RISK MANAGEMENT

There are 2 (two) types of stress testing at Bank Mandiri, namely sensitivity/shock analysis and scenario analysis (historical or hypothetical). The execution of a stress test covers the analysis of main risks such as credit risk, market risk, and liquidity risk whose calculation uses a statistical or a financial model developed by the Bank in line with the best practices in the industry, for instance, a model and a stress test that compares changes affecting the credit risk to macroeconomic factors.

In general, the result of stress testing throughout 2021 showed that Bank Mandiri was still capable of maintaining its capital sufficiency and liquidity by making quick anticipation of assets and liabilities management and preparing policies and systems.

In addition to conducting a stress test at the Bank at the individual level, a stress test at the level of Mandiri Group along with its subsidiaries was also performed. The stress testing for the Mandiri Group was one of the ways to communicate integrated risk management, whose result was presented to the management of Bank Mandiri, the management of Subsidiaries, and regulators for feedback and insights regarding corporate risk management strategies in case of an economic collapse.

In the future, stress testing will become relevant in identifying and measuring the impact of the COVID-19 pandemic and economic uncertainty on the Bank's performance to prepare feasible control measures.

RECOVERY PLAN

Based on the size of assets, liabilities, and capital, the level of product complexity, and the connection to the banking system, the FSA has determined that Bank Mandiri is a Domestic Systematically Important Bank.

As a Systemic Bank, Bank Mandiri prepares a Recovery Plan and Recovery Options to prevent, restore, or remedy the Bank's financial conditions and business continuity in the event of financial stress, as regulated in OJK Regulation No. 14/POJK.03/2017 on a Recovery Plan for Systemic Banks.

This Recovery Plan consists of a whole-entity analysis of the Bank's and its Subsidiaries' business lines, including crises (stress testing) that may happen to the Bank unexpectedly or a market-wide shock that may endanger the Bank's business (point of non-viability). As regulated by the OJK Regulation on Recovery Plan, the first Recovery Plan of Bank Mandiri has been approved by the shareholders on March 21, 2018, and Bank Mandiri has issued Medium Term Notes worth Rp500 billion to meet OJK Regulation No. 14/POJK.03/2017 on a Recovery Plan for Systemic Banks.

TYPES OF RISKS AND ITS MITIGATIONS

There are 10 (ten) types of risks managed by Bank Mandiri at the consolidated level, which are:

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

CREDIT RISK MANAGEMENT (CPR)

Credit risk management and mitigation are performed at every phase of lending. The credit risk management at Bank Mandiri for the Wholesale segment begins with determining market targets that refer to the Portfolio Guideline, which categorizes industries according to Industry Classification (attractive, neutral, selective, alert) based on the outlook and quality of the portfolio as well as Industry Limit, purpose to minimize the concentration of credit risk in certain sectors.

In the pre-approval phase, there is a Clearance Process consisting of preliminary analysis on targeted customers for Industry Acceptance Criteria and clearance parameters (reputation, business, finance) to generate quality prospective borrower pipelines. The next process is to perform a credit risk assessment by using a number of credit risk tools (credit risk rating,

spreadsheet, CPA, NAK, etc) which are then decided by the Credit Decision Authority (through Credit Committee Meetings) with a four-eye principle involving Business Unit and Credit Risk Management Unit independently.

After loans disbursement, credit risk and potential borrower failures must always be monitored and detected early (Early Warning Signals) using ALERT tools and if the borrower becomes problematic then a further action plan needs to be executed, which consists of collection, recovery, or restructuring among others.

As the nature of the Retail segment is a mass market, the credit process is more automatic in that it relies on the use of a credit risk scorecard, referring to the Risk Acceptance Criteria of each product, and is processed through an automated work-flow (loan factory). Monitoring is done at the portfolio level through the Portfolio Quality Review, which can be continued with the collection dan recovery process for the problematic portion of the portfolio.

To anticipate the deterioration of macroeconomic conditions, a "what-if" analysis of the wholesale and retail portfolios is performed and is subjected to stress testing and sensitivity analysis using certain macroeconomic scenarios.

In lending, Bank Mandiri always prioritizes the prudence principle by assigning a credit analysis function to independent business units and credit risk unit. Bank Mandiri always adheres to the Credit Policy (CP) in managing credit risk end-to-end. In the operational sense, this policy is outlined in the form of Credit Procedure Standard (CPS) and Product Manual.

In implementing credit concentration risk management at the borrower level, Bank Mandiri consistently monitors the Legal Lending Limit (LLL) and the application of Management Limit and Value Chain Limit 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 updates general credit policies, credit procedure per business segment, and risk management tools. The work guidelines aim to provide a comprehensive understanding of credit risk management, identify risks, measure and mitigate risks in the end-to-end lending process starting from determining the target market, credit analysis, approval, documentation, credit withdrawal, monitoring/supervision, to settlement of bad credit/restructuring.

To enhance its social role and concern about environmental issues and as an effort to do its responsibility in good corporate governance, Bank Mandiri has made a Technical Guidelines on Environmental and Social Analysis for Credit Provision that is used as a reference in doing environmental analyses for credit provision. This is in line with the Bank Indonesia Regulation concerning Asset Quality Assessment of Commercial Banks, which regulates that the assessment of the borrower's business prospect shall reflect the borrower's efforts to safeguard the environment. Besides, Bank Mandiri has started implementing sustainable banking through Sustainable Finance Action Plan (SFAP) to develop business processes and portfolios on the basis of ESG (environment, social, governance).

In principle, credit risk management is applied both at transactional and portfolio levels. At the transactional level, the four-eye principle is implemented, in which credit decisions shall involve the Business Unit and Credit Risk Management Unit independently to reach objective decisions. The mechanism of the four-eye principle is set by the Credit Committee based on the allowed limit and the credit decision-making is reached through the Credit Committee Meeting.

Credit risk from borrowers and products have been covered and reserved through CKPN which is currently calculated based on SFAS 71 as of 1 January 2020, and monitored through the cost of credit indicator.

RISK MANAGEMENT

Throughout 2021, the Bank assessed the latest conditions of the borrower to identify its eligibility status for the extension of the COVID restructuring facility. Non-eligible borrowers would potentially become uncollectible to the point of constituting NPL. This was apparent in the amount of NPL post-COVID restructuring that rose from Rp143 billion in December 2020 to Rp2.224 billion in October 2021. To minimize the upward trajectory of the NPL post-COVID restructuring, the Bank has been monitoring and helping former borrowers benefitting from the COVID restructuring via early and selective normal restructuring. However, for total NPL, the Bank succeeded in cutting back on NPL gradually in 2021. The NPL percentage (Excluding Bank) was successfully brought down from 3.29% in December 2020 to 3.01% in October 2021. This improvement in NPL is due, among others, to optimization of Upgrade and Collection on non-performing borrowers in 2021. With respect to LAR Incl COVID, the Bank also managed to bring down the LAR Incl COVID from 22.33 in December 2021 to 20.38% in October 2021 due to decreasing NPL and COVID restructuring portfolio. In 2022, the Bank projects amelioration of NPL and LAR so that credit quality would improve gradually.

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:

a. The Board of Commissioners, who are responsible for market risk oversight through the Risk Monitoring Committee, Integrated Governance Committee, and Audit Committee.
b. 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.
c. 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:

Segregation of Duties Principle

Front Office Unit (Treasury)	**Middle Office Unit (Risk Management)**	**Back Office Unit (Treasury Operation)**
Conduct transactions	Monitor, assess, and report the risks arising from all trading activities conducted by the Front Office Unit	Record and evaluate all exposures of trading activities on a daily basis using market prices from independent sources

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:

a. 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.

b. 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.

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

a. 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.

b. 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).

c. Monitoring, which is conducted using a limit system to monitor the indicators of liquidity risk.

d. 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), Macroprudential 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, Macroprudential 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 2021, Bank Mandiri's LCR reached 200.56% (Bank Only) and 197.69% (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 2021, Bank Mandiri's NSFR reached 126.20% (Bank Only) and 126.42% (consolidated), above the minimum NSFR fulfillment target set by the Regulator which was 100%.

The Macroprudential 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 2021, Bank Mandiri's RIM (Bank Only) reached 78.35%.

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 2021, the Bank's liquidity reserves were above the safety level.

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.

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

a. 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.
b. Assessment – a propcess to assess the inherent risk impact and likelihood. The purpose is to learn risks are more material/significant than others, in order to effectively target control measures. Assessment process may also include a quantitative iteration using control testing to evaluate operating and design effectiveness of risk control design within the Bank.
c. Monitoring – a proses 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 inlcude the early warning systems in existing tools/reporting.
d. Risk Control/Mitigation – a process to control/mitigate risk before the risk is realized by implementing certain procedures and/or following up action plans regarding to identified weaknesses (which may increase risk potential) during monitoring or incident follow-up. This process aims to minimize residual risks that the Bank is exposed to. Risk control activities must be consistent with the available control design; the design needs to be continually reviewed to ensure its relevance in addressing 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.

RISK MANAGEMENT

2. Loss Event Database (LED)
   LED contains data of operational risk incidents that are recorded with risk-based approach. LED provides lessons learnt, allows for remediation follow-up and improvement monitoring, and data for capital modelling.

3. Key Indicator (KI)
   KI contains key risk indicators (KRIs) and Key Control Indicators (KCIs) 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 activites 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.

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:

- **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.

- **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.

- **Internal Audit Unit**
  IAU carries out independent assurance function to ensure that all operational defense lines are functioning effectively and properly.

- **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.

- **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.

- **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 encountered by Bank Mandiri as a result of lawsuits, either filed by internal or external parties and/or the discovery of legal loopholes such as the absence of legal documents and regulations or weaknesses in documents. The legal risk management is conducted by the Legal Unit at the Head Office that performs functions, duties, and responsibilities in relation to regulatory matters, advisory, litigation, advocacy and legal support, education and transformation in legal area and manages the Bank's legal risk. In implementing these functions, duties, and responsibilities, the Legal Unit of the Head Office coordinates with the Legal Unit of the Work Unit and Legal Unit of the Region. The Head Office Legal Unit is the governing body of the system and is in charge of supervising the Legal Unit of the Work Unit and the Legal Unit of the Region.

The risk management mechanism which entails the identification process of measurement, control, and monitoring follows the applicable provisions on risk management. Each unit of product owner and/or executor or activity organizer must identify and manage risks to the best of their abilities including but not limited to the legal risk that is essentially prevalent in every product or activity made or conducted by the Company, so that it does not escalate and trigger other risks including but not limited to reputational risk.

The legal risk management by Bank Mandiri that is either preventive or repressive protects Bank Mandiri's legal interests satisfactorily and minimizes significant financial impact on Bank Mandiri, which is considered low according to the 2021 Legal Risk Profile Report.

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.

RISK MANAGEMENT

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 (NDF) that is part of the national program *Bangga Buatan 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 amidst national economic conditions affected by the COVID-19 pandemic.

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.

RISK MANAGEMENT

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

The year 2021 was a period of economic recovery that was surrounded by challenges and uncertainty. However, a strategic direction of the Corporate Plan was established per the bank's core competencies, shifting business patterns, and the public's transition to digital mindset. The Covid-19 pandemic expedited digital transition and made it a new habit. Besides, amidst economic uncertainty, Bank Mandiri also needed to pay attention to its profitability and credit distribution quality to manage risks in the future. As such, in addition to implementing initiatives outlined in the corporate plan, Bank Mandiri sharpened its business strategies by focusing on:

- Fostering credit growth in sectors having had quicker recovery, by prudently expanding credit to potential and stable industrial sectors per the portfolio guidance by considering the potential, capacity, and capability of each segment. Besides, Bank Mandiri also optimized the value chain program to capture business potential in the business ecosystem of wholesale customers.

- Optimizing fee-based income as a revenue driver by increasing e-channel productivity, increasing a recurring fee-based income growth, and enhancing the grip on existing customers and targeting top players in each industry group.

- Operational costs control, by enhancing the productivity of owned resources and developing virtual capacity of employees, emphasizing the achievement of KPI, prioritizing costs for strategic initiatives, providing value to customers, leveraging shifting customer behavior through more scalabale digitized services, and improving business processes continuously.

The Steps and Plan to Anticipate Strategic Risk

To anticipate the risk factors encountered by Bank Mandiri, it is necessary to implement independent and prudent risk management, but which does not limit the Company's business expansion process. The following are strategies for strategic risk management in 2021:

- Reviewed strategies periodically by considering external and internal factors to ensure the achievement of leading indicators of revenue and costs for each financial indicator. For instance, in guaranteeing prudent credit expansion, the Bank exercised selective focus on industrial sectors that were sustainable and growing by taking into account its internal capabilities and resources per the Risk Acceptance Criteria. This was done through end-to-end supervision of watchlist and high-risk debtors for better credit management.
- Controlled the impairment loss allowance by reviewing and following up on the credit restructuring program due to the Covid-19 as an attempt to help potentially uncollectible debtors. Bank Mandiri also maintained its Coverage Ratio & Cost of Credit at a level that was optimal to anticipate lessening credit quality affecting the bank's performance.

- Leveraged sufficient liquidity in the market through affordable funds stimulation to drive down Cost of Funds which resulted in cost saving.

- Investment of capital sourced from retained earnings (Tier-1) through optimization of revenue and efficiency program/saving of overhead costs and further review of initiatives affecting productivity and eliminating long-term non-value-added costs.

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 Conglomerate 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.
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. Compliance Unit at Unit level (i.e., Senior Operational Risk Unit)
   This unit ensures that all work units under its supervision exercise compliance function in accordance with applicable regulations.
7. Heads of Units
   Heads of Work 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 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:

a. 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.

b. 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.

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

d. Mitigation
Compliance risk mitigation is carried out by:
1. Reviewing risk identification process to ensure the process has been carried out appropriately.
2. Reviewing the appropriateness of control and mitigation activities.
3. Reviewing the appropriateness of compliance risk assessment process, including that the process has considered historical sanction data.

Compliance Risk Management Implementation

Compliance risk management activities in 2021 are:

1. Defining Risk Appetite Statement (RAS)
In 2021, Bank Mandiri defined its compliance Risk Appetite Statement (RAS) at 4 (four) violations per month. Throughout the year, the Bank received 1 (one) 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 2021, 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 breakfast 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 compliance units at work unit level on high-risk activities. Where discrepancy with applicable regulations is identified, immediate actions are taken to prevent the Bank from suffering any losses.
c. Compliance Assessment Program
This program aims to increase compliance risk awareness of the risk owners and compliance with applicable regulations (according to their duties and responsibilities).
d. Compliance Unit Competency Improvement Program
To increase understanding related to compliance risk management, the Company partners with a third party to organize compliance training and certification for all Compliance Unit personnel.

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 raised against the Bank to ensure the appetite threshold is not breached
b. Improve compliance risk assessment parameters
c. Improve reporting process on compliance function
2. Promotion of compliance risk awareness
a. Conduct compliance assessment to improve employee understanding of the applicable rules and regulations, especially those related to their duties and responsibilities.

b. Provide advice on compliance issues.

3. Strengthening monitoring on regulatory mandate fulfillment
   a. Disseminate information on new 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 on the Bank.

4. Competency Building for Compliance Work Units
   To improve the quality of personnel in Compliance Units, 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 held together with Businesss Unit to increase compliance risk awareness in the credit sector.

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 (CPR)

Insurance risk is a risk due to the failure of insurance companies to fulfill obligations to policyholders as a result of insufficient risk selection (underwriting) processes, pricing, reinsurance use, and/or claim handling. Insurance Risk Management is carried out by Subsidiaries of the Bank Mandiri business group that are engaged in the insurance business, which in this case include AXA Mandiri Financial Services, Mandiri AXA General Insurance, and Mandiri Inhealth. Bank Mandiri identifies and analyzes activities that can increase insurance risk exposure and affect company performance. The risk identification is carried out 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 per the established procedure.

Self-assessment of Integrated Insurance Risk Profile throughout 2021 was at a Low to Moderate (low) 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 sufficient although there are some issues that are resolvable in the normal course of business.

RISK ASSESSMENT OF THE BANK

To get a better picture of the risks, the Bank routinely makes a self-assessment of Bank Soundness Rating (BSR) which is reported to the Regulator every semester or 6 (six) months, and a Risk Profile Report (RPR) which is prepared quarterly or every 3 (three) months. The Bank's self-assessment of Bank Soundness Level is in accordance with OJK Regulation No. 4/POJK.03/2016 and OJK Circular No. 14/SEOJK.03/2017 on Assessment of Bank Soundness Rating, which consists of Risk Profile Assessment (including Inherent Risk and Quality of Risk Management Implementation), Rentability, Governance, and Capital. The Risk Profile Assessment entails assessment of Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Legal Risk, Strategic Risk, Reputational Risk, and Compliance Risk. For Integrated Risk Profil assessment, there are two additional risks, Insurance Risk and Intra-Group Transaction Risk.