

TYPES OF RISKS AND ITS MITIGATIONS

There are 10 (ten) types of risks managed by Bank Mandiri in an integrated manner:

1. Credit Risk
2. Market Risk
3. Liquidity Risk
4. Operational Risk
5. Legal Risk
6. Reputation Risk
7. Strategic Risk
8. Compliance Risk
9. Intra-Group Transaction Risk
10. Insurance Risk

CREDIT RISK MANAGEMENT

Credit risk management and mitigation are carried out at every stage of lending. Bank Mandiri's credit risk management process for the Wholesale segment begins with determining the target market referring to the Loan Portfolio Guideline, which categorizes the industrial sector into an Industry Classification (attractive, neutral, selective, vigilant) based on the outlook and portfolio quality, and Industry Limit which aims at minimizing the credit risk concentration in a particular sector.

Furthermore, in order to obtain a list of qualified and prospective pipeline, a pre-approval process is carried out through a number of stages using credit risk tools. These stages include the Clearance process which includes an initial analysis of targeted customers which includes reputation, business, finance which is then followed by a credit risk assessment by taking into account ratings, financial conditions, analysis of prospective borrowers, etc. The results of this assessment are then decided by the Credit Approval Authority with a four-eye principle involving the Business Unit and Credit Risk Management Unit independently.

Following the credit disbursement process, regular monitoring (early warning signal) is carried out to detect early borrowers that have the potential to become non-performing; hence an appropriate action plan can be prepared, including collection, recovery and restructuring activities.

In the Retail segment, as it is a mass market, the credit process is carried out more automatically using a credit risk scorecard, by referring to the Risk Acceptance Criteria of each product, and processed through an automated

work-flow (loan factory). The monitoring process is carried out on a portfolio basis through Portfolio Quality Review, which can be continued with the collection and recovery process for non-performing portfolios.

To anticipate the deterioration of macroeconomic conditions, a what-if analysis of wholesale and retail portfolios is carried out through a process of stress testing and sensitivity analysis using certain macroeconomic scenarios.

In disbursing its loans, Bank Mandiri always prioritizes the prudential principle by placing a credit analysis function carried out by independent business units and credit risk units. Bank Mandiri is always guided by the Credit Policy (KPKD) in managing credit risk end-to-end. Operationally, this policy is stated in the form of Credit Standard Procedures (SPK) and Product Manuals.

In carrying out credit concentration risk management at the borrower level, Bank Mandiri consistently monitors the Legal Lending Limit (LLL) and the application of Management Limit and for large business groups. In general, the credit process and credit risk management at Bank Mandiri have been carried out end-to-end and integrated by the Business Unit, Credit Operation Unit and Credit Risk Management Unit.

The Bank periodically reviews and improves credit policies in general, credit procedures per business segment and risk management tools. The work guidelines provide complete credit risk management instructions, to identify risks, measure and mitigate risks in the end-to-end credit process starting from determining the target market, credit analysis, approval, documentation, credit withdrawal, monitoring/supervision, to the process of resolving/restructuring non-performing loans.

To increase the Bank's social role and concern for environmental risks and in applying the principle of responsibility in Good Corporate Governance, Bank Mandiri has integrated Environmental, Social and Governance (ESG) aspects into the Industry Acceptance Criteria Technical Guidelines which are used to select qualified prospective debtors and prospective debtors who have applied ESG principles in their business activities. This is in line with the Financial Services Authority Regulation No.40/POJK.03/2019 concerning Asset Quality Assessment of Commercial Banks which stipulates that the assessment

TYPES OF RISKS AND ITS MITIGATIONS

of the debtor's business prospects also considers the debtor's efforts in maintaining the environment. In addition, in order to maintain the environment, the Bank has prepared a Sustainable Finance Action Plan as stipulated in the Financial Services Authority Regulation on the Application of Sustainable Finance for Financial Service Institutions, Issuers and Public Company.

In principle, credit risk management is applied at the transactional level as well as the portfolio level. At the transactional level, a four-eyes principle is applied, namely every credit approval involves the Business Unit and Credit Risk Management Unit independently to obtain an objective decision. The four-eyes principle mechanism is carried out by the Credit Committee in accordance with the limit of authority with the credit approval process carried out through the Credit Committee Meeting mechanism.

Credit risk from borrowers and products has been covered and reserved through impairment losses provision, which is currently calculated based on PSAK 71 as of 1 January 2020, and monitored through indicator cost of credit.

Throughout 2023, the Bank continued to conduct regular monitoring of the portfolio of debtors affected by the Covid-19 pandemic. The outstanding balance of the Covid-19 restructuring portfolio in December 2023 has improved significantly to Rp17.2 trillion compared to December 2022 of Rp35.9 trillion. This decrease is the result of debtors making normal payments as before the pandemic so that the Covid-19 restructuring flag can be removed and also due to the repayment of credit facilities.

OJK through the decision of the Board of Commissioners No. 34/KDK.03/2022 determined new criteria for the extension of Covid-19 restructuring which regulates the granting of a stricter extension of Covid-19 restructuring. This has the potential to increase NPL if not managed properly. Bankwide's NPL (Excluding Bank) percentage has been successfully reduced from 1.88% as of December 2022 to 1.02% as of December 2023. This NPL improvement is supported by the optimization of efforts to upgrade collectibility and collection for NPL debtors throughout 2023. In the aspect of LAR Including Covid-19, the Bank has also succeeded in reducing LAR Including Covid-19 from 12.10% as of December 2022 to 8.74% as of December 2023 as a result of declining NPLs and Covid-19 restructuring portfolio. Going forward in 2024, the Bank projects NPLs to remain stable with a tendency to improve.

MARKET RISK MANAGEMENT

Market risk management is carried out by an independent unit by implementing the segregation of duties principle, the separation of functions and responsibilities consisting of the front office, middle office, and back office. The Market Risk Management Organization comprises two parts, namely Market Risk Management – Trading Book and Market Risk Management – Banking Book.

The framework for and governance of market risk management at Bank Mandiri consist of:

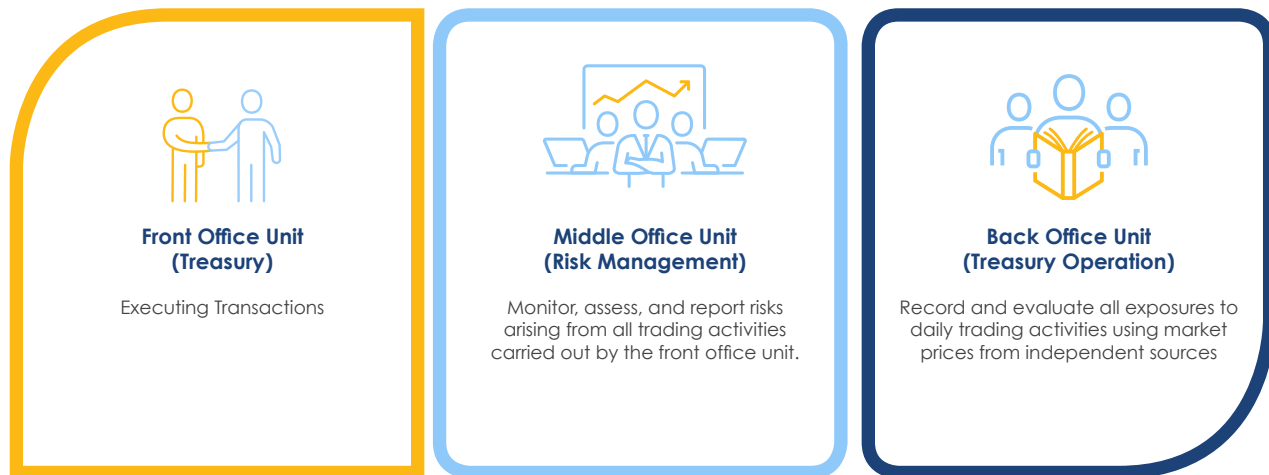
1. The Board of Commissioners, who are responsible for market risk oversight through the Risk Monitoring Committee, Integrated Governance Committee, and Audit Committee.
2. Directors, who are responsible for the risk policy function through the Executive Committee with respect to market risk management and recovery plan, the Assets & Liability Committee, and Risk Management and Credit Policy Committee.
3. Risk Management Unit together with the business units and compliance unit, who perform risk identification, risk calculation, risk monitoring, and risk control.

The Risk Management Framework of Bank Mandiri is developed based on internal and external factors including but are not limited to the Bank's business, regulatory provisions, development of methodologies and best practices, as well as risk data. The authority and responsibilities regarding the implementation of risk management are regulated in the Risk Management Policy (RMP). Meanwhile, the guidelines on market risk management in both the trading book portfolio and banking book are outlined in the Standard Treasury Procedure (STP) and the Standard Asset & Liability Procedure Management (SALPM).

Management and Mechanism of Market Risk Measurement – Trading Book

Trading book market risk is a risk arising from potential losses due to trading book activities, changes in interest rates, and exchange rates (including derivative instruments). Bank Mandiri's market risk management is carried out by applying the segregation of duties principle, i.e. separating functions and responsibilities of the treasury unit trade transactions, which consist of:

TYPES OF RISKS AND ITS MITIGATIONS



The measurement of trading book risk is done according to regulatory provisions and some internal indicators, which include Value at Risk, sensitivity simulation, and stress testing. Monitoring is conducted by implementing some types of transaction limits at the dealer level to ensure exposures from Treasury transactions remain consistent with the risk appetite set by the management.

Management and Mechanism of Market Risk Measurement – Banking Book

The banking book market risk is a risk that arises because of changes in interest rates and exchange rates for banking book activities that can affect the Bank's profitability (earning perspective) and the economic value of Bank capital (economic value perspective). The management of Bank Mandiri's banking book market risk is done by optimizing the balance sheet structure to obtain maximum returns per the level of acceptable risk. It is also done by setting a limit that is in accordance with internal provisions and the applicable laws and regulations, which is monitored periodically by the relevant work unit.

LIQUIDITY RISK MANAGEMENT

Liquidity risk is arising from the Bank's inability to fulfill due obligations using cash flow financing and/or high-quality collateral liquid assets without disrupting the Bank's activities and financial conditions.

Liquidity risk can be divided into two categories:

1. Funding Liquidity Risk, which is a risk caused by the Bank's inability to liquidate its assets or secure funding from other sources. The inability to secure cash flow financing that causes liquidity risk can be explained by (1) the Bank's inability to generate cash flow from productive assets or asset liquidation including liquid assets; and/or (2) the Bank's inability to generate cash flow from funding, interbank transactions, and received loans.
2. Market Liquidity Risk, which is a risk caused by the Bank's inability to close out certain positions at a market price due to inadequate market liquidity conditions or disruptions in the market.

TYPES OF RISKS AND ITS MITIGATIONS

Liquidity Risk Management is carried out in the following 4 (four) stages:

1. Identification, to determine risk and sources of liquidity risk and the problems it poses so that it may be controlled and mitigated. The identification of liquidity risk can be conducted by identifying balance sheet components and administrative account components that may affect the Bank's liquidity and identifying market parameters such as crises and other things.
2. Measurement, to measure liquidity risk, which is done using 2 (two) approaches, namely (1) Nominal Stock-Based (Liquidity Ratio) which entails the use of various financial ratios as an indicator of the level of liquidity risk and (2) Flow-Based (Liquidity Gap Analysis).
3. Monitoring, which is conducted using a limit system to monitor the indicators of liquidity risk.
4. Control, which is an activity that aims to minimize the impact of liquidity risk by considering the level of income earned.

Tools and Method

Bank Mandiri manages liquidity risk by measuring the liquidity risk using some indicators, such as primary reserve ratio (minimum statutory reserves and Cash ratio), secondary reserve (liquidity reserves), Macprudential Intermediation Ratio (MIR), Liquidity Coverage Ratio (LCR), and Net Stable Funding Ratio (NSFR).

To manage liquidity risk in a measured and comprehensive manner, Bank Mandiri implements the following strategies:

1. Determine limits that refer to internal provisions and regulatory provisions.
2. Perform periodic liquidity risk stress testing to determine the impact of changes in market factors and internal factors in extreme conditions (crises) on liquidity conditions.
3. Arrange and conduct a periodic review of the Liquidity Contingency Plan (LCP) and Recovery Plan that regulate the Company's procedure for handling worsening liquidity conditions including alternative financing strategies such as sale/purchase of FX, Money Market instruments, and Interbank Securities Repo, Government Bond sale, and the use of Standing Facility and repo of the Bank Indonesia. The determination of liquidity conditions and financing strategies in the LCP and Recovery Plan has considered internal and external conditions.

4. Monitor external indicators such as Jakarta Interbank Offered Rate (JIBOR), USD Interbank, Rupiah interest rate, yield from SUN and UST with a 10-year tenor, Outstanding IDR banking liquidity, USD/IDR exchange rate, credit spread of default swaps (CDS), Composite Stock Price Index (CSPI), as well as current market information. This monitoring aims to increase awareness of less stable economic conditions, either due to a global crisis or various domestic issues.

Liquidity Adequacy Ratio

Bank Mandiri's liquidity adequacy can be identified through Liquidity Coverage Ratio, Net Stable Funding Ratio, Macprudential Intermediation Ratio (MIR), and Liquidity Reserves. The Liquidity Coverage Ratio (LCR) is a ratio of High-Quality Liquid Assets (HQLA) to the estimated net cash outflow within the next 30 (thirty) days in a crisis scenario. The LCR aims to improve the short-term liquidity of a bank during a crisis. In December 2023, Bank Mandiri's LCR reached 176.24% (Bank Only) and 169.58% (consolidated), above the minimum LCR fulfillment target set by the Regulator which was 100%.

Another indicator used by Bank Mandiri to determine liquidity adequacy is the Net Stable Funding Ratio (NSFR). The Net Stable Funding Ratio (NSFR) is a ratio of available stable funding to required stable funding. As of December 2023, Bank Mandiri's NSFR reached 116.59% (Bank Only) and 118.07% (consolidated), above the minimum NSFR fulfillment target set by the Regulator which was 100%.

The Macprudential Intermediation Ratio (MIR) is a ratio of distributed credit and corporate commercial paper fulfilling certain requirements and are owned by the bank to third-party funds, commercial paper fulfilling certain requirements issued by the bank, and loans fulfilling certain requirements received by the bank. As of December 2023, Bank Mandiri's RIM (Bank Only) reached 83.73%.

In addition, Bank Mandiri has liquidity reserves, which serve as a liquid asset above minimum statutory reserves that are used to meet unscheduled liquidity needs. In managing its liquidity reserves, Bank Mandiri sets a limitation in the form of safety level, which is a projection of liquidity reserves for the next 1 (one) month. As of December 2023, the Bank's liquidity reserves were above the safety level.

TYPES OF RISKS AND ITS MITIGATIONS

RISK OPERATIONAL MANAGEMENT

An operational risk arises from the inadequacy and/or malfunction in internal processes, human error, system failure, and/or external events that affect the Bank's operations. Operational risks can lead to the onset of other risks such as reputational risk, strategic risk, legal risk, market risk, credit risk, compliance risk, and liquidity risk. Effective and consistent operational risk management is important to minimize the emergence of those other risks.

Operational risks are inherent to every product/activity/operational process of the Bank as part of its business activities. The risks are also the responsibility of every person within the Bank. Risk & Control Owner have the primary responsibility to carry out an optimal operational risk management to minimize this risk.

In developing an Operational Risk Management Strategy, the Bank applies the following principles:

1. Long-term oriented to ensure the Bank's business continuity, by maintaining the Bank's risk exposure managed in a controlled manner in accordance with the Bank's internal regulations, as well as prevailing laws and regulations and other stipulations.

2. Comprehensive and extensive in all parts of the Bank, and remains focused on material and or significant risks and the most effective mitigation processes.
3. Proactive in identifying and detecting potential control weaknesses and the occurrence of risks hence risks can always be minimized.
4. Comply with the provisions for the fulfillment of capital adequacy operational risks in accordance with regulations and the development of risks appetite.

Operational risk management is implemented through layered lines of defense where each line of defense has its own role and method in countering operational risks based on the principle of combined assurance hence a balance between risk & reward is also achieved.

The Risk & Control Owner is fully responsible for the risks and the implementation of daily internal controls to ensure that existing risks are mitigated, including making continuous improvements to existing control designs in accordance with process changes.

To ensure effective operational risk management, the process is carried out in four stages:



TYPES OF RISKS AND ITS MITIGATIONS

1. Identification – a process to identify potential inherent risks to a product/activity/process, taking into account internal and external factors, such as data of operational risk incidents, regulatory changes, and audit findings. This stage includes identifying risk mitigation and control measures.
2. Assessment, which is the process of evaluating by considering the potential impact and likelihood of a risk can inherently occur. This aims to find out which risks are more material/significant compared to others to ensure more focused control measures can be prepared. In addition, an assessment is also carried out on quantitative control through control testing activities to determine whether the control design regulated in the prevailing regulations at the bank has been effectively implemented (operating effectiveness) and or can still be effectively used (design effectiveness). The assessment produces a residual risk value which is the risk value after considering the controls.
3. Monitoring – a process to monitor risks that have been identified and assessed for their likelihood. Risk monitoring is carried out at all times in every work unit and by its members. The activity follows a hierarchy and is done collectively, including by the unit's head, adhering to the applicable procedures. Monitoring activities include the early warning systems in existing tools/reporting.
4. Risk Control/Mitigation, which is a process to control and mitigate before a risk event occurs through the implementation of adequate and consistent control procedures, as well as implementing follow-up actions plans on control weaknesses found (thereby potential risks occur) in the monitoring process and follow-up on incidents. The purpose of this process is to ensure that residual risk to the Bank is kept to a minimum. Controls must be consistently implemented according to existing control designs but must also be continuously reviewed to ensure existing control designs are still effective for mitigation of emerging risks.

Operational Risk Management Tools

To enable work units in implementing operational risk management, the Bank provides the following risk management tools:

1. Risk & Control Self-Assessment (RCSA)

RCSA is a register of key risks and control measures that inform risk-based control testing to identify potential weaknesses as early on as possible. The tool allows its user to maintain minimum level of residual risks and to take necessary mitigation measures.

2. Loss Event Database (LED)

A database of operational risk incidents that are recorded on a risk-based approach with the aim of being lesson learned, monitoring follow-up remediation and future improvements, and as one of the components of the calculation of operational risk capital (regulatory capital charge) of the Standardized Approach (SA) method.

3. Key Indicator (KI)

KI contains key risk indicators (KRIs) and Key Control Indicators (KCI) and serves as an early warning signal that encourages early control actions to be undertaken.

4. Issue & Action Management (IAM)

IAM is a tool to monitor if known issues are follow-up using a range of activities, such as control testing, incidents, key indicators, and self-identified issues.

5. Capital Modelling

A tool to calculate regulatory capital charge in accordance to applicable regulations and as part of operational risk mitigation.

To improve its operational risk management effectiveness, the Bank has developed an integrated Operational Risk Management System that covers all of the tools above. The system is also implemented in all work units at the head office and regions.

The output of operational risk management activities is an Operational Risk Profile Report that describes operational risk exposure. The report is submitted periodically to the Bank's Board of Commissioners and Board of Directors, and supports the boards' active role in operational risk management. The report also informs the Bank's risk management report to regulators as part of Risk-Based Bank Rating (RBBR) in accordance with applicable provisions.

TYPES OF RISKS AND ITS MITIGATIONS

Operational Risk Management Organization

Operational risk management is carried out by all of the Bank's elements, including the Board of Directors with active supervision from the Board of Commissioners. The Boards understand existing risks and have a key role in supporting and overseeing risk management activities at the operational unit level.

The operational risk management organization and their duties and responsibilities are:

1. Risk Management & Credit Policy Committee (RMPC)
RMPC leads the preparation, adjustment/ improvement of risk management and credit policies. RMPC's membership, duties, and authority are stipulated in a Board of Directors' Decision on RMPC.
2. Director Tasked with Risk Management Function
The duties, responsibilities, and authority of the Director with Risk Management Function as set out in the Risk Management Policy.
3. Internal Audit Unit
IAU carries out independent assurance function to ensure that all operational defense lines are functioning effectively and properly.
4. Work Unit on Operational Risk Management Development (Bankwide/Enterprise)
A unit that is responsible to formulate and disseminate policies, strategies, frameworks, and operational risk management tools.
5. Operational Risk Management Unit (Senior Operational Risk by Business Area)
A unit (attached to a business area) that is responsible for implementing operational risk management policies, strategies, frameworks and tools in collaboration with the Risk & Control Owner.
6. Risk & Control Owner
A unit that is fully responsible for operational risk management and ensuring the effectiveness and compliance of control measures in every operational activity. A Risk & Control Owner maintains the Bank's operational risk appetite at a level that has been identified, thereby allowing the Bank to achieve its goals and keep an optimal level of regulatory capital charge.

LEGAL RISK MANAGEMENT

Legal risk is a type of risk encountered by Bank Mandiri as a result of lawsuits, both carried out by internal and external parties and/or the discovery of weaknesses from juridical aspects, such as the absence of supporting laws and regulations, weaknesses in engagement such as non-fulfillment of valid contract conditions, or imperfect binding of collateral.

The legal risk management organization is carried out by the Legal unit at the Head Office by carrying out functions, duties and responsibilities related to regulatory, advisory, litigation, advocacy and legal assistance, education and transformation in the legal aspect, as well as the Bank's legal risk management.

In carrying out these functions, duties and responsibilities, the Legal unit at the Head Office coordinates with the Legal Unit in the Work Unit and in the Region. The Legal Unit of the Head Office is the supervisor of the system and supervises the Legal Unit in the Work Unit and the Legal Unit in the Region.

Risk management mechanisms that include the process of identifying, measuring, controlling and monitoring refer to the applicable provisions regarding risk management. Each work unit of the owner and/or product administrator or activity operator must identify and manage risks to the maximum including but not limited to legal risks that are basically attached to every product or activity made or carried out by the Company, thereby the inherent legal risks do not have a broad impact and trigger the emergence of other risks including but not limited to reputational risks.

Bank Mandiri's preventive and repressive legal risk management is sufficient to protect its legal interests and minimize the significant financial impact on the Bank, as reflected in the 2023 Legal Risk Profile Report which is at Low rating.

TYPES OF RISKS AND ITS MITIGATIONS

REPUTATIONAL RISK MANAGEMENT

Reputational risk arises as a result of declining stakeholder trust due to negative sentiments surrounding the Bank.

Reputational risk is managed via monitoring, supervision, handling, and settlement coordinated by the Corporate Secretary with support from relevant work units, such as Customer Care, Legal, Retail Product & Fraud Risk Management, IT Application Development & IT Application Support, and Business Continuity Management. The management of reputational risk follows internal provisions and applicable laws. In its implementation, reputational risk management is done by creating positive images via conventional media and positive content on social media.

The Mechanism for Managing Reputational Risk

Reputational risk is managed via monitoring, supervision, handling, and settlement coordinated by the Corporate Secretary Group which follow the provisions of the Corporate Secretary Standard Guidelines. Based on the Guidelines, there are 4 (four) stages of reputational risk management, namely identification, measurement, monitoring, and control of risk. The realization of those four stages can be seen in each activity performed by the Corporate Secretary handling reputational risk, such as the Bank's activity as a public company.

Based on that activity, reputational risk in its several forms is evident, such as lateness, errors, and incongruency in report submission caused by individuals who are not aware of or do not understand the principle of disclosure of information or negligence by supervisors. To mitigate that, the Company may take risk mitigation steps such as providing a list of mandatory information for disclosure and/or encouraging supervisors to check and recheck the work.

Should the reputational risk happen and lead to a negative perception of the Company, an action to minimize the ruin caused by such reputational risk can be taken. One action would be to commission positive articles for printed media, online media, or electronic media as well as positive content for social media to counter the negative perception that has taken shape. These positive articles can be based on business and social activities of the Company or the Company's support of government programs per the Corporate Secretary Standard Guidelines.

Implementation of Reputational Risk Management

One approach to managing reputational risk taken by the Company is ensuring that all work units perform their functions well and follow the applicable regulatory provisions. If there is a mistake that potentially affects the reputational aspect of the main duties and functions of a certain work unit, the work unit must provide detailed information to the Corporate Secretary Group immediately so the risk can be managed and its impact minimized.

At present, Bank Mandiri operates internal channels for handling complaints and questions from customers, such as branch offices, Call Center 14000, website, and the Company's official social media accounts. All complaints and questions are then forwarded to the Customer Care Group to be addressed and resolved. The Customer Care Group manages complaints and questions not only from internal channels but also from external sources such as printed media, online media, electronic media, and social media.

In doing its duties, the work unit of the Customer Care Group coordinates with the Corporate Secretary Group, especially in handling customer complaints from conventional media and social media.

The Corporate Secretary Group also monitors and evaluates various news items on print, online, and electronic media as well as social media periodically to measure the effectiveness of publications and communications of the Company. Next, the result of the monitoring and evaluation becomes a reference point to which media publications and communications are made in the next period to strengthen the Company's reputation continually.

For that purpose, the Corporate Secretary Group also performs a series of communications activities to bolster government programs such as the addressing of Job Creation Law to the public, Sovereign Wealth Fund Creation, and the Formation of a Government-Owned Sharia Bank. These are executed by inviting editors in chief and organizing other gatherings with several media groups.

In addition, the Corporate Secretary Group also prepares a series of communications activities involving state-owned enterprises to support the National Discount Festival

TYPES OF RISKS AND ITS MITIGATIONS

(NDF) that is part of the national program *Bangga Buatn Indonesia (BBI)*. The Corporate Secretary Group manages schedules and the involvement of each state-owned enterprise in the NDF.

All those activities reflect the commitment of the Corporate Secretary Group to support the strengthening of the Company's reputation, especially in the main shareholders' perspective.

In the event of a crisis so massive that it erodes the Company's reputation as well as the trust placed by the Stakeholders, the Company will immediately implement an action plan to minimize ruin, for instance formulating problem-solving strategies, determining internal sources, and making a schedule for crisis management and conducting the overall evaluation.

STRATEGIC RISK MANAGEMENT

Strategic Risk Management Organization

The Bank has formed a Risk Management Committee and a Risk Management Work Unit that aim to support comprehensive, integrated, measured, and controlled risk management. Each committee is supported by a working group consisting of groups that are directly involved in the risk management issues handled by the said committee.

Strategic Risk Management Mechanism

The Bank's risk management is regulated by a bank risk management policy per the Bank of Indonesia Regulation (PBI), the Financial Services Authority Regulation (FSAR), Basel provisions, and international best practices. This policy is regularly reviewed to anticipate changes in business conditions, regulations, and the Bank's internal conditions.

In managing strategic risk, Bank Mandiri always reviews its performance and evaluates its business target planning and takes corrective steps in developing a strategic plan and business targets by considering internal and external conditions, if necessary.

The Implementation of Strategic Risk Management

Bank Mandiri's strategic direction is in line with the Corporate Plan prepared by taking into account the Bank's core competencies and considering business shifting patterns and people's behavior that switch to digital. In the midst of economic uncertainty, Bank Mandiri also needs to pay attention to profitability and quality of loan disbursement in order to mitigate future risks. As such, in addition to implementing initiatives according to the corporate plan, Bank Mandiri sharpens its business strategy with a focus on:

1. Foster prudent credit growth to potential industrial sectors in accordance with portfolio guidance by taking into account the potential, capacity, and capability of each segment. In addition, Bank Mandiri also manages the quality of its credit portfolio at the bank-wide, segment and product levels to achieve synergistic growth amidst the challenges of the political year and uncertainty in international economic and geo-political conditions.
2. Optimization of Fee Based Income as a driver of revenue, among others, through increasing e-channel productivity, recurring & transactional fee-based income, and intensification in the business ecosystem of existing customers and top players in each industry sector.
3. Control of operational costs and investment costs, namely through prioritization programs for the use of costs for OPEX and CAPEX strategic initiatives to ensure the added value received by the Bank, utilizing shifting customer behavior through digitalization of more scalable services and making continuous improvements in business processes, as well as focusing on increasing resource productivity supported by employee development programs in line with the company's spirit in digitizing and evaluating its effectiveness into productivity KPIs.

Measures and Plans in Anticipating Strategic Risk

In terms of anticipating the risk factors faced by Bank Mandiri, it is necessary to implement independent and prudent risk management but not limit the Company's business expansion process. Here are the strategic risk management strategies in 2024:

1. Review strategies regularly (through stress-tests and sensibility analysis) by considering external and internal factors to ensure the achievement of leading indicators in terms of revenue and costs for each financial indicator. One example is in order to maintain prudent credit expansion, the Bank focuses and selectively pays attention to industrial sectors that remain recording positive and sustainable growth while considering internal capabilities and resources in accordance with Bank Mandiri's Risk Acceptance Criteria, monitoring watch lists and high-risk debtors end to end for better credit management.
2. Regarding industry trends leading to digitalization, Bank Mandiri's Corporate Plan 2020-2024 has a focus on digitalization, namely to become Indonesia's #1 Modern Digital Bank and ensure the progress of IT projects can perform according to the timeline.

TYPES OF RISKS AND ITS MITIGATIONS

3. Controlling reserve formation (CKPN) by reviewing and maintaining the Coverage Ratio & Cost of Credit at an optimal level to anticipate deterioration in credit quality that has an impact on the Bank's performance.
4. The Bank focuses on maintaining and fostering sustainable CASA Ratio and CASA volume improvement to support credit expansion, by:
 - a. Optimizing the use of Kopra by Mandiri through the main operating account strategy (Kopra Portal and Kopra H2H) in capturing the entire customer transaction ecosystem.
 - b. Maintaining Cost of Fund (CoF) realization while paying attention to liquidity, maintaining current account growth through transactional solutions for Business and Corporate customers, and increasing savings market share through Livin' as an everyday financial app.
5. Capital growth derived from retained earnings (Tier-1) through optimization of revenue and overhead costs, as well as a more in-depth assessment of initiatives that have an impact on increasing productivity, providing added value, and are long-term.
3. Board of Directors/SEVP
The Board of Directors is responsible to foster and realize Compliance Culture as well as to ensure that Compliance Function is implemented at all levels of the organization and the Bank's business activities.
4. Director in Charge of Compliance Function
The Director in charge of the Compliance Function is responsible for formulating compliance culture strategies, minimizing compliance risk, establishing compliance systems and procedures, and ensuring that all policies, provisions, systems, and procedures implemented by the Bank are in accordance with applicable laws and regulations.
5. Compliance Unit (i.e., Compliance & AML-CFT Group)
The Compliance Unit assists and/or represents the Director in charge of the Compliance Function in carrying out its duties and responsibilities.
6. Heads of Units
Heads of Units are responsible for realizing compliance culture in their respective units, managing compliance risk, and implementing system/process and/or procedure improvements related to compliance issues in their units.

COMPLIANCE RISK MANAGEMENT

Compliance arises as a result of the Bank's failure to comply with and/or to carry out the provisions of the applicable laws and regulations.

To manage compliance risk, Bank Mandiri has established policies, rules, systems, and procedures to build compliance culture as one of the keys to successful compliance risk management at Bank, consolidated, and Financial Conglomerates levels.

All levels of the Company are fully responsible for implementing compliance in each of their respective activities. The organization, duties, and responsibilities with respect to compliance are as follows:

1. Board of Commissioners
With respect to Compliance and Integrated Governance, the Board of Commissioners is mandated to supervise the implementation of Compliance Function.
2. Integrated Governance Committee
The committee is established to assist the Board of Commissioners in carrying out its supervisory function on the implementation of Integrated Governance and Integrated Compliance Functions at Bank Mandiri and its Subsidiaries.

Compliance Risk Management Mechanism

Bank Mandiri has established compliance risk management policies and procedures based on the applicable rules and regulations, where the risk is managed in several stages:

1. Identification
Identification of compliance risk is articulated in the Compliance Risk Statement (CRS). CRS entails reference of regulations, risk cause, risk control, and action plans for prevention purpose.
2. Evaluation
All identified risks are assessed by each risk owner. The output of assessment is a compliance risk profile for every work unit. Risk assessment is carried out based on the risk's occurrence likelihood and its potential impacts. Risk owners also assess the effectiveness of control measures.

TYPES OF RISKS AND ITS MITIGATIONS

3. Monitoring

Risk monitoring is part of an adequate compliance risk management. Monitoring activities include identifying and overseeing compliance risk appetite statement (RAS).

4. Mitigation

Compliance risk mitigation is carried out by:

- a. Reviewing risk identification process to ensure the process has been carried out appropriately.
- b. Reviewing the appropriateness of control and mitigation activities.
- c. Reviewing the appropriateness of compliance risk assessment process, including that the process has considered historical sanction data.

c. Compliance Assessment Program

This program aims to increase compliance risk awareness of the risk owners on applicable compliance and regulation risks (according to their duties and responsibilities).

d. Compliance Unit Competency Improvement Program

To increase understanding related to compliance risk management, the Company partners with an independent party to organize compliance training and certification for all Compliance Unit personnel.

Compliance Risk Management Implementation

Compliance risk management activities in 2023 were as follows:

1. Defining Risk Appetite Statement (RAS)

In 2023, Bank Mandiri defined its compliance Risk Appetite Statement (RAS) at 4 (four) violations per month. Throughout the year, the Bank received 2 (two) sanction per month, which was well below the RAS threshold.

2. Compliance Risk Assessment

Compliance risk assessment is carried out on a quarterly and semi-annual basis and submitted to the OJK as part of the Bank's Risk Profile Report. According to the self-assessment conducted in Quarter IV 2023, the Bank's compliance risk level was 2 (low to moderate). Several issues of concern for improvement were employees' compliance risk awareness, data quality, and monitoring of report submission to regulators.

3. Compliance Risk Mitigation

To mitigate compliance risk, the Bank has implemented several compliance programs:

- a. Monitoring the Fulfillment of the Banks' Obligations on New Regulations
The Compliance Unit conducts Prudential Meetings on new regulations, monitors action plans that need to be carried out, and issues reminders on regulatory obligations to the relevant Units.
- b. Control Testing Against High-Risk Activities
Control testing is carried out by the Senior Operational Risk Unit on high-risk activities. Where discrepancy with applicable regulations is identified, immediate actions are taken to prevent the Bank from suffering any losses.

Measures and Plans to Anticipate Compliance Risk

To improve compliance risk management, the following measures are taken:

1. Compliance Risk Management

- a. Define compliance Risk Appetite Statement (RAS) and monitor sanctions/fines to ensure the appetite that has been set out are under control.
- b. Improve compliance risk assessment parameters.
- c. Improve reporting process on compliance function.

2. Improvement of compliance risk awareness

- a. Conduct compliance assessment to improve employee understanding of the prevailing rules and regulations, particularly those related to duties and responsibilities.
- b. Provide advice on compliance issues.

3. Strengthening monitoring on regulatory mandate fulfillment

- a. Disseminate information on the issuance of laws and regulations, or other policies or the results of legal analysis to the Bank's management and employees.
- b. Monitoring the work units' action plans relating to new regulations that have significant impacts.

4. Competency Building for Compliance Unit

To improve the quality of personnel in Compliance Unit, the Bank collaborates with independent parties to organize training and certification of compliance.

5. Credit Webinars

A credit webinar is a discussion forum that is jointly held with Business Unit and Risk Unit to enhance compliance risk awareness in the credit area.

TYPES OF RISKS AND ITS MITIGATIONS

INTRA-GROUP TRANSACTION RISK MANAGEMENT

The risk management of intragroup transaction risk is at the level of the Group with Subsidiaries per the business strategies of Bank Mandiri. Bank Mandiri identifies and analyses the activities that may increase exposures to Intragroup Transaction Risk and affect the Company's performance. This risk identification is at the business activity and Subsidiary levels of Bank Mandiri by considering the complexity of transactions. Bank Mandiri may combine qualitative and quantitative methods to measure the Intragroup Transaction Risk for further periodic monitoring according to established procedures.

INSURANCE RISK MANAGEMENT

Insurance risk is a risk due to the failure of insurance company to fulfill its obligations to policyholders as the effect of inadequacy in underwriting, pricing and the use of reinsurance and/or claim handling. Insurance Risk Management is conducted in Subsidiaries of Bank Mandiri that are engaged in the insurance business, namely AXA Mandiri Financial Services, Mandiri AXA General Insurance and Mandiri Inhealth. But Mandiri AXA General Insurance has no longer been a member of Mandiri Group Financial Conglomerates since 4 October 2023. Bank Mandiri identifies and analyzes activities that can increase insurance risk exposure and affect the company performance. The risk identification is performed in the

business activities of Subsidiaries engaged in the insurance business by considering its characteristics. Bank Mandiri can combine qualitative and quantitative approaches in the process of measuring insurance risk which will then be subject to periodic risk monitoring in accordance with the established procedures.

The assessment of the Integrated Insurance Risk Profile throughout 2023 was at Low to Moderate level. This reflects low potential loss faced by Financial Conglomerates due to Integrated Insurance Risk at a certain time in the future. The quality of the implementation of the Integrated Management of Insurance Risk is adequate, there are some weaknesses but these weaknesses can be resolved in the normal course of business.

TYPES OF RISKS AND ITS MITIGATIONS

ENVIRONMENTAL, SOCIAL, & GOVERNANCE (ESG) RISK MANAGEMENT

ESG Risk Management Coverage

Alignment of ESG aspects is also one of Bank Mandiri's priorities in long-term business transformation. Through the stream "Conduct Sustainable Business", Bank Mandiri has developed ESG frameworks, roadmaps and initiatives with a target focus on the transition to a low-carbon economy, emission reduction and net zero in bank operations and increasing social impact in achieving SDGs targets.

To achieve this target, particularly in fostering the transition to a low-carbon economy, Bank Mandiri continues to identify, measure and evaluate ESG risks including climate risks, specifically in the financing aspect.

The ESG risk management system in the loan process includes Bank Mandiri's loan services for the wholesale and retail segments. Bank Mandiri establishes and applies the Technical Guidelines for Environmental and Social Analysis in Lending which is used as a reference in conducting environmental analysis in lending analysis.

This is in line with the efforts made by the Financial Services Authority (OJK) regarding the Asset Quality Assessment of Commercial Banks, which regulates that the assessment of the debtor's business prospects is also associated with the debtor's efforts in maintaining the environment.

ESG Risk Management System

ESG risk assessment on loan is carried out at each stage of loan disbursement end-to-end and integrated by the Business Unit, Credit Operation Unit and Credit Risk Management Unit. Each Business Unit conducts an assessment based on the Portfolio Guideline then carries out a pre-approval process using credit risk tools including the application of ESG aspects, for the wholesale segment, the assessment is stipulated in the Industry Acceptance Criteria (IAC), while for the retail segment, the assessment is carried out through a credit risk scorecard, with reference to the Risk Acceptance Criteria of each product.

Bank Mandiri establishes risk appetite and industry appetite in line with ESG issues in the Bank's policies as outlined in the Industry Acceptance Criteria (IAC) technical guidelines in Internal Regulation No.B3.P1.T16.IAC. Details of businesses covered is presented in the Sustainable Banking section of this report.

The Business Unit conducts due diligence, if necessary, on prospective debtors to explore issues related to Escalation submitted by the Business Unit to the authority holder to approve credit, where this function is carried out by the Senior VP to the Board of Directors. Lending decisions are made by the Business Unit and Credit Risk Management Unit independently with a four-eye-principle process.

The Bank periodically reviews and refines general credit policies, credit procedures per business segment and risk management tools, particularly sectors with high ESG and climate risks. Each Business Unit conducts a more detailed and in-depth assessment of each business activity to determine related ESG requirements in IAC and RAC, including based on input and involvement from regulators and resource persons.

Bank Mandiri analyzes the performance of sectoral portfolios, using sensitivity analysis of which the results are presented at the Board of Directors Forum and used as guidelines in internal business decision making.

ESG Risk Surveillance

The ESG Risk Management framework and governance at Bank Mandiri involves the active role of the Board of Commissioners and the Board of Directors. The Board of Directors monitors the implementation and fulfillment of ESG targets through the Risk Management & Credit Policy Committee (RMPC) forum, in accordance with the duties & authorities stipulated in the Decree of the Board of Directors of PT Bank Mandiri (Persero) Tbk, No. KEP.Dir/009/2021 on Risk Management & Credit Policy Committee, held quarterly with the topic of Sustainable Finance Action Plan (RAKB) performance, ESG trends, to discussion of critical issues in ESG aspects.

TYPES OF RISKS AND ITS MITIGATIONS

Furthermore, the Board of Commissioners supervises ESG implementation, fulfillment of ESG targets or commitments through the Risk Monitoring Committee (KPR) forum, which is held quarterly with topics such as reviewing the effectiveness of ESG-related risk management and supervision in financing activities.

Bank Mandiri monitors compliance in lending related to ESG aspects in accordance with bank policy, with the following measures:

1. Periodically monitor the fulfillment of ESG requirements. Bank Mandiri reviews regularly to ensure that the progress of customer projects is in accordance with the action plan that has been set. To ensure compliance with lending policies and procedures, Bank Mandiri also conducts periodic reviews and audits conducted by the Internal Audit Unit. For debtors who have not been able to meet these minimum requirements, there will be a periodic monitoring mechanism, determination of action plans and schedules needed.
2. Implement the ALERT system (watchlist) as an early warning system to identify risks that can affect the debtor's credit quality to ensure that preventive actions can be taken immediately to prevent credit quality deterioration based on financial performance, industry prospects, and fulfillment of ESG requirements.
3. Conduct an annual review as a form of check and balance of compliance with the latest internal credit policy requirements, including ESG requirements.

CLIMATE RISKS

Climate risk is an emerging risk embedded in key financial risks, such as credit risk, market risk, and operational risk. Bank Mandiri has assessed key financial risk accordingly and has considered ESG aspects in it. Climate risk is also embedded in every other type of risk managed by the Bank, including credit risk, liquidity risk, market risk and operational risk, enabling Bank Mandiri to carry out a comprehensive risk management process in accordance with existing procedures including climate risk.

Bank Mandiri has conducted an Initial Phase Climate Risk Stress Test for credit, market, and operational risks in accordance with OJK guidelines. On credit risk, credit portfolios that are potentially vulnerable to floods and forest fires have been identified; and sectoral portfolios that are characteristically classified as high emission sectors and are affected by government policies to control climate risk. For market risk, the Bank identifies market value movements in the Bank's securities portfolio which are included in the high emission sector category as a result of changes in government policy for carbon emissions.

Bank Mandiri manages climate-related financial risks, starting from risk identification and risk management framework, including conducting scenario analysis. The results of the climate risk analysis become inputs to increase the Bank's resilience to the impacts of climate risk and strengthen through various initiatives and alignment of ESG aspects in internal business processes. The impact of climate change on Bank Mandiri's sustainability based on the risk period is as follows:

1. In the short term (next 1-2 years). Climate change can have a risk impact on Bank Mandiri's financing through the potential impact of changes in government policy, inappropriate technological developments, and shifts in consumer and investor preferences, resulting in a decarbonization transition that affects borrower profitability, cash flow, and asset value.
2. In the medium (5-10 years) and long term. Severe and prolonged climate impacts can threaten the environment, such as floods, landslides, heat waves, food crises and other natural disasters.

Climate Risk Mitigation

Bank Mandiri is committed to managing its business and operations by prioritizing ESG principles to become "Indonesia's Sustainability Champion for Better Future". This commitment is Bank Mandiri's response in supporting the Government's aspirations towards a low-carbon economy.

In sectors that have high climate risk such as plantations, mining and energy, Bank Mandiri conducts intensive monitoring in fulfilling the ESG aspects that have been required by the Bank. Going forward, Bank Mandiri strives to conduct more comprehensive climate risk impact measurements, such as conducting climate scenario analysis and testing credit portfolios for customers against climate risks including transition and physical risk.

TYPES OF RISKS AND ITS MITIGATIONS

Climate-related Risks	Mitigation
Rising prices of raw materials and/or commodities due to climate change, weather problems, or crop failure	<ul style="list-style-type: none"> Conduct stress tests and create watchlists to be monitored regularly in order to analyse customers affected by related issues.
The risk of energy transition in countries that still rely on coal as the main energy source such as in Indonesia	<ul style="list-style-type: none"> Bank Mandiri adjusts its lending policy to the energy sector that uses coal in accordance with the Government's energy transition plan, such as phasing out financing for the coal sector starting in 2040.
Acute physical risk caused by extreme climate change, such as floods, landslides and haze due to forest fires.	<ul style="list-style-type: none"> Implementation of Business Continuity Plan and establishing data centers in several different places to mitigate disruption of customer convenience in transactions and protect the risk of data loss due to hydrometeorological disasters. Implementation of BCM according to international standards based on ISO 22301: 2019 to realize a resilient organization from potential internal and external threats through the readiness of BETH13 components (Building, Equipment, Technology, Human Resource & 3rd Parties). BCM also interacts with climate institutions such as the Meteorology, Climatology and Geophysics Agency (BMKG), in order to identify early and be able to carry out early action plans and socialize to all employees.
Climate-related opportunities	Response
Investment in technologies for new renewable energy is on the rise. According to records from the Ministry of Energy and Mineral Resources, in 2021, the use of renewable energy reached 11.5% of the total national energy.	Bank Mandiri builds internal capabilities to assist the transition to green energy in the sector. As of December 2022, Bank Mandiri has financed 10 renewable energy projects

Governance Bodies' Involvement on Climate Risk

Coordination of ESG-related aspects, including climate risk, at Bank Mandiri is carried out by ESG Group under the Vice President Director who is authorized to manage the framework, alignment of provisions in line with ESG and climate change issues, sustainable portfolio management, and responsible operational strategies of the Bank, including communication and reporting functions to external and internal parties. Reports from the ESG Unit are then regularly forwarded to the Board of Directors as needed and to the Board of Commissioners with a frequency of at least 4 times per year.

In the implementation of ESG and climate management, the Board of Directors takes a role in strategic functions, to:

1. integrate ESG aspects bank-wide, establish the direction of Bank Mandiri's Sustainable Finance (Sustainability) which includes Framework, Commitment, Strategy, Initiatives, Roadmap related to climate targets and SDGs achievement;
2. carry out supervisory functions related to ESG and climate risks and opportunities, implementation of Sustainable Finance, fulfillment of appropriate ESG targets and initiatives;
3. accountable in ensuring the achievement of sustainability aspirations to stakeholders; and

4. build the collaboration and partnership needed to accelerate the Company's progress towards achieving SDGs and climate targets.

The Board of Directors in this case is assisted by the Risk Management and Policy Committee (RMPC). The forum with Risk Management and Credit Policy Committee (RMPC) is held quarterly on the topic of Sustainable Finance Action Plan (RAKB) performance, ESG trends, including discussion of critical issues in ESG aspects.

The Company's Board of Commissioners takes an important role in managing ESG and climate aspects, particularly to ensure the integration of ESG and climate aspects in Bank Mandiri's long-term goals, including fostering efforts beyond compliance and adoption of best practices, and overseeing the management of risks and opportunities related to sustainability and climate. To carry out this task, the Board of Commissioners is supported by the Risk Oversight Committee (ROC). The Risk Oversight Committee (ROC) forum is held quarterly including discussing the effectiveness of ESG-related risk management and supervision in financing activities.

TYPES OF RISKS AND ITS MITIGATIONS

The functions and obligations of the Board of Directors and in the implementation of Bank Mandiri's sustainable finance are stipulated in Board of Directors Decree No. KEP.DIR/009/2021 dated 13 January 2021 on Risk Management & Credit Policy Committee and Decree of the Board of Commissioners No. KEP.KOM/007/2022 dated 18 November 2022 on the Risk Monitoring Committee Charter. The specific organ, ESG Group, was established in accordance with the Decree of the Board of Directors of KEP.DIR/32/2022 dated 12 September 2022.

Climate Risk Resilience

In the reporting period, Bank Mandiri has conducted a climate risk resilience assessment based on OJK Letter No. S-16/PB.013/2023 which requires KBMI 3 & 4 banks to assess climate risk in the portfolio. In the study, climate-related risks were compared with qualitative initial assessments associated with credit risk, market risk, and operational risk to physical risk events, namely flooding for residential and commercial property collateralized loan portfolios and drought/forest fire risk events for portfolios to corporations and MSMEs for the forestry and plantation sectors.

The assessment provides an overview of potential losses that will occur and their impact on credit, market, operational and capital risks of the Bank. For transition risk, an assessment was conducted on the portfolio of several high emission sectors by looking at the projected impact of increased carbon emissions and changes in government policy on credit risk, market risk, operational risk and the Bank's capital. The transition scenario uses the NGFS scenario according to OJK guidelines, namely Net Zero 2050, Delayed Transition and Current Policies.

In credit risk, portfolios that are potentially vulnerable to floods and forest fires have been identified as well as sectoral portfolios that are classified as high emission sectors and affected by government policies to control

climate risk. For market risk, the Bank identifies market value movements in the Bank's securities portfolio which are included in the high emission sector category as a result of changes in government policy for carbon emissions.

We analyze drought/forest fire/flood climate risk events to Bank Mandiri's operations and property which, based on the study, have the potential to cause damage and loss to the Bank's technology system and property, as well as disruption to employee mobility and health. In this scenario, the Bank already has a Disaster Recovery Plan mitigation plan that includes a contingency plan for catastrophic events.

Bank Mandiri will continue to develop climate risk stress testing in accordance with regulatory directives and the Bank's needs in planning climate risk management in the Company's portfolio. In accordance with technological advances, going forward it is necessary to develop specific models and analytics used in quantifying climate and environmental impacts, more detailed current data and information, scenarios and assumptions according to the direction of regulators.