



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**BOOK REVIEW: Duncan, Marvin and Jerome M. Stam, eds. *Financing Agriculture into the Twenty-first Century*. Boulder, CO: Westview Press, 1998, 232 pp., \$69.00 hardcover. ISBN 0-8133-3254-0.**

*Financing Agriculture into the Twenty-first Century* examines the forces changing U.S. agricultural finance and how those in production agriculture and in the agricultural finance industry are responding to these forces. It is intended for lenders, policymakers, and agricultural finance students. Editors Jerome Stam and Marvin Duncan and numerous authors provide a framework for stimulating further reflection and study. The book analyzes the current state of affairs and what is likely to emerge from the changes underway in the structure of agriculture, the institutions lending to agriculture, and in the methods for financing U.S. agriculture. The book contributes significantly to our understanding of these issues.

Fundamental changes are occurring in government-sponsored lending, in farm structure and performance, and in lending and financial services. The book is organized around issues, relationships, and structural changes, rather than simply reviewing the impacts of these changes on separate lending groups such as commercial banks or the Farm Credit System. Stam and Duncan believe "the traditional approach of analyzing finance and credit issues within a narrow context to be inadequate." I agree. *Financing Agriculture* focuses on the broader issues, relationships, and structural changes from traditional agricultural lending strategies to macroeconomic and international linkages and on the effects of those changes on the agricultural sector. It also discusses the implications for those who seek to fill the credit demand of agriculture.

The book is organized into four parts: 1. Forces Inducing Change, 2. Future Directions for Agricultural Finance, 3. Who Will Be the Lenders and What Will They Be Doing?, 4. Policy Implications.

In Part One, Glenn Pederson, Jeffrey Stensland, and Martin Fischer note that the implications of globalization for the agricultural sector have received greater attention since the late 1970s because of the increasing dependence of the sector on national and international economic/financial forces. Those forces are communicating greater volatility to the agricultural sector via commodity and financial markets. Therefore, there is a greater need for agricultural producers and their lending institutions to manage the associated risks more effectively. The strategy of agricultural lenders entails managing the interest rate risk, credit risk, and covariant risks that are endemic to lending institutions.

They suggest the need for greater uniformity in financial reporting to gain better access to capital markets. Furthermore, the Farm Financial Standards Taskforce 1991 has identified the strategic goal of establishing universally acceptable financial guidelines for U.S. production agriculture. These guidelines include identifying financial ratios that are common to all parts of the country, identifying standard methods for calculating those ratios, and formulating standard financial statement formats that may be used by all farm lending institutions.

Next, David Harrington, Robert Hoppe, R. Neal Peterson, David Banker and H. Frederick Gale discuss how structural characteristics, along with institutional arrangements, are of equal importance with traditional relationships in influencing the financing and performance of the agricultural sector. They concentrate on interpreting how recent changes in the structure and institutional setting of the agricultural sector—particularly the structure of farm household income—may influence the financing of agriculture over the next generation.

Summary implications for agricultural finance include the following:

- 1) farming will continue to evolve toward a more dualistic structure, with larger sizes of commercial farms accounting for the bulk of production, but with noncommercial farms dominating the number of farms
- 2) prices and production will be more volatile
- 3) price, yield, and revenue risks will be higher
- 4) farm investment decision-making will become more crucially dependent on timing
- 5) most farms, especially those in the smaller size categories, will remain highly dependent on off-farm income sources.

Mark Drabenstott and Alan Barkema begin Part Two by discussing new and changing rules of lending. Three key factors characterize the changes taking place in the agricultural credit market of the late 1990s. First, the market for agricultural credit is growing again. Second, competition in agricultural lending has intensified. And third, the growing need for equity capital points to the possible introduction of a new generation of agricultural finance products to meet that demand. Commercial banks have been quite successful in the 1990s, doubling their market share relative both to other banks and to the FCS. Part of the gain by banks has been by international banks now operating in the United States. Furthermore, much of the commercial banks' recent gain in market share came at the expense of the FCS, the second leading farm lender.

The competitive marketplace is putting pressure on regulators to review lending regulations to ensure that regulatory goals are achieved with minimal regulatory burden. The entrance of large international banks will prompt a closer look at whether the financial playing field is level across countries. The FCS has recently completed a revision of rules governing the scope of FCS lending, yet the core issue of public liability for a single-sector

GSE remains. Finally, all lenders find it difficult to assess the risk of lending to contract producers, and pooled efforts to gauge that risk may emerge.

More agricultural production is occurring under contractual relationships, e.g., between input suppliers and producers or between producers and processors. Drabenstott and Barkema state that the scaling down of government price supports may accelerate this trend. This is most notable in the pork and broiler industries. These contractual arrangements are also effective tools for sharing business risks. But the new marketing arrangements may not eliminate these traditional risks. They may only be transformed into a new kind of risk—relationship risk—arising from the chance that one or more parties to a business agreement will not perform as expected.

One approach to reducing relationship risk would involve a skilled lender as the financial intermediary for a production or marketing agreement between the two parties. Alternatively, a skilled intermediary could be retained to gather and review financial information for both parties. To address the regulatory concern that could arise from the potential conflict of interest if the vendor of risk-assessment services were also a lender to one of the contracting parties, a consortium of lenders might staff a central office to offer comprehensive risk-assessment services to consortium members or others.

Michael Boehlje discusses the emerging agricultural lending system. He explains the dynamics of the markets and the changing role of various participants in those markets, and reviews the opportunities and challenges to lenders in their planning and strategic positioning. He discusses the new lending environment for agriculture and the new competitors in the market. Then he addresses customer and market segmentation, the types of agricultural loans, and new delivery alternatives. Finally, he reviews sourcing funds, managing risks, reducing costs, pricing loans and developing alliances.

The new lending environment includes 1) structural changes encouraging farm and agribusiness firms to seek alliances and partner-

ships, 2) product changes, 3) significant changes in the asset structure of farm and agribusiness firms—the trend to more soft assets, 4) boundaryless firms—a soft-asset, “deal making” entity, with few of the traditional characteristics lenders value in a credit relationship, and 5) new competitors such as Captive Finance Companies (CFOs) and leasing companies.

Today's credit market is characterized by weaker demand, lower volume, and increased competition. In this new environment it is necessary to maintain market share and be a cost-effective supplier of agricultural credit. In this regard, 21st-century financing involves 1) understanding customer needs and relationships, 2) acknowledging and responding to market segmentation, and 3) assessing the lifetime valuation of a customer in the financial product/service sector.

Two major categories of loans are made to farmers: commercial loans and consumer loans. The loan portfolio can be further divided into a) signature, b) asset-based, and c) performance loans. Therefore, no unique set of criteria should be used for evaluating all agricultural loans. Boehlje adds that changes and innovations in the origination, delivery, and collection of agricultural credits may be necessary for lenders to remain competitive in the future.

Boehlje believes that the most serious challenges agricultural lenders will face are managing risk, reducing cost, sourcing funds, maintaining market share while pricing loan products competitively, and developing alliances and joint ventures among lenders.

Allen Featherstone, Michael Boehlje, and Joseph Arata discuss emerging strategies of traditional agricultural lenders. Traditional lenders of the future will look different than in the past. Information technology continues to lead to a consolidation in the number of lenders serving agriculture. Price competition will become increasingly intense. Although money is becoming more of a “bulk” commodity, opportunities still exist for differentiation based on innovation, image, and support.

They give a practical example of how traditional agricultural lenders might develop a

strategy for the future for the feeder-cattle industry. They define a “competitive landscape” that includes defining the product line to be served. They assess the competition for financing of a cow-calf operation by using a qualitative estimate of the service provided by each potential lender, and by the price of a feeder cattle loan relative to the prime interest rate. Their example points out the potential for forming an alliance between a traditional lender and a broker-dealer, as this might provide lower funding costs and increased resources for a funds-constrained lender.

Robert Collender and Steven Koenig discuss the role of federal credit programs. They state that “the structure of federal intervention in agricultural credit is anachronistic. Agriculture is no longer a special case, and hence federal intervention via sector-specific credit programs and policies may no longer be warranted. . . . As economists, we assess the relative costs and benefits of policy alternatives and determine whether credit is the most appropriate intervention. Income redistribution programs are often disguised as market perfecting; and rent-seeking constituencies often find compelling social concerns to support their agendas.” (p. 159 of Stam and Duncan).

After an insightful review of past policies, their limited effectiveness, and changes occurring in agricultural production and financial markets, Collender and Koenig suggest several general alternatives. These include lowering legal barriers to competition coupled with enforcement of antitrust laws, improving secondary markets, changes in direct and guaranteed federal farm lending programs, and targeting credit without direct subsidies.

Bruce Sherrick's chapter on emerging non-traditional lenders and products provides a framework for understanding the motivations and performance of nontraditional lenders, examines and evaluates specific nontraditional lenders and their products, and considers the future role of nontraditional lenders.

Sherrick mentions eight commonly cited reasons for the existence of nontraditional lenders. One of these is to fill otherwise unmet demands (shortfalls in supply). However, Sherrick states that the perception that nontra-

ditional lenders are filling credit gaps may be a manifestation of differing credit standards rather than actual shortages in available risk-priced credit.

He then divides the lending function into its component parts to further highlight the differences between conventional and nontraditional lenders. These parts are 1) funding, 2) origination and delivery, 3) underwriting and credit risk assessment, 4) credit risk bearing, 5) bonding functions, 6) warehousing, 7) servicing and monitoring, 8) collection and workout, and 9) regulatory burdens.

Sherrick says that although dividing the lending function into these component parts helps delineate differences across lenders, the lending functions themselves do little to provide a set of unified economic principles behind the observed and evolving market structure.

Sherrick discusses three economic approaches for understanding nontraditional lender behavior: 1) the "profit function" of the participants, 2) the "principal-agency" literature, and 3) the "state-space" framework.

Among the most visible and prominent of the "new" lenders and lender products are 1) captives and vendor finance companies; 2) leasing companies; 3) securitization, swapping, and separation of origination from warehousing; 4) investment banking, quasi-equity, and development of new equity markets; and 5) participation of traditionals in nontraditional markets or products.

Sherrick concludes that the future of agricultural lending will be more customer driven—the lender may be a re-lender, end user, related product vendor, equity provider, etc. In any case, successful financial products will need to be tailored to meet specific customer needs.

Part 4, Policy Implications, concludes with Cole Gustafson, Marvin Duncan and Jerome Stam discussing public and private policy implications. They believe that the industrial realignment that is occurring in the agricultural and food system and its associated increased risk, demands for considerable investment in technology, and the demands for substantial amounts of innovative credit and other new

forms of financing do not bode well for many independent family farms or ranchers. "The transition from marketing commodities to marketing products will increasingly require integration and coordination. Larger farm operations will be in the best position to take advantage of changing market conditions and innovative financing arrangements."

Gustafson, Duncan and Stam state that U.S. agriculture was not only severely economically depressed between World War I and World War II, but was undercapitalized as well. The federal government responded by introducing programs to reduce the riskiness of farming and to ensure easier access to credit at more favorable terms. The FCS' and FSA's predecessor agencies dramatically changed the credit situation and flow of funds and resources to agriculture that facilitated the financing of a technological revolution and capital restructuring of U.S. agriculture between the 1930s and 1970s. During the 60s and into the early 80s funds were plentiful relative to national demand. This situation helped many farmers to prosper and to accumulate assets ensuring a productive U.S. farm sector, but it also may have contributed to inflated prices of farmland and other capital goods.

The early 1980s saw a rapid change in the forces that had caused the expansion. A variety of interrelated economic changes in the 1980s caused the most severe financial stress for the farm sector since the Great Depression of the 1930s. Gustafson, Duncan and Stam note that this occurred when there were 2.4 million farms with a much greater capital intensity and a much differently structured rural sector than existed 50 years earlier.

Deregulation also became an important reality as steps were taken to make bank regulation consistent with an efficient and competitive banking system. In the early 1980s, considerable regulatory and other changes in the U.S. financial markets affected the agricultural sector.

The financial hardship experienced by farmers in the 1980s and indirectly throughout rural areas spurred the federal government to undertake specific credit initiatives to assist with economic adjustment. The federal gov-

ernment responded to the farm financial difficulties of the 80s with a variety of policies to provide farmers with income support, credit assistance, and new legal rights as borrowers. The financial stress caused considerable retrenchment and restructuring among the farm lenders.

The public-private credit delivery system that serves rural America has become very complex. As the agricultural sector entered the 1990s, several important changes transformed the ownership patterns of assets: the scale and size of farming units; the independence of suppliers, producers, and processors; and the adoption of technology in production processes. These factors created a demand for an entirely new portfolio of financial services and products. Although the agricultural lending industry has responded to this demand, they believe that a more fundamental restructuring of the agricultural lending industry is needed.

Conditions are radically different as we enter the twenty-first century. Structural change in the agricultural sector requires a new lending paradigm. Gustafson, Duncan and Stam conclude by asking, "Which farm groups will individual lenders target?" They suggest that significant repositioning, targeting, and product development are likely to occur in the agricultural finance industry.

Some past practices of lenders will require transformation. First, new credit and underwriting standards must be developed. Second, agricultural lenders will need to complete their transition from asset-based to cash-flow-based lending policies and procedures. Also, financial institutions will need to develop the ability to assess the economic value of business relationships and be prepared to finance their development. If, as Boehlje asserts, the true value of large-scale integrated firms stems from the relationships and alliances that are contained therein, these 'soft assets' will be the basis on which firms demand financial capital from lending institutions.

Creative new credit instruments need to be developed and tailored to individual firms. In addition to providing debt financing, financial institutions patronizing large-scale integrated farms will have to develop methods of sup-

plying equity capital as well, including underwriting of stock offerings and other equity products. They also note that internationalization of the U.S. agricultural finance industry lags behind that occurring in domestic production agriculture and agribusiness by a wide margin. Finally, financial institutions serving not only agriculture but all sectors of the economy will need to devote resources to developing new delivery systems, including computer-based banking, signature loans, etc.

The evolution of a 21st-century lending paradigm raises several public policy questions. What is the justification for public programs to supply reasonably priced credit? Agricultural firms likely will be neither entirely farm nor rural in their ownership and location. Since traditional farm production activities may account for only a small portion of a firm's business activity, demands for favored public policy by integrated farming units may not be warranted. Also, the need and political support for single-sector financial institutions catering to the industry may also wane. For example, Gustafson, Duncan and Stam suggest that single-sector financial institutions with special government "imprimatur" increasingly will be asked to demonstrate that they fulfill a public purpose in exchange for that imprimatur.

Gustafson, Duncan and Stam believe that it is likely that the government will continue to provide special programs to assist small and part-time farmers. The most prominent of these programs will be focused on providing credit to purchase farm real estate and to finance farming operations. They suggest that these programs will probably look much like the current credit programs of the FSA, with a twofold emphasis: 1) assisting small operator in growing the size of their farm businesses, and 2) assisting low-resource farms in acquiring the farm business management tools to become competitive. In both cases, most of these farmers will become part-time farmers, earning much of their family income from off-farm sources. Furthermore, access to lease financing and equipment rental arrangements will be important to their success. Finally, off-farm employment by one or more family

members will become the typical arrangement for small and limited-resource farmers if they are to achieve a competitive level of family living.

Another public-policy issue is the public's role in financing entry into farming. The opportunities for young people without families well established in agriculture to enter agriculture are increasing. They believe that contract production represents a growing opportunity for new entrants.

Lenders have become increasingly sensitive to environmental pollution problems of agriculture. Typically lenders avoid knowingly including borrower assets in collateral that secures a loan when those assets involve significant environmental problems. They note that the increasing use of large-scale confinement facilities for poultry and swine production is creating new pollution-control issues for lenders.

Gustafson, Duncan and Stam note two areas of concern and need for public policy. First, given the rapid changes occurring in the agricultural sector, what public policies would be useful and cost-effective? How long should the public sector continue to support specialized agricultural finance institutions? How does the public sector minimize or manage the abrupt dissolution of financial commitments to existing firms? Is the private sector better equipped to address these transition issues? Second, what if there is contagion to the agricultural sector from the failure of large-scale integrated agricultural firms. Should public and private policymakers be concerned about disruptions by failure of large integrated firms? By smaller farming units? By family or commercial farms? If so, what should be done about it?

Although the book does discuss enterprise diversification, vertical integration, production and marketing contracts, it does not discuss

hedging, futures options contracts, or crop insurance as additional risk-management tools. With the shift toward less government intervention in the post-1996 Farm Act environment, what further role might hedging and futures options contracts play in 21st-century agricultural risk management? Borrowers using these risk-sharing tools may be able to find newer, lower-cost sources of funding, or obtain new loans from existing sources at lower costs. Does the existence of hedging, futures options and private crop insurance weaken the case for public intervention?

The book is rich in research topics. For example, Bruce Sherrick states that agricultural securitization both manages the size and composition of the balance sheet and provides liquidity. Why have agricultural securitization markets lagged behind many others, Sherrick asks? He suggests several possible reasons, including some uniqueness in agriculture and the difficulty of standardizing claims. Also, he notes a paradox in agricultural production in that the industry has relatively high aggregate equity ratios, but individuals with debt are frequently very highly levered. Why do such great differences in equity ratios exist across otherwise similar units? And how well do current market products facilitate the removal and infusions of capital from production units? What are the implications for the financial viability of farms by type, size, class, and by region? The explanation may at least partly lie in the uniqueness of production agriculture and in the great variation in farm structure and management practices.

I highly recommend this collection of essays. Readers will also find numerous references at the end of each essay for anyone interested in further analysis or research.

Kenneth W. Erickson  
*U.S. Department of Agriculture, Economic Research Service*