CBJ CREDIT COURSE FOR EXAMINERS

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CBJ CREDIT COURSE FOR EXAMINERS

JORDAN ECONOMIC DEVELOPMENT PROGRAM (SABEQ)

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BEARINGPOINT, INC.

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TASK NO. 1.4.1.11.2.1 WORKSHOP FOR CBJ EXAMINERS IN BASIC CRDIT ANALYSIS SKILLS

CBJ CREDIT COURSE FOR EXAMINERS

Credit Management and Risk Analysis

Delivered to Examiners at the Central Bank of Jordan

June 2008

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Credit Management and Risk Analysis

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Kevin O'Brien - is a Manager in the Emerging Markets practice of BearingPoint with deep experience in trade financing, commercial banking and financial consulting. He holds an Undergraduate Degree in Business from the State University of New York; a Masters in Business from American University in Washington DC; and a Jurist Doctorate from George Mason University School of Law in Virginia where he served as Adjunct Professor. Mr. O'Brien is a member of the Virginia and District of Columbia Bar Associations. As a banker, Mr. O'Brien was responsible for $500 million in retail and SME loans and managed the transformation of SME lending to an automated process that included implementation of credit scoring.

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Credit Management and Risk Analysis

Overview

Objective – introduction to:
- Credit Risk Challenges
- Planning and Credit Policy
- Credit and Financial Analysis (Focus)
- Loan Administration

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Credit Management and Risk Analysis

Learning Objectives (continued)

- Credit Monitoring
- Loan Review
- Asset Allocation
- Management of Problem Credits

Training materials – all topics (copy left with Banks Supervision Department)

Time is limited – we will focus on a few topics

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Credit Management and Risk Analysis

Module 1: Credit Risk Challenges

One main challenge is credit risks - risk of default by obligor or another counterparty.

Counterparty:

- Broadly defined is any person or entity responsible for performance.
- Can be a co-borrower, guarantor or issuer of a letter of credit.

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Credit Management and Risk Analysis

Credit Risk Challenges (cont)

Credit risk is the largest risk faced by commercial banks since loans and other debt instruments constitute the bulk of their assets.

Several methods to manage counterparty risk:

- Collateralization
- Monitoring and Setting Credit Limits
- Credit Scoring (handout)
- Internal Ratings
- Setting of higher interest rates to cover expected losses
- Participation (2 meanings)

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Credit Management and Risk Analysis

Credit Risk Challenges (cont)

- Collateral – tangible, intangible property

- Monitoring and Setting Credit Limits –

Borrower Limits – "USE OF PROCEEDS, SOURCE OF REPAYENT"
Next – "Exposure". The kind of exposure that a bank can take depends on:
- Financial strength of the client,
- Information obtained from client or other sources,
- Number of years client has successfully run his/her business,
- Reputation of the client, and
- Business plan or blueprint for the business.

- Credit Scoring
- Internal Ratings
- Setting of higher interest rates to cover expected losses
- Participation (2 meanings)

- Participation in the affairs of mortgage borrowers who fall into arrears (UK)
- Banks sell off pieces of performing loans; reduce exposure, ↑ ROA:

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Credit Management and Risk Analysis

Credit Risk Challenges (cont)

Other Risk Challenges:

- Liquidity Risk
- Market Risk
- Operational Risk
- Legal/Documentation Risk
- Business Risk

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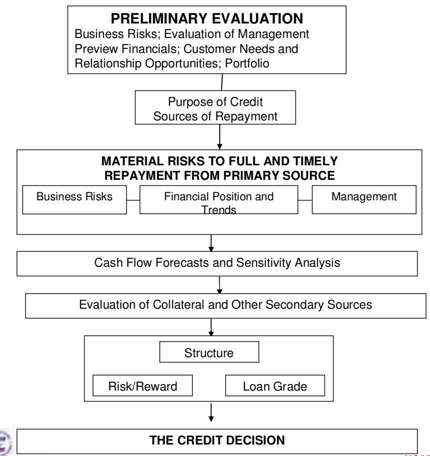

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Credit Management and Risk Analysis

Module 2: Planning and Credit Policy

The advantages of Planning - covered in materials.

We will focus briefly on Credit Policy

- Credit Culture often drives the Policy:

- Immediate Performance Driven
- Market Share/Production Driven
- Values Driven
- Unfocused (Current Priority Driven)

- Written loan policy:

- Is a definite guide approved from the senior management,
- Assists management in adopting credit standards,
- Ident fies the needs of the bank,
- Reflects the current thinking,
- Helps the bank's lending approach to fit the marketplace and competition,
- Meets regulatory requirements, and
- Creates a framework for lending.

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Credit Management and Risk Analysis

Planning and Credit Policy (cont)

- **Signs That a Loan Policy Needs Revision:**

- Doubt that the policy is current.
- No revision or authorization for a year or longer.
- Multiple versions are in circulation.
- Table of contents is not accurate.
- Policy is disorganized or contains addendums from years past that have never been incorporated into the text.
- Policy contains misspellings, typos, and grammatical errors.
- Retired or discharged officers and directors are listed, or new ones are not listed.
- Designated trade territory includes areas no longer served, or new areas are omitted.
- Discontinued products are included, or new products are not addressed.
- New regulations are not addressed.

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Credit Management and Risk Analysis

Planning and Credit Policy (cont)

- **Some specific areas that a credit policy may address include:**

- Management of the credit process
- Administration of credit policy
- Portfolio management
- Credit authority
- Restricted credits
- Credit administration
- Reserve classifications

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Credit Management and Risk Analysis

Planning and Credit Policy (cont)

- Other Policy Areas
- Lending Standarrds
- Credit Procedures
- Training

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Credit Management and Risk Analysis

Module 3: Credit Analysis and Financial Analysis

We will focus on this Module

- Sound credit analysis and good credit decisions are fundamental requirements of lending
- Generally involves drawing conclusions from analysis of financial statements
- Detailed analysis for larger corporate loans
- Less detailed analysis for consumer, micro and SME loans; tools allow faster/more efficient analysis (scoring)

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Process:

- Format/spreadsheet to organize financial data - make analysis easier (see handout),
- Standard analysis of key financial ratios and trends,
- Base loan directly to actual, identified business needs and cash flow projections; stated differently - L NK USE OF LOAN PROCEEDS WITH SOURCE OF REPAYMENT, and
- Structure credit facilities to protect the bank against key business, management and financial risks, and match the likely cash inflows and outflows.

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Credit Management and Risk Analysis

Recommended Steps for Conducting Ratio & Cash Flow Trend Analysis

1 Collect and verify data.

2 Spread profit and loss and balance sheet data.

3 Reconcile net worth and fixed assets.

4 Check whether ending balances are consistent with balance sheet

5 Check gross capital expenditures against fixed assets.

6 Reconcile

7 Calculate ratios.

8 Complete cash flows

If the above steps are followed, they will help to:

- Eliminate excessive, unquantified risks to the lending bank
- Estab ish credit requirements based on actual cash flow
- Enable banks to fully evaluate and understand their customers' creditworthiness
- Enable banks to structure credit requirements based on accurate risk assessment

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Five key components to analysis:

These are:

- Income statement,
- Balance sheet,
- Net worth and fixed asset reconciliation,
- Key ratios, and
- Cash flow statement.

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Key ratio groupings:

- Profitability – is business sustainable
- Efficiency – use of resources
- Leverage – capital vs. debt
- Liquidity – ability to meet ST obligations

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Income Statement

- Duration
  - period of time, "close out" and start over
  - normally a 1 yr period
  - lenders prefer at least 3 years WHY?
- Gross margin – gross revenue less cost of goods sold compared to sales; management of sold inventory costs and direct labor
- Operating margin – operating income compared to sales; management of non-productive costs and expenses
- Pre-tax and After-tax Income – other income/expense items, extraordinary, non-recurring income/expenses items and their impact. Example – sale of a business; off balance sheet paper profits - Enron
- Identify - Strengths, weaknesses and trends. Avoid "bottom line" analysis

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Income Statement (cont)

- Method of accounting – cash vs accrual; cash business (retailer) vs. one that provides credit to clients (wholesaler)
- Risks

  – Decreasing or flat sales/income; also rapid growth may impact control

  - Competitive business environment – reduce price and "squeeze margins", reduce earnings and cash flow EXAMPLE?
- Peer group analysis – compares performance with industry

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Balance Sheet

- Duration
  - "Snapshot" of business at one moment in time
  - Cumulative no "close out"
  - Again, lenders want 3 years
- Method of accounting – impacts values: inventory, A/R, fixed assets
- Broad approach to understanding
  - Assets & liabilities - how borrower "funds" its assets
  - Support from shareholders (leverage) – gap between assets and liabilities
  - Ability to meet current obligations
  - Trends
- Peer group analysis – compares condition of company and its activity with industry

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Balance Sheet (cont)

- Asset side of Balance Sheet:

  - Matching ST assets with ST liabilities; same with LT assets/liabilities
  - Collateral: Focus on asset values
  - Liquidity of ST assets; operating cycle

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)
Balance Sheet (cont)

- **Liabilities and Net Worth side of Balance Sheet:**

  - Accounts payable is a good sign
  - ST and LT debt: can company repay on time
  - Capital shows amount of owner commitment
  - Amount of capital depends on industry; manufacturer has more capital because of long operating cycle. What about a retailer?

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Ratio Analysis

- Means to an end to greater understanding
- Shows how the balance sheet and income statement intersect

Group	***Ratios***
Liquidity	• Current • Quick
Efficiency	• Receivables turnover • Inventory turnover • Payables turnover • Fixed asset turnover
Profitability	• Interest coverage • Fixed charge coverage • Net profit margin • ROA & ROE
Leverage	• Debt to equity

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Cash Flow Analysis

- **Cash Flow:**

  - First source of repayment
  - Analyze past performance & project future
  - Changes in IS and BS accounts
  - Identifies "sources and uses of cash" for the business
  - Good measure of past management decisions
  - Indicates business direction
- **Sales may grow along with profit, but cash generated from income may not be enough to repay the bank's loan. HOW CAN THIS BE?**

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Decisions affecting cash:

	Cash Inflows From	***Cash Outflows For***
Operating Flows	- Sales - Investment income - Non- financing/investing activities	- Goods & services - Administrative expenses - Suppliers or taxes
Financing Flows	Proceeds from new equity & loans	- Shareholders (2 ways) - Creditors
Investing Flows	Sale of investments & assets	New investments & assets

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Cash Flow (cont)

Questions to ask:

- Can borrower repay the loan within the intended timeframe?
- How has borrower generated cash flow and invested cash flow?
- What are the effects on cash flow with changes in the economy, marketplace, and competitive environment?
- What are the effects on cash flow from management's actions?
- What are the total financing needs after it has serviced its debt, invested in working capital, made capital expenditures, and paid dividends?
- How has the borrower financed its needs in terms of long-term vs. short-term?
- In short - is repayment possible given how the borrower has generated cash and is projected to generate cash? How will he/she finance the difference between what is generated and what must be spent.

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Steps for Cash Flow Projections:

Step 1
Develop realistic cash flow assumptions

Step 2
Project major cash inflows

Step 3
Project major cash outflows

Step 4
Review outcome and determine credit requirements

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Cash Flow (cont)

Cash Flow Drivers

- Primary factors that influence cash flow
- Combination of income statement and balance sheet items
- IS items reflect revenues, profit margins and expenses
- BS items reflect turnover of working assets and liabilities.

Some Examples:

- Gross margin, net margin
- Account receivables in days & Inventory in days
- Accounts payable in days
- Sales growth
- Growth/decrease in fixed assets

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Sensitivity analysis for projecting:

- **Income Statement**
- **Balance Sheet**
- **Cash Flow**

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

- Credit Scoring – Key mechanism and strategy used to evaluate SME risk. Scoring is defined as method to judge credit using a formula based on predictive data*
- Users - credit bureaus, credit providers, vendors
- Originally used - consumer/individual loans
- Now used - credit providers for non-rated corporate borrowing, leasing, other financing

* source: Credit & Management Systems, Inc

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Benefits:

- Speed in the Credit Process
- Accuracy
- Quantifiable
- Fewer Bad Debts
- Favorable Regulatory Treatment

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Methodology:
SME Loan Application:

- Order credit reports and scores on owner/personal guarantors (external scoring)
- Compute a credit score on SME (internal scoring)
- Cutoff point for scores: “clear approvals” / “clear denials”
- Analysts’ valuable time focused in between the two points

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Methodology:
Methodology (continued)
Risk/credit worthiness based on combination of:
1.Traditional Scoring 2.Credit Agency Scoring, & 3.Financial Statements Scoring

1. Traditional (non-financial) – each factor weighted and assigned a score
Factors may include: years in operation, payment history with vendors, trade references, returned checks, litigation, judgments/tax liens, *other from loan files*

2. Credit Agency information – each factor weighted and assigned a score
Factors may include: D&B ratings, Experian days beyond terms, etc.

3. Financial Statement – various ratios are compared to sector & peer group
- Liquidity, Profitability and Leverage - 3 main ones; series of sub-ratios
- Ratios are totaled, averaged and multiplied by each weight element

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Credit Analysis and Fina

Methodology:

Overall Credit

Traditional Sc

X

Credit Agency

X

Financial State

X

Assigned Weig

Credit Management and Risk Analysis

Module 4 - Loan Administration

Credit Decision Process (handout)

Five “C’s” of Credit:

- **Capacity** to repay is the most critical of the five factors. Lenders need to know exactly how a prospective borrower intends to repay the loan.
- **Character** refers to the personal traits of the senior management such as honesty, integrity, the observance of good business ethics and the reputation in the industry and the community.
- **Capital** is the owners’ investment in the company as indicated by the difference between total assets and total liabilities. Capital is a “cushion” against losses and adversity.
- **Conditions** focus on the intended purpose of the loan. Will the money be used for working capital, additional equipment, or inventory?
- **Collateral** or **guarantees** are additional forms of security.

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Credit Management and Risk Analysis

Credit Analysis and Financial Analysis (cont)

Methodology:

Final Score

Highest Quality	1.00 to 1.83
Good Quality	1.84 to 2.66
Average Quality	2.67 to 3.50
Below Average Quality	3.51 to 4.34
Poor Risk	4.35 to 5.17
High Risk	5.18 to 6.00

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Credit Management and Risk Analysis

Loan Administration (cont)

Exercise – break out into 2 or 3 groups

Instructions:

Read the case study below and evaluate the company's profile according to the 5 C's of credit using the following scale:

A: Very Good B: Good C: Normal D: Bad E: Very Bad

Mustafa Construction Co. Ltd was established in 2004 by four young developers. The directors are at the age of 27, 28, 32 and 34. They are constructing 100 villas at 3 different locations. 80 of 100 villas had been sold off the plan, but the initial payment was invested in buying some new properties for the project to be constructed in the future and for some luxurious cars. Now they are having cash flow problems and have applied for a new finance to finish up the projects. The company needs 2 million JD to finish the projects but in return 3 million JD will be transferred into the company's accounts. The experts evaluate the value of investment and properties as 2 million JD and 2.5 million JD respectively.

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Credit Management and Risk Analysis

Loan Administration (cont)

Collateral – Types:

- **Accounts Receivables**
- **Inventory**
- **Equipment**
- **Real Estate**
- **Valuations**
- **Audit Procedures**

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Credit Management and Risk Analysis

Module 5 - Credit Monitoring

- Importance of credit monitoring
- Monitoring systems
- Credit risk management
- Risk grading
- Regular customer calls (key to good credit monitoring)
- Quarterly review of risk grades
- Loan pricing
- Risk adjustment
- Cost and pricing components

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Credit Management and Risk Analysis

Loan Administration (cont)

Loan Structure

Types of Loans:
- Seasonal
- Term
- Bridge
- Permanent Working Capital
- Line of credit

For each type, the lender must identify:
- Loan Purpose
- Risks
- Source of Repayment
- Collateral
- Monitoring Scheme

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Credit Management and Risk Analysis

Module 6 - Loan Review

Loan Review vs. Loan Monitoring

Loan Review is a strategic process, a staff function:
- Accomplished by an **objective third party** (not the loan officer)
- Includes assessment and evaluation of individual loans, loan portfolio components
- Attempts to assess the loan portfolio as a whole
- May make recommendations for achieving corporate strategic objectives through the loan portfolio

Loan Monitoring is a tactical process, a line function:
- Accomplished by **loan officer**
- Tracking of a borrower, watching for loan deterioration, with the emphasis on **loan repayment**

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Credit Management and Risk Analysis

Loan Review (cont)

Content of Loan Review

<u>Five</u> specific issues should be addressed when examining individual credits:

- **Credit Quality**
- **Documentation**
- **Liquidation of Collateral**
- **Pricing and Funds Management Objectives**
- **Compliance With Loan Policy, Laws and Regulations**

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Credit Management and Risk Analysis

Module 7 - Asset Allocation

- **Need for Asset Allocation**
- **Key risk areas in the Portfolio**
- **Asset Allocation guidelines**
- **Portfolio limits**
- **Industry analysis**

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Credit Management and Risk Analysis

Module 8 - Management of Problematic Credits

Problem Loan Management Workshop

Association of Banks

September 24-25, 2007

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Credit Management and Risk Analysis

Management of Problematic Credits (cont)

Strategic Overview:

- **Banks make loans and take risks**
- **Problem loans are part of the business**
- **Effective management is essential**
- **Apply “lessons learned” to credit process**

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Credit Management and Risk Analysis

Management of Problematic Credits (cont)

Strategic Overview (cont):

When problem loans occur, address initial issues:

- Dimensions and costs involved
- Organizational structure
- Resources
- Process for collection strategies
- Measure results

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Credit Management and Risk Analysis

Management of Problematic Credits (cont)

Strategic Overview (cont):

- Dimension – reason for problem loans, how much is at risk
- Organization structure – loans reside with lenders or special department
- Resources - management, staff, training, informational needs (internal and external)
- Process for collection - work flow, roles and monitoring
- Measuring results

Again - apply “lessons learned” to credit process

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Credit Management and Risk Analysis

Management of Problematic Credits (cont)

Strategic Overview (cont):

General steps to resolve problem loans:

- Predict and Identify problem loans
- Analyze reasons for problem loans
- Identify cash flow and break-even tools
- Analyze financial data to solve cash flow problems
- Employ strategies for recovery
- Measure results

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Credit Management and Risk Analysis

Problem Loan Exercise

Recovery Analysis – Yousef and Sons

Instructions:

You are the loan officer at XYZ Bank for Yousef and Sons. The loan payments from the Yousef And Sons' Company have been late for the last several months. You reviewed the files in detail and determined that the documentation file is a mess and you are not sure if the bank has a first lien on the property because you can not locate the recording documents. In addition, the equipment that is also collateral has not been maintained properly and you are concerned about its value. Not only has the company been slow in making their payments but their line of credit is constantly fully extended and rarely paid down during the month.

The loan is currently graded as a 4 and "performing". You have determined that this loan should be classified as a problem loan and graded a 7 or 8. Therefore, you will begin the process of performing a recovery analysis. Your task for this exercise is to write out a plan to begin this analysis. This plan should include:

- What resources will you use to analyze the industry?
- Do you have enough financial information? Should you get more? From where will you get it?
- What steps will you take to assess management quality?
- What should you do to evaluate the collateral?

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Credit Management and Risk Analysis

- Recap of Training
- Thank you!

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Credit Management and Risk Analysis

- Handouts

Sample of financial statements: Balance Sheet, Income Statement, Cash Flow and ratios – spread over 3 yrs

Credit scoring from materials

Credit decision process

Collateral Worksheet

Loan Structure

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Credit Management and Risk Analysis

Module 3 - Credit Analysis: see handout

Financial Analysis Model of Balance Sheet, Income Statement & Cash Flow

Balance Sheet Accounts	***2007***	***2007***
Cash	31	12
Marketable Securities	82	66
Total	**113**	**78**
Difference in Cash & MS year to year	**(35)**	

Cash Flow Statement	***2007***
Operating Activities	(23)
Investment Activities	(15)
Financing Activities	3
Cash Flow Activity	(35)

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