

# **AXIS Specialty Limited (Singapore Branch)**

# Public Disclosures Under The Monetary Authority of Singapore Notice 124 For the year ended December 31, 2021

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# 1. DOCUMENT OVERVIEW

The Monetary Authority of Singapore ("MAS") requires licensed insurers to provide certain disclosures with respect to their business profile, corporate governance, risk exposure, risk management framework, performance and capital. This document provides these disclosures and applies to AXIS Specialty Limited - Singapore Branch.

# 2. **PROFILE**

AXIS Capital Holdings Limited ("AXIS Capital") is a Bermuda-based holding company for the AXIS group of companies. AXIS Capital was incorporated on December 9, 2002, under the laws of Bermuda. Through its operating subsidiaries and branches in Bermuda, the United States ("U.S."), Europe, Singapore and Canada, AXIS Capital provides a broad range of specialty lines insurance and treaty reinsurance to its clients on a worldwide basis. AXIS Capital's underwriting operations are organized around its global underwriting platforms, AXIS Insurance and AXIS Re.

AXIS Capital is a hybrid specialty lines insurance and treaty reinsurance company that is a leader in many of the markets where it chooses to compete. We provide our clients and distribution partners with a broad range of risk transfer products and services, and meaningful capacity, backed by excellent financial strength. We manage our portfolio holistically, aiming to construct the optimum portfolio of risks, consistent with our risk appetite and the development of our franchise. We nurture an ethical, entrepreneurial and disciplined culture that promotes outstanding client service, intelligent risk taking, operating efficiency, corporate citizenship and the achievement of superior risk-adjusted returns for our shareholders. We believe that the achievement of our objectives will position us as a global leader in specialty risks.

AXIS Specialty Limited (the "Company") was incorporated on November 8, 2001 under the laws of Bermuda. Pursuant to an exchange offer consummated on December 31, 2002, the Company became a wholly owned subsidiary of AXIS Capital. On December 12, 2011, AXIS Capital assigned all of its shares of the Company to AXIS Specialty Holdings Bermuda Limited ("AXIS Specialty Holdings"). AXIS Specialty Holdings was incorporated under the laws of Bermuda on September 22, 2011 and is a wholly owned subsidiary of AXIS Capital.

The Company is licensed under the Bermuda Insurance Act 1978, amendments thereto and related regulations, to write general business as a Class 4 insurer and commenced operations on November 20, 2001, providing a broad range of insurance and reinsurance products on a worldwide basis.

The Company also provides reinsurance protection to other subsidiaries of AXIS Capital through quota share and stop loss agreements.

The Company formed a branch in Singapore (the "Branch") on June 19, 2008 and obtained a license on August 12, 2008 to carry on general insurance business in Singapore.

The Branch has a general insurance license allowing it to write both direct insurance and reinsurance business. The Branch underwrites property, casualty and specialty risks in the Asia Pacific region. Property reinsurance is the dominant class of business underwritten.

For the direct insurance segment, the Branch writes a variety of casualty and specialty insurance products, namely terrorism, credit and political risk, professional indemnity, property and energy.

For the reinsurance segment, the Branch assumes mostly property lines of business on both an excess of loss and proportional basis and to a lesser extent casualty lines, including motor, general liability and accident and health lines..

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# 3. CORPORATE GOVERNANCE FRAMEWORK AND RISK MANAGEMENT

## a) AXIS Specialty Limited - Board of Directors, Management and Employees:

#### Role of Board, Management and Employees

The Company's business is conducted by its employees, managers and officers with guidance from business units and functions, and the oversight of the Board. The responsibilities of the Board are set forth in the Bye-Laws and the Board Standing Agenda Items. The responsibilities of management and employees are agreed with the individual's manager and, as applicable, as set forth in annual performance objectives. The AXIS Group operates under a shared services delivery model for many support functions. The services are provided and governed by a common group-wide framework applicable across all AXIS entities, including the Company.

# **Director Responsibilities**

Each director shall exercise his or her business judgment to act in the manner that he or she reasonably believes to reflect the best interests of the Company and its shareholders. The directors may commit the Company in accordance with the Bye-Laws. The directors may by power of attorney appoint any company, firm or person(s) to be the attorneys of the Company for specified purposes. A director who exercises his or her authority shall in all circumstances act in accordance with his or her business authority or ensure involvement from executive management with appropriate skills, experience and knowledge.

All directors must comply with all of AXIS Capital's and the Company's policies including, but not limited to, the AXIS Capital Holdings Limited Code of Business Conduct, Insider Trading Policy and Corporate Disclosure Policy.

#### **Board Committees**

Committees may be established by the Board to facilitate and assist in the execution of the Board's responsibilities. The Board may establish and maintain committees as necessary and appropriate under the circumstances.

The Company's board of directors oversees the affairs of the Company, including those of the Branch.

# b) Fit and Proper Process for Board of Directors, Management and Employees:

#### Board of Directors

The Board shall comprise individuals who meet Fit and Proper requirements and are selected by the shareholder(s) of the Company.

The Company's directors shall be persons who combine the highest standards of integrity and significant accomplishments in their chosen field of endeavor. Directors shall bring a diversity of experiences, skills and perspectives to the Board.

#### All Employees

All of the Company's employees, directors and officers are required to comply with the AXIS Capital Business Ethics Policies which include Code of Business Conduct, Whistleblower Policy and Insider Trading Policy. AXIS requires that all employees, directors and officers conduct business with integrity and comply with all applicable laws and regulations. The AXIS Business Ethics Policies set forth the standards of business conduct consistent with AXIS' core values of professionalism and integrity. To reinforce familiarity and understanding of the guiding principles of these policies, each year, all employees, officers and directors are required to acknowledge their acceptance and certify their compliance with each of the policies.

As part of the recruitment process, a candidate will be assessed to determine whether he or she is fit for the particular role; specifically with reference to competency and capability.

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AXIS will consider information about a person's competency and capability for a position, which includes the following:

- the activities and size of AXIS;
- the responsibilities of the position;
- the person's demonstrated capacity to successfully undertake the responsibilities of the position and the establishment/ maintenance of an effective control regime;
- the person's knowledge of the business and responsibilities of the position; and
- any professional qualifications, formal and informal training.

Also, as part of the recruitment process, a candidate will be assessed to determine whether he or she meets AXIS's standards for probity; specifically with reference to honesty, integrity, fairness, ethical behaviour and financial soundness.

AXIS will consider a candidate's record as a good indicator of character, as well as other information indicative of honesty, integrity, fairness and ethical behaviour.

# c) Risk Management Process and Procedures to Effectively Identify, Measure, Manage and Report on Risk Exposures:

AXIS has an established group-wide Enterprise Risk Management ("ERM") framework with a mission to promptly identify, assess, manage, monitor and report risks that affect the achievement of our strategic, operational and financial objectives that applies to all AXIS entities, including the Company and the Branch. The key objectives of the framework are to:

- Protect the capital base and earnings by monitoring risks against the stated risk appetite and limits;
- Promote a sound risk management culture through disciplined and informed risk taking;
- Enhance value creation and contribute to an optimal risk-return profile by providing the basis for efficient capital deployment;
- Support the group-wide decision making process by providing reliable and timely risk information; and
- Safeguard our reputation.

The risk management framework applies to all lines of business and corporate functions across the insurance and reinsurance segments. The Risk Management Function for the Company and the Branch is outsourced to Group Risk.

# Risk Governance

At the heart of the risk management framework is a governance process with responsibilities for identifying, assessing, managing, monitoring and reporting risks. Roles and responsibilities for risk management are articulated throughout the organization, from the Group Board of Directors and the Group Chief Executive Officer to business and functional areas, thus embedding risk management throughout the Group.

Risk governance is executed through a three lines of defence model, with business units ("first line") responsible for the identification, assessment, management, mitigation and monitoring of risks on a day-to-day basis; the Group Risk function ("second line") providing oversight and guidance on risk management across the business by supporting and challenging the first line in their identification, assessment, management and mitigation of risk; and Internal Audit ("third line") providing independent assurance on the effectiveness of governance, risk management and internal controls (see below for further details on the Risk Management Organization").

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To support our governance process, we rely on our documented policies and procedures. Our risk policies are a formal set of documents we use to specify our approach and risk mitigation/control philosophy for managing individual and aggregate risks. We also have procedures to approve exceptions and procedures for referring risk issues to senior management and the Board of Directors. Our qualitative and quantitative risk reporting framework provides transparency and early warning indicators to senior management with regard to our overall risk profile, adherence to risk appetite and limits, and improvement actions at an operating entity and Group level. Various governance and control bodies coordinate to help ensure that objectives are being achieved, risks are identified and appropriately managed, and internal controls are in place and operating effectively. As necessary, Company specific risk policies are also in place that supplement Group policy, consistent with local regulatory and compliance requirements.

The key elements of the governance framework, as it relates specifically to risk management, are described below.

# Group Board of Directors' Level

The Risk Committee of the Board ("Risk Committee" or "Board Risk Committee") assists the Board of Directors in overseeing the integrity and effectiveness of the ERM framework, and ensuring that our risk assumption and risk mitigation activities are consistent with that framework. The Risk Committee reviews, approves and monitors our overall risk strategy, risk appetite and key risk limits and receives regular reports from the Group Risk function ("Group Risk") to ensure any significant risk issues are being addressed by management. The Risk Committee further reviews, with management and Internal Audit, the Group's general policies and procedures and satisfies itself that effective systems of risk management and controls are established and maintained. Among its other responsibilities, the Risk Committee also reviews and approves our annual Own Risk and Solvency Assessment ("ORSA") report. The Risk Committee assesses the independence and objectivity of our Group Risk function, approves its terms of reference and reviews its ongoing activities.

Following a recommendation by the Chief Executive Officer, the Risk Committee also conducts a review and provides a recommendation to the Board of Directors regarding the appointment and/or removal of the Chief Risk Officer. The Risk Committee meets with the Chief Risk Officer in separate executive session on a regular basis.

The Finance Committee of the Board of Directors oversees the Group's investment of funds and adequacy of financing facilities. This includes approval of the Group's strategic asset allocation plan. The Audit Committee of the Board, which is supported by the Internal Audit function, is responsible for overseeing internal controls and compliance procedures, and also reviews with management and the Chairman of the Risk Committee the Group's policies regarding risk assessment and risk management

# Company Board of Director Level

The Company's Board of Directors has ultimate oversight responsibility for the effectiveness of the risk framework and ensuring that appropriate risk governance, monitoring and reporting exist for the Company. Among the primary responsibilities of the Board are to:

- Establish the Company's Solvency Standard and Risk Limits based on the recommendations of management, and monitor ongoing compliance. For any breaches, the Board is responsible for ensuring management action plans are adequate to address the situation;
- Approve the Company's risk policies;
- Ensure risk is being appropriately managed and reported in the Company, consistent with the Risk Policies as well as local legal and regulatory requirements;
- Review the Company's business plan, focusing in particular on risk aspects and implications for the Company's Solvency Standard and Risk Limits; and
- Review and approve the annual Own Risk and Solvency Assessment ("ORSA") report prepared for the Company.

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# Group Executive Level

The Group Executive Committee formulates business objectives and risk strategy within the overall risk appetite set by the Group Board. It allocates capital resources and sets limits across the Group, with the objective of balancing return and risk. While the Group Executive Committee is responsible overall for risk management, it has delegated some authority to the executive level Group Risk Management Committee ("RMC") consisting of the Group Chief Executive Officer, Chief Financial Officer, Chief Strategy Officer, Head of Group Underwriting, Chief Executive Officers of each segment, Chief Risk Officer, Chief Actuary and General Counsel.

The RMC is responsible for overseeing the integrity and effectiveness of the ERM framework across the Group and ensuring that the Group's risk assumption and risk mitigation activities are consistent with that framework, including a review of the annual business plan relative to our risk limits. In addition to the RMC, there is an established framework of separate yet complementary management committees and subcommittees, focusing on particular aspects of ERM.

#### **Risk Management Organization**

As a general principle, management in each of our lines of business, segments and corporate functions is responsible in the first instance for the risks and returns of its decisions. Management is the 'owner' of risk management processes and is responsible for managing our business within defined risk limits.

The Group Chief Risk Officer reports to the Group Chief Financial Officer and Chairman of the Group Risk Committee and leads our independent Group Risk function, and is responsible for oversight and implementation of the Group's ERM framework as well as providing guidance and support for risk management practices. Group Risk is responsible for developing methods and processes for identifying, assessing, managing, monitoring and reporting risk, and oversees the adherence to this framework at the Group and operating entity level. This forms the basis for informing the Board of Directors of the Company's risk profile.

Internal Audit, an independent, objective function, reports to the Group Audit Committee of the Group Board on the effectiveness of our risk management framework. This includes assurance that key business risks have been adequately identified and managed appropriately and that our system of internal control is operating effectively. Internal Audit also provides independent assurance around the validation of our internal capital model and coordinates risk-based audits, compliance reviews, and other specific initiatives to evaluate and address risk within targeted areas of our business.

Our risk governance structure is further complemented by our legal team which seeks to mitigate legal and regulatory compliance risks with support from other teams. This includes ensuring that significant developments in law and regulation are observed and that we react appropriately to impending legislative and regulatory changes and applicable court rulings.

# Risk Appetite and Limit Framework

Our integrated risk management framework considers material risks that arise from our operations. Material risks that might accumulate and have the potential to produce substantial losses are subject to our group-wide risk appetite and limit framework. Our risk appetite, as authorized by the Board of Directors, represents the amount of risk that we are willing to accept within the constraints imposed by our capital resources as well as the expectations of our stakeholders as to the type of risk we hold within our business. At an annual aggregated level, we also monitor and manage the potential financial loss from the accumulation of risk exposure in any one year.

Specific risk limits are defined and translated into a consistent framework across our identified risk categories and across our operating entities and are intended to limit the impact of individual risk types or accumulations of risk. Individual limits are established through an iterative process to ensure that the overall framework complies with our group-wide requirements on capital adequacy and risk accumulation.

We monitor risk through, for example, risk dashboards and limit consumption reports. These are intended to allow us to detect potential deviations from our internal risk limits at an early stage. Risk dashboards are prepared by Group Risk and reviewed by the Company's Board of Directors throughout the year.

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# d) Internal Controls:

Internal control is defined as the processes, policies, guidelines, and standards of practice in place to mitigate and manage risk to acceptable levels.

AXIS uses a common group-wide framework applicable across all AXIS entities, including the Company.

The AXIS internal control framework is based on the framework developed by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in 1992, and updated in 2013.

The AXIS internal controls are documented and maintained in a central risk and control repository, and individual control owners certify each quarter to the adequate design and continued operating effectiveness of their respective controls.

The internal control framework includes the following five interrelated components:

- *Control Environment:* The primary responsibility of AXIS Capital's Board of Directors is to provide effective governance over the Group's affairs for the benefit of its shareholders, and to help broaden the perspective of executive management. The Group Board has established the Group Audit Committee to facilitate and assist in the execution of its responsibilities. In terms of internal control oversight, it is the responsibility of the Group Audit Committee to review and periodically discuss with the Group Board the adequacy and effectiveness of the Group's internal control structure. There are several oversight committees such as the RMC which help set the management tone in terms of the control environment. AXIS operates with a three lines of defense model.
- *Risk Assessment:* The Internal Controls policy lists the risks ('Risk universe') to which the Group is exposed which the Risk Committee of the Group Board and RMC annually evaluate. Separate risk policies are defined for key risks within the universe which affirm AXIS's group-wide approach, appetite and risk mitigation/control philosophy for managing each risk. Risk assessments are regularly conducted by the business (overseen by Group Risk) across the risk universe for the group. The assessments take into consideration the control environment and the results of control activities as well as other factors e.g. external environment, management of the risk in relation to defined risk appetite and operational issues encountered in the management of the risk. The results of the assessments support upwards reporting and messaging to the AXIS Board.
- *Control Activities:* Each risk within the risk universe identifies an individual Risk Owner, normally a member of the AXIS Group Executive Committee, having appropriate experience and knowledge of the risk. The Risk Owner is responsible for designing and implementing an adequate and efficient control environment to manage their respective risks. Activities include, but are not limited to, reconciliation, documented roles and responsibilities, clear authority limits, peer reviews, appropriate segregation of duties and metrics reporting.
- *Information and Communication:* In terms of communication, AXIS has clear reporting and communication lines in place. Role profiles make clear each individual's role, their reporting lines and functional terms of reference set out responsibilities by function. Clear organizational and structure charts are also maintained. There is an escalation policy in place to ensure matters are reported upwards as required by employees. The AXIS Whistle blower Policy also provides various lines of communication for reporting violations and concerns.
- *Monitoring:* The effectiveness of the internal control framework is independently validated via regular internal audit reviews which are conducted on a rotational basis with findings reported to the Group Audit Committee. There are also Management Initiated Audits ("MIAs") done on claims and underwriting transactions which are reported to the Management Audit Committee. There are various monitoring activities performed by the second line of defense, Group Risk and Legal and Compliance.

The internal control framework is regularly reviewed and updated and annually assessed by the external auditors. The Internal Audit department also validates that the COSO 2013 framework is present and functioning as part of its annual internal audit plan.

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## 4. INSURANCE AND FINANCIAL RISK AND RISK MANAGEMENT

#### **Insurance Risk**

Insurance risk is the inherent uncertainty as to the occurrence, amount and timing of insurance and reinsurance liabilities transferred to us through the underwriting process.

A key component of the Group's underwriting risk governance is our peer review processes which allow for a collaborative review of risk and pricing and ensures that underwriting is within established guidelines and procedures. Underwriting guidelines are in place to provide a framework for consistent pricing and risk analysis and ensuring alignment to the Group's risk appetite. Limits are set on underwriting capacity, and cascade authority to individuals based on their specific roles and expertise.

We also have significant audit coverage across our lines of business, including Management Initiated Audits ("MIAs"). MIAs are audits of underwriting and claims files performed by teams independent of those who originated the transactions, the purpose of which is to test the robustness of our underwriting and claims processes and to recognize any early indicators of future trends in our operational risk environment.

#### **Reinsurance Purchasing**

Another key component of our mitigation of insurance risk is the purchase of reinsurance to protect our short and long tail lines of business on a treaty (covering a portfolio of risks) and facultative (single risk) basis.

For treaty reinsurance, we purchase proportional and non-proportional cover. Under proportional reinsurance, we cede an agreed proportion of the premiums and the losses and loss expenses on the policies we underwrite. We primarily use proportional reinsurance on our liability, professional lines and cyber portfolios, as well as on select property portfolios, where we protect against higher loss frequency rather than specific events. We also purchase proportional reinsurance on our assumed property catastrophe reinsurance portfolio, casualty, and credit and surety portfolios, which includes cessions to our Strategic Capital Partners. In addition, we use non-proportional reinsurance, whereby losses up to a certain amount (i.e. our retention) are borne by us. By using non-proportional reinsurance we can limit our liability with a retention which reflects our willingness and ability to bear risk, and is therefore in line with our risk appetite. We primarily purchase the following forms of non-proportional reinsurance:

- Excess of loss per risk: the reinsurer indemnifies us for loss amounts of all individual policies effected, defined in the treaty terms and conditions. Per risk treaties are an effective means of risk mitigation against large single losses (e.g. a large fire claim).
- Catastrophe excess of loss: provides aggregate loss cover for our insurance portfolio against the accumulation of losses incurred from a single event (e.g. windstorm).

We have a centralized Risk Funding department which coordinates external treaty reinsurance purchasing (including retrocession) across the Group and a separate AXIS ILS (Insurance Linked Securities) team, which coordinates the sourcing and structuring of third-party capital to support AXIS underwriting. Risk funding and AXIS ILS are overseen by our Reinsurance Purchasing Group ("RPG"). The RPG, which includes among others, our Group Chief Executive Officer, Group Chief Risk Officer, Head of Group Underwriting and representatives from the business leadership team, approves each treaty placement, and aims to ensure that appropriate diversification exists within our counterparty panels.

Facultative reinsurance is case by case risk transfer. In certain circumstances. we use facultative reinsurance to complement treaty reinsurance by covering additional risks above and beyond what is already covered in treaties. Facultative reinsurance is monitored by the Risk Funding department.

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# Natural Peril Catastrophe Risk

Natural catastrophes such as hurricanes, windstorms, earthquakes, floods, tornados, hail and fire represent a challenge for risk management due to their accumulation potential and occurrence volatility. In managing natural catastrophe risk, our internal risk limit framework aims to limit both the loss of capital due to a single event and the loss of capital that would occur from multiple(but perhaps smaller events) in any year. Within this framework, we have an established risk limit for single event, single zone probable maximum loss ("PML") within defined zones and at various return periods.

Our PMLs take into account the fact that an event may trigger claims in a number of lines of business. Our PMLs include assumptions regarding the location, size and magnitude of an event, the frequency of events, the construction type and a property's susceptibility to damage, and the cost of rebuilding the property. Loss estimates for non-U.S. zones will be subject to foreign exchange rates, although we may mitigate this currency variability from a book value perspective.

We have developed our PML estimates by combining judgment and experience with the outputs from the catastrophe model, commercially available from AIR Worldwide ("AIR"), which we also use for pricing catastrophe risk. This model covers the major peril regions where we face potential exposure. Additionally, we have included our estimate of non-modeled perils and other factors which we believe provides us with a more complete view of catastrophe risk.

Our PML estimates are based on assumptions that are inherently subject to significant uncertainties and contingencies. These uncertainties and contingencies can affect actual losses and could cause actual losses to differ materially from those expressed above. We aim to reduce the potential for model error in a number of ways, the most important of which is by ensuring that management's judgment supplements the model outputs. We also perform ongoing model validation at the line of business and at group level including through our catastrophe model validation team. These validation procedures include sensitivity testing of models to understand their key variables and, where possible, back testing the model outputs to actual results.

Estimated net losses from peak zone catastrophes may change from period to period as a result of several factors, which include but are not limited to, updates to vendor catastrophe models, changes to our internal modeling, underwriting portfolios, reinsurance purchasing strategy and foreign exchange rates.

#### Man-made Catastrophe Risk

Consistent with our management of natural peril catastrophe exposures, we take a similarly focused and analytical approach to the management of man-made catastrophes. Man-made catastrophes, which include such risks as train collisions, airplane crashes or terrorism, and other intentionally destructive acts, including cyber-attacks, are harder to model in terms of assumptions regarding intensity and frequency. For these risks we couple the vendor models (where available) with our bespoke modeling and underwriting judgment and expertise. This allows us to take advantage of business opportunities related to man-made catastrophe exposures particularly where we can measure and limit the risk sufficiently as well as obtain risk-adequate pricing.

As an example of our approach, our assessment of terrorism risk is based on a mixture of qualitative and quantitative data (e.g. for estimating property damage, business interruption, mortality and morbidity subsequent to an attack of a predefined magnitude), which we use to limit and manage our aggregate terrorism exposure. We use commercially available vendor modeling and bespoke modeling tools to measure accumulations around potential terrorism accumulation zones on a deterministic and probabilistic basis. We supplement the results of our modeling with underwriting judgment.

#### **Reserving Risk**

The estimation of loss reserves is subject to uncertainty as the settlement of claims that arise before the balance sheet date is dependent on future events and developments. There are many factors that would cause loss reserves to increase or decrease, which include, but are not limited to emerging claims and coverage issues, changes in the legislative, regulatory, social and economic environment and unexpected changes in loss inflation. The estimation of loss reserves could also be adversely affected by the failure of our loss limitation strategy and/or the failure of models used to support key decisions.

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We calculate reserves for losses and loss expenses ("loss reserves") in accordance with actuarial best practice based on substantiated methodologies and assumptions. In addition, we have well established processes in place for determining loss reserves, which we ensure are consistently applied. Our loss reserving process demands data quality and reliability and requires a quantitative and qualitative review of overall reserves and individual large claims. Within a structured control framework, claims information is communicated on a regular basis throughout our organization, including to senior management, to provide an increased awareness of losses that have occurred throughout the insurance markets. The detailed and analytical reserving approach that follows is designed to absorb and understand the latest information on reported and unreported claims, to recognize the resultant exposure as quickly as possible, and to record appropriate loss reserves in our financial statements.

Reserving for long-tail lines of business represents a significant component of reserving risk. When loss trends prove to be higher than those underlying our reserving assumptions, the risk is greater because of a stacking-up effect: loss reserves recorded in the financial statements cover claims arising from several years of underwriting activity and these reserves are likely to be adversely affected by unfavorable loss trends. We manage and mitigate reserving risk on long-tail business in a variety of ways. First, the long-tail business we write is part of a well-balanced and diversified global portfolio of business. We also purchase reinsurance on liability business to manage our net positions. Secondly, we follow a disciplined underwriting process that utilizes available information, including industry trends.

# **Claims Handling Risk**

In accepting risk, we are committing to the payment of claims and therefore these risks must be understood and controlled. AXIS has claims teams embedded in its main lines of business. These claims teams include a diverse group of experienced professionals, including claims adjusters and attorneys. AXIS also uses approved external service providers, such as independent adjusters and appraisers, surveyors, accountants, investigators and specialist attorneys, as appropriate.

AXIS maintains claims handling guidelines which include details on claims reporting controls and claims reporting escalation procedures in all of its claims teams. Large claims matters are reviewed during weekly claims meetings. The minutes from each meeting are circulated to underwriters, senior management and others involved in the reserving process. To maintain communication between underwriting and claims teams, claims personnel regularly report at underwriting meetings and frequently attend client meetings.

AXIS fosters a strong culture of review among its claims teams. This includes MIAs, whereby senior claims handlers audit a sample of claim files. The process is designed to ensure consistency between the claims units and to develop Group-wide best practices.

When we receive notice of a claim, regardless of size, it is recorded in our claims and underwriting systems. In addition, we produce alerts regarding significant events and potential losses, regardless of whether we have exposure. These alerts allow a direct notification to be communicated to underwriters and senior management worldwide. Similarly, for natural peril catastrophes, we have developed a catastrophe database, along with catastrophe coding in certain systems that allows for the gathering, analyzing and reporting of loss information as it develops from early modeled results to fully adjusted and paid losses.

# **Market Risk**

Market risk is the risk that our financial instruments may be negatively impacted by movements in financial market prices or rates such as equity prices, interest rates, credit spreads and foreign exchange rates. Fluctuations in market prices or rates primarily affect our investment portfolio.

Through asset and liability management, we aim to ensure that market risks influence the economic value of our investments and our loss reserves and other liabilities in the same way, thus mitigating the effect of market fluctuations. For example, we reflect important features of our liabilities, such as maturity patterns and currency structures, on the assets side of the balance sheet by acquiring investments with similar characteristics.

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We supplement our asset-liability management with various internal policies and limits. As part of our strategic asset allocation process, different asset strategies are simulated and stressed in order to evaluate the 'optimal' portfolio (given return objectives and risk constraints) at both the group and operating entity level. Our investments team manages asset classes to control aggregation of risk and provide a consistent approach to constructing portfolios and the selection process of external asset managers. We have limits on the concentration of investments by single issuers and certain asset classes, and we limit the level of illiquid investments.

We stress test our investment portfolios using historical and hypothetical scenarios to analyze the impact of unusual market conditions and to ensure potential investment losses remain within our risk appetite. At an annual aggregated level, we manage the total risk exposure to our investment portfolio so that the 'total return' investment loss in any one year is unlikely to exceed a defined percentage of our common equity at a defined return period.

We mitigate foreign currency risk by seeking to match our estimated insurance and reinsurance liabilities payable in foreign currencies with assets, including cash and investments that are also denominated in the same currencies. Where necessary, we use derivative financial instruments for economic hedging purposes. For example, in certain circumstances, we use forward contracts and currency options to economically hedge portions of our un-matched foreign currency exposures.

The Branch's exposure to foreign currency risk arises primarily from insurance contract liabilities and insurance debtors denominated in currencies other than the Branch's functional currency. A key component of the Branch's mitigation of foreign currency risk is the whole account quota share reinsurance protection provided by the Home office as it follows the settlement currencies of the underlying reinsured policies. The Branch does not use derivative financial instruments to protect it against the volatility associated with foreign currency transactions, and other financial assets and liabilities created in the ordinary course of business.

# Liquidity Risk

Liquidity risk is the risk that we may not have sufficient financial resources to meet our obligations when they are due or would have to incur excessive costs to do so. As an insurer and reinsurer, our core business generates liquidity primarily through premiums, investment income and the maturity/sale of investments. Our exposure to liquidity risk stems mainly from the need to cover potential extreme loss events and regulatory constraints that limit the flow of funds within the Group. To manage these risks, we have a range of liquidity policies and measures in place:

- We maintain cash and cash equivalents and a high quality, liquid investment portfolio to meet expected outflows, as well as those that could result from a range of potential stress events. We place limits on the maximum percentage of cash and investments which may be in an illiquid form as well as on the minimum percentage of unrestricted cash and liquid investment grade fixed income securities.
- There is a cash call cause in the whole account quota share reinsurance protection provided by the Head office for settlements above certain thresholds.
- We maintain committed borrowing facilities, as well as access to diverse funding sources to cover contingencies. Funding sources include asset sales, external debt issuances and lines of credit.

# **Credit Risk**

Credit risk represents the risk of incurring financial loss due to the diminished creditworthiness (reduced financial strength and, ultimately, possibly default) of our third party counterparties. We distinguish between various forms of credit exposure; the risk of issuer default from instruments in which we invest, such as corporate bonds; counterparty exposure in a direct contractual relationship, such as reinsurance; the credit risk related to our premiums receivable, including those from brokers and other intermediaries; and the risk we assume through our insurance contracts, such as our credit and political risk line of business.

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# Credit Risk Aggregation

We monitor and manage the aggregation of credit risk on a Group-wide basis allowing us to consider exposure management strategies for individual companies, countries, regions, sectors and any other relevant inter-dependencies. Our credit exposures are aggregated based on the origin of risk. Credit risk aggregation is managed through minimizing overlaps in underwriting, financing and investing activities. As part of our credit aggregation framework, we assign aggregate credit limits by country and by single counterparty (or parent of affiliated counterparties). These limits are based and adjusted on a variety of factors including the prevailing economic environment and the nature of the underlying credit exposures.

Our credit aggregation measurement and reporting process is facilitated by our credit risk exposure database, which contains relevant information on counterparty details and credit risk exposures. The database is accessible by management throughout the Group, thus providing transparency to allow for the implementation of active exposure management strategies. We also license third party tools to provide credit risk assessments. We monitor all our credit aggregations and, where appropriate, adjust our internal risk limits and/or have taken specific actions to reduce our risk exposures.

#### Credit Risk relating to Cash and Investments

In order to mitigate concentration and operational risks related to cash and cash equivalents, we limit the maximum amount of cash that can be deposited with a single counterparty and limit acceptable counterparties based on current rating, outlook and other relevant factors.

Our fixed maturity investment portfolio is exposed to potential losses arising from the diminished creditworthiness of issuers of bonds as well as third party counterparties such as custodians. Our investment portfolio is managed by external investment managers in accordance with investment guidelines. We limit such credit risk through diversification, issuer exposure limits graded by ratings and, with respect to custodians, contractual and other legal remedies. Excluding U.S. government and agency securities, we limit our concentration of credit risk to any single corporate issuer to 2% or less of our investment grade fixed maturities portfolio for securities rated A- or above and 1% or less of our investment grade fixed maturities portfolio for securities rated A-.

# Credit Risk relating to Reinsurance Recoverable Assets

We are exposed to the credit risk of a reinsurer failing to meet its obligations under our reinsurance contracts. To help mitigate this, our purchases of reinsurance are subject to financial security requirements specified by our Reinsurance Security Committee ("RSC"). The RSC maintains a list of approved reinsurers, performs credit risk assessments for potential new reinsurers, regularly monitors approved reinsurers with consideration for events which may have a material impact on their creditworthiness, recommends counterparty limits for different types of ceded business and monitors concentrations of credit risk. This assessment considers a wide range of individual attributes, including a review of the counterparty's financial strength, industry position and other qualitative factors. Generally, the RSC requires reinsurers who do not meet specified requirements to provide collateral.

#### Credit Risk relating to Premium Receivables

The diversity of our client base limits credit risk associated with premium receivables. In addition, for insurance contracts we have contractual rights to cancel coverage for non-payment of premiums, and for reinsurance contracts we have contractual rights to offset premium receivables against corresponding payments for losses and loss expenses.

Brokers and other intermediaries collect premiums from customers on our behalf. We have procedures in place to manage and monitor credit risk from intermediaries with a focus on day-to-day monitoring of the largest positions.

These contractual rights contribute to the mitigation of credit risk, together with the monitoring of aged premium receivable balances. In light of these mitigating factors and considering that a significant portion of premium receivables are not currently due based on the terms of the underlying contracts, we do not utilize specific credit quality indicators to monitor premium receivable balances.

For the year ended December 31, 2021

## Credit Risk relating to Underwriting Portfolio

In our insurance segment, we provide credit insurance primarily for lenders (financial institutions) and commodity traders seeking to mitigate the risk of non-payment from their borrowers and trading counterparties. This product complements our traditional political risk insurance business. For the credit insurance contracts, it is necessary for the buyer of the insurance, most often a bank or commodity trader, to hold an insured asset, most often an underlying loan, or sale and purchase contract in order to claim compensation under the insurance contract. The majority of the credit insurance provided is for single-name illiquid risks, primarily in the form of senior secured bank loans but also unsecured payment obligations in the case of shorter term trade credit, that can be individually analyzed and underwritten. As part of this underwriting process, an evaluation of creditworthiness and reputation of the obligor is critical. We generally require our clients to retain a share of each transaction that we insure. A key element to our underwriting analysis is the assessment of recovery in the event of default and, accordingly, the strength of the collateral and the enforceability of rights to the collateral are paramount.

Generally, we do not underwrite insurance for structured finance products that would expose us to mark-to-market losses. In addition, our credit insurance contracts typically do not include terms which would introduce liquidity risk, most notably, in the form of a collateralization requirement upon a ratings downgrade.

We also provide protection against sovereign default or sovereign actions that result in impairment of cross-border investments for banks and corporations. Our contracts generally include conditions precedent to our liability relating to the enforceability of the insured transaction and restricting amendments to the transaction documentation, obligations on the insured to prevent and minimize losses, subrogation rights (including rights to have the insured asset transferred to us) and waiting periods. Under most of our policies, a loss payment is made in the event the debtor failed to pay our client when payment is due subject to a waiting period of up to 180 days.

# **Operational Risk**

Operational risk represents the risk of loss as a result of inadequate processes, system failures, human error or external events, including but not limited to direct or indirect financial loss, reputational damage, customer dissatisfaction and legal and regulatory penalties.

The Group Risk function is responsible for coordinating and overseeing a group-wide framework for operational risk management. As part of this oversight, we maintain an operational loss-event database which helps us monitor and analyze potential operational risk issues, identify any trends, and, where necessary, put in place improvement actions to avoid occurrence or recurrence of operational loss events.

We manage transaction type operational risks through the application of process controls throughout our business. In testing these controls, we supplement the work of our internal audit team with regular underwriting and claim MIAs (as discussed above).

We have specific processes and systems in place to focus on high priority operational matters such as information security, managing business continuity, and third party vendor risk which are described below:

- Major failures and disasters which could cause a severe disruption to working environments, facilities and personnel, represent a significant operational risk to us. Our Business Continuity Management framework strives to protect critical business services and the functions which support these business services from these effects to enable us to carry out our core tasks in time and at the quality required. During 2021, we continued to review our Business Continuity Planning procedures through cyclical planned tests.
- We have developed a number of Information Technology ("IT") platforms, applications and security controls to support our business activities worldwide. Dedicated security standards are in place for our IT systems to ensure the proper use, availability and protection of our information assets.
- Our use of third party vendors exposes us to a number of increased operational risks, including the risk of security breaches, fraud, non-compliance with laws and regulations or internal guidelines and inadequate service. We manage material third party vendor risk, by, among other things, performing a thorough risk assessment on potential large vendors, reviewing a vendor's financial stability, ability to provide ongoing service and business continuity planning.

For the year ended December 31, 2021

# 5. **INSURANCE PROVISIONS**

The Branch annually prepares general purpose financial statements ("GPFS") in accordance with Financial Reporting Standards in Singapore. The GPFS are publicly available from the Accounting and Corporate Regulatory Authority of Singapore.

The provision for outstanding claims represents an estimate of the unpaid portion of the ultimate liability for losses and loss expenses for (re)insured events that have occurred at or before the reporting date. The balance reflects both claims that have been reported ("case reserves") and claims that have been incurred but not yet reported ("IBNR"). These amounts are reduced for estimated amounts of salvage and subrogation recoveries.

Reserves for losses and loss expenses are reviewed on a quarterly basis. Case reserves are primarily established based on amounts reported from insured and/or their brokers. Management estimates IBNR after reviewing detailed actuarial analyses and applying informed judgment regarding qualitative factors that may not be fully captured in the actuarial estimates. A variety of actuarial methods are utilised in this process, including the Expected Loss Ratio, Bornhuetter-Ferguson and Chain Ladder methods. The Branch's estimate is highly dependent on management's judgment as to which method(s) are most appropriate for a particular accident year and class of business. The Branch's historical claims data is often supplemented with industry benchmarks when applying these methodologies.

Unearned premium reserves represent the portion of premiums written which relates to the unexpired risks under contracts in force. Insurance and reinsurance premiums are earned evenly over the period during which the Branch is exposed to the underlying risk, which is generally one to two years with the exception of multi-year contracts.

The premiums paid to reinsurers (i.e. ceded premiums written) are expensed over the coverage period. Prepaid reinsurance premiums or reinsurers' portion of the unearned premium reserves represent the portion of premiums ceded which relate to the unexpired term of the contracts in force.

For purposes of the Branch's solvency assessment and regulatory filings its insurance liabilities are established in accordance with the Insurance valuation and capital regulations 2004 as prescribed by the Monetary Authority of Singapore ("MAS") and are comprised of Premium Liabilities and Claims Liabilities.

MAS' Insurance valuation and capital regulations 2004 define:

Premium Liabilities: as the higher of -

(i) the unearned premium reserves of the fund calculated as the aggregate of unearned premium reserves for each policy; or

(ii) the unexpired risk reserves, calculated as the sum of:

(a) the value of the expected future payments arising from future events insured under policies in force as at the valuation date, including any expense expected to be incurred in administering the policies and settling relevant claims; and

(b) any provision for any adverse deviation from the expected experience, calculated based on the 75 per cent level of sufficiency.

<u>Claim Liabilities:</u> an amount not less than the sum of:

(i) the value of the expected future payments in relation to all claims incurred prior to the valuation date (other than payments which have fallen due for payment on or before the valuation date), whether or not they have been reported to the insurer, including any expense expected to be incurred in settling those claims; and

(ii) any provision for any adverse deviation from the expected experience, calculated based on the 75 per cent level of sufficiency.

# 6. CAPITAL ADEQUACY

The primary objective of the Branch's capital management strategy is to ensure the Branch's ability to continue as a going concern and to maintain compliance with Fund Solvency and Capital Adequacy Requirements as prescribed by the Singapore Insurance Act.

For the year ended December 31, 2021

The Branch monitors its capital position and its compliance with these requirements on a regular basis. The Branch has complied with the above-mentioned solvency requirements during the financial year ended December 31, 2021. The Branch's capital consists of capital contributions from its head office, investment revaluation reserves and accumulated losses. The Branch's Capital Adequacy Ratio was 346% at December 31, 2021.

The Singapore Branch operates under AXIS Specialty Limited, a company licensed as a Class 4 insurer under the Bermuda Insurance Act 1978, amendments thereto and Related Regulations (the "Act"). The Company is required to comply with various provisions of the Act regarding solvency and liquidity. Under the Act, the Company is required to maintain minimum statutory capital and surplus equal to the greater of a minimum solvency margin ("MSM") and an Enhanced Capital Requirement ("ECR"). The MSM is the greater of \$100 million, 50% of net written premiums, 15% of the net reserve for losses and loss adjustment expenses or 25% of the ECR. The ECR is calculated based on either an internally developed risk-based capital model or a standard risk-based capital model developed by the Bermuda Monetary Authority ("BMA"). In 2016, the BMA implemented an Economic Balance Sheet ("EBS") framework, which is used as the basis to determine the ECR. Actual and required minimum statutory capital and surplus at December 31, 2021 were as follows:

Required minimum statutory capital and surplus:	US\$ 1,517,485,000
Actual statutory capital and surplus:	US\$ 3,067,879,000

# 7. FINANCIAL INSTRUMENTS AND INVESTMENTS

The Branch's investments are comprised of US dollar denominated highly rated fixed income securities with a short duration. These investments are managed in accordance with the Branch's Statement of Investment Policy and Objectives as approved by the Branch's Investment Committee and the Company's Board of Directors.

The Branch limits the concentration of investments by single issuers and certain asset classes, and limits the level of illiquid investments. Further, the Branch's investment guidelines do not permit the use of leverage in its fixed maturity portfolios.

# 8. FINANCIAL PERFORMANCE

The Branch's annual financial statements prepared in accordance with Singapore Financial Reporting Standards ("SFRS"), are filed by the Branch with, and publicly available from, the Accounting and Corporate Regulatory Authority of Singapore.

# 9. SUSTAINABILITY AND ENVIRONMENTAL RISK DISCLOSURE

Refer to the AXIS Capital Holdings Limited Sustainability Accounting Standards Board Disclosure Report on the AXIS Capital website.