# Financial Management in Agriculture

# in Agriculture

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#### FINANCIAL MANAGEMENT IN AGRICULTURE

#### Fifth Edition

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# Financial Management in Agriculture

FIFTH EDITION

# Financial Management

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#### **PREFACE**

As with previous editions, the fifth edition of *Financial Management in Agriculture* develops and applies concepts, analytical methods, and descriptive information about agricultural finance. Many of the important managerial problems and opportunities in agriculture involve finance: financing resource control, investment analysis, asset valuation, financial reporting and planning, managing risks and liquidity, establishing credit relationships with lenders, and understanding financial markets.

Most agricultural production firms differ significantly from large corporations in other industries. Business size generally is smaller, and managers must address financial activities as well as production, marketing, and personnel decisions. Risks associated with land, climate, and biological factors are especially important. Special financial institutions and lending programs also contribute to the uniqueness of agricultural finance.

Financial Management in Agriculture focuses on planning, analyzing, and controlling business performance in agriculture and on the related financial markets. The fifth edition contains 21 chapters organized into six sections. Section One introduces the nature and scope of financial management and the major goals that motivate managerial performance. The three chapters in Section Two address financial statements, financial analysis and control, and financial planning.

Section Three develops the concepts of financial leverage, risk, and liquidity and their effects on business performance. Various strategies for managing business and financial risks are considered. Section Four stresses the concepts and tools of asset valuation and long-term financial decision making. Capital

budgeting methods are identified under conditions of risk and inflation and under alternative financing arrangements for owning and leasing business assets.

Section Five contains four chapters that describe and evaluate financial intermediaries serving agriculture and the related management and policy issues. This section provides important information for understanding how the national and international financial markets influence financial decision making. Section Six considers legal aspects of finance, legal forms of business organization, and the management of equity capital in agriculture.

The fifth edition has several significant changes. Chapter 1 contains new material on the strategic management process and on financial structure of the agricultural sector. Chapters 3, 4, and 5 reflect substantial changes in the design and analysis of financial statements in order to achieve consistency with the 1991 Recommendations of the Farm Financial Standards Task Force. Chapters 6 and 7 contain added material about capital structure theories and borrower/lender relationships based on new finance concepts associated with asymmetric information and principal-agent relationships.

Chapter 8 extends risk management analysis by generalizing the portfolio theory approach and showing how portfolio analysis can be applied to analyze debt servicing capacity. Chapter 10 describes the modified internal rate-of-return method of capital budgeting, and Chapter 12 extends the bid-price analysis for farm land investments.

Section Five has been changed considerably. Chapter 15 has been recast to focus on recent financial market developments, new types of financial services, and a perspective on competition in financial markets. A new Chapter 16 centers on the management environment of financial institutions, emphasizing asset – liability management, risk management, and loan pricing. Chapter 17 describes the major agricultural lenders in detail, including substantial new developments affecting the Farm Credit System, trade credit, government credit programs, and the Federal Agricultural Mortgage Corporation (Farmer Mac). Finally, the legal aspects of agricultural finance now make up a new Chapter 19.

Other major changes include a summary at the end of each chapter and a glossary of key terms used in agricultural finance at the end of the book. Minor changes and improvements are incorporated within the rest of the chapters as well.

Financial Management in Agriculture is applicable in most countries of the world, although the institutional setting reflects the financial and legal environment of the United States. The book is intended for undergraduate and beginning graduate students, who are assumed to have some acquaintance

with microeconomic principles and with statistics. Otherwise, the book represents a starting point in the study of agricultural finance.

We are indebted to many persons for their assistance and support since the book was first published in 1973. Special thanks are due to F. J. Barnard, J. R. Brake, J. H. Clark, T. L. Frey, S. C. Gabriel, C. G. Gustafson, B. Godfrey, K. S. Harris, W. Hayenga, B. L. Jones, W. F. Lee, S. Lence, B. Pflueger, L. J. Robison, and S. T. Sonka. Numerous students, instructors, and book reviewers have made useful suggestions and raised critical questions that have furthered the book's development. Finally, we are grateful to Phyllis Blackford for her tireless, effective, and always cheerful efforts to type and compile the manuscript and to Pat Ward for her excellent editorial work at Interstate Publishers, Inc.

Peter J. Barry Paul N. Ellinger John A. Hopkin C. B. Baker

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**SECTION ONE** 

Introduction