

# SUSTAINABILITY

## RISK MANAGEMENT

Risk management is an integral part of Mapletree’s business strategy to deliver strong earnings and sustainable returns.

To safeguard and create value for stakeholders, the Management proactively manages risks and embeds the risk management process as part of the Group’s planning and decision-making process.

### STRONG OVERSIGHT AND GOVERNANCE

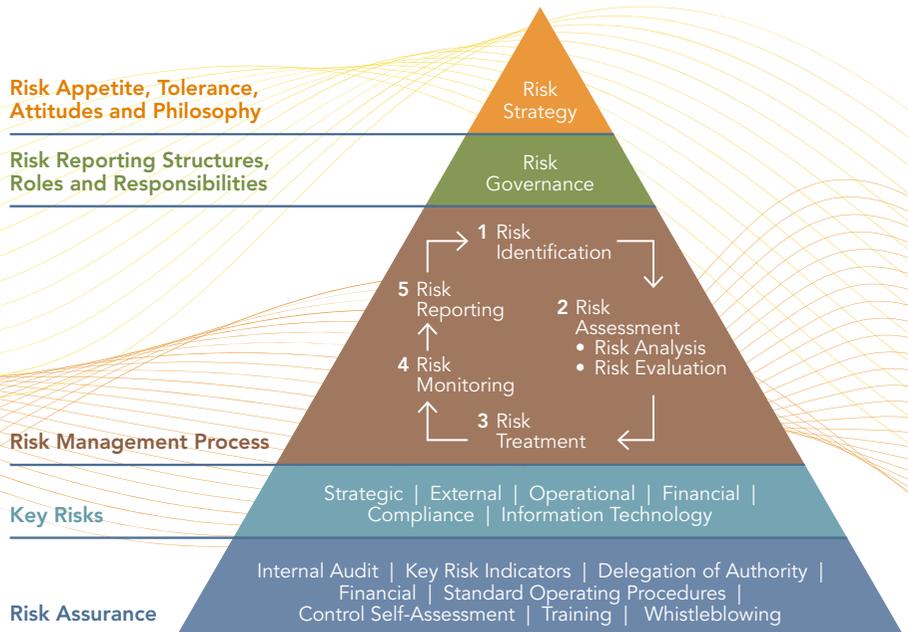
The Board of Directors (Board) is responsible for determining the Group’s overall risk strategy and risk governance, as well as ensuring that the Management implements sound risk management and internal control practices. The Board also approves the risk appetite and tolerance statements, which set out the nature and extent of risks that can be taken to achieve the Group’s business objectives. The Board, which is supported by the Audit and Risk Committee (AC), comprises directors whose collective diverse experience and knowledge serve to give guidance and provide strategic insights to the Management. As part of the review of Mapletree’s portfolio risks, the AC engages directly with the Risk Management (RM) department on a quarterly basis.

At Mapletree, the risk management culture involves both top-down oversight and bottom-up engagement from all employees. This ensures a risk approach that is aligned with the Group’s business

objectives and strategies for Mapletree, and which is also integrated with operational processes for effectiveness and accountability.

Mapletree’s Enterprise Risk Management (ERM) framework is adapted from the International Organisation for Standardisation ISO 31000 Risk Management. It is dynamic and evolves with the business, thus providing the Group with a holistic and consistent process for the identification, assessment, monitoring and reporting of risks. The RM department works closely with the Management to continually review and enhance the risk management system in accordance with market practices and regulatory requirements, under the guidance and direction of the AC and the Board. A group-wide control self-assessment (CSA) framework further reinforces risk awareness by fostering accountability, control and risk ownership, as well as provides additional assurance to the Management and the Board that operational risks are being effectively and adequately managed and controlled.

### ENTERPRISE RISK MANAGEMENT FRAMEWORK



## ROBUST MEASUREMENT AND ANALYSIS

Mapletree's risk measurement framework is based on Value-at-Risk (VaR), a methodology which measures the volatilities of market and property risk drivers such as rental rates, occupancy rates, capital values, interest rates and foreign exchange rates. It takes into consideration changes in the market environment and asset cash flows. To complement the VaR methodology, other risks such as refinancing, tenant-related and development risks are also assessed, monitored and measured as part of the framework where feasible.

The VaR methodology measures risks consistently across Mapletree's portfolio of assets. It enables the Management to quantify the benefits that arise from diversification across the portfolio and to assess risk by country, asset class and risk type. The Management recognises the limitations of any statistically based analysis that relies on historical data. Therefore, Mapletree's portfolio is subject to stress tests and scenario analyses to ensure that the Group remains resilient in the event of unexpected market shocks.

## RISK IDENTIFICATION AND ASSESSMENT

The Management identifies key risks, assesses their likelihood and impact on the business, as well as establishes corresponding mitigating controls. The information is maintained in a risk register that is reviewed and updated regularly. The key risks identified include but are not limited to:

### Strategic risks

#### Market risk

Mapletree's portfolio is subject to real estate market risks such as rental rate, occupancy volatilities and country-specific factors including competition, supply and demand as well as local regulations. Such risks are quantified, aggregated and monitored for existing assets and prospective acquisitions. Significant risk profile changes or emerging trends are reported for assessment and/or action.

#### Investment risk

Mapletree adopts a rigorous and disciplined investment approach, which subjects all investment proposals to stringent reviews. Project returns are assessed against internal country and sector-specific hurdle rates, which are independently determined by the RM department and regularly reviewed by the Management. Sensitivity analysis is performed for each acquisition on all key project variables to test the robustness of the assumptions used. For significant acquisitions, independent risk assessments are conducted by the RM department and included in investment proposals submitted to the Investment Committee or the Board for approval. All investment proposals are subject to rigorous scrutiny by the Board (or delegated to the Management Committee), in accordance with the Board's approved delegation of authority.

#### Project development risk

New development projects usually take a few years to complete, depending on the project size and complexity. To mitigate the risks of development delays, cost overruns and lower than expected quality, the Management has put in place stringent pre-qualifications for consultants and contractors as well as regular reviews of the project progress.

#### External risks

##### Economic and geopolitical risks

To manage economic and geopolitical risks, Mapletree conducts rigorous country and real estate market research and monitors the economic, geopolitical and political developments closely. The emergence of Covid-19 in early 2020 has heightened the economic uncertainties globally. To mitigate the adverse impact from Covid-19 on the financial performance of Mapletree's properties, the Management has extended rental reliefs to support tenants, where necessary, and also adopted flexible leasing strategies to maintain a high portfolio occupancy.

The Group will continue to closely monitor economic and geopolitical developments across the markets that it operates in as part of its active asset

management strategy. Additionally, the Management will seek suitable acquisition opportunities in these markets to diversify Mapletree's income stream and enhance the resilience of the portfolio.

#### Operational risks

Comprehensive operating, reporting and monitoring guidelines enable Mapletree to manage day-to-day activities and mitigate operational risks. To ensure relevance, the Group regularly reviews its standard operating procedures (SOPs) and benchmarks them against industry practices where appropriate.

Compliance with SOPs is assessed under the CSA framework and reinforced through training of employees and regular reviews by the Internal Audit department.

#### Human resource risk

The loss of key management personnel or inability to attract, grow and retain key talent and leaders can cause disruptions to the Group's business operations and hinder the achievement of its business objectives. Succession planning, talent management, competitive compensation and benefit plans have been put in place to attract, reward and retain talents and performing personnel.

#### Property damage and business disruption risks

In the event of unforeseen catastrophic events such as Covid-19, Mapletree has a business continuity plan and crisis communication plan that enable it to resume operations with minimal disruption and loss. Mapletree's properties are insured in accordance with industry norms in their respective jurisdictions and benchmarked against those in Singapore.

#### Health and safety risks

Mapletree places utmost importance on health and safety of its stakeholders.

Health and safety considerations are incorporated in the Group's SOPs. Checks on fire protection systems as well as required certificates and permits are performed regularly to

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ensure compliance with regulatory requirements.

Precautionary measures have been taken at Mapletree's properties to safeguard the well-being of its stakeholders during the pandemic. These included enhancing the frequencies of cleaning and disinfection of common areas, increasing the availability of hand sanitisers within properties as well as instituting safe distancing measures. For more information, please refer to page 113 of this annual report.

### Credit risk

Credit risk is mitigated from the outset by conducting tenant credit assessment as part of the investment due diligence process prior to an acquisition. For new and sizeable leases, credit assessments of prospective tenants are undertaken before the signing of lease agreements. On an ongoing basis, tenants' credit worthiness is closely monitored and arrears are managed by the Credit Control Committee, which meets regularly to review debtor balances. To further mitigate credit risks, security deposits in the form of cash or banker's guarantees are collected from prospective tenants prior to the commencement of leases, where applicable.

### Financial risks

Financial market risks and capital adequacy of Mapletree are closely monitored and actively managed by the Management, and reported to the Board on a quarterly basis.

At the portfolio level, the risk impact of interest rate and currency volatilities on value is quantified, monitored and reported quarterly using the VaR methodology. Refinancing risk is also quantified, taking into account the concentration of loan maturity profile and credit spread volatility.

### Interest rate risk

The Management prudently manages exposure to interest rate volatility from the Group's borrowings through interest rate derivatives and fixed rate debts.

### Foreign exchange risk

After taking into account cost, tax and other relevant considerations, the Manager will borrow in the same currency as the underlying assets to provide some natural hedge, and/or hedges through derivatives, whenever appropriate.

### Liquidity risk

The Management actively monitors the Group's cash flow position and funding requirements to ensure there are significant liquid reserves to fund operations, meet short-term obligations, and achieve a well-staggered debt maturity profile.

The Group also maintains sufficient financial flexibility and adequate debt headroom for Mapletree to fund future acquisitions. In addition, the Group monitors and mitigates bank concentration risks, by having a well-diversified funding base.

### Compliance risks

#### Regulatory risk

Mapletree is committed to complying with the applicable laws and regulations of the various jurisdictions in which it operates. Non-compliance may result in litigation, penalties, fines or revocation of business licenses. Mapletree identifies the applicable laws and regulatory obligations, and ensures compliance with these laws and regulations in its day-to-day business processes.

#### Fraud risk

A comprehensive corporate governance framework has been established to maintain responsible and transparent business practices. The framework contains specific guidelines on anti-corruption practices such as the prohibition of bribery, acceptance or offer of gifts and entertainment.

The Group also has a whistleblowing policy that allows employees and stakeholders to raise any serious concerns, dangers, risks, malpractices or wrongdoings in the workplace while protecting them from reprisals.

Compliance with the policies and procedures is required at all times. This includes policies on ethics and code of conduct, safe work practices and professional conduct. If an employee is found guilty of fraud, dishonesty or criminal conduct in relation to his/her employment, the Management reserves the rights to take appropriate disciplinary action, including termination of employment.

### Information Technology (IT) risk

Concerns over the threat posed by cybersecurity attacks have risen as such attacks have become more prevalent and sophisticated. Mapletree has in place comprehensive policies and procedures governing information availability, control and governance, as well as data security. An IT disaster recovery plan is in place and tested annually to ensure that Mapletree's business recovery objectives are met. All employees are required to complete a mandatory online training course on IT security awareness to ensure that they are aware of potential cybersecurity threats. On top of the constant monitoring of Internet gateways to detect potential security events, network vulnerability assessment and penetration testing are also conducted regularly to check for potential security gaps.

## RIGOROUS MONITORING AND CONTROL

Mapletree has developed internal key risk indicators that serve as an early-warning system to highlight risks that have escalated beyond the agreed tolerance levels. The Management has also established required actions to be taken when risk thresholds are breached.

Every quarter, the RM department presents a comprehensive report to the Board and the AC, highlighting key risk exposures, portfolio risk profile, results of stress testing scenarios such as Covid-19 and status of key risk indicators. The Board and the AC are also kept abreast of any material changes to the Group's risk profiles and activities.