

Risk Management

OVERVIEW

Bank Pembangunan Malaysia Berhad (the Bank) is exposed to invariably wide risk elements in fulfilling its developmental role of supporting infrastructure, maritime and high technology sectors. The Bank believes that a strong and integrated risk management system is one of the critical success factors that form an essential element in sustaining the Bank's profitability while undertaking its developmental role.

The Bank has been guided by its risk management principles in managing its business risk, which outline a basis for an integrated risk management effort and good corporate governance. Internal controls, specific policies, guidelines and procedures have been established to govern the activities of operational and support functions of the Bank. Risks arising from these activities are managed by dedicated risk management functions under Group Risk Management, that play a vital role in the execution of risk management activities and strategies through the process of identifying, measuring, monitoring and controlling all material risks faced by the Bank.

Combined with a structured risk governance consisting of a strong Board and Management oversight, a good check & balance system and sound risk management practices, the Bank has built a strong foundation towards ensuring a holistic and integrated approach of risk management that will safeguard the quality of the Bank's assets, thus minimizing reliance on collateral lending in its endeavor to achieve the mandate set by the Government.

RISK GOVERNANCE STRUCTURE

Being ultimately responsible for the management of risk of the Bank, the Board of Directors has overall risk oversight responsibility for ensuring effective implementation of risk management policies and determines the risk level, consistent with the Bank's risk appetite.

To assist the Board in overseeing and managing risks, dedicated committees have been established to provide the necessary infrastructure for implementing various risk management policies and procedures.

The key committees involved in risk management:

At Board Level

RISK MANAGEMENT COMMITTEE (RMC)

RMC is responsible to oversee the senior Management's activities in managing key risk areas of the Bank and to ensure that risk management process is in place and functioning effectively.

At Management Level

EXECUTIVE RISK MANAGEMENT COMMITTEE (ERMC)

ERMC is responsible to deliberate and recommend actions on all matters pertaining to credit risk, market risk, liquidity risk, ALM, operational risk and compliance risk and to assess the adequacy of strategies to manage overall risk activities.

The RMC and ERMC are supported by Group Risk Management which is responsible in overseeing the implementation of risk management processes at operational functions. Group Risk Management ensures that the established controls are reviewed and monitored from time to time so as to remain relevant in line with regulatory requirements and best practices. In doing so, knowledge in risk management is paramount to develop competencies & expertise in managing risks.

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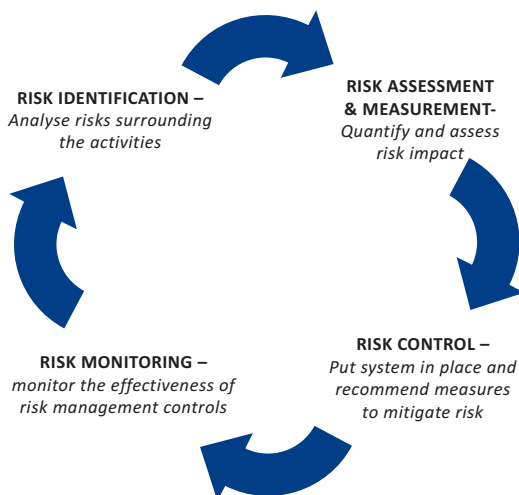
Continuous training programmes on risk management are being provided to the staff to enhance knowledge and competencies as well as to keep current with the latest development in risk management.

Group Risk management is made up of four (4) functions namely Credit Risk function, Market Risk function, Operational Risk function and Compliance function. Group Risk Management reports directly to the RMC to maintain its independence.

RISK MANAGEMENT PROCESS

The Bank realizes that the key success in lending activities lies in how the risk is managed, that is by having a clear risk management process and controls at various processes within the Bank that will assist in meeting the Bank's objective.

This risk management process involves four major processes as described below:-



The management of risk is a continuous process which is undertaken by Group Risk Management. The risks consist of credit risk, market risk, liquidity risk and operational risk that arise from the activities carried out at operational functions of the Bank.

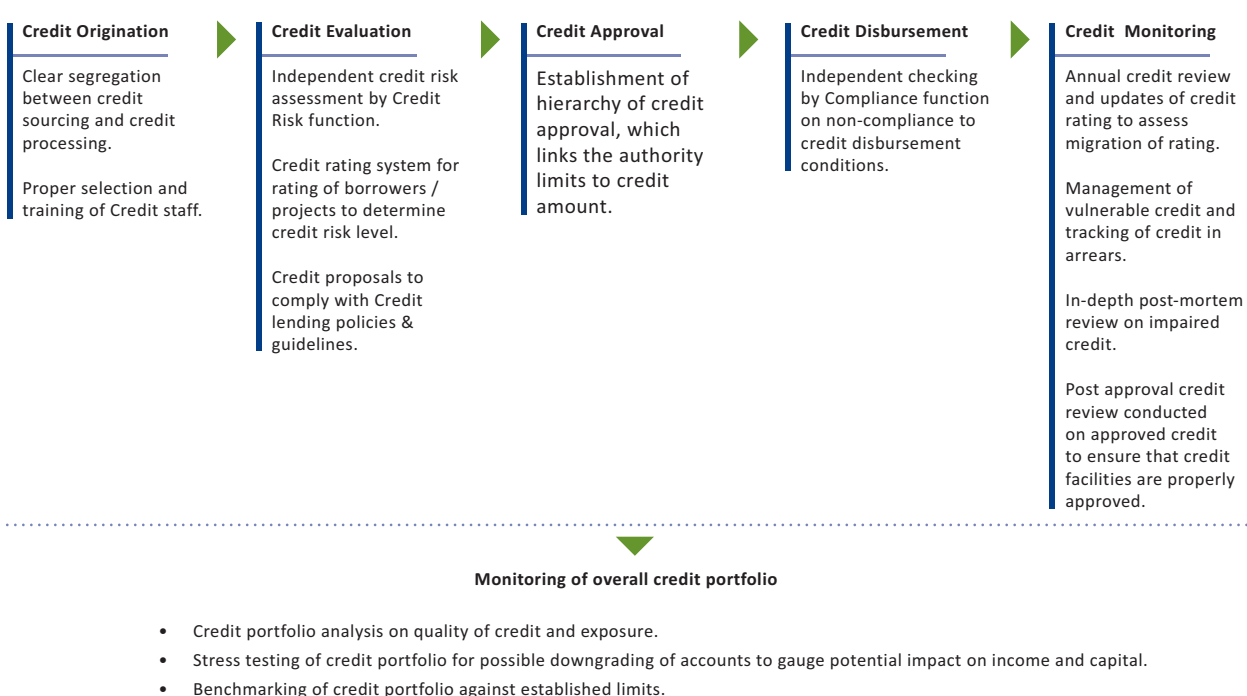
MANAGEMENT OF CREDIT RISK

Credit Risk is the potential loss of revenue, either the principal or interest or both, arising from the failure or unwillingness of counterparties or borrowers to honour their financial and contractual obligations as and when they are due. These obligations are from lending, investment and other activities undertaken by the Bank.

As lending is the main activity of the Bank, credit risk management has therefore been the main focus of the Bank's risk management activities. Management of credit risk encompasses establishing internal controls with a check-and-balance structure within the credit process to minimize poor credit quality arising from imprudent lending, risk concentration in credit portfolio and other judgmental errors that could potentially impact the overall financial soundness of the Bank. The process of managing credit risk involves risk identification, risk assessment and measurement, risk monitoring and risk control. Management of credit risk is not only vital at loan origination, but continues with the preservation of quality loan assets throughout the credit process in order to sustain credit quality.

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RISK ASSESSMENT AND CONTROLS AT VARIOUS CREDIT PROCESSES



Credit risk identification, assessment, monitoring and control are further elaborated in the following processes of credit risk management :

- The Bank maintains an independent credit evaluation function, which is separated from credit originator to maintain essential check-and-balance system against imprudent lending elements. Credit is originated by Business Development (BD) and processed by Credit Analysis function. To ensure highest standard of credit assessment, BD and Credit Analysis staff must undergo relevant training programmes to ensure understanding

of credit evaluation. The Bank encourages all staff in credit-related functions to secure the Certified Credit Professional (CCP) to continuously promote professionalism and expertise in their work.

In an effort to enhance customer relationship management concept and credit operations delivery system, the Bank, in August 2010, has streamlined the functions of BD and Credit Analysis. The functions have been placed under Business Banking which consists of various functions according to the respective financing sectors.

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- Prudent credit assessment is enforced through independent credit risk assessment by Credit Risk function. Risk issues are mitigated by the risk owners before the approving authorities consider any credit proposal. Credit Risk function also reviews credit proposals for compliance with credit policies.
- All credit proposals are rated using an internal credit rating system to assess and measure borrowers' risk of default. For project financing, the Bank uses a Project Risk Scoring (PRS) system to measure projects' risk of default. As a prudent practice, borrowers or projects assigned with a 'high risk' grade will not be considered for credit facilities unless adequate risk mitigations are in place.
- Credit disbursement requisition is independently assessed by Compliance function, as a "final gatekeeper" to ensure adherence to credit disbursement conditions prior to credit disbursement. Credit Compliance also verifies terms and conditions imposed in the Letter of Offer as approved by the approving authorities.
- The Bank continues to monitor the quality of credit throughout the credit period to detect any deterioration so that corrective measures could be taken. Annual credit review serve as a control mechanism to prevent further credit deterioration. Credit review is conducted at least once a year and more frequent reviews are performed on high-risk credit under "watch – list" accounts. Annual credit review will be rated by Credit Risk function to monitor credit risk migration for effective monitoring.
- The overall credit risk profiles of credit portfolio are reviewed and monitored by Credit Risk function by performing stress tests on credit portfolio based on selected scenarios, which include possible downgrading of the accounts to assess the impact on the Bank's earnings and capital. The results of stress tests, risk exposure and risk profile of credit portfolio are deliberated at the relevant committees of the Bank including ERMC and RMC.
- Risk issues surrounding new financing products are identified by Group Risk Management from the perspectives of credit risk, market risk and operational risk before being implemented to ensure that all inherent risks could be managed. All product development proposals need endorsement by RMC before obtaining approval from the Board.
- To better understand how problem credit developed and to identify lapses in credit and monitoring process, system and people, post mortem reviews are conducted on impaired credit. Observations and findings are communicated as feedback to assist in upgrading credit skills with the objective that past mistakes will not be repeated. Lessons are learned from root-cause analysis and actions are taken to improve credit risk management process.
- As part of the internal control, a team within the internal audit function was established to conduct post credit review on approved credits to analyse 'completeness' of credit decision, that is to determine the compliance of the processes involved in credit evaluation and approval. Feedback will be provided on the effectiveness of credit process in identifying emerging problems.

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Credit Risk Management Framework

The following framework governs the management of credit risk for the identification, measurement, monitoring and controlling of credit risk :

- The Bank has instituted clear internal controls to govern lending activities and assessment of credit proposals for prudent lending activities through the establishment of Credit Risk Management Policies and Credit Operations Policy and Guideline. Operational manuals and directives issued by Bank Negara Malaysia (BNM) including guidelines as prescribed under the Development Financial Institutions Act 2002 (DFIA) are adhered to, which have assisted the Bank in achieving its corporate objectives within an acceptable risk profile and risk appetite.
- Different levels of approving authorities govern credit approval process according to credit limits. The approval hierarchies that link the authority limits to the amount of credit ensure that credit sanctioning remains a critical part of risk evaluation system.
- Limits pertaining to financing portfolio are established to manage concentration risk. Limits are continuously monitored and any breaches or critical level of exposure will be reported to the relevant committees. The Bank diversifies its credit portfolio and avoids any undue concentration of credit risk in its credit portfolio by setting credit limit to single customer. The Bank diversifies its credit risk by spreading its credit portfolio across different economic activities to avoid being over-exposed to any particular economic sector. Exposure limits are set on lending portfolio particularly in respect of lending to commercial business. The limit by commercial business sector is guided by the Bank's Budget and is reviewed where necessary.
- Internal rating system is in place that serves as a 'tool' to measure credit risk level of borrowers and projects. The rating model is subject to enhancement to maintain its predictive power and robustness to suit lending requirements.
- Reporting of credit risk activities is made to the ERM before deliberations at the RMC. The ERM that meets once a month deliberates issues on the quality of credit risk of borrowers to preserve the quality of loan assets, with the objective of preventing them from turning impaired. The ERM recommends action on all credit risk related matters including loan asset quality, credit portfolio composition and adequacy of strategies and controls to manage overall credit risk activities. The ERM also deliberates periodical report on credit risk prior to submission to RMC.
- As part of the corporate governance, Group Audit & Examination (GAE) undertakes an independent assessment of "credit compliance" to policies and procedures. The findings are communicated to the respective functions and further deliberated at the Audit Committee meeting. Issues raised are followed-up by GAE to ensure that corrective measures are implemented.

CREDIT RISK INFRASTRUCTURE ENHANCEMENT

The Bank has embarked on the enhancement of credit rating 'tools' and credit rating management practice beginning the second half of 2010 with a plan to utilize the enhanced credit rating model in January 2011. This move is part of the Bank's effort to assess credit risk more comprehensively for effective measurement and management of credit risk, as well as part of effective risk-

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based lending strategies. The enhancement would involve the transition of the existing credit rating models to an enhanced version focusing on the three components of Risk Weighted Assets (RWA) calculation, namely Probability of Default (PD), Exposure at Default (EAD) and Loss Given Default (LGD) models.

MANAGEMENT OF MARKET RISK

Market risk is the risk of loss in financial instruments or balance sheet due to adverse movements in market factors. The primary categories of market risk are:

Interest rate risk :	The risk to earnings or capital arising from movement of interest rates. The measurement of interest rate risk using earning perspective is termed as Earning At Risk (EAR) while under the economic perspective; the interest rate is expressed in the form Capital At Risk or Economic Value of Equity (EVE).
Foreign exchange risk :	Arising from changes in exchange rates and implied volatilities on foreign exchange options.
Equity risk :	The risk which arises from adverse movements in the price of equities on the equity positions taken from time to time.

Market Risk function is an independent risk control unit and is responsible for ensuring that risk management frameworks are implemented and that adequate risk controls are in place to support business growth.

Market Risk function undertakes the following support roles:

- Formulating and reviewing the risk management frameworks, policies and procedures in accordance with the Bank's business direction and revised regulatory requirements;
- Carrying out independent monitoring of treasury activities on a daily basis, in accordance with approved policies and limits;
- Providing independent market-to-market valuation of treasury positions and risk exposures, using data obtained from various sources;
- Reviewing new product proposal papers (in conjunction with other risk management unit), to assess market and liquidity risks prior to launching new products ; and
- Providing integrated risk management support activities in conjunction with other risk management function and participating with other departments on joint assignments and projects involving market risk, liquidity risk and asset-liability management and stress testing.

Market risk identification, assessment, monitoring and control are further elaborated in the following processes of market risk management:

- In identifying market risk, any adverse movements in the market-to-market value of the Bank's investments and forex exposure are assessed to determine the gain or loss arising from such movements. Simulations are also performed to determine the impact on the Bank's portfolio such as earning at risk and capital at risk that arise from various increase or decrease in market conditions.

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- In determining loss or gain arising from the changes in interest rate movement, simulations are prepared under different interest rate movements to measure the impact on Net Interest Income of loan assets portfolio. Assessment is also made on the trend of Net Interest Margin to analyse its movement against the specific target. Actions taken to maintain the desired Net Interest Margin are deliberated at ERMC. Simulations are also done to gauge the net impact on FD placement and FD acceptance.
- Risk profile of the Bank and any unrealized gain/loss arising from interest rate movement are reported to ERMC, where decisions are made to address the issues. Any breaches of limits are also reported to ERMC and subsequently to the RMC for approval.
- An important goal of interest rate risk management is to maintain the Net Interest Margin within the tolerance limit. Such risk limits are reviewed periodically in line with market development and the Bank's risk appetite. Based on the simulations conducted on the interest rate movement, ERMC will be alerted on any potential loss arising from such movement beyond the established tolerance limits. Deviation from the target is assessed to enable proper controls, and appropriate actions will be taken so as to maintain safety, soundness and profitability of the Bank.
- Middle office function has been established under Market Risk to be responsible for monitoring money market and investment activities to ensure that they are within the established limits. Market Risk function will propose mitigations to adhere to internal limits.
- Early warning indicator was established as Management Action Trigger (MAT). The MAT is a trigger level to warn of a persistently breach limit position.
- Policies have also been established for the classification of investments in accordance to FRS 139 and the setting of exposure limit for bond portfolio.

Asset Liability Management Framework

Asset & liability management (ALM) can be broadly defined as the continual rearrangement of both sides of the Bank's balance sheet in pursuit of maintaining reasonable profitability, minimizing interest rate risk and to providing adequate liquidity.

Recognizing the impossibilities of achieving a perfect match in the ALM, the continual rearrangement process of the ALM position is governed by three (3) categories of policies. First is used to measure ALM performance relating to the measurement of interest rate risk; second is to measure foreign exchange translation risk; and third is to measure liquidity risk.

These policies are then translated into various pre-set limits embedded in the ALM framework.

The ALM process undertakes a number of analysis designed to identify static and dynamic mismatch; sensitivity of net interest income; and market value under limited multiple scenarios.

The result of the analysis is then presented to the ERMC for review of the ALM position. Material breach of pre-set limits and critical adjustments required on ALM approach are then escalated to the Board through RMC for deliberation and approval.

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MANAGEMENT OF LIQUIDITY RISK

Liquidity risk is the risk of loss resulting from the unavailability of sufficient funds to fulfill financial commitments, including customer liquidity needs, as they fall due. Liquidity risk also includes the risk of not being able to liquidate assets in a timely manner. The primary categories of liquidity risk are:

Funding risk :	Represents the risk that the Bank will not be able to fund its day-to-day operations at a reasonable cost.
Concentration risk :	Over exposure to one/single large depositor. Probability of loss arising from heavily lopsided exposure to a particular group of counterparties.

Liquidity risk identification, assessment, monitoring and control are further elaborated in the following processes of liquidity risk management:

- Liquidity gap analysis is carried out to measure liquidity gap, which includes the overall liquidity management analysis and reporting on a macro-level. Cash inflows and outflows are assessed to ensure that the Bank maintains sufficient liquid assets to meet financial obligations when they fall due. Short-term liquidity crunch is met by money market borrowings and disposals of marketable securities.
- Liquidity ratio is also used to assess liquidity risk, where any breaches of limit are evaluated to determine the attributing factors. Mitigations are then recommended via ERMIC.
- To manage liquidity, funding concentration is periodically assessed to monitor the level of reliance to particular funding sources by counterparty. Appropriate counterparty limits for deposit placement have been established to monitor liquidity and concentration risk to ensure diversification of funding structure, which are reviewed annually. Market Risk function proposes and recommends the needed mitigations and alternative actions to adhere to the internal limits of the Bank.

- Risk indicators are observed to ensure that the Bank would be able to meet its short-term obligations and to determine the existence of any adverse deviation or movement for detecting any warning signals. Risk indicators are regularly reviewed to ensure that the indicators remain relevant. Actions are taken to mitigate any deterioration in liquidity ratio, via ERMIC.
- The anticipated funding requirements, sources of funds, Bank's fund-raising capacity, present and anticipated asset quality and present and future earnings capacity are also assessed to monitor liquidity. Any requirements for funding by the operating business units, which have significant impact on the Bank's liquidity, are assessed and monitored.

Liquidity Management Framework

The Bank employs BNM's Liquidity Framework as a foundation to manage and measure its liquidity risk exposure. The Bank also adopts a range of tools to monitor the liquidity risk limit exposure such as New Liquidity Framework (NLF), internal limit, Management Action Triggers (MAT) and stress testing.

Liquidity risk represents the danger of not being able to fulfill payment obligations, whereby the failure to perform is followed by undesirable consequences. An effective liquidity management should further ensure that the Bank maintains sufficient liquidity to withstand a range of stress events, including those that affect secured and unsecured funding.

In managing liquidity risk, the Bank needs to be attentive to liquidity strategy. A general approach on liquidity strategy will be set by the Bank through quantitative and qualitative targets. This strategy addresses the goal of protecting financial strength and to some extent, the ability to withstand stressful events in the marketplace.

The liquidity strategy enunciated specific policies on particular aspects of liquidity management, such as the composition of assets and liabilities, the relative reliance on the use of certain financial instruments, and the liquidity and marketability of assets.

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MANAGEMENT OF OPERATIONAL RISK

Operational Risk focuses on controls to fire-wall the Bank's bottom line. The following controls are stop gaps to limit possible losses and to contain risks at all stages of decision making:

- Loss event and incident cases occurred under the seven (7) Loss Event types of Operational Risk losses are collated and reported. The collected cases are analyzed and reported to the ERM prior to reporting to the RMC.
- Key Risk Indicators (KRIs) were developed to identify and measure operational control weaknesses. Risk Limits were established to monitor actual risk taking against pre-determined limits. If limits are breached, such occurrences are reported to Management for corrective action. The KRIs in the Bank covers all risk taking activities specifically on the critical business functions such as Business Banking, Credit Management, Credit Recovery, Treasury, Legal, Finance and Human Resource. Most of the KRIs is reported monthly and some are reported on quarterly and yearly basis.
- During the 1st half of Year 2010, Operational Risk rolled out Risk Control Self-Assessment (RCSA) and Key Risk Indicators (KRIs) to all critical business functions to assess their level of inherent risks and residual risks. This programme provides a basis to Management to ensure that appropriate controls are in place to monitor risk exposure. Results of the assessment are summarized and reported to ERM and RMC.
- Further refinements were made, where selection and convergence of the most significant inherent risks pertaining to the Bank's core business operations and support services were undertaken during the 2nd half of the year. Operational Risk function has incorporated all inputs from all business functions of the Bank, including input from the Bank's Group Audit and Examination (GAE) for arriving at the final list of inherent risks to be approved by the Bank.

- Throughout the year, Operational Risk function was involved in all newly embarked Information Technology (IT) projects. In addition, on-going mitigations on the existing IT systems were also carried out and recommendations for improvement were communicated to Group Information Technology.
- Business Continuity Management is responsible to plan and coordinate Business Continuity Plan (BCP) Tests and IT Disaster Recovery Plan (DRP) Tests so as to comply with the requirements set by Bank Negara Malaysia (BNM). The testing programmes were carried out to test the Bank's ability to respond to any crisis and to resume its business operations.

CREDIT AND REGULATORY COMPLIANCE

Compliance function focuses on managing credit compliance and regulatory compliance. The scope of credit compliance is to check and ensure that all Letters of Offer issued by operational units are complete and in compliance with the terms and conditions approved prior to the signing by the Bank's Approving Authority.

In addition, loan disbursement requisition is independently checked by Compliance function to ensure the adherence to loan disbursement conditions prior to submission to the Bank's Approving Authority for final approval.

Compliance function also performs the identification and monitoring of regulations and controls for the Bank, i.e. the regulatory requirements which the Bank must comply. These include statutory reporting requirements and mandatory submissions to relevant supervisory bodies such as Bank Negara Malaysia. The scope of work starts from the identification of appropriate regulations and controls for the related business functions of the Bank until full implementation of the reporting and monitoring measures.

Compliance function is also responsible on the Anti-Money Laundering and Counter Financing of Terrorism. Any suspicious transactions are to be reported to the Financial Intelligence Unit (FIU) of Bank Negara Malaysia.