Review of International Co-operation

2013 Issue

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A publication of

International Co-operative Alliance
Committee on Co-operative Research

Review of International Co-operation

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Address
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Avenue Milcamps 105
1030 Brussels, Belgium

Published by the International Co-operative Alliance.

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Introduction

by Sonja Novkovic

This edition of the *Review of International Co-operation* features a selection of conference papers presented at the ICA Research conference in Nicosia, Cyprus in 2013. Our selection reflects the conference theme "Co-operatives during crisis and post-crisis period", but it also addresses another emergent and related theme: co-operatives in crisis.

Authors explore a number of issues facing co-operative organizations and the co-operative movement, not least of which is the view that the co-operative movement may be at a crossroads. Mitch Diamantopoulos builds on his research in two Canadian provinces and asks some difficult questions of relevance for the global co-operative movement: Firstly, do maturing co-operatives have a systemic tendency to drift from movement goals with a co-operative, community development approach toward an increasingly exclusive, market-driven, firm-oriented focus? He argues that degeneration is not merely a self-contained problem for individual co-operatives, but it tends to spread across sectors, eroding their social base. The author further explores movement regeneration strategies deployed in Quebec as a model of what is possible to pull co-operatives out of crisis. Finally, Diamantopoulos asks whether the movement is at a crossroads, and if so, whether the post-2012 (International Year of Co-operatives) support for the strategies of the Blueprint for a Co-operative Decade is a boost toward its renewal.

Kleanthous and Paton conjecture that as a result of the financial crisis and its aftermath disclosing unethical business practices, doors were opened for potential co-operative entry and growth as a sustainable and ethical business model. However, there is no evidence that this displacement of the investor-owned form in favour of co-operatives took place on a significant scale in the five years following the onset of the crisis. The authors address the question of why this may be the case, and suggest the possibility that co-operatives in fact fail to portray themselves as an ethical alternative, calling into question their sustainability. Assumptions in this paper need to be challenged or supported by further evidence, and other parallel causes of such developments need to be explored.

Co-operatives often find themselves in crisis when they reach the mature stage of their life-cycle and if they do not find ways to adjust to new realities. This seems to be the case in the Greek food industry, according to Sergaki et al. The authors compare networking among food producers by enterprise type, and observe that investor-owned businesses in Northern Greece form networks to innovate and survive in this highly competitive industry. Co-operatives, on the other hand, either do not deploy the principle of co-operation among co-operatives to form networks, or when they do, they co-operate solely for scale economies and price competition. This finding is counter-intuitive and suggests that co-operatives in the food industry in the region under study have entered their mature stage and need to find solutions beyond short-run economic logic to continue to be relevant players in the industry.

"Co-operatives also face crisis resulting from changing economic landscape and policies."

Co-operatives also face crisis resulting from changing economic landscape and policies. Many financial co-operatives around the world resorted to mergers as a strategy for survival, but this road has its challenges, from loss of identity to issues in governance as they distance themselves from their members. Akira Kurimoto compares mergers of Japanese consumer and agricultural co-operatives, noting important differences in their performance. While agricultural co-op mergers were imposed as a top-down decision, consumer co-ops integrated their operations in a more spontaneous way. The author captures some differences in performance of the two groups of co-operatives, indicating that large co-operatives in Japan may function more effectively when their growth is organic, but their governance challenges are shared, due to their size and distance from grass-roots membership.

Evidence shows that co-operatives, and co-operative banks in particular, performed better than their investor-owned counterparts in the economic crisis (Birchall, 2013). Temel conducts an analysis of the Canadian financial sector and confirms the hypothesis that credit unions display significantly less appetite for risk-taking, and therefore contribute to macro-economic stability. Established to support the financing needs of their communities, credit unions provide financial capital on non-predatory terms and avoid risky practices. Co-operative banks increased their assets, their membership and outstanding loan totals during the course of the recession while many large commercial banks were either rescued by the government or declared bankruptcy.

Kontogeorgos et al. study the response of Greek agricultural co-operatives to the economic recession of 2008-2013. Agricultural co-operatives have adjusted to the harsh external conditions by restraining their activities, increasing exports to find markets for the existing production, and relying on member capital to finance new investments. Co-operative managers also resort to networking and formation of strategic alliances to weather the crisis. Their behaviour confirms findings of previous studies, as well as those of Temel in this volume, that co-operatives demonstrate counter-cyclical behaviour by increasing (or maintaining) their activities in a recession and thereby providing macroeconomic stability.

The last paper, by Filippi, looks at the food price volatility crisis in France and asks whether new legislation created to counter this instability does the job better than agricultural co-operatives. Co-operatives typically stabilize earnings of their members, but industry differences, supply chain organization and product differentiation are also relevant factors influencing price and income volatility. Co-operatives can therefore play an important stabilizing role in supply chain management.

The articles in this volume of the Review assess how co-operatives deal with, or adjust to, external and internal crises. Not surprisingly, their performance has a stabilising effect if their decisions are consistent with the principles of co-operation, a factor that also increases their capacity to regenerate after a crisis.

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On the Conference

by Athanasios Hajimanolis and Simeon Karafolas

The 2013 ICA CCR conference was hosted at the European University Cyprus with the general theme *Co-operatives during crisis and post-crisis period*. The conference aimed to bring together academia and industry in the co-operative and social economy sectors to exchange views about the role of co-operatives in the 2008 financial crisis that transformed into an economic and social crisis thereafter. The crisis had a number of negative consequences globally, including failure of enterprises, increased unemployment, and even a risk of failure for certain countries. The key issues addressed by the conference were the consequences of the crisis for co-operative and other social economy entities. Discussions centred on co-operatives' behaviour up to the crisis point, the changes that took place as a result of the crisis, and a view to how they will emerge from the crisis.

A crisis can occur in many different contexts. Crises may be national or international in scale, but they can also take place at the local level, or even within a co-operative as an entrepreneurial entity. Therefore the crisis-related questions discussed at the 2013 conference, although focused on the 2008 financial crisis, are relevant to a broader set of periods and circumstances.

The conference covered many relevant aspects of the crisis' impact on co-operative entities, including issues of management and financing within co-operatives, as well as governments' management of the crisis itself. Other issues discussed include social entrepreneurship and government policy and support for the co-operative movement. The conference presented a unique opportunity for co-operative managers, academics, and government policy-makers to exchange ideas about how the co-operative movement could face the crisis, overcome it and continue to operate successfully in the recovery period. Cyprus offered an appropriate venue for these discussions, since it is one of the EU countries that suffered most during the crisis, and the effects were keenly felt by the co-operative sector, particularly by financial co-operatives.

The conference provided a forum for the presentation and discussion of scientific papers covering theory, methods, and applications in the field of the co-operative and social economy, covering a wide range of sectors and problem areas. Some specific issues discussed include:

- **Agricultural Co-operatives**: Despite the recent decline in the percentage contribution of agriculture to gross national income in many developed countries, it remains a significant employment sector and in many countries, the co-operative movement plays an important role. Recent developments and challenges to agricultural co-operatives were discussed under this theme.
- **Co-operative Banking**: The contribution of co-operative forms of banking, the special challenges that co-operative banks face in a period of crisis, and their competition with commercial banks were among the key topics under this heading.

- **Co-operative Governance**: Issues of co-operative governance not only in developed, but also in developing countries were discussed in this session, and the delicate balance between democratic participation of members, transparency, and economic efficiency were considered.

- **Co-operative Development**: Issues of leadership and development in co-operative organizations are of major importance for co-operatives, as highlighted in this session.

- **Co-operatives and Economy**: The role of co-operatives in the creation of wealth and especially their contribution to its more fair distribution in society were discussed in papers under this theme.

- **Co-operative History**: The current interest in the evolution of organizations and institutions has revived the interest in co-operative history and its impact on the development of modern co-operative organizations. Papers in this session dealt with such histories in several countries.

- **Co-operative Marketing and Management**: Marketing and strategic management issues are as important for co-operatives as they are for other types of firms. The delays within segments of the co-operative movement in adopting modern management and marketing approaches, the challenges this brings to competing effectively with private firms and, in particular, the strategies for addressing such problems, were among the topics of discussion in this session.

- **Co-operative Values**: The role of values as influencers of behavior and action is a theme related to co-operative history and the founders of the movement. Various differences between co-operatives and private firms are correctly attributed to value differences. Several papers in this session analyzed the relevant issues.

- **Social Entrepreneurship**: The recent emergence and substantial growth of social enterprises which, particularly in a period of economic crisis, can offer significant contributions to the alleviation of suffering of vulnerable social groups, is a topic of much interest today. The similarities and differences between social enterprises and the co-operative movement were discussed.

In conclusion, many important insights were gained by participants at this conference, which highlighted the resilience of co-operative organizations in difficult times. This capacity for resilience and endurance will surely help secure the survival and eventual prosperity of the co-operative movement during and after the crisis period, despite the severe difficulties faced in certain Southern European countries and, in some cases, the need for major restructuring.

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The Blueprint Paradox: Can Co-operators Overcome Movement Degeneration to Drive Post-Crisis Recovery?

by Mitch Diamantopoulos

Abstract

Corporate globalization and the post-2008 world recession have placed new strains on co-operatives. External challenges have also exacerbated a long-standing structural crisis, deeply rooted within maturing co-operative movement-sectors[1]: the problem of movement degeneration. This concept refers to maturing co-operatives' systemic tendency to drift from movement goals and a co-operative, community development approach toward an increasingly exclusive, market-driven, firm-oriented focus. These movement-wide pressures have accelerated degeneration and thus prevented some mature movements from capitalizing on new opportunities. This retreat into a siege co-operativism poses significant challenges to the expansive aims of the International Co-operative Alliance's ***Blueprint for a Co-operative Decade***. One such challenge includes making co-operation the world's fastest growing business model by 2020.

Building on a recent comparative study of the Canadian provinces of Québec and Saskatchewan, this paper highlights findings of international significance. It argues degeneration is not merely a self-contained problem for individual co-operatives; but that degeneration also has field effects: that 'degeneration contagion' tends to spread across movement-sectors, and that this can place powerful drag on new development. This process of cultural demutualization from within may also drive formal demutualizations, sector contraction and the erosion of the co-operative movement's historical bloc—the social base for its long-range expansion and renewal.

Globalization-era findings from Saskatchewan, where privatizations decimated the agrarian co-operative base, illustrate how 'stealth degeneration' may threaten movement objectives—subtly, slowly and even imperceptibly. An outlier of extreme movement degeneration in recent decades, the difficulties of the legendary Saskatchewan case provide a cautionary tale. However, it is also argued that 'degeneration drag' can be overcome through concerted movement regeneration strategies. Québec, where the number of co-operatives doubled in twenty years, serves as an exemplar of alternative possibility. These diverging paths represent a central paradox of globalization era co-operation in Canada. They also provide an instructive parable for a world movement at a crossroads.

Keywords: co-operatives; globalization; degeneration; Canada; Saskatchewan; Québec; Blueprint for a Co-operative Decade

1. Introduction: Theorizing Movement Regeneration in a Globalizing World

The International Co-operative Alliance's *Blueprint for a Co-operative Decade* challenges the movement to become the world leader in sustainability, the people's most preferred business model and the fastest growing form of enterprise by the year 2020 (Davies & Mills, 2013). This article argues that this campaign's success depends on effectively turning back the 'degeneration wave' that swept globalization-era co-operation over the last three decades. This sustained, albeit uneven global retreat from democratic commitments—such as co-operative education, community organizing or institutional intermediaries that support co-operative start-ups—hampered co-operative development in many regions. This degeneration wave also created the socio-cultural conditions for the 'demutualization waves' that broke out during this period (Herman & Souza, 2012; Myers, Maddocks & Beecher, 2012). Clearly, persistent degenerative trends and the Blueprint, as a regenerative project, exist in a contradictory tension. Overcoming the former is a key to the success of the latter.

To illustrate, this work contrasts case histories of two Canadian co-operative movements that emerged as world outliers for degeneration and regeneration in this period. Drawing from semi-structured interviews, statistical comparisons and historical research (Diamantopoulos, 2011), this report highlights conceptual findings of international significance. To clarify the universal character of the degeneration threat and the regeneration imperative, it also sets these individual explanations within the larger explanatory framework of the market-driven managerialism that drove co-operation's world-wide business response to globalization—responses that often came at the expense of demobilizing democratic energies, movement values and development capacities.

Central to this study's approach is the role of strategic movement action. In particular, the analysis focuses on the conceptual triad of cultural mutualization, cultural de-mutualization and cultural re-mutualization. To explain: a process of cultural mutualization must precede co-operative development—establishing understanding of the model as well as a willingness to work co-operatively and democratically. Movement-building largely involves cultivating movement values and development ambitions to drive new frontiers of democratic economic action. Elaborating a mutualist culture is the traditional function of co-operative education campaigns.

"Movement-building largely involves cultivating movement values and development ambitions to drive new frontiers of democratic economic action."

Conversely, a process of ***cultural demutualization*** prefigures the disenchantment that eventually leads to the formal, legal act of demutualization. It is the end-point in a long process of degenerating commitment to the distinctively democratic, social objectives that once distinguished the model. For example, as co-operatives focus on business priorities and come to resemble other businesses, a decisive bloc of members may eventually decide that the 'co-operative' is no longer worth fighting for.

In their formative stages, movements typically invest heavily in co-operative education, a movement press and aggressive campaigns to cultivate the co-operative values, beliefs and attitudes. This is the socio-cultural foundation on which the prospects for co-operative development depend. Conversely, the demutualization waves of the globalization period signalled the hollowing out of those co-operative values, beliefs and attitudes.
Co-operative campaigns once drove co-operative enlightenment and engagement as a preface to the development of new co-operatives. By contrast, the retreat from co-operative education and support to emerging co-operatives fostered the decline of the co-operative ethic and the democratic disengagement, disenchantment and moral turn-over of its social base. Cultural demutualization thus left co-operative firms vulnerable to predatory demutualizers and the hostile manoeuvres of the investor-led culture-policy bloc (Carroll, 2004). As the case of Saskatchewan illustrates, long-range retreat from movement-building activities reduced co-operation's democratic resilience in a crisis context. The result was movement degeneration, declining formation rates and an open door to a demutualization wave.

In contrast to the Saskatchewan case, some movements mustered sufficient democratic responses to the globalization shocks first felt in the eighties to drive a cultural remutualization in which democratic ambivalences were overcome in favour of a reform project for co-operation. As the case of Québec illustrates, stepping up co-operative education, community organizing and support to new co-operatives drove movement regeneration and rising formation rates. This paper more closely examines this theoretical and strategic issue.

1.1 Globalization Shocks, Co-operation's 'Structural Adjustment' and Accelerated Degeneration

Closed or isolated organizations tend to lose democratic energy, with their associational lives lapsing into inertia and entropy over time (McAdam, 1982; Michels, 1915; Weber, 1958). Similarly, co-operation's development potential has long been stealthily eroded across maturing world sectors. As co-operatives mature, associational vitality and movement mission gradually decay. Professional management eclipses their early reliance on intensive democratic involvements. Expanding market involvements encourage managerial oligarchy and co-operatives' gradual assimilation into the norms and values of the dominant economic culture (Cornforth, Thomas, Lewis & Spear, 1988; Diamantopoulos, 2012a; Greenberg, 1986; Vanek, 1971). More market-driven and bureaucratic, they become less likely to enlist civil society in new co-operative campaigns. This demobilizes membership and cuts off the sector of economic function of the firms from their founding, social movement base. Democratic energies and the developmental know-how and social networks to drive new campaigns and start-ups are disengaged and disperse. Degeneration cycles thus routinely stunt co-operation's development potential. This is a 'systemic' hazard (Briscoe, 1991; Meister, 1984; Webb, 1899).

Systemic degeneration is built into the 'dual nature' of co-operatives. On the one hand, they are democratic associations—rooted in extended social movement families. On the other hand, they are commercial enterprises—embedded in competitive markets (Diamantopoulos, 2012a; Fauquet, 1986; Levi, 2006; Pussa, Mönkkönen & Varis, 2013). While this duality is asymmetrical, contentious and may shift over time, in the absence of democratic interventions, market-driven involvements increasingly tend to crowd out social objectives such as movement expansion (Cornforth et al., 1988; Develtere, 1996). Paradoxically however, established co-operatives may grow, become prosperous and diversify into new markets even as the movement's development capacity loses its traction in civil society.

This systemic tendency toward the growth of large and well-established co-operatives while co-operation as a social movement declines has recently been reinforced, consolidated and accelerated. A new wave of 'episodic' degeneration was fostered by the overlapping shocks of globalization and the post-2008 economic crisis. Indeed, the eighties introduced a volatile,

"Degeneration cycles thus routinely stunt co-operation's development potential."

uncertain and risky moment for world co-operation. Investor-driven deregulation transformed the terrain to quicksand under co-operators' feet. For over thirty years, this regime of 'structural adjustment' squeezed co-operatives. A rapidly globalizing political economy favoured the economies of scale enjoyed by heavily capitalized multinational corporations over regionally rooted co-operative enterprises. This drove investor-led development at co-operation's expense, 'from above' (Marchak, 1991). Shifting cultural politics also fostered competitiveness, individualism and market populism—also corrosive of co-operative values—'from below' (Coleman, 2004).

The 2008 Wall Street collapse further tightened this vice on co-operation's structures and values (Myers et al., 2012). Certainly, this period's market and state failures created new openings for co-operative action (Bibby, 2009; Birchall & Hammond Ketilson, 2009; Reed & McMurtry, 2009; Stiglitz, 2009; Webster, Brown, Stewart, Walton & Shaw, 2012). However, economic uncertainty and the rise of an angry, authoritarian populism (Barber, 2010) discouraged that action. This is crisis-era co-operation's paradox: when collective action is most urgent it may also become most difficult.

Of course, all business models faced wrenching change in this globalizing world—but as both a network of economic enterprises and a social movement of democratic associations, co-operation was uniquely destabilized by the market-driven shift from a 'developmental' regime that balanced economic and social objectives toward an increasingly 'technocratic' regime. Emphasizing business priorities and managerial power, this technocratic hegemony over co-operation in the globalization era discounted social objectives, sped up degenerative trends and cast off the regenerative safeguards erected by previous generations. Over time, the prevailing structure of managerial power and its increasingly technocratic 'common sense' would pose formidable obstacles to movement expansion.

1.2 'Traders' and the globalization era's 'degeneration wave'

The unique conditions of the last three decades exacerbated co-operatives' systemic tendency to degenerate. Globalization accelerated maturing sectors' tendency to abandon movement goals, such as new co-operative development. Instead, these pressures encouraged the opposite: a narrowing focus on short-term, firm-specific business goals (Levi, 2006). Market restructuring thus forged the priorities and ideology of a market-driven faction of co-operative 'traders'. Their orientation was defined by a preference for strong management, market-pragmatism and a single bottom line focus (Briscoe, 1991). Their crisis-hardened and devoted quest for business efficiency, growth, sales and profit margins were purchased at the expense of movement-building. Inimical to projects that fail the 'straight line test' of established indices of business success, traders regarded co-operative education, the movement press, community outreach, coalition-building and new sector development campaigns as so many dispensable frills or counter-productive distractions. This technocratic turn had unintended but significant and perverse implications for development: accelerating degeneration on a global scale.

Indeed, globalization pressures provoked a profoundly defensive business reaction. Crisis management focused on running a 'tight ship'. Increasingly charged to steer the course were strong, 'hardball managers'—with a laser like focus on the bottom line and a willingness to make tough choices (Stalk & Lachenauer, 2004). Co-operative businesses needed speed, flexibility and expertise to navigate rapidly globalizing markets. Members routinely braced themselves for cascading regulatory and market change by authorizing an ever wider scope for swift and decisive executive action. In short, co-operatives responded to market threats by increasing management power.

External threats trained the focus of a generation of co-operators on market manoeuvre. They protected the co-operative legacy's business foundations through this turbulent period. However, co-operation's commercial successes increasingly came at the long-range expense of its democratic social project. For the most part, organizational cultures, the locus of decision-making and the balance of power shifted gradually. Creeping structural reforms—such as introducing term limits and professionalizing board make-up—further consolidated managerial authority and trader ideology. Globalization thus heralded a new period in co-operative movement history. It was defined by defensive retrenchment, the hegemony of hardball management and movement demobilization. The 2008 crash further reinforced this siege mentality. Indeed, Quarter, Mook and Armstrong suggest today's co-operatives are mere relics of once vibrant movements, like fish stranded ashore after a high tide:

> There are linkages that suggest that there is a co-operative sector, although any semblance to a social movement (e.g., the 'co-operative commonwealth') could be argued to be an artefact of history […] The dream of a co-operative commonwealth is no longer referred to, or at least is limited to the zealous few (2009: 8, 53).

Globalizing markets ushered in an era of technocratic co-operation: instrumental in its narrow market focus, vertically fragmented into enterprise silos asnd disengaged from civil society needs and movements.

In this strategic retrenchment, movement goals were set aside. Rather than a short-term tactical retreat, this new 'common sense' soon congealed into an entrenched managerial strategy, discourse and set of standing plans, policies and best practices.
Co-operation thus waged a great retreat from forging new democratic frontiers of movement education, community organization and new sector development. Instead, it pulled up the drawbridges of its isolated and besieged firm fortresses. Perpetually postponed movement expansion became the new normal. As some firms inevitably failed without new sectors emerging to replace them, this churn drove sector contraction. And as the investor-led economy expanded, co-operation's relative weight, importance and credibility shrank yet further.

"Globalization ushered in an era of technocratic co-operation."

However, managers were not generally villains and members were seldom hapless victims in this shift. Managers were frequently encouraged, if not compelled, to 'take charge' by their boards. Directors often lacked co-operative education and commitments; they were pleased to lessen their democratic burden by 'leaving it to the experts'. Blinkered bureaucratic frames increasingly reduced the scope of leaders' co-operative vision: from long-range movement expansion to the short-term market manoeuvre of their firm. However, like managers who turn a blind eye to the maintenance, repair and replacement of their firm's physical plant, short-termism allowed their movements' social capital to be depleted and their development systems to break down.

Focused on short-range market battles, the movement increasingly risked losing long-range wars for hearts, minds and new sectors. It yielded vast 'green fields' of co-operative development and new ideas to the investor-owned model. Its status as a meaningful development alternative was increasingly questioned.

For example, a 2012 study of international public opinion discovered that almost a quarter of non-members were either ‘unfamiliar’ or ‘unaware’ of the co-operative option. Worse, another quarter were ‘sceptics’. They distrusted that co-operatives actually adhered to movement values, particularly the large ones. Failing to promote those values, the sector further fed their scepticism (Ipsos & Université du Québec à Montréal, 2012).

This disconnect suggests how the technocratic interests, visions and values that became dominant in the globalization era thwarted co-operation’s democratic advance, even in the wake of the great collapse of public faith in investor-led development sparked by the 2008 crash. For many, co-operation had become indistinguishable from the corporate establishment—bureaucratic, self-interested, distant and remote. It was part of the problem. For others it was either irrelevant or invisible. Technocratic capture and market-driven mission drift help explain why the “ninety-nine percent” failed to turn to co-operation in greater numbers.

1.3 Frozen movements and the problem of ‘degeneration drag’

The ICA’s ebullient declaration to become the world leader in sustainability, the people's most preferred business model and the fastest growing form of enterprise by the year 2020 (Davies and Mills, 2013) may therefore understate obstacles, particularly outside Britain, Africa and the global financial sector (Webster et al.: 1-2). Chief amongst these is the pernicious problem of degeneration drag. In many maturing sectors, ‘frozen co-operatives’ have become disengaged from co-operative education and community outreach (Fairbairn, Bold, Fulton, Hammond Ketilson & Ish, 1991: 42). As co-operatives drift from their founding moorings in community and social movement networks (Develtere, 1996; Fairbairn, 2001; Diamantopoulos, 2012a), they tend to become increasingly market-driven and bureaucratic. This corporate managerialism undermines their ability to inspire and support new development (Diamantopoulos, 2012b).

Moreover, this retrenchment reaches beyond individual co-operatives or even established sectors: degeneration has field effects (Staber, 1992). Degeneration contagions may engulf whole ‘frozen movements’ as leading co-operatives mature and enter degenerative phases. Through their historic tenure, economic weight, cultural influence and political roles in apex organizations, these co-operatives’ leaders are best positioned to set the pattern, tone and scope for movement (in)action across the co-operative field. Due to their strategic structural location they are most likely to adopt the traders’ narrow market-based instrumentalism. They also command the power and influence to impose that hardball development logic on wider movements. Furthest removed from co-operatives’ founding ethos, the regeneration challenge is greatest with the trader cadres of these long-established, legacy co-operatives. Paradoxically, while these sectors have the greatest base of resources, experience, communication channels and cultural-political leverage from which to launch campaigns, many of their leaders have led a decades-long retreat from movement-building.

In the globalization era, the trader mentality prioritized the growth of established co-operatives over wider movement-building concerns such as co-operative education, community organizing and development assistance. This degeneration drag thwarted new opportunities. Organizing know-how and development coalitions eroded as founding generations retired or withdrew. Emerging co-operatives, and the younger activists who tend to lead them, were isolated. This demobilization of development-focused co-operators narrowed the movement's leadership base and further strengthened managerial power.

Globalization's degeneration wave thus depreciated social capital, culled activist cadres and campaign know-how, weakened social movement ties and disarticulated co-operation from anti-corporate democratic blocs[2]. It hobbled a whole generation of sector expansion. Worse, the atrophy of developmental expertise, structures and networks made regeneration and expansion ever more difficult. It therefore frequently took crises such as co-operative failures and demutualization waves to overcome entrenched technocratic hegemony and muster the regenerative energies to arrest and reverse the decline (Webster et al., 2012). This vicious degenerative spiral conceded emerging markets to an ever-expanding investor-owned economy and economic authority to the investor-led bloc.

Failures to coordinate new co-operative development reflect a break-down in solidaristic movement norms and social capital (Coleman, 1988). Ironically, many established co-operatives that deny support to emerging development coalitions and ventures benefited from vigorous campaigns and voluntary and institutional investments in their founding periods (Hammond Ketilson, Fulton, Fairbairn & Bold, 1992). This movement 'free-riding' defies co-operative principles ('co-operation among co-operatives' and 'concern for community'), weakens movement unity and identity and breaches inter-generational solidarity. Indeed, in many regions, this trader-led, technocratic retreat from co-operation's social objectives ended the 'developmental accord' that once governed nation state-era co-operation and countervailed degenerative tendencies. In that historic compromise, co-operators balanced business and movement objectives. They were collectively committed to movement expansion and funded strong apex organizations. Continuous education, campaigning and new co-operative development acted as a brake on degeneration.

However, in the age of 'lean management,' many developmental functions were shed in favour of the new, hardball market pragmatism of the 'technocratic accord'. Emerging sectors were increasingly left to 'sink or swim' as established sector management trimmed involvements not deemed mission-critical to its business interests. Shared movement commitments were curtailed, occasionally under the threat of dues strikes against 'bloated' apex organizations or expendable joint initiatives. Driving movement expansion against such entrenched degeneration thus pivots on first 'unfreezing' or bypassing bureaucratic structures.

Unfortunately for the *Blueprint*'s developmental ambitions, technocratic co-operation lacks the traditional movement know-how, networks and inclination to drive development 'from below'. It is also deeply entrenched—ideologically, discursively and institutionally. Disinterested in popular education, community organizing or building social movement coalitions, traders tend not to see the point of such 'off-task' sociological interventions. This is the *Blueprint* paradox.

2. Results and Discussion: The Contrasting Canadian Cases of Saskatchewan and Québec

Co-operation is a far-flung and wide-ranging movement. Abstracting from its diverse expressions and experiences thus casts only dim light. Two dramatically contrasting provincial movements from Canada illustrate how movement formations have emerged, evolved and, in one case, declined in the concrete and particular historical contexts of the globalization era: the radical contraction of Saskatchewan's co-operative sector and the robust expansion of the Québec movement from 1980-2010 (Diamantopoulos, 2011).

Canada is one of only four countries where a majority of the population belongs to a co-operative (Zamagni & Zamagni, 2010). The Saskatchewan and Québec movements have been traditional leaders in the Canadian context. From 1980-2010 however, Saskatchewan was wracked by privatizations in dairy, poultry and grain. Its co-operative sector retrenched.

In stark contrast, a whole new generation of worker, worker-shareholder and solidarity co-operatives emerged in Québec. They penetrated vast new frontiers of co-operative enterprise, from funeral homes to home care and ambulance services. Across most of the twentieth century, the Québec and Saskatchewan movements grew in successive waves. Now a wide gap in co-operative formations, memberships, revenues, assets and innovations has opened up between them.

With Saskatchewan lagging the national average by almost 6:1 in new co-operative formations from 1985 to 2005, while Québec more than doubled its pan-Canadian performance (Co-operatives Secretariat, 1987, 2008), these movements embody opposite extremes. They are outlier cases of extraordinary movement degeneration and regeneration respectively. Their dramatically diverging fortunes in the globalization era are thus of wider significance. They shed light on why—in some periods, regions and stages in their life-cycles—some movements decline while others expand and prosper. These ideal-typical cases also suggest why some movements, like Saskatchewan's, might be at risk of degenerating over time; and how they might be successfully regenerated, as in Québec's case.

"Canada is one of only four countries where a majority of the population belongs to a co-operative."

2.1 The Saskatchewan case: market pragmatism, stealth degeneration and sector contraction

How could Saskatchewan's legendary co-operative movement decline so quickly and profoundly? In short, globalization drove the consolidation of agriculture into larger but fewer farms. By reducing the number of middle farmers—the movement's bedrock—it thus eroded the co-operative historical bloc, numerically and ideologically[3]. The crisis of the family farm transformed agriculture's class structure, thus weakening movement strength and cohesion. Rural decline also pressured established co-operatives to consolidate branches, centralize operations and cull 'frill' expenses in publishing, education and movement building. Finally, deregulation opened Saskatchewan co-operatives to new cost and competitive pressures. This further reinforced a siege mentality to draw up the bridges in self-defence. The emergency response was defensive—to put management in charge, focus on core operations and set aside long-range movement-building. This was a particular and extreme case of maturing co-operation's more general globalization-era malaise.

Formal demutualizations in dairy, poultry and grains were thus prefigured by a creeping cultural demutualization or 'degeneration wave'. This degeneration wave eroded popular commitments to co-operative potential, but the price paid for decades of neglect was not visible until the demutualization wave swept the province. By then the movement base had been deskilled, demobilized and divorced from each other and their historic social movement allies. 'Frozen co-ops'—disengaged from co-operative education and community outreach—had become Saskatchewan's new normal (Fairbairn et al., 1991: 42), and were therefore particularly vulnerable to demutualization.

2.1.1 Stealth degeneration

This case illustrates a central problem for co-operators everywhere: the invisibility of degeneration. Co-operators are too often like the frog in the pot, slowly boiling alive because they can't perceive the temperature's gradual increase. This creeping degeneration may take place alongside exemplary business performance and take decades to manifest in a crisis. The signs are difficult or impossible to measure with conventional management tools. The problem may therefore be imperceptible, particularly if managers deliver tangible results in sales, margins and member rebates, all of which are easily measured.

The danger, of course, is the gradual erosion of intangibles—democratic norms, meaningful member involvement, social movement ties and bloc cohesion. For as the associational vitality of the co-operative dissipates, movement networks, organizing know-how and values also atrophy, quietly and gradually. As Maaniche (in Crewe, 2001) argued, a co-operative's life-span will be only a generation and a half without educational interventions to regenerate its founding movement culture. By the co-operative's second generation, directors and managers have no first-hand memory of why the co-operative was formed, how it was organized or who helped. It is now an established co-operative, led by professional managers and board members, not community organizers. Members get used to rubber stamping board motions to approve management's proposals and recommended slates at AGMs or they simply stay home. Managers get used to running the show (Cornforth et al., 1988). As MacPherson (1987) warns, co-operatives lose institutional memory, forgetting why or how to organize campaigns for new co-operatives. And since co-operatives often emerge in waves—in response to some common generational experience—the retirement of a founding generation of activist-co-operators can mean the broad-based loss of development networks, know-how and values. Degeneration advances by stealth.

2.1.2 Degeneration as a 'wicked problem'

In this degeneration wave in Saskatchewan, which culminated in a spate of demutualizations during the 1990s, individual co-operatives' residual 'associative intelligence' was gradually replaced by emergent managerial networks, methods and values, all of which soon become dominant[4]. The case of Saskatchewan's agrarian producer co-operatives demonstrates that a period of cultural demutualization may not simply thwart expansionist aims; it may undermine the member loyalty of established co-operatives—even serving as a preface to formal demutualizations. It also shows how quickly rapid socio-economic change can transform what had been a slow, plodding movement decline into a full-blown, irreversible crisis.

Few saw the epic collapse of agrarian co-operation coming in Saskatchewan. Fewer still had any idea what to do about it. That's because degeneration is a 'wicked problem' (Rittel & Webber, 1973). It defies routine approaches. It is entangled in other social and economic problems. Solutions differ from one context to another. Like nailing Jell-O to a wall, it frustrates technocratic quick fixes. Every region and sector has to find their own solutions, which require resources and sustained, broad-based educational action. This kind of problem-solving requires sociologically sensitive and exceptionally vigilant, skilful and democratic leadership. It requires a cultural shift.

Unfortunately, like a virus on a computer network, once degeneration takes hold of one node of a co-operative sector, it may gradually spread across the whole movement—through managerial networks, second tier co-operatives, federations and apex organizations. Crisis contexts frequently create 'affective epidemics' craving swift, focused and decisive executive action[5]. In these instances, developmental aims are easily dismissed as naïve, impractical and inconsistent with core business objectives. Indeed, the dominance of trader discourse and lack of meaningful democratic voice in a co-operative press, official newsletters, public statements and annual reports over time can incrementally deter activists from expressing their views. In this 'spiral of silence' they fear being stigmatized and excluded (Noelle-Neumann, 1984). In this context of degenerating democratic commitments, occasional crises provide pretexts to rollback expenditures on vestigial movement functions. To hard-nosed managers, co-operative education, community economic development and bloc-building fail to align with bottom-line business priorities. They may simply be viewed as wasteful distractions. A few maturing, frozen co-operatives that refuse to participate in joint movement action soon yield a frozen movement.

Degeneration is therefore in the end much more than a wicked problem. It is a 'super-wicked problem' because the leaders charged to fix it are themselves part of that problem (Brown, Harris & Russell, 2010). Most invested in a bottom-line business focus, they are frogs in the pot of everyday business management. Trained to 'over-commit' to critical business objectives, managers are least likely to even see how 'neglecting' potentially expensive and distracting social objectives is a problem. Indeed, trimming such involvements is a signature of 'due diligence' in the investor-owned firm formulae of the business schools' curricula. Modernizing leaders are unlikely to commit scarce organizational resources to co-operative community development initiatives or encourage members whose views they consider disruptive or inconvenient. In the age of market-driven market pragmatism, they view their job as pruning trees not seeding forests.

Illustrating the slippery dynamics of degeneration, the Saskatchewan case serves as a cautionary tale for co-operators everywhere. It demonstrates the importance of regenerative initiatives, like the *Blueprint*. But it also reminds that reversing decades of degeneration may take years; that it will encounter entrenched resistance; and that proactive leaders need to remain vigilant against ever-present, regressive tendencies by continually investing in a developmental movement. A strong democratic offence, as in so many fields, is certainly co-operation's best defence.

2.2 The Québec Case: Developmental Intervention, Movement Regeneration and Sector Expansion

The Québec case illustrates that degenerative tendencies can be reversed. While globalization reinforced movement degeneration in Saskatchewan, it had the opposite effect in *la belle province*. Certainly, degenerative pressures also intensified across this province at this time. However, double-digit unemployment rates provided policy-makers and civil society leaders with a strong, countervailing incentive toward co-operative expansion. Unlike the centrifugal pressures which polarized, fragmented and weakened Saskatchewan's agrarian-co-operative bloc, circumstances in Québec enlivened the 'movement nexus' that tied co-operators to trade-unionists, community groups, anti-poverty organizations and others. The agitations of this bloc expanded the traditional social base for economic democratization and pressured the sector to reinvent itself as an increasingly engaged and developmental movement.

There are a number of mechanisms within Québec that have helped expand co-operation in the province in the last few decades. The network of *co-opératives de développement régional* (regional development co-operatives or CDRs) is a particularly important mechanism, and its role will be highlighted here. (Savard, 2007; Côté, 2007)[6]. Starting in the '80s, the CDRs have brought delegates from established and emerging co-ops together to develop more co-operatives in their regions. This has given movement renewal an important boost. This modern network is publicly funded, sector self-managed and professionally staffed. However, it is functionally reminiscent of an earlier era of Catholic co-operation in which *caisse populaires* (credit unions) were organized around parishes—with the active involvement of priests (Lévesque, 1990; Rudin, 1990). The CDR network similarly provides development with powerful patrons, an institutional base and a regional network—in this case by pooling community, sector and state resources. The CDRs' staff, board members, member co-operatives and local supporters drive new start-ups by strengthening emerging sectors and reengaging social networks at the movement base. At the board table of individual co-operative firms, new co-operative development is at best a marginal concern. By contrast, this is a second-tier co-operative's ***raison d'etre***. Thus, from 1985 to 2005, CDRs recreated an efficient, modern nucleus of a regional development coalition. They reached out to civil society to stimulate and support new co-operatives. Over time, those efforts renewed regional co-operative blocs.

By focusing on community development rather than firm growth—and empowering community action rather than executive action—the CDR network served as a check against movement degeneration. Indeed, these parallel structures cross-cut the vertical silos of business-oriented co-operation, re-animating horizontal movement relations and re-opening democratic space to focus on movement goals. Structural lynchpins in the reinvention of Québec co-operation as a developmental movement, CDRs 'locked in' co-operative education, community outreach and a culture of continual campaigning.

Like CDR outreach staff who publish member newsletters and regional magazines, organize public events during Co-operatives Week and visit co-operative boards and high schools, CDR delegates from regional co-operatives also act as movement ambassadors. They build trust, goodwill and interest in how the model might solve community problems—both with their home co-operatives' directors and staff and through family and community networks. By returning to their home co-operatives with a broader, community-oriented development perspective, they revitalize movement culture 'from within'. Occasionally, they also bring opportunities for local co-operators to lend practical support—from financial or technical assistance to the use of a meeting room or a call for volunteers. These gestures of mutual aid help recreate a culture of reciprocity, community service and inter-co-operation. Complementing the work of CDR outreach staff, delegate-directors help to rebuild the co-operative movement culture 'from without' by gradually strengthening co-operation's ties to local civil society through their home co-ops.

By harnessing untapped movement potential, this decentralized network of regional development co-operatives overcomes coordination failure and inertia in co-operative development. Indeed, the CDR network helped launch over a thousand new co-operatives and created or maintained over 11,000 jobs in its first fifteen years (***Fédération des coopératives de développement régional du Québec***, 2010). This system of co-operative support is exemplary—both as a development mechanism for new co-operatives and as a regenerative mechanism for a mature movement once both stymied by long-entrenched degeneration and menaced by globalization's degeneration wave.

Québec has made extraordinary strides in popularizing the co-operative model. It is an example for co-operators everywhere. While the ***Blueprint*** project is ambitious and will face entrenched resistance, Québec co-operators show that another, more developmental movement is possible in this age of corporate globalization and austerity.

"By returning to their home co-operatives with a broader, community-oriented development perspective, they revitalize movement culture 'from within'."

3. Conclusion: Co-operation at a Crossroads

These outlier cases contrast the perils and promise of globalization-era co-operation. Saskatchewan's movement plunged into crisis and contracted dramatically. By contrast, Québec's movement expanded decisively, dramatically out-pacing Canadian sector growth. Globalization pressures tested each sector's economic resilience, movement sustainability and bloc cohesion. Indeed, the development gap between them was largely driven by bloc dissolution and re-invention—the market-driven erosion of Saskatchewan's traditional, agrarian-co-operative bloc on the one hand and civil society's renewal and expansion of Québec's social economy bloc on the other. Against the prevailing technocratic mono-mania for market-based solutions, each case illustrates the understated importance of co-operative social structures to movement fortunes (Bourdieu, 2005; Coleman, 1988; Granovetter, 1992).

Saskatchewan's traditional movement base was radically and rapidly reduced by wrenching agricultural consolidation. The collapse of the wheat province's traditional, farmer-led co-operative bloc left little energy and few resources to expand the movement's reach into new urban sectors (Fairbairn, 2005). With the declining hegemony of the historic co-operative-agrarian bloc; the virtual dissolution of its traditional leadership base; and the dismantling of education, communication and movement-building structures and meaningful sector-state partnership, Prairie co-operation plunged into rapid decline.
Co-operatives adapted to the turning tide defensively—by retreating to narrow, short-term business goals in a vicious degenerative cycle that reinforced declining formation rates and opened the door to the province's demutualization wave.

By contrast, Québec's strong urban base, actively supportive labour movement, engaged research community and developmental state responded to the jobs crisis by driving movement modernization and bloc renewal. The resulting co-operative boom helped position the movement for further gains (Lévesque &, Ninacs, 2000; Neamtan, 2004, 2008; Vaillancourt, 2009; Vézina, 2001). A series of campaigns demonstrated the model's wide-ranging potential but building a developmental movement took broadly-based, long-range movement vision and strategic commitment. It hinged on the democratic intervention of a diverse set of actors, from individual co-operators, to directors, to CDR staff and delegates. Of course, there is no protection against rapid change or churn. Inevitably some co-ops will fail. Similarly, co-operative leaders naturally tend first to their own operations. However, the Saskatchewan and Québec examples suggest a more balanced, developmental movement approach may better serve co-operation over the long term. The tragedy of the co-operative commons in Saskatchewan provides a warning to short-sighted leaders who do not invest time and resources into movement succession and regeneration[7]. The resurgence of co-operation in Québec, by contrast, provides movement modernizers with a model for renewal.

As a vast, varied movement that spans the planet, co-operation evades facile generalizations. Degeneration's origins, character and challenges vary by context and thus require tailored local responses. At the same time, degeneration's tendency to cross-cut co-operative contexts creates a common barrier to the world sector's further development. Indeed, the extreme case of Saskatchewan reflects a wider degenerative threat, particularly for those regions dominated by maturing co-operatives and an entrenched managerial tradition: long-range movement renewal is too easily taken for granted or dismissed, particularly in a crisis context. Conversely, the Québec case illustrates this fate is not inevitable. The CDRs illustrate one model of how regenerative networks have been mobilized to expand co-operation in the globalization context. By re-pooling movement resources, realigning movement priorities and re-tasking internal and external movement partners, Québec's development culture was revitalized. This paired case study thus suggests qualified optimism for the ICA's *Blueprint* goals. It took a major economic crisis in Québec—including movement discord, co-operative failures and a major social mobilization to set the stage for co-operation's resurgence. This suggests that the *Blueprint*'s success rests on the local ability of movements to recognize and find their own means for resolving the degeneration dilemma—within the social and economic terms of their own development contexts.

Notes

1 The term movement-sector is used to capture the duality of co-operation as both a democratic movement and an economic sector.

2 Carroll and Ratner have defined Gramsci's concept of an historical bloc as "a strategic alignment of classes, class fractions and popular groupings whose interests and outlook are realized within the project and whose coalescence establishes an organic relation between (the economic) base and (the ideological-cultural) superstructure" (1989: 30). See Gramsci (1971) for the seminal discussion.

3 Within the span of just one generation, Saskatchewan farmers' went from a decisive majority to an even more decisive minority of the population. The percentage of on-farm population declined from 61 percent in 1931 to only 16.2 percent by 1991. Average farm size almost tripled from 1931 to 2001 (Stirling, 2001).

4 MacPherson defines associative intelligence as "a special kind of knowing that emerges when people work together effectively; a conviction that people through working together could learn skills that would make collective behaviour more economically rewarding, socially beneficial and personally satisfying" (2002).

5 Grossberg (1992:284) defines the affective epidemic this way: "like a moral panic, once an affective epidemic is put into place, it is seen everywhere, displacing every other possible investment. But, unlike a moral panic, such epidemics are not always negatively charged."

6 In the early seventies, the Conseil des coopératives de l'Outaouais emerged. This experiment in joint regional action inspired the launch of the co-opératives de développement régional (CDR) program in the eighties. Pilot initiatives in Outaouais, Québec and Saguenay / Lac-St-Jean in 1983 generated 27 new co-operatives and 275 permanent new jobs within two years (Tremblay, 1985: 147). The network was launched in 1985, its co-operatives organized into a democratic federation under the provincial movement umbrella in 1998 and the CQCM assumed management of the program in 2005. There are eleven CDRs in operation in 2013.

7 Ironically, early movement pioneers' success in 'broadening-out' (Fairbairn, 2005) made Saskatchewan's the most diversified movement on the planet in the mid-forties (MacPherson, 1979) and ensured its future beyond the collapse of the agricultural production sector. This case is also thus a lesson in the importance of movement history and of resisting the complacency that often accompanies prosperity.

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The Financial Crisis: The Co-operatives are Here. Case Closed (?)

by Akis Kleanthous and Robert A. Paton

Abstract

Even though the financial crisis of 2008 has shown that the governance of traditional, Westernized, financial institutions has basically failed, no meaningful action, as yet, has been taken to systematically and fundamentally challenge the status quo in terms of prevailing financial wisdom.

Co-operatives, with over 100 years of experience and success, could be the answer to the financial crisis as they follow their own distinctive business model that is both stable and sustainable, and is therefore in direct contrast to that of investor-owned banks. Co-operative financial institutions fight usury, promote inclusion and assist in enhancing their members' wealth and the wealth of the surrounding communities. Moreover, co-operatives are engaged in ethical and fairly conservative relationship-based retail banking and are created, managed and owned by their clients/members. These differences encourage long-term stakeholder relationships and minimize opportunistic and short-termism behaviours. On the other hand, co-operative financial institutions are criticized for their perceived inability" to raise additional capital fast enough and to safeguard their capital, as well as for problems arising from their supposedly ineffective supervision and corporate governance schemes.

Despite the possibilities their ethical banking model offers, co-operative financial institutions do not seem to have taken the necessary steps to fill in the gap that the financial crisis has created. Could the reason be that co-operatives have distanced themselves from their founding principles and values? Preliminary research from Scotland provides some evidence of this. Further research is needed to systematically assess what the co-operative principles and values mean to the various stakeholders of co-operatives in different geographical areas.

Keywords: co-operatives, credit unions, banks, financial crisis

1. Introduction

The financial crisis of 2008 and its consequences have provoked many calls for change. Questions arise, are there sustainable and ethical alternatives to the existing financial model? In this paper, we will explore co-operatives as one such alternative. But to begin, let us consider the views of academic and industry commentators: what do they see the failings to be, and what remedies do they suggest?

Academics and commentators argue that executive directors' powers must be put in check and stakeholders, including non-executive directors, should act as devil's advocates or "internal regulators", constructively criticizing their executive director's decisions and plans (Sharpe, 2010; Sharfman, 2009; Turnbull & Pirson, 2011). Moreover, the non-executive directors should protect the financial health of the corporation by discouraging opportunistic behaviour by management and/or influential shareholders (Sharfman, 2009). In addition, the financial crisis has shown that it is not the idea of free markets that has failed, but rather the static financial system in which the financial institutions were forced to operate (Dowd, 2009). Finally, it seems that hoping for a miracle will not be enough (Geanakoplos, 2009) nor is sitting and waiting for the invisible hand to sort things out (Richter, 2009); tighter regulation of the financial market is urgently needed (Dam, 2010; Kotz, 2009; Ingves, 2009a; Ingves, 2009b). It has become abundantly clear that when big businesses are left unsupervised, they will go back to the relentless pursuit of profits (Munir, 2011).

Another demand among academics and commentators is for regulatory changes to include provisions for external factors (e.g. in line with the “Spanish Dynamic Provisioning Scheme”) (Brunnermeier & Sannikov, 2009); provisions for the shadow banking sector (Gorton & Metrick, 2010; Gorton, 2009) as well as provisions for moral hazard (so that whoever takes a risk should also pay for it) (Dowd, 2009; Scott, 2010). It is argued that of equal importance to the regulation itself is its implementation: each individual piece of legislation must be implemented as part of a larger set of regulations and not by itself (Campbell, 2011). On the other hand, Scott (2010) argues that what is needed is not more legislation, but rather better methods of resolving crises as and when they occur.

It is further argued that the financial crisis of 2008 is a natural point for all involved in the financial sector to start considering a new financial architecture (Brunnermeier et al., 2009), in order to gain back confidence and avoid a similar crisis in the future (Dudley, 2009). It seems that academic economists have been trapped in their own self-reinforcing feedback loop thus ignoring the challenges of the real world (Colander et al., 2009). Despite the expectations to the contrary, the crisis did not give rise to a new paradigm for governance (Peters et al., 2010), where the traditional assumptions about well-informed and rational participants are replaced by more real world assumptions (Berg, 2011).

Finally, in addition to the above demands, some researchers have identified the need to move to a more transparent and responsible banking sector and to resolve principal-agent problems (Congleton, 2009; Richter, 2009; Gibbons 2011; the European Coalition for Responsible Credit, 2011; Borio, 2008). In addition, in order to achieve sustainable development there is a need for financial services and financial products that are based on responsible credit, ethics and social responsibility (ECRC, 2011). Moreover, it seems that there is a need for ethical institutions to temper the financial institutions that in the past have harmed vulnerable people by exploitation, usury, greed and voracious lending (ECRC, 2011). Furthermore, there is demand for the simplification of banks’ activities so that regulators can understand the products as well as their implications (Mehran et al., 2011).

Viable solutions to the above problems could be addressed by organizations that are more open, more democratic and enable more employee participation (Wells, 1981). Such organizations include not-for-profit organizations where ownership and control are in the hands of the owners (e.g. not-for-profit co-operatives) (Cremer, 2009).

Co-operatives represent a distinctive form of business, operating in an ethical, fair, transparent and democratic way (Simon & Mayo, 2010) and featuring collective control and ownership (Wells, 1981).

In the following sections we explore the role of co-operatives in the global financial sector, consider the advantages and disadvantages of the co-operative banking model, and endeavor to assess whether they can provide answers to the issues highlighted above.

2. The Co-operative Financial Model could be the Solution

According to the International Co-operative Alliance (ICA), a co-operative is, "… an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise" (2012). Traditional co-operatives are defined as organizations whose ownership rights are confined to their members-patrons, and where benefits are paid out to members in relation to their individual patronage. In addition, the rights on the residual value of the co-operative are non-redeemable, non-appreciable and non-transferable (Chaddad & Cook, 2004). Moreover, because co-operatives are democratic, member- based organizations which exist to serve their members, they also feature "democratic rights of governance" (Spear, 2004b). Co-operative members take a long-term view of their investment in the organization, since they understand that the more they transact with the organization, the more they will benefit (Hansmann, 1988). Additionally, co-operatives, through the utilization of their social capital, "help to strengthen the fabric of civil society" (Spear, 2000). Finally, co-operatives are seen as social enterprises because they meet the three EMES criteria (enterprise orientation, social ownership and social aims) (Spear et al., 2009).

The historic roots of the co-operative banking sector in Europe are in Germany (significant figures being Herman Schulze-Delitch and Friedrick Wilhem Raaffeisen) where the first financial co-operatives were created as a response to the social and economic changes caused by the industrial revolution and the increased competition (Brannen & Ibrahim, 2010). The first co-operative financial organizations were formed as non- profits with the objective of increasing the well-being of their member-customers and other stakeholders through "maximizing their consumer surplus" (Fonteyne, 2007). Today, co-operative financial institutions, without any assistance from donors, not only assist in the financial inclusion of people and businesses that do not have any other access to financial products, but they also give increased decision-making power to their members (Cuevas & Fischer, 2006).

Co-operative financial institutions now have a strong presence in most countries (Fonteyne, 2007; EACB, 2010) and is argued that much of the competitiveness, economic success and prosperity of Finland, Sweden and Switzerland is due to the co-operative businesses that operate in these countries (Birchall, 2009). In Europe alone, co-operative financial institutions employ 757,000 people (Cuevas & Fischer, 2006); they are among the biggest banking institutions in Europe in terms of equity, number of branches (up to 40% of all banking outlets in certain countries) and total assets (up to 30% in some countries) (Hesse & Čihák, 2007). In addition, co-operative financial institutions in Germany at the end of 2003 had a combined market share of 52% in the financing of small and medium enterprises (SMEs) (Stolz & Wedow, 2005). In the USA, credit unions have grown to 78 million members, or 28% of the population, managing $440 billion worth of total assets (Goddard & Wilson, 2005). Worldwide in 2008 there were 53,685 credit unions in 97 countries, with almost 186 million members, owning assets of about US$1.2 trillion and loans of about US$847 billion (Brannen & Ibrahim, 2010). Despite their large market share however, co-operative financial institutions account for less than 3% of the total costs associated with the financial crisis of 2008 (EACB, quoted in Stefancic, 2010).

Co-operatives seem to be an important player in the financial market: what are their similarities and differences to investor owned banks?

2.1 Co-operative financial institutions vs. investor owned banks

Co-operative financial institutions such as credit unions act as significant competitors to investor-owned banks with regards to loans and savings (Brannen & Ibrahim, 2010; Feinberg & Rahman, 2006). Co-operatives appear to have fewer liquidity problems than commercial banks because they typically hold a higher proportion of a country's deposits (Fonteyne, 2007). Moreover, there is evidence that the mere presence of co-operative banks in an economy renders it more stable, even for commercial banks (Hesse & Čihák, 2007; Feinberg & Rahman, 2006). In addition, through direct competition between credit unions and commercial banks, the functioning of the financial markets stabilizes, resulting in lower risk of antitrust behavior on the part of commercial banks (Hesse & Čihák, 2007; Feinberg & Rahman, 2006). Evidence exists that credit unions offer the same products at around 2% lower interest rates than commercial banks, and credit unions are slower in increasing their interest rates (Feinberg & Rahman, 2006). In addition, co-operatives are stable because of the mutual support arrangements they enjoy (Hesse & Čihák, 2007). On the other hand, when a commercial bank is weak, the presence of financial co-operatives will render it even weaker because the non-profit nature of these co-operatives will leave less space for the commercial bank to exploit its customers (Hesse & Čihák, 2007).

In the following section we explore how co-operative financial institutions could satisfy the calls for change of the existing financial model.

2.2 Information asymmetry, power and agency problems

The present-day financial system is facing inefficiencies and governance problems due to asymmetric information between the principal (owners) and the agent (manager). Co-operatives can encounter fewer principal-agent problems because the double- identity of their clients as voting members enhances control over management, thus restricting behaviours such as empire-building and misallocation of resources (Ferri, 2012). Moreover, because of member involvement in decision making, co-operative financial institutions seem to be better placed to reduce the problem of asymmetry of information between the institution's management and its clients (Ferri, 2012; EACB, 2010).

"the mere presence of co-operative banks in an economy renders it more stable"

2.3 Socially responsible financial services

Another problem identified by academics is the lack of transparency in the current financial system, and the lack of responsible, sustainable and ethical financial services. Co-operatives are in a better position to identify and serve the needs of their customers because the customers are also the members—they have the power to steer the co-operative towards meeting their financial needs (Fonteyne, 2007; Brannen & Ibrahim, 2010). Also, thanks to the "intergenerational endowment," co-operatives enjoy a lower cost of capital which in turn enables them to offer a whole range of traditional financial products and services at lower than market rates (Fonteyne, 2007). Moreover, because of their not-for profit[1] nature, co-operative financial institutions not only have fewer incentives to use their power to the disadvantage of their customers (Fonteyne, 2007), but they also feature socially responsible and charitable policies targeted to the communities in which they operate (Brannen & Ibrahim, 2010; Valor et al., 2007). Finally, historically co-operatives promote products that are both responsible and ethical (Valor et al., 2007).

It is also important to note that because co-operatives have a social purpose rather than a profit-maximizing objective (Reed & Reed, 2009), profits are redistributed back to both borrowers and savers based on the amount of business they transacted with the co-op each year (Cuevas & Fischer, 2006). Also, the not-for-profit nature of co-operatives enables them to provide their members not only with an increase in income but also with “social profits” i.e. improvement in their lives (Reed & Reed, 2009). It is therefore argued that the lower reported profits of co-operatives are not the result of bad management or less effective cost management, but rather the result of the implementation of the co-operatives' member-oriented objectives (Hesse & Čihák, 2007).

Now that we have highlighted the various characteristics of the co-operative financial model that could satisfy the calls for change to the existing financial model, we will next examine some potential drawbacks of the co-operative model.

2.4 Disadvantages of the co-operative financial model

Co-operatives are considered disadvantaged in relation to investor-owned financial institutions because of restrictions in the current legislation not permitting co-operatives to raise additional funds (e.g. in the case of a crisis or in an effort to expand their operations) as well as due to lack of expertise in dealing with the money markets (Fonteyne, 2007). In addition, the current regulations governing co-operatives impose restrictions on the amount of additional finance that they can raise in the form of capital (Reed & Reed, 2009). Traditionally, apart from the initial capital raised during their formation stage, co-operatives rarely needed additional capital—and when they did, it was financed by retained earnings or debt (Chaddad & Cook, 2004; Birchall & Ketilson, 2009; Fajardo, 2012; Sacchetti & Tortia, 2012; Korres, 1999: 142- 143). Retained earnings are sometimes referred to as an “intergenerational endowment” (Fonteyne, 2007; Papageorgiou, 2004: 56) or “collective capital,” with current members seen as trustees for future generations of members (Birchall, 1997).

Another disadvantage for financial co-operatives, at least in the UK, is that historically they have been portrayed as poor people’s banks: because they were perceived as providers of humanistic but unsustainable financial services (Jones, 2006). Although there was some element of truth to this in the past, credit unions in the UK have gone under major transformations in recent years, moving away from exclusively serving the poor while relying on the generosity of donors and government assistance, to being commercially viable financial institutions having the means and the know-how to serve a wider range of people (Jones, 2006). Unfortunately, the stigma around credit unions as "poor people's banks" remains, and somewhat limits their ability to attract new members.

Additionally, the co-operative business model is perceived as inferior to that of commercial banks because the co-operative business model is more asset- and human resources-intensive (because of the extended branch network it sustains), and this increases co-operatives' vulnerability (Fonteyne, 2007). However, empirical studies have found that even though co-operative banks are less profitable than commercial banks, they are also much more cost-efficient than commercial banks (Gutiérrez, 2008).

Another criticism of co-operatives is that their governance system is “inappropriate” in that the board of directors, drawn from the co-op's membership, tends not to have the expertise required to adequately control management and direct management’s effort in serving their current and future stakeholders (Fonteyne, 2007). A number of changes have been proposed to address this issue, including more transparent disclosures, more active involvement of members in the strategy-setting of co-operatives, attracting qualified independent members to the boards, increasing the minimum members' investment and introducing systems to expose co-operatives to market mechanisms (Fonteyne, 2007).

> " co-operatives' governance systems must be strengthened to mitigate the risks of 'empire-building' "

Co-operatives seem to be disadvantaged also by their perceived inability to manage their capital due to their lack of corporate governance measures. Therefore, co-operatives' governance systems must be strengthened to mitigate the risks of "empire-building", (i.e. creating and accumulating profits for no other reason than their managers' aggressiveness and power-seeking) and the risk of misappropriation of assets by their managers (Fonteyne, 2007; Cuevas & Fischer, 2006).

Another disadvantage of co-operatives is that the pace with which they implement changes is too slow, given the rapidly changing banking industry (Fonteyne, 2007). To act/react more quickly, co-operatives must find the balance between adapting to new technologies, protecting their employees' job security, finding an appropriate level of involvement of employees in running the organization, and dealing with the inflexible costs relating to operating and maintaining an extensive network of branches while maintaining their non-profit nature and hence their competitive advantage (Fonteyne, 2007).

Finally, co-operatives seem to be disadvantaged by their current oversight model. Even though there are specific laws governing credit unions, and established supervisory bodies in each country, currently there is not enough oversight of co-operative financial institutions (Cuevas & Fischer, 2006). This is because the large number of small co-operatives poses a challenge to the governmental agencies that supervise them, and results in the government agencies relying on apex organizations for support, triggering the potential conflict of interest (Fonteyne, 2007). The idea of subjecting co-operative financial institutions to the same laws and oversight mechanisms as investor-owned banks could be a quick and not-very-costly answer to the current problems (Cuevas & Fischer, 2006) – this approach was tested in India in 1966 (Talwar, 2011). A possible approach could be a transitional phase with dual supervision—until such a time as all co-operatives are subjected to the same or analogous legal and supervisory environment as commercial banks (although ideally, the regulatory environment would be tailor-made for co-operatives (Cuevas & Fischer, 2006)).

In summary, the various real and perceived disadvantages of the financial co-operative model consist of the following: the perceived inability to raise additional capital fast enough, the perceived inability of co-operatives to safeguard their capital, as well as problems arising from the current regulatory oversight scheme and the current corporate governance scheme. We will now move to an assessment of the future for co-operatives.

2.5 Concerns for the future of co-operatives

Looking towards the future of co-operatives, the much-anticipated new credit union model in the UK will be based on international experience and it will radically alter the operational, organizational and financial structure of the traditional credit union (Jones, 2006). The new model will allow credit unions to increase their savings, and give commercial loans to their members, thus creating enough profits to build up reserves and pay dividends (Jones, 2006). In addition, this new "quality" credit union is described as being able to attract members from society at large by offering high quality services and products. Another possible change for credit unions is the setting up of transnational co-operatives (called "European Cooperative Societies" under SCE Regulation in Europe (Fici, 2012)), which will create new opportunities for growth and new ways of competing with commercial banks (Fonteyne, 2007). A third possibility for the future is the building of networks among co-operatives either horizontally, in order to create economies of scale, or vertically, in an attempt to add value to their products or services (Reed & Reed, 2009). Finally, it is argued that co-operatives should engage in promoting their principles and values more strongly, using sound communications strategies, in order to influence governments to enact legislation enabling co-operatives to better assist vulnerable members of society (Reed & Reed, 2009). This communication tactic could also be used to better inform the general public, policymakers and the local governments about co-operatives' social mission, which could open doors for the co-operative movement in new industries such as health care, education and social services (Borzaga & Galera, 2012).

Despite the great future that lays ahead for co-operatives, some academics have expressed concerns that co-operatives are increasingly moving away from their principles and values. This may well be related to some co-operatives recent attempts to make adjustments to the model in order to overcome perceived disadvantages. Types of adjustments that seem to move co-ops farther away from the principles and values include issuing non-voting shares to non-member-providers of financing, changing constitutions to allow non-qualifying persons to become members, and changing the principle of "one-person, one-vote," enabling those who contribute more to have more voting rights, (Spear, 2004a). In addition, concerns have been raised about the increase in competition in retail banking as a possible motivator for co-ops to abandon their values. Furthermore, the lack of diversification of co-operatives (Stefancic, 2010) and the possible diseconomies of scale arising from mergers between co-operatives (Alexopoulos & Goglio, 2009), are causes for concern.

In addition to the above "new" challenges, co-operative financial institutions must deal with a perennial lack of qualified and experienced co-operative management, as well as the political aspirations, collusion and personal agendas of their Board members (Alexopoulos & Goglio, 2009). It would seem that the most effective way to deal with the above issues is to solve the problem of disengaged membership, by finding ways of incentivizing members to participate in the democratic control of their co-operatives (Birchall & Simmons, 2004; Alexopoulos & Goglio, 2009); for example, by paying a cash dividend to members who take an active role in co-operative life. (Birchall & Simmons, 2004). A different concern about the future of co-operatives comes from Fici (2012) who states that the legal framework of co-operatives in Europe does not clearly link the co-operative model with the co-operative principles; as such, other organizations with democratic structures but without a social mandate could be mistaken for co-operatives.

On the other hand, the co-operative financial model is a proven one in many contexts, and in the financial sector it should continue to strengthen itself as it attracts new clients and builds relationships of trust with them (Borzaga & Galera, 2012; EACB, 2010). Moreover, co-operatives are able to cater to the needs of the generations to come: they have shown that they are more resilient to financial crises than their investor-owned counterparts. Following the 2008 crisis, not only did co-operatives not have to be bailed out by governments or central banks, but in fact they were able to continue lending to individuals and to SMEs (Ferri, 2012). Indeed, the recent crisis has shown that all those arguing that co-operatives are obsolete and will soon disappear were wrong: the "Originate to Hold" business model of co-operatives is much more sustainable and benefits the whole of society, unlike the "Originate to Distribute" model of the investor owned banks (Ferri, 2012; EACB, 2010; Cuevas & Fischer, 2006). Finally, co-operatives seem to have advantages over other forms of organization where there is an element of trust involved and particularly in the following three situations: firstly, where there is a great asymmetry of information between the consumer and the organization (making it more tempting to exploit the organization's position); secondly, where the buyer of a service is locked in for a longer term and there is a high probability of "contract failure" combined with "consumer inertia"; and thirdly, where the provider of services provides a low quality and standardized service to all users (e.g. in education and health care) (Spear, 2000). In these cases, provided that people have a desire to influence decision making and have access to social capital, starting up a co-operative to provide these services can be an economical choice for the founding members — financial co-ops can be quite inexpensive to set-up, and can often attract volunteers and donations (Spear, 2000).

Based on our analysis so far and taking into account the over 100 years of history of co-operatives as a proven business model, their ethical and sustainable financial approach (which promotes the financial inclusion of marginalized people) and the great acceptance co-operatives enjoy globally; one could easily pose the question: if co-operatives are so good for their members and society at large, why have they not triumphed over the gap created by the financial crisis of 2008? Could the answer to this question be, at least partly, because co-operatives do not stick to their principles and values and hence people do not perceive them any longer as not- for profit organizations? Are the co-operative principles and values used only as a marketing tool in a successful marketing campaign? Could it be that managers, employees, members and other stakeholders no longer work to ensure their co-operatives operate in line with the principles and values, but rather use them as a defense mechanism? These may seem to be rhetorical questions, but there is indeed evidence, at least in some areas of Scotland, that co-operatives do not follow the co-operative principles and values but members merely use them as a defense mechanism to remain independent (Wilson & MacLean, 2012). During their research, mainly among producer co-operatives established in rural and island areas of Scotland, Wilson and MacLean (2012) found evidence that co-operative members did not seem to be concerned with the co-operative principles and values. As the researchers describe, *"the principles of co-operatives are fundamental to the founders of the co-operative but as time passes these become less visible and important"*. Moreover, their research findings left a question mark as to the importance of co-operative principles and values in making co-operation work.

"Following the 2008 crisis, not only did co-operatives not have to be bailed out by governments or central banks, but in fact they were able to continue lending to individuals and to SMEs."

3. Conclusion and Directions for Future Research

Even though the financial crisis of 2008 has shown that the governance of the existing financial model seems to have failed, no action has been taken as yet with regards to altering it on a grand scale or implementing an alternative model.

Co-operatives represent a sustainable alternative to the existing financial model: they have been around for more than 100 years, fighting usury and exclusion and assisting their members in enhancing their wealth as well as that of the surrounding communities. Co-operatives are engaged in old fashioned, relationship-based retail banking which is ethical, sustainable and fair. Co-operative financial institutions follow their own distinctive business model which is in direct contrast to that of investor owned banks. The mere presence of co-operatives renders the whole financial system more stable and reduces the ability for investor owned banks to take advantage of their position and impose detrimental terms on their clients. Co-operatives continue to thrive when ill-intentioned Cassandras predicted their extinction (Whyman, 2012). The future can only be bright for co-operatives, as government budget cuts create gaps in the economy which co-operatives are well positioned to step in and fill, by assisting people to continue their lives just as they did before the crisis. Moreover, the possibility of setting up European Co-operative Societies opens the doors for co-operation between countries, exchanging experiences and know-how: as such, the sky is the limit.

"Co-operatives represent a sustainable alternative to the existing financial model"

Future research in this area should concentrate on the fact that despite all the favourable signs and the existence of all the right pre-requisites, five years after the financial crisis there is still no evidence that co-operatives are in the position to fill in the gap. What are the reasons behind this "inability", "un-readiness" or "unwillingness" of co-operatives to take this historic opportunity to promote themselves as a fair, sustainable and ethical alternative financial model? Could the evidence from Wilson and MacLean's (2012) research indicate a possible reason for this failure to take action? A more systematic assessment of the extent to which co-operatives actually follow the co-operative principles and values in practice, and what the co-operative principles and values mean to the various stakeholders in different geographical areas, is needed. Regulatory environment is also a factor that needs further scrutiny.

Notes

[1] Not-for-profit implies that profit is not the objective of the enterprise; however it can make a surplus (i.e. it differs from a 'non-profit' enterprise whose financial objective is to break even).

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The Role of Networks in Strategic Orientations of Enterprises: a Comparison between Agricultural Co-operatives and Private Food Firms in Northern Greece

by Panagiota Sergaki, Stavriani Koutsou, Anastasios Michailidis, Helen Salavou, Ioanna Karypidou

Abstract

Networks offer significant benefits for food producers; for example, the network structure facilitates innovation and inter-firm co-operation on technical aspects of production. Both agricultural co-operatives and private firms in the food industry in Greece collaborate to advance their market share. The main aim of this research is to investigate whether one of these two types of organizations is more prone to participation in networks, and examine how networks improve their members' competitive advantage. To answer these questions, this paper analyzes survey data from 70 agricultural co-operatives and private food firms. Both firms' and co-operatives' competitiveness are modeled using a methodological mix of a multivariate categorical regression technique and summary statistics. Findings reveal that both types of organizations are prone to collaboration and networking but for different reasons and to different degrees; findings also indicate that firms that network follow different strategies, and are motivated by different purposes, than co-operatives that engage in collaborative activities.

Keywords: networks, food firms, co-operatives, performance, competitiveness, categorical regression

Introduction

Business networks offer participants a set of relationships based on mutual trust, shared risk and shared rewards that can result in a significant competitive advantage (Sergaki, 2010; Lamprinopoulou, Tregear & Ness, 2006; van der Vorst, Beulens & van Beek, 2005). The main concept of a network is that it brings together actors from within the same sector, and establishes the roles performed by each of them (Lambert and Cooper, 2000). Social capital theory suggests that networks add value for members (e.g. individuals, organizations or communities) by permitting them to tap into the resources embedded in such relationships for their benefit (Fernandez-Perez, 2013).

The food industry is characteristic of a highly competitive sector where a wide range of supply chain networks are developing via horizontal (i.e. joint-ventures, strategic alliances) and vertical (i.e. buyer and supplier) co-operation[1], knowledge sharing, innovation, and outsourcing agreements (OECD, 2001). The high levels of competition in this sector necessitate co-operation among different players (e.g. at an informational or logistical level); co-operation allows for a more efficient execution of processes and a more regular exchange of information for coordination purposes (Van der Vorst, Beulens & van Beek, 2005). Consequently, networking is a key strategy for food sector actors who wish to increase the scale and scope of their activities in a rapidly changing market (OECD, 2001).

Agricultural co-operatives are a characteristic example of a type of organization that relies on networking. Each co-operative consists of multiple members who safeguard strong relationships with their local communities, based on the co-operative's material and intangible investments and also on members' local investments (Draperi & Touzard, 2003; Bacattini, 1991). Furthermore, because farmers are often members of more than one local co-operative, this tends to facilitate the coordination of activities of local co-operatives which belong to a higher level (regional) co-operative network (a federation, or a league).

Co-operative networks, founded on strong relationships of inter-business collaboration with other small or large co-operatives or other economic units, can be based around production, marketing or R&D activities.
Co-operative networks benefit their members by helping each individual co-op become more competitive, through providing new ideas, channels for easier penetration into the market, opportunities for cost reduction, access to a broader supply of products and avenues for sharing critical information and new technologies (Van der Vorst, Beulens & van Beek, 2005). The literature on the economics of networks among business entrepreneurs, co-operatives and farmers is extensive: research has been done on the importance of connecting enterprises, networks and agricultural co-operatives (Cook & Chaddad, 2004; Bijman & Hendrikse, 2003); on the creation of networks (Contractor, Wasserman & Faust, 2006; Duysters, Heimeriks & Jurriens, 2004) and on the important competitive advantages gained (Chaddad, 2006; Dyer & Singh, 1998). Furthermore, relationships between supply channel members have been explained via transaction cost economics (Williamson, 1975), Social Exchange Theory (Hinde, 1979), Social Interaction Theory (Halinen & Salmi, 2001) and Social Capital Theory (Fernandez-Perez, Verdu & Benitez-Amado, 2013).

This empirical study makes a contribution to the research on food industry networks in Greece. Firstly, though many researchers have studied the impact of networks on food firms' performance, few studies have undertaken a systematic empirical investigation of the role of networks on a company's strategic orientation (Fernandez-Perez, Verdu & Benitez-Amado, 2013). Secondly, this study examines whether agricultural co-operatives are more or less prone to collaboration than private food firms, in Northern Greece. Thirdly, this study advances our knowledge of how different organizational types use networks to boost their competitive advantage within the food sector. Although the food sector is of vital importance to the Greek economy, this is the first survey attempting to assess the importance of networking for the strategic orientation of these two organizational types.

Agricultural co-operatives, despite their small presence in the food sector (just under 8% of all food sector organizations) are significant players in the industry, with a long history, especially in Northern Greece. This geographical region is dominated by isolated rural communities with limited access to the resources needed for community survival and development (Salavou & Sergaki, 2013). The current study examines the degree of networking among 70 food organizations operating in the region. Data from surveys of 35 private firms and 35 agricultural co-operatives within the food sector are analyzed employing multivariate categorical regression technique (Michailidis et al., 2010; 2011; Loizou et al., 2014).

The remainder of this paper is divided into four major sections. Firstly, the theoretical framework is discussed in detail. Next, the methodological framework is presented; the following section deals with analysis and results. The final section concludes the paper with implications for academic research and practitioners. An appendix provides further information on methodology.

Theoretical Framework

According to industrial economics theory (Hakansson & Johanson, 1994; Williamson, 1991, 1975), a network is an intermediate organizational form, whereby a number of "nodes" (small business units) are related to each other by specific "threads" (inter-business interactions). The main reasons that organizations engage in networking stem from their desire to overcome common problems in order to achieve greater efficiency, as well as penetration into the market beyond their individual reach, and fulfillment of their individual goals. Consequently, the orientation of a network is closely related to the strategic orientation of its member firms. Available empirical evidence confirms that networks: a) stimulate firms' competitiveness (Sergaki, 2010; Phillips, 2006; Saxenian, 1994); b) facilitate trust and control, allowing combinations of economies of scale and scope (Amin, 1999); c) reduce transaction costs (e.g. for local labour markets; Carlsson, 1997); d) solve several principal agent problems (Mistri, 1999); and e) safeguard access to local public goods (Bellandi, 2002).

In the last twenty years, many networks have been created in response to rapid technological changes, trade liberalization and the globalization of markets. The need for greater flexibility, in order to be able to more quickly respond to the external environment and adjust to constantly changing consumer demands (Gibbs & Bernat, 1997), has led to a greater need for firms to engage in external co-operation via networking (Trigilia, 2001). A network's strategic alliances, along with the co-operative management of common resources, give organizations the flexibility they need to survive in competitive markets. Research indicates that networking creates important competitive advantages for member enterprises through the improvement of their performance (Sergaki, 2010; Phillips, 2006; Bengtsson & Kock, 2000).

The theories that have been developed to help enterprises achieve relative advantage in the marketplace mainly concern strategies with an underlying philosophy that other enterprises are competitors that have to be faced as "enemies". Networking theory begins from the opposite philosophy: enterprises within the same sector become teammates in the market and consequently, co-operation among them can contribute to the creation of advantages for each team member, while at the same time resulting in better market outcomes for consumers.

Indeed, collective action creates a framework that facilitates access to resources, knowledge, entrepreneurial opportunities and the market itself (Brunori & Rossi, 2000). As far as individual enterprises are concerned, the development of long-term relationships with other co-operating enterprises is based on the view that the future does not belong to a single enterprise but to enterprise networks, which unify their workforce to target certain markets and specific consumers (Vlahos & Karanikolas, 2012).

"A network's strategic alliances, along with the co-operative management of common resources, give organizations the flexibility they need to survive in competitive markets."

Fernandez-Perez, Verdu and Benitez-Amado (2013) studied 188 Spanish firms participating in networks. They investigated how networks' characteristics (e.g. the size of the network and the strength of the ties) influence firms' strategic orientation. They found that the size of the networks and the strength of ties have different implications for strategic orientation from the perspective of the social capital they provide (large networks have more access to information and knowledge, superior service and fast and reliable deliveries, and offer increased awareness of new opportunities).

Li and Ling (2012) examined 45 construction firms and found that profitable firms that participate in networks are more likely to adopt practices that differentiate them from competitors instead of pursuing a low-cost strategy. According to Delgado (2009) who followed 296 firms for 5 years in the USA, the cluster (network) strength induces member firms to prioritize quality-oriented rather than low-cost strategies.

Borch and Roaldsen (2007) examined 11 firms dealing in lamb products. They concluded that in order to apply a differentiation strategy and at the same time be competitive in price, the managers had to coordinate closely with others in the value chain.

Ritossa and Bulgacov (2009) examined 20 agricultural co-operatives in Brazil and pointed out that those co-operatives that participate in networks or strategic alliances prioritize access to diversification strategies and produce positive results both from an economic and a social perspective, while Cook (2008) finds that networks among co-operatives improve strategic competition, and dissuade imitation and price cutting. These networks provide several additional advantages to their members, leading to a stronger strategic position in the market. The most important of the advantages include the following: lower barriers to entry (e.g. access to information, resources, markets and technologies) and exit (e.g. reduced need for specialized investment); sharing of assets, skills, inputs, know-how and high-skilled personnel within the network; the creation of competitive advantage; and lower risk premiums on capital. All these benefits help co-operatives to achieve their strategic objectives (Sergaki, 2010; Porter, 2000).

Novkovic (2007) compared worker co-operatives with investor-owned firms in order to investigate the role of networks in innovation adoption (an element of diversification strategy). She found that the creation of close networks increases the potential for co-operative survival, even when investor-owned firms have the innovation rate advantage.

Chaddad (2006) examined the role of networks in creating competitive advantage in US agricultural co-operatives. He investigated the federated agricultural co-operative system where patrons are members of a local co-operative, which in turn is a member of a regional co-operative. He concludes:

> Federated agricultural co-operatives are structured by means of sequential layers of ownership with strong vertical ties between subsequent layers. This model, which adopts several elements from the network theory, provides valuable benefits for its members related to their strategic orientation. Moreover, inter-organizational collaborations in co-operative net chains are fundamental sources of competitive advantage that may impact the future development of agricultural co-operatives in both developed and developing countries.

In a previous research project, Chaddad and Cook (2004) identified that participating in networks is increasingly utilized as an equity capital-seeking strategy by US agricultural co-operatives.

Hudson and Herndon (2002) examined 97 US co-operatives in order to measure their motives for participating in mergers, acquisitions, alliances and networks. The results clearly indicated that co-operatives are prone to collaboration and participation in networks and strategic alliances for strategic reasons. The same conclusions were reached by Rotrigues-Alcala (2000) who conducted a survey of 12 US co-operative managers to analyze network formation by agricultural co-operatives.

In Europe, networking in the last twenty years has had a profound impact on the structure of the EU supply chain, reorganizing it in response to the changing environment (Sergaki, 2010). One such example is the creation of several international networks with members operating in different European countries (KMU und Kooperationen, 2003). The Community Strategic guidelines on Cohesion (CSGs), adopted by the Council on 6 October 2006 for the period 2007-2013, explicitly encouraged EU member states and regions to promote strong networks between different countries as part of their economic reform and competition strategies.

According to an extensive research study conducted by the Observatory of European SMEs, the European Network for SMEs Research (ENSR) and Intomart, which was based on 7745 interviews of SMEs in Europe-19 in 2003, strategic networks are quite common: 25% of 19.27 million SMEs in EU-19 participate in some sort of formal co-operation arrangement, b) 65% of the co-operating SMEs have more than two partners, and c) 80% of SME partnerships last more than three years. The researchers found that 82% of the co-operating companies reported that their partnerships increased their competitive strength; they also found that more than 2.5 million SMEs are part of strategic networks (KMU und Kooperationen, 2003). A more recent (2007) study by the same organization suggests that strategic partnerships are a favorable approach for SMEs in Finland (70%), Lithuania (66%), Norway (64%) and Greece (61%). Countries in which the least number of SMEs see networks as an applicable strategy include Malta (29%), Slovakia (32%), the UK (33%) and France (33%). The same report suggests that strategic partnerships are more likely to be selected by larger firms. More than half of LMEs (52%) are inclined to look to co-operation to overcome difficulties while only 38% of SMEs would select such a strategy (Observatory of European SMEs, 2007: 68).

"Co-operatives are prone to collaboration and participation in networks and strategic alliances for strategic reasons."

The Greek Government has been promoting clustering amongst SMEs, and evaluating the benefits of networking for firms in the food sector. At the beginning of the new century, the Greek Government gave strong incentives to SMEs and agricultural co-operatives to participate in clusters. The final evaluation of several networking efforts in Greece revealed that the most important benefits were related to the development of strong collaboration between competing companies, the achievement of strategic goals of the members, the improvement of member-firms' economic results and increased regional development.

Greek agricultural co-operatives[2], as federated organizations, create an expectation of high levels of on-going collective action. However, contrary to the examples of other networking organizations given above, in practice Greek agricultural co-operatives operate separately from each other with little willingness to collaborate. Consequently, the benefits of networking are not being realized (Iliopoulos, 2000). According to Sergaki (2010), the main weaknesses of enterprises participating in agrifood networks in Greece are related to the lack of trust of the members in the long-term viability of the networks; the internal competition between members of networks with homogeneous products; the lack of confidence (which is usually related to a lack of appropriate business mentality); as well as the failure of members to appreciate the beneficial characteristics of the networks.

Based on the aforementioned observations, the present study focuses on the Porter-based perspective (Porter, 2000) and empirically examines two main questions:

- How do private food firms and co-operatives use networks to boost their competitive advantage within the food sector in Northern Greece?
- Are private food firms in the region more or less prone to collaboration than agricultural co-operatives?

Methodological Framework

The empirical research was conducted by using semi-structured self-administered questionnaires (Malhorta, 1996). Throughout 2009, surveys were distributed to management-level staff of both private food firms and agricultural co-operatives. The survey was designed to gain insight into issues related to networking in firms and especially into the role of networks in firms' strategic orientation. Using the simple random sampling method, potential participants were selected one by one, mainly from a sampling framework created for an ex ante qualitative research project. The questions posed above are examined by employing both descriptive statistics and categorical regression models (CATREG[3]) to handle the optimally transformed categorical variables and to determine possible relations between a dependent variable and a set of selected independent ones. See the Appendix for a more detailed description of methodology and statistical results.

The Findings

According to the empirical results of this study, agricultural co-operatives and private food firms in Northern Greece exhibit substantial differences in organizational characteristics: private food firms tend to be younger (just under half the age of co-ops) while their sales volumes are fourfold. The number of private employees in a given firm is three times larger than number of staff in a co-operative[4]. While both private food firms and co-operatives use networks to boost their competitive advantage, private firms are more prone to collaboration. Regarding the competitive methods they use, private firms emphasize marketing issues, quality certification, R&D and innovation, while co-operatives prioritize cost reduction strategies, creative operations and mutual development.

Discussion and Conclusion

The objective of this empirical study was two-fold: i) to detect differences in the ways private food firms and co-operatives use networks to boost their competitive advantage within the food sector in Greece and ii) to investigate which organizational type (private firm or co-operative) is more prone to collaboration.

Regarding the first question, the overall results indicate that food-based networks are used to boost the competitive level of both private enterprises and co-operatives with the help of relevant competitive strategies. However, private firms and co-operatives differ mainly in the reasons why they participate in networks. The private enterprises participate in networks for two main reasons: for economic development (marketing, quality assurance and efficiency) and for differentiation reasons (differentiation strategies). On the other hand, agricultural co-operatives usually use networks for cost reduction reasons (mutual development and creative operations; i.e. they employ cost leadership strategy). As a consequence, these two types of organizations adopt different strategic orientations: private food firms focus mainly on their long-term growth plan while agricultural co-operatives focus on their short-term growth plan.

These conclusions are in line with previous research, which indicates that private food firms and agricultural co-operatives in the food sector in Northern Greece follow different generic strategies. Private food firms emphasize differentiation-based strategies (pure differentiation and differentiation focus), whereas agricultural co-operatives show a greater inclination to pursue low-cost focused strategies (Salavou & Sergaki, 2013; Papadopoulou & Sergaki, 2013, Sergaki, Kalogeras & Benos, 2012).

Regarding the second question, our results indicate that private food firms are more prone to collaboration than co-operatives in Greece. This finding is of particular interest because according to the 6th international co-operative principle (co-operation among co-operatives) we would expect co-operatives to follow collaborative strategies to a greater extent than private firms. We see instead, however, that in practice they remain isolated from others even when struggling with serious weaknesses in their performance levels (Sergaki, 2010; Goldsmith & Gow, 2004).

Several factors may explain the non-collaborative attitudes of co-operative firms, which appear to be tied to their lower performance levels compared to private firms: poor management, greater age of the co-operatives (which in several instances correspond to limited staff potential and aging membership), as well as uncertain work conditions. Moreover, Greek co-operatives' anachronistic attitudes may lead to the adoption of defensive strategies, which can in turn bring financial problems. These attitudes form part of a more generalized conservative mentality that it is associated with decreased adoption of innovative practices at the organizational level.

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In contrast, research shows that in recent years, there is a clear tendency for private food firms to actively participate in food-based networks. The private firms that were examined in the current study indicated that they actively seek out networking opportunities. They do this because the competitive methods that form part of their differentiation strategy are resource-intensive and consequently require collaboration from different actors in the value chain.

The findings outlined above are of vital importance for policy-makers, as both globalization and concentration within the retail sector are causing tremendous power imbalances between different parts of the food chain. Currently, a handful of retailers act as the trading partners for more than 13 million farmers and 300,000 food-industry enterprises across Europe, creating unfavorable conditions for producers and small food firms at the competitive level (COGECA, 2010).

In order to find the appropriate mechanisms to facilitate networking both among co-operatives and among private firms, policy makers should re-evaluate the current legislation and make the changes (compatible with competition law) needed to further facilitate horizontal and vertical collaborations within the food chain (COGECA, 2010). Furthermore, policy makers should establish appropriate incentives for food organizations to participate in networks that promote the adoption of performance-improving competitive methods, in order to help these organizations secure competitive advantages. Particular emphasis should be placed on incentives for co-operatives given that—as revealed by the research—they not only tend to participate less in networks in comparison with private food firms, but also under-exploit networking advantages. One method that might be used to help managers change their attitude towards network formation would be to provide special seminars emphasizing the advantages of networking. Agricultural co-operatives, with the help of other network members, might be able to advance low-cost drivers to gain a profitable cost leadership position and/or develop marketing platforms for adopting differentiation-based strategic choices. Similarly, private food firms might be able to enhance the uniqueness in their product offerings and reap higher rewards.

This study has some limitations. First, the sample consists of agricultural co-operatives and private food firms located in Northern Greece. A useful direction for future research would be to examine whether similar studies of agricultural co-operatives and private food firms located in other regions of Greece confirm these empirical findings. Moreover, the above-mentioned implications will have broader applicability once the findings can be confirmed in comparable national contexts within Europe.

Notes

1 Term ‘co-operation’ is used interchangeably with ‘collaboration’ in this paper. Co-operatives, on the other hand, are member-owned businesses.

2 There are over 6,900 such co-operatives with 782,000 members in Greece.

3 CATREG is one of the recent options in SPSS ver. 17.

4 Note that co-operatives usually employ seasonal staff because of the nature of their agricultural products.

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Appendix

A discussion of methodology and statistical results

The CATREG model (Van der Kooij & Meulman, 1997) has been used to highlight possible relationships between the subjective importance of networks and a set of other selected independent categorical variables. In fact, CATREG, as a modern regression technique, is much more holistic and effective than multiple regression analysis and the more commonly employed logit-probit models. Both logit and probit models in logistic regression are special cases of a link function in a generalized linear model. They are the canonical link functions for the binomial distribution. On the other hand, the CATREG model can deal more optimally with both qualitative and quantitative data, as it works in two discrete and simple stages: firstly, the nominal and ordinal variables are transformed to interval scales, in order to maximize the relationship between each predictor and the dependent variable, and secondly, multiple regression analysis is applied to the transformed variables (SPSS, 2007). CATREG tools provide the framework for choosing between reference cell and effect cell parameterization. This means that categorical variables, or interaction terms that include categorical variables, will drop or add the entire variable or interaction term and evaluate changes in model fit, rather than dropping one categorical level at a time. Comparatively, even though CATREG is relatively complicated and sophisticated and involves advanced statistical techniques such as optimal scaling for multivariate categorical data analysis, there are several advantages in using this model. The main advantage is that CATREG can be run with the fewest assumptions: (a) the normality assumption of the predictor variables is relaxed, (b) factor levels are coded simultaneously into values, therefore sample sizes need not necessarily be large, (c) only one coefficient is needed for a predictor variable and (d) nonlinear associations can be detected with these models.

Relative importance indicates the importance of each predictor, using Pratt's measure (Pratt, 1987). This measure is roughly equivalent to the product of the regression coefficient and zero-order correlation. The Pratt index is primarily used to uncover suppressor variables. That is, in the case that a predictor yields a relatively high beta but low importance, the situation suggests that the variable may have been suppressed by other predictors. In addition, partial and part correlations are similar to zero-order correlations, except that the effect of all other predictors has been controlled. Finally, tolerance is utilized to identify multicollinearity. According to the econometrics literature (SPSS, 2007; Siardos, 2002; Pratt, 1987) relative importance measures are much more useful than the usual standardized beta weights. In particular, relative importance indicates the percentage of explanation of the dependent variable while they can also be used to predict its future values.

SPSS Ver. 17 for Windows was employed for the multivariate statistical analysis of the dataset (70 cases). Reliability analysis (SPSS, 2007; Bohmstedt, 1970) for the eleven variables of Table 2 was used to determine the extent to which these items are related to each other, in order to produce an overall index of the internal consistency of the scale, and to identify items that had to be excluded from the scale. In fact, none of the items were reliability coefficient was found to be equal to 0.89 (SPSS, 2007), thus indicating that the return migration reasons scale is reliable. Friedman's two-way analysis of variance, with x^2=2.322 (α=0.00) and Hotelling's

T^2=1.033 (F=28.12 and α=0.00), indicated the significance in differences of item means.

Then, having accepted the consistency of the eleven items mentioned above and investigating further the subjective "importance of networks" (where: 1=no importance, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance) in order to determine how network decisions are influenced by firm characteristics, a CATREG model was employed along with the eleven independent variables mentioned above. The model yielded goodness-of-fit (R2) values ranging from 0.746 (private food sector) to 0.829 (agricultural co-operatives) indicating a moderate relation between the "importance of networking" and the group of selected predictors. However, since R2>0.70, it is indicated that more than 70% (from 74.6% to 82.9%) of the variance in the "importance of networking" rankings is explained by the regression of the optimally transformed variables used. The aforementioned high values of R2 are not unexpected as CATREG usually maximizes the strength of the relation between the dependent variable and the elected predictors. In addition, the F-statistic values (from 6.88 to 7.13) with corresponding α=0.00 indicate that this model is consistently performing well.

The relative importance measures (Pratt, 1987) of the independent variables show that the most influential factors predicting the "importance of networking" in private food enterprises correspond to "marketing" (accounting for 31.2%), followed by "quality" (29.6%), and "efficiency" (24.1%) (Table 3). Respectively, the relative importance measures of the independent variables, which are reported by the agricultural co-operatives, are higher for the variables of "creative operation", "education" and "mutual development". The total percentage of the "subjective networking" decision which is explained by the estimated two or three independent variables in each group is calculated in the last column of Table 3. Notably, the additive importance of estimated independent variables accounts for about 84.9% and 85.1% for the first and second group respectively.

Table 1. Private Food Enterprises versus Agricultural Co-operatives

Ind. Variables	*Private Food Enterprises*	*Agricultural Co-operatives*
1. Age	36.59 years	**74.18 years**
2. Sales (mean)	**€9.25 million**	€2.11 million
3. Permanent staff (mean)	**106.27**	30.18
4. Seasonal staff (mean)	20.22	**36.68**
5. Creative operation*	37.5%	**63.6%**
6. Efficiency*	**87.5%**	84.8%
7. Marketing*	**100%**	48.9%
8. Obtaining quality certificates*	**96.8%**	33.3%
9. Research &* Development	**43.7%**	6.1%
10. Innovation*	**93.7%**	84.8%
11. Mutual development*	21.8%	**93.4%**

** 4=major importance or 5=great importance*

Table 2. Model variables description

Ind. Variables	*Type*	*Categories (Description)*
1. Age	Numeric	*Age of the Enterprise*
2. Sales	Numeric	*Sales (annual base)*
3. Permanent staff	Numeric	*Number of permanent staff (annual base)*
4. Seasonal staff	Numeric	*Number of seasonal staff (annual base)*
5. Creative operation	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
6. Efficiency	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
7. Marketing	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
8. Obtaining quality certificates	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
9. Research & Development	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
10. Innovation	Ordinal	*1= not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*
11. Mutual development	Ordinal	*1=not important, 2=minor importance, 3=enough importance, 4=major importance & 5=great importance*

Table 3. Relative Importance Measures

Cluster	***N***	***R^2***	***F***	***Relative Importance Measures***			***Total Explanation***
Private Food Enterprises	35	0.746	6.88	Marketing (0.312)	Quality (0.296)	Efficiency (0.241)	(84.9%)
Agricultural Co-operatives	35	0.829	7.13	Creative operation (0.538)	Mutual development (0.313)	-	(85.1%)

Co-operative Organizations and Institutional Stability: Evidence from the Canadian Financial Sector[1]

by Bülent Temel

Abstract

This article examines the extent to which co-operative rationale associates with institutional stability in the financial sector in Canada. It introduces a composite indicator of institutional risk propensity by blending the four balance sheet risks used by the Canadian Central Bank. Quarterly data between 2000 and 2010 was used for the CMRI (Composite Managerial Risk Index) as the dependent variable in a panel data analysis, which considered quarterly growth rates of real GDP and M3 money supply as macroeconomic, financial sector share performance as sectoral, and profitability of financial organizations as organizational independent variables. Estimations suggest that credit unions in Canada display observably lower levels of risk propensity in comparison to their commercial competitors, and consequently offer a more pronounced potential to endorse institutional, sectoral and macroeconomic stability.

Keywords: credit unions, commercial banks, CMRI, managerial risk, Canada

1. Design Differences between Commercial Banks and Credit Unions

Commercial banks and credit unions are two types of financial organizations that compete in the same sector with different organizational structures (Table 1). Commercial banks in North America are publicly-traded corporations owned by their shareholders/stockholders[2]. Funded largely by stock sales, they exist to maximize their share value by means of profit maximization and perception management (stock trading). Each stockholder's voting power is determined by the number of shares he/she owns, which makes shareholder meetings a convention with a heterogeneous distribution of power. Stockholders elect a board of directors, which in turn appoint executives to administer daily operations of the company. These three organs solely pursue stockholders' pecuniary interests, and do so as a separate class than other stakeholders of the company who are influenced by operations of the company—employees, customers, vendors, traders and the local government.

On the other hand, credit unions are not-for-profit co-operatives that are democratically owned and controlled by their local stakeholders (members). They are organizations established and expanded by members for the purpose of satisfying each other's financial needs. Because credit unions do not issue tradable shares, they are owned solely by their depositor, borrower and employee members. They observe a ***one member-one vote principle***, which allows any eligible person who opens an account to be an equal owner with the same voting rights as the existing owners—irrespective of the size of his/her deposit. Credit union executives are professional bankers (Soltis, 2013) who are appointed (amongst their members, or from outside) by boards

boards of directors who are volunteer members elected annually by all members. Credit unions do not operate for ***profit maximization***, and they raise funds mostly through their members' deposits. Their members are local people who belong to a particular community as defined in the credit union's bylaws—the main categories used to describe such communities are employment (such as Harvard University Employees Credit Union), residency (San Diego County Credit Union), or professional affiliation (Navy Federal Credit Union).

Table 1. Features of credit unions and commercial banks

	Credit unions	**Commercial banks**
Structure:	Not-for-profit co-operative	For-profit corporation
Organizational purpose:	Provide members with favourable interest rates in a sustainable way	Maximize share value
Profit purpose:	Make profits to sustain and improve benefits to stakeholders (members)	Maximize profits to maximize value for shareholders
Use of profits:	Used to offer lower interest rates on loans and higher interest rates on deposits	Distributed to stockholders as dividends, and used to improve market capitalization
Ownership:	Owned by stakeholders (depositors, borrowers and employees)	Owned by shareholders
Funding source:	(Mostly) Member deposits	(Mostly) Stock sales
Clientele:	Community members All income levels	Anyone Mostly middle- to high- income levels
Governance:	By professional bankers (executives) hired by board of directors who are elected by members from the pool of volunteering members	By professional bankers (executives) hired by board of directors who are hired by stockholders from the pool of available professionals
Voting rights:	One person-one vote	One share-one vote
Products and services:	Full service (Savings, credits, insurance and investments)	Full service (Savings, credits, insurance and investments)
Service delivery:	All mediums (Main office, shared branching, ATMs, POS devices, PDAs, cell phones, Internet)	All mediums (Main office, shared branching, ATMs, POS devices, PDAs, cell phones, Internet)
Local identity?	Yes	No

Table 1 Adapted from *What is a Credit Union? Credit Unions vs. Other Financial Institutions.* [online] World Council of Credit Unions. Available at <http://www.woccu.org/about/creditunion> Accessed July 17, 2014.

Credit unions are community organizations that restrict their membership to members of their communities, and they aim to serve all socioeconomic segments of the population that makes up the defined community. Commercial banks have no eligibility requirements for patronage, and they generally target middle- and high-income households. In credit unions, profits are used to offer higher interest rates for deposit accounts and lower interest rates on loans while commercial banks distribute their profits to their stockholders as dividend payments and use their profitability to improve their market capitalization. The two organizations differ minimally in terms of the products and services they offer and the mediums by which they offer them; however, credit unions have a more localized character and focus than commercial banks, which seek and spread to other profitable markets with minimal regard for their locations.

2. Organizational Type and Risk Tolerance

The differing organizational structures of commercial banks and credit unions incentivize the leadership of these organizations to adopt different levels of risk propensity (López-Puertas Lamy, 2012). Because maximizing shareholders' value is their ultimate purpose, executives in commercial banks treat risk as an essential enabler of profit maximization, which helps them accomplish their organizational mission. Distribution of profits to shareholders as dividends further compels bank executives to embrace risk-taking as a positive leadership trait. On the other side, credit union executives follow a more conservative attitude towards risk, because their performance is evaluated according to earnings (59.6%), board evaluation (51.6%) and loan growth (43%) (Cartwright & Dettmann, 2013), and credit union profits are used to offer more favourable interest rates to members (Heinrich & Kashian, 2006). This corporate culture marks a healthy perception of profits, which values them no more than a means to help members with their financing needs.

Accordingly, credit unions avoid volatile instruments or accounting techniques like ***mark-to-market asset valuations***. Their reluctance to engage in subprime lending, which led commercial banks to the brinks of collapse in the recent episode, was proven to be a prudent approach over the course of the financial crisis. In an examination of resilience to economic contractions, Smith and Woodbury conclude that "Banks and credit unions have different loan portfolios and differ in their resilience to business conditions for the same reason—they differ in the degree to which they seek out and are willing to accept risk" (2010: 7). Crear adds that instruments like "subprime mortgage loans characterized by high interest rates with large interest rate resets, negative amortization, lack of sufficient underwriting and other indicators of fraud" are incompatible with "credit unions' generally conservative lending practices and philosophical mandate to place member needs ahead of institutional profits" (2009: 2).

A study published before the crisis in 2007 revealed that for-profit commercial banks are inclined to keep minimal amounts of capital to cover their potential losses. In their analysis of the spread between ***regulatory capital*** (the minimum capital required by the law) and ***economic capital*** (the capital level bank administrations would prefer if they were free to determine it on their own), Elizalde and Rapullo found that the two capital levels are partially exclusive. Although regulators seek to minimize the spread between the two capital levels, banks do not appear to acknowledge the virtues of keeping economic capital levels close to regulatory capital requirements. The authors concluded that "there does not exist a direct relationship between [the two] capital levels. […] regulatory (but not economic) capital depends on the confidence level set by the regulator, while economic (but not regulatory) capital depends on the intermediation margin and the cost of bank capital. These last two variables play a key role in determining the differences between economic and regulatory capital" (2007: 111).

"credit union executives follow a more conservative attitude towards risk"

Credit unions, on the other hand, have significantly lower rates of delinquency (inability to meet obligations) and charge-offs (use of insurance funds due to severe delinquency) than commercial banks do (52% and 77% of banks, respectively) (Smith & Woodbury, 2010). In their comparative analysis of the data between 1986 and 2009, Smith and Woodbury found that "Banks and credit unions have different loan portfolios and differ in their resilience to business conditions for the same reason—they differ in the degree to which they are willing to accept risk" (2010: 7). Authors suggest that financial sector regulations should take this conclusion into account, and reduce capital reserve rates required from credit unions to levels that are below those mandated for commercial banks.

In commercial banks, segregation of management/ownership and other stakeholders as two separate classes manifests itself in compensation structure. The fact that the organs that exist to serve stockholders make decisions on executive compensation results in stock-option plans being positioned as a stable component of compensation packages in corporate America. Setting a large portion (as high as 92%) (Bebchuck & Grinstein, 2005) of executive compensation to come from equity is beneficial for all three of the decision-making organs. Regularly scheduled, large scale purchases of the company's own stock (on average, 10.3% of corporate earnings are spent on executive compensation (Bebchuck & Grinstein, 2005), which is 296 times the average salary in U.S. companies (Davis &, Mishel 2014) applies upward pressure on companies' stock prices. It increases companies' market capitalization, which in turn provides the company greater ability to retain its top executives. Despite its benefits for the management/shareholders, stock-option plans encourage excessive risk-taking among financial executives (Rao & Williams, 2006).

Equity-based bonuses further increase risk incentives for leadership in commercial banks. Executives whose performance in increasing the company's share value is rewarded with bonuses are encouraged to take excessive risks. Crotty likens executives who are largely paid by non-salary means to ***rainmakers*** who have nothing to lose from making positive predictions: It is "[…] rational for rainmakers to use unsustainable leverage to invest in recklessly risky assets in the bubble […] since boom-period bonuses do not have to be returned if rainmaker decisions eventually lead to losses for their firms, and since large bonuses continue to be paid even when firms in fact suffer large losses" (Crotty, 2012).

Conflict of interests created by this value-based compensation structure also leads to the ***golden parachute*** phenomenon—another risk-incentive for executives. Written and signed by executives and boards of directors, employment contracts of executives often include clauses that allow for hefty compensation of executives in the case of departure from the company. Enormous exit bonuses delivered to executives as a result of their failure provide perverse incentives for excessive risk-taking. Wade et al., who analyzed 89 Fortune 500 corporations, found that corporate boards with more outsiders offer larger golden parachutes, and these pay packages are "associated with increased takeover risk" for companies (Chandratat, O'Reilly & Wade, 1990: 587).

Bank executive compensation packages are largely based on equities, include golden parachute bonuses, and total $7.8 million on average (Fahlenbracha & Stulzb, 2011: 16). Executive compensation in credit unions, on the other hand, does not offer equities or exit bonuses (Cartwright & Dettmann, 2013), and is worth $256,339 on average. Birchall suggests that this difference, which had been considered as a positive incentive for management in commercial banking, ought to be questioned as a source of perverse incentive for excessive risk-taking in finance: "Before the crisis, economists said financial co-operatives were bound to be less efficient than investor-owned banks because they did not reward their managers with shares. Now the thinking is, this is great, we shouldn't be rewarding managers with shares because managers will then take high risk strategies, bail out five years later as multi-millionaires and leave the banks to go bankrupt" (2012). Vast differences in compensation structure and the executive priorities they set are also found to be associated with significantly lower quality of service in commercial banks vis-à-vis credit unions (Addams & Allred, 2000).

Another organizational feature of credit unions that influences the risk attitude of their executives is the fact that credit unions, as financial co-operatives, do not issue tradable ownership shares. In expansionary periods during which asset prices rise, credit unions cannot raise equity by selling their shares as their commercial competitors do. While this inability translates into slower growth prospects for credit unions, it also prevents excessive growth that conceals unjustifiable risk-taking. The recent financial crisis demonstrated that financial institutions become less manageable when their portfolios become highly complex. The larger a financial institution is, the more diverse and complex its asset portfolio becomes, which compromises its management's capacity to administer and monitor the portfolios prudently. In the U.S. financial system in which similar numbers of credit unions and banks operate (approximately 7,000 credit unions and 6,000 banks), the seven largest banks by asset size (Avraham, Selvaggi & Vickery, 2012: 71) control 70% of all assets in the system (US Dept of Commerce) whereas the seven largest credit unions by asset size (Jervey, 2013) control a mere 1.2% of the assets.

A St. Louis Federal Reserve paper noted that excessive concentration of assets and diversification of operations constitute a systemic threat to the U.S. economy, and these behaviours have to be curbed by "incremental reforms such as the 2010 Dodd-Frank Act, which includes living wills for orderly dissolution, capital requirements, stress tests, risk-based assessments on deposit insurance, FDIC orderly liquidation authority, the Volcker Rule and investor protections, or radical reforms such as caps on assets or deposits" (2012). While opportunities for scale and scope economies, and motivations to diversify and comply with legal requirements increasingly compel smaller credit unions to resort to acquisitions and mergers (Deloitte, 2010), the acquiring side is nearly twice as large in comparison to the acquired side in banks (%7.9) (Pilloff, 2004: 7), versus credit unions (4.4%) (Dopico & Wilcox, 2011: 3)—indicating a higher concentration of assets at the top in the bank subsector compared to the credit union subsector. Another St. Louis Federal Reserve paper points out that credit unions have been an attractive option for American consumers: "Households respond to increased concentration among local banks by moving accounts to credit unions"(Emmons & Schmid, 2000: 39).

Credit unions' conservative approach to risk taking is also linked to the characteristic of being ***self-insuring*** businesses. While deposits in commercial banks are insured by the FDIC (Federal Deposit Insurance Corporation), which is funded by taxpayers, deposits in credit unions are insured by NCUSIF (National Credit Union Share Insurance Fund) which is funded by credit unions themselves[3]. Congruent with the universal co-operative principal of co-operation with other co-operatives, credit unions transfer 1% of the deposits they receive to NCUSIF as a contingency measure. This mechanism allows credit unions to not be a burden on public finance as deposits in failed credit unions are paid back using the NCUSIF funds created by all credit unions—rather than being absorbed by taxpayers as in commercial bank failures. This structure also eliminates a moral hazard existent in the commercial banking subsector. In commercial banks, proceeds from an investment project accumulate solely for shareholders whereas the losses in the case of failure are assumed only partly by shareholders. This mismatch between potential gains and losses for shareholders does not exist in credit unions, whose depositors are insured, but are also the same people as the owners (Jensen & Meckling, 1976) .

Predictably, commercial banks registered colossal failures during the Great Recession—costing taxpayers enormous sums of money in terms of FDIC paybacks and rescue packages. In 2010 alone, 157 banks failures marked a 17-year historical high, while 860 other banks were admitted to the FDIC's list of institutions with bankruptcy risk. Government rescues of Bank of America and Countrywide Financial alone have cost $1.9 trillion, while the FDIC registered a negative balance of $8 billion at the end September 2010 (Hilzenrath, 2010). Furthermore, insurance losses are typically much larger in the FDIC than they are in NCUSIF. Prior to the subprime crisis, the fund ratio was at -0.28% at the FDIC but at 1.3% at NCUSIF (Hampel, 2010). This reality translates into higher costs to bank depositors as banks' FDIC insurance costs are estimated to be 60% higher than credit unions' insurance costs with NCUSIF (Hampel, 2010).

3. Empirical Analysis of Risk Propensity in Credit Unions vs. Commercial Banks

3.1 Quantifying organizational risk propensity: Composite Managerial Risk Indicator (CMRI)

To examine the relationship between organizational type and risk propensity, this section analyzes data from the financial sector in Canada. The Canadian sector is a suitable choice for a comparative analysis of credit unions and commercial banks for a number of reasons: firstly, it is consistently ranked as the soundest financial sector in the world (Porter, 2010), which makes credit unions' contribution to financial stability more observably pronounced. It is also a financial system in which credit unions play a significant role—making the comparative analysis involving credit unions sufficiently relevant. Finally, data availability and quality for the Canadian financial sector is high—making it possible to retrieve the comprehensive data needed for a multidimensional analysis that combines cross-sectional and time-series aspects.

The Canadian financial sector was the only financial sector within the G7 economies that did not need a government bailout during the Great Recession; furthermore, it remained profitable during that time. Porter credits conservatively set capital requirements, a low leverage cap, prudentially enforced regulations, and a risk-averse culture for Canada's success (Porter, 2010: 3-6). Another factor is policy networks that respond to misbalances in a co-operative spirit with the corporate sector (Roberge, 2010).

Calomiris links this tradition to Canada's French colonial history whose legacy has lead to a "highly-centralized federal government which controlled economic policymaking and had built-in buffers for banker interests against populist forces" (2013). Just as a secular state keeps religion and government separate, Canada's welfare state keeps corporate interests away from the public service. It is illegal for financial corporations to lobby public officials in Canada, and corporate contributions to election campaigns are strongly restricted.

In order to construct an empirical model to examine whether commercial banks and credits unions have intrinsically different propensities for risk tolerance, these organizations' exposure to risk need to be identified quantitatively. For this, we consider four balance sheet indicators of risk used by the Canadian central bank, the Bank of Canada: ***Leverage ratio, (Tier 1) capital ratio, liquidity ratio*** and ***funding ratio*** (Chen et al., 2012: 24).

Leverage ratio shows the extent to which a financial institution's assets were purchased with borrowed money (D'Hulster, 2009). Higher leverage indicates a greater dependency on macroeconomic conditions in sustaining an asset base, and is a risk factor. ***Tier 1 capital ratio*** defines a financial institution's ability to cover its risk-weighted assets with owners' equity and reserves. It was created and promoted by the Basel Committee on Banking Supervision—a Swiss-based organization comprised of central bank governors of ten leading economies. The committee's decision to create this ratio was a response to criticisms that the previously-used Tier 2 ratio had relied on subjectively-quantified Tier 2 capital. Also known as "supplementary capital," Tier 2 capital had included undisclosed reserves, revaluation reserves, general loan-loss reserves, hybrid (debt/equity) capital instruments, and subordinated debt. In a 2006 brief, the committee announced that "They [elements of Tier 2 capital] may be inherently of the same intrinsic quality as published retained earnings, but, in the context of an internationally agreed minimum standard, their lack of transparency, together with the fact that many countries do not recognize undisclosed reserves, either as an accepted accounting concept or as a legitimate element of capital, argue for excluding them from the core equity capital element" (Bank for International Settlements, 2006: 14), and so they initiated the Tier 1 ratio as a more sophisticated risk indicator that distinguishes between different types of capital and assets. A larger value for the Tier 1 capital ratio points to greater coverage for risk-weighted assets, indicating higher managerial prudence.

Liquidity ratio and ***funding ratio*** are two newer concepts inspired by indicators proposed in Basel-III guidelines (Bank for International Settlements n.d.). Chen et al. describe the ***liquidity ratio*** as a buffer shown by the total value of cash, cash equivalents, public securities and secured short-term loans per dollar of assets: "The higher the asset-liquidity ratio, the more an institution is able to withstand adverse shocks that increase the need to liquidate assets" (2012: 24). ***Funding ratio*** is a measure of the reliability of capital that funds the assets, and refers to the size of wholesale (non-personal) deposits and repurchase agreements in relation to total assets.

The financial meltdown in the U.S. economy revealed the insufficiency of each of these measures as risk indicators alone. At the end of 2008, the Tier 1 capital ratio, which was the most frequently used risk indicator at the time, was at 9.4% of risk-weighted assets, and its surpassing the 4% benchmark was thought to indicate overcapitalization against the default risk (Fratianni & Marchionne, 2009: 22). As Davis and Karim find, the literature on the importance of early warning systems (EWS) has rapidly expanded in response to increasing fragility in financial sectors due to increasing international mobility of capital and leveraging around the world, but political considerations get in the way of using EWS decisively in policymaking (Karim & Philip Davis, 2008: 89). Even though many international organizations and central banks keep track of financial stress—the IMF, European Central Bank, Czech Central Bank, and National Bank of Hungary to name a few (Gadanecz & Jayaram, 2009)—policymakers are often reluctant to rely on EWS due to the high costs of predicting banking crises incorrectly. In the face of insufficient political will to use risk stress tests in shaping policies, public officials have conventionally treated the literature on this subject as having only limited policy relevance, and utilized only those measures with an economy-wide perspective. A recent study by SEACEN (South East Asia Central Banks Research Center) reads:

> In response to the global financial crises in the 1980s and 1990s, national and international institutions started to monitor the soundness of the financial system more intensively. A wide range of instruments/indicators is used to assess financial system stability in analytical practice. […] Composite indicators in the form of the banking soundness index, the financial stress index, financial stability index and financial stability maps are used by the authorities to gauge financial stability (Indraratna, 2013: iii). […] However, the use of composite indicators is not widespread in Financial Stability Reports published by central banks which extensively focus on sector specific indicators and macro economic variables to assess stability (Indraratna, 2013: 5).

For financial systems to be supported by more stable financial institutions, the individual risk indicators of these institutions should be blended into a single, comprehensive composite indicator that can inform the markets, central banks, regulators and the public about the soundness of balance sheets in the financial sector more comprehensively than individual indicators do. Such a composite measure would be instrumental for enabling investors to assess the prospects that financial institutions represent, for regulators to establish guidelines for systemic stability and enforce them, and for policymakers to monitor the delicate balance between risk and growth in a reliable fashion (Holló, Kremer & Lo Duca, 2012). It would also allow annual risk rankings of financial institutions to be prepared and announced so the general public could evaluate their banking options for safety and viability. Such rankings would open a new line of competition for financial organizations, and encourage them to offer their clients lower organizational risk as the trustees of their money—in addition to conventional tools of competitive advantage like better interest rates or service. In an increasingly complex and intertwined financial world, comprehensive risk measures would supplement traditional methods of bank assessment such as perceived quality of service or name recognition with a more objective and performance-based criterion, and allow more informed decisions for economic actors.

This article introduces a single aggregate measure under the name *Composite Managerial Risk Indicator* (CMRI). The CMRI blends the four balance sheet risks identified above with minor algorithmic changes made to them for the sake of interpretive consistency: because the CMRI endeavors to point to risk propensity in financial institutions, its constituent elements ought to be realigned so that higher values will indicate higher risk levels. To convert the four indicators into ratios that positively correlate to higher risk propensity, new ratios are derived while remaining committed to the subject ratios' original spirit.

Leverage ratio: Total assets / (Total owner's equity + Subordinated debt)
gives way to
Reverse leverage ratio: 1 / Leverage ratio
= (Total owner's equity + Subordinated debt) / Total assets
and to
Leveraged assets ratio (LAR): 1- Reverse leverage ratio
= 1 - (Total owner's equity + Subordinated debt) / Total assets

Similarly,
Tier 1 capital ratio: Adjusted net Tier 1 capital / Total risk-weighted assets
leads to
***Capital inadequacy ratio* (CIR)**: 1- Tier 1 capital (adequacy) ratio
= 1 - Adjusted net Tier 1 capital / Total risk-weighted assets

Likewise,
Asset liquidity ratio: (Cash and cash equivalents + Public securities + Secured short-term loans) / Total assets
leads to
***Asset illiquidity ratio* (AIR)**: 1 – Asset liquidity ratio
= 1 - (Cash and cash equivalents + Public securities + Secured short-term loans) / Total assets

And finally,
Funding ratio: (Non-personal deposits + Repos) / Total assets produces
***Mobile funding ratio* (MFR)**: 1 - Funding ratio
= 1 - (Non-personal deposits + Repos) / Total assets

The CMRI is then built as a composite indicator that blends the four risk indicators by applying equal weights to each indicator. This approach conforms to the approach in the financial sector risk literature, which welcomes homogenous attribution of significance across risk indicators. As the Bank for International Settlements notes, "the variance-equal method […] is the one most commonly used in the literature and consists of normalising each variable and then assigning equal weights" (Gadanecz & Jayaram, 2009: 372).

Each of the four ratios is indexed across all observed organizations and time periods, and incorporated into the composite index.

$CMRI_{i,t}$ = 0.25 Leverage Assets Ratio $Index_{i,t}$ + 0.25 Capital Inadequacy Ratio $Index_{i,t}$ + 0.25 Asset Illiquidity Ratio $Index_{i,t}$ + 0.25 Mobile Funding Ratio $Index_{i,t}$ where i: Observed organization and t: Time period

$LARI_{i,t}$: Leverage Assets Ratio Index: $LAR_{i,t}$ – (Minimum of all LAR values across all organizations and periods) / (Maximum of all LAR values across all organizations and periods – Minimum of all LAR values across all organizations and periods)

$CIRI_{i,t}$: Capital Inadequacy Ratio Index: $CIR_{i,t}$ – (Minimum of all CIR values across all organizations and periods) / (Maximum of all CIR values across all organizations and periods – Minimum of all CIR values across all organizations and periods)

$AIRI_{i,t}$: Asset Illiquidity Ratio Index: $AIR_{i,t}$ – (Minimum of all AIR values across all organizations and periods) / (Maximum of all AIR values across all organizations and periods – Minimum of all AIR values across all organizations and periods)

$MFRI_{i,t}$: Mobile Funding Ratio Index: $MFR_{i,t}$ – (Minimum of all MFR values across all organizations and periods) / (Maximum of all MFR values across all organizations and periods – Minimum of all MFR values across all organizations and periods)

The CMRI is to be used with cognizance of a number of limitations. Firstly, it is a preliminary indicator of balance sheet risk that does not distinguish ***good risk*** from ***bad risk*** (Kalafatcılar & Keleş, 2011: 9).

Co-operatives are organizations that exist in the capitalist system, which relies on risk as a necessary element of its functioning. Irrespective of the role paid by government (regulatory vs. participatory, minimal vs. significant, etc.), or the way various economic actors relate to one another (unions vs. employers, regulators vs. businesses, workers vs. entrepreneurs, etc.), all forms of capitalism (neoliberal, social democratic, state capitalist, or any other form) include economic actors who control capital to make investments towards maximizing returns. As Illing and Aaron point out, "a low propensity for risk translates into a higher cost of capital, potentially limiting business investment, while a high propensity for risk can produce booms in credit and asset prices, sowing the seeds of eventual recessions and stress on the financial system" (2005: 37). It is therefore not surprising that the Dutch consulting co-operative KPMG's ***Guide to Understanding and Articulating Risk Appetite*** observes that the question of "How much risk . . . an organization need[s] to take on in order to attain appropriate and sought-after returns . . . can be exceedingly difficult [to answer]" (KPMG, 2008). The threshold where risk level begins to jeopardize an organization or economy's functioning is based too heavily on specific context to be determined accurately. Accordingly, any literature written within the language of capitalism (such as the present work) has to make use of the term ***risk*** in a non-judgmental fashion. It is essential to interpret the findings of this article and any other that may use the CMRI in the future with full awareness of the fact that the CMRI is a measurement of risk when risk is thought of as ***any*** (but not necessarily, ***excessive***) delegation of control. This conception of risk overlaps with the common (negative) connotation of the word only when CMRI figures are relatively high in an observed data set.

Secondly, the CMRI is not a definitive quantitative measure that is perfectly comparable across data sets. It shows outcomes of an indexing procedure, which by definition, refers to assessments of observed phenomena relative to others within the same set of phenomena. It is an attempt to quantify a complicated and abstract concept like ***managerial risk propensity*** as policy-relevantly as possible—not an absolute gauge leading to perfectly objective evaluations. A particular CMRI value would not necessarily indicate the same level of real risk in different analytical sets with different actors, because different datasets would include different empirical values, from which CMRI values are determined[4]. For example, if all banks in Sweden are significantly more risk-averse than banks in Singapore, then a Swedish bank with a CMRI score of 0.8 would have a much less risky portfolio than its Singaporean counterpart with the same score. Therefore, international comparisons based on the CMRI (or any other index) should be made only by analyzing the relative position of each observed unit against ***all*** units in all countries without a national stratification—e.g. a Swedish bank compared against all banks in all observed countries rather than banks in Sweden only. This approach would help analysts avoid the "illusion of precision . . . efforts to quantify risk propensity can sometimes produce" (KPMG, 2008).

3.2 Econometric model

There are 28 domestic commercial banks[5] and 11 domestically chartered credit unions in the Canadian financial system. Of these organizations, this analysis focuses on the five largest commercial banks and the five largest credit unions as they control the vast majority of assets in their respective subsectors[6], and their asset total collectively constitutes 91% of all assets in the sector. Assets controlled by the five banks ($3.2T) are 10 times the total assets held by the other 23 domestic banks combined ($0.32T), and assets controlled by the five largest credit unions make up 98% of the total assets in all 11 of the domestically chartered credit unions in Canada ($0.305T)[7]. The five largest of the banks and credit unions also make a workable sample due to better data integrity, as they are the most professionally-managed and transparent organizations in the Canadian financial sector.

The CMRI figures for financial institutions allow for an investigation of managerial risk propensity with respect to the various factors that influence it. This study uses the CMRI figures of financial institutions as the dependent variable, and computes their values out of the quarterly balance sheet data provided by the Office of the Superintendent of Financial Institutions—an independent government agency in Canada. In addition to using the CU (credit union) dummy variable to identify the effect of organizational type on risk propensity, the model also includes growth rates of quarterly real GDP (GGDP) and M3 money supply (GM3) as macroeconomic factors, financial sector share performance (GTSX) as a sectoral factor, and profitability of observed organizations (GPROF) as organizational factors affecting CMRI outcomes as independent variables. The linearly formed model is as follows:

$$\mathbf{CMRI_{o,t}} = \beta_0 + \beta_1\ GGDP_t + \beta_2\ GM3_t + \beta_3\ GTSX_{t-1} + \beta_4\ GPROF_{i,t-1} + CUDummy_i + u_{i,t}$$

where i: organizations

t: time periods (quarter)

Quarterly growth rates of real GDP are expected to affect financial institutions' risk propensity in two opposing ways (Hu & Shen, 2007: 32): firstly, as positive news surfaces in an economy, increased output translates into better economic prospects and higher demand for leveraging. Expanding business volume in the financial sector would drive bank executives to assume larger risks in order to sustain their rewarding positions, which are based on their banks' growth (Amador, Gómez-González &Pabón, 2013). On the other hand, recent positive profitability performance improves financial institutions' *franchise value*—the present value of expected profits based on recent performance, which curbs financial institutions' risk propensity. Financial executives that successfully meet their performance targets could be motivated to adopt a more conservative approach to risk in order to avoid compromising their favourable current stance (Demsetz, Saidenberg and Strahan, 1996: 1). No sign is expected at the GGDP variable in the model due to the potential presence of these two opposite effects. GGDP data were retrieved from the OECD[8].

Money supply influences risk propensity in the financial sector by causing interest rates to change (Altunbas, Gambacorta & Marrqués-Ibanez, 2014). Increased money supply applies downward pressure on the monetary policy rate, which increases the values of the real and collateralized assets that financial institutions control. These valuations compel financial institutions to perceive their portfolios' default risks and volatility to be lower. As Bernanke and Kuttner point out, these optimistic assessments of risk encourage the use of valuation techniques like VAR (Value-at-Risk) that allows financial institutions to recapitalize their loan portfolios by releasing funds from their required reserves (2005). Altunbas et al. adds that "changes in measured risk by banks determine adjustments in their balance sheets and leverage conditions and this, in turn, amplifies business cycle movements"(2014: 98). This condition creates a similar effect to that of a fall in lending discipline as a result of lower rates. When market rates decline, financial institutions may feel encouraged to screen their loan applicants less demandingly, which paves the way for subprime lending—just as increased competition on lending practices in the sector would do (Ruckes, 2004).

The IShares S&P/TSX Capped Financials Index Fund (TSX Fund from herein) is used as an indicator of sectoral performance that would influence risk-taking in the financial sector. The TSX Fund is a mutual fund "comprised of securities of Canadian financial sector issuers listed on the TSX, selected by S&P using its industrial classifications and guidelines for evaluating issuer capitalization, liquidity and fundamentals." The fund, which provides an average value of the shares in financial institutions in Canada, manages $847M worth of assets in its constituent companies, and has 29.2M outstanding shares. 69.31% of the assets the fund manages belong to the five commercial banks analyzed in this article (IShares, 2014). The relationship between share prices and risk propensity follows a circular path: organizational risk propensities shape the extent to which businesses invest in the opportunities available to them, which in turn influences their share values. As Epetimehin points out, "Determining the risk propensity of an organization will help in determining the limit to which it can accept or take risks, which eventually affects the value of the firm either positively or negatively" (2013: 335). Consecutively, increases in share values act as an indicator of executives' effectiveness, which subsequently drives executives to sustain or increase their risk propensity in order to respond to the shareholders' growth expectations. As Raghuram G. Rajan explains,

> […] positive excess returns (the amount by which returns exceed the returns on the market) generate substantial inflows while negative returns generate much milder outflows—in short, inflows are convex in returns. Thus an investment manager's compensation is directly related to the returns he generates, but it is also indirectly related to returns via the quantum of assets he manages, which are also influenced by returns. The superimposition of these two effects leads to a compensation function that is convex in returns, that is, one that encourages risk taking because the upside is significant, while the downside is limited (2005: 18-19).

This sectoral and direct relationship differs greatly from the interplay between GDP and CMRI, which is economy-wide and indirect (Shen & Hu, 2007: 34). The share values variable is included in the model as lagged by one period in order to account for the expectation that its value influences risk propensity that is demonstrated in the next period, and to avoid the possible endogeneity problem. Thus, estimations are expected to provide a positive sign for this independent variable. Data for the TSX Fund were extracted from TD Waterhouse's database that tracks fund values on a daily basis (IShares Data: n.d.)[9].

(Lagged) profitability is a firm-specific independent variable in the model. It shows the total amount of profits (or losses) an observed organization has made with respect to its assets in the quarter prior to a given one. The Profits/Assets formula (rather than total assets) allows us to maneuver the scaling issue given that the banks and credit unions observed are typically of different sizes. The underlying assumption in the choice of this variable is that executive boards in observed organizations would make their managerial decisions based partly on the profitability of their organizations in the last quarter. The profitability variable is therefore lagged by one period (quarter) in order to reflect this reasoning, and also to avoid the possibility of an endogeneity problem. A relative assessment of profits in proportion to the organizations' assets is more likely to motivate executives than profit totals in absolute terms, which would inform executives about the company's performance only minimally, due to organizational size differences across the sector. Variations in lagged profitability derive from both time (quarters) and cross-sectional (organizations') dimensions. Profitability data were gathered from periodic financial statements (shareholder reports, balance sheets and/or annual reports) made available by the investor relations offices in observed financial institutions—online and/or upon request.

The link between profitability and executive performance is an organic element of commercial rationality: commercial businesses are established to maximize their profits, and accordingly their managers are hired to accomplish this goal. However, the same rationale also harbors a moral hazard that incentivizes excessive risk-taking among executives. As Bebchuk and Spamann observe, pay-for-performance schemes that compensate executives largely in response to profitability and share valuation reward executives for profitability, but do not punish them for losses. "Equity-based awards, coupled with the capital structure of banks, tie executives' compensation to a highly levered bet on the value of banks' assets. Because bank executives expect to share any gains that might flow to common shareholders, but are insulated from losses that the realization of risks could impose on preferred shareholders, bondholders, depositors, and taxpayers, executives have incentives to give insufficient weight to the downside of risky strategies" (2010: 247). Nonetheless, increases in profitability can also curb executive risk propensity by eliminating the need for managers to take on risks since their organization already meets its performance targets and the current state of the business poses too large a stake to justify further risk-taking. Because this risk-averting effect may offset the opposite effect of risk encouragement, no particular sign is expected from the profitability variable in the model.

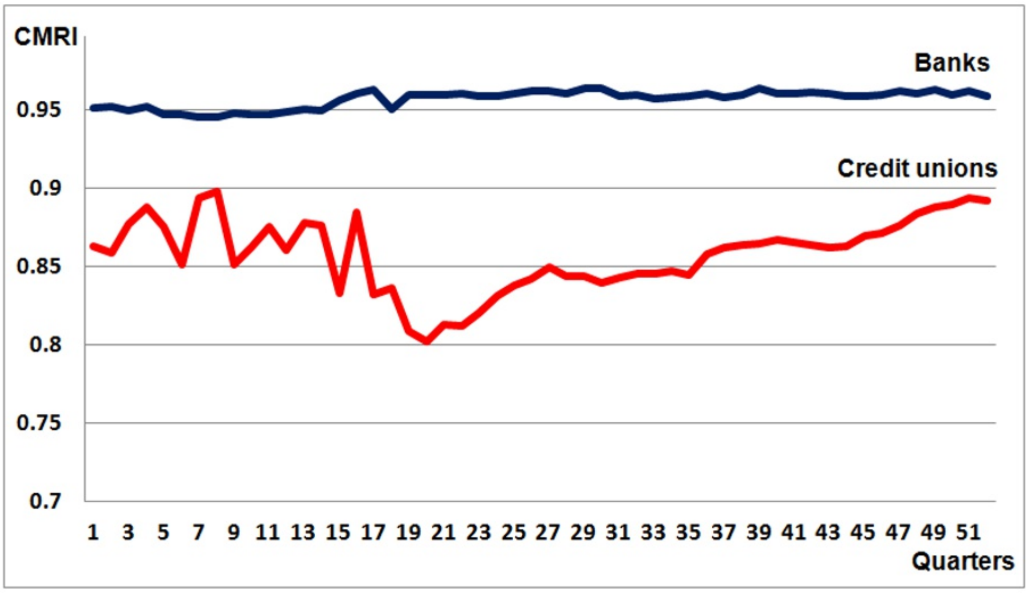
Credit union CMRI scores are included in the model as the dummy variable, and are denoted as CU Dummy. Banks and credit unions are identified as 0 (zero) and 1 (one), respectively. The model is designed to control for the risk propensity in credit unions while holding the impact of all other variables constant—i.e., ***ceteris paribus***. Thus, the expected sign on the credit union dummy variable is negative. Table 2 presents descriptive statistics of the variables in the model.

Table 2. Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
$CMRI_{CB}$	0.956	0.018	0.716	0.986
$CMRI_{CU}$	0.857	0.155	0.238	0.933
GGDP	0.011	0.029	-0.021	0.141
GM3	0.017	0.008	-0.012	0.036
$GTSX_{Lagged}$	0.015	0.079	-0.269	0.256
$GPROF_{Lagged}$	0.005	0.009	-0.006	0.048

Figure 1 illustrates the historical trajectory of the CMRI figures across banks and credit unions between 2000 and 2012. Linear presentations of risk levels in commercial and co-operative banks demonstrate that credit unions display a more conservative approach to corporate governance. Bank CMRIs show a significantly lower standard deviation than credit union CMRIs (1.8% vs. 15.5%). However, they also appear to be above credit unions' CMRI level in all quarters observed. Average credit union CMRI fluctuates between 0.8 and 0.9 whereas average bank CMRI floats within the 0.94-0.97 interval. Average bank CMRI is 0.956, which is 18% higher than the average credit union CMRI of 0.857. Commercial banks' higher risk absorbance provides empirical support for the argument that their higher risk propensity is an organizational feature relevant to their ontological purpose.

Figure 1. Historical trajectory of quarterly CMRI values in observed commercial banks and credit unions (2000-2012)



The CMRI is distinct from the risk propensity indices in the financial literature in several ways. The *Global Risk Aversion Index* (GRAI) developed by Coudert and Gex points to "a correlation with a negative sign between price changes of the different assets and their volatility" (2006: 85). It is designed to be applicable to a number of markets, particularly currency and stock markets. The diversity of asset classes it fits gives it a more general character than the CMRI, which blends risk indicators that exist in the balance sheets of financial organizations only. Others such as the *Westpac Risk Propensity Index* (WP), *UBS Investor Sentiment Index* (UBS), *JP Morgan Liquidity, Credit and Volatility Index* (LCVI), and *Merrill Lynch Financial Stress Index* (ML) include variables from fixed-income, equity, currency and commodities markets[10], and do not focus solely on financial sector institutions as the CMRI does. "Since these measures combine many different types of risk (liquidity, credit, and market risks), the[ir] subcomponents do not always move together," and their scope ends up defeating the purpose behind "combining the components, [which] is to capture the overall risk propensity"(Illing & Aaron, 2005: 38). Dresdner Kleinwort's *Aggregate Risk Perception Index* (ARPI), which shows the "weighted average of seven indexes of perceived risks: foreign exchange, equity, credit, commodity, liquidity, emerging market and yield" (FX Week, 2008), and Lehman Brothers' Market Risk Sentiment Index (MARS), which is the "two-day moving average of the aggregate index [that combines] market volatility (one-year FX implied volatility and equity implied volatility), EM event risk (EM CDS spreads and EM equities), market liquidity (G3 swap spread), and risk propensity ratios (equity to bond returns, gold price to gold equity returns, and US equity P/E ratio)" (González-Hermosillo, 2008) are vulnerable to the same problem of over-comprehensiveness.

The CMRI also differs from other indices such as the ***State Street Investor Confidence Index*** (ICI), ***Tarashev-Tsatsaronis-Karampatos Risk Appetite Index*** (BIS), ***Goldman Sachs Risk Aversion Index*** (GS), ***Credit Suisse-First Boston Risk Appetite Index*** (CSFB), and the ***Gai and Vause Risk Appetite Index*** (BE) in two fundamental ways: firstly, it does not cater to the needs and priorities of particular organizations such as the State Street Corporation, Bank of International Settlements, Goldman Sachs, Credit Suisse-First Boston, and the Bank of England, which have developed these indices for their corresponding missions, respectively. Secondly, the CMRI is an empirical index that follows a different approach from these theoretical indices, which are constructed against theoretical backgrounds. As KPMG notes, "Thinking about risk propensity is often unclear, definitions are vague and contradictory, and the gap between theory and practice is wide"(2008). The CMRI's sector-specific, performance-based and non-overinclusive design promises to provide focused and reliable information to market participants in finance—primarily banking consumers, policymakers, and financial institutions.

3.3 Empirical results

Panel data analysis is employed on the data that are bidimensional across time and individual organizations. This technique investigates the relationship amongst a number of specific entities with regularly repeated measurements over time. By allowing researchers to mitigate the heterogeneity problem and distinguish and observe individual/group effect and time effect by means of fixed and random effect analyses, panel analysis provides a more informative and diverse, and less collinear conclusion with a higher degree of freedom and efficiency (Baltagi, 2001: 6). The quarterly data used constitutes a 10x52 long panel matrix that provides observations for risk and profitability in five commercial banks and five credit unions, and for growth, money supply and the TSX index in the Canadian economy over a period of 52 quarters between 2000 and 2012.

Estimation results are presented in Table 3. The table presents the results of both OLS and random effect estimations. F values and Wald statistic for the estimations indicate that the regression model performs well.

Table 3: Estimation results

Variable	OLS	Random effect
CU dummy	-0.13435[a]	-0.14335[b]
	-0.01068	-0.05836
GTSX (lag 1)	0.00507[a]	0.00543[a]
	-0.00117	-0.00078
GPROF (lag 1)	0.00002	0.0000002
	-0.00002	-0.00001
GGDP	-0.30304	-0.30285[b]
	-0.21138	-0.13994
M3 growth	-0.79245	-0.79707[b]
	-0.61213	-0.40527
F statistic:	55.02[a]	
Wald:		81.49[a]

Notes: Figures in parentheses are standard errors: **a**: significant at 1%; **b**: significant at 5%. Sample size in both estimations is 520.

Impact of profitability (PROF) is found to be statistically insignificant. This could be an outcome of a correlation between profitability and other independent variables. Furthermore, rises in executive risk propensity as a result of recent favourable profitability performance may be offset by a corresponding fall in risk tolerance due to an increase in future profitability prospects. As the *franchise value* increases due to improvements in efficiency, soft power from organizational and personal relationships, or new or increased penetration into less-competitive markets, stakes may rise too high to justify higher risk-taking. The argument for a negative correlation between franchise values and risk propensity builds on a seminal work by Michael Keeley who found that a long period of falls in franchise values over the three decades following the mid-1900s led to a rapid rise in organizational risk tolerance in the U.S. banking sector in the 1980s (1990: 1183). A final and perhaps most instructive inference to be drawn from the finding that profitability is insignificant to organizational risk propensity is that of a corporate culture in which value maximization is attained increasingly by forward-looking speculative trading rather than backward-looking real accounting.

This point is supported by the finding that financial sector performance in the securities market (TSX) influences organizational risk propensity in a statistically significant way. Modern corporate culture that places a significant emphasis on stock compensations leads to a subordination of performance targets in customer service, economic expansion and labour practices to a crude aspiration to maximize share values. This dynamic is consistent with a substantial research literature on executive compensation, which documents the link between securities-based compensation schemes with higher propensities for business acquisitions, volatile instruments, and uneconomical capital accumulations.

The roles of real output growth (GDP) and money supply growth (M3) appear to be statistically significant at a 95% level of confidence in the random effect estimation. This outcome endorses the argument that improved economic prospects and the pool of available funds in the economy encourage further risk-taking among financial institutions. It points to an arguable negative correlation between conservatism in the financial sector and *good news* in the economy (rise in output and money circulation). The OLS estimation, on the other hand, indicates that the influence of the *good news* factor is insignificant on the observed dependent variable. It appears to concur with the *franchise value paradigm*, which argues that higher concentrations of market share result in lower non-performing loan ratios in periods of economic expansion.

4. Findings and Conclusions

The panel data estimation results are consistent with the theoretical expectation that co-operative-type institutionalization is associated with lower risk propensity in the financial sector. The commercial form of financial intermediation appears to encourage risk-taking among financial sector executives who face risk-driven incentives for performance. Real growth in output and money supply appear to influence risk attitude among financial executives. As the present value of future expected profits increase, financial institutions take on a more conservative rather than liberal approach to risk. Nonetheless, share values are found to be a major factor behind organizational perception of risk in finance. Publicly trading, profit-maximizing financial institutions provide a contextual incentive to their leadership to assume higher risks than their co-operative counterparts. This aspect of corporate culture marks the distinction of co-operative institutionalization that rewards service and prudence rather than value-maximization and aggressiveness. It confirms the hypothesis that credit unions are measurably less responsive to macroeconomic climate in terms of risk-taking.

Co-operative financing has its own distinct challenges as well; however, these are challenges that can be managed with proper governance at the organizational and sectoral levels. Improving the binding rules and regulations within and outside credit unions, executing external auditing, avoiding external credit, and improving incentives to attract savings are some of the ideas that have been put forward to improve the effectiveness of the internal checks and balances within credit unions. Since prudent governance complements the prudent spirit behind the co-operative form, credit unions will offer an increasingly advantageous and stable option in 21st Century banking.

Notes

1 This paper is a revised version of parts from the PhD dissertation entitled "Co-operative Rationale: An Examination of Stability in Contemporary Political Economy" submitted to Atilim University Institute of Social Sciences (2015) PhD Program in Political Economics.

2 The terms shareholders and stockholders are used interchangeably in this paper.

3 The FDIC coverage limit is $250,000 for all account types, while the NCUSIF coverage limit is $250,000 for certain retirement accounts and $100,000 for other accounts.

4 The issue of international incomparability can be mitigated by national ratifications of international laws that mandate certain intervals for risk indicators, which narrows down the spread between maximum and minimum values in the CMRI procedure.

5 *Schedule-I banks*, which are domestic, deposit-accepting institutions owned solely by Canadian entities and individuals.

6 In descending order of their assets in Canadian dollars at the end of 2012 Q4, these organizations are Royal Bank of Canada/RBC ($825B), Toronto Dominion Bank/TD ($811B), Bank of Nova Scotia/SCOT ($668B), Bank of Montreal/BMO ($525) and Canadian Imperial Bank of Commerce/CIBC ($393B) for commercial banks; and Desjardins Group/DG ($201B), Vancity/VCU ($17B), Coast Capital Savings/CCS ($14B), Servus Credit Union/SCU ($12B) and Meridian Credit Union/MCU ($8) for credit unions.

7 Author's calculations based on sectoral totals from OSFI (Office of the Superintendent of Financial Institutions), and balance-sheet data from the ten observed institutions.

8 OECD Quarterly growth rates of real GDP, change over previous quarter, http://stats.oecd.org/Index.aspx?QueryId=350.

9 Pre-2001 data is the author's calculations from actual performance of the shares comprising the fund.

10 *JP Morgan Liquidity, Credit and Volatility Index* (LCVI) also includes the GRAI mentioned above.

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Co-operatives During Crisis: The Reaction of Greek Agricultural Co-operatives to the Economic Crisis

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Abstract

The Greek economic crisis had numerous consequences on businesses and employment, leading the whole economy to the edge of collapse. One severe consequence for enterprises was the very low liquidity and a cash shortage in the market. In response to this situation, companies cut off investment activity, slashed wages and reduced personnel. In the long term however, companies will have to reform and reconstruct their business strategies by adopting more sophisticated solutions in order to cope with the crisis and lead the whole Greek economy to the post-crisis era. This is also the case for the Greek agricultural co-operatives.

This paper conducts a strategic assessment of the Greek agricultural co-operative sector in order to illustrate how it has responded to the economic crisis and also to investigate its strategic options for the future. Qualitative research was carried out during the first half of 2013 using in-depth interviews with co-operative executives in order to assess their co-ops' financial situation and reaction to the crisis. This is the first study undertaken in Greece relating to agricultural co-operatives' strategic management processes and how they have responded to the crisis.

The analysis of our results shows that agricultural co-operatives restricted their activities in response to the crisis, and were eager to export their products. In addition, the cash shortage forced them to rely exclusively on their members to finance new economic activity. According to the co-operatives' executives, their future strategy excludes abandoning their activities or selling equipment and real estate properties, but does involve exports, the hiring of more experienced personnel and increased investments in marketing. These results could provide helpful direction not only for agricultural co-operatives' management boards but also for other agri-food businesses operating within a severely restrictive economic crisis.

Keywords: economic crisis, Greece, agricultural co-operatives, strategic management, liquidity, investments

Introduction

The Greek economic crisis, in its 6th year in 2013, has had numerous negative consequences on businesses and employment, leading the whole country's economy to the edge. One severe consequence for enterprises is cash shortage and low liquidity. In response to this situation, companies cut off investment activity, slashed wages and reduced personnel. At the same time, the high rate of unemployment reduced workers' income resulting in a dramatic reduction in consumption. This has fed a recession cycle that cannot be broken without radical economic reform for the whole country. At the same time, individual companies will have to reform and reconstruct their business strategies, adopting more sophisticated solutions in order to cope with the crisis and lead the Greek economy into the post-crisis era.

The food production sector makes up approximately 17% of the total number of Greek enterprises, contributes 22% to total employment and 21% to annual turnover in the manufacturing industry. Thus, the importance of the agri-food sector for the Greek economy cannot be understated (IOBE, 2010). On the other hand, agricultural co-operatives, in total, make only a small contribution to the agri-food sector (almost 8% of all agri-food enterprises). Despite their relatively small numbers, however, agricultural co-operatives play a crucial role in improving the socio-economic status of their members and local communities. Greek agricultural co-operatives have increased the negotiating power of farmers and constitute an important rural development mechanism, as they contribute to the economic viability of rural areas, especially in the less affluent regions of Greece (Theodosiou et al., 2010; Chatzitheodoridis et al., 2013). In addition, agricultural co-operatives in Greece command significant market share in the olive oil, table olives, wine and dairy sectors.

"agricultural co-operatives play a crucial role in improving the socio-economic status of their members and local communities"

While Greek agricultural co-operatives clearly play an important role in rural economies, they have been found to provide only limited value for their farmer-members (Iliopoulos, 2012). This could be explained by the number of "operationally inactive" agricultural co-operatives: many existing co-operatives do not serve any real business purpose, but their existence is justified on a political basis. In the last 80 years, political intervention within the Greek co-operative sector has been a constant. Since the early 1930s, governments have used agricultural co-operatives as a public policy tool to provide rural credit, organize agricultural markets, and politically influence co-op members (Patronis, 2002). The government's main method of intervening in agricultural co-operatives' affairs has been through co-operative legislation (Karafolas, 2005). Ongoing experimentation with different legal frameworks and extensive political intervention into the internal organization and business decisions of agricultural co-operatives led these organizations into enormous troubles and high debt during the 1980's and 1990's. In addition, in recent decades, several co-operative leaders have used their position as a first step for a political career in either the national or EU parliaments (Demakis, 2004).

The above-mentioned political interventions had a negative impact on co-operatives' positioning and competitiveness in the marketplace. On top of these challenges, agricultural co-operatives have had to compete with investor-owned firms that apply sophisticated management strategies and marketing techniques. Only recently (since the mid-1990s) have co-operatives in Greece engaged in systematic efforts to reengineer their organizational structure and business strategies to increase their value added. Many agricultural co-operatives have now become involved in secondary processing activities, and have created their own brands. A number of them also now process Protected Designation of Origin and Protected Geographical Indication (PDO & PGI) products. Despite these advances however, and despite the fact that many agricultural co-operatives have now adapted management and marketing strategies, marketing approaches are in general weak, with products being far less differentiated than those of large private food producing firms (Sergaki and Semos, 2006, Salavou and Sergaki, 2013). In addition, the lack of strategic focus along with a preference for production-oriented strategies (Kyriakopoulos et al, 2004) has made Greek agricultural co-operatives extremely vulnerable (Benos et al, 2007) and incapable of responding to rapid changes in the markets (Novkovic and Power, 2005). These strategic shortcomings were amplified during the economic crisis.

Given the various challenges outlined above, there is a need to carry out a strategic assessment of the agricultural co-operative sector in order to evaluate the sector's reactions to the economic crisis and identify the most promising strategic directions for the coming years. Unfortunately, the limited availability of co-operatives' financial profiles and sales data makes it necessary to rely on expert assessments to obtain an accurate picture of the Greek agricultural co-operative sector. To this end, an analytical study was undertaken during the first half of 2013, using in-depth interviews with co-operative executives.

This paper is divided into three further sections. The next section presents the rationale behind the methodology, and an outline of the questionnaire used in the study. The following section presents demographic information about the executives participating in the study and their co-operatives, and goes on to discuss the findings of the strategic assessment as well as identify the strategic actions for Greek agricultural co-operatives going forward. The final section presents the conclusions of this study.

Methodology

As already mentioned, there is unfortunately no statistical data or previous experience to draw on when making a strategic analysis of the Greek agricultural co-operative sector during the ongoing economic crisis, making it necessary instead to rely on qualitative methods. By analyzing the current situation, this study aims to identify alternative management scenarios that could offer potential solutions for the challenges the sector is currently facing. This analysis is based on the perceptions of agricultural co-operatives' executives, as well as an assessment of the directions taken by co-operatives' management boards in response to the economic crisis. It is our belief that preliminary research such as this could be useful in drawing conclusions about the strategies that the sector should focus on in the future. Since formulating alternative management scenarios is subjective, it requires the analysis of qualitative variables and subsequent predictions employing an analytical method. Analytical qualitative methods can be used for predictive purposes, i.e. extracting information for future scenarios, as well as for the analysis of particular issues for which no prior studies are available.

For this paper, in-depth interviews were conducted with various co-operative executives (general managers, presidents of the elected boards of directors, and departmental managers) in order to assess both the problems currently faced by agricultural co-operatives in Greece and the possible solutions. In these interviews conducted via the telephone, the researcher asked open-ended questions and recorded the respondents' answers. An invitation was sent to co-operative's executives, firstly through email and followed up via telephone, requesting their participation in the survey. The topics of the interview were announced to participants two to three weeks in advance. The interview was divided into three parts: in the first part, respondents were asked demographic questions relating to themselves and their co-operative. The second part of the interview consisted of two multi-item questions, one concerning the management techniques used by the co-operative and a second one (a closed question using a 7-point Likert scale) dealing with the co-operative's sources of funding. Both questions referred to two distinct periods: the first period being before 2009 (prior to the crisis) and the second period being from 2009 until the spring of 2013. The third part of the interview sought the interviewee's opinions on future strategies and tactics that the co-operative sector could follow in order to overcome the effects of the economic crisis. Participants were also asked to rank the proposed strategies as either high or low priority. In analyzing the results of the interviews, the researchers sought to do two things: firstly, to investigate how the economic crisis has affected agricultural co-operatives and, secondly, to determine which management strategy(s) could be implemented to help them overcome the effects of the crisis. We believe that the qualitative techniques employed in this study will yield useful information about both the current status of Greek agricultural co-ops and possible future directions for the sector.

Results and Discussion

Twenty-four people employed in different agricultural co-operatives took part in this study. Their respective positions within their co-operatives, along with some demographic information, are presented in Table 1. It is worth highlighting that the general managers have, on average, the most work experience and the highest levels of education; however it is also worth noting that all executives have a significant amount of total work experience (at least 13 years) and considerable experience in their current positions (more than 6 years).

Table 1: The characteristics of the Co-operatives' executives

Respondent	Number	Position Experience (Years)	Total Work Experience (Years)	Avg. years of education (1 = basic - 9 years; 4 = post-graduate - 18 years)
President of the Board	6	9.6	18.2	2.8
General Manager	8	12.3	21.2	3.5
Production Manager	4	10.3	13.0	3.3
Economics/Accounting Manager	6	6.3	14.2	2.8

Source: Authors' own work, 2013

Each respondent was asked to identify their co-operative's main activity, because the majority of agricultural co-operatives in Greece are characterized as 'multipurpose,' meaning they deal with more than one product or activity. Table 2a presents the respondents' answers to the question: "What is the main activity of your co-operative?", while Table 2b presents the answers to the question "Does your co-operative process food products?" and also indicates whether the co-op processes food products labeled as "Protected Designation of Origin - PDO," "Protected Geographical Indication - PDI" or both.

Table 2a: The main activity of the agricultural co-operatives whose executives participated in the survey.

Agricultural Co-operatives' Main Activity	Percentage
Cereals / Supplies	30%
Fresh Fruit	20%
Olives / Olive oil	15%
Wines	15%
Traditional / Local Products / Women's co-operatives	15%
Canned goods (processed fruits - mainly peaches)	5%

Source: Authors' own work, 2013

As we can see above, the majority of respondents are occupied in co-operatives whose main activity is in the direct trading of cereals and supplies, although they engage in other activities as well. Most of the co-operatives producing traditional or local products such as olives and olive oil, fresh fruit, wines, are run mainly (and sometimes exclusively) by women.

Table 2b: Food processing, PDO and PGI products for the co-operatives participating in the survey.

Agricultural Co-operatives dealing with:	Percentage
Food Processing (in general)	85%
PDO Products	40%
PGI Products	5%
Both PDO & PGI Products	5%

Source: Authors' own work, 2013

The remaining analysis is divided into two parts. In the first part, we compare selected indicators across the pre-crisis and crisis periods. These indicators include total turnover, exports, employee remuneration and contract type, number of activities, and an overview of funding opportunities and their accessibility. In the second part, we analyze the executives' intentions with respect to how they will steer their co-operatives through the crisis period and, more importantly, the post-crisis period. In the tables below, responses were divided into groups based on the agricultural co-operatives' main activity.

Table 3 presents the trends, as they were observed by the co-operative experts, for a number of selected indicators, compared between the two examined time periods. It is worth noting that for almost all co-operative activities there is an increase in their total turnover across the time periods, as well as an increase in their exports. In our opinion, this phenomenon is probably explained by the aforementioned decrease in domestic consumption that forced these co-ops to seek new markets abroad. Although, on the one hand, co-operatives began seeking these new markets, on the other hand the executives revealed a decrease in starting new activities, buying new assets and seeking new funds. We also see a trend in decreasing labor costs as both full time and seasonal personnel are reduced. This situation indicates that co-operatives are only turning to markets abroad in the crisis era to deliver their excess production, without making the necessary investments to effectively claim a lasting market share.

Table 3: Indicator changes from the pre-crisis period to the crisis period

	Cereals / Supplies	Olives / Olive oil	Wines	Traditional Products	Canning	Fresh Fruit
Total turnover	Increased	Increased	Slightly increased	Decreased	Increased	Slightly increased
Exports	Increased	Increased	Increased	Unchanged	Increased	Increased
Full time personnel	Decreased	Unchanged	Decreased	Decreased	Increased	Decreased
Seasonal personnel	Decreased	Increased	Decreased	Decreased	Decreased	Increased
Part-time staff	Decreased	Not applicable	Unchanged	Decreased	Increased	Not applicable
Non-salary benefits	Unchanged	Not applicable	Un-changed	Not applicable	Unchanged	Unchanged
Early retirement schemes	Unchanged	Not applicable	Decreased	Not applicable	Not applicable	Unchanged
Activities cut off	Unchanged	Unchanged	Unchanged	Increased	Unchanged	Unchanged
Starting new activities	Slightly increased	Decreased	Decreased	Decreased	Decreased	Slightly increased
Selling Assets	Unchanged	Not applicable	Slightly increased	Unchanged	Not Applicable	Decreased
Assets Replacement	Unchanged	Decreased	Decreased	Decreased	Decreased	Unchanged
Buying New Assets	Decreased	Unchanged	Unchanged	Decreased	Unchanged	Unchanged
New Loans	Decreased	Unchanged	Decreased	Decreased	Unchanged	Decreased

Source: Authors' own work, 2013

It is also interesting to note that co-operatives dealing with traditional and local products, as well as those in the canning industry, each face a completely different situation than co-ops in the other categories. The canning industry was always export-oriented, with the vast majority of their produce being exported. Moreover the general characteristics of the canning co-ops are completely different than the other co-operatives: e.g. higher turnover, and more employees working seasonally with an increased seasonal operational cost. On the other hand, the co-operatives dealing in traditional and local products are mostly women's co-operatives, operating at a local level with the primary goal of providing additional income and occupation to rural families. Without neglecting their importance in social and cultural life and rural development, it must be said that these co-operatives' operational priorities are not primarily financial, but rather centred on providing rural women with a means of achieving social integration and personal empowerment: the additional income source is of secondary importance. Research indicates that their members' lack of professional skills and unwillingness to undertake entrepreneurial risk has led them toward an enterprise model that lacks modern business methods in the areas of quality control, production systems, organizational and managing technologies, advertising and promotion, and the raising of capital (Gidarakou et al., 2000, Lassithiotaki, 2011).

With the extent of the cash shortage in the Greek market, even in recent years (Manifava, 2013) in mind, the next issue examined was funding accessibility and funding opportunities for the different types of co-operatives. Across the board, co-operatives' executives reported that it is more difficult to access funds, especially from private banks and European structural funds. Their most reliable funding source is their members, however the data did not show a clear trend indicating if it was easier or more difficult to access funding from members during the crisis. This observation could inspire a two-pronged quantitative research in this field: first, what would make Greek farmers invest more in their co-operatives and, secondly, how could co-operatives motivate their members to participate in their investment projects? A recent study on the region of Thessaly for the first decade of the 2000s showed that agriculture received only 9.5% of publicly funded investments in the region, against 64.5% for industry and 26% for tourism (Karafolas 2013).

Table 4: Accessibility to alternative funding sources, comparing pre-crisis and crisis period

	Funding Accessibility		Funding from members		Funding from Private Banks		Funding from State / EU funds	
Period	**'06-'09**	**'09-'12**	**'06-'09**	**'09-12**	**'06-'09**	**'09-'12**	**'06-'09**	**'09-'12**
Cereals / Supplies	6.75	4.75	2.00	3.67	4.67	2.67	1.75	2.33
Olives / Olive oil	5.00	1.00	7.00	7.00	N/A	N/A	N/A	N/A
Wines	4.50	1.00	2.50	3.00	3.50	1.00	4.00	1.50
Traditional Products	5.33	1.00	4.33	3.67	2.67	1.00	5.33	1.00
Cans	7.00	4.00	5.00	5.00	7.00	7.00	6.00	5.00
Fresh Fruit	5.50	3.25	3.25	3.25	4.00	1.50	4.33	4.33

Source: Authors' own work, 2013

Notes: '06-'09 refers to pre crisis period and '09 – '12 refers to crisis period; 1 = min 7 = max.

The third part of the analysis focuses on the future plans of the co-operatives' management. In the interviews, the participants were asked to rank their priorities for future management activities. In the table below, for each co-operative type, the management strategies identified as highest priority are characterized as "have to" while the management strategies with the lowest priority are characterized as "avoid". For almost all the different types of co-operatives, a first priority is to expand their exports, to invest in marketing and to create branded products. It is worth mentioning that wine co-operatives placed a higher priority on differentiating their products, attracting experienced managers and motivating their staff with non-salary benefits and motives.

Table 5: Future Management strategy

	Cereals / Supplies	Olives / Olive oil	Wines	Traditional Products	Cans	Fresh Fruit
Have to:	Exploit Buildings & Other Assets	Export	Non salary motives	Marketing Investments & Co-operative Brands		
		Marketing Investments & Co-operative Brands	Differentiate	Export	New export markets	Establish co-operative networks
			Efficient / Experienced Managers		Exploit internal Markets	
Avoid:	SELL buildings machinery & other assets	Abandon Activities	Abandon Activities	Merge with other similar co-ops	Abandon Activities	Abandon Activities
			SELL buildings machinery & other assets			

Source: Authors' own work, 2013

It is also interesting to note that fresh fruit co-operatives identified their priority as establishing co-operative networks.

Co-operative networks, strategic alliances and even mergers could permit the concentration of the agricultural offer, making it possible to offer agricultural products at more competitive costs. Taking into account the strong downward price pressure exerted by the distribution channels and hypermarkets, this strategy could be compatible with a cost-reduction strategy via the concentration of agricultural supply. This observation would require further quantitative research to determine which alternative strategy (alliances, networks or mergers) would be most feasible.

Management strategies with the lowest priority formed the "avoid" category. It is interesting that all types of co-operatives assigned a low priority to abandoning activities and selling equipment, machinery and real estate. Greek co-operatives are generally multipurpose co-operatives dealing with many products and activities. Even though is a common management practice to abandon activities that are not profitable, this is not an option for Greek agricultural co-operatives.

Efforts have been made in the past to force agricultural co-operatives to merge their activities into a single co-operative organization, to no avail. The lack of mergers has resulted in excessive levels of competition. For example, while the prices that producers receive for their extra virgin olive oil have dramatically decreased, eight federated olive oil co-operatives continue to compete against each other in the small prefecture of Chania on the island of Crete (Oustapassidis et al., 2000). The situation is similar with respect to other products in other regions (Kontogeorgos, 2001). In sum, the number of primary and secondary co-operatives remains very high relative to the needs of farmers and market demand (Illiopoulos, 2012). At a first glance the explanation for this unwillingness of agricultural co-operatives to merge into larger businesses may be explained by their leaders' reluctance to abandon their sometimes powerful governance roles, in anticipation of the decline in available board positions after the merger (Iliopoulos and Valentinov, 2012).

Conclusion

The analysis conducted in the previous section is not only useful to illustrate the reaction of the Greek agricultural co-operative sector to the economic crisis, but also because it provides information to help build strategies for improving their competitiveness. The results of the analysis could provide helpful directions not only for Greek agricultural co-operatives' management boards, but also for other agricultural co-operatives operating under a severe economic situation such as the Greek economic crisis.

The first set of observations that must be underscored in relation to co-ops' reaction to the crisis is that Greek agricultural co-operatives have increased their exports. This was reported by all participants and is considered a main part of their future strategic plans. However, agricultural co-operatives seem unwilling to start new activities and consequently they are not interested in buying new assets (eg. machinery and equipment) and thus, they are not seeking any additional funding sources. At the same time, most of the co-operatives (except those dealing with canned fruits) are trying to reduce their labour costs (and consequently, their personnel) regardless of whether their staff are full time, part time or even seasonal employees.

The second key observation is that all types of Greek co-operatives face difficulties in funding their activities. According to the research participants, it is easier to seek funding among their members than from credit institutions and the public sector. Moreover, the whole Mediterranean agriculture and co-operative farming sector suffers from a marked lack of financing (Campos-Climent, et al, 2012). Greek agricultural co-operatives should search for new sources of funding apart from public funds (grants and subsidies) and traditional credit institutions. It is necessary for co-operatives, for the successful implementation of the aforementioned strategies, to develop functional funding strategies and ensure appropriate funding sources for improving and promoting the characteristics of their products.

The co-operative executives who took part in this study revealed their intentions for future strategic action. The initial results showed that exports, new markets, and marketing investments to strengthen the brand are among their first priorities across all different types of co-operatives. However, co-operative executives in the wine sector set their first priorities as differentiating themselves from other companies (mainly the IOF) and attracting experienced managers using non-salary motives. These priorities show that these co-operatives are familiar with the strategies used by the IOF. Another difference was seen in co-operatives dealing in fresh fruit: their highest priority is seeking to create networks in order to expand their activities. While there was some diversity in high priority items, there was full agreement on what was not a priority: all co-operatives' executives strongly believe that co-operative organizations should not abandon their activities or sell their assets (especially their real estate property).

In conclusion, these results show, firstly, that Greek agricultural co-operatives during the economic crisis have "frozen" their activities while seeking to export their excess production. Secondly, there is a liquidity shortage for the co-operatives that forces them to rely on their members to finance any new economic activities. Their future strategies, according to the executives interviewed in this survey, exclude abandoning activities and selling equipment and property, but include the promotion of exports, increased investments in marketing (co-operative brands), and the recruitment of experienced personnel.

Although this research is limited because it uses only qualitative data, it makes an important contribution to describing the reaction of the Greek agricultural co-operative sector to the economic crisis, and also helps to identify strategies which could improve the future competitiveness of Greek agricultural co-operatives.

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Evaluating Mergers in the Japanese Co-operative Sector

by Akira Kurimoto

Abstract

There exist legal provisions for mergers and business transfers of co-ops in Japan, but the process of mergers has differed significantly between the realm of agricultural co-operatives and that of consumer co-operatives. Agricultural co-ops had been pushed to merge in order to cope with the financial crisis in the 1950s, through the Law Promoting Mergers of Agricultural Co-ops, passed in 1961. As a result, the number of agricultural co-ops has been drastically reduced while further restructuring of economic functions has been sought through mergers between prefectural and national federations since 1991. In contrast, consumer co-ops have merged spontaneously and their number has slowly reduced. As a result of these mergers, major co-ops operating in the whole prefecture were created in most prefectures in the 1980s. In the 1990s consortia were founded to attain economies of scale as inter-prefectural buying centrals.

The performance of the merged co-ops is mixed. While the average membership of agricultural co-ops doubled during 2000-2008, smaller co-ops have shown better performance than larger ones in terms of sales-per-member and labor productivity. It is also pointed out that the closure of branches as a result of the mergers resulted in the loss of members' contact and (therefore) patronage with their co-ops. In the case of consumer co-ops, the larger co-ops have generally performed better than the smaller ones. However, the larger a co-op becomes, the more difficult it is to maintain member participation.

Keywords: merger, consortium, regional society, governance, agricultural co-operatives, consumer co-operatives, Japanese co-operatives

1. Introduction

The Agricultural Co-operative Law in Japan provides for both mergers and business transfers of agricultural co-ops, but the progress has been very slow. The financial crisis in Japan in the 1950s prompted the government to push agricultural co-ops to merge into larger, more economically viable entities: to this end, the government passed the Law Promoting Mergers of Agricultural Co-ops in 1961. As a result, the number of Japanese agricultural co-ops has been reduced from ca. 13,300 in 1950 to 4,200 in 1985, and only 725 in 2010. In some prefectures, in fact, the remaining independent co-ops have merged into a single prefectural society. Since 1991, the restructuring of economic functions has been sought through mergers between prefectural and national federations (Zenkyoren, Zennoh and Norinchukin Bank).

Consumer Co-operative Law had confined consumer co-ops in Japan to operating within specific prefectures until 2007. Within prefectures there has been some spontaneous merging and the total number of consumer co-ops shrunk from 730 in 1991 to ca. 600 in 2010. As a result, major co-ops operating in the whole prefecture emerged in most prefectures. Consortia were then founded to attain economies of scale in the 1990's—these are known as inter-prefectural buying centrals. In 2007 Japanese law was amended to allow mergers between co-ops in adjacent prefectures, and since that time, mega-co-ops continue to be created through mergers among major co-ops. In the field of insurance co-ops, national societies were created (Zenrosai and JCIA).

The performance of the merged co-ops shows mixed results. While the average membership of agricultural co-ops has doubled from 6,400 to 12,330 during 2000-2008, smaller co-ops have enjoyed better performance than larger ones in terms of sales-per-member and labor productivity. It is also pointed out that closure of local branches resulted in the loss of members' contact with co-ops, with a resulting loss of patronage. In the case of consumer co-ops, larger co-ops have generally enjoyed better performance than smaller ones in terms of sales-per-member and labor productivity. However, the larger a consumer co-op becomes, the more difficult it is to maintain member participation.

This paper will describe the legal framework pertaining to mergers of co-operatives in Japan, and describe the various consolidation processes that have occurred through mergers since 1945. It will then evaluate the outcomes of the mergers both from a business and associational perspective. Finally, it will outline several questions for further research.

"In the case of consumer co-ops, larger co-ops have generally enjoyed better performance"

2. Legal Framework

The Agricultural Co-operative Law (1947) provides for mergers and business transfers of agricultural co-ops (Art. 44, 46, 50.2, 65-69). There are 2 types of mergers: the consolidation-type merger in which existing co-ops are liquidated to create a new co-op with pooled property and membership, and the absorption-type merger in which one co-op takes over another co-op's property and membership.
Co-ops have preferred the former while joint-stock companies have mostly adopted the latter. The financial crisis in the 1950s prompted the government to push agricultural co-ops to merge into economically viable entities through the Law Promoting Mergers of Agricultural Co-ops. This law was passed in 1961, and aimed to promote mergers through the provision of grants and other assistance to establish a financial basis for merging co-ops. Upon the prefectural governor's approval of management plans for mergers, the government would give grants to prefectures to cover expenses relating to the acquisition, building and improvement of necessary facilities, costs of consulting to the prefectures and co-operative federations, etc.

The Consumer Co-operative Law (1948) also provides for mergers and business transfers of consumer co-ops (Art. 40, 42, 50.2, 65-71). The original law contained several institutional constraints: co-operatives were not allowed to trade with non-members, establish wholesale societies, trade in other prefectures or engage in the credit business. The restriction on co-ops trading only within their home prefecture often prevented them from serving consumers who lived in a co-op's catchment area but whose home address was registered in another prefecture. This restriction proved to be anachronistic as the economy expanded to a global scale and beyond to cyber space. Under such circumstances, co-operatives had to adopt a strategy of establishing regional federations (consortia) in the 1990s instead of merging into regional societies. This solution bypassed the restriction, but left co-ops facing the governance problems of how to maintain members' influence while seeking efficient business operations and how to strike a balance between centralization and decentralization. The Amendment Law was presented in the Diet (the Japanese Parliament) in April 2007 and unanimously passed in May. Regarding the business operations of consumer co-ops, the strict rules were relaxed to some extent. For example, the legal business operating area, which had been restricted to within a single prefecture, was extended to adjoining prefectures when necessary for the implementation of a retail business. This enables co-ops to make inter-prefectural mergers to enhance their economies of scale and address the governance problems associated with the dual board structure in co-op consortiums.

3. Consolidation Process through Mergers of Co-operatives

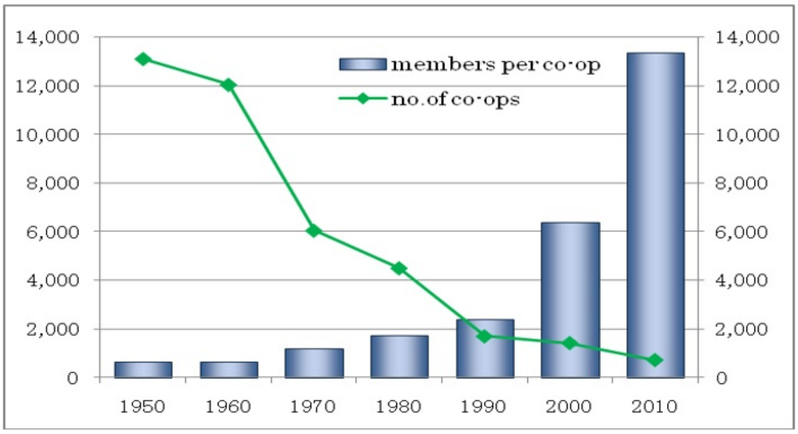
3.1 Mergers of agricultural co-ops

The mergers of agricultural co-ops have been promoted by institutional arrangements. In 1950, more than 13,000 co-ops existed at the village level, most of which were based on rural traditions; however, most of them were too small to be economically viable, and many were failing due to unprofitable assets carried over from the pre-war days. It was imperative to save these ailing co-ops, and establish new, financially healthy co-operative enterprises as part of the government program to implement measures for modernization of agriculture and rural life. Since the Law Promoting Mergers of Agricultural Co-ops took effect in 1961, mergers were accelerated and the number of co-ops drastically reduced; from cca.12,000 in 1960 to 6,000 in 1970, and 4,200 in 1985. In 1988 the 18th National JA Congress resolved to work to further consolidate the sector to only 1,000 co-ops by 2000 in order to strengthen business and management functions. In the 1990s, the liberalization of the banking industry pushed co-ops to make further mergers to cope with stiffer competition, and the number was consolidated to 725 in 2010 (See Figure 1).

Mergers were also prompted by large-scale merging of municipalities (cities, towns and villages) since the three-tier system of agricultural co-ops had been organized in parallel with the public administration system. Co-ops had been obliged to implement government agricultural policy and it was convenient for them to have structures corresponding to the governments at national, prefectural and municipal levels. Based on the Local Autonomy Law and other special laws, the restructuring of municipalities was vigorously carried out after the Second World War; the number of municipalities in Japan sharply dropped from 9,868 to 3,472 during 1956-1961 (the so-called Grand Merger of the Showa era), and from 3,234 to 1,821 during 1999-2006 (the Grand Merger of the Heisei era). Meanwhile the number of co-ops fell below the number of municipalities in 1992 and is now less than half of the latter. As a result, the average size of agricultural co-ops grew to more than 13,000 members and in the prefectures of Nara, Kagawa and Okinawa, single prefecture-wide societies emerged. In the case of the Kagawaken Agricultural Co-op, co-op membership exceeds 133,000.

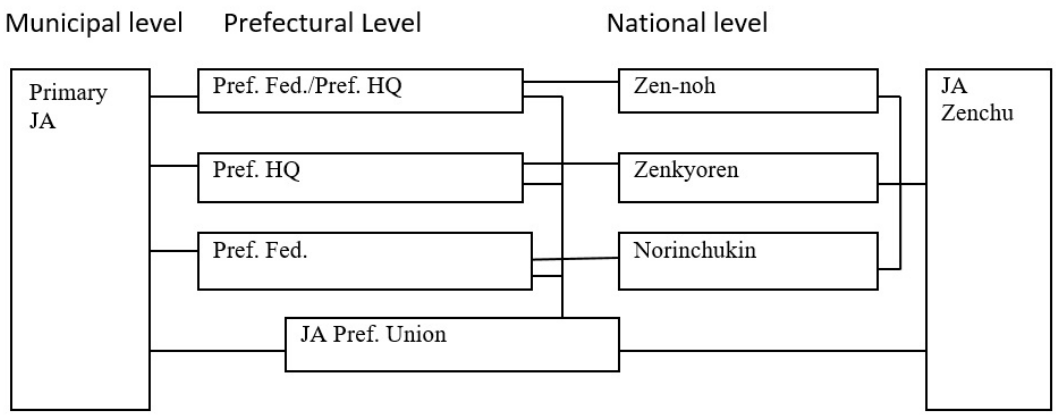
The JA group[1] used to operate under a three-tier system including primary, prefectural and national levels. As mentioned above, this corresponded to the Japanese administrative system (municipal, prefectural and national governments), which helped co-ops to coordinate public policies but became inefficient due to multi-stage handling. In 1991, the 19th National JA Congress resolved to consolidate to a two-tier system, eliminating the prefectural level. Since then, the restructuring of business functions has been sought through mergers between prefectural and national federations. The insurance business was consolidated to Zenkyoren (National Mutual Insurance Federation of Agricultural Co-ops), while the banking business is undertaken by Norinchukin Bank (Central Co-op Bank for Agriculture, Forestry and Fisheries) and 38 prefectural JAs. The supply and marketing business is mostly handled by Zen-noh (National Federation of Agricultural Co-ops) but 12 prefectural federations and societies operate independently. (See Figure 2). The non-business functions for public relations, education and auditing are carried out by JA prefectural unions and JA Zenchu (Central Union of Agricultural Co-ops).

Figure 1. The evolution agricultural co-ops and membership per co-op



Source: MAFF Statistics

Figure 2. The organizational structure of JA group

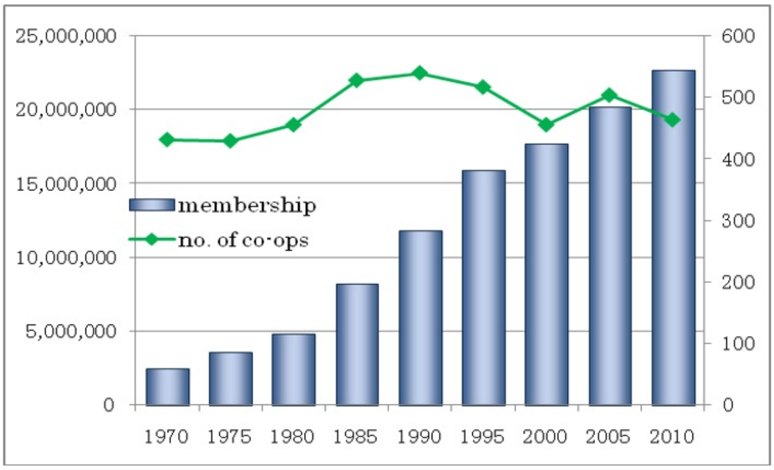


Source: JA Zenchu website

3.2 Mergers of consumer co-ops

In contrast with agricultural co-ops, consumer co-ops have tended to merge spontaneously at their own initiative. That said, the total number of consumer co-ops steadily increased until 1990, as new co-ops were founded in every prefecture (See Figure 3). Since then, even though membership has continued to grow, the total number of co-ops has started declining because mergers have outnumbered start-ups . The JCCU (Japanese Consumer Co-op Union) began to advocate a policy of consolidation of co-ops following its European counterparts. As a result, major co-ops operating within an entire prefecture were created in most prefectures by 1990. Some competing co-ops with different strategies coexist in the huge market of megalopolies (See Table 1). Most mergers were pro-active, undertaken to accomplish economies of scale; however some were passive, undertaken to save ailing co-ops.

Figure 3. The evolution of consumer co-ops and membership



Source: JCCU Statistics

Table 1. The largest Japanese consumer co-op societies in 2011

No.	Name of society	Prefecture	Members	Turnover*	Share capital*
1	Co-op Sapporo	Hokkaido	1,391,552	261,860	61,672
2	Co-op Kobe	Hyogo	1,670,425	261,850	44,559
3	Co-op Tokyo	Tokyo	1,283,538	158,468	21,713
4	Co-op Kanagawa	Kanagawa	1,247,017	133,364	27,194
5	Saitama Co-op	Saitama	878,931	108,013	24,188
6	Miyagi Co-op	Miyagi	664,559	103,973	22,960
7	Chiba Co-op	Chiba	678,781	92,159	20,743
8	Kyoto Co-op	Kyoto	497,514	72,472	15,572
9	Osaka Izumi Co-op	Osaka	431,787	69,926	12,647
10	Pal System Tokyo	Tokyo	415,882	68,206	13,874

Source: JCCU Statistics *JPY million

To accomplish economies of scale under the institutional constraint of being confined in operating area to within a given prefecture, starting in 1990 consumer co-ops began to create regional consortia (business federations)—a legitimate form of consolidation. It is up to each primary co-op to decide whether to join a consortium; and if so, which functions they delegate to it and how much they buy from it. The voluntary nature of this arrangement has resulted in a slow and diverse integration of business functions in consortiums. Now two major co-ops and thirteen consumer co-operative consortiums cover most parts of Japan. The second largest co-op, Co-op Sapporo, has achieved full-fledged concentration of all consumer co-ops in the prefecture of Hokkaido Island through mergers and the transfer of engagements, while Co-op Kobe, the largest co-op, has developed a strategic alliance with its sister society, Osaka Kita Co-op by sharing merchandising functions and human resources. Today, these major co-ops and consortiums account for 90% of consumer co-ops' business (See Table 2).

Table 2. Profile of Consumer Co-operative Consortiums in 2011

	Est.	Head office	No. of affiliates	Affiliates' members*	Affiliates' turnover**	CCC's turnover**
Co-op Tohoku Sannet	1995	Sendai	7	1,451	208	794
Co-opnet	1992	Saitama	8	3,593	491	356
Ucoop	1990	Yokohama	6	1,892	291	162
Pal System	1990	Tokyo	10	1,346	194	158
Seikatsu Club	1990	Tokyo	18	311	84	57
Tokai Co-op	1994	Nagoya	3	777	102	77
Co-op Hokuriku	1996	Kanazawa	3	328	42	22
Co-op Kinki	2003	Osaka	7	1,8667	283	130
Kirari	2002	Osaka	2	32	6	3
Shizenha	2002	Osaka	10	95	11	8
Co-op Chugoku Shikoku	2005	Hiroshima	9	1,631	190	99
Co-op Kyushu	1993	Fukuoka	8	1,617	183	80
Green Co-op	1992	Fukuoka	13	381	56	43

Source: JCCU Statistics * thousand ** JPY billion

The most important function of a consortium is to buy products collectively from manufacturers and wholesalers at reduced prices. In many cases this has been accompanied with the development of regional CO-OP labels as a result of consolidating similar labels owned by primary co-ops. The extent of integration of buying and related business functions varies from one consortium to another, largely depending on consensus on business strategies among affiliated co-ops. The concentration of buying activities taken on by the consortiums ranges from 49% to 100%. The consortiums in the greater Tokyo area have concentrated purchasing and logistic functions and invest in physical distribution/food processing facilities on behalf of affiliated co-ops. In contrast, the consortiums in Japan's northern and western regions take on only limited functions on behalf of their member co-ops—nearly half of all commodities sold to consumers are independently procured and distributed by the primary co-ops.

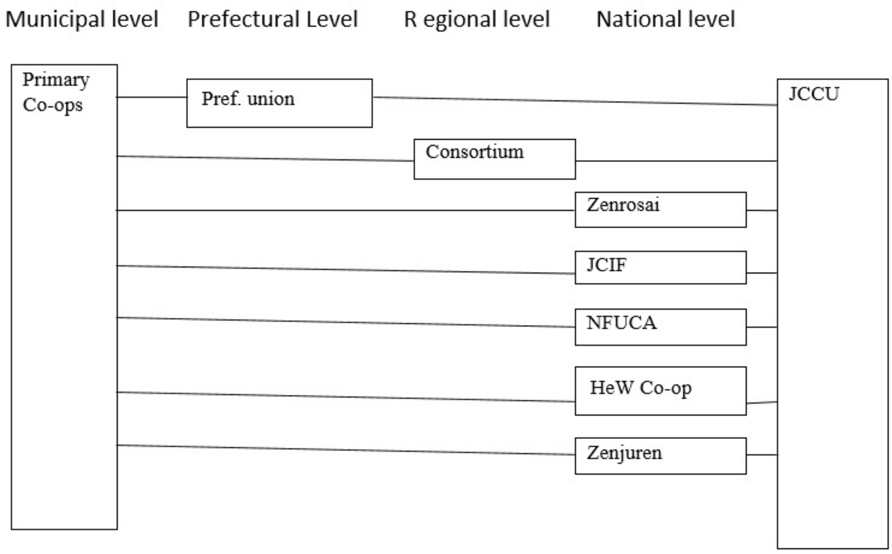
Collective buying has lowered wholesale prices of products for Japanese consumer co-operatives, as well as other expenses. The third largest co-op, Co-op Tokyo, joined the Co-opnet Federation in 1999 and successfully reduced their purchasing price by ca. 2 percent. These advantages were obtained in mass-produced processed foods. While CO-OP brands have been emphasized to give co-operatives a competitive edge, other manufacturer's brands are also jointly procured in the interest of lowering prices. Even though many primary co-ops and regional consortiums have developed their own co-op labels, they have not always succeeded in making their prices sufficiently competitive, or adequately differentiating their products' quality. As a result, in 2000 Co-opnet Federation decided to partner with the JCCU in 2000 to integrate their CO-OP brand products and achieve more competitive prices.

The consumer co-operative consortiums, as second-tier organizations, have a delegate governance structure. The general assembly, made up of delegates elected from each primary co-op, is the consortium's supreme decision-making body: it elects the board of directors who have the authority to run the organization. It is interesting to note that while in primary co-ops, lay board members elected from the membership constitute the majority of the board, with a smaller number of executives, in the consortiums, the majority of the board members are professional full-time executive directors, most of whom are nominated by primary co-operatives. One would expect that such interlocking directorates enable effective decision-making and mitigate potential conflicts between consortiums and primaries. However, the coexistence of the primaries' and consortium's boards can also complicate the decision-making process, increasing transaction costs and requiring more time. Some argue that this organizational structure alienates individual co-op members from governance and does not allow for their opinions to be reflected in the decision-making of the consortium's board; that said, the issue of how to ensure member participation in large-scale organizations is a common problem, whether they are federated or not.

The functions of consortiums and non-federated primary co-ops often overlap. To address this, Co-opnet Federation, Co-op Tokyo and Saitama Co-op have consolidated their buying and administrative functions to reduce overall costs. In fact, they are heading for a de facto merger, which became possible as a result of the amended Consumer Co-operative Law in 2007. In contrast, Seikatsu Club Co-ops in Tokyo and Kanagawa Prefectures made the decision to divide into smaller co-ops and daughter co-ops with less than 20,000 members were created to ensure more effective member participation in 1993 and 2004 respectively.

Based on the amended Consumer Co-operative Law, the insurance business was separated from the primary co-ops and integrated into the Japan CO-OP Insurance Consumer Co-op Federation (JCIF) in 2009. On the other hand, medical co-ops founded their own Japanese Health and Welfare Co-ops Federation (HeW Co-op) in 2010. Now the JCCU is a national apex organization for all types of consumer co-ops (See Figure 4). All primary co-ops (retail, insurance, health/welfare and housing) have to affiliate with prefectural unions, although retail co-ops can instead join consortiums on a voluntary basis.
Co-ops in the fields of insurance, health/welfare, housing and post-secondary education affiliate with JCCU through their national federations (Zenrosai, JCIF, HeW Co-op, Zenjuren-National Federation of Housing Co-ops and NFUCA-National Federation of University Co-ops).

Figure 4. The organizational structure of consumer co-ops in Japan



Source: JCCU website

4. Evaluation of the Outcomes of Mergers

When we analyze the outcomes of mergers, we need to evaluate from both a business and associational perspective; that is, we need to evaluate both performance and member participation. The former is evaluated to gauge to what extent greater efficiency (one of the key objectives of mergers) is attained, while the latter is evaluated out of concern about how member participation can be maintained in larger organizations.

The mixed performance of merged co-ops has been observed. While the average membership of agricultural co-ops has doubled from 6,400 to 13,370 during the 2000-2010 period, it was in fact the smaller co-ops that enjoyed better performance in terms of deposits and sales per member, as well as in labor productivity (See Table 3). These mergers often led to various rationalization measures including integration/closure of branches/facilities, which enlarged the distance between co-ops and members and therefore resulted in the loss of members' contact with their co-ops and, subsequently, a loss of their patronage. Thus, many of the merged co-ops seemed to be caught in a 'negative spiral' in which the reduced co-op services drove members away, which led to a reduction in the volume of transactions and necessitated further rationalization. In this regard, it can be concluded that agricultural co-ops have not so far been able to realize the enhanced efficiency benefits which they had expected to attain from the mergers, and yet still maintain member participation. At the same time however, it is worth considering that without these mergers, some co-ops might have gone bankrupt in the wake of financial liberalization and the lower credibility of agricultural co-ops generally. In addition, in recent years, larger co-ops have been attracting more qualified graduates as candidates for the board. The debate on mergers is still ongoing; proponents insist that the benefits of economies of scale cannot be ignored, while opponents are concerned about the desire for business efficiency (if any is in fact gained), superseding associational effects. According to a questionnaire survey on merged co-ops[2], benefits were 'strengthened strategy and control functions' (36.7%), 'strengthened business functions' (33.4%), and 'improved financial structure' (23.2%), while problems included 'decreased member patronage' (53.6%), 'difficulty of governance according to members' will' (49.1%), and 'difficulty in coordinating business operations' (39.9%).

Table 3. Comparison of patronage and performance of agricultural co-ops in 2010

Size of full members	Deposits per member*	Sales per member*	Ratio of overhead (%)	Labor product-Ivity*
less than 1,000	10,754	9,673	89.9	9,069
1,000-5,000	10,246	1,196	89.4	8,817
5,000-10,000	9,005	720	90.5	8,372
more than 10,000	8,204	678	91.8	8,233
total	8,872	895	90.8	8,421

Source: MAFF Statistics *\ thousand

In the case of consumer co-ops, mergers and integration of business functions led to the highly integrated consortium structure to which most consumer co-ops now belong. Although there are a number of core characteristics shared among Japanese-style consumer co-ops, a variety of co-op types can be distinguished in terms of their basic orientation, membership composition, business format, and so on. A wide spectrum exists from business-oriented mainstream co-ops seeking to involve a majority population, to social movement-oriented co-ops addressing a minority of the population. In most prefectures a major co-op competes with several smaller co-ops (such as Pal System Co-op and Seikatsu Club Co-op) (Consumer Co-operative Institute of Japan, 2010: 14-17).

When we look at a comparison of both patronage and performance across different types of consumer co-ops, we can see that the larger co-ops generally enjoyed better performance than the smaller ones in terms of sales-per-member, return on assets and labor productivity (See Table 4). However, in smaller co-ops the share-per-member is larger, which means that members' loyalty is diluted in larger organizations.

Table 4. Comparison of patronage and performance of consumer co-ops in 2011

Turnover (\)	Monthly sales per member (\)	Share per member (\)	ROA (%)	Labor productivity*
less than 1 billion	11,593	37,665	0.3	8,544
5-10 billion	10,638	39,308	1.7	10,200
10-30 billion	11,043	33,798	2.2	8,460
30-50 billion	11,673	35,001	2.6	9,228
50-100 billion	11,772	31,517	3.7	9,768
more than 10 billion	12,153	28,320	2.5	9,096
total	11,681	31,891	2.6	9,084

Source: JCCU Statistics *\ thousand

It can also be observed that the larger a co-op becomes, the more difficult it is to maintain member participation. Since major co-ops already have a huge membership of hundreds of thousands, they have developed organizational structures to facilitate effective member participation as much as possible. Starting from Han groups (for making/receiving orders and communication) consisting of several members at the neighborhood level, many co-ops then set up intermediary bodies such as district/shop committees at the primary school district level and area/regional committees at the municipal level. These bodies facilitate co-operative governance at the local/regional levels and also facilitate each co-op's involvement in the affairs of the communities where they operate. The active members in Han groups often find ways to involve themselves in a wider scope of activities, and also to assume greater responsibility for co-op affairs. In this way they are able to climb up the echelon of co-operative administration, first as committee members, then as delegates to an AGM or as board members. That said, with the shift in lifestyle of the average co-op member, corresponding with a decline in Han groups, the patterns of member participation are also changing: members are expecting to be able to participate in a wider variety of ways, mostly thanks to digital technology advances (Consumer Co-operative Institute of Japan, 2010: 27-44). For example, before the foundation of Co-op Mirai (Co-op Future) in March 2013, a large number of members were consulted on the merger in a variety of ways and the overwhelming majority expressed approval[3].

5. Conclusion and Questions

In the globalized economy, the size of an organization tends to continue to increase in order to survive in a highly competitive world. As such, it seems inevitable that Japanese co-operatives will have to achieve a critical size and consolidate their economic power in order to compete with national and transnational enterprises.

In 2007, the amended Consumer Co-operative Law allowed consumer co-ops operating in individual prefectures to merge with co-ops in adjacent prefectures, under the condition that they needed to do so in order to remain competitive in the retail business. Thereafter, a number of mega-co-ops were created by mergers among major co-ops: Co-op Kobe absorbed Osaka Kita Co-op in April 2011; Co-op Tokyo, Co-op Saitama and Chiba Co-op merged to create Co-op Mirai in March 2013; and Co-op Kanagawa, Co-op Shizuoka and Co-op Yamanashi merged to Ucoop in March 2013. These new mega co-ops have impressive membership: Co-op Kobe boasts 1.7 million members, Co-op Mirai has 2.8 million and Ucoop has 1.8 million. There are some pros and some cons related to these mega mergers, but there is certainly a consensus that the larger these organizations grow, the more efforts will be needed to ensure they remain responsive to their members' needs as they work towards increasingly efficient business operations and effective member participation.

However horizontal merges and vertical integration resulted in mixed performance, with many co-ops not yet exploiting the full potential of their new economies of scale, yet losing associational ties with their members.

"Japanese co-operatives will have to achieve a critical size and consolidate their economic power in order to compete"

Several questions still need to be addressed: Firstly, which structure provides the most benefits overall—consortiums with a federative structure or regional co-ops formed after mergers? Second, what is the appropriate size of federated or merged organizations, for different businesses sectors (e.g. supply/marketing/retailing or banking/insurance)? Thirdly, how can performance be improved without compromising member participation? Fourth, how can governance functions be improved in these large-scale organizations? In order to answer these questions, we first need to define the criteria for evaluation. At the same time, we need to be able to analyze the changes in performance of both merged and separated co-ops over time, through the collection of panel data.

Notes

1 JA is an acronym of Japan Agricultural Co-op.

2 Agricultural Development and Training Center, ***Research on Strategy for promoting insurance business and organizational structure in extended JA***, 2000. The purpose of the survey was to estimate benefits and problems of mergers in agricultural co-ops. The target was larger and merged co-ops. 371 co-ops among 553 co-ops responded to questionnaires (67.1%).

3 The open members' forums were held in each shops/depos during December 2011 through February 2012 when ca. 800 000 members responded to the questionnaires on the future directions of new co-op and these voices were summarized in the policy statements. More than 760,000 members proposed the name of new co-op in the separate consultation. In addition to the ordinary delegates meetings in districts, the special meetings were held before the special AGM for final decision.

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Does the French Contractualization Law Help Agricultural Co-operatives Mitigate Price Volatility?

by Maryline Filippi

Abstract

In the context of the agricultural price volatility crisis and major changes in European market regulation tools, France has recently introduced new contractual agreements between producers and agri-food shareholders. The measures in the Loi de Modernization Agricole (LMA, 2010) are aimed at guaranteeing sustainable income for farmers. We analyze the implications of this legislative contractualization for farmers and their agricultural co-operatives. Our results show that the differences between existing co-operative contracts and the recent legislative contractualization can vary both in the function of (i) product price determination, and (ii) agri-food supply-chains, according to low or high added-value product differentiation. Unfortunately, at this stage, LMA is only able to offer a partial solution to the problem.

Keywords: contract, supply-chain, income, farmer, agricultural co-operatives

1. Introduction

Traditionally, the Common Agricultural Policy (CAP) has used several different price supports, tariffs, or export subsidies to support the agricultural sector. However, the CAP has been evolving and as a result of this, together with the "Agenda 2000" reforms, intervention prices have been reduced and, for several products, direct payments have been introduced (Hanisch and Rommel, 2012; Chatellier and Guyomard, 2012). This reduction in subsidies is aimed at supporting market prices resulting from the gradual dismantling of the CAP and this, together with an increased demand for food products, contributes to the strong volatility of raw material prices[1] (Hanisch and Rommel, 2012; Deloitte, 2012).

World price movements are felt differently in regional or local markets and are manifested in various policy responses, exchange rate movements, competition policies, market structures and degrees of market openness (Interagency Report, 2011). Factors that explain these differentials and contribute to the volatility in world prices of agricultural raw materials include exogenous factors such as the impact of climate change on farm yields, and the possible non-rational expectations of economic agents in the short run (Gohin, 2012). Such volatility[2] has had considerable repercussions on producers, their economic organizations and the organization of food supply chains (Interagency Report, 2011).

All this increases the risk of uncertainty concerning production cost levels, and consequently the viability and income of producers. Faced with on-going crisis, the French Public Authorities have introduced a policy based on contractualization between supply-chain stakeholders via the 2010 Law of Agricultural Modernization[3] (Loi de Modernization Agricole, LMA) with the objective of stabilizing farmers' income. This public policy contractualization seeks to replace current systems of coordination between farmers and their co-operatives with legally recognized contractual agreements. In France, three farmers out of four are members of agricultural co-operatives: 60% in marketing and 40% in the agri-food processing sector. How does this Contractualization Law help co-operatives, and what effects could it have on the stabilization of supply-chains and/or producers' income?

This article investigates the way in which public contractualization contributes to loyalty to co-operatives in order to deal with the price volatility crisis. We first address the question of members' income determination and then consider the differences between public and co-operative contracts, to examine their impact on the stabilization of owner-members' income. Economic literature has underscored the interest in, modalities for, and risks of using contracts, defined as commitments between parties. Can public contractualization be opposed to co-operative contracts? Since there are no statistical studies currently available on the effects of the LMA on farmers and their co-operatives, our methodology is based on "expert opinions," analyzing the nature of the contracts concerned, and taking into account effective co-operative income. Examples from the dairy and meat sectors have been highlighted, since they were amongst the first to have the LMA applied to them. Our analysis shows that the LMA only partially stabilizes both producer and co-operative incomes.

The determinants of producer income include product differentiation, supply-chain organization, and the way in which product prices are established (Malpel et al., 2012). This is why producers organize themselves into strong co-operatives in order to address these challenges. Our aim here is not to confront the two modes of contractualization but to examine how they can be used together to stabilize farmers' income, which is heavily impacted by raw material price volatility.

The paper is organized as follows: Section 2 describes the specificities of French legislative contractualization and co-operative contracts. In particular, we focus on the impact of co-operative contracts on producers' income. Section 3 deals with the consequences of the new policy for farmers, co-operatives and supply-chains. It also considers the organization of Producer Organizations (POs) and the downstream levels, concluding that the LMA offers only a partial solution for stabilizing farmers' income.

2. Two alternative Forms of Contractualization to Stem Price Volatility

LMA contracts and co-operative contracts are two alternative modes of intervention, the former being public, the latter private. Even though they focus on the same objective to stabilize producer income, the LMA does not recognize the co-operative contract, since its characteristics do not conform to the LMA's own specific definition of a contract. In order to understand the exact scope of the LMA contract and how it works, we first study its modalities. We then examine the ways in which the LMA contract and the co-operative contract differ, including their differing effects on stablizing owner-members' co-operative income.

2.1 LMA contractualization as a negotiating tool for supply-chain stakeholders

France, within the institutional European context, has opted for contractualization between producers and their buyers via the LMA. This contractualization policy aims at encouraging the different stakeholders to establish agreements to fix prices and quantities.

The goal of these purchasing contracts is to smooth out price variations in order to avoid any excessive rise in costs between the different parties, including consumers, within the supply-chains. The underlying principle is to sign five-year contracts committing the parties to a certain volume of agricultural products, and fixing the modalities of price determination throughout the supply-chain in order to combat price volatility. For example, the Milk Price Agreement established a differential pricing scheme with the objective of increasing the producers' share in the added-value within the supply-chain.

The dairy, fruit and vegetable supply-chains are particularly affected, even though the meat and cereal supply-chains have also started to implement certain contractualization measures. It should not be forgotten that price determination is related to the specificities of each supply-chain. Article 12 of the Law[4] defines the characteristics of sales contracts for agricultural products, which are the object of the contracts between farmers and co-operatives as well. LMA sale contracts can become compulsory in the case of such products as milk, fruit and vegetables. The Law therefore imposes contractual requirements on agricultural co-operatives dealing in these sorts of products.[5]

2.2 Co-operative contracts as a tool for stabilising owner-members' income

A co-operative contract between owner-members and their co-operative contractualizes the commitment of both parties. Even though membership in a co-operative is free and voluntary, a formalization of this engagement represents the legal foundation for this joint commitment.

Terms for a typical co-operative contract include the obligation of a co-operative to collect the total production of its members and/or provide them with the best service possible; the owner-members must, in turn, commit themselves to supplying their production to the co-operative (ICA Principles, 1995; Filippi et al., 2006). Members' production contribution to their co-operative needs to be exclusive (apport total) in the fruit and vegetables sectors in France but in other cases this may vary, as in the case of meat or cereals. The co-operative statutes detail the extent and the duration of the commitment (a minimum of three years and, on average, five years), and the level of contribution that is required regulated by internal rules and regulations.

A farmer's annual income from their co-operative is usually based on an "average price" (particularly when markets are stable). This is composed of "fixed advance payments", paid at the beginning of the production period and based on expected production, plus a "complementary price" related to the effective execution of the production commitment (Hansmann, 1996). During the General Assembly meeting, owner-members decide how they intend to allocate their co-operative's profits. When the results are positive, members allocate surpluses for any or all of the following purposes: developing their co-operative; setting up reserves, at least part of which would be indivisible; and benefiting members in proportion to their transactions with the co-operative. Any dividend is then added to members' overall income.

> *Owner-member income* = (fixed advance payments + complementary price + reimbursement) x quantities produced + limited equity remuneration

In addition, more and more co-operatives are practising differentiated remuneration between farmers, based on quality and engagement (Nicolas, 1995). This means that co-operatives establish differing contracts with each member, based on each member's needs and contributions. This evolution towards a greater emphasis on members' needs can be seen as evidence of the growing importance of individualism within co-operative culture and a shift in values from equality to equity.

However, this also means that co-operatives can develop "productive activities under contract." These agreements involve co-operatives signing a contract with retailers or transformers in order to supply produce of a certain quality and quantity to the supply chain, and are mostly established as part of an industrial partnership, such as with Heineken, McDonald's or Barilla.

> "more and more co-operatives are practising differentiated remuneration between farmers, based on quality and engagement"

It is worth noting that owner-member income can also vary depending on whether the enterprise is a co-operative or a co-operative group. In the latter case, benefits from business subsidiaries may be distributed to owner-members in the form of dividends (including even dividends coming from the subsidiaries, as authorized by the French Laws of 1991 and 1992). However, this legislation is seldom used, since supplementary price distribution is preferred.

To summarise, co-operatives, as pragmatic enterprises, respond to their members' needs through the development of individualized contracts with each owner-member. This allows co-operative organizations to adapt to economic constraints in order to better sustain their owner-members' activities (Bijman, et al., 2012).

2.3 What is the expected effect of the two types of contracts on stabilizing producer income?

According to the LMA, "co-operative contracts" do not correspond to the requirements of a contract. Even if a co-operative contract is considered a sui generis contract, it does not legally constitute a "sales contract" for the co-operative. This is because the advance payment and the supplementary price are fixed by the Board, and the reimbursement to individual owner-members (ristournes) is determined by the General Assembly. This practice introduces uncertainty concerning owner-members' annual remuneration, especially in the case of total supply contribution (apport total). This explains why the Public Authority recommends that co-operatives apply the rules of information and transparency as regards the "price criteria and modalities" indicated in Art. R 631-10, 4th / EU N°26/2012 of the European Council 14th March 2012 (Danel, et al., 2012).

Co-operative contracts and contracts as defined by the LMA also differ with respect to the precise moment at which property rights are transferred, and in the modalities of price determination. While the LMA has adopted European criteria for the modalities of price determination (art. R 631-10,4), French co-operatives have historically referred to their legal statutes and co-operative principles. Under the LMA, the French Authority is now attempting to clarify how these European criteria would be implemented for agricultural co-op members when drawing up legally valid contracts with manufacturers and retailers.

In practice, the determination of income and contracts for co-operative members varies with each type of product. As suggested by Bijman and Hanisch in their classification of producer organizations (POs) and co-operatives, it would be relevant to identify sector specificities, in order to better understand co-operative structure and behaviour. "For instance," observe Bijman and Hanisch, "perishable products need either some kind of processing before they are sold, as in the case of milk, or they need to be delivered to the final consumer very rapidly, as in the case of fresh vegetables. Thus, dairy co-operatives are usually involved in processing, which has implications for capital requirements, while fresh produce co-operatives are focussing much more on efficient logistics" (2012: 12). As we know, price volatility is passed on to the consumer quite differently according to the nature of the product, with it being passed on more quickly in the case of perishable products (Gohin, 2012). Further, added-value is shared in different proportions between shareholders, depending on whether it is a raw material, or a transformed or labelled product, and whether it is of protected origin.

When product price-determination differs according to the type of product, it has an impact not only on producers but also on production area differentiation; that is, whether the products are classified as premium, generic or for industrial use.

These differences also depend on the roles played by actors and supply-chain organizations in creating added-value. Accordingly, co-operatives need to aim for price stability to ensure their competitiveness, in accordance with the co-operative objectives of promoting their members' products and income. Because owner-members are subject to delivery obligations and delivery rights, the quantities cannot be adjusted to a changing price, as is possible for business firms (Hanisch, et al., 2012).

This leads us to consider the consequences for producer organizations (POs), contrasting LMA contractualization and co-operatives.

3. What are the Consequences of LMA Contractualization for Producers, Co-operatives and Supply-Chains?

The concern of this study is to explore in what way, if any, the LMA offers solutions for stabilizing farmer income. One alternative solution may be an increase in the number of POs (producer organizations). A PO is a special designation for an agricultural organization: while many co-operatives are POs, not all are. POs are regulated by the French Laws of 1960 and 1962 (Filippi, 2012; Malpel et al., 2012). POs can take a number of legal forms including co-operatives, SICAs[6] and producer associations. Other kinds of associations or companies may be considered POs if their capital and voting rights are held in majority by farmers (Art D 551-2 du CRPM). POs participate in improving the balance in supply-chains in order to strengthen their negotiating position. Their role changes according to the degree of concentration in the supply-chain—for example, it is weak for cereals and strong for meat (Deloitte, 2012).

3.1 Upstream agricultural organizations: the role of POs

The European Commission is committed to facilitating the restructuring of the agricultural sector by encouraging the creation of voluntary agricultural POs. The Directorate General (DG) of Agriculture and Rural Development has launched a large study, "Support for Farmers' Co-operatives," that will provide background knowledge to help farmers organize themselves into co-operatives in order to consolidate their market orientation and thus generate a solid market income (Bijman et al., 2012; Hanisch et al., 2012). Although European Law encourages POs to increase their bargaining power, it focuses more on individual farmers than on their co-operatives. From this perspective, French Law and the CAP seem to introduce ambiguity regarding the recommendations of the Competition Authority.

The main objective of POs is to improve the price paid to members, to help farmers increase and stabilize their annual income. The Rural Code (Code Rural D 551-23) distinguishes business POs, which take ownership of their members' production before selling it, from non-business POs, which group members without property rights transfer. In France, business POs tend to outperform non-business POs. For example in the case of the cattle sector, in 2011 the Ministry reported 65 business POs and 35 non-business POs operating, but indicated that of the 68% of PO market share, 60% of that was held by business POs (Malpel et al., 2012: 22).

To become recognized as a PO, certain membership requirements must be met. PO membership involves subscribing member-capital according to the proportions indicated in the statutes and in conformity with members' commitment (products or services). Supply contribution must be total when the co-operative is recognized as a PO. The Fruit and Vegetable Common Market Organization (CMO) makes the receipt of European aid conditional on belonging to an officially recognized PO, which has to commercialize (with some exceptions) the totality of members' production to that same PO (Deloitte, 2012). The supply-chains concerned by these regulations include meat (cattle, sheep, pork, poultry and rabbit), fresh fruit and vegetables, viticulture, tobacco, forests and dairy (Malpel et al., 2012). Furthermore, Bijman and Hanisch report that, "In the fresh fruits and vegetables industry, associations of POs (so-called APOs) are newly appearing. This development is actively supported by the EU, as many POs are too small to pose any countervailing power vis-à-vis large retailers" (2012: 21).

The legal recognition of a co-operative as a PO contributes to reinforcing its role as a market player, whose goals are to promote supply concentration and members' access to the market. It can also organize production and adapt it to demand, promote the quality of both processes and products, reduce production costs and regulate production prices. PO recognition can also help co-operatives promote innovative cultivation practices, as well as environmentally-friendly production and waste management techniques.

Recognition as a PO gives rise to challenges for co-operatives, as well as the positive outcomes described above. For instance, once a co-op is recognized as a PO, it must respect the legislation concerning POs. This means taking into account a number of criteria, such as recognition of the number of associate-members of the PO, the volume traded, technical control and the activity commitment of its members. In addition, an associate-member cannot be a member of two POs for the same product. Moreover, the necessary statutory modifications (see Art 10 of Co-operative status) must be made, and special group assemblies, in the case of multipurpose co-operatives, must be organized.

The result is that, for multipurpose co-operatives, co-operative functioning is modified by the creation of a specialized group for each product type that has received PO recognition. These groups must then be consulted for all decisions made about the product, and as well as for Ordinary and Extraordinary General Assembly decisions. This means that all decisions need to be agreed to by the PO before being validated by the General Assembly, which accepts them or not, without modifications. In fact, even in the case of Board decisions, the PO needs to be consulted beforehand.

The modes of functioning of POs are also defined by legislation. These modes are the same as for Ordinary General Assemblies, where decisions are made by a simple majority of the votes cast; however there is no need for quorum. This leads to a co-operative being organized on the basis of a PO specialized by product or trade.

The efficiency of POs is difficult to measure. No studies have as yet been dedicated to this, nor to analyzing the quantitative data or added-value created by POs. It is also difficult to determine what can be captured by the downstream sector (more than 80% of fruit and vegetables are distributed by the large retail sector). Consequently, the chances of PO success in obtaining better remuneration for farmers can be jeopardized (Malpel, et al., 2012).

The DG AGRI European Study concerning co-operatives and POs in 27 countries (Bijman, et al., 2012), underlines farmers' interest in having access to markets and improving their incomes. At the same time, the study indicates that POs and co-operatives have limited potential to improve farmers' income, due to the limited counterweight they offer to the downstream players, including processors and retailers. Local production, shorter food supply-chains and proximity relations with consumers can improve income, as can geographical labels, such as Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI) (Chever, et al., 2012).

Although the development of co-operatives is encouraged by the legislation, their growth seems to induce in owner-members the "feeling" that they are losing control over the decision-making process. In the dairy sector, for example, the organization of producers into bargaining organizations is a natural response to the dairy farmers' loss of control over their co-operative in the on-going race to reach a critical scale. At the same time, farmers are losing the protection provided by the CAP, and are increasingly feeling the consequences of imbalances in the dairy markets. These imbalances originate from the bargaining power of the retail sector in which just a handful of actors influence prices. As explained by Hanisch and Rommel (2012), farmers experiment in this case by reorganizing themselves into bargaining associations, whilst tending to withdraw their membership from large processing co-operatives. To farmers, this is a way to secure delivery rights in a time of quota abolition. Consequently, another motivation of farmers as owner-members of large co-operatives is that, if they cannot manage to keep control of the co-operative, to try, at least, to remain in the race-to-size-scenario. In this situation, the organization of new POs does not happen easily because at least some farmers want to remain aboard of large flagship enterprises playing key roles in price negotiations with traders and in price signalling vis-à-vis IOFs (Hanisch and Rommel, 2012).

3.2 Downstream negotiations: supply-chain differences

The phenomenon of higher raw material prices for consumers reflects recent changes in the balance of power between producers and retailers. While the degree of market concentration is an essential factor, the regulatory framework, degree of competitiveness and level of vertical integration also play a role in the transmission of price volatility (Besson, 2008; Chantrel et Lecoq, 2009).

Economic efficiency is even more complex. Contracts, but also marketing and retailing, exercise considerable influence on the economic performance of co-operatives and, consequently, on members' remuneration. The key point is that, as owner-members, farmers have the right to control, as well to appropriate residual earnings (Hansmann, 1996).

- *Critical size* is also invoked as a strategy to better manage price volatility. This is a major strategic issue for co-operatives that want to have greater power vis-à-vis downstream chains. But even the biggest European co-operatives find it difficult, regardless of their size, to have sufficient power to protect their added-value (Bijman, et al., 2012).

- *Quality and product differentiation, and niche market positioning* are, consequently, of particular interest. These strategies can help co-operatives to address market constraints by the creation of added-value. The emergence of new forms of relationships between producers and consumers provides a great opportunity for co-operatives, since they are well connected to their farmer-members, and also to the local territory (Filippi, 2012).

- The *development of risks* associated with volatility has contributed to the need for futures markets and hedging tools (Declerck et Pottier, 2010).

Conflicts of interest may arise as a result of the Competition Law Regulations, due to price commitments. This is why, in countries such as Denmark and the Netherlands with their co-operative monopoly markets in the dairy sector, coordination between actors over volumes and prices, (which is essential for sharing the quasi-rent), is arranged within one and the same co-operative, which vertically integrates all the links in the food supply chain. Can we then say that vertical integration provides a solution for stabilizing price fluctuations, allotting risk, and improving farmers' income?

The DG AGRI Study was unable to answer this question, since the strategies of co-operatives are intimately bound up with the different determinants cited above (Bijman, et al., 2012). In the case of dairy co-operatives, the co-operative contribution contract includes quantity, quality, and a social capital commitment by members: it is not just a simple sales contract. From co-operatives' point of view, their contractual commitments produce the same effects as those stipulated by the LMA, but by different means. With the prospect of dairy quotas coming to an end, co-operatives have arranged to collect the total milk contribution from each of their farmer-members in order to be able to better manage prices and quality via price differentiation, and to ensure better collection and processing performance. A total contribution system allows co-operatives to manage the entire dairy collection process. By controlling the various processing stages, co-operatives can ensure their opportunities for product enhancement. Future policy measures are expected to have an impact on both co-operatives and production areas.

At the same time, there is increasing pressure on co-operatives to form co-operative groups, and to develop strategic alliances to allow them to manage the increase in volumes related to the end of dairy quotas. During the next 5 to 10 years, added-value creation logic will be more related to associations between different production areas than to production and processing within one area. Product origin, food safety and environmental issues will certainly play a greater role in determining added-value.

For the meat sector, Rabobank (2010) anticipates that the international market will increase by more than 19% between 2010 and 2015. Currently, in the French pork sector, 140 specialized co-operatives collect 91% of pork butchers' products.
Co-operative organizations also differ according to region: for example, in the West we have seen mergers between Agrial and Terrena; in the East alliances are more common; and in the South we see numerous small co-operatives still operating independently. This diversity of regional configurations, which influences each region's organizational structures, illustrates a resilient response by French co-operatives to international competition, based on specific local contexts.

3.3 Faced with price volatility, is public contractualization enough?

The original question we asked in the study is: Will public contractualization indeed work to stabilize farmers' income? The answer is both yes and no. Even though contracts help protect farmers from volatility, co-operation and dialogue between producers still provides the best way to access the market and negotiate with stakeholders. Co-operative governance, at the present time, remains a key advantage (Bijman, et al. 2012).

Commitments between co-operatives and members provide the only guarantee for good governance, and help to promote strategic decision-making that meets owner-member expectations, addresses competitive market constraints and co-operatives' industrial and commercial capacities (National Federation of Dairy Co-operatives, 2013).[7] Hanisch and Rommel (2012) argue that the formation of co-operatives is the necessary response of producers to structural problems in the dairy market. While compensating for imbalances on both sides of the dairy market, producers must make a compromise when deciding on whether to join co-operatives and/or bargaining associations. Farmers cannot avoid the need to develop a critical scale of production. As they grow, co-operatives will have to introduce new structures for internal governance and control, which may stray away from the traditional co-operative principles like direct democratic control and self-management. Neither competition policy nor national anti-trust agencies have managed to prevent imbalances, thus triggering further concentration among retailers and food processors. Producers are trapped between, on the one hand, the problem of losing control over their increasingly professionalized co-operatives, and on the other hand, the problem of participating in horizontal/vertical integration and in the growth processes necessary to negotiate fair terms (Hansmann, 1996; Cook and Chaddad, 2004; Hanisch, et al., 2012; Bijman, et al., 2012).

Consequently, the formation of second tier co-operatives and strategic alliances with one or more investor-owned firms (IOFs) could provide opportunities for developing supply-chains. In this situation, a contract would be a means to better coordinate supply-chain actors, rather than an end in itself. European and French regulations seem to view agricultural co-operatives as stakeholder organizations instead of as collective organizations initiated and owned by farmers. This point of view tends to marginalize this particular ownership form.

Indeed, this reveals another ambiguity, which is the way in which public authorities regard upstream concentration. Sustaining producer organizations, be they co-operatives with or without POs, in order to give them market and negotiation power, could enter into conflict with the Policy developed by the European Competition Authority. Since the Competition Authority does not allow price and quantity agreements, it effectively precludes the possibility of allowing co-operatives the dominant market position needed to negotiate with retailers. An example of this, in the cider sector, is Agrial, which became a leader in order to better defend the interest of its owner-members: the Public Authority condemned its monopolistic position. However in the North of Europe, we see that larger co-operatives are permitted to exist, (e.g. Frieland Campesina or Arla Food), and seem to do a very good job at defending their members' rights and interests.

4. Conclusion

This article analyzes the question of how price volatility can be regulated, by undertaking a detailed review of the effects of the French Contractualization Law (LMA) on agricultural co-operatives. We conclude that the LMA focuses on organization and support for individual farmers rather than on their agricultural co-operatives. For co-operatives, the impact of this imposed contractualization is not really a key issue, because they already offer protection of farmer incomes through their own contract system, with the key differences concerning ownership rights. Multipurpose co-operatives are able to manage raw material price volatility repercussions between the food crop and animal supply-chains. When there is good co-operative governance, owner-members can be trusted to make the right decisions concerning their remuneration.

We see that the LMA does respond in part to the need to stabilize farmer incomes. However, although the LMA does favour agreements on sharing added-value, it can only solve one part of the problem. Other determinants, such as supply-chain organization or product differentiation, introduce constraints on price determination and, consequently, on farmer income. Other private contracts with industrial players or retailers could provide alternative answers to the problem of price volatility.

The choice to become recognized as a PO could offer a sustainable solution for improving co-operatives' market position, provided that these PO co-operatives are sufficiently competitive. However, the question of how farmers can be best supported in maintaining better control of their traditional co-operatives, which are evolving into increasingly large co-operative groups, becomes highly relevant. In this case, public policy has a significant role to play. Consequently, it is essential for farmers to combine both private and public forms of contractualization in order to create and sustain positive competitive dynamics.

Notes

[1] "Not all price variations are problematic, which is the case when prices move along a smooth and well established path, reflecting market fundamentals or when they exhibit a typical, and well-known seasonal pattern. But variations in prices do become problematic when they are large and cannot be anticipated and, consequently, create a level of uncertainty which increases risks for producers, traders, consumers and governments, and may lead to sub-optimal decisions. Variations in prices that do not reflect market fundamentals are also problematic as they can lead to incorrect decisions" (Hanisch and Rommel, 2012: 6).

[2] With annual variations of 300% in wheat in 2008 and 200% in corn, these fluctuations seriously affect both farm organizations and production systems.

[3] The Law was promulgated on 27th July 2010, with a decree on 31st December 2011 for the fruit, vegetable and dairy sectors.

[4] See Art 2 of Law 2010-874 of 22nd July 2010 (L 631-24)

[5] See 3rd sub-paragraph of Part II of Article L 631-24 of CRPM of Law

[6] SICA : Societé d'Interêt Collectif Agricole – Agricultural Collective Interest Society

[7] National Federation of Dairy Co-operatives: Fédération Nationale des Co-opératives Laitières; see website http://www.fncl.co-op

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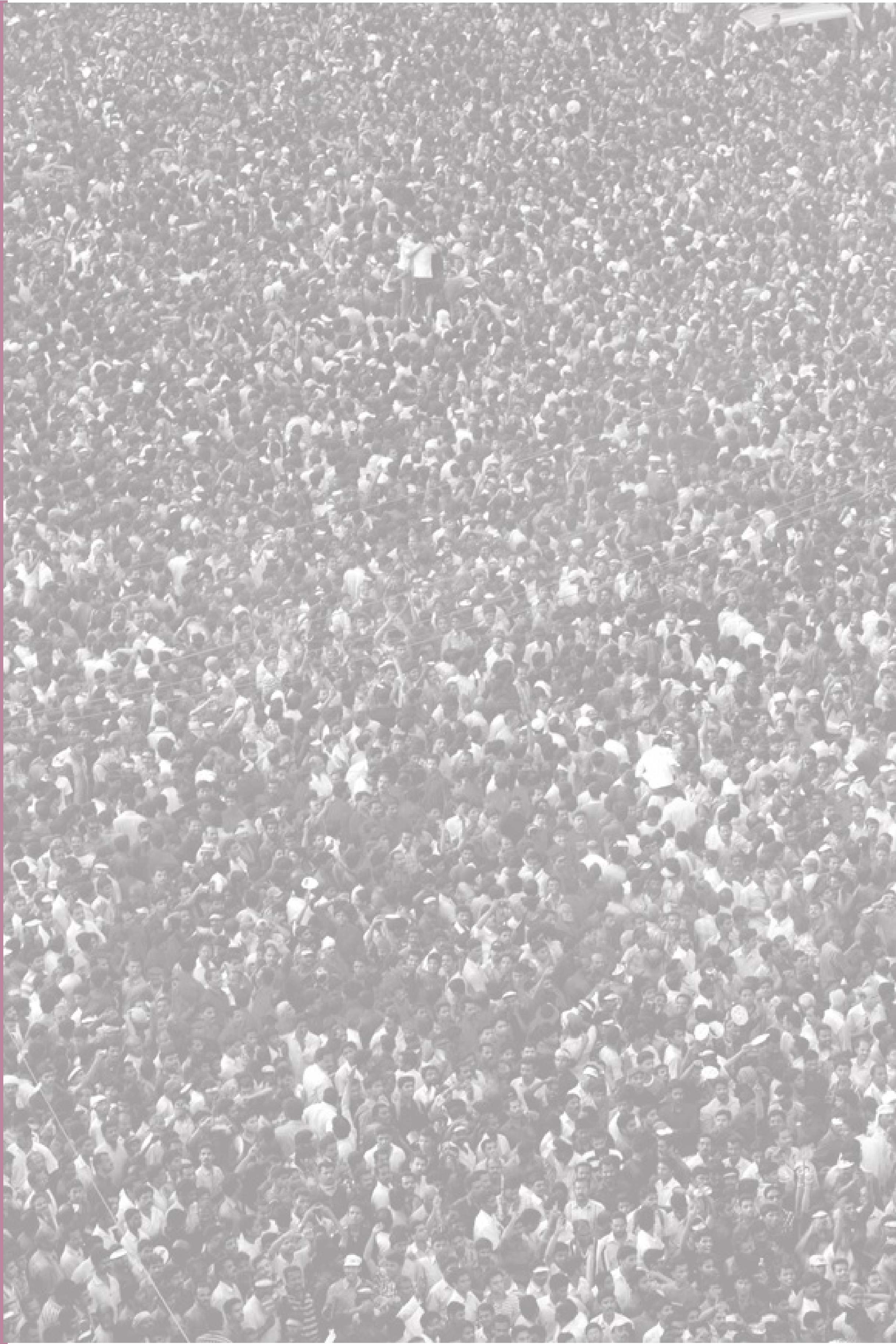

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