The Economic Culture of U.S. Agricultural Cooperatives

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Abstract

Two contesting philosophies that shaped cooperative culture during the past 70 years are explored, Edwin Nourse's populist concept of cooperatives as a "competitive yardstick" restoring competition to the marketplace on behalf of farmers and Aaron Sapiro's philosophy that cooperatives should be businesslike, purely economic and preferably large-scale organizations for maximum effectiveness bargaining with processors. As cooperatives expanded over the 20th century, the tension between these two philosophies set into motion cultural constraints on cooperative growth that came to a crisis point with the industrialization of the pork industry. This brought rapprochement with businesses cooperatives had formerly defined themselves in opposition to, resulting in a new phase of cooperative identity, the "valueadded" cooperative. [Keywords: cooperatives, agriculture, farmers, competitive yardstick, value-added, Nourse, Sapiro]

Over the past 70 years, U.S. agricultural cooperatives have struggled to find their place relative to other firms in the American economy, a challenge that reflects their mandate to further economic opportunities for family farmers. Starting in the New Deal era that often meant protecting farmers from the potential exploitation of others within the food or agribusiness system. Because cooperatives were not profit seeking, they also represented the possibility of a commentary on the American economic system. In the popular expression of cooperatives as a "competitive yardstick" disciplining the economic system, "cooperatives kept the other firm honest."

Offering a farmer-owned alternative to offset the market power of monopolists who threatened farmer welfare is also an accepted cooperative role. To reach this point, cooperatives risked becoming indistinguishable from those they sought to challenge, as demonstrated by the cooperative experience in the industrializing pork industry during the late 1990s. Indeed, by the early 21st century, cooperatives were including others besides farmers as stakeholders in the cooperative system because farmer investment alone could no longer provide the capital-intensive production and distribution systems needed by contemporary farmers. Adversarial attitudes were cast aside as retail buyers and consumers began to be seen less as driving down food prices than as partners accomplishing the task of getting farmers' product marketed or providing market access.

This article traces how the cooperative philosophies initiated in the early 20th century created contradictions for later cooperative development. Cooperatives were seen as the solution to a Midwestern, populist concept of farmers as the victim of potentially overwhelming economic forces (captured by economist Edwin Nourse) and cooperatives were also viewed as a purely business or economic arrangement (fostered by California attorney Aaron Sapiro). When farmers modernized agriculture by "making business decisions and dealing with the business community," they naturally acquired "the values and outlook of business" (Douglas 1969:xii). Beneath these conflicting visions was the question: Were cooperatives the solution to farmers' problems or could they ultimately become, as Nourse intimated, part of the problem, a further manifestation of the economic conditions that called for collective action? Farmers wanted to use cooperatives to protect their

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economic independence, but cooperatives needed farmers to be economically dependent on them. Unable to resolve this conundrum using the traditional mores of cooperation, cooperatives turned to more purely economic norms—efficiency, homogeneity, standardization, being a low cost provider. These standards brought new stakeholders into the cooperative fold, diminishing the relative power of farmers within their own organizations.

This is also a story of how the management (i.e., managers and directors) of farmer-owned cooperatives perceived and articulated farmer concerns. Unlike proprietary firms, which are essentially profit driven, cooperatives can represent multiple, sometimes conflicting, social or economic objectives in a reflection of the varied characteristics and objectives that often comprise their membership. As this text will suggest, to resolve the inconsistencies in objectives associated with collective marketing over the span of the 20th century, cooperatives progressed from regarding other firms as adversaries to identifying with them. Economist Mieke Meurs observed that "social scientists understand little about the conditions under which norms do or do not change in the face of economic incentives" (2001:108). By illuminating how cooperatives changed norms to facilitate their response to the economic incentives of industrialization and globalization, this study contributes to a greater understanding of the relationship between norms and social change.

The California Plan: Imposing Order and Stability on the Marketplace

In 1923, attorney Aaron Sapiro established a model of agricultural cooperation—the "California Plan"—based on the success of Sunkist, founded in 1893 as the Southern California Fruit Growers Exchange. The cooperative was formed by growers who wanted to get the right fruit to the right market at the right time for a fair price, a task that middlemen were unable to perform satisfactorily. In 1907, growers began using the name "Sunkist" to market fruit.

Sapiro saw producer control beginning in the marketplace with the product as a deliverable because this gave producers the basis to negotiate with processors or engage in further marketing themselves. Sapiro's "new system of orderly distribution of agricultural products" or *orderly marketing* became the conceptual basis for commodity-specialized cooperatives pursuing a large market share (1923:93). Sapiro argued that cooperatives should organize all the growers of a commodity on a "huge scale": for example, garnering 97 percent of all the almond growers; 92 percent of the raisin growers and so forth.

Producer commitment and control attained through marketing contracts would provide product and capital to force the cooperative into aggressive consumer marketing efforts like advertising to deplete excess inventory. Sapiro sought to escape the confines of a particular geography to limit cooperatives' tendency, particularly in the Midwest, to overemphasize production. For Sapiro, marketing was key-his ideas would become, in the late 20th century, the conceptual foundation of the "market driven cooperative." "If you raise something you think of the locality. If you buy something, you think of the commodity. That is the first and dominant point in the California idea." Comingled into a common pool, the product (or commodity) was also the basis of producer equality. "Every man gets the same as every other for the same type, grade, quantity, and quality of product. It is absolute cooperation" said Sapiro (1923:89).

Sapiro restricted cooperative membership to farmers yet he greatly admired the business model his contemporary, economist Edwin Nourse, saw only in terms of monopolistic exploitation of farmers. "Business" to Sapiro meant minimizing local politics in favor of gaining capital for the cooperative through contract production with growers, starting the cooperative as solidly as a bank with an inventory of raisins, hens, eggs, or pears. Growers were to be tied to each other through strong, permanent contracts. Sapiro did not believe in the economic forces of supply and demand, which he called "weird machinery which in some way skillfully strips the producer and carries riches for the middleman" (1923:90). He wanted to position strong cooperative suppliers against the marketplace's strong buyers or distributors of farm products.

The Competitive Yardstick: Disciplining the Marketplace

To Nourse, a cooperative model based on a bilateral monopoly, pitting cooperative against the processor, gave the cooperative too much market power because it represented "collective bargaining with a big stick" (1945:108). Nourse came from a Midwestern populist heritage, reflected in his sensitivity toward farmer victimization, which he saw as inequalities in size between producers and those they transacted with. By creating competition that could give producers the best deal at harvest or when purchasing farm supplies, cooperatives contributed to a market system that represented equal opportunity for economic success. Cooperatives were also a way for farmers to participate in business. This brought farmers into the economic system as social agents, able to affect their fate through their livelihood.

Nourse started from the proposition that multiple transactions ensured the integrity of the free enterprise system. His cooperatives began small and increased in size to restore competition or services to a problematic marketplace that was not delivering what farmers needed. In the popular expression of the yardstick, by providing "an extra bid," cooperatives kept other firms "honest" or realistic in the prices and services offered farmers.¹ Cooperatives would be a "competitive yardstick" by not only setting the pace of competition, but also by disciplining their competitors through superior or innovative examples of processing or distribution. Once this objective was attained, Nourse recommended that cooperatives "should be content merely to maintain 'stand-by' capacity or a 'yardstick' operational position rather than try to occupy the whole field or a dominating position within it," a stance opposed to Sapiro (Nourse 1945:106). Farmers were to return to farming, in effect ceding cooperative market share to the newly chastened proprietary firms.

By scaling back to a shadow, "watchdog" presence, monitoring markets for potential intervention, the cooperatives in Nourse's model reinforced the message that the ideal cooperative was small and that the agricultural marketing system would not work to the farmers' benefit without continued vigilance. Nourse even went so far as to recommend that that, once industry had been made competitive, a large, highly efficient cooperative "may be well advised in entirely terminating operations" (1945:106). Nourse privileged a small organization that sought to differentiate itself from proprietary firms by emphasizing personal service over the economic values of efficiency (more output per unit of input), large size, and low cost production.

Identifying and highlighting "cooperative difference" would become the defining characteristic of American cooperatives throughout the most of the 20th century—that is, how unique relative to investororiented firms (IOFs) their philosophies, products, and operating practices were. Cooperative "difference" corresponded to a high cultural regard for the independence of the American producer.

Finding the appropriate mix between machinery and people would become an ongoing challenge for cooperatives as they sought to differentiate themselves from proprietary firms. In the yardstick model, managing relationships was not seen as a way to resolve marketing problems because cooperatives and proprietary firms were seen as natural enemies. Likewise, forming an alliance with customers was out of the question because farmers believed consumer pressure depressed food prices (Fite 1981). The model sent the message that farmers should "go it alone," trusting no one but themselves. So, within the yardstick philosophy, farmer control had to be expressed—or objectified—through an investment. Farmers were to exert control over their market situation through asset ownership and technological prowess-ownership equaled control. The productivity of the newly mechanizing agricultural sector in the first part of the 20th century undoubtedly made farmers receptive to this message. Farmer autonomy and organizational tangibility were privileged in the way Nourse conceptualized what a cooperative should look like and how it should relate to the rest of the business world. This attitude segregated cooperatives from the rest of the business community. The expression used by the cooperative community, "cooperatives as the Fourth Estate," captured this difference.

In reality, farmers were unlikely to let noncooperative firms take market share and business identity from them. The yardstick model became an iconic model of cooperation, perhaps because Nourse understood how cooperation could work within a freeenterprise system that touted the advantages of hard work, competition, and independence (elements of the agrarian American dream) but did not necessarily protect farmers when they went to buy or sell. In his model, it is not the organization itself that protects farmers (because, Nourse warned, the cooperative could become too much like "big business"); rather, it is prices as the outcome of the competitive process that matter by ensuring farmers' livelihood. Cooperatives' importance was established by the way they endorsed an American free-market ideology that promoted competition as an institutional proving ground for "survival of the fittest": the same standard the marketplace applied to American farmers. Indeed, dairy, grain, horticultural, and livestock farmers wanted the assurance of an extra bid to offset the ongoing consolidation of many commodity markets during the 20th century.

For many farmers, fewer and larger buyers were becoming the norm.

Proportional Investment Cooperative: Cooperatives as an Extension of the Farm

In contrast to Sapiro's plan, the competitive yardstick offered Midwestern producers a decentralized model of cooperative marketing, based on breaking down power rather than building it up. Individual farmer interests mattered more than the collectivity. This fostered a production-centered culture, that is, "a cooperative exists to market what the farmer grows." The cooperative increased market competition and improved the farm operation's efficiency by giving producers "an extra bid" to compare with other bids to ensure a fair selection or an optimal production decision thereby reinforcing the producer's identity as an independent entrepreneur. Midwestern cooperatives and their members were loosely coupled; most followed an open membership policy. Membership was often transitory based on whatever cooperative offered the best deal. Moreover, equity or investment requirements for membership were minimal, typically based on deferred patronage refunds, to make membership and capital investment as "painless" as possible.

Producers had established organizations that were clearly "user owned, user controlled, and user benefiting" (Dunn 1988). In the Midwest, almost every County had a grain elevator, feed mill, and perhaps also a livestock marketing cooperative as well. Yet the organizational significance of producers within cooperatives would be challenged in the latter half of the 20th century by industrial agriculture's reorganization of agricultural production and marketing. Through vertical integration, industrialization linked multiple stages of production and marketing under the ownership of the same firm. Industrialization created a need for cooperatives to link other stages of production and marketing to the farm on a more systematic basis than had previously occurred within a production agriculture composed of independent farmers. The advantages of reorganization under industrialization were lower production costs as the scale of production increased, and the potential for greater standardization, food safety, and animal health. These benefits offered the potential to capture more margins or profits from mass-market consumer-branded products.

The producer independence captured within the Nourse model made farm and cooperative exist as disparate economic units because farmers (and Nourse)

implicitly viewed cooperatives as an extension of the farm, subordinate to the decision-making power of the individual producer. If the farm was profitable, the cooperative did not have to be. The concept of the proportional investment cooperative developed by economist Richard Phillips (1953) brought farm and cooperative together in a symbiotic relationship, creating a rationale for vertical integration. Phillips argued that the cooperative could not be looked on as a firm separate from the individual operations of the participating firms (i.e., farm enterprises). Interdependency between the two was fundamental-the "cooperative had no more economic life or purpose apart from the participating economic units than one of the individual plants of a large multi-plant firm" (Phillips 1953:68). Phillips addressed the cooperative as a team or common plant operated by sovereign economic units (firms or households) who agreed to coordinate their activity with the "idea of maximizing returns to each of the individual associated firms" through maximizing "the profitability of the complete chain of integrated plants operating as a unit": this was vertical integration (1953:68–71).² Paradoxically, establishing a conceptual basis for vertical integration would be the first step in establishing cooperatives as organizations with goals and identities separate from farmer-members.

Out-Cargilling Cargill: Doing It All for Producers

Sapiro wanted cooperatives to be large and powerful to match the market power of those they sold to; to maximize individual producer influence and control, Nourse wanted cooperatives to represent a small and personal marketing experience. The industrializing pork industry would provide the test case for Midwestern cooperatives to become significant, if not large-scale commodity marketers. State of the art technological changes like scale economics and structural changes like vertical integration and coordination were bringing cooperatives to the ranks of the Fortune 500 corporations during the latter half of the 20th century. Unlike their agribusiness counterparts financed by anonymous stockholders, however, cooperatives had to consider how the meaning of the organization changed with size. In the evocative language of the competitive yardstick model, any large business could exploit farmers, including large cooperatives.

The yardstick norm was both populist and agrarian. Grant McConnell (1969:180) describes agrarian

populism as the "political platform of the common man" based on the concept that "power is suspect." Cooperatives are the institution that provides "the common man," that is, the small farmer, equality in the marketplace. The critical issue was whether producer equality was maintained by keeping cooperatives small and participatory or commensurate in size, scale, and vision with the large businesses that threatened to overpower farmers in the marketplace. As agriculture was industrializing, farmers with "an innate fear of bigness" appeared to be keeping cooperatives from holding their own against "big industry and big agriculture" (Fite 1978:271). Other producers and farm leaders, concerned about the growing vertical integration in agriculture by agribusiness corporations, urged cooperatives to "beat them to it" (Rhodes 1972:40). Enhancing "active competition" for farm products mattered less for this group than simply preserving the "operator's access to markets" (Rhodes 1972:40). Under the pressures of industrialization, the Nourse concept of using collective action to maintain a healthy free enterprise system was eroding.

Concern over separation of ownership and control began to emerge within cooperatives, leading to the question, "When a cooperative becomes large enough to compete with a corporate giant, is it really responsive to farmers or is it beyond the farmers' capability to control it?" (Rhodes 1972:41). Howard Cowden, founder and president of the largest U.S. cooperative, Farmland Industries, responded, "size could be a virtue rather than a curse if the power, opportunities and advantages associated with bigness were based on the principles of service" (Fite 1978:255). Intensive member service was how cooperatives would stay true to their roots. Opportunities for service would be identified through daring vision. Cowden often said "Make no little plans. They have not the power to stir men's souls" (Egerstrom 1994:11).

When agribusiness majors like Archer-Daniels-Midland (ADM), Cargill, and ConAgra became the new standard for cooperative aspirations, farmers learned to expect daring vision from cooperatives. Yet, finding a way to position themselves on a par with these companies was not easy. For example, cooperatives could have used their strength in grain origination (postharvest collection) to form a national grain export cooperative. They were hindered by an inadequate market intelligence system, an inability to source grain outside the United States, and a market system overly specialized in domestic grains (Thurston 1976:45).

The emphasis on the first stage, postharvest aspect of marketing and food processing was perhaps a natural consequence of cooperatives' close ties to farmers but it limited their potential relative to other agribusinesses. Because cooperatives functioned "as vertical extensions of the farming operations of their members" (Bhuyan and Royer 1994:179) and because these activities are generally not as complex as further processing and product differentiation, they brought cooperatives low margins and little market power. Cooperatives became volume driven, and sought to offset low per-unit margins on the commodities they handled by maximizing market share. They built facilities and expanded geographically, competing against one another and proprietary firms to capture volume from producers so they could attain scale economies and maximize capacity utilization in processing operations.

As agricultural industrialization took hold, farmer interest in maintaining the ambience of small rural cooperatives through customized service and multiple facilities was at odds with the kind of organizations cooperatives were developing into through industrialization. Producers wanted cooperatives to bolster the competitive market system by rectifying the increasing tendency of one or two buyers to dominate local markets for livestock and grain. Traditionally in hog production and packing, the producer's position remained "open" until the product was ready for sale (Martinez 1999:10). In 1972, economist Harold Breimyer observed farmers' strong preference for remaining independent proprietors "buying and selling in the open market" over entering into production contracts (1972:14). Paradoxically, he noted that this had not stopped the steady growth of contracting. Likewise, producers resisted cooperative marketing agreements even if that could help the cooperative develop and maintain specifications for a branded product. American farmers supported collective marketing in principle but in practice were not strongly loyal to cooperatives (Breimyer 1972:14; Fite 1978:384). Cooperatives were judged according to a "survival of the fittest" criterion: The cooperative should compete in the market for farmers' product like any other buyer.

At the same time, agricultural industrialization was exposing cooperatives to new economic norms: efficiency, being a low cost provider, commodity specialization, and coordinating the various stages of production and marketing through a "big picture" systems approach. By adopting the state-of-the-art technology associated with industrialization, cooperatives

automatically became large firms. Six cooperatives entered the ranks of the Fortune 500 companies during the 1970s (Lauck 2000:14). This growth gave cooperative executives the basis for a grand vision or grand narrative that would allow them to become much more than an extension of the farm (Hogeland 2005). In February 1998, Land O'Lakes vowed to build a "world-class aligned pork system" for its small pork producer-members. Land O'Lakes also wanted to become the largest North American feed supplier as part of its plan to become a "total food/agricultural company" (Lauck 2000:122). Farmland Industries sought to "Out-Cargill Cargill." Noel Estenson, CEO of what would become the largest grain cooperative in the United States, CHS Inc., used the slogan "from the Back 40 [acres] to Aisle 40 [of the supermarket]" to launch a vision of the cooperative as an integrated unit from producer to consumer (Estenson 1998). These ambitions put cooperatives in the league of ConAgra, Cargill, and ADM. Within this role, they were adversaries, fighting corporations and each other for the farm and consumer dollar.

Cooperatives Adapt to Industrialization

Rapid growth in market share among the four largest firms slaughtering red meats presaged a loss of the competitive bidding that both producers and cooperatives used to define their identity. Beef led the way: from 1980 to 1994, four-firm concentration ratios for steer and heifer slaughter went from 36 percent to 82 percent (U.S. Department of Agriculture 1996). Similarly, four-firm concentration ratios for sheep and lamb slaughter were 56 percent in 1980 and had reached 73 percent by 1994. Pork slaughter followed these trends. The share of slaughter accounted for by the four largest firms went from 34 percent to 46 percent from 1980 to 1994. During the February, 1998 annual meeting, CEO Jack Gherty stressed that "Land O'Lakes was absolutely committed to the development of a world class aligned pork production system offering independent producers a viable alternative to the growing force of large vertical integrators" (PR Newswire 1998).

Fearing foreclosure of competitive markets, cooperatives began pursuing "market access" for members.³ Land O'Lakes followed the Sapiro model by marketing meat as a commodity primarily to a single buyer (IBP); Countrymark and Farmland produced consumer-branded meat products sold in Midwestern supermarkets.

The pork industry was rapidly moving toward larger-sized farms, accompanied by an explosion of technological knowledge in genetics, building design, nutrition, and waste management (Hogeland 1995). These technologies were becoming less and less accessible to managers of smaller farms. In a 1993 survey, over 40 percent of 670 local cooperatives observed that producers with less than 2,000 head "were not changing substantially"; 27 percent were "scaling back production or getting out of the hog business" (Hogeland 1995:9). Developing strategic alliances with area packers, contracting with packers to produce hogs to specifications, forming producer-based marketing or "networking" associations were options for small and large producer alike. Nevertheless, 75 percent of these locals said small producers were "unsure of how to respond to the changes in the hog industry" or were making no significant change (Hogeland 1995:10).

Small- or medium-sized independent pork producers were often demoralized by the changes occurring in the pork industry. Economist John Lawrence observed the older, mismatched, and ramshackle facilities that seemed to be the norm in the Iowa pork industry and concluded, "reinvesting in their operations and themselves is one of the greatest challenges facing traditional producers" (1997:6). The small and medium sized independent pork producers who bought feed and other farm supplies from cooperatives usually did not keep production records. Absent such records, they did not know to the penny much feed was required per pound of gain, nor did they try pushing productivity (i.e., pigs/sow/year) beyond a certain level. They followed an intuitive approach to animal husbandry. "I can just look at them pigs and tell how they're doin," one farmer told anthropologist Randy Ziegenhorn (1999:116).

Economists predicted that the producer best adapted to industrialization utilized cooperative scale economies for volume purchases, kept records to identify inefficiencies, standardized housing and production practices, and committed their production to the cooperative through a marketing agreement (Rhodes 1993:13). These were not necessarily family farmers; indeed, social attributes like household status were irrelevant. Rather, they were a new kind of producer, a "farm business manager" who utilized contract marketing and financial management skills in tandem with an industrial structure of farming through "the keys to the industrial process," branding and identity preservation (Urban 1991:71).

Traditional cooperative norms-making commitments to rural communities through a federated system of ownership and control; providing a "home" for growers' product; setting the "pace" of competition; facilitating stabilized, orderly marketing-interfered with the streamlining and focus of industrialization, manifested through efficiency, turnover, repetition, predictability, and standardization. But by imitating the production methods used by pork integrators like Murphy Farms (Rhodes 1993:19), cooperatives were creating a new culture that allowed them to become more like other corporations than different. Through financial scrutiny, the individual difference and diversity that had been the hallmark of producer and cooperative identity under open, competitive markets could be minimized to fulfill the primary norm associated with industrialization, "being a low cost supplier."

Producing crops or livestock where geographic conditions dictated, not where farmer-members lived was an example of cost reduction. This criterion began to create specialization within agriculture, further eroding the diversification of family farm production. Deterritorialization stripped producers of the agrarian dignity that said "those who labor in the earth are the chosen people of God" (Jefferson 1784:280) and instead, cast them as "labor" (Urban 1991:70), which could be combined and optimized like any other factor of production, such as land, capital, or technology. Open markets gave producers choice and with it, power over cooperatives. Industrialization gave choice to cooperatives. Industrialization replaced the haphazard, hit-or-miss coordination of the open market with interlinked, planned systems of production, distribution, and marketing. The tremendous capital investment represented by large scale plants forced cooperatives (and other food processors) to optimize the investment in facilities and working capital by selecting growers who could uphold product standards. The planning associated with industrialization was antithetical to the flexibility and independence associated with open markets. With industrialization, planning began at the genetic stage of production in a search for the desired product attributes. The search for lean genetics in hogs that began in the 1980s was a precursor to the genetic-based "identity preservation" systems that emerged a decade later in grains and fruits and vegetables.

Farmland Industries, Land O'Lakes, and Countrymark pursued multiple goals—trying to bring production techniques used by members in line with new industry technologies; offering producers a producerowned marketing channel for pork to offset the rising share of slaughter done by the industry's leading four firms; supporting locally owned cooperatives producing feed and other products used in hog production; and developing consumer-recognized branded products.

This was a culture of cooperatives "doing it all" for members. The system focus of industrialization had expanded cooperative objectives significantly beyond the farmer-to processor transactions envisioned by Nourse or Sapiro. Through its "Farmland Foods" branded pork products, for example, Farmland pursued an integrated pork system that went from "farm gate to table." These ambitious goals created a conflict of interest for cooperatives. Gherty indicated Land O'Lakes' fast growing pork system "would protect not only the interests of independent producers, but also the cooperative systems' feed assets" (PR Newswire 1998). Cooperatives are often asked, "Who do we serve?" Industrialization changed cooperative culture so that the organization began to recognize itself as a stakeholder in its economic operations.

Protecting the collectivity and the assets that defined it was a critical outcome of cooperative industrialization. Prior to industrialization, cooperatives saw their mission primarily as protecting the individual family farmer. The competitive yardstick norm destabilized cooperatives by keeping them small and economically powerless (Hogeland in press). "Out-Cargilling Cargill" served a similar function by forcing large, economically efficient cooperatives to expend themselves in potentially high-cost service to members. For example, Farmland Industries, the largest U.S. cooperative, struggled to reconcile growth with populism by being "the Giant with the personal touch" who "grew large while seeming to stay small to the membership," a variation on the cooperative culture of "being all things to all people" (Hogeland 2004:28). "Doing it all" by going from farm gate to table required specialized expertise to cover the entire marketplace.

Industrialization provided an alternative set of norms not specifically tied to the needs of producers and so, offered the basis for cooperative identities encompassing more than a connection with producers. The norm of cost minimization forced cooperatives to make a choice: who would they serve?

The transformation of the pork industry signaled that a change in cultural values had occurred. Industrialization led food processors to make decisions

about rations, breeding, and marketing that producers ordinarily made within their role as independent entrepreneurs. Nourse valued cooperatives as an organizational form that encouraged the participation of small producers. He saw cooperatives as "bottom-up" organizations. Although this is an enduring cooperative attribute, industrialization brought greater prominence to the cooperative executives or managers who could look at commodity production and marketing from a broad systems perspective. Industrialization encouraged a managerial "top-down" culture within cooperatives. Industrialization's norm of cost minimization made it impossible for cooperatives to continue to be an extension of the farm, for farmers to believe that if the farm was profitable, the cooperative did not have to be. A crisis in pork production was the cultural leveling mechanism that eroded producer independence to create a place for the interdependence required by industrialization.

Consequences of "Doing It All"

Within the pork industry, industrialization made cooperatives livestock producers because they owned breeding stock. Independent pork producers feared that cooperative contract production could contribute to the potential for industry overproduction to depress prices for all. Cooperatives were not the drivers of the industrialization process; indeed, their market share within livestock was relatively minor, less than 15 percent, and contemporary survey evidence revealed producer discontent with cooperative slowness to come to terms with the changes in the pork industry (Hogeland 1995). Cooperatives were considered reactive, not proactive. The competitive yardstick norm outlined cultural alternatives—be small and potentially ineffective or large and potentially harmful to members. Pork cooperatives chose the latter path. Industrialization did not define outcomes in the pessimistic manner of the yardstick.

Independent pork producers who bought propane, feed, or agronomy services from cooperatives complained that cooperative contract production was competing with their own production (Ziegenhorn 1999:85). Although economist V. James Rhodes (1993:19) dismissed complaints as "producer resentment of competition," nevertheless, in 1998, producer fears were realized.

Vertical integration is an inflexible, continuous flow process, unable to respond quickly to system

shocks. At the end of 1998, a shortage of slaughter capacity caused hog prices to fall to the lowest level in 30 years, 16.5 cents per pound (Washington 1998). Break-even price was around 36–40 cents per pound. The crisis hit independent producers hardest, but growers whose contracts had a "floor" price, like the members of Land O'Lakes, were essentially protected from the impact of the price collapse.

The industrialization of the pork industry was a watershed event for cooperatives because it presaged the end of producer independence that underlay the cultural construction of the Nourse model of cooperation. Ziegenhorn observed that large cooperatives traditionally avoided producing agricultural commodities and livestock. When Farmland Industries did so, by contracting with farmers for its own packing plants, Ziegenhorn noted sharp rebukes and resentment from farmers that "an organization which they ostensibly own is also a competitor" (1999:85).

Such publicity was a negative social cost or externality (unforeseen consequence) to cooperative involvement in pork production. The essence of an externality is, as A. Allan Schmid suggests, interdependence (2004:92). Producers who wanted to maintain the status quo objected to cooperative involvement in the industry. Such producers knew their complaints would be more likely to be heard by the managers of the locally owned feed or grain cooperatives who had an ownership stake in the regional cooperatives invested in the pork industry than by the managers or executives of integrated pork companies. It suggests that there is an implicit social contract between cooperatives and community farmers that tacitly constraints what cooperatives can do. Producers control cooperatives whether they are members or not.

Although the cooperatives (via directors and management) saw their role as progress, as modernizing production, as preserving feed markets for their own products and those of affiliated local cooperatives, the leavening norms of industrialization made producer independence and control problematic for both cooperative and producer. Industrialization created pork production and marketing systems that were antithetical to the producer control associated with multiple, small cooperatives. These systems represented the interdependence between the pork producer, slaughterer, wholesaler, retailer, and consumer. The piecemeal approach to cooperation used by Nourse was insufficient to come to terms with an industrialized agriculture. Land O'Lakes lost \$26 million covering the contacts of its contract growers and by 2005 had sold its swine operations.

Cooperatives were unable to "do it all;" integrators now dominate the pork industry. There is no major farmer-owned marketing channel in the pork industry. Did producer protest achieve a Pyrrhic victory? From 1980–2001, Farmland Industries (including the pork operations of Farmland Foods) returned \$306M in cash patronage and stock dividends to members (Rural Development, USDA).

The grain industry also followed a Nourse model of competition. Producers and managers of local cooperative elevators preferred making independent marketing decisions that freed them to sell to the highest bidder over making formal commitments to market grain through an integrated cooperative grain system (Turner et al. 1978:16). Roger Ginder observes that "Optimal use of the facilities individually did not result in optimal use of the facilities as a system" (1991:16). The cooperative sector incurred a high level of debt in sustaining marketing facilities that were underutilized. In a more general sense, Michael Cook and Constantine Iliopoulis (1999:527) describe how an agricultural depression during 1983 led producers to be "disenchanted with the inability of their traditional cooperatives to assist them during their economic despair." Producers rebuked cooperatives for having "too much cooperative baggage," such as bureaucracy, inefficiency, and excess capacity (Cook and Iliopoulis 1999:527). These are problems of excess asset accumulation. Cooperatives understood competitive advantage as tangible assets. The competitive yardstick erased differences between the prices of cooperatives and their competitors (Cook and Iliopoulis 1999:527), but the economic cost was high. In 2002, cash-strapped Farmland Industries sold many cooperative assets to Archer Daniels Midland (ADM), reducing cooperative involvement in the grain industry to the postharvest "first handler" local cooperative level. In 2002, Farmland Industries also filed for bankruptcy.

Pricing similarity raises ideological questions about the purpose or meaning of a cooperative. If the two organizations price alike, what distinguishes a cooperative from a corporation? If a Farmland or Land O'Lakes prices like Cargill, why should a producer invest in the cooperative? Nourse said cooperatives should essentially "disappear" when the yardstick erased the market failures like monopoly that had called it into existence. In a sense, this happened as Nourse predicted. At the end of the 20th century, cooperatives began downplaying their collective identity in favor of calling themselves "a business that just happens to be a cooperative." Farming's iconic image changed as well. In 2004, Land O'Lakes CEO Jack Gherty said, "with the ongoing consolidation and industrialization of agriculture, farming's public image has changed from a 'way of life' that deserves preserving to that of just another business enterprise" (2004:31). At this time of market triumph, business and corporate values reign supreme. How has this affected cooperative culture and ideology?

Emergence of the Value-Added Cooperative

In the mid-1990s farmers began to recognize that "we're not going to out-Cargill Cargill, so we have to do things differently" (Day 1994). Persistent high levels of market power in both food retailing and food manufacturing challenged cooperatives to develop a more strategic approach to marketing (Cotterill 1999). Pro-Fac executive Thomas Kalchik spoke plainly: "Taking an adversarial approach is not in the best interest of either the processor or the producer" (1994:27). This was a turnaround from the traditional, adversarial yardstick position. Cooperatives began to represent producer interests as a part of (not at odds with or separate from) the emerging systems of globalization and industrialization. A new definition of cooperatives emerged: "Cooperatives exist because they add value by creating orderly marketing and by earning a processor return" (Moore 1994:31). This definition by Countrymark executive Hugh Moore is notable for not mentioning farmers, farmer advocacy or farmer victimization. Cooperatives were putting on a new public face that reflected a multidimensional value system. Farmland's slogan, "Proud to be Farmer Owned" was an identity of the 1970s. Nourse's aggressive "good fort Competition" was being overrun by the new stakeholders brought into cooperatives through industrialization (Nourse 1945:108). The vision statement of CHS Inc. is completely contemporary in its emphasis on the role of industrialization balancing the interests of farmers and consumers: "To be an integrated supply and grain-based foods system linking producers with consumers."

Value-added definitions include "the collection of activities within a company or industry resulting in the creation of a product or service valued by the consumer" (Katz and Boland 1999:100). "Value-added" cooperatives are also "market driven" cooperatives. The stress on the product represents a return to Sapirostyle values where the product, not the producer, is paramount. This phase of cooperative identity utilizes other organizations in "adding value" to producermembers' product through further processing or global market access. CHS (Inver Grove Heights, Minnesota) created Ventura Foods, a leading U.S. supplier and manufacturer of salad dressings, sauces, margarines, and butter blends, through a joint venture with Mitsui and Co., Ltd, a Japanese firm. CHS sees Ventura Foods as an opportunity to add value in the consumer foods business, to re-create CHS as a "grains-based foods company" and to reduce dependence on commodity earnings.⁴

Within contemporary markets, cooperatives appear to be gaining advantages for farmers not by emphasizing difference (the solution of an earlier era) but by stressing compatibility, that is, how they fit into a supply chain. For example, Pro-Fac Cooperative (Rochester, New York) produces fruits and vegetables for branded food companies. A U.S. market share of some 50-55 percent in recent years (Calvin and Cook 2001) and a globally recognized brand name has allowed Sunkist (Sherman Oaks, California) to become a fresh fruit category manager for prominent retail chains. These relationships reflect a new norm: Being an effective competitor in the global economy requires participating in a network as a trusted cooperator (Morgan and Hunt 1994). In this new market setting, one of the primary ways cooperatives become "value added" is by improving the coordination and flow of the integrated food systems or supply chains that have emerged to replace open markets as a coordinating mechanism in the food industry.

Supply chains often involve an economic division of labor, where retailers designate preferred suppliers who, as Calvin and Cook suggest, perform category management, real time inventory management, and market development in exchange for long-term supply contracts. Partnering's goal of "taking costs out of the system" is realized when the retailer can replace multiple suppliers with a handful of high volume suppliers. Cooperative members "control their destiny" through the market access provided by the retailer's shelf space and global market share. This is an example of a cooperative working with a corporation to attain a goal it could not attain on its own.

Cultural alignment with organizations that have been defined as adversaries for most of the 20th century may also be possible because domestic producers are confronting significant import competition from countries like China and Brazil. Because U.S. labor costs are relatively high, labor saving technology is a way for cooperatives to become more competitive with imports. This is a different way of investing in assets than promoted by the competitive yardstick. For example, raisin cooperative Sun Maid has introduced technology that will produce a cleaner raisin by keeping grapes off the ground as they dry.

Discussion and Conclusions

During the 70-some years covered by this study, producers resisted committing product to cooperatives, wanting to exercise their independence through a free market system that offered a choice of buyers. Agrarian values made cooperatives sites for negotiating farmer control over agricultural industrialization. This strategy failed because cooperatives did not possess the critical mass of producer supply that could have demonstrated the merits of challenging monopolists through a producer-owned marketing channel. The Nourse model focused too exclusively on the farmer role to consider how farmer interests could be enhanced within the network of consumers, processors, and retailers constituting the industrialization process. Sapiro's "orderly marketing" cooperative of the early 20th century and the "market-driven" or "value-added" cooperative of the late 20th century shared a commodity emphasis that backgrounded the role of producers.

The norms that shaped the meaning of collective marketing for most of the 20th century were outward looking, concerned with the position and performance of cooperatives relative to the rest of the agricultural marketing system. The competitive yardstick norm allowed farmers to compare the cooperative's bid with those of other firms. The norm of "out-Cargilling Cargill" allowed a similar cross-company comparison of service and performance. Neither norm considered cooperatives on their own terms as organizations that could bring producers the higher margins from raw materials held within the cooperative system to be processed and marketed as branded or identitypreserved products. Commodities invariably leached out of the cooperative system through the interfirm and intercooperative competition fostered by the competitive yardstick. Now, after 70 years, producers are committing to cooperatives because agricultural marketing has evolved to a stage where products are tailored to specific uses and markets. Market determination takes place at the genetic, preproduction stage, not at the postharvest stage represented by the competitive yardstick. Cooperatives have entered a "value added" era that is both inward and outward looking. Cooperatives use their internal processing resources to improve the market value of the farmers' raw product but they also need external linkages to mass retailers or food service firms to get maximum benefit from that effort.

Industrialization's standard for efficient operations was operating at a lower cost than competitors. Agricultural industrialization produced norms and conditions that undid cooperatives' service culture. The huge capital investment demanded by industrialization gave cooperatives a measure of control over members, that is, the capital investment had to be made profitable.

Industrialization depersonalized agriculture by introducing economic standards that classified farmers as a factor of production whose use should be optimized like any other factor of production, that is, capital, land, or technology. Cooperatives could now choose efficiency over serving members, cooperatives now had the power of choice that the competitive yardstick had given members. No longer was the farm the locus of decision making because the cooperative was an extension or appendage of the farm. The economic norm of efficiency introduced by industrialization gave cooperatives the power to close small, underutilized facilities like feed mills and grain elevators that, under the competitive vardstick, would have been considered too valuable to close because some members liked the convenience of having a facility close to their farm.

As the relative importance of producers to cooperatives declined, the importance of capital further increased. Cooperatives began seeking nonfarm investors to restore declines in equity investment resulting from farmer attrition during the latter part of the 20th century. This was part of a general cultural transformation that weakened the symbiotic relationship between farm and cooperative.

Nourse's concern about the disproportionate size and scale of farmers relative to "big business" may be his enduring contribution to cooperative economics. Cooperatives may have attained normative stability and coherence perhaps at the cost of overlooking who has power in the marketing system and who does not. Farmers' efforts to "control their destiny" through collective marketing may prove illusive without the vigilance Nourse also recommended.

Notes

1. Cook comments that "one manager's objective function might be an increase in market share or revenue growth, whereas the wise old-timer from the competitive yardstick school, might think the key to cooperative success is: Did the cooperative keep the IOFs [investor-oriented firms] honest?" (1994:48).

2. The proportional investment cooperative, which has been called the "original 'pure' form of U.S. agricultural cooperative organizational design" (Cook and Chaddad 2004:1250), highlights the importance of the individual producer–member. But participating firms typically did not share the joint plant equally. Rather, participation depended on the extent of the integration or overlap between their firm's activities and those of the joint plant; proportionality determines how the participating firms share the costs and benefits of the joint firm. Phillips's concept linked vertical integration with a geographically dispersed production agriculture composed of family farmers.

3. Kimberly Zeuli notes that "unlike other organizations, a cooperative may be able to justify entering this type of market to challenge the market power of the monopolist" (2001:6). The cooperative can choose to continue to charge the high monopolist price and return excess profits back to members in the form of patronage refunds. This can increase members' welfare.

4. Until 2005, as part of this effort, CHS was a national manufacturer of flour and corn tortillas, tortilla chips, wraps, and prepared Mexican foods for the retail, foodservice, and restaurant markets.

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