit risk capital
    - 3% of previous year's gross earned premiums

5. Compliance and enforcement

- Insurers must notify the IRA within 30 days if they breach or may breach capital requirements or the guidelines outlined above. Notification must include a remedial plan.
- Supervisory intervention and administration sanctions may be enacted by the IRA to ensure remedial measures are pursued.

PRODUCT PRICING REQUIREMENTS

Under Section 5(1)(b), (c), (d) of the Insurance Act, the Commissioner of Insurance has the power to:

- Standardize contracts for compulsory insurance (including rates in some cases)
- Require insurers to amend, simplify, or delete unclear, ambiguous, unfair, or oppressive policy terms
- Approve tariffs and rates for any class of insurance

Under Section 30(d) and (e) of the Insurance Act, when applying for registration, insurers must file:

- All proposals, policy forms, endorsements, and any written material on terms, conditions, and benefits
- Statements of premium rates, advantages, and terms to be offered
- The bases and formulas used to calculate those rates
- For long-term (life) insurance, an actuary's certificate confirming the rates and terms are sound and workable

Any significant changes after registration remain subject to the commissioner's general approval powers under Sections 5, 74, and 75 of the Insurance Act.

Life insurance premiums (Section 74 of the Insurance Act):

- Premium rates must be approved by an actuary.
- The rates, actuarial bases, and actuarial certificate must be filed with the commissioner at least 30 days before use or within three months of appointment.
- Actuaries must consider maximum commission/rebate limits, and insurers cannot exceed these without the commissioner's approval.
- Applies to both new products and repricing of existing products.

General insurance premiums (Section 75 of the Insurance Act):

- Insurers must submit their schedule/manual of premium rates for each class before starting business or within three months of appointment.
- Changes must be filed at least 60 days before implementation, with reasons provided.
- Deviations from filed rates must be reported within 30 days.
- No actuarial certification is required, but the commissioner may issue directions to ensure rates are not unfairly discriminatory or inadequate.

Part VIII of the Insurance Act sets additional requirements for premium rates, policy terms, and claims settlements. In summary, it protects policyholders by regulating commissions, premium rates, and contract terms. Life and general insurers must file approved rates with the commissioner, and policies must be clear, accurate, and compliant with Kenyan law, and must state benefits in Kenyan currency unless exempted. Policyholders' rights include returning certain life policies within 28 days, receiving paid-up or surrender values after three years, and protection of benefits from creditors. Additional rules address motor ownership transfers, claims settlement, insurable interest, child policies, and safeguards against unfair deductions or policy forfeiture.

Further guidelines are issued in the IRA Guidelines on Insurance Products for Insurance Companies and Intermediaries (IRA Guidelines). Main provisions include:

- **Product design**: Insurers must follow a structured process including a business case, market testing, cost-benefit analysis, risk assessment, implementation plans, approval levels, post-implementation reviews, and compliance monitoring.
- **Pricing**: Pricing should be based on realistic claims and cost estimates, with ongoing actuarial review, profit/loss analysis, and monitoring of price deviations. Insurers must adjust prices based on experience and market conditions while complying with pricing policies.
- **Filing**: All new or repackaged products must be submitted to the IRA before launch, with detailed documentation including policy documents, forms, marketing materials, pricing structures, reinsurance details, business plans, etc. Products can only be launched after receiving a "no objection" letter from the IRA. An actuary's report is required for life insurance products.
- **Marketing**: Promotion must be clear, fair, truthful, and consistent with approved terms. Insurers are responsible for the accuracy of information shared with customers and intermediaries and must withdraw misleading information promptly.
- **Disclosures**: Customers must receive comprehensive written information before and at the point of sale, including product features, premiums, charges, benefits, exclusions, surrender values, and risks covered. Commission amounts must be disclosed upon request. Customers and intermediaries must also disclose all material facts to insurers.
- **Reporting**: Insurers and certain intermediaries must submit annual performance reports for each new or repackaged product for at least three years using IRA templates.
- **Withdrawal of products**: The IRA must be notified before withdrawing a product, with reasons provided and measures to protect existing policyholders. The IRA can require public notification and has the power to withdraw products from the market.

ADDITIONAL PROVISIONS

Reinsurance

Active locally licensed reinsurers:

- Long-term life insurance: Continental Re, East Africa Re, and Kenya Re
- General insurance: Continental Re, East Africa Re, Kenya Re, Ghana Re, and WAICA Re Kenya

Two reinsurers operate under regional charters: ZEP-RE (PTA Reinsurance Company) and Africa Reinsurance Corporation. They receive mandatory cessions of 10% and 5%, respectively, of Kenyan treaty insurance business.

Kenya Reinsurance Corporation, a locally incorporated reinsurer, receives mandatory cessions of 20% of treaty insurance business for both long-term and general insurance, as provided under the section 145(2) of the Insurance Act, and the Fifteenth Schedule of the Insurance Regulations. For some long-term insurance businesses, the mandatory cession is 25%.

Further reinsurance guidance is issued in the IRA Guidelines.

OWN RISK SOLVENCY ASSESSMENT (ORSA)

An FCR is required. It should cover the Risk Management System and highlight any issues arising from the use of the specified reinsurance strategy and arrangement in relation to the insurer's liability profile.

The FCR requires specific detail on other areas such as profitability, adequacy of past estimates of insurance liabilities, pricing, and premium adequacy.

The FCR is produced annually by the AA (for independence), while ORSA is a management responsibility. The quality of FCR reports is still improving and is subject to detailed review by the IRA. Management teams and boards are starting to engage with the FCR, though it remains mostly a compliance exercise. Most insurers do not yet have the underlying processes to produce a quality FCR, but this is expected to improve over time.

ENTERPRISE RISK MANAGEMENT (ERM)

Kenya has been a regional leader in strengthening governance and risk management requirements. Every insurer is required to have authorized control functions for risk management, compliance, actuarial, and internal audit. These functions must be independent and free from senior management influence and should directly report to the board and its subcommittees.

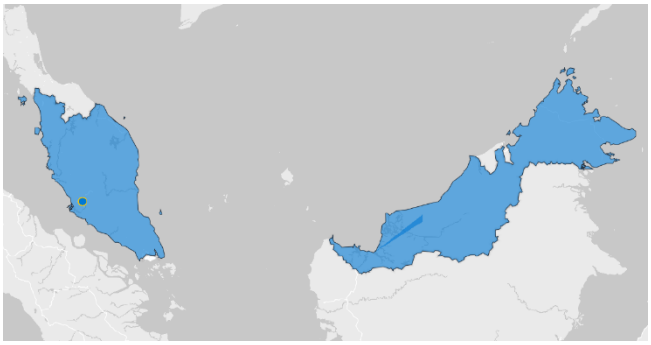
The structure of the regulation clearly separates the organization's three main powers—ownership, management, and administration—and distinguishes the three lines of defense: internal audit, control functions such as risk and compliance, and senior management.

The IRA also requires insurers to have a board-approved risk management framework, including a risk appetite statement. The law requires companies to have a functional and well-resourced risk management function that is effective and capable of helping the insurer identify, assess, monitor, mitigate, and report on its key risks in a timely way, as well as promote and sustain a sound risk culture.

Asset-Liability Management (ALM)

Under the IRA Guidelines, the actuarial function is responsible for evaluating and advising on insurance valuations, solvency, material risks, and other actuarial matters, including the development of an ALM strategy. The FCR must detail the insurer's approach to ALM, considering the insurer's profile, liquidity needs, and any additional commentary from the AA.

Malaysia



Capital City: Kuala Lumpur

Population: 35.6 million

Real GDP: $422.6 billion ($11,900 per capita)

OVERVIEW OF INSURANCE MARKET

The Malaysian insurance market is relatively sophisticated, with the phased removal of tariffs on motor insurance encouraging product innovation. Market penetration is high and increasing, with around 45% of Malaysians having at least one policy.

Endowment products dominate Malaysia's life insurance market, accounting for about 80% of premiums, with most of the remainder from whole life insurance. Motor insurance is the largest general insurance segment, while fire insurance remains important, and demand for catastrophe insurance is increasing.

Malaysia is an important market for takaful insurance.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

Actuarial Society of Malaysia

Number of Credentialed Actuaries In Country

Approximately 250 (around 7 per million citizens)

Organization that Approves Responsible Actuaries

Bank Negara Malaysia (BNM)

Qualifications Of Responsible Actuary

Individual must be a fellow member of relevant actuarial body (e.g. IFoA, SOA, CAS, Canadian Institute of Actuaries). The individual must also have at least three years of relevant post-qualification experience and meet their CPD requirements. Potential candidates must be assessed by the BNM.

Requirement for Internal Actuarial Function

Insurance companies in Malaysia must have an AA approved by BNM.

Powers of Appointed Actuary

BNM regulations outline the AA's responsibilities, and insurers and reinsurers must have an AA in place. BNM doesn't appear to require a peer-review actuary or an auditing actuary.

The AA is responsible for valuation and pricing, compliance with regulations, and advising the board on financial risks.

BNM regulations emphasize the separation of pricing responsibilities from the AA's roles to avoid conflict of interest in Paragraph 9.9 of the regulations. Conflicts of interest arise when the AA is also responsible for pricing, as they may face commercial pressure to set prices for market competitiveness rather than making independent, objective decisions that protect policyholders and ensure the insurer's reserves adequacy.

Actuarial Capacity Within The Insurance Regulator

There are several actuaries within BNM. Regulators are proactive and readily engage with industry professionals.

ACTUARIAL VALUATIONS

Overall Approach

Insurers in Malaysia must submit quarterly forms and valuation reports covering liabilities, policy counts, and solvency position. They also prepare a quarterly surplus analysis, showing the surplus generated from investment-related elements, insurance-related elements, new business, and other sources.

Submissions are generally due by the 21st of the month following the valuation date. Year-end forms are generally similar to quarter-end forms, but require more detailed liability breakdowns, including by product and product group.

Labuan, a federal territory of Malaysia, recently moved from a volume-based capital framework to a risk-based approach. BNM is also moving toward an updated risk-based framework (i.e., RBC2) and is currently in the quantitative investigation phase. Under the current RBC framework, companies must submit quarterly RBC forms to the regulator covering liabilities, policy counts, and capital charges for different risks.

Companies are required to send valuation reports including solvency results, movement in surplus, details of liabilities, valuation methodology, reinsurance arrangements, and details of new products to the regulator for review.

All insurers are also required to submit an annual FCR report prepared by the AA documenting their assessment and independent opinion/recommendations on the following key areas:

- Nature of business
- Experience analysis
- ALM
- Capital adequacy and threats to its financial condition
- Reinsurance arrangements
- Distribution of surplus

The FCR must be presented to the board and submitted to the regulator within 14 days of that presentation.

Life Insurance Liabilities

Life insurance contract liabilities are made up of the BEL, the time value of options and guarantees (TVOG), and the risk margin.

The reserve methodology varies depending on the product's contract boundary. For example, short-term policies are reserved using the unexpired risk basis, while long-term policies use prospective reserving methods such as GPV or sterling reserve. Reserves are calculated as a net of reinsurance and allow for tax, meaning investment return assumptions are net of tax. Management actions are not allowed under the current RBC framework but are permitted under the capital management plan and under the ICAAP framework.

All options and guarantees in life insurance policies must be explicitly identified, with TVOG included in the liabilities. TVOG should be valued using a stochastic method, although a deterministic method may be used after assessing the materiality and size of the portfolio.

A risk margin is required and is determined using a provision for adverse deviation approach, reflecting the 75th percentile adverse scenario.

Under the prospective approach, cash flows must be discounted using regulator-specified yield curves: the Malaysian government securities yield curve for conventional insurance liabilities and the Government Investment Issues curve for takaful liabilities. The current RBC framework does not allow smoothing or illiquidity premium.

IFRS 17 has been implemented in Malaysia, and life insurance companies must disclose IFRS 17 information in their financial statements. A similar disclosure is also required annually to BNM.

General Insurance Liabilities

General insurance contract liabilities consist of two components: claim liabilities and premium liabilities. Claim liabilities relate to expired coverage periods and include outstanding case reserves, IBNR reserves, claims handling expense reserves, and a risk margin to provide sufficiency at the 75th percentile confidence level. Premium liabilities relate to coverage and are determined as the higher of UPR and unexpired risk reserve (URR), where URR reflects expected future claims and expenses, including a 75th percentile risk margin for the unexpired portion of policies.

For takaful insurance, expense liabilities are treated differently from conventional insurance because of its structure and adherence to Shariah principles. Participants contribute to a risk fund (Tabarru) used strictly for claims and benefits. The takaful operator manages the fund and charges a Wakalah (management) or similar fee to cover operational expenses like administration, marketing, and commissions. Unlike conventional insurance, where claims and expenses are paid from the insurer's main account, takaful separates the participant's risk fund from the operator's own account. Claims and related risk expenses are paid from the risk fund, while operational expenses are paid from the operator's fee. As a result, takaful operators account separately for expense liabilities funded by operator fees and risk liabilities covered by the participants' fund), ensuring Shariah compliance and transparency.

Discounting reserves is not mandated under current general insurance regulatory reporting, but it will be introduced as an additional requirement under the upcoming RBC2 framework.

SOLVENCY AND CAPITAL FRAMEWORK

BNM prescribes the stress factors used in capital calculations. These include market-related stresses, such as equity declines and interest rate movements; insurance-related stresses, such as an increase in expenses and mortality increases; and operational risk. The current RBC framework does not allow for correlations between risks, although this feature is proposed under the new RBC2 framework.

The specific stresses can be found at https://www.bnm.gov.my/insurance-takaful under "Risk-Based Capital Framework for Insurer." The relevant appendix for risk charges is outlined here:

- Credit Risk Capital Charges: Appendix I
- Market Risk Capital Charges: Appendix II
- Stress Factors for Life Insurance Liabilities: Appendix V

Insurance risk charge calculations for general insurance liabilities are relatively straightforward compared with life insurance liabilities. The charges are factor-based, with factors varying by type of business; for example, long-tailed business is subject to higher risk charge factors. The factors are set out in Appendix IV of the above-referenced document.

Product Pricing Requirements

Companies need to seek approval from the regulator before launching products.

BNM's product transparency and disclosure requirements specify the information that must be disclosed in brochures and policy documents. These can be found at https://www.bnm.gov.my/insurance-takaful under "Product Transparency and Disclosure."

The same requirement applies to general insurance. All insurers must submit product documentation (PD) at least 30 days prior to launching a new product. The PD must include the product description, distribution channel, target market, projected business volume, premiums and charges, technical basis, underwriting requirements, and CEO approval. Further details on the filing requirements can be found in appendices of this document

Motor and fire insurance premium rates are tariffed, and policy wording is regulated. Under Malaysia's phased liberalization, insurers may price and adjust premiums freely as long as deviation from the prescribed tariff do not exceed 10%. Proposed rates above this threshold must be filed with the regulator for approval. This approach is intended to gradually introduce competition and innovation in the market while maintaining some regulatory oversight to protect policyholders.

ADDITIONAL PROVISIONS

Reinsurance

Valuation reports must summarize reinsurance arrangements and assess their adequacy, including relevant credit ratings. Valuation results must be presented on both gross and net of reinsurance basis.

Own Risk Solvency Assessment (ORSA)

BNM's (ICAAP includes guidelines for action plans in case of CAR drops, as well as stress testing and scenario analysis. This process helps companies identify key risks and maintain appropriate capital levels.

Under ICAAP, insurers conduct stress tests and scenario analyses, with impacts shown on a multiperiod basis through projections over several years.

Companies must identify their key risks and the actions they would undertake to restore solvency if it falls below their individual target capital level.

BNM requires companies to have their ICAAP independently reviewed every three years, typically by an external consultancy.

ICAAP content requirements are set out in BNM's Guidelines on Internal Capital Adequacy Assessment Process for Insurers. When preparing ICAAP documentation, companies generally refer to Section B of the regulation with additional detail provided in paragraph 11.4.

BNM regulations require companies to review their ICAAP annually and indicate that BNM will review the soundness of each company's ICAAP. However, the regulations do not explicitly require formal submission to BNM. We understand that BNM may access the ICAAP documentation through board materials where ICAAP-related items such as individual target capital levels are approved.

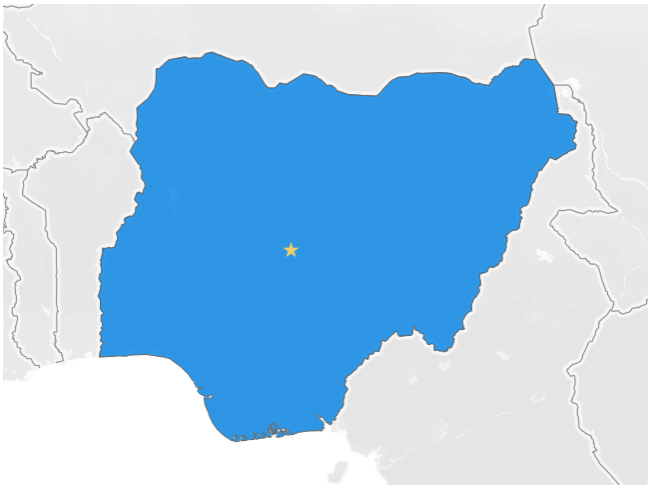
Asset-Liability Modeling/Analysis

As part of ICAAP, insurers must project both assets and liabilities and include them in projected balance sheets submitted with the ICAAP report. Beyond this, the regulator does not prescribe specific ALM requirements.

Enterprise Risk Management (ERM)

Malaysia has no specific ERM regulations or guidelines, but the ICAAP report describes the main risks the business faces, how these are managed, and the company's risk appetite through a risk appetite statement.

Nigeria



Capital City: Abuja

Population: 232.7 million

Real GDP: $540.9 billion ($2,300 per capita)

OVERVIEW OF INSURANCE MARKET

Nigeria's insurance market is slightly more fragmented than those in other countries. It includes core insurance providers as well as significant risks covered and regulated outside the core insurance industry:

- Healthcare regulated by the National Health Insurance Authority (NHIA)
- Pension regulated by the Pension Commission (PenCom)

The health insurance industry is made up of accredited healthcare providers and health maintenance organizations (HMOs).

Nigeria's pension structure is primarily a defined contribution framework. Retirees may purchase an annuity from an insurance company or continue drawing income from their accumulated funds, with no requirement to buy an annuity. The regulation establishing the pension industry also made group life insurance compulsory for companies with three or more employees.

The National Insurance Commission (NAICOM) regulates the core insurance industry. Unless otherwise stated, this summary refers to this sub-sector.

Insurance companies in Nigeria are currently classified as life, non-life, or composite. However, following the passage of the Nigerian Insurance Industry Reform Act 2025 (NIIRA 2025) in July 2025, existing composite companies must separate by 2030.

NIIRA 2025 identifies several compulsory insurance classes, including:

- Insurance of public buildings
- Motor insurance
- Credit insurance
- Marine insurance

The insurance industry controlled by NAICOM is roughly 65% non-life and 35% life.

The top three risks for the non-life industry by premium are oil & gas, fire, and motor.

For the life industry, the largest premium is from group life (47%), followed by annuity (33%) and individual/retail business (20%).

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

Nigerian Actuarial Society (NAS)

Number of Credentialed Actuaries In Country

Approximately 15 (less than 1 per 10 million citizens)

Organization that Approves Responsible Actuaries

The NAS and the relevant regulators approve actuaries for specific areas of practice. The FRC also oversees inputs into financial reporting for public entities, including certain actuarial work.

NIIRA 2025 Section 53(4) requires the statutory actuary to be independent of the insurer or reinsurer being valued; accordingly, this role is performed by consultants.

Under Section 38 of the National Health Insurance Authority Act of 2022, the NHIA must appoint a licensed actuary "on such terms and conditions as may be determined from time to time."

Qualifications of A Responsible Actuary

Must be a fellow of the Nigerian Actuarial Society or an equivalent recognized actuarial body.

Educational requirements: Completion of actuarial examinations recognized by NAS such as IFoA, SOA, CAS, or the Actuarial Society of South Africa (ASSA).

Compliance: Adherence to professional standards and ethical guidelines set by NAS, and for financial reporting work, the FRC.

Requirement for Internal Actuarial Function

Insurers are required to have an actuarial department. The department must be headed by someone competent, but not necessarily by an actuary.

Life insurers are more likely than non-life insurers to have an internal actuary. Actuaries are not currently engaged internally in the pension or health industries.

NAICOM recently strengthened requirements for life insurers writing annuity business. These insurers must employ at least one qualified actuary responsible for conducting and implementing ALM, subject to a transition period.

Powers of Appointed Actuary

Under NAICOM requirements, the statutory valuation must be signed by a qualified actuary who is a fellow of a recognized actuarial body.

For pricing requirements, an assistant actuary may sign.

The FRC recently proposed regulations setting requirements for actuaries performing actuarial work for insurers related to financial reporting. Under the draft, actuaries must be associates of a recognized professional body with at least five years of post-qualification experience. The proposed regulations apply to:

- Actuarial services for financial reporting purposes, including capital assessment, pricing, ALM, valuation, insurance, pensions, investments, financial modeling, and risk assessment
- All actuaries providing actuarial services for the financial reporting of public interest entities (PIEs) in Nigeria

Actuarial Capacity Within The Insurance Regulator

The regulator does not have actuaries on staff. It has two actuarial analysts who completed the Certified Actuarial Analyst (CAA) examinations, a credential formerly co-sponsored by the SOA and IFoA that has since been discontinued.

Regulators have occasionally engaged support from consulting actuaries.

ACTUARIAL VALUATIONS

An annual valuation is required.

A new quarterly valuation requirement has been introduced, although it does not require a full valuation.

IFRS 17 was adopted in 2023 and is incorporated into valuation requirements.

SOLVENCY AND CAPITAL FRAMEWORK

Current Requirements

NIIRA 2025 sets the capital requirement as the higher of a fixed MCR or an RBC determined by NAICOM. The MCR amounts are as follows:

- Life: NGN 10 billion ~ $7 million
- Non-life: NGN 15 billion ~ $10.5 million
- Reinsurance: NGN 5 billion ~ $24.6 million

Existing operators have until July 2026 to comply with these capital levels.

Risk-Based Capital (RBC)

NIIRA 2025 gives NAICOM authority to establish the RBC framework and, under Section 15 (2), requires the framework to consider insurance, market, credit, and operational risks. The act also gives NAICOM the power to set RBC solvency requirements and requires insurers to hold capital based on the minimum of the MCR or RBC requirement. NAICOM is expected to release details on the RBC regime in due course.

Nigeria has been exploring RBC requirements for several years, but they have not yet been adopted. The RBC structure incorporated in NIIRA 2025 is simpler than the frameworks used in the U.K. or South Africa and more closely resembles Kenya's approach.

Work on adopting an RBC approach is continuing in 2026.

PRODUCT PRICING REQUIREMENTS

All new life and non-life products require NAICOM approval before launch, including pricing. NAICOM is required to give this approval within 30 days.

Repricing does not require approval.

ADDITIONAL PROVISIONS

Reinsurance

Nigeria's main reinsurers are Africa Re and Continental Re, with smaller players such as Nigeria Re and FBS Re also active in the market.

All insurance companies are required to submit their treaty reinsurance arrangements to NAICOM by December 31 each year.

NAICOM's Local Content Law requires insurers to exhaust local reinsurance capacity before going outside Nigeria. Companies must obtain prior consultation and approval from NAICOM before engaging foreign insurers or reinsurers. Although this law took effect in 2010, it has been enforced more strictly since the Prudential Guidelines for Insurance Institutions were issued in 2022. This enforcement has disrupted the reinsurance market and contributed to consolidation in the insurance and reinsurance sectors.

Own Risk Solvency Assessment (ORSA)

Insurers are required to complete an ORSA regularly, and no less than annually. The company must internally document the process and results of the assessment and provide a high-level ORSA summary report to the commissioner.

Insurers with premiums under certain thresholds are exempt from ORSA requirements.

The intent of ORSA is to foster effective ERM throughout the insurer and to provide an overview perspective on risk and capital.

The ORSA report is expected to focus on three major areas, as follows:

1. Section 1: Description of the insurer's risk management framework
2. Section 2: Insurer's assessment of risk exposures
3. Section 3: Group-level assessment of risk capital and prospective solvency assessment, if the company operates as part of an insurance group or holding company structure

There are no prescribed stresses to be included in the ORSA analysis.

The ORSA report's information related to the financial condition of the company should be completed by an external independent actuary.

Enterprise Risk Management (ERM)

ERM requirements are captured in the Prudential Guidelines for Insurance Institutions issued in 2022. All insurers are required to have an ERM team and an ERM department.

The Guidelines also require an independent actuary to prepare an annual FCR. This report should contain:

- Developments since prior year
- Business overview
- Valuation of assets and liabilities
- Pricing and premium adequacy
- ALM
- Capital management and capital adequacy
- Reinsurance management strategy
- Risk management

In practice, ERM implementation varies across companies.

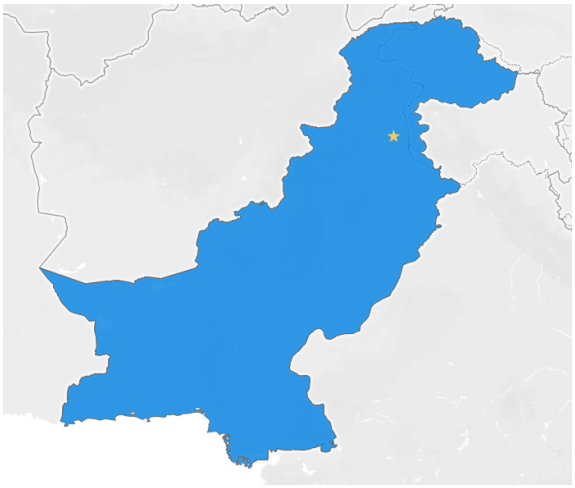
Asset-Liability Management (ALM)

As noted above, NAICOM recently introduced requirements for life insurers that write annuity business to appoint at least one qualified actuary responsible for conducting and implementing ALM. Firms without in-house actuaries are required to engage external actuarial professionals for an interim period of up to two years, subject to regulatory approval for further extensions.

Companies must submit their ALM reports to the commission on a quarterly basis. Companies with annuity portfolios exceeding 1,000 annuitants or valued at NGN 5 billion or more must submit monthly reports, due by the 15th of the following month.

The new requirements became effective February 1, 2025. Insurance companies unable to meet the additional expenses imposed by the new regulation will be required to transfer their annuity portfolio to another suitable insurance company within 180 days.

Pakistan



Location: South Asia

Capital City: Islamabad

Population: 251.3 million

Real GDP: $0.411 billion ($1,600 per capita)

Overview of Insurance Market

According to the SECP Insurance Industry Statistics 2024 report, the total insurance penetration stands at 0.7% of GDP with insurance density of PKR 2,913 at year-end. Total insurance industry assets stand at PKR 3,554 billion for the same period. Life insurance industry total premiums stand at PKR 434 billion (~64% of total industry), and general insurance premiums stand at PKR 243 billion (~36% of total premiums), totaling PKR 677 billion at year-end.

Pakistan's insurance sector is composed of state-owned and private insurance and takaful companies. Forty-two insurance and takaful companies operate within the country—29 general insurance and general takaful companies, 12 life and family takaful insurance companies, and one reinsurer, Pakistan Reinsurance Company (PakRe)—with a few more in the incorporation stage. There are no separate licensed monoline health insurance companies since law permits health insurance under both general and life insurance companies.

SECP regulates the industry through the Insurance Ordinance 2000 and subsidiary legislation. The Draft Insurance Bill 2026 has been introduced by the government to Parliament for approval in mid-2026. The primary changes in the legislation focus on market liberalization, private sector growth, digital transformation, ease of doing business, enhanced policyholder protection, financial resilience, and enhanced governance standards with supervisory enforcement powers.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

Pakistan Society of Actuaries (PSOA)

Number of Credentialed Actuaries In Country

Approximately 30 (less than 1 per million citizens)

Organization that Approves Responsible Actuaries

Securities and Exchange Commission of Pakistan (SECP)

Qualifications of A Responsible Actuary

The AA for a life insurance company must be a fully qualified actuary of a recognized actuarial professional body, including the IFoA (U.K.), the SOA (U.S.), or any other recognized organization, and be a registered member with PSOA. They must have at least three years of post-qualification experience, of which one year must be in the Pakistan market.

As per draft amendments of the Insurance Ordinance, similar requirements of life insurance companies shall apply to general insurance AAs.

Requirement for Internal Actuarial Function

The internal actuary must have at least five years of experience with an insurance company or actuarial consultancy, whether in Pakistan or abroad, and be at least an associate member of the IFoA, SOA, or CAS. This is applicable to life insurance companies within one year and within two years for general insurance companies, as set out in the notification issued in mid-2025.

Previously, there were no specific qualification requirements for internal actuaries. The mid-2025 notification introduced these requirements in response to the expanded responsibilities under IFRS 17, the emerging risk-based capital regime, and other broader actuarial responsibilities.

Powers Of The Appointed Actuary

Section 27 of the Insurance Ordinance 2000 sets out the responsibilities and requirements of the AA, although its focus is currently for life insurers primarily. Per Section 27, Article 2, the AA is responsible for the following duties:

- Performing an annual investigation into the financial condition of a life insurer, within the scope and reporting on requirements prescribed by the commission
- Providing written advice on the equitable allocation of revenues and expenses between funds and between policy holders within funds
- Certifying that the terms and conditions of a type of policy issued by a life insurer are sound and workable
- Annually certifying the mortality, expenses, and other changes under investment contracts
- Such other duties as may be prescribed by the commission

The AA must have direct access to the insurer's board of directors at any time and may submit a report that the AA deems necessary to bring to the board's attention.

Actuarial Capacity Within The Insurance Regulator

SECP has occasionally employed actuaries, either fully qualified or partially qualified. At the time of writing, SECP had no full-time senior qualified actuarial strength with relevant international market experience. Currently, the regulator is in the process of enhancing its actuarial capacity by onboarding full-time resources.

Comprehensive actuarial planning is needed to support actuarial policymaking and supervision as part of the roadmap for implementation of the Insurance Strategic Plan 2023–2028. This should include a focus on strengthening actuarial regulatory capacity through a dedicated operational division overseeing the sector's actuarial and financial stability, similar to approaches used in India and the ulf Cooperation Council (GCC) markets, particularly the Kingdom of Saudi Arabia and the United Arab Emirates.

Separate actuarial work rules should be developed to define responsibilities of actuaries, specify the scope of actuarial submissions across actuarial and insurance control cycles, and incorporate auditors' actuarial expert responsibilities for financial and/or statutory reporting purposes.

ACTUARIAL VALUATIONS

Current actuarial valuation requirements are set out in Insurance Ordinance 2000, Insurance Rules 2017, Insurance Accounting Regulations 2017, and Circular 9 of 2016. These instructions are high level and do not fully reflect evolving global and local statutory and financial reporting practices. The relevant requirements are summarized below:

- Insurance Ordinance 2000: Article 34 (Valuation of Assets and Liabilities), Article 50 (Actuarial Report)
- Insurance Rules 2017: Article 22 (Financial Condition Report), read along with Annexure IV, Article 23 (Minimum Actuarial Valuation), read along with Annexure V
- Insurance Accounting Regulations 2017: Article 12 and Article 24 dealing with recognition of premiums in the accounting statements
- Circular 9 of 2016: entailing a rudimentary approach to IBNR reserves calculation

Actuarial valuation requirements are spread across multiple regulatory instruments and are not consolidated in a single, systematic framework covering life and general insurance actuarial practices under the current regime.

Annual valuations are required. However, listed life insurance companies generally carry out quarterly actuarial valuations.

In August 2025, actuarial valuations rules were prepared and circulated for comments to insurance companies. These consolidated all relevant regulations, aligned with requirements for IFRS 17 and RBC compatibility, and adopted the latest international best practices.

Valuation of Assets and Liabilities: Article 34 of Insurance Ordinance

The valuation framework requires insurers to measure assets and liabilities in accordance with the accounting rules prescribed by the regulator, ensuring alignment with regulatory standards. At the balance sheet date, assets must be valued conservatively, meaning they cannot exceed the amount at which they could realistically be sold in an orderly market between willing parties, net of transaction costs. Similarly, liabilities, other than policyholders' liabilities, must not be understated and should be valued at no less than the amount required to transfer them in an orderly transaction, including associated costs.

For general insurance and short-term business, the regulation introduces specific prudent requirements. Outstanding claims liabilities must be valued at least equal to the expected settlement costs, including all claims incurred (whether reported or not), settlement expenses, and a prudence margin for adverse development. Additionally, insurers must recognize liabilities for unexpired risks, consisting of unearned premium reserves, which represent the portion of premiums relating to future coverage, and, where necessary, a premium deficiency reserve if expected future claims exceed those unearned premiums. The unearned premiums reserve is explained in the Insurance Accounting Regulations; however, no consistent bases have been defined for premium deficiency reserves.

Minimum Actuarial Valuation Basis: Annexure V—Rule 23 of Insurance Rules 2017

The actuarial valuation approach prescribed under Annexure V of Rule 23 of the Insurance Rules 2017 requires life insurers to determine policyholders' liabilities using a prospective, policy-by-policy valuation method, where future obligations are assessed after allowing for future net premiums. The minimum standard is the mathematical reserve, calculated on a prudent basis using net level premium (NLP) methodology with a one-year full preliminary term (FPT) adjustment allowed for longer policies. The default valuation technique is the NLP method, wherein no allowance is made for bonuses and an expenses component is included, producing conservative results rather than the best estimate required under the current ambitions for IFRS 17 and RBC implementation.

However, the AA may adopt alternative methods provided that the resulting reserves are at least as strong as those produced by the prescribed method.

The valuation relies on specified parameters, including mortality tables issued by the PSOA, morbidity assumptions justified by the AA, and a prescribed conservative interest rate of 3.75% (subject to revision, although it has remained unchanged for a long time), along with any additional relevant parameters. The approach must account for all future liabilities and ensure that reserves are not negative, while maintaining consistency in methods and assumptions over time. Valuations are required on both a gross and net-of-reinsurance basis, ensuring comprehensive views of risk exposures.

Different product types are treated according to their nature. Traditional life policies follow mathematical reserve calculations, while linked and universal life products are split into fund/unit components and additional actuarial reserves for guarantees and expenses. For any business not explicitly covered, reserves are determined using generally accepted actuarial principles and professional guidance. Importantly, the AA must also include additional provisions for risks such as underwriting, variations, guarantees, policyholder options, foreign exchange exposure, and expense inadequacies.

Circular 9 of 2016: IBNR Reserves

The guidelines established an approach for the estimation of IBNR reserves for general insurance and are also used for short-term business of life insurance to ensure adequate reserves. The guidelines prescribe a single reserving method (i.e., chain ladder), while allowing alternative methods where they are supported with sufficient documentation, rationale, and adequate historical claims data. They also require robust data management including loss and reporting dates by class of business, to capture differences in claims behavior and risk profile, although such class-level requirements are not specifically defined for RBC and IFRS 17 regimes.

The preparation of an actuarial report on IBNR reserves requires the involvement of a qualified actuary, who is expected to validate the assumptions, methodologies, and results through formal valuation reports submitted to the regulator.

The guidelines are relatively prescriptive and appear outdated in the context of the more risk-sensitive financial reporting and statutory frameworks being implemented globally. They appear to have served as a transitional model where specific instructions had not yet been issued, as required by Article 34 of Insurance Ordinance 2000.

FINANCIAL CONDITION REPORT

Actuarial Report—Article 50 of Insurance Ordinance 2000, Annexure IV (Financial Condition Report Requirements) under Rule 22 of Insurance Rules 2017

The regulation requires every life insurer to conduct an annual actuarial investigation of its financial conditions through the AA, including a formal valuation of policyholder liabilities. The resulting actuarial report must be prepared in accordance with conditions prescribed by the regulator. This requirement also applies whenever a valuation is carried out for profit distribution or when valuation results are made public. The integrity of the process is reinforced by certification from the insurer's principal officer confirming that complete and accurate policy data has been provided to the actuary.

The actuarial report must include detailed statements of the insurer's in-force business and, importantly, the minimum actuarial reserve for policyholder liabilities calculated using prescribed methods. However, the framework goes beyond the minimum requirement, emphasizing prudence. If, in the actuary's opinion, a realistic valuation of liabilities, including a margin for adverse deviation, exceeds the prescribed minimum reserve, the higher amount must be reported. This establishes dual-layer approach: the minimum regulatory reserve and the realistic actuarial reserve, with the higher of the two reported in disclosures.

The FCR framework requires life insurers to prepare a comprehensive annual report for each statutory fund, supported by detailed prescribed forms and covering different types of business, such as non-linked, linked, and universal life products. This approach ensures that the actuarial valuation is fully integrated with financial reporting by requiring detailed disclosure of policy data, valuation results, and fund-level summaries. Central to the report is the AA's responsibility to clearly state valuation date, methods, assumptions, and principles used in determining policyholder liabilities. This includes justification for key assumptions such as mortality, morbidity, and exchange rates, as well as the treatment of any policies that may otherwise appear as assets.

The FCR emphasizes transparency and professional accountability by requiring the actuary to disclose any limitations, qualifications, or departures from professional standards and to provide a clear opinion on the adequacy of premium rates, charges, and reserves. Beyond valuation and pricing adequacy, the report extends to broader financial and risk assessment requirements, including analysis of reinsurance arrangements, investment policy, asset composition and returns, and overall business mix, thereby linking actuarial work to the insurer's strategic and financial position.

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SOLVENCY AND CAPITAL FRAMEWORK

Current Requirements

The solvency requirements for general insurance companies, including accident and health, are set out in Article 36 of the Insurance Ordinance and Article 15 of the Insurance Rules. Under these articles, a general insurance company is required to maintain admissible assets in excess of liabilities at all times by at least the prescribed minimum amount.

The minimum solvency requirement is defined as the highest of (i) a fixed capital amount prescribed by the SECP; (ii) a percentage of earned premium revenue over the preceding 12 months, net of reinsurance, subject to a 50% cap on reinsurance credit; or (iii) a percentage of the sum of unexpired risk premium and outstanding claims liabilities, also net of reinsurance, with similar 50% cap of reinsurance credit. The applicable percentage is currently 20% for both the premium and claims risk charges.

The fixed minimum capital is PKR 150 million for general insurers, PKR 50 million for general microinsurers, and PKR 75 million for general digital insurers.

Similarly, the solvency requirements for life insurance business are set out in Article 35 of the Insurance Ordinance 2000 and Article 14 of the Insurance Rules 2017, read together with Annexure III. A solvency margin must be maintained at all times, defined as the excess of admissible assets over liabilities, including policyholder liabilities, at both the statutory fund and company levels, unless the commission permits aggregation. Accident and health business follows the same solvency approach as general insurance business.

For all life statutory funds, a prescribed formula-based approach considers both policyholder liabilities and sum-at-risk, combining the two to produce the solvency requirement. The risk capital factors, K1 for policyholder liability and K2 for sum-at-risk, are reinsurance adjusted and vary by product class, as detailed in attachment 1 of Annexure III.

This framework reflects a pre-Solvency I approach. It is static and retrospective in nature, focuses primarily on underwriting risk, and does not explicitly account for market, credit, or operational risks. While the underwriting risk charge percentages are generally acceptable to the market, they are outdated and do not fully reflect the evolving risk profile of business written in Pakistan's insurance market.

The SECP initiated work on an RBC regime by producing a draft concept paper in 2021. However, implementation was delayed as IFRS 17 implementation took precedence at the request of the industry. Additionally, the RBC regime needs to be aligned with applicable financial reporting standards. Its implementation will also require substantial upgrades to the actuarial valuation rules to ensure that BELs are appropriately reflected, and that margins are not implicitly embedded into reserves to avoid double-counting of stresses.

In 2024, an initial RBC model was developed in-house to support consultation with the market and to conduct an impact assessment. Further work is needed to ensure that the statutory and financial reporting valuation regimes are internationally acceptable and compatible. RBC implementation remains a critical objective of the Insurance Strategic Plan 2023–2028.

Product Pricing Requirements

Similar to the actuarial valuation requirements, actuarial pricing and product development are more focused on life insurance business than general insurance business.

For general insurance business, annual product pricing requirements do not apply to retail and corporate motor third-party liability, motor comprehensive, short-term and long-term health insurance, or residential and commercial property insurance. General insurance product requirements are limited to the submission of products and classes of business a new general insurer intends to write at the time of company incorporation and licensing.

Life insurance product requirements are more comprehensive than those in other markets in the region, largely because they have been developed with significant input from senior industry actuaries.

For group life insurance contracts, the AA is required to comment on profitability in the FCR submissions. During product pricing, some large group contracts must be approved and certified by the AA to ensure appropriate pricing; however, there is no formal pricing adequacy mechanism that uses rating factors to derive risk premiums, commissions, expense bases, and profitability margins. There is also no mechanism to compare selling premiums with technical premiums or assess management discretion over available discounts.

For individual life insurance products, a strong and comprehensive regulatory framework exists to ensure financial soundness, transparency, and policyholder protection. Over time, the following requirements have been introduced:

- Standard product approval covering product features, benefits, policy terms, pricing and actuarial bases, projections and sensitivity analysis, policy documents and illustrations, reinsurance arrangements, and certifications.
- Simplified submissions for standardized/similar products including a summary of changes and justifications, AA approval, and documentation maintenance.
- Use-and-file approach for short-term products with terms of one year or less requiring filing within 10 days and covering the internal product approval process and actuarial certification for soundness and expense compliance.
- Simplified submissions for digital and technology-based products, including limits on sum-insured and charges, as well as disclosure and illustration requirements.
- Maximum management expense limits that cap acquisition costs, administrative expenses, and other related charges.
- Unit-linked product pricing requirements that promote transparency and fairness by covering NAV calculation methodology; charges such as allocation, surrender, and fund management; and alignment of investment policies with asset exposures and policyholder risk profiles.
- Illustration requirements providing standardized benefit illustrations at PSOA-defined growth rate scenarios, based on historical performance and realistic expectations for unit-linked products.

ADDITIONAL PROVISIONS

Enterprise Risk Management (ERM) and Own Risk & Solvency Assessment (ORSA)

Under SECP's Code of Corporate Governance for Insurers 2016, insurers are required to establish a formal ERM Framework as part of their overall governance structure. The board of directors holds ultimate responsibility for risk oversight and must ensure that a risk management function has adequate authority, independence, and resources. The board is also responsible for approving the insurer's risk management policies and risk appetite, and for ensuring that all material risks are identified, assessed, and managed on an enterprisewide basis rather than in silos. The code further requires the establishment of a board risk management committee to oversee the effectiveness of the ERM framework and monitor the insurer's risk profile. The ERM system must cover all key risk categories relevant to insurance operations, including underwriting, market, credit, operational, and liquidity risks. Insurers are required to implement adequate internal controls, risk measurement systems, and reporting mechanisms, enabling timely monitoring and escalation of risks to senior management and the board.

Additionally, the risk management function must regularly report on the insurer's risk exposures, compliance with risk limits, and overall risk position, supported by tools such as stress testing and scenario analysis. The ERM framework must be integrated with other control functions, including compliance and internal audit, and documented through formal policies and procedures. Overall, the code establishes a board-driven, independent, and enterprisewide risk management framework to ensure financial soundness and protection of policyholders.

Pakistan currently has no requirements under ORSA and scenario and stress testing.

Reinsurance And Asset-Liability Management (ALM)

On an annual basis, and whenever changes occur, companies are required to submit their reinsurance treaties to SECP.

As a legal requirement, at least 35% of reinsurance placements must be made to the national reinsurer, PakRe, unless PakRe accepts a reduced share of the risk. Any remaining placements must be made with internationally rated reinsurers that meet minimum credit rating standards. Facultative reinsurance placements not accepted by PakRe must be approved by SECP and supported by appropriate documentation, with placement made to eligible reinsurers.

Beyond the required disclosure on reinsurance appropriateness in the FCR or the actuarial report, for life insurers, SECP has not issued further instructions on technical reinsurance reviews for life and general insurance companies, unlike requirements seen in some other jurisdictions.

With respect to ALM, there are no significant requirements beyond life insurers providing a review of investment returns and commentary on investment policy in the FCR. General insurance companies are not subject to comparable requirements.

Kingdom of Saudi Arabia

Capital City: Riyadh

Population: 35.3 million

Real GDP: $881.2 billion ($25,000 per capita)

OVERVIEW OF INSURANCE MARKET

The insurance industry in the Kingdom of Saudi Arabia (KSA) is driven primarily by mandatory motor and health insurance. Companies also write nonmotor general insurance, although this business is usually substantially reinsured. Life insurance business remains small, though some large companies have recently increased their focus on individual products. The market has only two local reinsurers, but some insurance companies also write inward facultative business.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

KSA does not have an independent national actuarial association. Instead, the profession is supported by international and regional organizations operating within the kingdom.

Number of Credentialed Actuaries In Country

There are approximately 100 to 150 credentialed actuaries practicing in KSA.

Organization That Approves Responsible Actuaries

Insurance Authority (IA)

Qualifications of Appointed Actuary

An AA must be a fellow of a recognized actuarial body. When approving an AA, the IA also considers relevant experience.

Requirement for Internal Actuarial Function

All companies are required to appoint an AA. The AA may be an employee of the company or an external actuary but cannot be the CEO or a member of the board. Companies must obtain a no-objection from the IA on the appointment, and the IA generally conducts an interview before issuing it. Other no-objection requirements are similar to those for C-suite roles.

The actuarial work rules require all insurance companies to have an internal actuarial function. The regulator expects that the head of actuarial function will be a fellow, and almost all companies comply with this expectation. The IA also expects each company to employ a certain number of actuarial analysts, including Saudi actuaries.

In some companies, actuaries also work in related functions, such as pricing, underwriting, and risk.

Powers of Appointed Actuary

The IA expects the HAF and AA to have regular access to, and report to, senior management and the board of directors. A summary of each actuarial submission to the IA should be presented to the board or its audit committee. The IA has also emphasized that the HAF/AA should report the expected impact of deviations from technical pricing to senior management and the board.

Actuarial Capacity Within The Insurance Regulator

The IA has a strong and active internal actuarial team of at least 10 actuaries at various career levels, including some senior actuaries.

At the beginning of each year, they issue the actuarial submission calendar for the year.

Regulatory Overview

Two main regulations govern actuarial work. The first is the implementing regulations, which are insurance regulations that also include provisions on solvency margin and valuation of technical provisions. In March 2020, the IA issued the Actuarial Work Rules for Insurance (AWR), a comprehensive framework covering all aspects of actuarial work for insurance and reinsurance companies in KSA.

The AWR covers the following aspects:

- Licensing of actuarial service providers
- Requirements and procedures related to appointment and termination of the AA
- Roles and responsibilities of the AA, particularly with regards to:
  - Data and data confidentiality
  - Reserving
  - Pricing and pricing adequacy
  - Solvency and capital
  - Risk management
  - Experience studies
- Roles and responsibilities of the board of directors and senior management with regard to the AA

In addition to the general guidelines in the AWR, the IA has issued circulars with further instructions for most major actuarial submissions, with varying levels of detail depending on the nature of the submission.

For each submission, the IA requires specified information in Excel templates, along with a standard actuarial report. These templates can be extensive; for example, the solvency and capital submission template effectively serves as a capital model using the standard regulatory formula. The IA actuarial team reviews the submissions, particularly the Excel templates, and provides feedback regularly.

ACTUARIAL VALUATIONS

The AA is required to certify reserves on a quarterly basis. Although management generally makes the final reserve decision, it is expected to book the reserves recommended by the AA. Insurance companies apply IFRS 17 for financial reporting, and the same technical provisions are used for regulatory reporting.

Circular 283, dated March 14, 2024, sets out requirements related to technical provisions post-IFRS 17 implementation. It provides high-level valuation principles, while the IA communicates more detailed expectations through separate requests. Recently, the IA has emphasized the following areas:

- Minimum reserving segments, which the IA prescribes and updates frequently to reflect changes in the industry
- Consistency with other actuarial work, such as the relationship between pricing adequacy and onerosity assessments, or between expense assumptions and expense study reports
- Adoption of more sophisticated methodologies, such as frequency-severity methods, rather than total loss methods

Following IFRS 17 implementation, roll-forward liability reconciliation disclosures are also submitted to the IA at the group-of-contract level. The IA has identified which parts relate to CFOs and which relate to AAs, and AAs must certify the sections assigned to them.

SOLVENCY AND CAPITAL FRAMEWORK

Solvency Capital Framework

The current solvency requirement for insurance companies is set out in the implementing regulations and follows a simple Solvency I type model.

Risk-Based Capital (RBC)

In recent years, the IA has developed a new capital model within solvency and capital reporting template. The model is comparable to the standard formula model under Solvency II, and is currently referred to as Indicative Risk-Based Capital (i-RBC). It is expected to replace the current model in the near future.

Based on the IA notification dated October 28, 2025, the IA has announced that the RBC model developed for the solvency and capital reporting template will fully replace the current Solvency I-style model. It has also issued instructions on adopting internal models. Quarterly reporting will be required, with parallel runs during 2026. From January 1, 2027, only the RBC model will apply.

PRODUCT PRICING REQUIREMENTS

New Products

The HAF/AA are responsible for determining technical prices for motor and health business. Underwriters make the final premium decision, but their discretion is limited by the board-approved underwriting authority matrix. Any deviations must be justified and documented.

For motor retail business (personal lines), the IA prescribes the minimum number of rating variables and has provided an extensive list of possible variables.

The HAF/AA are also commonly involved in pricing special and/or jumbo corporate accounts.

Pricing requirements for nonmotor and nonhealth lines are less detailed than those for motor and health business. All new life and general products must be filed with the IA and approved before launch. Each filing requires an actuarial report/certification. A checklist to individual life actuarial reports, but there are no minimum content requirements for other products.

Pricing Review

A quarterly pricing adequacy analysis is required for both motor and medical business. The analysis compares premiums that would have applied if the actuarial pricing recommendation had been followed with the premiums actually charged. These reports are co-prepared and co-signed by HAF, AA, and chief underwriter or equivalent role.

The IA requires a full repricing of motor and health products at least annually. However, the IA increasingly expects the HAF/AA to update technical prices as needed, rather than waiting for the annual pricing exercise. Any update to technical prices must be submitted to the IA. Detailed submissions may be made once a year, with shorter submissions, such as addenda to the main reports, provided during the year.

For detailed submissions, the IA expects advanced statistical techniques and requires risk rates, expense loadings, and the corporate pricing framework, including any experience-rating mechanism, to be established separately for each pricing segment.

The AA is required to prepare an annual P&S Pricing Report analyzing the profitability of the current individual and group life products. There are no pricing/pricing review requirements for nonmotor general insurance lines of businesses.

ADDITIONAL PROVISIONS

Reinsurance

The IA expects the HAF/AA to be involved in setting the company's reinsurance program. Because reinsurance treaty renewal cycles vary by company, the IA allows flexibility in the timing of this report.

The required analysis required has two parts. The first reviews the impact of current and past reinsurance arrangements on financial performance and capital relief. This typically involves summarizing premiums and claims data by underwriting period and reinsurance type (treaty versus facultative).

The second part identifies the company's goals and objectives for the reinsurance program, sets key performance indicators (KPIs), and identifies arrangements that meet the KPIs. Companies generally use sophisticated statistical techniques and simulations, at least for motor and health business, to estimate the KPIs under various possible reinsurance programs.

Own Risk Solvency Assessment (ORSA)

There are currently no specific ORSA requirements. However, certain risk management regulations address some activities typically performed in ORSA. With RBC adoption and the increased role of the risk management function in solvency reporting, specific ORSA-related requirements may be introduced in the future.

Asset-Liability Management (ALM)

The AA must annually review the company's investments and perform an ALM exercise. The IA instructions require the AA to review and comment on the appropriateness of the investment portfolio relative to liabilities, the appropriateness of the investment policy for both policyholders and shareholders, and compliance with asset allocation limits and investment-related rules.

A standard ALM exercise is also required. However, detailed cash-flow projection requirements are limited because most companies are only engaged in short-term business.

Enterprise Risk Management (ERM)

The IA's Risk Management Regulation sets out risk management requirements for insurers. Although it does not specifically refer to ERM or actuarial responsibilities, it covers most principles typically found in an ERM framework, except for a capital model. With the upcoming implementation of RBC, risk management frameworks are to be updated to incorporate capital models, whether based on the standard regulatory approach or internally developed. Once embedded in risk management processes, these capital models should bring most companies' overall frameworks closer to those used in more developed countries.

Experience Studies

The following experience studies must be performed annually and submitted to the IA:

- Expense
- Persistency: individual ;ife business only
- Mortality and morbidity: individual and group life only

Since most companies do not write individual life business and have little or no group life business, most companies are only required to perform an expense study.

During IFRS 17 implementation, the IA's IFRS 17 working group developed a general expense classification and expected treatment under IFRS 17. This classification is now commonly used for expense allocation and has been incorporated into the IA's experience studies Excel template.

The IA expects assumptions derived from the annual experience study exercise to be utilized in other actuarial work, such as reserve expense assumptions pricing loadings. However, the AA may deviate from these assumptions when appropriate, with adequate justification.

Peer Review

All actuarial submissions to the IA must be peer reviewed by another actuary.

Sri Lanka

Capital Cities: Sri Jayewardenepura Kotte, Colombo

Population: 21.9 million

Real GDP: $91.8 billion ($4,200 per capita)

OVERVIEW OF INSURANCE MARKET

As of year-end 2024, Sri Lanka's insurance market was composed of 29 companies: 15 long-term insurers and 14 general insurers. One local company provides reinsurance for general insurance and also operates as a direct insurer. Following implementation of the RBC framework in 2016, insurers were required to segregate long-term and general insurance business into two separate legal entities.

Long-term insurers primarily offer term life, universal life, endowment, and health products. General insurers mainly provide motor, fire, marine, and short-term or group health lines.

Insurance penetration remains low, at 0.61% for long-term insurance and 0.46% for general insurance. Insurance density, measured as gross written premium per capita, is LKR 14,694.

ACTUARIAL CAPACITY AND FRAMEWORK

Name Of Actuarial Association(S)

Actuarial Association of Sri Lanka (AASL)

Number of Credentialed Actuaries In Country

Approximately 40 (2 per million citizens)

Organization That Approves Responsible Actuaries

Insurance Regulatory Commission of Sri Lanka (IRCSL)

Qualifications of A Responsible Actuary

Must be a fellow of the IFoA or a fellow of any other professional actuarial institute approved by AASL.

Alternatively, must be an associate of any of the professional actuarial institutes approved by AASL, with no less than 10 years of post-qualification experience in relevant actuarial matters.

Requirement for Internal Actuarial Function

Every insurer carrying long-term insurance business must employ or retain an actuary on a permanent basis.

Role And Powers of Appointed Actuary

The AA is required to assess the financial condition of all long-term insurance businesses at the end of each financial year, including a valuation of their assets and liabilities.

The AA must certify that the insurer's reserves are sufficient to meet all current and contingent liabilities of its policyholders and determine the surplus.

The AA is also responsible for recommending the amount of bonus, if any, that may be paid to policyholders, as well as the surplus available for transfer to the insurer's shareholders.

In the event of the insurer's winding up, the AA must separately ascertain the value of assets and liabilities relating to long-term insurance business separately from other assets and liabilities.

Actuarial Capacity Within The Insurance Regulator

In 2024, the IRCSL hired two actuaries on contract for 24 months.

There is a relatively small team that supports actuarial oversight within IRCSL, but currently there are no qualified actuaries on staff.

ACTUARIAL VALUATIONS

Quarterly returns of insurers:

- Every insurer must submit quarterly actuarial valuations to the commission, including financial statements, solvency margin (RBC) reports, certifications, and compliance documents specific to both general and long-term insurance.
- Signing can be done by the AA, an in-house actuary, or the head of the actuarial department.

Annual returns of insurers:

- Every insurer must submit annual returns including financial statements, RBC reports, reserve reports, certifications, and compliance certificates to the commission within four months of their financial year-end, by April 30 each year. The certification should be done by the AA.

Monthly reporting:

- All insurers must report monthly and submit their reports to the commission as directed.
- The minimum requirement is internal calculation.

Insurers carrying long-term insurance business are required to have a qualified actuary prepare an actuarial abstract in the prescribed format. This actuarial report and abstract must be submitted to the IRCSL within four months of their financial year-end, by April 30 each year.

SOLVENCY AND CAPITAL FRAMEWORK

Current Requirements

Under the RII Act and IRCSL rules, insurers must maintain the prescribed minimum paid-up capital.

Effective January 1, 2016, every insurer shall maintain a minimum CAR of 120% and total available capital (TAC) of a minimum of Rs 500 million.

In addition, every insurer must maintain a solvency margin that is not below the control solvency margin of 160%.

Risk-Based Capital (RBC)

The RBC framework currently in use has been in effect since January 1, 2016. It requires a market-consistent valuation of assets and liabilities, subject to admissibility limits on assets, the classification of capital into Tier 1 and Tier 2, and the application of a risk margin to BELs.

The liability risk margin is determined based on a specified percentile of the normal distribution: the 75th percentile for long-term insurers and the 65th percentile for general insurers. This distribution is defined by:

- A mean equal to the BEL, net of reinsurance
- A 99.5% percentile equal to the liability risk capital charge

Insurers are permitted to recognize negative liabilities for long-term policies and are not required to set the liabilities to zero.

The liability risk capital charge is derived based on capital charges for credit, concentration, reinsurance risks, and market risks with no diversification benefits. These are then combined with liability and operational risk capital charges, for which diversification benefits are permitted.

IRCSL has proposed revisions to this framework in response to evolving asset markets, Sri Lanka's dynamic economic conditions, and developments by global regulatory forums. The proposed changes were released for public consultation, and a QIS exercise is currently under way.

PRODUCT PRICING REQUIREMENTS

Long-Term Insurance Products Pricing

All long-term insurance products except group products and riders must be certified by the AA, in accordance with Circular No. 1 of 2021.

For riders and group products, the circular requires disclosure of pricing information, including details of the person responsible for computing the premiums.

Where the company submits a pricing certificate for group products or riders, the certificate may be issued by the AA, an in-house actuary, or the head of the actuarial division, as permitted under Circular No. 1 of 2021.

Any product or pricing revisions also must be approved by IRCSL.

Long-Term Insurance Products Repricing Where Repricing Is Done Frequently

All long-term insurance products submitted for review, excluding group products and riders, must be certified by the AA.

Where repricing is carried out frequently, the AA must include instructions for these adjustments in their certificate.

The company shall maintain clear repricing principles and implement comprehensive checks and validations to support the actuary's certification.

If subsequent amendments to the initial product don't materially alter its terms and conditions, a repricing certification from an in-house actuary or the head of the actuarial division is also acceptable.

However, the IRCSL may, where necessary, request an actuarial certificate signed by the AA for such amendments made to existing products (clarification to Circular No. 1 of 2021).

Riders and Group Products

These are exempted from the above requirements.

The circular currently requires disclosure of pricing information, including details of the person responsible for computing the premiums.

In an instance where the IRCSL requests an actuarial certificate for riders and group products, the certificate must be certified by the AA of the company. However, if a pricing certificate is submitted by the company for group products or riders, it can originate from the AA, an in-house actuary, or the head of the actuarial division (clarification to Circular No. 1 of 2021).

ADDITIONAL PROVISIONS

Reinsurance

General insurance companies are required to cede 30% of their reinsured technical reserves to National Insurance Trust Fund (NITF), the sole reinsurer in Sri Lanka.

Reinsurance shall be placed only with an entity authorized by a regulatory/supervisory authority to conduct reinsurance business.

The reinsurer must hold long-term ratings credit and financial strength ratings of BBB or equivalent from one of the specified rating agencies: Moody's, S&P, Fitch, or AM Best. The rating must have been issued no more than 18 months prior to the reinsurance placement.

Insurance companies must file the specific details regarding reinsurance/risk transfer programs for the upcoming year by January 31 of each calendar year. This filing should include the structure of the reinsurance program, any alternative risk transfer mechanisms, the proportion of business ceded, evidence that net retained risks are commensurate with the cedant's risk appetite and financial resources, the overall level of risk transfer, and disclose reinsurance arrangements with related parties.

Own Risk Solvency Assessment (ORSA)

There are no specific requirements regarding ORSA other than the mandatory solvency reporting described above. However, the annual returns report that must be certified by an actuary includes a section on own risk assessment.

If a company does not meet the CAR, they are expected to provide a plan to increase paid-up capital within a given time period, during which the company is expected to determine the CAR monthly and report to IRCSL.

There is no regulation that mandates this, but it is general practice.

ENTERPRISE RISK MANAGEMENT (ERM)

There are no specific guidelines or regulations around ERM. However, insurers are expected to disclose risk exposures when reporting annual returns. The section on risk management includes subsections for the following:

- Overview of the risk strategies and policies in place to ensure compliance with the risk appetite
- High-level information on the scope, frequency, and requirements of the management information presented to the company's board of directors and management
- Description of the risk management function including resources available, risk appetite and risk tolerance, and risk management strategies for each category of risk

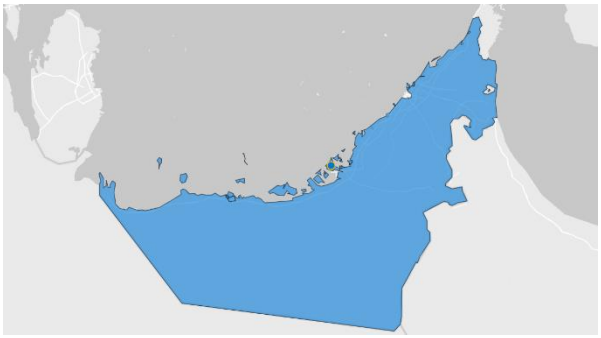
- How the company manages regulatory capital risks
- Material underwriting, market, credit, liquidity, operational risk exposures and how these were estimated
- How the company assesses “own risk” and how this is factored into the decision-making process
- Risk concentrations, mitigation measures, and sensitivities

Asset-Liability Management (ALM)

Regulations require that each insurance company has a board-approved ALM policy that takes into consideration its investment management, product development, and pricing functions.

The ALM policy must discuss cash flow and duration considerations under multiple scenarios.

United Arab Emirates



Capital City: Abu Dhabi

Population: 11.0 million

Real GDP: $457.1 billion ($41,600 per capita)

OVERVIEW OF INSURANCE MARKET

The insurance and reinsurance market in the United Arab Emirates (UAE) is highly diverse, with both local and international insurers operating in the country. International insurers may operate through branches or through separately incorporated local entities. The market includes providers of both takaful and conventional insurance products.

The life insurance market is naturally constrained by the UAE’s relatively small population. Even so, insurers offer a broad range of products, from traditional participating plans to flexible universal-life and unit-linked plans. Some companies also offer portability features for expatriates under life insurance policies.

The general insurance market is driven by motor insurance, particularly personal and retail lines, due to mandatory third-party liability requirements. Other general insurance lines are also present, though a significant portion is ceded to foreign reinsurers.

The health insurance market is substantial and offers a wide range of products and coverage levels. Employer-sponsored policies account for a significant share of the market and typically provide broad coverage. In addition, certain mandatory products are designed specifically for blue-collar workers. Minimum/mandatory health coverage varies by emirate.

ACTUARIAL CAPACITY AND FRAMEWORK

Name of Actuarial Association(S)

The UAE does not have an independent national actuarial association. Instead, the profession is supported by international and regional organizations operating within the country.

Number of Credentialed Actuaries in Country

Approximately 40 (4 per million citizens)

Organization that Approves Responsible Actuaries

Central Bank of United Arab Emirates (CBUAE)

Qualifications of A Responsible Actuary

Board of Directors Decision No. 9 of 2017 provides regulations for the licensing and registration of actuaries.

Must be a fellow member of any professional actuarial institute, approved by the board, or an associate of any professional actuarial institute with no less than two years of experience.

Requirement for Internal Actuarial Function

Regulations governing risk management and internal controls require insurance companies to establish and maintain an effective and independent actuarial function.

The extent of actuarial work performed in-house varies by company, in some organizations, internal teams primarily serve as a liaison between business units and external actuaries, whereas in others, the actuarial work is conducted entirely in-house.

Role And Powers of Appointed Actuary

All insurance companies are required to have an AA, and all actuarial work must undergo peer review.

The AA may be an external actuary, or the in-house actuary may serve as the AA. There is a growing trend toward employing in-house actuaries within both actuarial and risk management functions.

Actuarial Capacity Within The Insurance Regulator

A small team of three to four actuaries currently works within the regulator. Previously, the regulator engaged a consulting firm to provide actuarial support.

ACTUARIAL VALUATIONS

For the year-end valuation, companies are required to prepare a detailed FCR that reflects the actuarial valuation.

The AA is required to certify reserves on a quarterly basis. For quarterly valuations, a brief actuarial certificate is required, rather than the full valuation report or FCR. However, companies must still submit detailed financial and technical regulatory reporting forms (e-forms) each quarter. These quarterly forms require extensive triangulation data, as well as information on individual life policy movements.

Although companies prepare financial statements under IFRS 17, regulatory reporting continues to follow the financial and technical regulations that are broadly aligned with IFRS 4. The regulatory forms have not yet been updated to reflect IFRS 17. As a result, companies are effectively reporting under two different regimes, both of which must be certified by the AA.

In practice, most companies first perform the regulatory/IFRS 4 valuation and then amend or extend it to align with IFRS 17 requirements.

While the financial and technical regulations provide detailed requirements for regulatory reporting, there is currently no specific guidance for IFRS 17 valuations.

SOLVENCY AND CAPITAL FRAMEWORK

The regulatory forms include a standard formula capital model that is, in many respects, similar to—and perhaps derived from—Solvency II. However, companies are not permitted to use an internal model.

The AA is required to certify solvency figures on a quarterly basis. In addition, once a year, through the FCR, the AA must provide a detailed analysis of the risks faced by the company.

All companies must adopt the standard formula RBC model embedded within the quarterly e-forms. Internal capital models are not permitted.

CBUAE requires stress testing to be performed as part of ORSA, where it should supplement the standard capital model.

PRODUCT PRICING REQUIREMENTS

New Products

All new products must be filed with the regulator, and each filing requires actuarial certification. For nonmotor general insurance products, actuaries typically rely on pricing information provided by reinsurers.

For individual life business, detailed technical and operational requirements are set out in IA Board Decision 49 (BOD49). From a pricing perspective, BOD49 specifies the documentation required for individual life product filings. More importantly, it establishes detailed requirements related to commissions and broader distribution costs, surrender charges, and illustration formats. The regulation requires the actuary to certify that products comply with the applicable limits on commissions, surrender charge requirements, and prescribed illustration formats.

Pricing Review

The regulatory requirements for AAs related to pricing reviews are as follows:

- Motor business: An annual pricing review is required. This is generally a review of the appropriateness of pricing, rather than a detailed rate-setting exercise. In most cases, the actuary provides an opinion on whether the rates are reasonable, rather than recommending specific rates.
- Medical business: An annual pricing review is required. Similar to motor business, this typically focuses on whether the rates are reasonable and does not usually involve making exact rate recommendations.
- Motor and medical underwriting review: An annual underwriting review is required for both motor and medical business. This generally consists of ratio analysis and does not include the derivation of rates, burning costs, or similar pricing calculations.
- Nonmotor general insurance underwriting review: An underwriting review of nonmotor general insurance business is required twice a year. This also generally involves ratio analysis and does not include the derivation of rates, burning costs, or other technical pricing calculations.

For motor retail business, the regulator prescribes minimum and maximum rates, and companies are required to price within these ranges.

In practice, actuarial involvement in pricing is limited. Although actuaries prepare the reports described above, the rates ultimately charged are typically decided by underwriters. For medical business, many companies rely on reinsurer-provided tools that include the rates and pricing parameters.

ADDITIONAL PROVISIONS

Reinsurance

On an annual basis, the AA is required to review and comment on the appropriateness and financial impact of reinsurance arrangements in the FCR, as well as in pricing and underwriting review reports. Currently, no detailed guidelines are available on the technical aspects of such analysis.

Own Risk Solvency Assessment (ORSA)

As part of risk management guidelines, the regulator requires insurance companies to submit an annual ORSA report. AAs are required to review the ORSA report and provide a certificate on it.

Enterprise Risk Management (ERM)

As part of the risk management guidelines, the regulator requires Insurance Companies to Implement An ERM Framework.

ASSET-LIABILITY MANAGEMENT (ALM)

Once a year, in the FCR, the AA is required to comment on the appropriateness of the investment policy, investment allocation, and the ALM. No separate detailed guidelines are available on the technical aspects of such analysis.

Solutions for a world at risk™

Milliman leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. We help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs—so they can meet their business, financial, and social objectives. Our solutions encompass insurance, financial services, healthcare, life sciences, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

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