We are grateful to a large number of coop managers, workers, and board members who have granted us interviews, provided original source materials, and allowed us to observe their meetings since 1998. We are also grateful to Daniel Beunza, Dana Fischer, Ray Horton, James Kitts, Chuck Tilly, and participants in the Contentious Politics seminar at Columbia University and the Strategy and Ecology Conference at Washington University for helpful comments on an earlier draft. This paper is dedicated to Dick Cyert, who introduced us to the Sunnyside Food Coop, where he enjoyed the economic experiment and the soup.
Social movement organizations may resist or reverse the tendency for conservative goal displacement when the pressure they face is from a focused rather than diffuse source. A salient rival sharpens the organizational identity of the SMO by providing a contrast. The result can be a re-invigorated SMO. We document this process through qualitative and quantitative analyses of food cooperatives. After decades of malaise and identity erosion, these SMOs have recently been enlivened, and many have re-emphasized cooperative identity and the organizing principles associated with it. The trigger was the emergence of a potent competitor, the corporate chain Whole Foods. Coops faced with his rival have asked “how are we different?” Their answer has been “cooperative identity” and they are more likely to pursue cooperative goals and more likely to emphasize cooperativism in their appeals to consumers and inter-organizational relations than are coops that do not face Whole Foods.
“It’s not just about being around nice people, having a good life and saying hi to your neighbors. It’s about living a lifestyle that is an active alternative to capitalism. And it’s serious…capitalism wants to invade.”

-member of the managing collective of the People’s Market Coop

“If you go back twenty years, health food was a Birkenstock, hippie type of lifestyle… you went into the store and people were barefoot and they had long hair and it was kind of a makeshift environment. And it evolved into what is now Whole Foods and Wild Oates, which is pretty amazing.”

-marketing manager at a leading for-profit natural-foods chain

Social movements routinely depend on organizations, either as vehicles for challenging economic and political structures or as contexts within which participants may pursue alternative cultural and social goals. However, social movement organizations’ (SMOs’) agendas of change expose them to hostility and pressure to conform their goals and structures to the surrounding society (Zald and Ash, 1966). Since the core values and ideals of radical organizations often do not resonate with, and occasionally conflict with, those of more conventional organizations with whom they must interact (e.g., resource suppliers) SMOs face constant pressure to modify their defining features. Consequently, the question of whether SMOs succumb to this external drag of conservatism or find ways to maintain and invigorate themselves is crucial to our understanding of the viability, efficacy, and dynamics of social movements.

We maintain that organizational identity – the “social codes, or sets of rules, specifying the features an organization is expected to possess (Hsu and Hannan, 2005:475) – is a key mechanisms through which external influences affect the basic organizing principles (e.g., goals, strategies, and structures) of SMOs. SMOs face pressure to modify organizing principles when the identity represented by those principles does not resonate with the environment (Baron, 2003; Rao et al., 2003). At the same time, organizational identity may also be an internal source of strength with which SMOs may resist such pressure. In particular, as Stinchcombe (1965) famously argued, organizations are imprinted with the ideals of their founders and of the era in which they are founded, and these have a persistent influence on the organization. This suggests that organizational identity provides a source of inertia with regard to the goals, strategies,
and structures of SMOs, even as the environment around them changes (Clemens, 1993). Consequently, organizational identity represents both a force for change and stability of SMOs.

We investigate the theoretical tension surrounding organizational identity and SMO organizing principles with a qualitative and quantitative analysis of retail food cooperatives (hereafter coops). These SMOs are part of a consumer cooperative movement that has opposed corporate domination of the economy and promoted autonomy and democratic control for consumers. Most food coops were founded in the late 1960s and early 1970s, at an historical moment when their goals were particularly resonant with societal trends. In the subsequent two decades coops evolved just as classic theories of SMO dynamics would predict—the coops exercised less and less their cooperative identity and became outwardly more like other organizations in their environment. In recent years, however, there has been a reversal of that trend toward conservativism, and a reawakening of cooperativism in many of these organizations. Our analysis suggests that the triggering mechanism for this reversal was the emergence of new and potent competition in the coops’ natural-foods niche, particularly from the for profit corporate chain Whole Foods.

The coop case therefore provides support for both the idea that SMOs are pressured towards conservativism, and the idea that their identities are persistent. It also provides a valuable opportunity for understanding how the seemingly opposing forces generated by SMOs’ identities can be reconciled. As our qualitative analysis will show, there is compelling evidence to support the notion that coops compromised their organizing principles in the face of external influence. The fact that they returned to cooperativism when faced with an existential threat, however, indicates that their founding identities were present all along, even if dormant. The question then becomes under what conditions will SMOs’ identities be seconded to other influences on goals, strategies, and structure, and when will identities be resonant enough to take hold over those factors. The effect of Whole Foods on the coops suggests one compelling explanation; that a salient rival organization (or counter movement) makes SMO identities more resonant, an argument consistent with other evidence in the social psychology of identity (Sherif et al. 1961; Tafjel and Turner, 1986). More generally, we
argue that opposition to an SMO may erode it or invigorate it, with the result depending on whether the opposition is diffuse or focused, and the mechanism being the resonance of organizational identity.

By identifying a condition in which the “march to conservatism” of SMOs may be arrested and even reversed, we highlight a fresh dimension to accounts of the vibrancy of SMOs and social movements. In particular, our arguments and evidence have implications regarding the interactions between movements and counter-movements, suggesting that they may enliven each other even as they pursue antithetical goals (Meyer and Staggenborg, 1996). Our findings are also relevant beyond the social movement literature, as they illuminate a relationship between organizational identity, strategy and structure that should hold for all kinds of organizations, not just SMOs. By plumbing their identities in the search for a competitive advantage, the coops reinforce ideas about the persistent influence of identities while at the same time illustrating the possibility that identities may seed strategic innovation. For example, in their effort to emulate Whole Foods while remaining true to their cooperative identity, the coops have created a novel inter-organizational form, the cooperative chain. Thus, the coops show that organizations may adapt their strategies and structures to changing competitive conditions while maintaining the continuity of their identities.

**Organizational Identity and the Maintenance of SMO Organizing Principles**

Evoking the origin of the idea in classic theory, Zald and Ash (1966) apply the label Michels-Weber to capture the proposition that SMOs are doomed to conservatism as bureaucracy displaces democracy and charismatic leadership (Gerth and Mills, 1946; Michels, 1962). In this account, bureaucracy and hierarchy are seen as inevitable responses to organizational growth and to the pursuit of influence in a political system already dominated by bureaucratic and hierarchical organizations. Another source of pressure against radical goals and structures is coercive isomorphism where powerful organizations influence those that depend on them to become more like them (DiMaggio and Powell, 1983). This effect is endemic in the literature on cooperatives which documents coercion or cooption from banks (Mintz and Schwartz, 1985; Simons and
Ingram, 1997) and government bureaucracies (Rothschild and Whitt, 1986) as sources of pressure away from cooperative principles.

The literature has identified exceptions to the “iron law” implied by this Michels-Weber proposition, but most often the exceptions rely on the SMO being insulated from its environment (Garner and Ash, 1966; Kanter, 1972; Jenkins, 1977), a condition that may indeed foster the internal maintenance of SMO goals and structures, but will typically undermine the ability to actually achieve those goals because changing political, economic and social systems requires interacting with them. Clemens (1993) identifies an alternative route to SMO maintenance in her study of the persistence and influence of women’s groups in the decades around 1900. She suggests that the management of organizational identity may prevent conservative goal transformation: “rather than identifying a unilinear trend toward hierarchical, bureaucratic forms, this alternative account suggests that we should expect to find a lot of cultural work around the questions of ‘What kind of group are we?’ And ‘What do groups like us do?’” (p. 775).

The evocation of organizational identity introduces arguments that SMOs might be expected to maintain their goals and structures regardless of the vagaries of external influence, because the costs of changing the organization’s core outweighs the advantages of repositioning for efficiency or to satisfy interaction partners (Stinchcombe, 1965; Baron, Hannan and Burton, 1999). This path-dependent position does not suggest an outright rejection of the influence of the environment on an SMO’s identity expressions, but allocates more weight to initial conditions than is foreseen by the deterministic decline of the Michels-Weber model. Organizational theorists have been explicit that change happens, but at a cost of disruption, which is greater when the change impinges on the organization’s core identity (Barnett and Carroll, 1995; Hannan, Baron, Hsu and Kocek, 2006).

To date, efforts to link organizational identity to the dynamics of SMOs have argued that the resonance of identities depends on cultural trends in the SMO’s environment (e.g., Rao, Monin and Durand, 2003) and that institutional entrepreneurs may build alliances between organizations by framing them as compatible in identity terms (Clemens, 1993; Ingram and Rao, 2004). Both of those processes played a role in
the coop case, but did not adequately account for the potent force that prompted us to investigate coops in the first place; changes in competition. Indeed, the effect of competition on organizational identity has gone largely unexamined in the literature, although evidence from social psychology links the resonance of a group’s identity to the salience of competitors (Sherif et al., 1961; Tajfel and Turner, 1986; Hogg and Terry, 2000), and at least one account of the relationship between salient competition and SMO activity claims (but does not directly examine) organizational identity as the intermediating mechanism (Greve, Pozner and Rao, 2006). Initially curious to understand what would happen to the coops when they encountered powerful competitors possessing sharply contrasting identities, we quickly became immersed in the ‘David and Goliath” struggle that ensued and is still underway today. As we learned more about the competitive dynamics that threatened the very survival of coops, we expanded our initial observations into a systematic study consisting of both a qualitative and quantitative investigation.

**Method of Research**

We used a multi-method approach to study how competition affects the dynamics of organizational identity in order to arrive at a more comprehensive understanding of this question than any method alone could provide (Jick, 1979). The qualitative inquiry sought to provide detailed background and fine-grained insights into how the members of the coop community perceived and interpreted: the nature of competition in the retail food industry, their organization’s identity, and their organization’s responses to competition. More generally, since the existing literature has yet to adequately link competition and organizational identity, we began with a qualitative analysis of the coops with the aim of generating grounded theory (Eisenhardt, 1989; Glaser and Strauss, 1967). The subsequent quantitative analysis was designed to validate with a sample of coops the main generalizable theoretical insights derived from the qualitative investigation.

We designed the qualitative study with two objectives in mind. First, we wanted to gain insights from a diverse range of coops in terms of the degree of competition faced and the level of adherence to principles associated with cooperative identity. Second, we
wanted to observe the dynamics of identity and responses to competition over time. To satisfy the first objective we visited and conducted interviews at six coops. To satisfy the second objective we conducted a longitudinal case study of a seventh coop, the Sunnyside Food Coop as it faced the entry of Whole Foods to its market. We selected these coops using theoretical sampling (Glaser and Strauss, 1967), looking for variance on two dimensions: (1) the degree of for-profit competition they faced; and (2) their adherence to cooperative identity, by which we mean the apparent influence of cooperativism on their goals and structures. Table 1 locates the coops approximately on these dimensions, while table 2 summarizes important characteristics of each (we have changed the names of the coops to protect the anonymity of our informants).

Geographically, the coops were located in the Northeast (three), Midwest (two), Southwest (one), and Canada (one), in cities of varying sizes. The only coop-intensive region not represented was the West Coast. West Coast coops are well represented in journalistic accounts of the population, and we have seen nothing to indicate that they do not follow the general pattern we describe below.

All interviews in our six smaller case studies were conducted on-site at the interviewees’ coop. In total we interviewed 17 individuals including eight coop board presidents/members, five coop general managers, two working members, one industry consultant, and one executive from a for-profit natural food retail chain. A semi-structured interview format was used for each interview and an outline of topics to be discussed was provided to the interviewees in advance. Most interviews lasted approximately one hour, although some individuals were interviewed for up to five hours (across multiple sessions). All interviews were tape-recorded and transcribed. Additionally, we collected other materials, such as photographs, newsletters and consultants’ reports, from the coops where we conducted interviews. We complemented the in-depth interviews with a large number of less formal conversations at a three-day annual conference of food coops.¹

¹ The Consumer Cooperative Management Association is the largest annual conference for individuals involved in operating coops. The conference attracts hundreds of representatives from across the U.S. and Canada. Since the theme of the 2000 conference we attended was “Collaboration Meets Competition” it provided an excellent opportunity to gather a broad cross-section of views from those dealing directly with increased competition.
The longitudinal case study involved interviews of the Sunnyside Food Coop’s general managers, board presidents, and several board members, and attending monthly board meetings over the course of five years, always in the role of non-participant observers. We began attending the board meetings 2½ years before Whole Foods announced its intention to enter Sunnyside Food Coop’s market and for another 2½ years after the announcement (1½ years after the chain’s arrival). As a routine part of attending the board meetings we gathered the coop’s official minutes of the meetings and also recorded extensive hand-written notes during those meetings. We also observed a day-long board training seminar conducted by an external consultant to orient the new board members and to update continuing board members of the board’s duties, roles, and responsibilities. In addition, we gathered other documents that catalogued important details about the coop’s evolution during this time, including a market analysis performed by a consultant and monthly newsletters.

We used the data gathered in the qualitative study in two ways. First, we drew on them to derive a theory as to how the coops responded to competition (Eisenhardt, 1989). In particular, the preliminary field interviews and other materials were examined in an exploratory fashion to identify consistent patterns in the data (Miles and Huberman, 1984). This qualitative analysis largely consisted of comparing the similarities and differences among the coops interviewed (Bourgeois and Eisenhardt, 1988). The outcome of this activity was a set of constructs and preliminary hypotheses that were iteratively refined by applying them to each of the coops studied and relating them to similar theoretical concepts in the extant literature.

The data from the preliminary field interviews also helped shape several details of the research design for the quantitative study. In particular, the preliminary interviews influenced context-specific parameters of the survey we conducted, such as how to capture differences in adherence to identity and what sort of archival data sources were available to supplement the survey data. The data from the qualitative study were also used to help us interpret and amplify the findings produced by the quantitative analysis. In sum, whereas the qualitative inquiry aimed to develop a broad and detailed picture of coops’ identity and responses to competition, the quantitative analyses narrowed the focus in an effort to establish the validity of our primary theoretical predictions. Before
discussing the results of our analyses we first briefly describe the genesis and evolution of identity among food coops, which is an important precursor to understanding the dynamics we observed during our study.

**Origin and Evolution of Food Coops’ Organizational Identity**

For food coops and other consumer cooperatives, the social codes and rules that specify their defining organizational features derive from a model developed in 1844 by striking weavers in Rochdale, England. According to that model, a coop’s customers should also be members. Members are the residual claimants on a coop’s profits. In addition, members are ultimately responsible for decisions as to how the coop will be organized and managed, which are made democratically according to the principle of one-member one-vote. Almost all contemporary food coops recognize some version of the Rochdale Cooperative Principles as the blueprint for their core identity (see table 3). These principles contrast to those of the corporate form employed by the coops’ chain competitors. In corporations, the shareholders are the residual claimants. There is no principle that shareholders should have an operational (as opposed to merely financial) connection to the corporation, and no necessity that they have equal influence over its governance.

The first food coops in the U.S. were founded by European immigrants in the late nineteenth century, with the support of unions like the Knights of Labor. During Roosevelt’s New Deal, hundreds of food coops were founded with financial support from the government. A few depression-era coops persist, such as the Hyde Park Coop near the University of Chicago, but most current coops were founded in a new wave, after 1970. The new wave was the result of the search for an “intelligent compromise” by sixties radicals faced with the problem of designing lives which were both feasible and moral. “The coop stores were created, first of all, as a perfectly logical response to the demand among young radicals for the goods and services necessary for living a life outside the established economic system (Cox, 1994: 4).”

The ultimate aspiration of the coop movement was the utopian-socialist ideal of a commonwealth of cooperatives. Systematic efforts to bring about that outcome were rare
and for most coops, promotion of cooperativism in the broader economy was limited to a general sympathy for other cooperatives, expressed through occasional favors to them. On the other hand, almost all coops initially employed organizing principles that reflected cooperativism, with the key characteristic being member participation in the work and decision making of the coop. Most coops required shoppers to be members. All encouraged members to work in the coop, and some required it. Participation in decision making occurred through boards of directors that were active in the day-to-day governance of the coop, and responsive to concerns and suggestions from other members. And although it is not a necessary feature of a consumer cooperative, many coops operated without hierarchy among hired workers, allowing them to form an egalitarian collective which managed itself and exercised substantial autonomy in implementing the objectives of the board.

Data as to how many coops existed before the 1990s is sketchy, reflecting the decentralized nature of the movement. It is impossible, therefore, to estimate the survival rate of the new-wave coops with any precision. Still, the best evidence suggests that coops were fairly robust. Six of the thirteen coops that Cox (1994) mentions in his account of Twin Cities coops in the early 1970s, and four of the nine coops mentioned by Zwerdling (1979), are still in existence today which seems at least satisfactory for small retailers. The reason for this relatively high survival rate appears to be a lack of competition. Prior to the 1990s, other coops and small for-profit health food stores constituted the main source of competition. The absence of chain competition is likely due to the fact that the natural-foods niche was until the 1990s seen as too small to justify the chains’ attention. The coops that focused on natural foods were therefore able to pass beneath the radar of the retail food industry’s most potent competitors. Consistent with this diagnosis, the coops that were most likely to fail over this period were those that expanded beyond natural foods into the mainstream grocery category of the chains: Old-

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2 Ronco (1975) lists around 1000 coops, however he does not distinguish between “buying clubs” which require members to place a periodic order for food which the coop then buys and distributes, and “storefronts”, cooperative retail outlets which correspond to what we call food coops in this paper. Other accounts of that time suggest that Ronco’s list consisted predominantly of buying clubs. For example, Curhan and Wertheim (1976) identify twenty-eight coops in the Boston area in 1974, consisting of twenty-seven buying clubs and one storefront. Consistent with other accounts of the origins of the new wave coops, the only 1971 Boston buying club that morphed into a storefront by 1974 was peopled by young radicals.
wave coops like the Berkeley Consumer Coop and new-wave coops such as Denver’s Common Market that moved into supermarket-sized spaces, and coops that targeted the urban poor with canned goods and “junk food” (Curhan and Wertheim, 1976; Cox, 1994)³.

Those coops that survived during the period leading up to the 1990s gradually drifted away from their initial founding principles. Their expressed identities became less cooperative, and more centered on goals such as the promotion of environmentalism, sustainable development, and most importantly the promotion of natural food. Organizationally, they de-emphasized member work and participation, encouraged non-member shopping, hired general managers to intercede between the board and the workers, and introduced hierarchy and bureaucracy to govern those workers. This general pattern of erosion in the original cooperative principles seems to have occurred across the coop community. Our qualitative study certainly supports the trend away from cooperativism in the seven coops we examined in depth and further suggests that similar dynamics were at play in most other coops. It was at this point in the history of coops that we initiated our qualitative study and began to investigate the forces influencing coops’ organizational identity and organizing principles.

QUALITATIVE ANALYSIS

Atrophy of Food Coops’ Organizational Identity

The most common explanation our interviewees gave for moves away from original organizing principles was efficiency, consistent with Michels’(1962) arguments and with empirical evidence that cooperative principles are sacrificed when they become more costly (Barkai, 1977; Widekehr, 1980; Simons and Ingram, 1997). We heard repeatedly that members were less efficient workers than paid employees on tasks such as stocking shelves or working a cash register. Similarly, six of the seven coops we studied established a general manager position based on the justifications that there were

³ Curhan and Wertheim (1976) estimate the failure rate of buying-clubs that served mainly the working poor between 1971 and 1974 to be thirty-seven percent. Failure rates for coops whose members were high social-economic status suburbanites, and young radicals, were three and eight percent, respectively.
efficiency benefits of hierarchy and specialization of labor. Illustrative is the case of Rainbow, which was generally adherent to cooperative principles but had established hierarchy among workers in 1995 and was in the process of increasing the authority of the general manager during our interviews in 2000. Rainbow decided in favor of hierarchy when the organization was challenged by a fire which destroyed their store and forced a relocation project: “at a time of crisis, it’s easier to have one leader than to have ten different people. So I think that it sort of laid the groundwork for us to say there’s got to be an easier way for us to manage this store.” The appeal of hierarchy was also partly a function of the competitive environment, because the pressure on cooperatives to be efficient depends on the prominence of the capitalist alternative (Simons and Ingram, 2004). The one coop without a general manager, People’s Market, was explicit about the role of the market: “I think the reasons that people move into a hierarchical system is strictly because of market pressure. It’s easier to get things done in a hierarchy. The decision making process is much less unwieldy; it takes a lot less time. Our deal is we have to sit down and convince people.”

As is common in the experience of cooperative organizations, the food coops were subject to coercive isomorphism from transaction partners and governments. Aware of this risk, all of the food coops we interviewed recognized the principle of transacting with other coops, but in practice they always had significant dependencies on resource providers such as banks, landlords, and government agencies. (On the other hand, six of the seven coops we studied in depth relied on cooperative suppliers, and thus avoided one source of exposure to cooption or coercion). For one of the coops we interviewed, isomorphic pressure was responsible for its initial incorporation, because its first landlord, a large university, refused to strike a deal with an “ownerless organization.” Another, the only one that had completely abolished member work, cited government regulations as the reason: “...it’s totally out of sync with any kind of workmen’s compensation coverage. It’s just a rat’s nest of potential liabilities, and anytime the government’s looked into it they’ve ruled against it.”

These complaints lodged by coops’ transaction partners may be understood as criticisms on the resonance of coops’ identities. Resonant identities, according to Baron (2003: 12) “capture or activate powerful distinctions along social, ethnic, religious,
economic, political, and cultural lines.” Part of what banks, landlords and governments are saying when they pressure coops to be more like “traditional” organizations is that coops do not fit within the categories that have been established to ease the burden of transacting (Zuckerman, 1999), perhaps because the coops are insufficiently common or powerful to justify their own categories. It is also likely that the resonance of coops’ identities decreased in the 1970s and 1980s as the broader cultural themes that had motivated their founding became less salient (Rao et al., 2003).

Lastly, food coops likely exhibit the general tendency (that is, independent of specific cultural contexts and transaction partners) for cooperative identity to fade as the organization ages, similar to dynamics observed in studies of taxi cooperatives, worker-owned scavenger firms, plywood cooperatives and other worker cooperatives (Russell, 1985; Craig and Pencavel, 1992; Russell and Hanneman, 1995). One of our informants was explicit about this challenge to “sticking to the principles”, noting that “in this town a collective has a life span of about twenty years and we are thirty years old.” Zwerdling (1979) links the life-cycle of food coops to the life-cycle of their participants by attributing the zeal of the coops founded in the early 1970s to the youth of their founders. Another informant explained why the founders of one notable coop had all stopped adhering to cooperative principles: “you get tired of it…politics, hassling with people all the time, conflicting philosophies, a lot of bickering. It’s like a civil war.”

**Rivalry and Renewal**

In the six years that we observed the coop population there was a reversal of course in identity erosion. Our analysis suggests two processes that account for the re-awakening of cooperative identity, and a concomitant re-invigoration of the competitive position of the coops. The first process is the familiar strategy of *differentiation*, and involves the coops’ efforts to develop sources of value that are unique from those of their competitors. The second process, which we label *approximation*, represents an effort to deflate the relative advantages of competitors by partially replicating them. These processes are the staples of the strategic-management canon for both business organizations (Porter, 1985) and SMOs (Meyer and Staggenborg, 1998; Ingram and Rao,
2005), so there is not much theoretical insight to be gained by simply showing that the coops employed them also. Instead, our intended contribution is to show that the coops’ original identities defined their efforts at differentiation and approximation.

Before we detail coops’ efforts at differentiation and approximation, it is first important to understand why coops moved to stop the decades-long period of identity erosion and began to reposition themselves. Quite simply, they had to because for-profit chains became attracted to the natural-foods niche, and provided a source of competition for the coops that was mostly absent in 1970s, 1980s, and early 1990s. Figure 1 shows the annual revenues of the two leading for-profit natural-foods chains, Whole Foods and Wild Oats (the two companies announced a merger in early 2007). The figure indicates that these chains had almost no market presence in the beginning of the 1990s, but have grown to account for almost $7 billion in revenue by 2006 (with a goal to increase that to $12 billion 2010). In contrast, the combined sales of coops in 2002 were about $750 million according to an estimate in Cooperative Grocer (the leading trade journal for coops). Between 1993 and 2006 the two for-profit natural-foods chains enjoyed annual sales growth of 22% and growth in the number of stores of 14%. Over the same period, mainstream for-profit chains also discovered the natural-foods niche and entered it, often by building “stores within stores” that focused on natural foods.

The intrusion of for-profit chains into the coops’ natural-foods niche was confirmed during our interviews with members of the coops we studied in detail. Of the seven coops we studied, five were facing increasing competition. For instance, at the time of our interviews at the Food Conspiracy in 2002, a Whole Foods had just opened about a mile away, and soon after a local unit of a large for-profit chain established a store-within-a-store for natural foods. Rainbow was also responding to the natural-foods entry of a conventional chain at the time of our interviews in 2001. And, Wild Rice had a fierce competitor in the form of a conventional chain’s nearby superstore, which had an organic produce section that was larger than the entire coop. Whole Foods had at that time two important stores nearby, and has since built a third. Similarly, Whole Foods opened in The Brick’s market soon before our interview there, and a local upscale grocery chain also contributed to the intensity of competition. Sunnyside went from
having no notable competition when we began observation there in 1998 to facing a Whole Foods within two miles that opened in 2002.

The reaction triggered by this competition is illustrated in our observations at Sunnyside. At the board meeting after Whole Foods announced its plans to build near the coop, the overwhelming focus of discussion was the new competitor and what to do in response. For instance, a member not on the board came to a monthly meeting (a rarity) and presented a list of suggestions for new directions for the coop, most of which emphasized providing more service to the membership and community. The Board responded positively, indicating that these suggestions were like those they had also been considering. The board also planned a retreat, with the question of how to respond to Whole Foods as the main agenda item. A consultant who had worked with other coops facing competition was brought in to moderate that discussion. Over the next two years, Whole Foods competition was the most discussed topic at board meetings, and agenda items such as “preparing for competition” and “strategic planning” became commonplace.

Similar dynamics occurred elsewhere. At Rainbow we were told “competition has become a lot steeper. Whole Foods is about to take over the whole world, and us…but I think it galvanizes people to some sort of action. And I also think there’s been some sort of changeover…there is some new motivation, new energy, and new blood maybe.” The link between competition and renewal is further illustrated by the two coops we examined that did not perceive competition from for-profit chains. The Briar Patch Coop is located in a town sufficiently small that it is unlikely to attract a natural-foods chain, indeed it lacks a strong for-profit grocery store of any stripe. People’s Market is in a city with two Whole Foods, but that coop is so radical that it sees its competitors as more moderate coops, rather than for-profits. Neither of these coops was involved in initiatives to reinvigorate core cooperative principles, such as new forms of cooperation-among-cooperatives, that the other five coops we studied and the broader

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4 This view of competition is consistent with the model offered by Barnett and Woywode (2004). In that account of Viennese newspapers in the 1920s and 1930s, the most intense competition is between adjacent ideologies. Communist newspapers might compete with Social Democrats for journalists and readers, but not with the fascists, whose constituents are simply too far away in ideological space. Similarly at People’s Market “other coops are seen as the primary threat to us, Whole Foods is just out of the spectrum.”
coop community was embracing. And while both coops maintained strong relations with members, which is a source of differentiation from for-profit chains, this had been a long-standing policy of the coops, rather than a recent change.

Based on these observations, we concluded that competition from Whole Foods and other for-profit chains was what shook the coops from their identity slumber. A journalistic account of the Wheatsville coop, based in Whole Foods’ headquarter-city of Austin, Texas, and therefore one of the first to face intense chain competition, is prescient about the developments that would affect other coops: “No longer able to claim organics and healthy food as their own, Wheatsville, like food coops everywhere has fallen into a bit of an *identity crisis*: Should we lower our prices? Spruce up customer service? Increase advertising? Or maybe, some Wheatsville veterans reason, we should just get back to our roots (Smith, 1996; emphasis ours).” In the next two sections we see that coops did in fact do all of these things, in ways that depended on their cooperative identities.

**Identity-Based Differentiation**

In the face of a formidable competitor, a common reaction is mimicry, an attempt to adopt the strategic elements that look so awesome from the perspective of the attacked. Indeed some coops in the 1970s and 1980s became much like conventional supermarkets, and as we will describe, a few coops currently take this approach. More, however, have taken an opposite approach of emphasizing the unique features of a coop. The strategic logic is to emphasize *something* that the coops do better than their for-profit competition. To find this something, the coops have plumbed the core of their identities. An early exemplar is the Mercantile Coop in Lawrence, Kansas, which is renowned in coop circles for not only surviving but winning the competition with a chain. When Wild Oats opened a store in Lawrence in 1992, the coop was suffering from the malaise that gripped the coop population as a whole. According to a current manager, the new competitor “forced the co-op to look at its *identity*. Our identity now is a direct result of that time. We had to survive, so we put the emphasis on coop and community (Cumbie, 2002;
emphasis ours).” Two years later Mercantile was reinvigorated and Wild Oats had closed its Lawrence store.

Mercantile’s “emphasis on coop and community” illustrates the two most common elements of coops’ differentiation strategies. Differentiation through cooperative values is perhaps the more promising of these options because it is derived from fundamental differences between the identity-codes of coops and for-profit chains. Coops are owned by their member/shoppers and chains are not. The manager of the Food Conspiracy explained that “[cooperative] principles are part of what defined us differently from Whole Foods and these other competitors. Because otherwise, what are we other than a health food store? What defines us? …so, we’ve been sort of re-looking at those kinds of principles.”

It is no exaggeration for coops to say “this is your store,” and this has often been the rallying call of recent efforts to re-invigorate their membership. One of the managers we interviewed sent a letter to the membership during the coop’s darkest days following the entry of a new competitor highlighting just this message. In the deliberations of Sunnyside’s board following Whole Foods’ announced entry, strengthening the appeal to membership was the prime strategy. In the board’s thinking, a key to this was to make sure that people were clear about the benefits of membership, and discussions of how to communicate these benefits have become a focus of industry publication and meetings.

One of the conclusions of this deliberation is that forging stronger ties to members requires asking more, not less of them. Increasing member involvement has the dual benefits of strengthening the boundary between the coop and the environment, and increasing member commitment, mechanisms that have been shown to promote the survival of other participatory organizations (Kanter, 1972). Whether or not the leaders of the coops we spoke to were aware of the underlying causal mechanisms, they understood that asking more of members is good for the coop. For example, a board member at Sunnyside once proposed dropping the membership fee, an idea that was met with an emphatically negative response from the rest of the board.

A key form of member participation is member work in the store. The discourse around the practice of member work shifted markedly during the period of our study.
Initially, the practice was characterized as an inefficient anachronism – “a political artifact left over from the mid-seventies” according to one manager we spoke with – and an obstacle to the smooth operation of stores. Now, it is more common to hear that member work is important both for controlling costs and for building attachment to the coop. At the Food Conspiracy, the general manager knew that working members bought more at the coop than other shoppers. In 2003, when competition was intensifying and the Food Conspiracy was coming under financial pressure, it increased the discount given to working members, which is an indicator as to how much a coop relies on member labor. The venerable Park Slope Coop in Brooklyn requires all members to work, and enjoys high levels of member-coop connectedness, commitment to cooperative values, camaraderie and sales (Holtz, 2003).

The second form of differentiation was to emphasize the coops’ connection to the community at large. One manager explained his strategy in response to the anticipated but unannounced entry of Whole Foods: “There is a hometown concern here. I would hire a professional marketer and start advertising hometown, and how to keep that type of store alive…. you characterize yourself as being the homeboys…what works is the opportunity for people to come together as a friendly group…parties, picnics, celebrations…to emphasize the practice of being in harmony with other human beings rather than competitive.” Of course, this type of community connection is not unique to coops. Claims to represent the local community have been central in the fights that independent businesses have waged against chains over the last century (Ingram and Rao, 2004).

The difficulty with basing a differentiation strategy on community attachment, however, is that there is nothing to prevent chains from claiming it also. Not surprisingly, Whole Foods and Wild Oats emphasize community support in their advertising, stores, and annual reports. The Sunnyside Food Coop discovered after Whole Foods entered their market that the chain store actually competed with the coop to sponsor the most appealing community causes. If community attachment has potential to differentiate coops from chains, it is because professionally-managed, hierarchical, public corporations like Whole Foods and Wild Oats may not be able to produce impressions of community- and earth-friendliness with enough authenticity to win over the most
socially-conscious natural-foods consumers. (One of our coop informants used the evocative term “greenwashing” to describe the efforts of corporate chains to do so).

Along these lines, our visit to the headquarters of one of the natural-foods chains revealed that the business was really built on stereotypical corporate values. Our interviewee, a marketing executive (recently hired from a fast-food chain that specialized in unnatural foods), spent most of an hour describing the professional-management practices he employed, and the business-qualifications of his consultants, and said nothing about the chain’s community involvement until prompted. We have also come across a small number of coop workers and managers who switched from for-profit chains because of the perception that those organizations were hypocritical and that they do not quite live up to their espoused ideals (of course, this is a one-sided observation, and employees of coops also move to chains). So, it may be that the chains are inhibited from fully adopting community-connectedness by the primacy of shareholder’s financial interests as a governing principle. If so, coops may have an advantage in attracting consumers who place a premium on transacting with a business that is kind to the community.\(^5\)

**Approximation in the Face of Identity Constraints**

In addition to using cooperative identity as a basis for differentiation, coops also used their identity to reformulate a key feature of the corporate chain organizational form to make it compatible with cooperative principles. One of the things that surprised us most when we began examining food coops was that they did little that reflected the eighth Rochdale principle “cooperation among cooperatives.” It is on this dimension that we saw the most striking changes in the population. During the period of our study we

\(^5\) The resulting social capital might allow coops to further differentiate themselves by housing transactions that require high trust between organization and consumer. For example, some coops give advice on herbal medicines, and almost all coop bulletin boards and newsletters contain advertisements for trust-based personal services such as babysitting and massage. And the organic category which is central to the coops’ product offerings may be better suited to an organization that can credibly claim to value consumer’s interests above profits, because the institutions for certifying products as organic are weak. We have not perceived an increase in coops’ emphasis on these types of transactions as a function of competition, although one manager claimed in a communication to members that an advantage over the local chain was that the coop created an environment in which it was safe to let oneself go (“it’s the only store in town where you can expect to hear [Dean Martin’s] Volare sung by the customers in the aisles”).
identified a number of instances of collective action, which were central to the coops’ survival strategies. These efforts have coops banding together to share financial data, management expertise, technological advice, and to reap the benefits of purchasing power and branding. The aim of these initiatives is to approximate the chains’ economies of scope and scale through federations of coops. The most prominent effort in this regard is a set of regional cooperative grocers’ associations (CGAs), which are themselves part of a National CGA (NCGA) that represents the prime instrument of collective strategy among coops. The CGAs have grown rapidly. In June 2002 there were 74 coop members; by June 2003 there were 104. In July 2003, two new regional CGAs, with thirteen member coops, were recognized. Currently, there are 130 coop members across 32 states.

Coops’ collective strategy comes directly from an analysis of the strengths of the for-profit entrants to the industry, as reported in the Cooperative Grocer: “The competition facing the cooperatives is comprised of two multi-national corporations, each of which is vertically integrated more than the cooperatives and horizontally diversified as well. Globalization and corporate concentration have bypassed the co-operatives and created economies of scale for corporations that have put the co-operatives' backs to the wall (Webb, 2000).” The goal of the CGAs is to make their members more efficient and thereby put them more proximate to the chains on the dimension of costs. Some CGAs employed collective purchasing to create market power and get better prices, and an important current initiative of the NCGA is the creation of a national purchasing plan. The NCGA is also developing a national coop brand, a move aimed to create economies of scale in marketing that no individual coop could produce on their own.

The NCGA also helps members’ efficiency by promoting inter-coop learning. An innovative effort in this regard is a program involving the sharing of financial statements among member coops. Our informants report that this is a very useful tool that allows them to benchmark their operations against other coops. It also allows them to identify coops that face the same problems that they do, or are particularly strong in a specific operational area (e.g., produce turnover). They then consult with the managers of those coops directly for help, and typically receive practical information, useful materials and resources (e.g., manuals, brochures, forms, spreadsheets), and occasionally hands-on
assistance. The NCGA also maintains a list-serve where coop managers can post questions and answers about their strategies and operations. Recently, the national organization purchased the Cooperative Grocer, which provides information about coop management and promotes cooperative principles.

These efforts at joint purchasing, branding and inter-unit learning are clearly intended to mimic the competitive advantages of the chains. The CGAs are, however, substantially different than the chains in the form of managerial authority that they employ. The CGAs are cooperatives of cooperatives, and therefore are governed democratically according to the wishes of their members. Conversely, the headquarters of Whole Foods or Wild Oats exercise centralized hierarchical control over the units of the chain.

Although hierarchical control may have certain efficiency advantages associated with it, the CGAs and coops are prevented from adopting such control by their identity that values member autonomy. As a result, the principle of member autonomy is sometimes in tension with the collective interest of the federated units, making the CGA inferior to the chain when it comes to efficiently coordinating members. Along these lines, one of our informants explained why joint purchasing in the regional CGA was not yet operating: “it is a challenge, because we all have to agree to put the same thing on sale. We have to agree to certain levels of buy-ins.” And People’s Market opted out of its region’s CGA because others in that group did not support the same political causes. It is also notable that the NCGA’s efforts to establish national purchasing and branding have been slow. They were announced as intentions in 2003, and there still is no operational progress. One of our respondents estimated that the national brand had only a 50% chance of becoming a reality: “It’s just real difficult to get the coops to buy into anything other than being a god-damn coop. And sometimes the only reason they are buying into that is the politics of it.” When for-profit chains take decisions, they are much quicker to implement them because they do not require the approval of their constituent units. So, while the CGAs are without a doubt inspired by the chains, they are actually a hybrid
between the chains’ multi-unit structure and the coops’ participatory values. As a result, the imitation of the chains’ advantages is only approximate.  

Propositions and Hypotheses

Our qualitative analysis of the coops suggests a number of general propositions for organizational theory and specific hypotheses that we will test for the coops. First, the coop case presents one answer to the question we began with as to when SMOs may forestall or avoid conservative goal transformation – when the presence of a salient rival reinforces organizational identity and enlivens the goals consistent with that identity. Specifically, Whole Foods is the Goliath that has induced some coops to return to their cooperative roots:

Hypothesis 1: Coops that recognize Whole Foods as a salient competitor will be more likely to pursue traditional cooperative goals.

Second, the coop case illustrates that SMO organizing principles reflect their identities and goals. At the most basic level, this is well known. For example, few would be surprised that in the decades when the coops’ identity faded in the face of operational demands and unsympathetic interaction partners, they also eliminated cooperative elements of their structures, such as the policy that members must work in the coop. Our qualitative analysis also illuminated a less obvious influence of a resonant identity, one that reflects specifically the link between competition and identity. The coops show that organizations with resonant identities reflect those identities in their strategies for meeting competition. For the coops that faced a threat from Whole Foods, they devised strategic responses that were designed to be consistent with and supportive of cooperative principles. In particular, coops’ strategy of differentiation focused on what made them

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6 The CGAs have a historical precedent in the grocery industry. In the first-half of the twentieth century, some independent grocery stores challenged by chain competition banded together to form “voluntary chains,” and comparable organizations of independents have emerged in other industries challenged by chains. Like the CGAs, voluntary chains seek to produce economies of scope and scale while minimizing the intrusion on member-autonomy. Some, such as the Independent Grocers Association (IGA) and Best Western Motels, have been quite successful, at least in terms of growth and member survival. Interestingly, we saw no indication that the coops recognized the voluntary chains as a precedent for the CGAs, and the latter organizations seem not to consider at all the experience of the former.
fundamentally different from that rival, particularly their relationship to members. They did this both by increasing member benefits and by reifying the distinction between members and non-members through increasing the costs of membership:

**Hypothesis 2**: Coops that recognize Whole Foods as a salient competitor will offer more benefits to their members as opposed to non-members.

**Hypothesis 3**: Coops that recognize Whole Foods as a salient competitor will have higher costs of membership.

At the same time, coops’ strategy of *approximation* aimed to replicate a key source of advantage of their competitor while still preserving their cooperative identity. Specifically, the creation of CGAs was designed to provide coops with scale and scope advantages similar to those enjoyed by Whole Foods:

**Hypothesis 4**: Coops that recognize Whole Foods as a salient competitor will be more likely to join cooperative grocers’ associations.

**QUANTITATIVE ANALYSIS**

To test the hypotheses we gathered archival and survey data about coops’ strategic priorities, adherence to cooperative principles, and intensity of competition faced from Whole Foods. We used several sources to identify the population of retail food coops in existence at the time of our study. First, we obtained the Food Co-Operative Directory for 2002. There is no charge for inclusion in that directory and our informants told us that this was considered the most comprehensive and up-to-date record of existing coops. Next, we compared the directory to the 2002 membership list for the Consumer Cooperative Management Association. We then checked these listings against online sources, including: The Coop Directory Service Listing (http://www.coopdirectory.org/), The Rural Cooperative Center at U.C. Davis (http://cooperatives.ucdavis.edu/), and the Food Coop and Other Coop Resources listing (http://bbparkslope.com/jim/food.coop.html). We resolved any inconsistencies across these directories by calling or emailing coops to: verify that it was still in operation, confirm that it was a retail food coop (as opposed to a buying club or distributor), and to
corroborate the mailing address. Based on these sources we were able to identify a total of 291 active retail food coops.

Based on the qualitative field interviews we designed a survey to capture: the degree and type of competition faced, implementation of cooperative principles, strategic priorities, responses to competition, and descriptive information. We then solicited input from several of our informants about the survey’s clarity, length, and ease of completion. We incorporated their comments and feedback into a finalized version of the survey instrument, which we mailed to all 291 coops in July 2003. The survey was accompanied by a cover letter addressed to the general manager that requested a response from either the general manager, the board president, or a board member. We also followed Dilman’s (2000) guidelines for increasing response rate. Specifically, after the initial survey mailing, extensive follow-up communications were carried out including: (1) sending a reminder/thank you postcard, (2) sending a second round of mailings, and (3) calling any remaining non-respondents.

We received a total of 150 responses from 106 different coops. In 44 cases we received more than one completed survey for the same coop. In these instances we included in our analyses the survey from the general manager (GM), if available, since our field interviews indicated that they are typically the most knowledgeable of their coops’ activities. If there was no response from a GM, but multiple responses from board members we used (a) the most complete response; or (b) the response from the board member with the longest participation in the coop. The results we report below are robust to alternative methods for choosing between multiple responses.

The response rate of 36% (106/291), while comparable to other mail surveys, does raise the potential for non-response bias. We followed Berk’s (1983) two-stage approach for dealing with sample selection in survey responses. The first stage was a selection regression where the dependent variable was whether we received a response from a coop, and the independent variables included a measure of Whole Foods competition (a count of the Whole Foods stores in the coop’s telephone area code), a count of the number of coops in the state, and an indicator of whether the coop was part
of a CGA\textsuperscript{7}. The last variable in particular was a significant predictor of non response (CGA coops were more likely to respond to our survey). We calculated the hazard of non-response from the predicted values from the first-stage regression, and enter these in the second-stage regressions below to account for non-response bias. (In the regression of the likelihood of being a member of a CGA we exclude that variable from the selection equation so as to avoid having versions of the same variable on the left- and right-hand side of our regression).

**Dependent Variables**

Hypothesis 1 requires that we identify the goals each coop is pursuing. In the survey we asked respondents to indicate on a five-point Likert scale to what extent each of sixteen potential goals was a strategic priority for their coop. We conducted a factor analysis with rotation on these sixteen items to group them into related goals (Appendix A). The result produced five sets of goals which we have labeled as Cooperativeness, Environment/Community, Worker, Scale Efficiency and Scope Efficiency. The Cooperativeness goal set captures well the objectives that are associated with the cooperative identity, so we used this for our test of hypothesis 1\textsuperscript{8}. We analyzed the determinants of all five goal sets, to ensure that any influence of Whole Foods competition on Cooperativeness does not reflect a spurious effect of Whole Foods to increase coops’ priorities on all dimensions.

To test hypothesis 2, we created an index of Membership Benefits by adding one for each of the following that the coop offers: regular discounts for members, regular surcharges for non-members, annual surplus disbursements to members, coupons for members, discount days for members. Our qualitative analyses had indicated that these are important benefits for distinguishing members and non-members, and thereby

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\textsuperscript{7} The locations of Whole Foods retail stores at the time of our survey were obtained from the company’s website (http://www.wholefoodsmarket.com/investor/storeinfo.html). At this time Whole Foods operated 147 stores in 26 different states. To identify which coops participated in CGAs we obtained the 2003 membership list from the National Cooperative Grocers Association. At the end of 2003 110 coops belonged to a CGA.

\textsuperscript{8} The Cooperativeness goal set actually includes one item, to offer locally grown food, which is not obviously related to cooperative identity. Our results are substantively the same if we exclude the “local foods” item from the calculation of Cooperativeness.
differentiating the coops from corporate competitors. Similarly, we were guided by our qualitative analysis in choosing the survey items we used to represent the Costs of Membership to test hypothesis 3. These were the number of hours members are required to work, or required to work to obtain a discount, and the equity investment they have to make to be part of the coop. Since these variables are in different units, we standardized and added them to create Costs of Membership. We also considered including in Cost of Membership the annual fee that members are sometimes charged, but decided not to because coops use equity investments and annual fees as substitutes, and the long-term nature of the equity investment is more consistent with the competitive logic of raising the commitment of members by raising their contributions. (Our results are nonetheless consistent if we include the annual fee in Costs of Membership). Finally, we test hypothesis 4 with a dichotomous variable coded one if the respondent reports that his/her coop is part of a Cooperative Grocers’ Association and with the archival data on CGA membership.

Independent and Control Variables

Our key independent variable is Whole Foods Salience, which is a dummy variable coded 1 if the respondent listed Whole Foods first when asked for the coop’s competitors. Other operationalizations of competition from Whole Foods (such as the distance of Whole Foods from the coop) produce similar results, but we favor the “first listing” operationalization because it captures not only that Whole Foods is a competitor, but that it is occupying the attention of decision makers at the coop. Thirteen percent of coops listed Whole Foods as their first competitor (another fifteen percent included Whole Foods lower on their list of competitors).

We use the Age of the coop as a control variable. In general we should expect older coops to emphasize less cooperative goals and member-focused practices (the difference between old- and new-wave coops described above). We also control for the intensity of competition from all sources, to rule out the possibility that Whole Foods Salience confounds the source of competition faced by the coop with the intensity of competition it faces. The variable Competitive Intensity is an aggregate of the degree of
competition the coop faces from each competitor (we allowed respondents to identify up to 10 competitors). Following prior research we estimated the degree of competition between two organizations as a function of the overlap in their target markets and the distance between them (Baum and Mezias, 1992). Specifically, we asked respondents “Approximately how many miles by car is the [competitor’s] store from your coop?”, “What is your best estimate of the percentage of your co-op’s products that overlap with those of [the competitor]?”, and “What is your best estimate of the percentage of your co-op’s customers that overlap with those of [the competitor]?”. We used the responses to these questions to compute the contribution of each competitor to overall intensity as the product of their percentage overlaps with the coop in terms of product offerings and customers, divided by the distance from the coop.

We included a count of the Number of Coops in the State of the focal coop, as this may reflect the cultural roots of cooperativism in different parts of the country, and whether there are nearby coops that may serve as sources of knowledge and resources for the coop. We considered other control variables such as the number of members, floor space and sales of the coop, but ultimately chose not to include them in our main analyses as they are likely endogenous to the coops’ goals and structures.

Results

Table 4 presents the results of linear regressions of the independent and control variables on the five goal-set variables. The key coefficient for hypothesis 1 is for Whole Foods Salience in model 1. As predicted, coops that recognize Whole Foods as an important competitor are more likely to emphasize traditional cooperative goals. Whole Foods Salience is not a significant positive influence on any of the other four types of goals, so it is not that Whole Foods competition simply increase motivation at coops; it increases the impetus to do one thing in particular, pursue the goals that are traditionally associated with cooperative identity. Indeed, Whole Foods Salience makes the coop less likely to pursue the Scope Efficiency goal set, indicating not only that coops facing this rival returned to the goals of their own identity, but they also spurned the goals associated with for-profit supermarkets. The only other significant result in table 4 is that older coops
were less likely to pursue environmental/community goals, which is sensible as those goals were salient during the founding era of the new wave coops of the 1960s and 1970s, but were less important for old-wave coops.

Table 5 examines the determinants of the concrete efforts by the coops to meet competition. The regression methods vary according to the dependent variable, with *Membership Benefits* (an index of benefits offered to members, ranging from 0 to 4) analyzed with an ordered-logit regression, *Costs of Membership* (a continuous variable, the sum of two standardized continuous variables) with OLS regression, and *Cooperative Grocers Association* (an indicator variable) with logit regression. Consistent with hypothesis 2, model 6 shows that coops that see Whole Foods as a salient competitor offer more *Membership Benefits*. In model 7 *Whole Foods Salience* is associated with a higher *Cost of Membership*, as hypothesis 3 predicts. Together these two analyses show that coops facing Whole Foods differentiated from that rival using their unique and identity-embedded quality, their relationship with members. They made the category of membership more attractive by offering more to members as opposed to non-members, at the same time that they reified the difference between those categories, and tried to encourage member commitment, by raising the financial and time costs of membership.

Model 8 examines which coops are more likely to be members of *Cooperative Grocers Associations*, the cooperative chains that were an effort to approximate the scale advantages of for-profit chains. As predicted by hypothesis 4, *Whole Food Salience* is associated with a greater likelihood of being part of a CGA. Since our qualitative analysis indicated that coops were pursuing other forms of inter-coop cooperation to approximate the chains’ advantages, we also estimated model 9 which uses a more comprehensive measure of a coop’s *Inter-Coop Relations*. The dependent variable there is an index created by considering which of the following forms of inter-coop relations the coop maintained: participated in a CGA; shared financial statements with other coops; attended a national conference of coops; read a list serve of idea sharing of coops; responded to questions on that list serve. Model 9 shows that *Whole Foods Salience* is also a positive predictor when inter-coop relations are defined in this more comprehensive way.
Importantly, it is always *Whole Foods Salience* and never the overall level of *Competitive Intensity* that is associated with coops’ pursuit of cooperative goals and the deployment of identity-inspired modes of approximation and differentiation. This is consistent with theoretical arguments and our case-study observations that diffuse competition is different in kind from salient rivalry in terms of the effect on identity, and through identity, on organizational goals and practices. To reinforce this finding, we also examined whether any other competitors had the same influence as Whole Foods. Particularly, we considered when the respondent named a different natural foods chain as the first competitor. This happened twelve times, eight of these the competitor was Wild Oates, Whole Foods smaller rival. Added to the models in tables 4 and 5, *Wild Oates Salience* is only marginally significant in one case, in the model that explains *Member Benefits*. In all cases, *Whole Foods Salience* remains significant in the predicted directions.

**Limitations of the Quantitative Analysis**

One concern inherent in survey analysis is common-source bias that may emerge because the same individual provides both our independent and dependent variables through their survey responses. As a test to rule out common-source bias we re-estimated our models after substituting an archival measure of Whole Foods competition—the number of Whole Foods with the same telephone area code as the coop—for *Whole Foods Salience*. There is a high correlation of 0.54 between the number of Whole Foods stores our respondents listed as competitor and the number that actually existed in the coop’s area code. The resulting regressions are presented as models 10-13 in table 5; in all instances the effect of the archival measure of Whole Foods competition is significant in the predicted direction. So, our results hold up even when we use different sources for the dependent and independent variables.

Another concern inherent in survey analysis is causality. Our dependent and independent variables are measured simultaneously. There are alternative explanations that might reverse the causal account we present, making the salience of Whole Foods a function of the coop’s goals and policies. In the absence of a natural experiment, the
econometric options for ruling out reverse causal arguments are limited and not wholly satisfying. We rely on the multi-method research design we have employed to reinforce our inference of causality. Particularly, our qualitative observation of the coops is very useful for guidance as to what caused what. We believe that Whole Foods competition preceded and caused the renewal of cooperative identity and the emergence of the current forms of differentiation and approximation because we have observed coops before, during and after Whole Foods. Indeed, the coop we observed most closely, Sunnyside Coop, experienced the announcement and arrival of Whole Foods during our observation window. We saw that the announcement of Whole Foods’ new store evoked a crisis of self reflection at this coop and a renewed emphasis on cooperative identity, goals and practices.

It is also useful to consider the logic of an explanation that reversed our proposed direction of causality. Given that our results hold when we use an objective measure of whether Whole Foods is near to a coop, a key implication of a reverse causality argument would be that the strength of cooperative identity of a coop affects the likelihood that Whole Foods will locate a store nearby. Given the difference in size between Whole Foods stores and coops it seems unlikely that Whole Foods considers coops at all, let alone how cooperative they are. Indeed, our interview at a leading for-profit natural foods retailing chain indicated that they ignored coops completely when locating stores, relying instead on a complex analysis of demographics and sociographics of the surrounding residents.

**DISCUSSION**

Clemens (1993) suggested that SMOs may avoid conservative goal transformation through identity management, by asking the questions “What kind of group are we? And what do groups like us do?” We agree, but would add that identity can also be managed by asking What kind of group are they? and How are we different from them? The recognition of a rival other can have a marked positive influence on the resonance of an

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9 The average coop represented in our survey occupied a floorspace of 4,772 sqft; the average Whole Foods store at the time of our survey was more than six times as large, 30,352 sqft.
organization’s identity (Sherif et al., 1961; Tajfel and Turner, 1986). The issue here is not simply that the coops were faced with hostile external forces; after all, that was true in the 1970s and 1980s when the resonance of the coops’ identities faded. What is different now is that the coops’ opposition is no longer diffuse “society” but rather a very specific, prominent, and therefore salient organization, Whole Foods.

Pre-Whole Foods, the coops’ identity was fuzzy to lenders, suppliers, landlords, regulators, and many shoppers. As a result, they pressured coops to conform to extant categories, and the coops came to look more like for-profit grocers. Whole Foods has presented the coops with a powerful cognitive and rhetoric device, the opportunity to present a contrast to this other (Greve, Pozner and Rao, 2006). That contrast has clarified to all just what the coops are and how they claim to create value for their constituents. We have seen that this sharpening of identity has been particularly important within the coops themselves, as it has defined the strategies they are using to meet the potent new competitor. And while the initial pressure to conservative goal transformation is unique to SMOs, the relationship between rivalry, identity and strategy that the coops illustrate seems germane to all types of organizations. For example, Apple’s organizational culture and marketing strategy play on its identity of the counter-culture challenger to authority—recall the 1983 introduction of the Macintosh computer in a Super Bowl advertisement that evoked Orwell’s “1984” with a woman hurling a hammer through a large screen broadcasting the speech of a “Big Brother” figure. It is hard to imagine that this identity would be so resonant, and the market stance so effective, if Apple was not in competition with IBM then and Microsoft now.

Whole Foods seems to be a rival that is impossible for the coops to overlook. But in other cases, rivalry may be socially constructed, creating the opportunity for SMO entrepreneurs to actively manage the identities of their organizations through framing (Benford and Snow, 2000). Studies of SMO identity management have focused on efforts to forge allegiances between organizations by presenting their identities as compatible (Clemens, 1993; Ingram and Rao, 2005). However, SMO entrepreneurs may also strengthen identities by emphasizing differences between their organization and outsiders or rivals, a technique that Gamson (1992) labels adversarial framing. For example, Barnett and Woywode (2004) document adversarial framing in the political
cartoons of Viennese newspapers in the inter-war years. This introduces new possibilities into a literature that has recognized that movements and counter-movements may spur each by making outcomes more difficult to maintain (Meyer and Staggenborg, 1996), but has not emphasized the role that the perception of rivalry can have for reinforcing identity and thereby enlivening SMOs.

Instances where theories fail can be very useful for revealing scope conditions, and our qualitative analysis presents such an opportunity. The pattern of identity erosion followed by competition-induced renewal holds, more or less, for six of the seven coops we examined in depth. The seventh stands out as an exception to the generalization that the founding identity of the coops constrained their strategic future. The Brick (upper-left cell of Table 1) has become less cooperative as for-profit competition increased, basically relocating to a position in ideological space that is “just to the left” of Whole Foods and Wild Oats. The general manager there is critical of the ideals that other coops are increasingly evoking. Of member participation, he complains “anybody qualified or unqualified is eligible to run to be a director. And I don’t think that suits the long term interest of the cooperative….a lot of successful, private businesses, if they are sole proprietorships or partnerships, they don’t have a Board.” As for cooperators that stress community contributions, he opined “they should just form a political party and change their line of work and the coop could hire somebody who could manage a grocery store.” Indeed, he seems envious of the chains with which coops compete: “it would be nice to have a national chain, but I don't think it’s realistic to seriously entertain the idea that the coops would be willing to give up their independence to become part of a national chain. I mean it would be a very good idea, but it will never happen.”

The divergence of The Brick from the typical pattern invites the questions “why?” and “will it persist?” An obvious, if proximate, answer to the first question emerges by comparing The Brick’s general manager to those of the other coops. At the other coops, the managers held some version of cooperative values sincerely, while The Brick’s manager, who has guided its transition to “corporate coop”, sees cooperative principles mainly as obstacles to operational efficiency. Of course, this begs the question why a manager with such values would come to power at The Brick, but not at the other six coops we examined. We see two explanations, one based on a systematic idea about the
relationship between identity and competition, and the other based on an idiosyncrasy of The Brick’s history. The idiosyncratic explanation concerns a period of intense contention in The Brick’s city in 1974-1975, when an impatient group of communists, who saw the network of fledgling coops as an attractive tool to promote revolution, attacked the anarchists that operated the coops. The two groups battled each other politically, physically and legally and “the only people who were left with the coops were the people who were willing to call the police, which were liberals.” So, the cooperative foundation of The Brick may have been shaken by this “coop war”, opening it to the influence of other identities. The systematic explanation is that there are many other coops in The Brick’s city, and even in its trading area, so it faces an atypical form of competition. Ideologically similar organizations compete intensely when they rely on the same resources, so The Brick’s corporate stance may represent an effort to differentiate itself from coop competitors (Barnett and Woywode, 2004; Zald and McCarthy, 1987).

Turning to “will it persist?”, there are signs of trouble for the The Brick’s strategy. The Brick presents a jumble of value-claims which may ultimately confuse, if not offend, potential consumers. It brings to mind Baron’s (2004) fictitious example of the Shtetl/Chinese restaurant that combines incompatible strategic positions (cuisines) and ends up as illegitimate. Strategy scholars (e.g. Porter, 1985) have long criticized organizations that get “stuck in the middle” of two strategic positions, but the failings of Baron’s “U-Long-Nose” eatery and The Brick are more than that. It is not just that they try so hard to appeal to all that they appeal to none, but that the combinations of value-claims that they stake are so inconsistent as to compromise each other. Competitors are actually exposing this weak ideological underbelly of The Brick—a nearby coop advertises itself as the area’s only “real” coop, a claim that all parties interpret as a direct challenge to The Brick’s legitimacy.

Despite these legitimacy-based attacks on The Brick, that organization is on firm financial footing, and has grown rapidly in recent years. Nevertheless, there is precedent for corporate coops that initially thrive, but eventually falter. In the late 1970s, the corporate coop model was advocated to resolve the malaise that affected after the heightened excitement of their founding period. “Even the most politicized and radical coop activists are becoming more pragmatic. In fact, many of the new co-ops are raising
the same battle cry of the corporate food industry they are struggling against: get bigger (Zwerdling, 1979: 105).” The coop that was held as an exemplar of the “get bigger” strategy was the Berkeley Consumer Coop, which grew to become much like any regional, mainstream chain. It expanded to thirteen stores and $70 million in annual sales in the late seventies, but was driven out of business in the eighties. Berkeley’s fate indicates how difficult it is for a coop to “out chain the chains”, given that organizations of the latter form are designed to reap economies of scope and scale, experienced with their strategy, well capitalized, and occupied preferential market positions before any coop thought to mimic them. The Brick is not yet expanding like Berkeley Consumer did, so it may be able to sustain itself by occupying the niche of “smaller grocery” and avoiding head-to-head competition with the chains. Still, a coop that operates like a for-profit store and survives merely because it is small enough that shoppers can park close to the door has failed to uphold core cooperative principles. For these reasons, The Brick seems most like an example of the rare process of an organization that switches its form, rather than an illustration of a viable combination of coop identity and strategy.

If the message of coops’ efforts at strategic positioning is to be true to the core, it cannot be ignored that by following that principle they have nevertheless produced an organizational innovation, the CGA. This form emerged from their effort to approximate the advantages of the chains. It was not, however, a copy of the chains’ structure in any true sense, nor was it rendered from whole cloth. Instead, it was a manifestation of the ideal of “cooperation between cooperatives”, a principle that almost every coop published annually in its newsletter, even if it did not affect their operations until recently. The cobbling together of the chain’s multi-unit structure and coop’s system of authority produced an organizational experiment that is still in the works. At this stage, the shortcomings of the CGA in comparison to the chains in terms of the effectiveness of coordination and the speed of decision-making are clear. These problems may yet be resolved, however, opening at least the possibility that the CGA might develop into a sustainable organizational form.

So, while the coop case illustrates the fundamental principle from organizational-identity theory that it is tough for organizations to shift from their core organizing codes, it also helps show how it is that we sometimes get new organizational forms in spite of
that constraint. Some combinations of organizing principles such as the corporate coop may be prohibited by the blueprints that underlie an organizational form, but others such as the CGA may be simply off the map, neither foreseen as an extension of the base model nor prohibited. When organizations that represent different identities meet in competition, the incentive to explore the uncharted territory of their organizing principles increases, and new forms may be the result. This dynamic is particularly notable, as it responds to both of the pressing questions that Hsu and Hannan (2005) identify for the literature on organizational identity: the need to understand identity change and the implications of identities for strategy.

The implications of an organizational innovation like the CGA are not just for theories of organizational design but also for the contention of ideals. Like economic organizations, social movement organizations seek to emulate their rivals (Meyer and Staggenborg, 1998). That emulation is, however, constrained by the identities of the movements (Ingram and Rao, 2004). Similarly, strategies for social movement contention diffuse from location to location, and between levels of an institutional hierarchy, often changing in the process, but also creating a community out of previously isolated contenders (Soule, 1997; McAdam, Tarrow and Tilly, 2001). The coop case illustrates both these principles, with the novel CGA emerging as a chain-inspired mechanism to push the coop cause, and tactics for re-engaging members and community spreading between coops that share a new sense of cohesion due to their common competitors. The result is a new excitement, and perhaps even optimism among many in the coop community. Their coops may be in crisis, but their cooperative identity seems to hold more promise than at any time since the 1970s. With fresh ideas about what makes a coop better than a corporation, and new forms of cooperation such as the CGA, the members of coops at least have something to fight for again.
References


Table 1
Sample of Coops in Qualitative Analysis
by Dimensions of Theoretical Sampling

<table>
<thead>
<tr>
<th>Adherence to Cooperative Identity</th>
<th>Wild Rice</th>
<th>Food Conspiracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>The Brick</td>
<td>Sunnyside (1998-2001)</td>
</tr>
<tr>
<td>Competition from for-profit chains</td>
<td>Sunnyside (2001-2003)</td>
<td>Peoples Market</td>
</tr>
<tr>
<td>Low</td>
<td>Briar Patch</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2
Summary of Examined Coops

<table>
<thead>
<tr>
<th>Co-Op</th>
<th>Location</th>
<th>Size</th>
<th>Perceived Competition From Capitalist Grocers</th>
<th>Relations to Other Cooperatives</th>
<th>Member Participation</th>
<th>Initiatives at time of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow, founded 1971</td>
<td>Large college town, known for its liberalism</td>
<td>10,000 sqft; 3700 members; $5.5 million sales; 80 employees</td>
<td>Medium: A very successful regional chain with natural food “store within a store”; a national chain that sells some organics; a small natural grocery store</td>
<td>High: Joined a CGA as soon as possible; borrows from a cooperative bank; shares financial data with other food coops; uses cooperative supplier; collective marketing with non-food coops</td>
<td>High: 70-75% of sales are to members; referendums regarding product line; borrowed a “significant” amount from members to rebuild after a fire; large proportion of members work in store</td>
<td>Customer-service training program for staff; electronic cash registers; improved cleanliness in store.</td>
</tr>
<tr>
<td>Briar Patch, founded 1973</td>
<td>Small college town</td>
<td>670 members</td>
<td>Low: An independent natural food store in a neighboring town; a regional grocery store in town opened a natural food section which quickly failed</td>
<td>Low: Doesn’t rely on a cooperative supplier; not part of a CGA; occasional correspondence with other food coops</td>
<td>Medium: 60% of sales are to members; 2 hrs work per month for a 10% discount; members contributed $86,000 to buy the current building</td>
<td>Opening a bakery</td>
</tr>
<tr>
<td>People’s Market, 1971</td>
<td>Mid-sized city, in liberal, counter-culture neighborhood, near a large university</td>
<td>1600 sqft</td>
<td>Low: This radically-anarchist coop perceives its main competition as more moderate food coops, not capitalist food retailers; there are many food coops in the city</td>
<td>Low: forgoes membership in a local coalition of food coops; does maintain relations to other more anarchistic organizations, mainly worker cooperatives</td>
<td>High: Members are required to work in the store and only members are eligible for a discount; board of directors made up of working members</td>
<td>None</td>
</tr>
<tr>
<td>Food Conspiracy, 1972</td>
<td>Large Canadian city, in a working-class, downtown neighborhood</td>
<td>1085 members; $1.15 million sales</td>
<td>High: an independent, local natural foods chain has a nearby location; Whole Foods had opened a store the previous month—one mile away; large national chain nearby is expanding its selection of natural and organic products</td>
<td>Medium: Uses a cooperative supplier; maintains email contact with U.S. coops, has a “twining” relationship with a successful U.S. coop, about five hours driving distance</td>
<td>Medium/High: 65% of sales are to working members; 50% of members work; members working 2 hours per month avoid 8% surcharge (raised to 12% in 1993)</td>
<td>Systematic board and store-level efforts to increase member work and participation</td>
</tr>
<tr>
<td>Co-Op</td>
<td>Location</td>
<td>Size</td>
<td>Perceived Competition From Capitalist Grocers</td>
<td>Relations to Other Cooperatives</td>
<td>Member Participation</td>
<td>Initiatives at time of Interview</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>The Brick, founded 1974</td>
<td>Mid-sized city</td>
<td>$23 million in sales in 2002, 240 employees, 10,000 members</td>
<td>Medium/high: Whole Foods has two stores in the city, one 1.5 miles from the coop; a local gourmet-grocery chain is also in the segment</td>
<td>Medium: Part of a CGA, although derives limited benefits because it is bigger than other members; one-on-one consultations with like coops; supports national brand</td>
<td>Low: No discount for members; no working members; little distinction between members and others except that members get rebates of coop “profits”</td>
<td>Continued growth</td>
</tr>
<tr>
<td>Sunnyside, founded 1973</td>
<td>Mid-sized City, working-class neighborhood</td>
<td>7000 square feet, 5000 members</td>
<td>Low to High: No notable competition until Whole Foods opened a store in 2002</td>
<td>Medium: Part of a CGA, uses a cooperative supplier</td>
<td>Medium: Members receive discounts; work in the store; have access to the coops’ credit union; members are participation in board elections is small</td>
<td>Expanded the store in 2000; 2003 quelling labor unrest</td>
</tr>
<tr>
<td>Wild Rice, founded 1975</td>
<td>Mid-sized city</td>
<td>4750 members</td>
<td>High: Whole Foods has two stores and a long history in the city; a regional chain has a mega gourmet grocery store six blocks away; other chain stores with large natural foods sections; a number of neighborhood grocery stores and small chains specialize in natural foods</td>
<td>Medium: Initially, didn’t join a CGA because of geographic isolation. As of 2003, is part of a CGA</td>
<td>Medium: Members working 2 hours a month receive a 10% discount; 80% of shoppers are members</td>
<td>“Face-lift” for the store</td>
</tr>
</tbody>
</table>
Table 3
The Rochdale Cooperative Principles

Most food coops, and many other consumer coops identify some version of the “Rochdale Cooperative Principles” as their core identity. There are a number of versions, and, given that there are many umbrella organizations for consumer coops, none of them can be termed official. The eight principles below are perhaps the most common listing we’ve seen by food coops. (Another very common list includes seven principles: it excludes item three below, combines items five and six into a principle of “community concern”, and includes another principle of “autonomy and independence” which holds that coops should exercise caution in interorganizational relations to avoid compromising their cooperative identity).

1. **Open, Voluntary Membership.** Membership in a cooperative society should be voluntary and available without artificial restriction or any social, political, racial or religious discrimination, to all persons who can make use of its services and are willing to accept the responsibilities of membership.

2. **Democratic Control.** Cooperative societies are democratic organizations. Their affairs should be administered by persons elected or appointed in a manner agreed to by the members and accountable to them. Members of primary societies should enjoy equal rights of voting (one member, one vote) and participation in decisions affecting their societies. In other than primary societies the administration should be conducted on a democratic basis in a suitable form.

3. **Limited Return, If Any, On Equity Capital.** Share capital should only receive a strictly limited rate of interest.

4. **Net Surplus Belongs To User-Owners.** The economic results arising out of the operations of a society belong to the members of that society and should be distributed in such a manner as would avoid one member gaining at the expense of others. This may be done by decision of the members as follows: a) by provision for development of the business of the cooperative; b) by provision of common services; or c) by distribution among the members in proportion to their transactions with the society.

5. **Honest Business Practices.** Cooperatives should deal openly, honestly, and honorably with their members and the general public.

6. **Ultimate Aim Is To Advance Common Good.** The ultimate aim of all cooperatives should be to aid in the participatory definition and the advancement of the common good.

7. **Education.** All cooperative societies should make provision for the education of their members, officers, and employees and of the general public in the principles and techniques of cooperation, both economic and democratic.

8. **Cooperation Among Cooperatives.** All cooperative organizations, in order to best serve the interest of their members and their communities, should actively cooperate in every practical way with other cooperatives at local, national, and international levels.
Table 4
Linear Regressions Explaining Food Cooperative Goals

<table>
<thead>
<tr>
<th></th>
<th>(1) Cooperativeness</th>
<th>(2) Environment/Community</th>
<th>(3) Scale Efficiency</th>
<th>(4) Worker Scope Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Foods Salience</td>
<td>1.745*</td>
<td>0.534</td>
<td>-0.046</td>
<td>-0.267</td>
</tr>
<tr>
<td></td>
<td>(1.94)</td>
<td>(1.14)</td>
<td>(0.10)</td>
<td>(0.50)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.013</td>
<td>-0.032**</td>
<td>-0.008</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.63)</td>
<td>(2.82)</td>
<td>(0.72)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Competitive Intensity</td>
<td>0.059</td>
<td>-0.002</td>
<td>-0.046</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(1.29)</td>
<td>(0.09)</td>
<td>(1.92)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Number Coops in State</td>
<td>-0.022</td>
<td>-0.006</td>
<td>0.012</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(1.17)</td>
<td>(0.58)</td>
<td>(1.19)</td>
<td>(0.26)</td>
</tr>
<tr>
<td>$\lambda_i$ (sample selection)</td>
<td>-18.957**</td>
<td>-1.564</td>
<td>-2.040</td>
<td>-8.605**</td>
</tr>
<tr>
<td></td>
<td>(5.35)</td>
<td>(0.84)</td>
<td>(1.15)</td>
<td>(4.08)</td>
</tr>
<tr>
<td>Constant</td>
<td>29.248**</td>
<td>14.254**</td>
<td>13.981**</td>
<td>17.053**</td>
</tr>
<tr>
<td></td>
<td>(13.87)</td>
<td>(12.88)</td>
<td>(13.18)</td>
<td>(13.52)</td>
</tr>
<tr>
<td>Observations</td>
<td>103</td>
<td>107</td>
<td>107</td>
<td>106</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.31</td>
<td>0.10</td>
<td>0.06</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%
<table>
<thead>
<tr>
<th></th>
<th>(6) Membership Benefits (Ordered Logit)</th>
<th>(7) Costs of Membership (OLS)</th>
<th>(8) Cooperative Grocers Association (Logit)</th>
<th>(9) Inter-Coop Relations (Ordered Logit)</th>
<th>(10) Membership Benefits (Ordered Logit)</th>
<th>(11) Costs of Membership (OLS)</th>
<th>(12) Cooperative Grocers Association (Logit)</th>
<th>(13) Inter-Coop Relations (Ordered Logit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Foods Salience</td>
<td>1.132* (2.14)</td>
<td>1.426** (3.62)</td>
<td>2.145* (1.99)</td>
<td>1.657** (2.63)</td>
<td>0.227* (1.65)</td>
<td>0.317** (2.96)</td>
<td>0.452* (1.70)</td>
<td>0.280* (1.86)</td>
</tr>
<tr>
<td>Whole Foods in Area Code</td>
<td>-0.051** (3.49)</td>
<td>-0.016 (1.70)</td>
<td>0.009 (0.54)</td>
<td>-0.003 (0.21)</td>
<td>-0.052** (3.53)</td>
<td>-0.017 (1.79)</td>
<td>0.025 (1.22)</td>
<td>-0.003 (0.26)</td>
</tr>
<tr>
<td>Coop Age</td>
<td>-0.022 (0.78)</td>
<td>-0.014 (0.69)</td>
<td>-0.068 (0.57)</td>
<td>-0.022 (0.51)</td>
<td>-0.022 (0.76)</td>
<td>-0.014 (0.68)</td>
<td>-0.005 (0.09)</td>
<td>-0.021 (0.51)</td>
</tr>
<tr>
<td>Competitive Intensity</td>
<td>0.004 (0.35)</td>
<td>0.000 (0.01)</td>
<td>-0.032* (1.97)</td>
<td>-0.017 (1.34)</td>
<td>0.007 (0.60)</td>
<td>0.005 (0.56)</td>
<td>-0.024 (1.11)</td>
<td>-0.011 (0.88)</td>
</tr>
<tr>
<td>Number Coops in State</td>
<td>-6.643** (3.05)</td>
<td>0.265 (0.17)</td>
<td>45.029 (1.20)</td>
<td>-20.386** (6.67)</td>
<td>-7.420** (3.40)</td>
<td>-1.025 (0.65)</td>
<td>-25.978** (5.60)</td>
<td>-21.420** (6.92)</td>
</tr>
<tr>
<td>( \lambda_i ) (sample selection)</td>
<td>-26.878 (0.04)</td>
<td>106 (102)</td>
<td>-120.96** (99)</td>
<td>-123.97** (106)</td>
<td>-30.12** (0.76)</td>
<td>-122.97**</td>
<td>-122.97**</td>
<td>-122.97**</td>
</tr>
<tr>
<td>Constant</td>
<td>0.033 (0.04)</td>
<td>106 (106)</td>
<td>99 (102)</td>
<td>106 (106)</td>
<td>102 (102)</td>
<td>99 (99)</td>
<td>0.11</td>
<td>-30.12**</td>
</tr>
<tr>
<td>Observations</td>
<td>106 (106)</td>
<td>106 (102)</td>
<td>99 (102)</td>
<td>106 (102)</td>
<td>99 (99)</td>
<td>0.11 (0.11)</td>
<td>-30.12**</td>
<td>-122.97**</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-122.97**</td>
<td>-59.90</td>
<td>-120.96**</td>
<td>-123.97**</td>
<td>-30.12**</td>
<td>-122.97**</td>
<td>-122.97**</td>
<td>-122.97**</td>
</tr>
</tbody>
</table>

Absolute value of z statistics in parentheses
* significant at 5%; ** significant at 1%
Figure 1
Revenues of For-Profit Natural Food Chains

Source: Annual Reports of Whole Foods Market, Inc. and Wild Oats Markets
Appendix 1
Factor Analysis of Coop Goals

Survey respondents responded on a five-point Likert scale to the importance of each of the following sixteen items as priorities for their coop. We conducted a principal-component factor analysis with orthogonal-varimax rotation. This produced five factors. We indicate below which survey items loaded at greater than .50 on each factor. To create the dependent variables for the analysis of goals we summed the responses for the highly loaded items for each of the five factors.

<table>
<thead>
<tr>
<th>Factor 1: Cooperativeness</th>
<th>Factor 2: Environment/ Community</th>
<th>Factor 3: Worker</th>
<th>Factor 4: Scale Efficiency</th>
<th>Factor 5: Scope Efficiency</th>
</tr>
</thead>
</table>

To what extent is it a priority for your coop to:

1. ensure democratic member control? *
2. provide the largest supply of locally grown/produced food possible? *
3. expand awareness of cooperative principles and practices? *
4. help create a national chain of food co-ops? *
5. generate a surplus to return to members? *
6. offer the healthiest food possible? *
7. provide community outreach? *
8. protect the natural environment? *
9. develop professional management systems? *
10. develop participatory management systems? *
11. create a work environment conducive to employee development? *
12. improve operational efficiency? *
13. generate sales growth? *
14. increase the number of members belonging to the co-op? *
15. offer the lowest possible prices? *
16. offer the widest variety of products possible? *