Assessing Credit Risk
Objectives

Discuss the following:
• Inherent Risk
• Quality of Risk Management
• Residual or Composite Risk
• Risk Trend
Inherent Risk

- Define the risk
- Identify sources of risk
- Quantify the level of risk
Define the Risk

- Credit risk is:
  - Risk of default: The risk that a counter party will be unable to perform as agreed.
  - Risk of loss: The risk that as a result of a counter party's inability to perform as agreed, the lender suffers a loss.
    - Accounting losses
    - Economic losses

- Inherent risk is the aggregate credit risk that exists in a bank’s book of business* due to the nature of the bank’s chosen strategy.
  *Includes on balance sheet as well as off balance sheet activities
Define the Risk

Inherent risk is both forward looking and backward looking.

- What are the results of the bank’s prior decisions?
  - Past dues
  - Charge offs
  - Non-performing
  - Portfolio mix

- What are the expected results of the bank’s future direction?
  - Pipeline
  - New loans
  - Budget and strategy
  - New products
Identify Sources of Risk

- Factors to consider
  - Business activities
  - Strategic factors
  - External factors

- Sources of Information
Business Activities

- Portfolio and product mix
- New products and delivery channels
- Third party originations
- Target market – quality of borrowers
Strategic Factors

- The impact of strategic factors including the following:
  - Target market – geographic
  - Acquisitions
  - Concentrations
  - Securitizations

- The maintenance of an appropriate balance between risk and reward.
External Factors

- Economic
- Industry
- Competitive and market conditions
- Legislative and regulatory changes
- Technological advancement
Sources of Information

- Internal management reports
  - Portfolio analysis
  - Delinquency analysis
  - Yield analysis
- Strategic plan
- Policies and procedures
- Discussions with management
Quantify the Level of Risk

- Factors to consider
  - Portfolio composition
  - Credit quality factors
  - Underwriting factors
- Sources of information
- Metrics
Portfolio Composition

- Different types of loans have different levels of risk
  - Commercial real estate
  - Commercial and industrial
  - Single family home mortgages
  - Automobile
  - Government guaranteed or sovereign debt

- The composition of a bank’s portfolio defines the quantity of risk in the portfolio

- It is also important to consider the impact of growth
Credit Quality Factors

- The levels and trends of delinquencies, nonperforming and problem assets, losses, weighted average risk ratings, and reserves.
- Trends in the growth and volume of lending and fee-based credit activities, including off-balance-sheet, investment, payment, settlement, and clearing activities.
Credit Quality Factors

- Trends in the financial performance of borrowers and counterparties.
- Trends identified in loan pricing methods, portfolio analytics, loss forecasting, and stress testing methods.
- Trends in summary ratings assigned by the bank’s loan review and audit.
Underwriting Factors

- Changes in underwriting standards including credit score, leverage, policies, price, tenor, collateral, guarantor support, covenants, and structure.
- The borrower’s ability to service debt based on current and projected debt service coverage, debt/income ratios, and credit history.
- The volume and extent of exceptions and overrides.
Sources Of Information

- Policies and procedures
- Management reports
  - Past due reports
  - New Loan reports
  - Pipeline reports
  - Problem loan reports
- Committee minutes
- Discussions with management
Metrics to Look At

- Dollars at risk
- % investment grade vs. non-investment grade
- Non-performing ratio
- Weighted average risk grade of the portfolio
- Expected loss
- Historical losses
- Volume of exceptions
Quantity of Credit Risk - Low

- Current or prospective exposure to loss of earnings or capital is minimal.
- Credit exposures reflect conservative structure or marketing initiatives.
- The volume of exceptions or overrides to sound underwriting standards poses minimal risk.
Quantity of Credit Risk – Low (cont.)

- Exposures represent a well-diversified distribution by investment grade (or equivalently strong nonrated borrowers) and borrower leverage.
- Borrowers operate in stable markets and industries.
- Risk of loss from concentrations is minimal.
Quantity of Credit Risk – Low (cont.)

- Limited sensitivity exists due to deteriorating economic, industry, competitive, regulatory, and technological factors.
- The bank’s compensation is adequate to justify the risk being assumed.
- Portfolio growth presents no concerns.
Quantity of Credit Risk – Low (cont.)

- The volume of troubled credits is low relative to capital and can be resolved in the normal course of business.
- Credit-related losses do not meaningfully impact current reserves and result in modest provisions relative to earnings.
Quantity of Credit Risk - Moderate

- Current or prospective exposure to loss of earnings or capital does not materially impact financial condition.
- Credit exposures reflect acceptable underwriting or marketing initiatives.
- Exceptions or overrides to sound underwriting standards may exist, but do not pose substantive risk.
Quantity of Credit Risk – Moderate (cont.)

- Exposures may include noninvestment grade (or equivalently strong nonrated borrowers) or leveraged borrowers, but borrowers typically operate in less volatile markets and industries.
- Exposure does not reflect significant concentrations.
- Vulnerability may exist due to deteriorating economic, industry, competitive, regulatory, and technological factors.
Quantity of Credit Risk – Moderate (cont.)

- The bank’s compensation is adequate to justify the risk being assumed.
- While advanced portfolio growth may exist within specific products or sectors, it is in accordance with a reasonable plan.
- The volume of troubled credits does not pose undue risk relative to capital and can be resolved within realistic time frames.
- Credit-related losses do not seriously deplete current reserves or necessitate large provisions relative to earnings.
Quantity of Credit Risk - High

- Current or prospective exposure to loss of earnings or capital is material.
- Credit exposures reflect aggressive underwriting or marketing initiatives.
- A large volume of substantive exceptions or overrides to sound underwriting standards exists.
Quantity of Credit Risk – High (cont.)

- Exposures are skewed toward non-investment grade (or equivalent non-rated borrowers) or highly leveraged borrowers, or borrowers operating in volatile markets and industries.
- Exposure reflects significant concentrations.
- Significant vulnerability exists due to deteriorating economic, industry, competitive, regulatory, and technological factors.
Quantity of Credit Risk – High (cont.)

- The bank’s return does not justify the risk being taken.
- Portfolio growth, including products or sectors within the portfolio, is aggressive.
- The volume of troubled credits may be large relative to capital and may require an extended time to resolve.
- Credit-related losses may seriously deplete current reserves or necessitate large provisions relative to earnings.
Quality of Risk Management

- Board and Senior Management Oversight
- Policies, Procedures, and Limits
- Measuring, Monitoring, and MIS
- Internal Controls and Independent Verification
Board and Senior Management Oversight

- Hire appropriate senior management
- Establish the bank’s tolerance for risk
- Determine the bank’s strategic plans
- Budgeting
- Establish the bank’s compensation plans
- Attract good business to the bank
- Approve policies and procedures
Policies, Procedures, and Limits

- The credit policy should be consistent with the bank’s overall strategic direction and tolerance limits.
- The credit culture should be appropriately balanced between credit quality and marketing.
- The structure of the credit operation should be effective and responsibility and accountability should be assigned at every level.
- The definitions that guide policy, underwriting, and documentation exceptions and the guidelines for approving policy exceptions should be reasonable.
Policies, Procedures, and Limits

- Policies that establish risk limits or positions should be appropriate and periodically reevaluated.
- The credit policy must be approved by the board of directors or an appropriate committee of the board.
- There must be an effective means of communicating the bank’s policies, procedures, and limits to the appropriate personnel.
Measuring, Monitoring, and MIS

- Portfolio management and the ability to identify, measure, and monitor risks relating to credit structures and concentrations should be adequate.
- Portfolio stress testing, rescoring, and behavioral scoring practices should be appropriate.
- Credit analysis and covenant monitoring, should be performed regularly and adequately.
Measuring, Monitoring, and MIS (cont.)

- Internal risk rating processes should be accurate, timely, and well documented.
- Front- and back-office systems should be able to support current and projected credit operations.
- Management reports should be timely, accurate, and useful
Data Integrity
- The bank’s data is an asset and should be treated as such
- There should be processes in place to ensure, protect, and validate the bank’s data integrity
- The data the bank collects and stores should be appropriate given the current and expected uses of the data
- Remember: garbage in - garbage out
Internal Controls and Independent Verification

- Loan Grantors
- Credit Administration
- Accounting
- Collections
- Personnel
- Internal audit
- Internal loan review
Loan Grantors

- Approval system → signature vs. committee
- Loan grantors should not have update access to the loan or accounting systems
- Loan grantors should not be allowed to process payments, book loans, disburse loan proceeds, or release collateral
- Loan grantors should own the risks of the credits they grant which means that they should be involved in the credit from initial underwriting through to final disposition.
Credit Administration

- Loan processing and verification
  - Exception identification and tracking
  - Loan documentation
  - Collateral
    - Perfection
    - Insurance
- Policy maintenance
- Limit monitoring
Accounting

- Evaluating and maintaining the allowance for loan and lease losses.
- Compliance with regulatory and accounting guidelines.
- Segregation of duties among loan granting, loan processing, and loan funding functions.
- Segregation of duties between payment processing and loan granting functions.
- Loan and general ledger system security.
The strategy the bank employs to collect problem loans should be appropriate for the size and complexity of the organization:
- Small banks → loan officers collect
- Large banks → centralized collections department

Timely involvement of specialists is critical:
- Bankruptcy specialists
- Attorneys
- Workout specialists
- Credit counselors
In assessing the adequacy of personnel we review the following:

- The depth of technical and managerial expertise.
- The appropriateness of performance management and compensation programs.
- The appropriateness of management’s response to deficiencies identified in policies, processes, personnel and control systems.
- The level of turnover of critical staff.
Personnel (Cont.)

- The adequacy of training.
- The ability of managers to implement new products, services, and systems in response to changing business, economic, or competitive conditions.
- The understanding of and adherence to the bank’s strategic direction and risk tolerance as defined by senior management and the board.
The difference between internal audit and loan review is that loan review has an asset quality focus and internal audit does not.

Internal audit’s focus is primarily on credit administration and accounting processes.

Issues to consider include the following:
- The independence of the function
- The frequency and scope of their work
- The qualification of the auditors to evaluate the effectiveness of the bank’s processes
Loan Review

- Loan review’s focus should be on credit quality
- One of the most important functions of an effective loan review program is the validation of the accuracy of the loan grading system
- Issues to consider when evaluating loan review include the following:
  - The independence of the function
  - The frequency and scope of their work
  - The qualification of the auditors to evaluate the effectiveness of the bank’s processes
Quality of Credit Risk Management - Strong

- The credit policy function comprehensively defines risk tolerance, responsibilities, and accountabilities.
- All aspects of credit policies are effectively communicated.
- The credit culture, including compensation, strikes an appropriate balance between marketing and credit considerations.
- The credit granting process is extensively defined, well understood and adhered to consistently.
Quality of Credit Risk Management – Strong (cont.)

- Credit analysis is thorough and timely.
- Risk measurement and monitoring systems are comprehensive and allow management to proactively implement appropriate actions in response to changes in asset quality and market conditions.
- Information processes (manual and/or automated) are fully appropriate for the volume and complexity of activity.
Quality of Credit Risk Management – Strong (cont.)

- Any weaknesses are minor, with potential for nominal impact to earnings or capital.
- MIS produced by these information processes are accurate, timely, and complete, providing relevant information necessary for sound management decisions.
- Credit administration is effective.
Quality of Credit Risk Management – Strong (cont.)

- Management identifies and actively manages portfolio risk, including the risk relating to credit structure and concentrations.
- The ALLL method is well-defined, objective and clearly supports adequacy of current reserve levels. Personnel possess extensive technical and managerial expertise.
- Internal control is comprehensive and effective.
- The stature, quality, and independence of internal loan review and audit support highly effective control systems.
Quality of Credit Risk Management - Acceptable

- The credit policy function satisfactorily defines risk tolerance, responsibilities, and accountabilities.
- Key aspects of credit policies are effectively communicated.
- The credit culture, including compensation, appropriately balances marketing and credit considerations.
- The credit granting process is well-defined and understood.
- Credit analysis is adequate.
Quality of Credit Risk Management – Acceptable (cont.)

- Risk measurement and monitoring systems permit management to capably respond to changes in asset quality or market conditions. Information processes (manual and/or automated) are adequate for the volume and complexity of activity.
- MIS produced by these processes contain weaknesses in accuracy, timeliness, completeness, or relevance.
Quality of Credit Risk Management – Acceptable (cont.)

- Weaknesses in information processes (including resulting MIS) are not so significant that they lead management to decisions that materially impact earnings or capital.
- Internal grading and reporting accurately stratifies portfolio quality.
- Credit administration is adequate.
- Management identifies and monitors portfolio risk, including the risk relating to credit structure.
Quality of Credit Risk Management – Acceptable (cont.)

- Management’s attention to credit risk diversification is adequate.
- The ALLL method is satisfactory and results in sufficient coverage of inherent credit losses.
- Personnel possess requisite technical and managerial expertise.
- Key internal control is in place and effective.
- The stature, quality, and independence of internal loan review and audit are appropriate.
Quality of Credit Risk Management - Weak

- The credit policy function may not effectively define risk tolerance, responsibilities, and accountabilities.
- Credit policies are not effectively communicated.
- The credit culture, including compensation, overemphasizes marketing relative to credit considerations.
- The credit granting process is not well-defined or not well understood.
Quality of Credit Risk Management – Weak (cont.)

- Credit analysis is insufficient relative to the risk.
- Risk measurement and monitoring systems may not permit management to implement timely and appropriate actions in response to changes in asset quality or market conditions.
- Information processes (manual and/or automated) are inappropriate for the volume and complexity of activity.
Quality of Credit Risk Management – Weak (cont.)

- MIS produced by these processes are inaccurate, untimely, incomplete, or insufficient to make sound management decisions.
- Weaknesses in information processes (including resulting MIS) can lead management to decisions that materially impact earnings or capital.
- Internal grading and reporting of credit exposure does not accurately stratify the portfolio’s quality. Credit administration is ineffective.
Quality of Credit Risk Management – Weak (cont.)

- Management is unable to identify and monitor portfolio risk, including the risk relating to credit structure.
- Management’s attention to credit risk diversification is inadequate.
- The ALLL method is flawed and may result in insufficient coverage of inherent credit losses.
- Personnel lack requisite technical and managerial expertise.
Quality of Credit Risk Management – Weak (cont.)

- Key internal control may be absent or ineffective.
- The stature, quality, or independence of internal loan review and/or audit is lacking.
Residual Risk

- Residual risk the degree to which the quality of risk management mitigates the level of inherent risk
- This judgment is based on the level of supervisory concern, which is a summary judgment incorporating the assessments of the quantity of risk and the quality of risk management (examiners weigh the relative importance of each).
- Residual risk is characterized as high, moderate, or low.
Risk Trend

- The probable change in the bank’s risk profile over the next 12 months. Each risk is characterized as decreasing, stable, or increasing.
- The direction of risk often influences the supervisory strategy, including how much validation is needed.
Risk Assessment: Develop Hypothesis

- High Quantity
  - Weak RM Process
  - High Exposure
  - Strong RM Process

- Low Quantity
  - Weak RM Process
  - Low Exposure
  - Strong RM Process
Questions?