

## **REDESIGNING COOPERATIVE BOUNDARIES: THE EMERGENCE OF NEW MODELS**

**MICHAEL L. COOK AND FABIO R. CHADDAD**

In a mid 1990s AAEA invited paper session, the presenters and discussants posited challenges and opportunities for agricultural cooperation. Fulton hypothesized that forces external to the cooperative, especially technology and member individualism, would increasingly emerge as obstacles to success in North American agricultural cooperatives. Cook hypothesized forces internal to the cooperative, especially potential negative consequences of vaguely defined property rights, would challenge cooperative organizational growth in subsequent years. Three strategic choices were identified as potentially efficient, that is, the option to exit either the sector or the organizational form, to continue strategically and structurally with moderate changes to organization form, or to shift to a more radical form of organizational structure. This article and session attempt to describe and analyze organizational design initiatives adopted since the mid 1990s.

This article complements and expands a typology of discrete institutional arrangements (i.e., cooperative models) based upon a broad definition of ownership rights comprising residual claim and control rights (Chaddad and Cook). We argue that cooperative models may be distinguished by how ownership rights are defined and assigned to economic agents tied contractually to the firm (members, patrons, and investors). In addition, we develop a set of observations that suggest a research agenda based on a new institutional approach

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Michael L. Cook is Robert D. Partridge Professor of Cooperative Leadership, Department of Agricultural Economics, University of Missouri-Columbia. Fabio R. Chaddad is assistant professor, Department of Agricultural and Resource Economics, Washington State University.

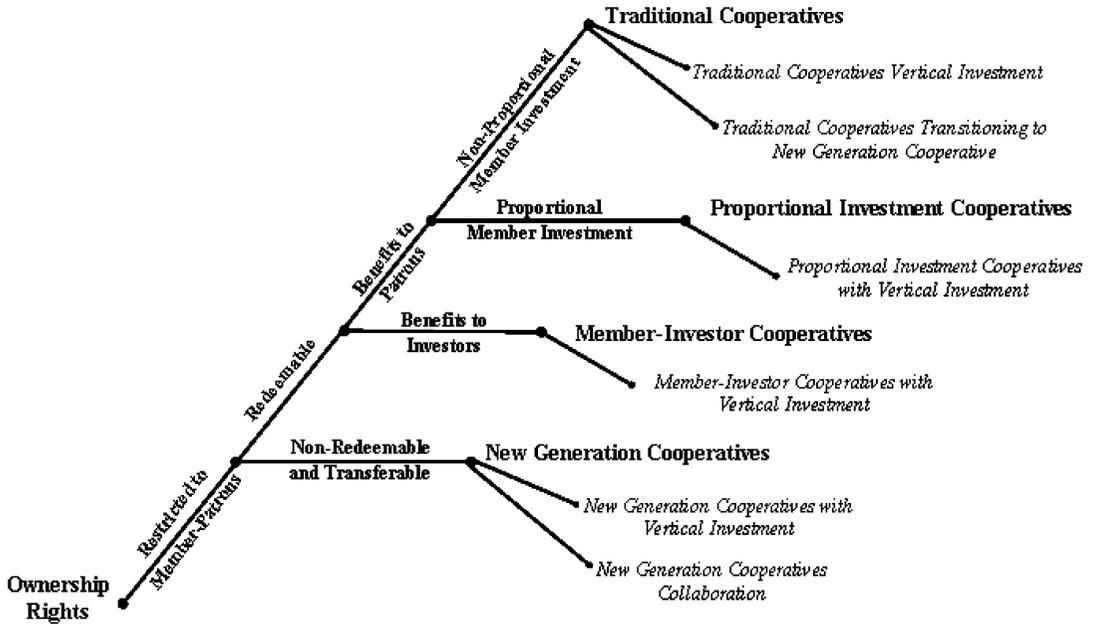
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to understanding organizational change in the food system.

### **Typology and Examples**

In the upward egressing branch of figure 1, four cooperative models with ownership rights restricted to member patrons are described: the traditional cooperative, proportional investment cooperative, member-investor cooperative, and new-generation cooperative (NGC). The traditional cooperative structure is defined here as being user owned, user controlled, and user benefited in addition to having the following organizational attributes: ownership rights are restricted to member patrons; residual return rights are nontransferable, nonappreciable, and redeemable; and user benefits are distributed to members in proportion to patronage but investment may not be proportional to patronage.

Numerous traditional cooperatives, while maintaining ownership rights "restricted to members only," are developing vertical investment structures by investing in limited liability companies, joint ventures, or other forms of strategic alliances. Local multipurpose cooperatives, traditional marketing cooperatives, and the majority of traditional regional multipurpose cooperatives are engaged in the vertical investment structures denoted at the top of figure 1. The formation of Purina Mills as a Limited Liability Corporation (LLC) is one example of a traditional, regional multipurpose cooperative (Land O'Lakes Ag Services) vertical investment. In addition, traditional cooperatives have or are attempting transition to an NGC. Examples of this form of traditional cooperative transitional ownership rights include the Harvest States (now CHS) equity participation units and CALAVO's transition from



**Figure 1. Emerging forms of cooperatives from an ownership rights approach**

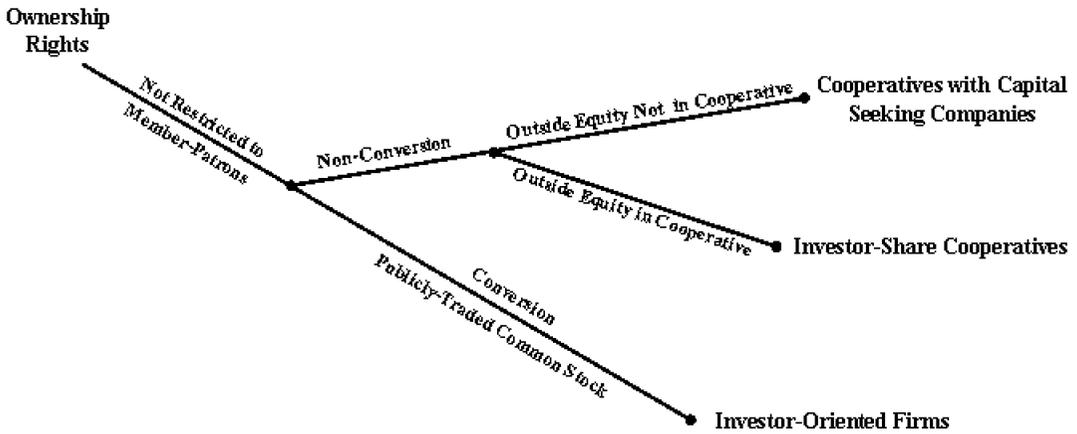
proportional investment to traditional marketing to new generation to finally an investor-oriented, producer-owned organization.

The next model, second from the top, is the proportional investment model. In this model, ownership rights are restricted to members, nontransferable, nonappreciable, and redeemable, but members are expected to invest in the cooperative in proportion to patronage. This is the original “pure” form of U.S. agricultural cooperative organizational design. As membership becomes more heterogeneous, the degree of vaguely defined property rights increases, thus moving the proportionally organized cooperative to the traditional cooperative status. Recognizing the dynamic shift to misalignment of control, investment, and benefits, proportional investment cooperatives (PIC) adopt capital management policies to ensure proportionality of internally generated capital including separate capital pools and base capital plans. The base capital plan is a popular instrument utilized by PICs. Riceland, Dairy Farmers of America, and Land O’Lakes dairy division are PICs with vertical investments in the form of joint ventures, LLCs, and strategic alliances.

In member-investor cooperatives, returns to members are distributed in proportion to shareholdings in addition to patronage. This is done either with dividend distribution in proportion to shares and/or appreciability of co-

operative shares. Fonterra Cooperative Group of New Zealand not only represents member investment cooperatives with ownership rights being aligned with member investment in fair value shares and peak notes, but also serves as an example of a member investment cooperative with vertical investment. These investments are usually in the form of joint equity ventures and are established with partners throughout the world with cooperatives and noncooperatives.

The lowest major branch in figure 1 is the NGC model. In the classic NGC model, ownership rights are in the form of tradable and appreciable delivery rights restricted to current member patrons. In addition, member patrons are required to purchase delivery rights on the basis of expected patronage such that usage and capital investment are proportionately aligned. These ownership rights, generally, are not redeemable. An increasing number of NGCs are pursuing the vertical investment structure-strategy form. For example, many of the emerging ethanol ventures are LLCs with an NGC being the primary investor. Another NGC ownership structure is called the collaborative model. In this model, a traditional, proportional, or member investment cooperative has an equity interest in the NGC or the NGC has an equity interest in another cooperative. Golden Oval Eggs and U.S. Premium Beef are examples of collaborative NGCs.



**Figure 2. Emerging forms of cooperatives where ownership rights are not restricted to member patrons**

Figure 2 represents emerging cooperative models where ownership rights are not restricted to member patrons. This set of models consists of cooperatives with capital-seeking companies, investor share cooperatives, and cooperatives which have converted to an investor-driven ownership structure. In a capital-seeking company, investors acquire ownership rights in a separate legal entity wholly or partly owned by the cooperative. In other words, outside investor capital is not directly introduced in the cooperative firm, but in trust companies, strategic alliances, or subsidiaries. This model differs with the figure 1 vertical investment models by degree of control conceded and permanent capital contributing importance. In investor-share cooperatives, investors receive ownership rights in the cooperative in addition to the traditional cooperative ownership rights held by member patrons. That is, the cooperative issues more than one class of shares to different “owner” groups (e.g., nonvoting fixed returns preferred stock and nonvoting publicly tradable common stock among others).

The conversion to an IOF model is an exit from agricultural cooperative status strategy. Notwithstanding vaguely defined property right constraints, increased member heterogeneity and competitive pressures from the business environment, there have been few cases of agricultural cooperative conversions to a corporate structure in the United States. In the 1980s, only six agricultural cooperatives opted to convert (Schrader). More recently, CALAVO Growers, Dakota Growers Pasta, and South Dakota Soybean Processors have converted to a corporate ownership structure.

## Observations and Research Suggestions

### *Observation 1: Defense versus Offense*

From an individual producer point of view, the traditional role of a cooperative has been to improve farmer returns by lowering production and transaction costs in the market channel, counterbalancing the negative economic impacts of market power, and reducing producer income risks (Sexton and Iskow). In these cases, it might be hypothesized that the generic reason producers form cooperatives is to “protect” the current and future value of farm assets. This cooperative formation reasoning can be defined as defensive. Alternatively, producers might organize with the primary objective being to “add” to the value of their assets. This can be thought of as an offensive reason for formation or continuance. The plethora of organizational forms that have emerged since the early 1990s might be considered offensive. Profit margins at the farm level on a per unit basis have decreased steadily over the past fifteen years (Blank). This has placed considerable financial pressure on a large number of individual producers who consequently have encouraged their cooperatives to shift from defensive to offensive. The growing number of organizational structures observed in figures 1 and 2 below the proportional model suggest offensive structure is becoming more common. Consequently, as cooperatives grow and invest in organization-specific assets—including intangible assets—their ownership structure is realigned. As a result, they either seek to reduce members’ capital contributions through permanent capital accumulation by expanding

nonmember business, through required capital contributions on member business to increase the growth capital base or to leverage partners' balance sheets into more opportune offensive strategies.

### *Observation 2: Investment-Control Constraint Trade-offs*

As noncontrolled heterogeneity increases in a cooperative's membership and given no change in selective incentives, there is a tendency for cooperative investment and control constraints to be exacerbated (Hansmann). Resultant investment disincentives and misaligned control rights might lead to financial stagnation and member apathy. When investment constraints (internal free rider, horizon, and portfolio problems) are realigned, control constraints in the form of agency and influence costs eventually emerge. Each of the new configurations in figures 1 and 2 will have to be tested for their investment-control trade-off impacts.

### *Observation 3: The Quest for Permanent Capital*

Not unlike IOFs, cooperatives rely on internally generated capital as their primary source of equity capital. Traditional cooperatives, however, depend on patronage-based methods for acquiring risk capital, particularly retained patronage refunds and per unit capital retains. As a result, approximately 60% of equity capital in U.S. agricultural cooperatives is in the form of equity certificates and credits (Chesnick). In other words, equity capital in a cooperative's balance sheet generally is allocated to individual members, representing a claim against the cooperative by present and former members. This claim is partially redeemable, with the ultimate payments to members being at the discretion of the board of directors. Because redeeming equity is a cash outlay to the cooperative, a large portion of its equity capital stock is not considered permanent. Cooperatives seeking to build a permanent source of equity capital are experimenting with nontraditional capital acquisition approaches, including nonredeemable member-investor shares, capital-seeking strategic alliances, and nonvoting preferred shares.

### *Observation 4: Non-voluntary Exit*

Recently, a number of large multipurpose cooperatives have filed for bankruptcy. Mem-

ber heterogeneity and suboptimization of multiple objective functions were influential in this decision-making process. Ownership rights were misaligned with use, control, investment incentives, and benefit distribution. The high degree of misalignment violated most laws of optimal organizational design. This observation does not suggest there were not other external and internal forces that might have led to the financial failure of these member-owned and member-controlled organizations, but organizational architecture was misaligned. The study of organizational failure in producer-owned organizations seldom includes intra-firm coordination incentives and disincentives.

### *Observation 5: A Continuum?*

Analyzing case research, congressional testimony, and interviews with cooperative development specialists, the demand for risk capital in an increasingly capital intensive and industrialized food chain becomes more apparent. Utilizing the ownership rights framework represented in figures 1 and 2, it is tempting to hypothesize a sequential path commencing at the proportional investment cooperative level near the top of figure 1 and progressing downward as a cooperative becomes more risk capital seeking.

As each step downward on the typology figure is adopted, an ownership rights attribution is relaxed. The question then arises as to whether this framework suggests that in an industrialized food system the cooperative is a transitional form of business organization, that is, a business form moving from a group of producers with homogeneous user interest to a set of heterogeneous users who have evolved to a homogeneous economic state only through the bonding attraction to the return on investment metric.

### *Observation 6: Institutional Reform*

Recently, the demand to organize "offensive" types of cooperatives has gone from cooperative leaders' quest to internally realign structure and incentive systems with offense-driven strategies toward the more externally oriented public policy arena. In the mid 1990s, Iowa adopted Chapter 501 allowing the formation of cooperatives exempt from rather restrictive corporate farming laws. In 2001, the Wyoming legislature passed a cooperative statute allowing a cooperative to be organized with both

patron and nonpatron ownership rights. During the 2003 legislative session, Minnesota created a cooperative law, Chapter 308B, which authorizes outside equity in cooperatives in return for limited voting rights in order to facilitate more flexible financing alternatives for cooperatives. Numerous other states have similar legislation under study, suggesting that the institutional environment relating to producer collective action is under reform.

#### *Observation 7: Hybrid Formation*

Producers are not only restructuring and redesigning their traditional cooperatives through realignment of ownership rights and vertical investment, but also forming producer-controlled hybrid organizations. These hybrids, in the form of LLCs, Limited Liability Partnerships, guilds, and subchapter S firms have many of the organizational advantages of traditional or NGCs (with the exception of accessing CoBank debt financing and limited immunity to antitrust offered by Capper-Volsted) in addition to providing more flexible risk capital acquisition mechanisms. According to Ginder, self-employment tax benefits, access to nonfarm investors, and tax credit pass through provisions of the LLCs have led during the past five years most start-up ethanol groups to choose it as the preferred organization form.

#### **Summary**

The redesigning of cooperative boundaries is viewed in this article through a property rights and incomplete contracting logic lens. As shown in figures 1 and 2, numerous structural models are emerging as traditional cooperative attributes are relaxed. Using the ownership rights approach, cooperative decision makers view their organizational options from a bimodal point of view. Either all ownership rights are restricted to member patrons or ownership rights are shared between member patrons and nonmember investors. The resultant control rights implications are obvious.

The typology introduced in this article assists in understanding the evolution of cooperatives as they develop new mechanisms to acquire equity capital. Utilizing this property rights-derived framework, the applied organizational economist can more clearly understand the evolution of Tri-Valley, from proportional investment—to traditional—to NGC to fail-

ure as documented in the accompanying Cross-Buccola paper. The typology also demonstrates the permeating user benefit–investor benefit tension examined in the Holland–King analysis of the NGC model. Finally, the reader can easily trace the evolution of CALAVO from its simple origins to the member decision to demutualize as described in this session’s paper by Stanford and Hogeland. Using this Williamsonian-influenced comparative framework (Williamson), the organizational architect is aided in the pursuit of redefining the boundaries of the traditional agricultural cooperative.

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