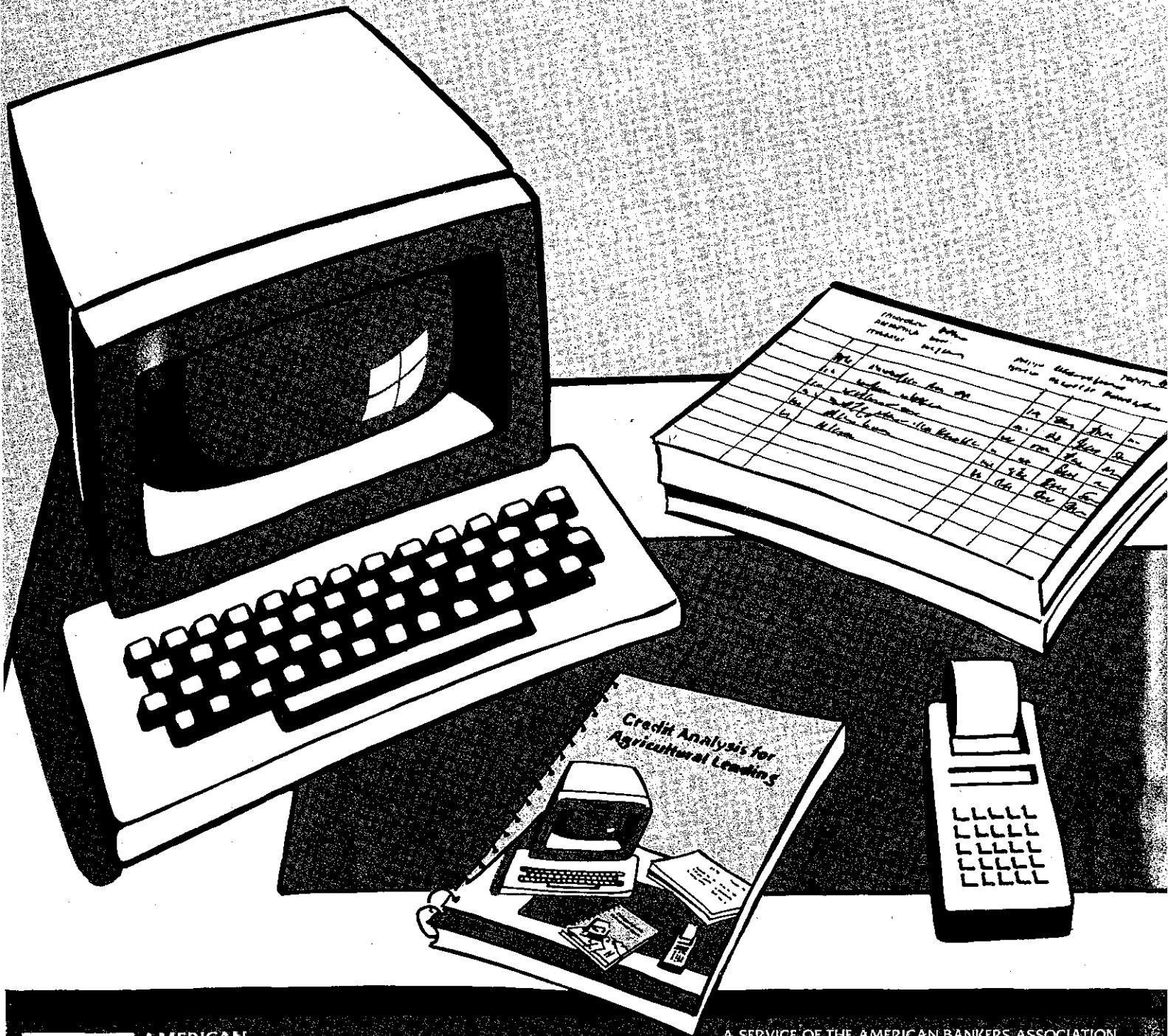


Instructor's Manual

Credit Analysis for Agricultural Lending



AMERICAN BANKERS ASSOCIATION

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Instruction Manual
for
Credit Analysis For
Agricultural Lending

by
Dr. David M. Kohl*
and
Deborah N. Jackson⁺



*Associate Professor of Agricultural Finance,
Virginia Tech, Blacksburg, Virginia

⁺Instructional Consultant and Graduate Student,
Virginia Tech, Blacksburg, Virginia

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INTRODUCTION

Purpose and Structure of this Manual

This instructor's manual will assist you in the use of the Credit Analysis For Agricultural Lending text to teach bank employees the essential principles and concepts to analyze and administer agricultural credit. It is designed to assist you, the instructor, to use your time and the students' time effectively and assist the students in grasping material in the most effective and expedient manner.

Lessons in this manual contain these teaching aids:

- * list of material to be covered
- * overview of the lesson
- * primary objectives of the lesson - standards for each lesson describe the ultimate level of comprehension for the student. What you expect from a particular class depends upon many factors, including previous education, work experience and time allotted to a particular section of instruction.
- * key concepts, terms, phrases students should understand
- * equipment and resources needed

* suggested learning activities including:

1. open ended discussion questions and points to stimulate and facilitate interaction with students.
2. case study assignments that can be used to enhance lectures or used for homework assignments that have a direct relationship to on-the-job activities.
3. guest speaker and resource material suggestions.
4. Subject matter concept quizzes that can be used by the instructor to ascertain students' grasp of important concepts and principles. These quizzes include multiple choice and short answer questions along with exercise problems. Answers to these quizzes as well as case study assignments are given in the back of this workbook. However, the answers are not absolute and only should be used as guidelines.

* Allocation of time - An indication of the amount of time each aspect of a lesson unit might require is included to help you structure classroom time. Time allocations offer general guidelines only. A particular group of students may require more or less time than indicated to master certain lessons.

* Assignments of next class

Perspective of the textbook

Credit Analysis For Agricultural Lending, a handbook designed to provide bank lending officers with a working knowledge of agricultural lending and credit procedures and techniques, is an updated, revised version of the 1975 Agricultural Credit Analysis Handbook. In the ten years since its original issue, agriculture and associated banking sectors have changed substantially; changes in economics, concepts, techniques, and technologies have caused agricultural operators to go about their businesses differently. Today's agricultural operator needs to be able to adapt to change, possess the ability and capability to synthesize large amounts of data, use available technologies, and maintain accurate and thorough operating, financial, and production records.

This book is designed to assist agricultural lending officers, both new personnel and those with experience. It serves both as:

- * A manual that can be used as a training document for new agricultural lending officers;
- * A readily available desk reference for experienced officers to reinforce concepts and practices.

Credit Analysis For Agricultural Lending provides bankers with a compilation of agricultural credit analysis

techniques while also introducing new technologies and concepts that may be of assistance in performing day-to-day risk and credit evaluation. In addition, the handbook is intended to serve as a focal point for banks to use as a standard reference guide when formulating or updating credit policies, procedures and guidelines for agriculture. Concepts and techniques are presented and discussed in detail. Case illustrations addressing quantitative and analytic situations are presented to reinforce the central thrust of chapters focusing on credit analysis.

A word of caution: although this handbook presents the tools, concepts, and techniques of agricultural credit analysis, it is not intended to substitute for, nor replace, practices and procedures used by individual banks. Policies, procedures, practices, documentation, and needs will vary by bank, location, loan type, and customer. Therefore, Credit Analysis For Agricultural Lending presents the framework from which sound credit decisions may be made. The concepts introduced within the text should supplement and complement each bank's specific policies and procedures governing lending practice. Forms, techniques, and evaluation criteria will be unique to each bank. However, the skills and understanding required in performing agricultural credit analysis and sound loan management techniques are universal. It is this baseline of information that is contained within the handbook.

The handbook proceeds from an overview of agricultural lending to specific techniques for credit analysis. The breakdown by chapter is as follows:

Chapter 1, "Perspective on Agriculture and Agricultural Banking" is an overview of agriculture, emphasizing challenges now faced by the industry and the way agricultural banking is expected to evolve through the year 2000. The chapter explores agriculture and its financial health, including such topics as changes in the financial composition of farms, use of financial leverage within farming operation, modifications to accounting practices, and trends in off-farm income. The dynamic nature of agricultural banking is then considered, and externalities affecting decision making within agricultural banking are discussed, along with factors controlled from within a bank such as staffing, use of new technologies, and credit evaluation.

Chapter 2, "Overview of the Credit Process and its Components", describes and briefly summarizes the agricultural credit process. Highlighted within the chapter are major subject areas stressing evaluative techniques discussed in depth in subsequent chapters.

Chapter 3, "Gathering Information and Building the Customer Relationship" introduces the concept of a banker's being

more than an extender of credit by emphasizing the role of a business advisor, marketer, and communicator. Presented are the information needs and obligations of the borrower and banker. Central to the discussion is the theme that a relationship built upon open and honest communication between both parties is essential. The chapter highlights the need to obtain current, accurate, and complete financial, marketing and production information from the borrower as an initial component of the credit cycle.

Chapter 4, "Analyzing the Historical Financial and Operational Aspects of the Borrower" covers the importance of credit and risk evaluation. The key elements of agricultural credit analysis are introduced, and concepts and techniques for performing credit analysis of agricultural borrowers are described in detail. The chapter looks at the three major financial statements as used in conducting a thorough analysis, their individual importance to the process, the quantitative information contained in each, and how the data derived can be used to evaluate risk and credit worthiness. Analyses and guidelines presented for each financial statement are then reinforced with a case illustration used throughout the chapter.

Chapter 5, "Financial Planning and Analysis" points out that a futuristic orientation is important when evaluating credit worthiness and describes how to guide preparation of pro

forma financial statements during decision making. A major portion of the chapter is devoted to the importance and use of budgets, including income, expenses, capital expenditure, and family living, as well as to assisting and guiding development and implementation of goal setting for the borrower. A case illustration is presented throughout the chapter to reinforce concepts and techniques addressed.

Chapter 6, "Credit Structuring and Risk Management" presents the key factors to consider when structuring a loan so as to minimize bank as well as borrower risk. Topics include developing a borrower profile, knowing the loan's purpose, using collateral, and using a loan agreement. The chapter introduces risk management concepts which incorporate the use of financial futures and risk spreading for banks, as well as concepts that borrowers may use to minimize risks associated with production and marketing. The impact that various funding and financing alternatives may have on the credit analysis and loan structuring process is addressed.

Chapter 7, "Portfolio Analysis and Problem Loans" deals with monitoring and supervision of individual loans, as well as of the entire loan portfolio. Topics include classifying loans within the portfolio and developing and implementing a strategy for early identification of problems. The chapter goes on the present concepts designed to assist bankers with borrower counseling, alternatives for problem loan workouts,

and factors to consider during the loan liquidation process.

Chapter 8, "Microcomputers and the Credit Process" begins with an overview of microcomputers and how they may be used in the credit process and points out the complexities of using microcomputers, including: selecting the right hardware configuration, determining software needs, ensuring proper documentation of the system, and recognizing the advantages and disadvantages of microcomputer use. The chapter concludes with a brief description of generic software available of use in the credit analysis process.

CONTENT

This lesson begins the text, Credit Analysis and Agricultural Lending. Students' assignment is to read Chapter 1, "Perspective on Agriculture and Agricultural Banking".

OVERVIEW

"Perspective on Agriculture and Agricultural Banking" is an overview of agriculture, emphasizing the challenges faced by the industry and its ramifications on the future of agricultural banking. The chapter explores the agricultural balance sheet, including asset and liability trends and structure. The farm income statement is analyzed illustrating farm income patterns and influences directly affecting agricultural cash flows. The dynamic nature of agricultural banking is considered, including its importance in financing agricultural and competitive forces. The externalities affecting decision making within agricultural banking are discussed, along with factors controlled from within a bank, such as staffing, new techniques, and credit evaluation.

KEY CONCEPTS, TERMS, AND PHRASES

After studying Chapter 1 and Lesson 1, students will be familiar with:

- * the extent of agricultural debt
- * trends in agricultural assets
- * shifts in composition of assets
- * trends in agricultural debt
- * increased use of agricultural debt
- * changes in leverage ratios
- * the farm income statement
- * cost-price squeeze
- * externalities affecting farm income
- * influence of non-farm income
- * trends in agricultural debt market share
- * changes in farm structure
- * agri-banking for the future
- * competitive forces in the future

PERFORMANCE OBJECTIVES

Following the successful completion of Lesson 1, students will be able to:

- * describe how the balance sheet of agriculture has changed in recent years, including asset trends and composition, and the increased reliance on farm debt;
- * discuss the agricultural income statement and forces that

have directly influenced income trends on both large and small farms, and how the American farmer is adjusting to these changes;

- * provide an overview of the agri-banker's role in financing agriculture and how competition and market share have changed;
- * develop an understanding of the issues and challenges facing the agriculture sector and agriculture banking in the years to come.

EQUIPMENT/RESOURCES

- * Blackboard, flipchart, or overhead
- * Latest information concerning agricultural balance sheet, and income statement, and well as agricultural debt market share (national, state, and local if possible)
- * Background information of farm and lending trends and characteristics

SUGGESTED LEARNING ACTIVITIES

APPROXIMATE TIME REQUIRED

Opening remarks

15 minutes

Inform students of your expectations of the course and why an overview of agriculture and agricultural banking is necessary before specific concepts and techniques can be presented and illustrated.

Lecture and Discussion

120 minutes

Discussion questions interspersed with the lecture on chapter 1 might include:

What are the latest trends concerning the agricultural balance sheet and income statement, state, national, and local.

How are debt-to-asset ratios changing by farm size, enterprise, and location.

The external forces that appear to be influencing agricultural incomes in your market area such as, United States economic policy, domestic and world markets, technology, weather, and non-farm influences.

How are farmers coping with the cost-price squeeze in your area?

The role of agri-bankers in financing agriculture, and how competitive forces are influencing market shares.

The issues and challenges facing agriculture and how it will influence agricultural banking and the ways it will affect the extension and servicing of agricultural credit, i.e. what characteristics will the prototype farm customer and agri-bank and banker have to remain competitive ten years from now.

Lecture

15 minutes

Summarize the entire "Perspective on Agriculture and Agricultural Banking".

Reemphasize:

- * Trends in agricultural assets and debt
- * The agricultural income statement trends and characteristics
- * Influences affecting the agricultural sector
- * Agricultural farm debt market shares and competitive influences
- * Issues and challenges facing agriculture and agricultural banking and important lending parameters

Stop and Ask for Questions

Then

Proceed to discuss Chapters 2 and 3 and Lesson 2, "Overview of the Credit Process and Its Components," and "Gathering Information and Building the Customer Relationship."

SUBJECT MATTER CONTENT QUIZ

The following quiz provides the instructor with an opportunity to evaluate students' understanding of concepts and information presented in Chapter 1. After students answer the questions, check the answers against those at the back of this workbook. If the majority of the students answered any of the questions incorrectly, you should review the topic in the text before going on to the next lesson. If however, answers were generally correct you should move to Lesson 2.

Multiple Choice

1. During the decades of the 1970's farm assets increased in value
 - (a) one and one half times
 - (b) twice
 - (c) three times
 - (d) none of the above

2. In the years from 1950 through the 1970's, the percentage of farm assets shifted to
 - (a) cash generating assets
 - (b) more liquid holdings
 - (c) farm real estate and improvements
 - (d) none of the above

3. The cost-price squeeze in the 1970's and 1980's had a greater impact on
 - (a) smaller and parttime farmers
 - (b) large commercial farmers

4. What factors influence farm sales on the international market
 - (a) Political stability in foreign markets
 - (b) United States economic policy
 - (c) Economic stability within foreign markets
 - (d) Competition from other producing countries
 - (e) All of the above

5. Which period in agriculture realized the most stable net farm income
 - (a) 1970's and 1980's
 - (b) 1950's and 1960's
 - (c) 1930's and 1940's
 - (d) none of the above

6. Which statement would least characterize the farm income statement since 1960?
- (a) Smaller farms have been more profitable than bigger farms
 - (b) More net farm family income with a greater percentage being farm derived
 - (c) Less net family farm income with a smaller percentage being farm derived
 - (d) A greater percentage of net farm family income being derived from off-farm employment
7. Which statement would best characterize the farm financial scene over the decades of the 1960's, 1970's, and early 1980's?
- (a) Farm debt dramatically outpaced the value of farm assets in the 1970's
 - (b) Farm debt as a percent of farm assets remained quite stable in the 1970's
 - (c) Farm debt declined dramatically in the early 1980's
8. Which of the following is not a characteristic of the market share in agricultural credit in recent years?
- (a) Federal Land Bank and FmHA have taken a more aggressive role
 - (b) Commercial bank's market share in non-real estate

- agriculture declined in the 1960's and 1970's
- (c) Production Credit's market share remained stable in the 1970's and early 1980's
 - (d) Farmers Home Administration and the Commodity Credit Corporation are relatively unimportant in the non-real estate market.
9. Which factors were important in the general expansion in agriculture in the 1970's?
- (a) inflation
 - (b) world markets
 - (c) use of debt capital
 - (d) domestic farm policy
 - (e) all of the above
10. Which of the following are going to shape the future of agricultural banking?
- (a) Shift toward fewer farms and either small parttime farmers or large commercial farms
 - (b) Changes in the Farm Credit Systems services and delivery systems
 - (c) More formal credit risk evaluation and a focus on portfolio quality
 - (e) all of the above

LESSON 2

THE COMPONENTS OF THE CREDIT PROCESS INFORMATION GATHERING AND CUSTOMER RELATIONS

CONTENT

This lesson introduces the credit analysis cycle. Students' assignment is to read Chapters 2 and 3, "Overview of the Credit Process and Its Components" and "Gathering Information and Building the Customer Relationship".

OVERVIEW

The components of the credit process, and information gathering and customer relations describes and summarizes the agricultural credit process and introduces the role of the banker as more than an extendor of credit, but as a business advisor, marketer, and communicator. Techniques concerning information gathering and verification for the credit process, methods of analysis and risk evaluation as well as loan administration after the loan is made are illustrated. Basic principles and techniques concerning customer and bank needs assessments, borrower profiles, officer call reports, effective credit policy, and administration are presented.

KEY CONCEPTS, TERMS, AND PHRASES

After studying Chapters 2 and 3 and Lesson 2, students will be familiar with:

- * components of an effective credit policy
- * credit policy implementation
- * data gathering techniques
- * loan structuring
- * loan administration
- * bank needs assessments matrix
- * customers needs assessments matrix
- * borrower profile
- * officer call reports
- * borrower responsibilities
- * banker responsibilities
- * credit information validation process

PERFORMANCE OBJECTIVES

Following the successful completion of Lesson 2, students will be able to:

- * understand the techniques to build a customer relationship and the importance of communications and information flows before and after the loan is made;
- * know the importance of credit structuring and risk minimization of a loan and portfolio administration after a loan is made;

- * develop a needs assessments matrix for both the borrower and bank within the context of senior management goals, the competitive environment, and credit and loan policies;
- * be familiar with methods and sources to obtain and validate financial information in the credit analysis process.

EQUIPMENT/RESOURCES

- * Blackboard, overhead, or flipchart
- * Examples of actual bank and lending policies to use as illustrations
- * Examples of borrower profile forms or officer call reports

SUGGESTED LEARNING ACTIVITIES

APPROXIMATE TIME REQUIRED

Opening Remarks

10 minutes

Inform students of the objectives of this session and the importance of the bank loan officer of being more than an extendor of credit but a marketer of services, and administrator of credit.

Lecture and Discussion

140 minutes

Discussion questions interspersed with your lecture on Chapters 2 and 3 might include:

An example of a bank situation in your region and have the class develop a credit and lending policy to carry out an effective agri-lending program.

How often farm visits should be made and in what context, and how you go about expediating the information process.

Discussion concerning what methods are most effective in assessing customers needs to remain competitive and how often it should be done.

What sources of financial statement information verification are most effective, i.e. suppliers, other institutional banks, PCAs, credit agencies, public records.

Discussion of how customer and bank needs assessments would vary from a country bank and a large regional bank.

Lecture

10 minutes

Summarize the components of the credit process, information gathering and customer relations.

Reemphasize:

- * Techniques to build a customer relationship and the importance of being a marketer.
- * Importance of needs assessments for the borrower and bank.
- * Methods used to gather and validate information to be used in the credit process.

Stop and Ask for Questions

Then

Proceed to discuss the next chapter and Lesson 3, "Analyzing the Financial and Operational Aspects of the Borrower" and indicate students should be familiar with the analysis techniques presented in Chapter 4.

SUBJECT MATTER CONTENT QUIZ

The following quiz provides the instructor with an opportunity to evaluate students' understanding of concepts and information present in Chapters 2 and 3 and Lesson 2. After students answer the questions check the answers

against those at the back of this workbook. If the majority of the students answered any of the questions incorrectly, you should review the topic before going to the next lesson. If however answers were generally correct, you should move on to Lesson 3.

1. You have been asked to design a credit and lending policy for a moderate size agricultural bank in an area that has both an agricultural and industrial base. The agriculture includes grain and diversified livestock such as cattle and hogs. Major competition includes Farm Credit and insurance companies. Outline or discuss some of the factors that should be included in this policy.
2. Discuss the typical responsibilities of an agricultural loan officer concerning managing and administering of agricultural loans.
3. You have been hired as an agricultural executive officer at Central Bank. You have been asked to do a needs assessment. What factors would you consider in this needs assessment?
4. A dairy farmer has completed a loan application for a \$100,000 credit line with your bank. The application was accompanied by accurate and complete financial statements and was submitted as had been verbally agreed upon. Outline the bank's responsibilities.

CONTENT

This lesson focuses on the analytical aspects of financial statement analysis. Student assignment is to read Chapter 4, "Analyzing the Historical Financial and Operational Aspects of the Borrower."

OVERVIEW

"Analyzing the Historical Financial and Operational Aspects of the Borrower" explores the preparation and analysis of the three major financial statements from a historical perspective. The text focuses on a systematic approach to statement analysis by thoroughly analyzing each of the major criteria used to evaluate risk and credit-worthiness associated with loan decision making. Ratio and non-ratio analysis is used to isolate strengths and weaknesses for each of the financial statements and is reinforced with a case illustration used throughout the chapter.

KEY CONCEPTS, TERMS, AND PHRASES

After studying Chapter 4 and Lesson 3, students will be familiar with:

- * a systematic approach to agri-lending
- * agricultural asset and liability classification
- * agricultural valuation and methodology procedures
- * financial liquidity
- * current ratio
- * quick or acid-test ratio
- * working capital
- * current debt ratio
- * financial solvency
- * equity value/leverage ratios
- * borrowing capacity, reserve and excess
- * management of credit lines
- * financing agreements
- * agricultural entities
- * contingent liabilities
- * operating or profit and loss statement
- * purpose of operating statement
- * cash concept
- * accrual concept
- * agricultural profitability measures
- * net cash income
- * net farm income
- * labor and management income
- * percent return on investment

- * percent return on equity
- * operational efficiencies
- * cash flow statement
- * cash expense-cash receipt ratio
- * cash flow coverage ratio
- * debt service ratio
- * factors to consider in a personal evaluation
- * factors to consider in an on-site visit

PERFORMANCE OBJECTIVES

Following the successful completion of Lesson 3, students will be able to:

- * discuss the preparation and analysis of the three major financial agricultural statements including how valuation procedures and methodology can affect interpretation and results;
- * analyze an applicants' credit-worthiness using financial statements and other pertinent information and develop a meaningful evaluation adopting a systematic approach including financial position, credit management, level of management performance, repayment ability, and resources and individual;
- * calculate and examine measures and guidelines that can aid in isolating strengths and weaknesses of a borrower;
- * be familiar with basic ratio and non-ratio indicators that can be integrated in a systematic approach to agri-lending analysis.

EQUIPMENT/RESOURCES

- * Blackboard, overhead, or flipchart
- * Background information concerning how agricultural financial statements are prepared in the area or region
- * Background information on specific measures and guidelines used in the area for financial statement analysis

<u>SUGGESTED LEARNING ACTIVITIES</u>	<u>APPROXIMATE TIME REQUIRED</u>
Opening Remarks Inform students of the objectives of this session and the importance of agricultural statement analysis in today's complex agricultural environment	10 minutes
Lecture and Discussion Lecture and discussion concerning Chapter 4 is most effective when a case study illustration is used to highlight and expound upon the basic concepts and principles discussed in the chapter. The case from a local situation or the one illustrated at the end of this lesson (Practical Application Exercise 1) might be useful for lecture and discussion. Discussion questions interspersed with your lecture on Chapter 4 might include: What methods or valuation procedures and methodology are used in your area and region concerning agricultural financial statements and how can they impact results and analysis? How have financial measures and standards in statement analysis changed to reflect current economic conditions in your region?	160 minutes

How can investigation into personal characteristics and habits be used to enhance the credit analysis process?

Examples of how on-site visits were used to either reinforce or detract from credit-worthiness.

Lecture

10 minutes

Summarize "Analyzing the Financial and Operational Aspects of the Borrower"

Reemphasize:

- * How statement preparation and evaluation techniques and methodology affect analysis and results
- * The usefulness of a systematic approach to statement analysis can be a useful tool to evaluate risk and credit-worthiness
- * How ratio and non-ratio analysis can be integrated in a systematic approach to agrilending analysis
- * Summary and conclusion concerning the case example, if utilized in class

Stop and Ask for Questions

Then

Proceed to give a homework case study concerning Chapter 4 and then assign the next chapter, "Portfolio Analysis and Problem Loans."

SUBJECT MATTER CONTENT QUIZ

The following quiz provides the instructor with an opportunity to evaluate students' understanding of concepts and information presented in Chapter 4. After students answer the questions check the answers against those at the back of this workbook. If the majority of the students

answered any of the questions incorrectly, you should review the topic in the text before going on to the next lesson. If however, answers were generally correct you should move to Lesson 4.

Multiple Choice

1. The farm business profit for a year would be found on
 - (a) balance sheet
 - (b) cash flow budget
 - (c) income statement
 - (d) partial budget

2. Which ratio would best determine the ability of a business to meet immediate financial objectives?
 - (a) current ratio
 - (b) current debt ratio
 - (c) equity value ratio
 - (d) quick ratio

3. A farmer is solvent in the long run if
 - (a) he has sufficient current assets to cover current debt
 - (b) he has sufficient equity to cover current debts
 - (c) he has sufficient assets to cover all debts
 - (d) he can pay all current debts with all equity