

# Financial Risk Management

Workshop arranged by Business Solutions

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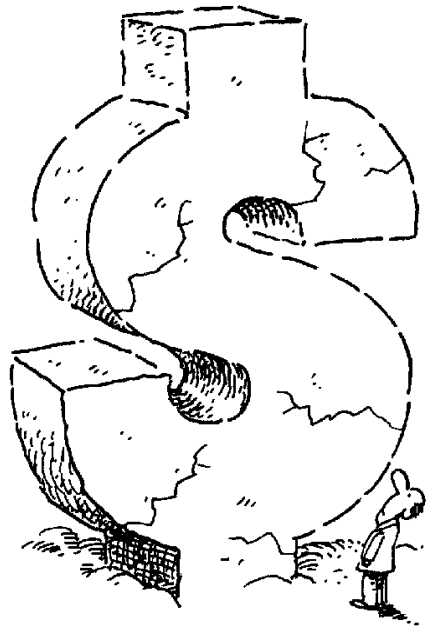
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# What is Credit Risk?



# Defining Credit Risk

**Credit risk is most simply defined as the potential that a bank borrower will fail to meet its obligations in accordance with agreed terms.**

*Source: (Bank for International Settlement)*

# Establishing an Appropriate Credit Risk Environment

## Establishing an Appropriate Credit Risk Environment



# Establishing an Appropriate Credit Risk Environment

- The strategy should include a statement of the bank's willingness to grant credit based on type, economic sector, geographical location, currency, maturity and anticipated profitability.
- Strategy may also include financial goals of credit quality, earnings and growth.

# Establishing an Appropriate Credit Risk Environment

- What should the bank's board of directors do with the credit risk strategy?



# Establishing an Appropriate Credit Risk Environment

- Review financial results of the bank to see if changes need to be made to the strategy.
- Ensure strategy is communicated throughout the bank.
- Review for compliance with strategy.



# Establishing an Appropriate Credit Risk Environment

What about Senior Management?

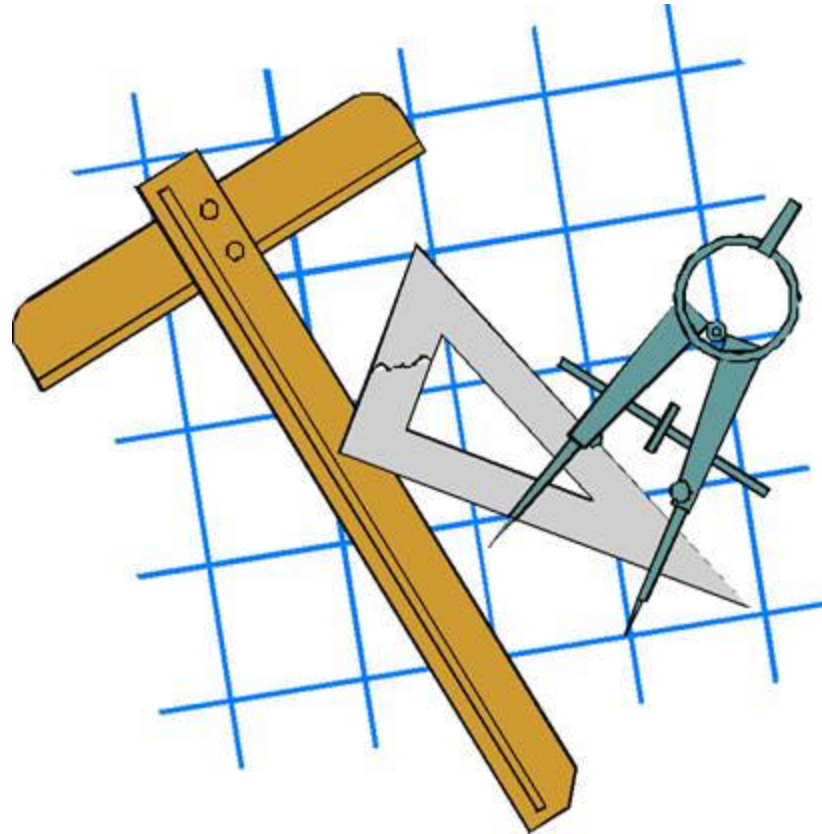


# Establishing an Appropriate Credit Risk Environment

- Senior management should have responsibility for implementing the credit risk strategy approved by the bank's board of directors.

# Establishing an Appropriate Credit Risk Environment

- Identifying
- Measuring
- Monitoring
- Controlling



# Establishing an Appropriate Credit Risk Environment

- Management's responsibilities include ensuring that:
  - ✓ the bank's credit-granting activities conform to the established criteria
  - ✓ written procedures are developed and implemented
  - ✓ loan approval and review responsibilities are clearly and properly assigned

# Establishing an Appropriate Credit Risk Environment

- Design of a written loan policy



# Establishing an Appropriate Credit Risk Environment

Credit policies should address:

- target markets
- portfolio mix
- price and non-price terms
- structure of limits
- approval authorities
- exception reporting

# Establishing an Appropriate Credit Risk Environment

- Banks should identify and manage credit risk in all products and ensure the risks of new products to them are subject to adequate procedures and controls before being introduced and approved by the board of directors.



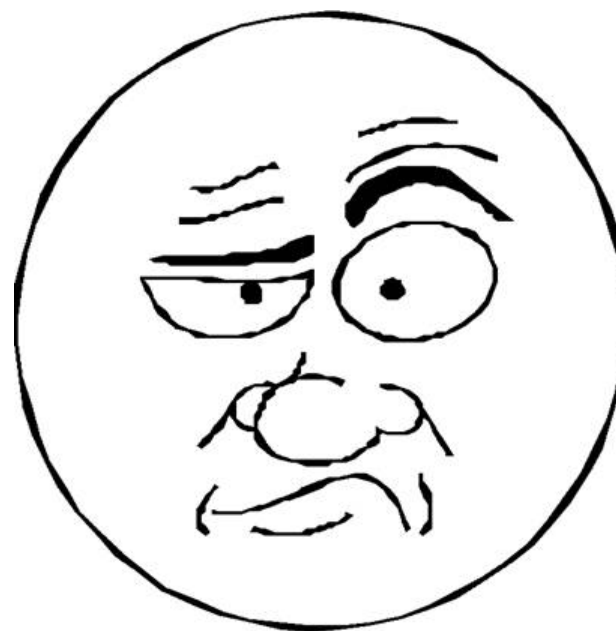
# Operating Under a Sound Credit Granting Process



# Operating Under a Sound Credit Granting Process

## ➤ Operating Under a Sound Credit Granting Process

Bank should have a well-defined credit granting criteria that sets forth who is eligible for credit and how much, type available and terms.



# Operating Under a Sound Credit Granting Process

- Factors to be considered and documented in approving credits include:
  - ✓ the purpose of the credit and source of repayment
  - ✓ the current risk profile of the borrower and its sensitivity to economic and market developments
  - ✓ Repayment history and current capacity to repay
  - ✓ the proposed terms and conditions of the credit, including any covenants
  - ✓ for commercial credits, the borrower's business expertise and status of economic sector and position within that sector
  - ✓ where applicable, the adequacy and enforceability of collateral or guarantees

# Operating Under a Sound Credit Granting Process

- Bank's should establish credit limits on single borrowers and groups of connected borrowers.
- ✓ Limits should be established for particular industries or economic sectors, geographic regions and specific products.
- ✓ Banks should monitor actual exposures against established limits
- ✓ Limits should not be binding and not driven by customer demand.

# Operating Under a Sound Credit Granting Process

- Steps in the credit-granting process may include:
  - ✓ Business origination function
  - ✓ Credit analysis function
  - ✓ Credit approval function
- For process to work, all areas must work together
  - ✓ Approvals should be made in accordance with bank's guidelines and approved by the appropriate level of management

# Operating Under a Sound Credit Granting Process

- Credits should be made on an arm's length basis.
- Loans to related individual or companies must be monitored to mitigate risks of connected lending



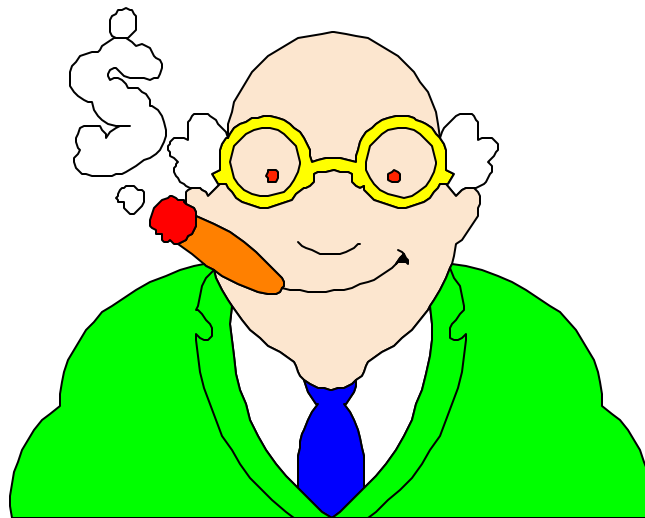
# Operating Under a Sound Credit Granting Process

- Critical that extensions of credit be made on established policies
- Directors, senior management and other influential parties should not seek to override established credit granting processes
- Extensions of credit should be subject to approval by board of directors



# **Maintaining an Appropriate Credit Administration, Measurement and Monitoring Process**

# Establish appropriate Credit administration and Monitoring system



What is credit  
administration?

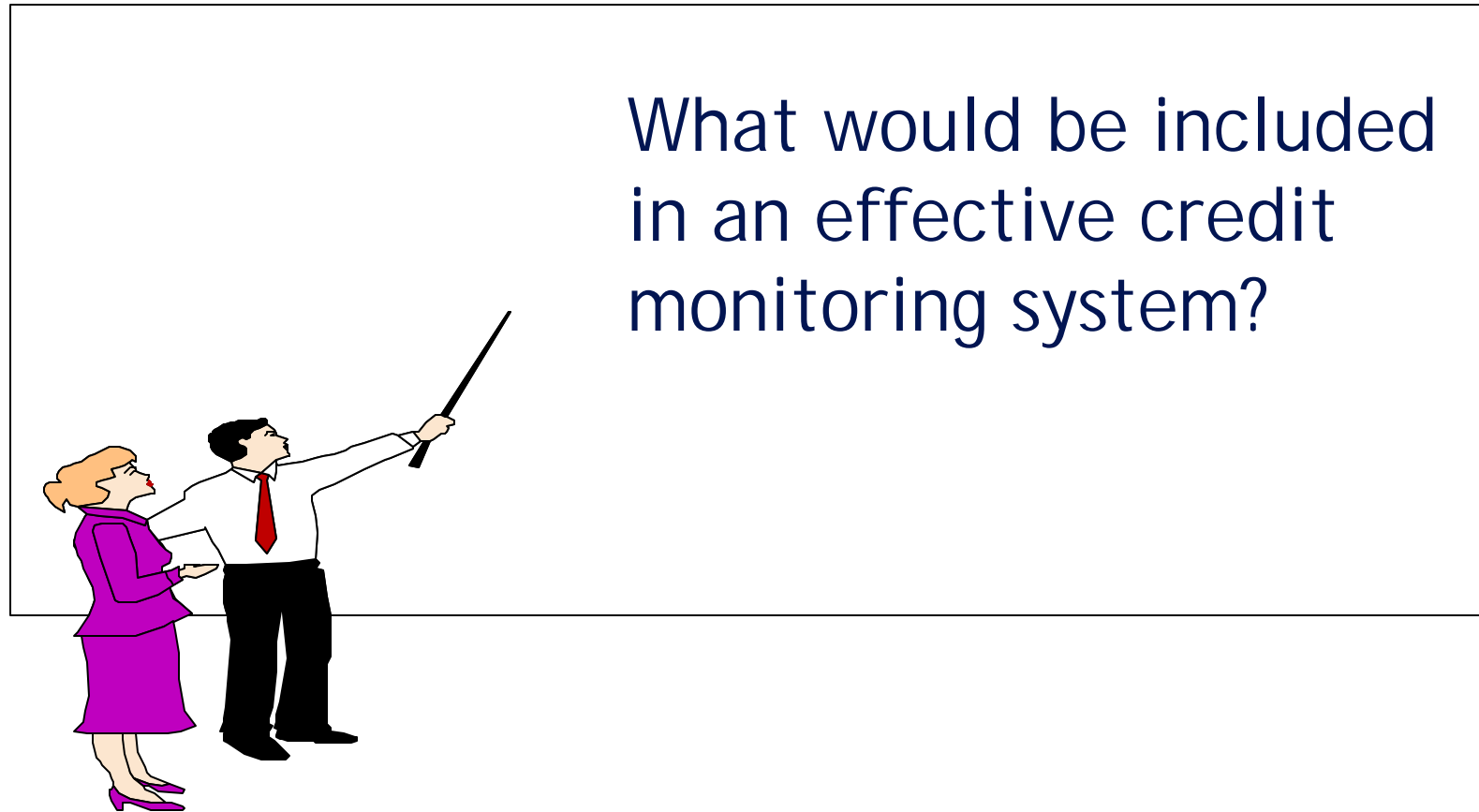


# Establish appropriate Credit administration and Monitoring system

## ➤ Banks should ensure:

- ✓ Efficiency and effectiveness in monitoring documentation, contractual requirements, legal covenants, collateral etc.
- ✓ Accuracy and timeliness of information provided to management information systems.
- ✓ Adequacy of controls of “back office” procedures.
- ✓ Compliance with laws and internal policies.
- ✓ Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves.

# Establish appropriate Credit administration and Monitoring system



## Establish appropriate Credit administration and Monitoring system

- Understanding of borrower's current financial Condition
- Compliance with loan covenants
- Use of approved credit lines
- Projected cash flow meet debt servicing requirement
- Adequate collateral coverage
- Identification of problem credits

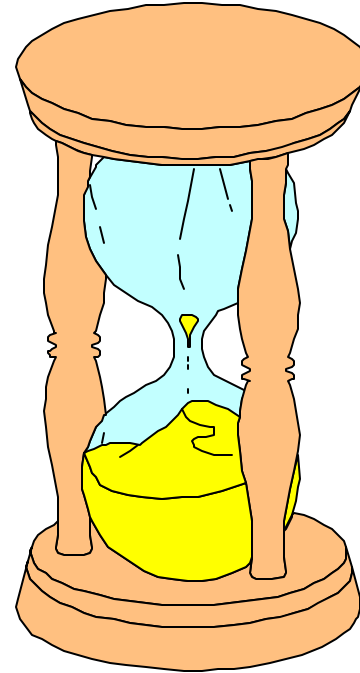
# Establish appropriate Credit administration and Monitoring system

- Banks should develop and utilize internal risk rating systems in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities.
- Internal risk ratings should be responsive to indicators of potential deterioration in credit risk.



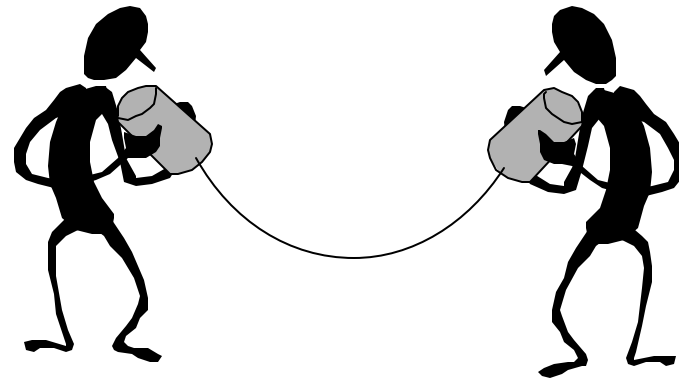
# Establish appropriate Credit administration and Monitoring system

- Frequency of credit reviews
  - ✓ At credit inception
  - ✓ During life of credit



# Establish appropriate Credit administration and Monitoring system

➤ What type of information should be in an effective management information system?



- ✓ Total loans and commitments
- ✓ Newly granted loans, renewals, and restructurings
- ✓ Delinquent and nonaccrual loans
- ✓ Adversely rated credits
- ✓ Loans in excess of credit limits
- ✓ Loans in noncompliance with policy
- ✓ Credit exposure by type, geography, collateral

## Establish appropriate Credit administration and Monitoring system

- Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolio, and should assess their credit risk exposures under stressful conditions.

# Establish appropriate Credit administration and Monitoring system

## Stress Testing

- Economic or industry changes
- Market-risk events
- Liquidity conditions







# Ensuring Adequate Controls over Credit Risk

# Ensuring Adequate Controls over Credit Risk

- Banks should establish a system of independent, ongoing credit review and the results of such reviews should be communicated directly to the board of directors and senior management.
- Should provide information to evaluate the performance of account officers and the condition of the credit portfolio.



# Ensuring Adequate Controls over Credit Risk

## ➤ Internal Credit Reviews:

- ✓ Evaluate overall credit administration process
- ✓ Determine accuracy of risk ratings
- ✓ Judge whether account officer is properly monitoring credits
- ✓ Maintain the bank's credit risk exposure within parameters set by the board of directors
- ✓ Ensure management attention for credits exceeding predetermined levels
- ✓ Perform internal audits on a periodic basis



# Credit Derivative

# Credit Derivative

- In finance, a credit derivative is a derivative whose value derives from the credit risk on an underlying bond, loan or other financial asset
- Credit derivatives are bilateral contracts between a buyer and seller under which the seller sells protection against the credit risk of the reference entity

# Credit Derivative

- Credit default products are the most commonly traded credit derivative product e.g. Credit Default Swap, Collateralized Debt Obligation
- Credit derivatives market is a global one, London has a market share of about 40%, with the rest of Europe having about 10%
- Market participants are banks, hedge funds, insurance companies, pension funds, and other corporates

# Credit Derivative

## *Types of Credit Derivative*

- Credit derivatives are fundamentally divided into two categories
- UNFUNDED CREDIT DERIVATIVE: Where credit protection is bought and sold between bilateral counterparties this is known as an unfunded credit derivative
- FUNDED CREDIT DERIVATIVE: If the credit derivative is entered into by a financial institution or a special purpose vehicle (SPV) and payments under the credit derivative are funded using securitization techniques, such that a debt obligation is issued by the financial institution or SPV to support these obligations, this is known as a funded credit derivative.

# Credit Derivative

## *Types of Credit Derivative*

### Unfunded Credit Derivative

**Unfunded credit derivative** is a bilateral contract between two counterparties, where each party is responsible for making its payments under the contract (i.e. payments of premiums and any cash or physical settlement amount) itself without recourse to other assets

### Funded Credit Derivative

A funded credit derivative involves the protection seller (the party that assumes the credit risk) making an initial payment that is used to settle any potential credit events. The advantage of this to the protection buyer is that it is not exposed to the credit risk of the protection seller