

# Literature Review on Co-operative Resilience in Times of Crisis

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# LITERATURE REVIEW ON CO-OPERATIVE RESILIENCE IN TIMES OF CRISIS

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Impact of COVID-19 on the Co-  
operative Sector in Canada –  
Part 1

Report prepared for:



# Literature Review on Co-operative Resilience in Times of Crisis

## IMPACT OF COVID-19 ON THE CO-OPERATIVE SECTOR IN CANADA – PART 1

### 1 | CONTEXT

The current report is the first part of a broader research inquiry into Canadian co-operative responses to the Coronavirus pandemic. The aim of the literature review is to learn and understand how co-operatives have weathered and responded to past crises. Although the focus of the overall research is about co-operatives in Canada, the scarcity of publications on their reactions to historical crises have led us to broaden our scope to include international publications. Literature reviewed includes French and English academic papers, governmental publications, and reports published by organizations focused on co-operatives. Publications devoted to social economy organizations in general have been excluded (see Appendix I for a more detailed methodology). Throughout this report, we will refer to co-operatives, understanding that includes credit unions and mutuals, unless otherwise specified.

Therefore, the report is divided into the following sections. To begin, we present the main results found in the literature with a specific interest in waves of co-operative formation in times of crises and discussions about the way co-operatives weathered the 2007 financial crisis and its subsequent economic crisis. Thereafter, we list the resilience factors identified by the authors of these publications. We conclude with proposals for future research that would deepen our understanding of the way (Canadian) co-operatives behave in times of crisis.

### 2 | CO-OPERATIVE RESILIENCE THROUGH CRISES

The notion of crisis refers to different concepts. Crises can be both circumstantial, when linked to specific events such as natural disasters, or structural when embedded in the organization of society (Demoustier & Colletis, 2012). Simply put, crises can be understood as an event or a shock combined with vulnerabilities. Crises unveil the underlying weaknesses of an organization or of a society (figure 1; Normandin, 2020). Organizations can respond to a crisis by attempting to act on revealed internal vulnerabilities or on the vulnerabilities of their stakeholders and communities. The literature rarely addresses the responses of co-operatives in times of crisis despite the numerous publications about their resilience. Therefore, in this section, we discuss the main themes emerging from the literature on co-operative resilience, namely (1) the waves of co-operative formation in times of economic crisis and (2) the lesser impact of the 2007 financial crisis, and its subsequent economic crisis, on co-operatives.



Figure 1. Conceptualization of a crisis. Reproduced from Normandin, 2020.

## 2.1 | More co-operatives are created during structural crises

Co-operatives are often said to emerge in times of structural crises in order to answer immediate needs or to alleviate unveiled vulnerabilities. Birchall & Hammond Ketilson (2009) as well as Sánchez-Bajo & Roelants (2011) describe numerous historical instances where co-operatives (and mutuals to a lesser degree) were created in reaction to difficult economic times: retail consumer co-operatives during the economic crisis of the 1840s in Britain, financial co-operatives in Germany during the agricultural depression of the 1860s, farming co-operatives during the 1930's Great Depression in the United States, co-operative housing movement in New York (US) in the 1960s, and multiple worker-owned co-operatives formed to take over businesses in Western Europe after the collapse of the Soviet Union. Co-operative solutions were also applied in recovery programmes in the aftermath of World War II in Europe and Asia to reintroduce fair systems of distribution and production, create employment, and resettle ex-combatants (Parnell, 2001). Authors also point out that waves of co-operative formation coincide with periods of great structural transformations in Quebec (Lévesque, 2012; Lévesque & Petitclerc, 2008; Malo, 2006). Indeed, "Many of today's most significant and economically powerful [co-operatives] had their origins in times of crisis and their roots in responding to the needs of people living in the harshest of conditions" (Parnell, 2001, p. 4).

Besides, some research focuses more specifically on the creation of worker-owned co-operatives which, since the 19<sup>th</sup> century, tend to increase in numbers during recessions (both as start-ups and takeovers) in countries where there is a strong level of co-operative embeddedness (Birchall, 2017). Smith & Rothbaum (2013) draw attention to a study about co-operative rescues of bankrupt or declining firms during a high unemployment period in France led by Estrin (1985). The study finds that 63% of jobs created in the late 1970's and early 1980's were due to rescues by co-operatives. The *empresas recuperadas*, formed in the aftermath of the 2001 crisis in Argentina, are also well-known examples of worker-owned co-operatives formed from failing businesses (Howarth, 2007; Vieta, 2014; Ruggeri & Vieta, 2015).

In fact, Pérotin (2006) confirms, through a statistical analysis of SCOPs<sup>1</sup> in France from 1979 to 2002, that co-operative creations are countercyclical. That is to say that they emerge in greatest numbers in times of economic recession. The author notes that an increase of 1% in unemployment results in a 5-10% increase in co-operative creations, and that longer periods of unemployment translate into higher co-operative creations. Actually, more co-operatives are created when unemployment rises, economic growth is lower, and interest rates and profit prospects are lower. This contrasts with conventional business creation, which is associated positively with economic growth and negatively with unemployment. Pérotin (2006) also mentions that while co-operative creations are more countercyclical, no statistically significant difference is found in the effects of the business cycle variables on co-operatives' and conventional firms' exit, which means that in times of economic crisis, the closures of co-operatives and conventional firms do not differ significantly.

## 2.2 | The resilience of co-operatives in the face of 2007 financial crisis and subsequent economic crisis

The last financial crisis (2007) and the resulting economic crisis (2008-2009<sup>2</sup>) led co-operative associations and researchers in co-operative studies to take greater interest in their effects on co-operatives. Since these crises have had a less pronounced impact in Canada than in other countries (Gordon, 2017), studies about the resilience of co-operatives during these difficult times mainly concern those operating in Europe. In this section, we present some of the results disclosed in these studies.

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<sup>1</sup> Société coopérative de production

<sup>2</sup> These years may vary depending on the countries (Gordon, 2017).

## Financial Co-operatives

Financial co-operatives are constituted as co-operative banks, mainly present in Europe, and credit unions, which is the most common model in North America and other countries (Birchall, 2013). In general, research indicates that financial groups with co-operative status have had more stable returns and have better weathered the crisis than groups with shareholder ownership including during this last financial crisis (Birchall & Hammond Ketilson, 2009; Groeneveld & de Vries, 2009; Birchall, 2013; Bazot, Jeffers & Ouyahia, 2019; Hesse & Čihák, 2007; Lemzeri, Jaeger & Ori, 2012; Chiaramonte, Poli & Oriani, 2015).

Before the crisis, financial cooperatives were competing successfully against investor-owned banks. During the crisis, in general they were not badly affected, though losses were made by central banks in several countries. These were mainly due to investment in derivatives that, before the crisis, had been passed by the rating agencies as safe. Only in a few places did these central banks have to accept government assistance, and rather than being allowed to fail, weaker cooperatives were mainly taken over by stronger ones. Most of the losses incurred were made up quite quickly, within a year or two, though in some countries primary cooperatives had to bail out their centrals. Now, after the crisis, nearly all the indicators show that they have bounced back and are growing again, though not at the same pace as before the crisis; the worldwide economic slowdown and the Euro crisis are to blame for that. There must be something about the customer-owned business model that makes it so resilient in a downturn. (Birchall, 2013, p. 32)

In fact, during the last financial crisis, European co-operative banks generally displayed stable profit growth, relatively limited write-downs, increased customers, strong capitalization, and none of them fell to nationalization programmes nor declared bankruptcy (European Association of Co-operative Banks (EACB), 2010; Bazot et al., 2019; Birchall, 2017). They build-up counter-cyclical buffers, namely reserves, that function well in a crisis (Sánchez-Bajo & Roelants, 2011; Groeneveld & de Vries, 2009; Birchall, 2013). These results varied from one country to another depending on the institutional systems in place (Bazot et al., 2019), and some co-operative banking groups experienced serious setbacks with subsidiaries active in the highly speculative markets (Ouchene, 2015). For example, Jaeger, Lemzeri & Ory (2016) observe that the financial performance indicators of French co-operative banks characterized by a high level of hybridization<sup>3</sup> were not significantly different from joint-stock banking groups, both before and during the financial crisis. As noted by Ouchene (2015), this seems to reveal (1) the risks linked to high hybridization of the organizational structures of co-operative banks, and (2) the incompatibility between the objective of optimal return on equity for the benefit of shareholders and respect for co-operative values which condition trust and loyalty of members. Bazot et al. (2019) found, on the other hand, that European systemic co-operative banks<sup>4</sup> have been more stable than non-co-operative ones, while indicating that non-systemic co-operative banks did not display a significantly different performance from non-systemic banks. Overall, based on comparisons of key financial figures and measures of banking stability with commercial banks, the co-operative banks seem to have a beneficial influence on the stability of national financial systems (EACB, 2010), when above a certain market share threshold (Chiaramonte et al., 2015).

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<sup>3</sup> Hybridization refers to organizational and governance changes made in co-operative banking groups, leading to an increased internal control transferred to apex organizations and to stockholders of the co-operative's subsidiaries (c.f. Ory & Lemzeri, 2012).

<sup>4</sup> Defined as those whose "disorderly bankruptcy, due to their size, complexity and systemic interconnection, would cause significant disturbances to the financial system as a whole and to economic activity" (Banque de France, 2021).

In Canada, financial co-operatives consist of credit unions, in which customers are also members<sup>5</sup> (Birchall, 2013). Approximately 460 credit unions are serving more than 12 million members across Canada (Omololu, 2020). Most provinces have a central bank or a federation, which is owned by the credit unions and operates at the provincial level, providing financial and technological products and services and managing liquidity and investment for the individual credit unions (Birchall & Hammond Ketilson, 2009). Although Desjardins Group and SaskCentral both had significant losses on their investments during the financial crisis (Birchall, 2017), Desjardins Group remained a dominant player in Quebec with a 39.3% market share in residential mortgage credit, 46.9% in farm credit, and 43.9% in personal savings. Credit unions in Saskatchewan reported their highest ever net income and total assets in 2008 (Birchall & Hammond Ketilson, 2009). Similar situations have been observed in Manitoba, where the 48 credit unions saw their assets, loans, and deposits increase by 10% in 2008. In British Columbia, credit unions' earnings increased by 10% to reach an all-time high for the province (Birchall & Hammond Ketilson, 2009). Thanks in part to its co-operative structure - represented by its network of local *caisses* generating nearly 75% of Desjardins Group's surpluses - the latter weathered the financial crisis and recovered fairly quickly announcing, in 2010, historical surpluses of C\$1.4 billion (Ouchene, 2015). It also allowed Desjardins Group to repurchase from its members toxic assets attached to shares they acquired from non-banking investors. In 2010, Desjardins Group was ranked 26<sup>th</sup> among the 50 safest financial institutions in the world, 4<sup>th</sup> in North America and the 1<sup>st</sup> co-operative financial institution to be recognized as the banking institution of the year in Canada (Ouchene, 2015).

The credit union model is also common worldwide: 51,013 credit unions exist in 100 countries, serving 196.5 million members (Birchall, 2013). According to the World Council of Credit Unions, not a single credit union anywhere in the world received government recapitalization as a result of the financial crisis; meanwhile they remained well-capitalized (Crear, 2009). Only in a few instances did central co-operative banks or federations have to accept government assistance (Birchall, 2013). Moreover, the worldwide picture of credit unions is one of growth from 2007 to 2010 (figure 2).

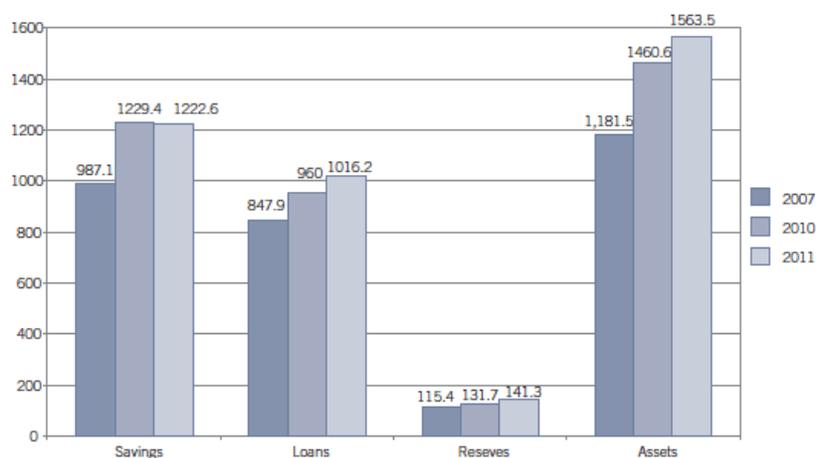


Figure 2. Credit unions during and after the financial crisis: World totals in millions US\$.  
Reproduced from Birchall, 2013, p. 28.

All around the world, the stability and the perceived transparency of financial co-operatives led to a resurgence in their popularity, from the start of the financial crisis. Many of them observed an increase in their membership. This is the case with Desjardins Group in Quebec, and with many other credit unions and co-operative banks (Ouchene, 2015; Birchall, 2013).

<sup>5</sup> This is not the case in co-operative banks, which can serve both members and non-members (Birchall, 2013).

### Insurance Mutuals and Co-operatives

Insurance mutuals and co-operatives have also benefited from a resurgence of popularity since the financial crisis, mostly attributed to a greater level of trust and satisfaction, the disillusion with shareholder-owned companies, and the ability of insurance mutuals and co-operatives to take a longer-term view to protect the interests of members/policyholders (Birchall, 2017). They grew from a market share of 23.4% in 2007 to 27.3% in 2013 (Birchall, 2017) and still held 26.7% of the global market share in 2017 (ICMIF, 2020). In parallel, premium incomes of the global mutual insurance sector grew by 30% between 2007 and 2017 compared to 17% for the global insurance industry (ICMIF, 2020).

Globally, the mutual sector (5,100 mutual and co-operative insurers worldwide) registered positive annual growth in nine of the previous 10 years from 2007-2017 (ICMIF, 2020). From 2012 to 2017, the number of their members/policyholders increased by a total of 13% resulting in 922 million members/policyholders around the world in 2017. Furthermore, a total of 1.16 million people were employed by mutual and co-operative insurers in 2007, an increase of 24% since 2007 (ICMIF, 2020). In Canada, 110 active mutual and co-operative insurers employed 32,529 people in 2017 and held 19.4% of the market share, mostly in non-life insurance (ICMIF, 2020). The Canadian mutual sector, and many other national markets, saw its total assets more than double in value from 2007-2017 (ICMIF, 2020).

### Retail consumer, housing, & worker-owned co-operatives

What was first a financial crisis in 2007 quickly transformed into an economic crisis. Relatively unaffected at the onset of the financial crisis, some non-financial co-operatives soon began to feel its indirect repercussions. Besides the growing pressure to lower prices in response to the stagnant or falling income of their members/customers, **retail consumer co-operatives** throughout Europe were substantially affected by the economic crisis, as was the whole distribution sector (Birchall, 2017; Sánchez-Bajo & Roelants, 2011). Nevertheless, according to Sánchez-Bajo & Roelants (2011), their percentage of sales and their membership numbers increased during this period. In North America and in Europe, retail consumer co-operatives achieved modest growth during the financial crisis (Webb & Cheney, 2013).

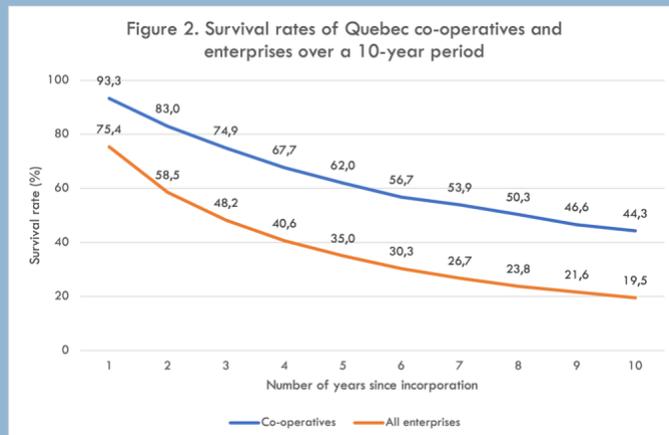
**Housing co-operatives** also achieved a modest growth during the financial crisis in North America and in Europe (Webb & Cheney, 2013). Rental housing co-operatives resisted the crisis better than ownership housing co-operatives, mostly because of the shortage of mortgage loans and the fall in asset values that affected the housing market (Sánchez-Bajo & Roelants, 2011).

Housing cooperatives, whether organized around home rental or ownership, considerably contribute to avoiding housing bubbles such as that of the sub-primes in the USA, by providing decent and inclusive housing to millions of people. It is probably no coincidence that housing crises have been weaker or non-existent in countries where the housing cooperative system is particularly strong, such as Germany or Norway. (Sánchez-Bajo & Roelants, 2011, p. 217)

As observed in prior crises, **worker-owned co-operatives**, both as start-ups and takeovers of ailing businesses, increased in number in some countries (Eum, Dovgan & Terrasi, 2012). Successful transfers of businesses to the employees under worker-owned co-operatives, with net job salvation, intensified during the crisis especially in southern Europe and South America (Sánchez-Bajo & Roelants, 2011). In France, 263 worker co-operatives were created between 2009 and 2013 (Birchall, 2017). In the United Kingdom, the number of worker co-operatives rose from 373 in 2007 - with 1,649 workers - to 541 in 2011 - with 1,940 workers (Eum, 2012). In Nordic countries, such as Sweden and Finland, the number of worker-owned co-operatives gradually increased and start-ups among them were higher than for other types of start-ups in 2011 (Eum et al., 2012). In Spain, worker co-operatives experienced a rapid fall in the number of enterprises and jobs in 2009, indicating a slowdown in the decrease of number of co-operatives and a net increase in employment since 2010 (Eum, 2012).

## Survival rates of co-operatives

While survival rates are not directly related to the resilience of co-operatives in times of crisis, it is interesting to note that studies about co-operatives' early survival rates all mention it as higher than for conventional enterprises. In their latest study based on Quebec co-operatives founded between 1995 and 2002, Clément & Bouchard (2008) observe that co-operatives have a higher early survival rate than conventional enterprises (figure 3).



Source: Clément & Bouchard, 2008

Similar results are found in two other Canadian provinces. In British Columbia, the 5-years survival rate for co-operatives created between 2000 and 2010 is 100 out of 150 co-operatives (66.6%) (Murray, 2011). In Alberta, the 3-years survival rate for the 127 co-operatives incorporated in 2005 and 2006 is 81.5% compared to 48% for conventional firms (Stringham & Lee, 2011).

Moreover, according to data obtained through a governmental survey sent to Canadian SMEs, the average age of co-operatives is 43.5 years compared to 16.7 years for all SMEs and nearly 71% of all co-operatives are over 20 years (Egbers, Rivet-Crothers & Huang, 2019).

Co-operatives UK (2019) indicate that 84.9% of the co-operatives incorporated in 2009 are still active 5 years after their birth, while 41.7% of conventional enterprises are. Similar survival rates are observed for co-operatives and conventional enterprises incorporated in 2010 (81.9% vs 41.4%) and in 2011 (80.4% vs 44.1%).

Finally, Monteiro & Stewart (2015) analyzed co-operatives and conventional enterprises in Portugal, based on the ones active between 1995-2007. Not only did they find that, at every age point, co-operatives have a higher cumulative probability of survival, but they also observed that co-operatives are, on average, just over 25 years compared to less than 12 years for conventional firms.

The economic crisis, which is rooted in the financial system, has worsened the financial environment of [worker-owned co-operatives]. All of them face difficulties in negotiating loans with banks. Nevertheless, the direct impact is less severe for cooperatives from our network than for conventional enterprises since they are able to rely on their own resources rather than being dependent on external financial resources. In some countries, if necessary, they have access to mutualized support institutions, such as nonbanking financial cooperative instruments. (CICOPA, 2010)

The economic crisis more seriously affected worker-owned co-operatives in sectors that mainly depend on the performance of other enterprises such as manufacturing, construction, and business services leading to some job cuts and, in a few instances, closures (CICOPA, 2010). Worker co-operatives in Central and Eastern European countries – more dependent on industrial sectors - lost up to 20-30% of co-operatives and workers (Eum, 2012). Nevertheless, worker co-operatives demonstrate their advantage by laying off fewer workers than conventional enterprises in times of recession (Birchall, 2013). For example, where Mondragon co-operatives are located, the unemployment rate remained below 5% compared to >35% in the rest of Spain (Larrasquet, 2012). According to Davis (2021), worker-owned co-operatives retain about 45% more employees than conventional enterprises during sustained periods of low revenue. In 2009-2010, the percentage of job losses and the number of closures of co-operatives, as well as their level of indebtedness, remained lower than the corresponding figures for conventional enterprises of similar size, industry, and region (CICOPA, 2010; Birchall, 2017; Sánchez-Bajo & Roelants, 2011). Most of the reported closures were worker co-operatives already facing problems before the economic crisis (CICOPA, 2010). Worker co-operatives organized in group structures, such as federations or groups, and those with the strongest level of reserves also better withstood the crisis (Birchall, 2017; Sánchez-Bajo & Roelants, 2011).

### 3 | CO-OPERATIVE RESILIENCE FACTORS

Resilience, at the organizational level, “is the measurable combination of characteristics, abilities, capacities or capabilities that allows an organization to withstand known and unknown disturbances and still survive” (Ruiz-Martin, López-Paredes & Wainer, 2018, p. 21). Thus, resilience factors are the measures put in place inside co-operatives in various fields (Eum, 2012). Most of the organizational resilience factors found in this literature review (table 1) are related to the specific structure of co-operative enterprise model, which can be organized according to three main differentiating features (Novkovic and Miner 2015; Miner and Novkovic 2020).

**People-centered (as opposed to capital-centered)** governance and management assumes people are intrinsically motivated social beings capable of balancing personal and group interests in accordance with general moral principles. Co-operatives, in this view, embrace a balance of objectives (including financial) and tend to involve or consider key stakeholders in their decision-making process.

**Joint ownership and control (distributed, rather than concentrated)** is a hallmark of co-operative organizations, and it is intertwined with members as owners, controllers, and beneficiaries. Although typically operating under private property regimes, co-operatives distribute ownership rights equally among their members and may hold a part of their assets in non-divisible reserves.

**Democratic governance based on one member, one vote (rather than wealth-based)** - self-governance is the underlying engine of autonomous co-operative enterprises, with the vital component being democratic decision-making by their members as a *personal-member* right rather than a property right.

Although co-operatives might share similar resilience factors at the organizational level (micro-level), one should be careful in over-generalizing these conclusions. Firstly, all recessions and crises are not the same. They can vary in severity and causes, and thus, in their impact on and implications for co-operatives. For example, “in the 1930s consumer co-operatives were promoted in the USA as an answer to a recession caused by under-consumption, while in the [2008-2009] recession we face the opposite problem of consumer indebtedness and it is co-operative banks that are getting attention” (Birchall, 2013, p.2). Second, the resilience factors presented do not all apply to every type of co-operatives in every sector. In other words, resilience factors are influenced by, among others, the type of co-operative (consumer, worker, producer, multistakeholder), their size and maturity, their internal practices, their sector (finance, insurance, retail, industry, agriculture, social services, etc.), the surrounding local and co-operative networks, the legal framework, and the type of crisis (health, financial, sectoral, multifaceted, etc.). Table 1 presents the resilience factors identified in the literature, respective of their specific contexts – therefore some of these factors are listed more than once.

Table 1. Co-operative resilience factors identified in the literature<sup>6</sup>

Co-operative resilience factors	Authors
<b>Financial co-operatives during 2007 financial crisis</b>	
<u>Type of ownership</u> <ul style="list-style-type: none"> <li>▪ Member-owned: tend to be more risk-averse</li> <li>▪ Not driven by profits or shareholder interests</li> <li>▪ Local co-operatives scrutinize the decisions of federations</li> </ul>	Birchall & Hammond Ketilson, 2009
<u>Methods of capitalization</u> <ul style="list-style-type: none"> <li>▪ Strong in retail banking</li> <li>▪ Direct link of savings and loans as a moral constraint</li> <li>▪ Not reliant upon capital markets for funding</li> <li>▪ Tend to retain their profits and take fewer risks – higher capital reserves</li> </ul>	

<sup>6</sup> No factors were suggested to explain mutuals’ resilience in the literature, which explains why it is not mentioned in the table.

Co-operative resilience factors	Authors
<ul style="list-style-type: none"> <li>▪ Double quality of members: diminish dependency on outside financing, lead to sharpen risk awareness and strengthen governance mechanisms</li> <li>▪ Tend to invest in real economy, mainly in their proximity</li> </ul>	Fazzlo, 2009
<ul style="list-style-type: none"> <li>▪ Balance between generation of profits and consideration of stakeholders</li> <li>▪ Absence of shareholders: more flexibility and resilience</li> <li>▪ No shares on the financial market: not subject to unsolicited takeovers or speculative maneuvers</li> <li>▪ Geared towards long-term goals</li> <li>▪ Comparative informational advantage – commitment and involvement of members (note: may be lost as the co-operative grows in size)</li> <li>▪ Lower cost of capital: limited remuneration of shares</li> <li>▪ Solid position in the retail market</li> <li>▪ Local co-operatives contributing to financial stabilization of the federation</li> <li>▪ Ability to mobilize and accumulate deposits</li> <li>▪ High level of trust from consumers: member-owned not just looking for profit maximization</li> <li>▪ Co-operative culture remaining dominant despite the emergence of a “commercial” culture</li> </ul>	Ouchene, 2015
<b>Various type of co-operatives during and after the 2007 financial crisis</b>	
<ul style="list-style-type: none"> <li>▪ Reinforced horizontal control through co-operative practices</li> <li>▪ High degree of legitimacy, reinforced by previous investments in human resources and information flows: rapid decision-making</li> </ul> <p><u>Related to co-operative rationale and standards</u></p> <ul style="list-style-type: none"> <li>▪ Enterprise subordinated to the association</li> <li>▪ Relation to the surrounding environment: close to the community and members, inter-cooperation</li> <li>▪ Internal functioning: democracy, training, and education</li> <li>▪ System of financial accumulation and distribution: contribution to and remuneration of capital, surpluses returned to members, reserves</li> <li>▪ Co-operative shares not marketable</li> <li>▪ Accounting: book value instead of fair value for financial reporting</li> <li>▪ Stabilized prices through surplus redistribution to members</li> </ul>	Sánchez Bajo and Roelants, 2011
<b>Worker-owned co-operatives during 2008-2009 economic crisis</b>	
<p><u>General</u></p> <ul style="list-style-type: none"> <li>▪ Participation of members in management of the co-operative</li> <li>▪ Build-up of reserve funds</li> <li>▪ Connection with territorial needs and participation of the community</li> <li>▪ Capacity to organize and follow-up business transfers to employees</li> <li>▪ Mutual aid, horizontal groups, and consortia</li> </ul> <p><u>Micro-level (individual co-ops)</u></p> <ul style="list-style-type: none"> <li>▪ Capacity to mobilize members’ participation</li> <li>▪ Capacity to mobilize the participation of the wider community (esp. social co-ops)</li> </ul> <p><u>Meso-level (mobilisation of mutual aid among co-ops)</u></p> <ul style="list-style-type: none"> <li>▪ Existence of business support entities (training, consulting, financing) owned and controlled by the national co-op movements</li> <li>▪ Development of horizontal groups, consortia, networks among co-ops</li> </ul> <p><u>Macro-level (favourable environment)</u></p> <ul style="list-style-type: none"> <li>▪ Presence of co-ops in a substantial part of the economy</li> <li>▪ Existence of a conducive legal framework – e.g., making indivisible reserves compulsory, establishing non-banking financial instruments, public policies promoting co-ops</li> </ul>	Eum, 2012

Co-operative resilience factors	Authors
<p><u>Embedded in the nature of the worker co-operatives</u></p> <ul style="list-style-type: none"> <li>▪ Comparatively less pressure to maximize profit</li> <li>▪ Democratic and dynamic decision-making structures</li> <li>▪ Marriage of labor and capital with social purpose</li> <li>▪ Connections to member and community needs</li> </ul> <p><u>Others</u></p> <ul style="list-style-type: none"> <li>▪ Market fit</li> <li>▪ Strength and persistence of value commitments</li> <li>▪ Collective engagement in strategic planning</li> <li>▪ Presence and reproduction of capable and inspiring leadership</li> <li>▪ Pursuit of diversified training</li> <li>▪ Strong capable co-operative development mechanism</li> </ul>	<p>Webb &amp; Cheney, 2013</p>
<b>Forestry co-ops (worker co-ops) during forestry crisis in New Brunswick (2004)</b>	
<ul style="list-style-type: none"> <li>▪ Founder and member leadership</li> <li>▪ Workers' loyalty and commitment</li> <li>▪ Sectoral and cross-sectoral networking</li> <li>▪ Resilience of workers and administrators</li> <li>▪ Sense of identity and belonging of the community with respect to the business</li> </ul>	<p>Leclerc et al., 2014</p>
<b>Historical comparison of Quebec's and Saskatchewan's co-operative movements</b>	
<ul style="list-style-type: none"> <li>▪ Concertation (concerted action) between co-operative sector, social movements, and state actors</li> <li>▪ 7 pillars benchmark of development action: <ul style="list-style-type: none"> <li>- Sector leadership</li> <li>- Promotion and outreach</li> <li>- Public policy</li> <li>- Solidarity and co-operative finance</li> <li>- Technical assistance</li> <li>- Sector development</li> <li>- Co-operative research</li> </ul> </li> </ul>	<p>Diamantopoulos, 2011</p>
<b>Factors explaining higher early survival rates of co-operatives</b>	
<p><u>Inherent to co-operative model</u></p> <ul style="list-style-type: none"> <li>▪ Purpose: member service rather than return on capital leading to different business decisions</li> <li>▪ Double quality of members: owners and users</li> <li>▪ Democratic governance and accountability to members</li> <li>▪ Group of promoters and anchoring in the community</li> </ul> <p><u>Related to history and business environment</u></p> <ul style="list-style-type: none"> <li>▪ Strong presence in basic economic sectors (e.g., agriculture, forestry, housing, etc.)</li> <li>▪ Support from 1st and 2nd tier organizations</li> </ul>	<p>Clément &amp; Bouchard, 2008 (Quebec)</p>
<ul style="list-style-type: none"> <li>▪ Lines of activities in which the risk is lower</li> </ul>	<p>Monteiro &amp; Stewart, 2015 (Portugal)</p>
<ul style="list-style-type: none"> <li>▪ Co-operatives operating in the same field as other existing co-operatives</li> </ul>	<p>Stringham &amp; Lee, 2011 (Alberta)</p>
<ul style="list-style-type: none"> <li>▪ Co-operative density – importance of support structures for co-operative entrepreneurship</li> </ul>	<p>Pérotin, 2006 (SCOPs, France)</p>

As Eum (2012) points out, the inherent characteristics of the co-operative model (micro-level) are not sufficient to ensure they better weather crises. Reinforcing factors and measures, at the meso (associations, 2<sup>nd</sup> tier organizations, etc.) and macro levels (policy), are also required to ensure their resilience. The meso-level measures relate to cooperation among co-operatives (and other stakeholders) at the local, regional, and national levels through the creation of business support institutions, groups, consortia, federations, etc. The macro-level measures refer to public policies and legislative framework enabling the development of co-operatives and international cooperation among co-operative federations. In sum, the organizational resilience factors (micro-level) are reinforced by networks and cooperation among co-operatives (meso-level) as well as by policies and economic trends (macro-level) (Eum, 2012). As shown in table 1, some authors identify meso and macro-levels measures as contributing to co-operative resilience.

Given that all individual cooperatives are founded on the same cooperative values and operational principles and that [...] not all of them are resilient to the crisis in the same fashion, we could hypothesize that cooperative-specific characteristics are particularly effective when micro, meso and macro level characteristics are combined, and that the inherent advantages of the cooperative model at the micro-level are not sufficient to overcome the large-scale economic recession in the ongoing crisis: therefore measures at the meso and macro level would be important in order to strengthen the advantages of the cooperative model at micro level. (Eum 2012, p. 16)

## 4 | CONCLUDING REMARKS ON THE LITERATURE REVIEW

As part of a larger research about the impact of the Covid-19 on Canadian co-operatives, this literature review highlighted that co-operatives are generally resilient organizations during times of crisis. Some factors, listed by various authors to explain that resilience, were also included. Resilience of co-operatives is generally discussed at the micro (organizational) level, while the reinforcing factors, at the meso and macro levels, are less covered.

The ways in which co-operatives respond to crises are seldom analyzed. This should be the object of further research. Based on the organizational resilience theory, response mechanisms can be implemented before (anticipation), during (coping), and after (adaptation) an unexpected event (such as a crisis) in order to prevent, mitigate the effects, and learn from it (Duchek, 2020). In this sense, it would be relevant to understand if and how:

- some characteristics inherent to the co-operative model, as member-owned and controlled organizations based on the co-operative values and principles<sup>7</sup>, help to prevent or reduce the effects of unexpected events (anticipation);
- co-operatives and their networks respond to unexpected events by measures ensuring not only their immediate survival, but also answering members' and community needs (coping);
- collective learning, among co-operatives and within sectoral or regional networks, can reinforce co-operative organizations over time (adaptation).

Finally, we present avenues for future research, based on certain gaps or suggestions from the literature review.

### Co-operative Statistics

- There is a very clear need for more current, specific, and systematic statistics specifically on co-operatives in order to differentiate them from: 1) other social economy organizations and 2) SMEs -

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<sup>7</sup> As stated in the Statement on Co-operative Identity (International Co-operative Alliance, 2018).

and to be able to understand their specificities (survival rates, longevity, etc.). Very few documents, in the Canadian context, rely on quantitative and systematic data to demonstrate co-operative resilience or to document crises' effects on co-operatives. The most recent results regarding the higher early survival rates of co-operatives in Quebec, Alberta, and British Columbia are not recent enough to reliably describe the *current* situation of co-operatives in those provinces.

- Since 1970, publications often include co-operatives within the broader social (and solidarity) economy sphere. Hence, it is more difficult to obtain results specific to co-operatives. This points to the value in developing mechanisms that allow researchers to disaggregate co-operatives from other business models within the national statistical data and academic literature.

### Practical strategies

- Few articles discuss the practical ways in which co-operatives respond to crises in terms of anticipation, coping, and adaptation except for some specific examples, such as Desjardins (communication, restructuring, reliance on local co-operative network; Ouchene, 2015) and worker co-operatives in 1990 in Quebec (innovative strategies corresponding to the co-operative spirit and investor-owned firms' inspired strategies (Comeau, 1994).
- A better understanding of co-operative strategies to anticipate, cope with, or adapt to crises might contribute to explain their longevity and higher survival rates.
- The role co-operative associations and networks play in building resilience needs to be better understood. Specifically, the types of networks, co-operation among co-operatives, and inter-co-operative support in operations, finance, and governance needs to be explored. The impact of legal framework and policies on the co-operative resilience should be explored as well.

### Community resilience

- Many articles discuss the contribution of co-operatives to economic and community resilience (Cooperatives Europe, 2019; Sánchez-Bajo & Roelants, 2011; Lévesque, 2012; Delgado, Dorian & Laliberté, 2014; Parnell, 2001). However, most of them present the role and potential of co-operatives for community resilience in developing countries neglecting the contribution of co-operatives to the resilience of communities in developed countries.
- As Birchall (2013) suggests, co-operatives can provide advantages “not just to their existing members but to potential members, to the economic sector they are in, and to the wider society in which the economy is embedded” (p.3). Research demonstrating co-operative capacities and potential to “enhance the ability of the affected population and the indirect beneficiaries to cope with the crisis and to prevent or reduce the impact of a crisis” (Parnell, 2001: 4) would allow stakeholders and public policies to take this aspect of resilience role into consideration.

“Whereas cooperatives are important to the economy for what they directly contribute in terms of common goods, wealth, jobs, resilience, sustainability and fair redistribution of resources, they are perhaps even more important for their indirect role, as concrete sources of inspiration for policy making and economic practice.” (Sánchez Bajo & Roelants, 2011, p.220-221)

### Mutuals

- Almost no publications were found about Canadian or international mutuals' resilience or survival rates.
- In the case of the current health crisis, the role of mutual insurance could be key for community resilience, and thus should induce more research efforts in that sector.

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## APPENDIX 1. METHODOLOGY USED FOR LITERATURE REVIEW

The methodology used to carry out this literature review is inspired by that of Ruiz-Martin et al. (2018). Here, we detail our methodology based on main steps suggested by the authors.

### Step 1. Defining research questions

To explore co-operative resilience in times of crisis, we based our research on the following questions:

- What is mentioned about (Canadian) co-operatives and mutuals in times of crisis in the literature?
- What are the main factors identified to explain the co-operatives' and mutuals' resilience – in general and in times of crisis?
- What are the effects of the co-operatives' and mutuals' responses on the organization and on their stakeholders?

We expected the documents surveyed to answer one or more of these questions.

### Step 2. Defining search criteria

We conducted our research for publications following these principal criteria:

- Our search terms, both in French and in English, aimed to find publications on responses, resilience or creation of co-operatives or mutuals in times of crisis. We focused first on Canadian co-operatives and mutuals. Then, considering the few relevant publications on Canadian co-operatives and mutuals in times of crisis, we did the same search without specifying any country.
- Academic databases searched: Google Scholar, CAIRN, Érudit, EBSCO, ProQuest
- Websites searched: Google, International Co-operative Alliance, International Labour Organization
- No period restriction

### Step 3. Defining inclusion criteria

By relying on a rapid evaluation of publications from their summary, our search returned 96 results. We kept only the publications that met the following criteria:

- Co-operatives or mutuals as main object
- Resilience or responses to crises as angle of analysis
- Accessible

The final number of publications was 36 at this stage.

### Step 4. Validating search results

After our first search in databases, we looked up the relevant references mentioned in selected publications. We also added “survival rates” in our search terms, since some authors refer to these when discussing co-operative resilience. In total, 41 publications were analyzed.

### Step 5. Analyzing selected papers

We analyzed the papers in relation with our research questions:

- Two major themes emerged from our analysis: (1) the waves of creation of co-operatives in times of economic recession; (2) co-operatives' and mutuals' resilience during the 2007 financial crisis and its subsequent economic crisis. With rare exceptions, papers did not discuss specifically the resilience or responses of co-operatives in the face of other historical crises.

- Resilience factors: To answer this question, we looked at the reasons put forward by the authors to explain co-operative resilience. Considering that resilience factors mentioned by authors are related to specific contexts, we were unable to group them into categories without losing important information. Therefore, we listed them according to the types of co-operatives and crises.
- Effects: Almost no publications refer to co-operatives' responses to crisis. Therefore, there is also almost no mention of the (internal and external) effects of the co-operatives' responses on their organizations and stakeholders, except for the fact that they generally perform well and try to maintain jobs in times of crises. Therefore, we did not go further in our analysis of co-operatives' responses or effects.