

Basel III Reforms

In order to improve the Company's ability to manage risk due to interest rate movements affecting income and capital (Interest Rate Risk in Banking Book/IRRBB), Bank Mandiri has made preparations regarding the implementation of Basel IV with the following details:

1. In September 2017, Bank Mandiri conducted a review and provided feedback on the issuance of Consultative Paper IRRBB (CP IRRBB) by OJK.
2. On the Issuance of CP, Bank Mandiri also prepared a gap analysis between the implementation of IRRBB management which had been conducted by Bank Mandiri with IRRBB management standard in CP.
3. Bank Mandiri had also been active as a working group member with the OJK discussing technical issues related to IRRBB management standard in CP.
4. Bank Mandiri also conducted benchmarking to several Banks in Asia related to the implementation of IRRBB.

Strategic Initiatives of the Risk Management Implementation in 2017

Credit Portfolio Risk

Credit Portfolio Risk

In order to support operational growth strategy business to always have superior competitiveness on an industrial scale national banks and ASEAN, Bank Mandiri consistently and continuously develop the infrastructure and capabilities risk management, among others, covers the following matters:

1. Risk level alignment at Bank Mandiri
 - a. Implementation of Risk Appetite Statement (RAS) as formal guidance in the process of risk taking for achieve business targets.
 - b. Develop a system that aggregates calculations stress testing for credit risk, liquidity risk, market risk, impact on Profit / Loss and capital adequacy (CAR), at Bank Mandiri and Subsidiaries.
2. Strengthening Credit Portfolio Management that includes setting the direction of booking productive credit through portfolio guideline 2017, credit consumptive booking arrangement through Development of pipeline Management system and establishment unit credit supervisory. In addition, in order to increase effectiveness monitoring credit especially in

the region, Bank Mandiri initiate portfolio manager implemented since 2017.

Fixed end to end credit process in the wholesale segment through:

- a. Business process wholesale segment improvement with setting limits for anchor clients and specific sectors.
- b. Implementation of Name Clearance on pipeline designation debtor and Proactive Loan Monitoring System for monitoring credit.
- c. Strengthening of debtor information sources to analyze and monitor credit quality.
- d. Enhancement Credit Processing System in order improvement of end to end credit process with:
 - Implementation of New Internal Rating Based Approach for more precise measurement of risk level measurement and granular.
 - Improved early warning system to improve the potential sensitivity of debtors to decrease the quality of credit
- e. Optimize the use of limit management system.
3. Efficiency of capital use through:
 - a. Implementation of IRBA Phase III.
 - b. Enhancement Modeling Basel II Risk Parameters for Retail Portfolio.
 - c. Implementation of New Operational Risk Reporting System.
 - d. Enhancement of Operational Risk Load Calculation.
 - e. Intensification and Extensification of Validation Functions.
4. Expected Credit Loss model development in order preparation of IFRS implementation 9.

Risk and its Management Profiles

Risk Type

There are 10 (ten) risk types that must at least be managed, namely:

1. Credit Risk
Credit Risk is a risk due to the failure of the debtor and/or other parties in fulfilling the obligation to the Bank.
2. Market Risk
Market Risk is the risk on the balance sheet position and the administrative account including derivative transactions, due to the overall changes in market conditions, including the risk of changes in the option price.
3. Liquidity Risk
Liquidity Risk is potential loss resulting from the Bank's inability to meet its financial obligation on due date from its funding cash

flows and/or from high quality liquid assets that can be used as collaterals, without disrupting the activities and financial condition of the Bank.

4. Operational Risk

Operational Risk is the risk due to inadequate and/or non-functioning of internal processes, human error, system failure, and/or any external events affecting the Bank's operations.

5. Legal Risk

Legal Risk is the risk due to lawsuits and/or weaknesses of juridical aspects.

6. Reputation Risk

Reputation Risk is the Risk due to decreased stakeholder trust stemming from negative perceptions of the Bank.

7. Strategic Risk

Strategic Risk is the risk due to inaccuracy in the taking and/or execution of a strategic decision as well as failure in anticipating changes in the business environment.

8. Compliance Risk

Compliance Risk is a risk due to the Bank's failure to comply with and/or not enforce the applicable laws and regulations.

9. Risk of Intra-Group Transactions

Risk of Intra-Group Transactions is the risk of dependence of an entity, directly or indirectly, to another entity in a Financial Conglomeration in the context of fulfilling the written agreement obligation or an unwritten agreement whether followed by the transfer of funds and/or not followed by the transfer of funds.

10. Insurance Risk

Insurance Risk is a risk due to failure of an insurance company to fulfill obligations to policy holders as a result of inadequate risk selection process (underwriting), premium determination (pricing), use of reinsurance, and/or claims handling.

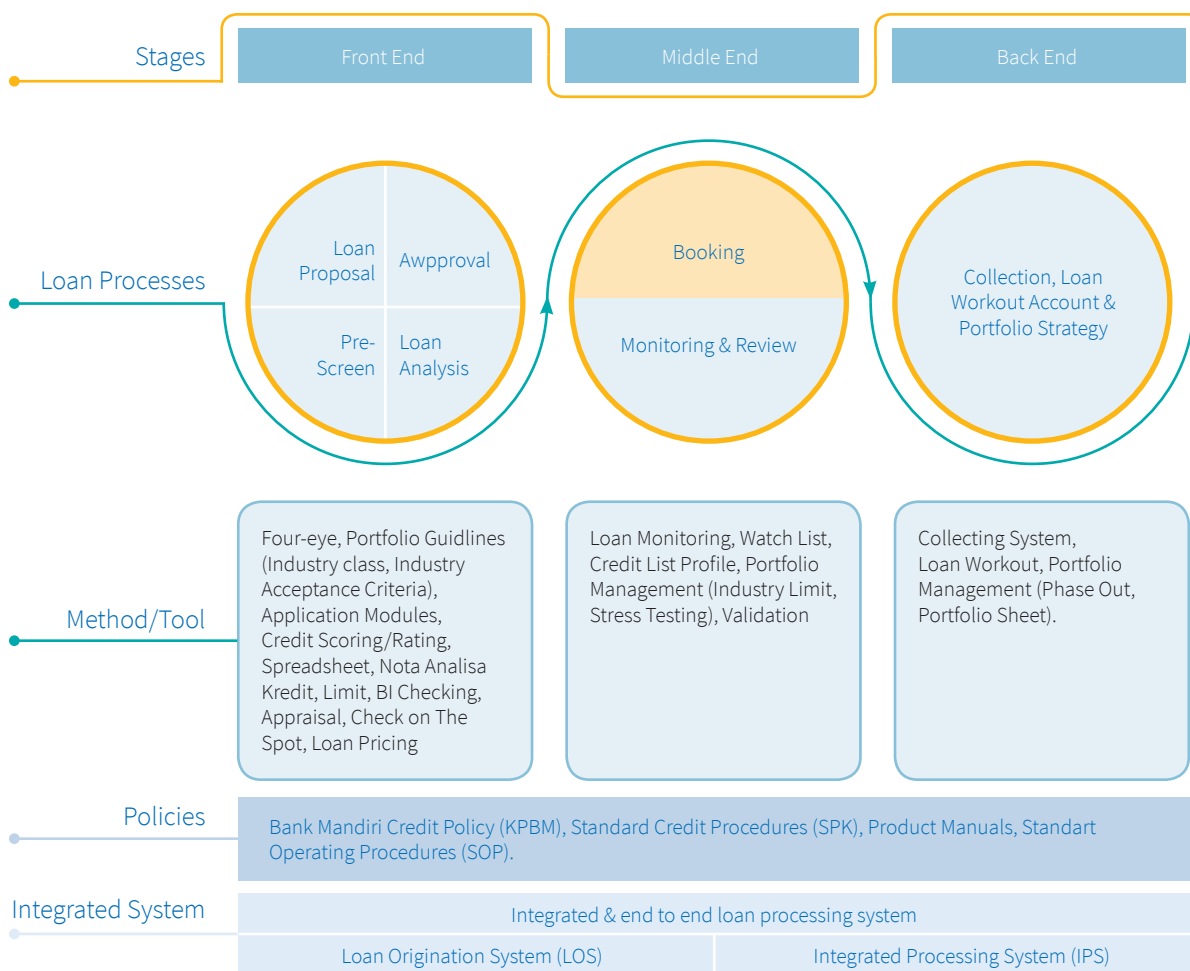
Risk Management

Credit Risk

Bank Mandiri's credit management process began with determining the target market and continued by conducting risk assessment and monitoring of credit granting. In extending its credit, Bank Mandiri always prioritized the principles of prudence by placing the credit analysis function performed by the independent business unit and the credit risk unit. Bank Mandiri was always guided by Bank Mandiri Credit Policy (KPBM) in managing credit risk on an end-to-end basis. Operationally, this policy was set forth in the form of Standard Credit Procedures (SPK) and Product Manual.

In implementing the risk management of credit concentration at the debtor level, Bank Mandiri consistently monitored the Legal Lending Limit (BMPK). In general, credit process and credit risk management at Bank Mandiri had been conducted on an end-to-end basis and integrated by Business Unit, Credit Operation Unit and Credit Risk Management Unit. The following is the credit risk management scheme:

Loan Process Flow and Credit Management



Market Risk

The management of market risk management was carried out by an independent work unit through applying the segregation of duties principle that was separation of functions and responsibilities consisting of front office, middle office, and back office. The Market Risk Management Organization consisted of two parts, namely Market Risk Management - Trading Book and Market Risk Management - Banking Book.

The market risk management and governance framework at Bank Mandiri adhered to the principle of the Three Layers of Defense approach, comprising:

- The Board of Commissioners conducted the risk oversight function through the Risk Oversight Committee, the Integrated Governance Committee, and the Audit Committee.
- Board of Directors performing risk policy function through Executive Committee related to market risk management that was Asset and Liability Committee (ALCO) and Risk Management Committee.
- The Risk Management Unit together with the business unit and the compliance work unit performed the risk identification, risk measurement, risk monitoring, and risk control functions.

The Bank Mandiri Risk Management Framework was developed on the basis of internal and external factors including but not limited to bank business, regulatory requirements, methodological developments and best practices, and risk data. The authority and responsibility associated with the implementation of risk management were regulated in Bank Mandiri Risk Management Policy (KMRBM).

As for the guidance in the implementation of market risk management, both trading book and banking book portfolios were regulated in Standard Procedures of Treasury (SPT) and Standard of Asset & Liability Management Procedure (SP ALM).

Management and Market Risk Measurement Mechanism – Trading Book

Market risk is a risk arising from potential losses resulting from changes in interest rates and exchange rates (including derivative instruments).

The market risk management of Bank Mandiri was carried out by applying the segregation of duties principle of separating functions and responsibilities independently of Treasury Group trade transactions consisting of:

- a. The front office unit (Treasury) is the transaction implementing unit.
- b. The middle office unit (Risk Management,) was responsible for monitoring, assessing and reporting risks arising from any trading activities performed by the Treasury unit.
- c. The back office (Treasury Operation) unit was responsible for recording and valuing all exposures on daily trading activity using market rates from independent sources.

Management and Market Risk Measurement Mechanism – Banking Book

Bank book market risk is a risk arising due to changes in interest rates and exchange rates on banking book activities. Banking book market risk management of Bank Mandiri was carried out by optimizing the balance sheet structure in order to obtain maximum returns in accordance with acceptable levels of risk and by setting limits referring to regulatory and internal regulations monitored on a weekly and monthly basis by the Market Risk Management Unit.

The risk of changes in bank book interest rates arose from movements in market rates that were contrary to the positions or transactions held by the Bank, which might affect the Bank's profitability (earning perspective) and the economic value of the Bank's capital (economic value perspective).

Liquidity Risk

Liquidity risk is a risk that occurs when the Company is not able to provide liquidity with fair price impacting on profitability and banking capital. Steps and plans in anticipating Liquidity Risk include:

- a. The Bank imposes limits referring to both regulatory and internal regulations.
- b. The Bank conducted periodic stress testing of liquidity risk to determine the impact of changes in market factors and internal factors on the extreme (crisis) conditions of liquidity.
- c. The Bank also had a Liquidity Contingency Plan (LCP) including funding strategies such as money market loans, repo, bilateral loans, FX swaps, securities sales, and pricing strategies. In the LCP,

the determination of liquidity conditions and funding strategies has taken into account both internal and external conditions.

- d. The Bank also monitored external indicators including: USD/IDR exchange rate, Credit Default Swap (CDS) 5 years Indonesia, Spread between 5 years ROI compared to 5 years UST, Composite Stock Price Index (IHSG), Rupiah and USD interbank rate, Non-Delivery Forward (NDF) USD/IDR 1B as well as the latest market information. This monitoring aimed to increase awareness of the unstable economic conditions, both due to global crisis conditions and due to various issues within the country.

Operational Risk

Operational Risk is a Risk due to inadequate and/or non-functioning of internal process, human error, system failure, and/or the presence of external events affecting the Bank's operations.

Operational risk may lead to other risks such as reputation risk, strategic risk, legal risk, market risk, credit risk, compliance risk, liquidity risk, intra-group transaction risk and insurance risk.

Effective operational risk management and consistency minimize the incidence of other risks.

Operational risk is inherent in all activities/operational processes of the Bank in conducting businesses. Bank implements Operational Risk Management effectively to reduce the frequency and/or impact of operational losses. In general, the application of Operational Risk Management was expected to have a positive impact on BANK stakeholders.

Implementation of operational risk management involves all elements within the Bank, including the Board of Directors with active monitoring of the Board of Commissioners. The Board of Commissioners and the Board of Directors understand the risks faced by the Bank and play an important role in supporting and monitoring the success of its implementation across all operational work units.

Organizations in operational risk management consist of:

- Risk Management Committee, is a Board of Directors committee performing the supervisory function of risk control and management, among others, through the establishment of risk management strategies and procedures, monitoring of risk profile and determining risk appetite.
- Director in charge of Risk Management function, i.e., Director having duties and responsibilities in formulating the Risk Management policy, strategy and framework.
- The Operational Risk Group of Operational Risk Management Working Unit is the Operational Risk Management Work Unit responsible for formulating policies, strategies, frameworks and operational risk management tools as well as socializing them.

- The Operational Risk Operations Unit, the Senior Operational Risk, is the Operational Risk Management Work Unit responsible for implementing operational risk policies, strategies, frameworks and risk management tools in collaboration with the Risk Owner Work Unit.
- The Risk Owner Working Unit is fully responsible for Operational Risk management and ensuring control over every operational activity that has been effectively implemented and in accordance with the provisions.
- Compliance Work Unit is a work unit performing the compliance function on internal and external rules.
- Internal Audit is a work unit performing an effectiveness evaluation of the internal control, risk management and governance processes.

Legal Risk

Legal risk is a type of risk faced by Bank Mandiri as a result of lawsuits, done by either internal or external parties, and/or the discovery of weaknesses from juridical aspects such as the absence of legal and regulatory documents or weaknesses in documents.

The legal risk management organization was implemented by the Legal Unit at Head Office by performing the functions, duties and responsibilities related to regulatory, advisory, litigation, advocacy and legal assistance, education and transformation in legal and Bank legal risk management. In performing such functions, duties and responsibilities, the Legal Unit at the Head Office coordinated with the Legal Unit of the Work Unit and Legal Unit of the Region. The Head Office Legal Unit was a supervisor of the system and supervised the Legal Unit of the Work Unit and Legal Unit of the Region.

In optimizing the function of work units related to litigation, Bank Mandiri initiated the formation of Wholesale Credit Litigation Group focusing on litigation issues in the wholesale segment.

Legal Risk Management Mechanism

Risk management mechanisms including the process of identification, measurement, and control and monitoring referred to the applicable provisions on risk management. Each work unit of the owner and or executor of the product or the organizer of the activity must identify and manage the risks maximally including but not limited to legal risks basically attached to any product or activity created or executed by the Bank, so as not to have a widespread impact and trigger the other risks including but not limited to reputation risk.

Legal risk management conducted by Bank Mandiri, both preventive and repressive, was sufficient to protect Bank Mandiri's legal interests

and minimize significant financial impacts for Bank Mandiri, as reflected in the 2017 Legal Risk Profile Report at Low predicate.

Reputation Risk

Reputation risk is a risk that Bank Mandiri has to deal with as an impact from stakeholder's negative perception against the bank that comes from various unwanted events, among others negative publication regarding bank's operations, business ethics violation, customer complaints, stakeholder weakness, and other events that can damage bank's image.

Reputation risk is managed by Corporate Secretary Group and conducted by all working units in the company environment, including Customer Care Group, Strategic Marketing Group, and IT Strategy and Infrastructure Group. In its function, Corporate Secretary Group is responsible to the Directors and is under the direct supervision of President Director. Therefore, other to president director, Corporate Secretary Group also reports to Section Director and officials in the same level as Director in regards to events related to reputation.

Mechanism of Reputation Risk Management

Reputation risk is managed through supervision mechanism, handling and resolution coordinated by Corporate Secretary Group by referring to the provisions stated in Standard Guideline for Corporate Secretary.

Strategic Risk

Strategic risk is a risk faced by Bank Mandiri due to the inaccuracy in the taking and/or implementation of a strategic decision and failure in anticipating changes in the business environment.

The Bank had established Risk Management Committee and Risk Management Work Unit aiming to support a comprehensive, integrated, measurable and controlled risk management. Each of these committees was supported by a working group whose members consisted of groups directly related to the risk issues included within the scope of the committee.

Strategic Risk Management Mechanism

In conducting strategic risk management, Bank Mandiri continuously reviewed performance and evaluated the policy of arranging business target as well as conducted corrective measures in developing strategic plans and business targets by taking into account internal and external conditions, if necessary. Bank Mandiri also continued to work on strengthening the implementation of management support programs on financial performance through the development of

automated budgeting, PMS enhancement and Executive Information System (EIS) development.

Compliance Risk

Compliance risk is the risk that arises when the bank does not comply with and/or does not enforce the applicable laws and regulations.

Risk Management Compliance Organization

All Companies are fully responsible for implementing compliance in their respective activities. The organization as well as duties and responsibilities of implementing the compliance function are as follows:

1. Board of Commissioners
In relation to the implementation of the Compliance Function and the Implementation of Integrated Governance, the Board of Commissioners shall exercise active monitoring of the implementation of the compliance function.
2. Integrated Governance Committee
A Committee established to assist the Board of Commissioners in exercising the monitoring function on the realization of Integrated Governance and Integrated Compliance Function at Bank Mandiri and Subsidiaries.
3. Board of Directors/SEVP
The Board of Directors has the duty and responsibility to cultivate and realize the implementation of the Compliance Culture and ensure the implementation of the Compliance Function at all levels of the Bank's organization and business activities.
4. Director in charge of the Compliance Function
The Director in charge of the Compliance Function is responsible for formulating strategies of compliance culture, minimizing compliance risk, establishing compliance systems and procedures and ensuring that all Bank policies, rules, systems and procedures are in compliance with the applicable laws and regulations.
5. Compliance Work Unit
The Compliance Work Unit assists and/or represents the Board of Director in charge of the Compliance Function in performing its duties and responsibilities.
6. Compliance Work Unit at Agency
The Compliance Work Unit at the Work Unit ensures the compliance function performed by the supervised Head of Work Unit.
7. Head of Work Unit
Heads of Work Units are responsible for realizing the Compliance Culture in their respective Work Units, managing compliance risks and carrying out improvements to the compliance-related processes or procedures that exist in the work unit.

Compliance Risk Management Mechanism

Bank Mandiri has established compliance risk management policies and procedures that were subject to the applicable rules and regulations. The main objective of the compliance risk management policies and procedures is to build compliance culture that is one of the keys to success in the bank sustainability.

The compliance risk management process is divided into several phases, namely:

- a. Identification
The identification of compliance risks was incorporated into the Compliance Risk Statement (CRS) including relevant regulations, the causes of risk, risk control, and action plans required to prevent compliance risks.
- b. Assessment
The identified compliance risks were assessed by each risk owner to generate a compliance risk profile in the work unit. The risk assessment is based on the likelihood of the occurrence of the risk and the impact it will have on the risk. In addition, the risk owner also assessed the effectiveness of the performed controls.
- c. Monitoring
Compliance risk monitoring was performed by means of:
 1. Reviewing that compliance risk identification process had been performed properly and correctly.
 2. Reviewing that the implementation of control and mitigation had been done well and correctly.
 3. Reviewing that the compliance risk assessment process had been conducted properly and correctly and took into account the historical data of sanctions.
- d. Mitigation
Risk mitigation was conducted by establishing and monitoring the Risk Appetite Statement (RAS) of compliance risk.

Risk of Intra-Group Transaction

Risk of Intra-Group Transactions is the risk of dependence of an entity, directly or indirectly, to another entity in a Financial Conglomeration in the context of fulfilling the written agreement obligation or an unwritten agreement whether followed by the transfer of funds and/or not followed by the transfer of funds. Implementation of Intra-Group Transaction Risk Management was performed with Subsidiaries in Bank Mandiri's business group in accordance with the Bank Mandiri's business strategy.

Bank Mandiri identified and analyzed the activities that could increase the exposure of Intra-Group Transaction Risk and affect the company's performance. The risk identification was performed on the business activities of Bank Mandiri and Subsidiaries by considering the complexity of the transactions. Bank Mandiri could

combine qualitative and quantitative approaches in the process of measuring Intra-Group Transaction Risk. Bank Mandiri monitored the risk of Intra-Group Transactions on a regular basis.

Insurance Risk

Insurance Risk is a risk due to failure of an insurance company to fulfill obligations to policy holders as a result of inadequate risk selection process (underwriting), premium determination (pricing), use of reinsurance, and/or claims handling. Implementation of Insurance Risk Management was performed on Subsidiaries in Bank Mandiri's business group engaged in the insurance business.

Bank Mandiri identified and analyzed the activities that could increase the exposure of Insurance Risk and affect the company's

performance. The identification of such risks shall be made in the business activities of the Subsidiary engaged in insurance, taking into account their characteristics. Bank Mandiri could combine qualitative and quantitative approaches in the process of measuring Insurance Risk. Bank Mandiri conducted periodic monitoring of Insurance Risk.

Risk Assessment

Outcome of self assessment Bank Mandiri's risk profile Individual position 31 December 2017 was rated 1 (low) with Low to moderate Inherent Risk Rating and Risk Management Implementation Quality Rating (KPMR), which was strong.

The assessment of Risk profile self-assessment of Bank Mandiri (individual) in the position of 31 December 2017 was as follows:

Type of Risk	Inherent Risk Level	Level of Quality of Risk Management Implementation	Risk Level Ranking
Credit Risk	Moderate	Satisfactory	Low to moderate
Market Risk	Low	Strong	Low
Liquidity Risk	Low	Strong	Low
Operational Risk	Moderate	Satisfactory	Low to moderate
Legal Risk	Low	Strong	Low
Strategic Risk	Low	Strong	Low
Compliance Risk	Low to moderate	Strong	Low
Reputation Risk	Low	Satisfactory	Low
Composite Rating	Low to moderate	Strong	Low

Efforts to Increase Risk Culture

In order to achieve the vision, Bank Mandiri always apply risk awareness culture in all operational activities. Bank Mandiri has a risk-caring culture including anti fraud culture which is communicated effectively. Implementation of a conscious culture one risk is done through the Risk Awareness program where the program is owned by each work unit and associated with recognition, understanding and mitigation of operational risks. P it is reflected in the Culture Excellence, RAKSA is a risk program awareness that supports the principle of self-preservation, guard your friends, guard independent. Development of risk-caring culture is realized with development of a conducive environment / governance and framework open, efficient and effective risk management.

Evaluation of Risk Management Implementation

The Bank constantly evaluates the effectiveness of the system risk management. Evaluations include strategy adjustments and risk framework as part of risk management policy, adequacy of risk management information systems and adequacy process of identification, measurement, monitoring and control risk.

One form of evaluation on risk management policy is annual evaluation of the Bank's Risk Management Policy Mandiri (KMRBM) and standard procedures. The annual evaluation results shows that risk management at Bank Mandiri during 2017 is sufficient.