

CANADIAN CENTRE FOR THE STUDY OF CO-OPERATIVES (CCSC)

Efficiency and Autonomy? Recasting the Credit Union Merger Debate

Author(s): **Marc-André Pigeon**, *CCSC Director and Assistant
Professor, Johnson Shoyama Graduate School of Public Policy*

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JOHNSON SHOYAMA
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Canadian Centre for the Study of Co-operatives
101 Diefenbaker Place
University of Saskatchewan
Saskatoon SK Canada S7N 5B8
Phone: (306) 966-8509 / Fax: (306) 966-8517

E-mail: coop.studies@usask.ca

Website: <http://www.usaskstudies.coop>

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1.0 INTRODUCTION

COVID-19 has, by all accounts, helped the credit union system gain a renewed appreciation for the benefits of working collectively through their second-tier organizations (i.e., centrals), and informally, with each other. Whether it was lobbying through the Canadian Credit Union Association to get broad-based credit union access to the Canada Emergency Business Account (CEBA), working through their centrals to develop processes and protocols around CEBA, or assembling for Zoom calls to share best practices, the system has by all accounts pulled together *as a system* in a way that it hasn't in a long while.

Prior to the crisis, the situation looked very different. The pressures were centrifugal instead of centripetal, threatening to pull the system apart, as documented in an earlier Canadian Centre for the Study of Co-operatives (CCSC) publication ("Regulatory Disruption: A Guide for Credit Union Boards," available [here](#)). Consider:

- Two credit unions had already made the leap to federal jurisdiction, with implications for their centrals. Two others were on their way to federal incorporation. Still more credit unions were giving the federal option serious consideration. These dynamics threaten the viability of centrals, whose remaining large credit unions may resent carrying the costs of services largely for the benefit of a shrinking number of small credit unions.
- Payments modernization posed challenges to the centrals and their historically privileged relationship with Payments Canada and the Bank of Canada.
- There was, and continues to be, a growing divide between prairie credit unions and the rest of the system around modernizing banking platforms and payments functions.
- The looming implementation of open banking — a policy that gives users ownership of their data — promised to erode the provincial operating boundaries that have long constrained competition among credit unions.
- Meanwhile, growing competition from startup financial technology firms — and the big banks that have spent billions modernizing their offerings — was putting pressure on credit unions to merge, if only to obtain the scale needed to make necessary technological

investments, further upsetting the traditional relationship between historically large centrals and their smaller credit union members. Increasingly, the situation is reversed

- Collectively, these and other forces were setting off internal dynamics that put at risk the structures and arrangements that have served the credit union system well for the better part of forty years.

Notwithstanding the rapprochement brought about by COVID-19, the pre-pandemic pressures have not abated but, arguably, intensified, calling into question the durability of the collective impulse. While credit unions may accept the important role played by their centrals in paving the way to CEBA, for example, some will undoubtedly note that the largest credit unions got in on the program earliest and draw a conclusion that in a crisis, policymakers have demonstrated how it is better to be big than to be collective. In a banking system dramatically shaped by policy, this is no small consideration.

As a result, many credit unions may wish to refocus on a strategy of merging or working more closely in some form of arrangement with other credit unions the better to achieve the economies of scale and scope that would help them meet new and existing competition head on, insulate themselves from unhealthy system dynamics, and get early access to government support if and when needed.

But these efforts to achieve scale come at a well-known cost, particularly if they mean centralized decision making that is perceived to be distant from the local concerns of the credit unions involved in the merger or partnership discussions. In a COVID-19 world, where the "local" has taken on new importance, the perceived loss of local credibility could slow or undermine mergers or other types of formal working arrangements (e.g., shared services) that are otherwise economically sensible.

With that in mind, this paper asks the following question: If two or more credit unions attempt to join forces through a merger or some other formal working arrangement, where might they place key decision points to preserve some degree of local autonomy while pursuing efficiencies through economies of scale? For simplicity, I refer to this as the "merger" scenario, but *it need not be*. As I discuss below, the coming together of two or more credit unions can take different forms, each with a unique distribution of "places" where decision

authority can rest. To simplify, these places are either “local” or in the “centre.” In a conventional merger, we can think of the local as branches and the centre as headquarters. In a more elaborated federation model such as Desjardins, the local could be credit unions that are members of a federation, which in turn is the centre.¹

The rest of this paper is structured as follows. First, I set out some theoretical considerations by looking at the concept of interdependencies, a key piece of what has become known as the Canadian Centre for the Study of Co-operatives’s governance framework. Second, based on an analysis of a dozen banking co-operatives and one non-co-op bank, I classify the place of different decisions as situated either at the local level, at the centre, or shared between these two places.

Third, I propose a taxonomy of four models that describe different distributions of power — and interdependent relationships — between the centre and the local. Fourth and finally, I make a provisional recommendation on which of the models and related distribution of decision making offers the best value to credit unions contemplating mergers or some other more elaborate arrangement based on business considerations and two core elements of the CCSC model — interdependencies and legitimacy. I conclude by reflecting on the current state in light of these models.

2.0 WHY LOCAL?

Why do (and should) credit unions care about the distribution of decision making in a merger? Why not centralize all important decision making at headquarters? In some ways, the answer is obvious: Members still care about proximity to decision makers, and in a credit union, there is a mechanism that gives that concern bite — the one-member, one-vote democratic structure. Members might worry that a merger that results in a centralization of power will lead to job losses at *their* credit union, a decline in the quality of *their* service, or less money flowing back into *their* community. In short, decision-making proximity confers legitimacy, political and otherwise. In Saskatchewan, for example, this is captured well by Saskatoon-based Affinity Credit Union’s advertising campaign emphasizing the area code for its chief executive officer (hint: it’s not 416). The renewed emphasis on local brought about by COVID-19 underlines this point.

But there are other, less-often-cited reasons for distributing decision making among parties to a merger or partnership.

In the banking literature, there is a long-standing recognition that local banking — and the co-operative structure in particular — provides informational advantages, helping to make sound lending decisions and avoiding the kinds of risks that bring down more centralized and investor-owned competitors (Allen et al. 2012; Hesse and Čihák 2007). While these informational advantages are arguably less relevant in a digital world of commoditized lending products such as mortgages, they probably still matter for more complex commercial lending. They may also still matter for experimentation and innovation. And proximity may confer another risk-management benefit: Members whose loyalty is tied to the local nature of their credit union may be more inclined to pay back loans and/or tolerate pricing (or technological platforms) that may not be the best in the market but are good enough.

At a more theoretical level, people like Nicholas Taleb (2012) have argued that distributed decision-making systems tend to be “anti-fragile” and get stronger under stress, whereas it seems that highly centralized decision-making structures (like the old Soviet Union or large banks) tend to be brittle and depend on significant state support. This may be one of the reasons why co-operatives and credit unions have long been touted as resilient in crises. During the COVID-19 pandemic, there is some evidence for this kind of feedback loop between crisis and anti-fragility among co-operatives. In Winkler, Manitoba, for example, the community rallied around the local co-op retail store (part of the decentralized co-operative retailing system) by offering volunteer hours to meet the surge in demand brought about by COVID-19-related buying.

This concern for local expresses itself in a variety of organizational decisions. Some, for example, have allowed the parties to a merger to retain local brands (see textbox highlighting the case of First West, page 10). Others put in place formal governance systems that gave members of a federation power over central authorities (e.g., Desjardins). Still others provided considerable loan underwriting discretion to local entities (Raiffeisenbanken). The examples abound. And of course, historically, credit unions and co-operative banks everywhere have debated the relative merits of centralizing functions in second-tier organizations versus retaining local autonomy. I explore these points in detail in the following pages.

3.0 STRATEGIC INTERDEPENDENCIES

The well-documented benefits of decentralization also have a cost that is equally well understood by credit union leaders, especially those accustomed to working in a loosely organized collaborative system like the one they currently have:

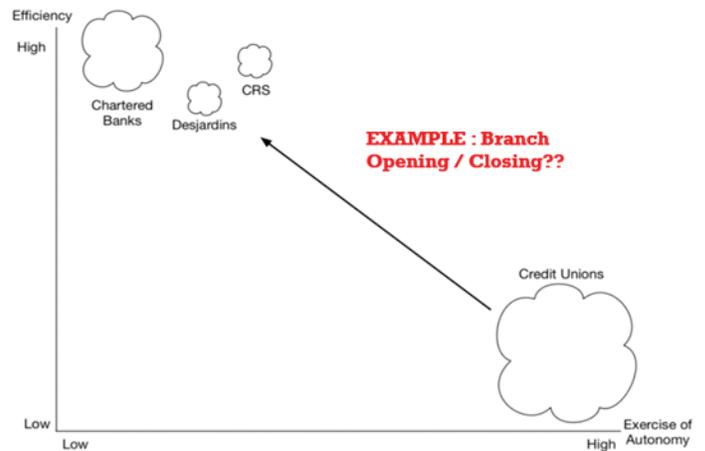
- slow and costly collective decision making
- the ever-present risk of some credit unions not pulling their weight (free riders)
- layers of management that can undermine competitiveness
- the inability of credit unions in the “system” to set aside parochial concerns and think in terms of the group
- a diversity of practices (some innovative, some not), which, when they go wrong, can have reputational effects for the group as a whole

Academics use the term “interdependencies” to describe situations where the pursuit of self-interest by each individual, usually in some opportunistic way (e.g., free riding), may not result in the most efficient or effective outcome for the group. We can use this concept of interdependencies to think about the tension or trade-off between the benefits of local autonomy and centralization. Figure 1 (below) depicts this trade-off graphically, showing how more local autonomy in a system might come at the expense of efficiency.² To illustrate, consider the social dilemma around branch closing: If a merger or partnership leaves this decision in the hands of the entities that are coming together instead of with the newly created “centre,” we might expect local decision makers to resist closures because the visible political costs of closing a branch pale compared with the uncertain and promised group-wide efficiency gains of moving that decision to the centre.

While useful as a conceptual tool, the autonomy/efficiency trade-off depicted in Figure 1 may be *too* simplistic for the purposes of answering the question about the appropriate distribution of decision-making powers among credit unions contemplating a merger. It does not say much about *which* kinds of decisions should be local and which should be centralized. It suggests that centralization is *necessarily* more efficient than autonomy, but following Taleb (2012), what good is efficiency if it is paired with fragility or hinges on government support? Setting aside Taleb’s important point,

even the claim that a more decentralized system is necessarily more inefficient could, under the right circumstances, be suspect.

Figure 1: Autonomy/Efficiency Trade-Offs



This last point is important. To see why, I want to take a small detour into the study of organizations and game theory, two fields devoted to studying interdependencies. While different, both reach similar conclusions.³ I focus on game theory since it has the advantage of using relatively simple models that can help decision makers cut through complexity. That said, game theory starts off in a less-than-promising place, assuming a kind of egotistical super human who knows what they want, whose wants never change, who pursues their wants ruthlessly, and who is consistently rational. In short, this egotistical super human makes consistent, coherent, and predictable decisions. While clearly not realistic, these assumptions help simplify the resulting models and illuminate how to overcome opportunistic free riding and other anti-social behaviour.

With that in mind, and following Weber (2018), I would characterize the span of credit union configurations — whether we’re looking at a merged entity with a single locus of centralized decision making or the current system of loosely organized central / credit union relationships with multiple “places” for decision making — as a set of “pooled interdependencies.”⁴ In a system of pooled interdependencies, the “operational units” are interdependent if the failure of any one unit can undermine the whole and/or where activities produce a common resource (e.g., a brand like “credit union”). In all other respects, however, the operational units have decision-making authority.

These features — mostly unfettered decision-making authority but with implications for the group — describe well the current credit union system (outside of Quebec), where the failure of a large otherwise independent credit union could destabilize and undermine the brand and the stability of the system. This outcome could also result from a sufficiently egregious problem at a precarious smaller credit union that perhaps has taken undue risks. The same logic applies *within* a credit union, particularly one that results from a recent merger. Here, reckless behaviour at a credit union branch, perhaps imbued with considerable autonomy, could cause reputational damage to the credit union as an entity.

To see what this looks like in game-theoretic form, we can characterize the interdependencies and related dilemmas in what is called “matrix” form. Figure 2 (below), following Weber (2018), provides a generic version of a pooled interdependencies game called the Bank Branch Coordination Game.

Figure 2: Pooled Interdependencies and the Bank Branch Coordination Game

		Branch 2	
		Appropriately	Inappropriately
Branch 1	Appropriately	$(x+b-c, x+b-c)$	$(x-c, x)$
	Inappropriately	$(x, x-c)$	(x, x)

This so-called Bank Branch Coordination Game assumes a bank with two branches. Each branch is independent of the other, earns some fixed amount x , and can choose to act “appropriately” (e.g., manage risk) or “inappropriately” (e.g., take on excessive risk). Branches have full decision-making authority. If both branches act appropriately, they get a benefit equal to b (e.g., fewer losses, better brand) but have to incur a cost c (e.g., compliance, forgone risk-based revenue).

In a pooled interdependency scenario, the problem is usually around coordinating behaviour to yield an outcome that benefits the group. To illustrate, following Weber (2018) once again, we set the values in the aforementioned matrix to $x = 1$, $b = 2$, and $c = 1$. This generates the following matrix, with values in parentheses indicating the “payoffs” to each player. To read these values off, consider the bottom left (southwest) corner of the matrix. It shows that player 1 has a payoff of 1 while player 2’s payoff is 0.

Figure 3: Bank Branch Coordination in Practice

		Branch 2	
		Appropriately	Inappropriately
Branch 1	Appropriately	(2, 2)	(0, 1)
	Inappropriately	(1, 0)	(1, 1)

In this scenario, branch 1 and branch 2 would like to coordinate their behaviour around “appropriate action,” recognizing that it will generate the greatest collective payoff ($2 + 2 = 4$), but because game theory assumes the two branches do not communicate (or communicate badly) and have to make decisions at precisely the same moment in time (they don’t know how the other branch has behaved),⁵ there is a risk that they may not align on this outcome. In other words, the outcome is uncertain even though everyone has a clear preference for coordinating around appropriate action. It is little wonder, then, that credit union executives may have a bias towards centralizing decisions after a merger; there must be some lack of confidence about the ability of locals to coordinate their behaviour in a way that maximizes the benefits to the group.

Figure 4: The Weak-Link Game

		Minimum of all players’ choices						
		7	6	5	4	3	2	1
Player’s choice	7	90	70	50	30	10	-10	-30
	6		80	60	40	20	0	-20
	5			70	50	30	10	-10
	4				60	40	20	0
	3					50	30	10
	2						40	20
	1							30

We can illustrate the same point more emphatically by using a different game to look at what happens when a multitude of parties, such as a large number of branches or a group of legally autonomous credit unions operating in a Desjardins-like federation, try to work together. In the Weak-Link Game, shown in Figure 4, each player’s payoff is conditional on the minimum value of the choices made by all the other players. For example, if a player chooses option 7, their payoff will depend on how many other players also choose option 7. If all of the other six players choose 7, then each gets the maximum payoff of 90 units. But if even one player chooses option 1,

then everyone’s payoff is -30 units. Suddenly, everyone has to pay to play and the weakest link (the person choosing option 1) prevails. Here, the coordination challenge is significant because a player selecting option 7 has to have a high degree of confidence that the others will too. They risk, in other words, losing -30 units; on the other hand, if that same player chooses option 1, the worst they can do is gain 30 units (no one can choose less than 1).⁶ In credit union terms, we can use this again to understand why there may be some tendency towards centralizing decisions in a merger situation: Shared good intentions around coordinating behaviour by merging parties may not mean much if one of the parties fails to hold up their end of the deal. This is a bit like a group of people sharing a communal kitchen, with the goal of maintaining a clean fridge (i.e., all 7s), but if one party fails to live up to that goal, the fridge is soon messy and unusable.

So far, we have talked strictly about coordination games where there is a “good collective outcome” that everyone knows about but where there is uncertainty about what the other party will do. But in some discussions about credit union mergers, there are also incentives for some parties to walk away and go it alone, recognizing the certainty of the payoffs arising from independent action versus the uncertainty of co-operation. The classic illustration of this scenario is what is called a prisoner’s dilemma, which we recast in the form of a credit union merger or go-it-alone dilemma.

Figure 5: The Credit Union Merger Dilemma

		Credit Union 2	
		Merge	Don’t Merge
Credit Union 1	Merge	(2, 2)	(0, 3)
	Don’t Merge	(3, 0)	(1, 1)

In this situation, game theory predicts that the merger will not take place. Each party to the merger recognizes that the go-it-alone strategy yields a higher payoff for *themselves* regardless of what the other party does. They choose the go-it-alone strategy even though they understand that collectively, their members would be better off with a merger scenario (merge + merge = 2 + 2 = 4 versus a maximum payoff of 3 from going it alone).

There is an obvious lack of realism to these games, but they capture the dynamics of situations where people or organizations fail to coordinate their behaviour because they are either uncertain about the other side’s behaviour or their individual payoffs dwarf the benefits of co-operation (even

if the collective payoffs of co-operation are better). And yet, we humans — and organizations — often do succeed in coordinating and collaborating. How? Here’s where the game-theoretic literature can take us beyond the depressing and somewhat obvious conclusion that humans often don’t get along. Weber’s work (2018) identifies five “solutions” or “tools” to solving coordination and co-operation problems. I augment these with drawing on work by Simon (1991) and Ostrom (2000, 2015).

- **Precedent or Path Dependency:** One way to solve a given coordination problem (e.g., around prudent or appropriate branch behaviour, as above) is to defer to what took place in the past. If previous decisions leaned towards appropriate behaviour in the bank branch game (for example), then there is strong evidence that that can be the solution for the next coordination challenge. This idea is captured well by the workplace nostrum “That’s just the way things are done here.” Of course, there needs to be precedent for it to have any impact, but there are other mechanisms that can help get us there. The important point is that once an example is set, it can make future coordination and co-operation easier or more difficult (if inappropriate).
- **Salience:** Parties can coordinate behaviour by emphasizing the salience of certain choices. In our bank branch game, for example, the parties might coordinate by getting the centre to encourage a rule, unwritten perhaps, around the importance of always behaving prudently.
- **Changing Payoffs:** The parties involved in coordinating behaviour can more easily align if they become convinced that the payoffs are greater than they might have believed. This might be accomplished, for example, by asking an outside consultant to assess the gains from co-operative behaviour (e.g., a merger). This would amount to increasing the real or perceived value of merging (top left corner) in Figure 5.
- **Authority:** Authority figures can help align behaviour simply by suggesting a path forward. This is doubly true when the authority figures, either inside or outside, have institutional power to impose outcomes. In the credit union space, these outside parties would most often be regulators, but they could also be politicians or influential credit union leaders.

- **Communications:** Most game-theoretic models assume no or poor communications (high noise, low signal), which result in outcomes that undermine the collective good. When experimenters allow for effective communication, social dilemmas often get resolved. While this may seem obvious, the fact that many coordination efforts break down underlines the importance of effective communications among parties with distributed decision-making authority. It is easier to *say* “communicate” than to actually *do* it. Hiring professionals skilled in fostering good conversations can help overcome communications challenges.
- **Repeated Interactions:** Even where communication may not be possible or is poor, simply observing behaviour can send powerful signals that help coordinate future behaviour. By interacting repeatedly, parties can solve coordination problems.

There is at least one other powerful tool that can overcome coordination and co-operation problems and in some ways encompasses the points enumerated above. That tool is culture, which we define as a set of informal norms that shape behaviour. In an organizational context, Campbell (2016) describes culture as what people do when no one is looking. The impact of culture cannot be overstated. The late great Nobel prize winner Herbert Simon (1991) stressed, for example, the importance of organizations setting clear organizational objectives and values as a way of solving co-operation and coordination problems that economists (using game-theoretic models) would otherwise predict are insoluble. In short, creating the right set of incentives (understood broadly to contain both financial and nonfinancial aspects), beliefs, norms, and environment can have positive spillover effects on the other parts of an organization and facilitate more distributed decision making, while creating the wrong set can lead to the negative consequences predicted by game theory. In her work, Ostrom (2015) similarly stresses the importance of shared norms and, in particular, discount rates, both of which we can consider as elements of culture.

4.0 APPLYING THE INTERDEPENDENCY LENS

The previous discussion suggests there may not be a *necessary* trade-off between autonomy and efficiency nor any *necessary* reason for individuals or entities to fail to coordinate or co-operate. But the interdependencies / game-theoretic

perspective also provides us with a lens that we can use to interpret real-world observations about the “location” of key decision points in a given financial co-operative. It helps us understand *why* groupings of credit unions (or merged credit unions) seem to routinely put certain decisions at the local level, others at the centre, and share others.

4.1 Financial Co-operative Decision Making

Drawing on this understanding of interdependencies, I looked at the legal and decision-making structures of twelve financial co-operative models plus one non-co-operative — Sweden-based Handelsbanken — chosen because of its successful and unique (for an investor-owned firm) distribution of decision making. I selected entities that offered some rough comparability in terms of regulation and market structure to those in force in Canada and which held out the promise of interesting and illustrative distributions of decision-making powers.

For each of the thirteen entities, I categorized twenty-one key decision points as centre, local, or shared by consulting publicly available corporate documents, legislative frameworks, articles of incorporation, by-laws, external rating agency analyses, and conversations with corporate governance specialists at each organization. I categorized a decision as situated in the centre, local, or shared based on where the *preponderance* of decision making for that area of activity appears to take place, *not* by reference to final or over-arching decision-making authority. By summing up the location of decision making across these thirteen entities, I obtained a first empirical *approximation* of where it might make sense for a set of merging credit unions to allocate power. I summarize this effort in Table 1 (below).

Before moving on, a short word about what I mean by “local.” In some co-operative financial entities, the local level consists of legally distinct entities that voluntarily come together to share functions. In others, however, the local level is more akin to a branch having no legally distinct corporate status. Either way, it is a “space” or “location” away from the “centre.” One of the important findings of this research is that the presence or absence of distinct legal status does not necessarily lead to the presence or absence of decision-making power — *de jure* need not determine *de facto* power. A conventional branch could, under certain configurations, have more decision-making power than a legally constituted credit union or co-operative bank operating in a system of credit unions or co-operative banks.

To interpret this table, consider capital management, a core part of operating a banking entity. Based on my review of the evidence, I categorized this decision point as centre because eleven of thirteen entities held this function exclusively at headquarters. Two of the surveyed entities in the sample, however, placed this function with the local level. In cases where the preponderance of the decision is centre but there is some evidence that this function is shared between the centre and local levels, I have indicated the number of shared entities as well. In all other cases, the balance is made up of entities that place the decision point at the local level (as with capital management). Finally, I ordered the table (reading left to right, top to bottom) in terms of the number of entities that place a decision item at the centre. Thus, decisions around information technology (IT) are universally made (in my sample) at the centre. By contrast, half the sampled financial co-operatives left decisions around patronage with the local level, while the other half put the decision at headquarters, in the centre.⁷

Reading the table from left to right and top to bottom shows that the left-hand column is made up entirely of decision items that are situated mostly at the centre. In the right-hand column, however, the picture gets murkier. In the case of underwriting, for example, eight of thirteen entities place this function at the centre, three share the function, while the balance — two entities — leave this decision item with the locals. Moving down the right-hand column, there is a growing cohort of co-operative financial institutions that share decision items between the centre and the local. At the bottom of the right-hand column, decision items are more strongly local. With member complaints, for example, nine of thirteen place this decision at the local level and another two share it. Only two have it firmly at the centre.

4.2 Interpreting the Data

How do we make sense of these observations? To help with the interpretation from an interdependency perspective, I

Table 1: Case Study Analysis of Where Key Decisions Sit ** Full Sample (/13) **

Decision	Place /13	Decision	Place /13
1. Information Technology	Centre (13)	12. Winding Up	Centre (9)
2. Capital Management	Centre (11)	13. Branch Closing	Centre (9)
3. Data Analytics	Centre (11)	14. Product Choices	Centre (9) + shared (1)
4. Organizational Design	Centre (11)	15. Financial Reporting	Centre (8) + shared (2)
5. Branch Opening	Centre (11)	16. Human Resources	Centre (8) + shared (2)
6. Inspection and Compliance	Centre (11) + shared (1)	17. Underwriting	Centre (8) + shared (3)
7. Branding	Centre (11) + shared (1)	18. Democratic Control	Shared (5) + local (2) ¹
8. Treasury/Liquidity Management	Centre (10)	19. Patronage	Local (6) ²
9. Prices	Centre (10) + shared (1)	20. Community Giving	Local (7) ³ + shared (1)
10. Partnerships	Centre (10) + shared (2)	21. Member Complaints	Local (7) + shared (1)
11. Mergers & Amalgamations	Centre (9)		

Notes: 1, 2, 3: For these three decision points, the sample of relevant entities is twelve and not thirteen because one of the case studies, Handelsbanken, is not a co-operative. It therefore does not have democratic control nor pay patronage. Further, it is unclear where community giving takes place.
 4. The information in this table is a distillation of thirteen case studies. The cases were put together based on available documents, third-party reports (i.e., rating agencies), and where possible, interviews (and validation) with governance officials in the respective organizations.
 5. The classifications (local, shared, centre) are based on a best-estimate qualitative assessment of the available information and reflect what I believe to be the locale for the preponderance of decision making around each decision point. They do *not* refer to final decision-making authority, although this is an important consideration in some decision-making areas. Nevertheless, these assessments are highly subjective and often a matter of debate and dispute even within an organization.

want to reinterpret Figure 2. Rather than a decision about “acting appropriately” in terms of complying with some informal norm that is good for the whole, I now interpret the game as a decision by a credit union about whether to centralize (at a central, shared service, credit union service organization, or similar entity) or hang onto decision-making authority. In matrix diagram form, this looks like Figure 6, which is simply Figure 2 but with new labels, where centralize / keep local are the two possible choices (there is no shared option). As with Figure 2, the value of x is the current profitability, but b now represents the benefit of centralization while c represents the cost of centralization — what the organization gives up by ceding control.

Figure 6: Pooled Interdependencies and Decision Making

		Credit Union 2	
		Centralize	Keep Local
Credit Union 1	Centralize	$(x+b-c, x+b-c)$	$(x-c, x)$
	Keep Local	$(x, x-c)$	(x, x)

Now let’s turn to the interpretation. First, from our analysis of thirteen co-operative financial institutions, we observe that there is a set of decision items that are nearly always placed at the centre, with information technology being the most unambiguously centred of all, followed closely by two other key decision areas — capitalization and data analytics. I refer to these decision items as *technical* in nature, requiring employees with a great deal of education and experience backstopped by an organization with the resources to spend what is necessary for them to perform adequately and achieve real economies of scale.

Somewhat less emphatically (it being further down the list), I would also add liquidity management to the technical set of key decisions. For technical issues, the primary benefit of centralization is associated with tangible economies of scale, the obvious potential for higher returns (from the pooling of funds), and possible improvements in service quality, which all imply a high value for b paired with only minimal and difficult-to-quantify costs c . There is very little lost at the local level when these decisions are centralized, other than perhaps some jobs. The net effect is to amplify the likelihood of achieving the collective outcome in the top left (northwest) part of the matrix, namely centralize.

I call the second category of issues *regulatory*. These resemble technical issues but are motivated by regulatory pressures,

which compel centralization largely for two reasons: 1) to avoid the duplication of costs associated with complying with regulatory norms; and 2) to reduce the risk of noncompliance arising from inexperienced and overworked staff at small local credit unions or branches. In other words, there is a high and visible value b in centralizing this function and little to no cost in c , apart from perhaps a vague sense of loss of local control. In principle, there shouldn’t even be any job losses associated with this shift.

I would put inspection and compliance in this category, given the growing weight of financial sector regulations (Haldane 2012) and the occasional use of regulatory incentives around good (coordinating) behaviour.⁸ Note that within inspection and compliance I include the compliance costs of following regulations associated with capital and liquidity management, two core areas of regulatory oversight. I also include organizational design in this category because regulators would exert — and have exerted — considerable influence over how credit unions and co-operative banks organize themselves. Legislators, for example, have set rules that treat systems of financial co-operatives as “groups” for regulatory purposes or effectively prevent members of these groups from exiting.

I identify a third category of decision items, namely those where the benefits (and costs) of centralization are strongly influenced by the *competitive context*. I place decisions around prices, branding, products, branch opening and closing, and partnerships in this category. These are areas where credit unions can effectively pool their marketing and product development budgets and create a single price, brand, and product line that can help sustain and grow demand. In other words, I would again expect a moderately high value for b associated with centralizing these functions paired with a somewhat-more-tangible-yet-modest cost c associated with the loss of local identity. While the preponderance of the cases discussed above in Table 1 suggest that these functions do tend to be centralized, there is enough room for creativity and uncertainty in these domains to imagine the benefit/cost dynamic playing out differently.

Finally, I define a fourth area where the centralization and decentralization decision, and the associated benefits and costs, seem to hinge around *legitimacy* considerations. These also happen to be areas where technical demands are low, regulatory pressures are minimal, and competitive considerations are at least not antagonistic to local, more

heterogeneous, decision making. Here, the benefits of centralization b would be low while the costs c are high, leading to coordination around the bottom right (southeast) part in the matrix from Figure 6. This category would group together many of the decision items in the bottom right hand of Table 1, namely financial reporting, human resource management, underwriting, democratic control, patronage, member complaints, and community giving. For the same reasons of legitimacy, mergers and amalgamations could also be placed in this category, as could decisions around winding up. These are highly sensitive issues at the local level but of little consequence from a technical, regulatory, or competitive perspective.

Table 2 summarizes this categorization schema, identifying the full range of decision items associated with each category and indicating the primary and secondary drivers of centralization or its absence.

4.3 Objections to the Analysis

Before turning to my recommendations about where these decision points *should* sit (as opposed to where they actually sit) in the event of a credit union merger, I think it's important to highlight four obvious objections to this analysis. First, it is highly contingent on the sample. If I had chosen a different set of credit unions and co-operative banks, the outcome would likely have been different. There is validity to this objection. But as I stressed earlier, I focused my sample on entities that have had to at least wrestle with where to put decision items. The sample could certainly have been larger or different, but

time and energy constraints limited such efforts.

The second obvious objection is that the analysis does not tell us much about whether the resulting matrix of decision making would make sense for any set of merging credit unions, given their historical trajectory, structures, and politics. I address this point below in a discussion around path dependency. Third, some of the distinctions among local, centre, and shared may become less relevant in an online world of highly commoditized products and/or highly targeted advertising based on data analytics — the very world that many expect is coming. Fourth and finally, while I attempted to validate the assessment with the individuals inside the twelve financial co-operatives (plus one nonfinancial co-operative), even they were sometimes unsure about where a decision ultimately sat. Doubt arose because of the distinction between *de jure* decision making (as given by articles of association, legal existence, legislative frameworks, or other formal rules) and *de facto* decision making (as given by the realpolitik of a given situation). In these circumstances, I generally deferred to the *de jure* location.

4.4 Organizational Structures

From the above, I identify four configurations of legal and decision-making structures that merging credit unions could consider. There could be many more.

- **Unitary:** In a pure unitary structure, the merged credit unions would form a single legal entity with one mind-and-management overseen by a representative board

Table 2: Decision Categories, Items, Benefits, and Costs

Decision Category	Decision Items		Benefit (b) and Cost of Centralization (c)
Technical	Information Technology Capital Management	Data Analytics Treasury/Liquidity Management	Very high benefit b Low and intangible cost c
Regulatory	Inspection and Compliance	Organizational Design	Very high benefit b Very low or no cost c
Market	Prices Branding Products	Branch Opening Branch Closing Partnerships	Moderately high b Tangible but modest c
Legitimacy	Financial Reporting HR Underwriting Democratic Control Patronage	Member Complaints Community Giving Mergers and Acquisitions Winding Up	Intangible/low b Tangible and high c

of directors. Articles of association and by-laws would be structured accordingly. Decisions and information would flow largely from the centre down to the branch level. This model characterizes the current approach of most Canadian credit unions and banks. Crucially, even in situations where there are some trappings of local input through local member councils and local brands, for example, these entities have no or very little *de jure* or *de facto* decision-making power. They exist at the whim of the credit union board and management. From the perspective of this work, First West's "multi-brand" model would be considered a pure unitary model for this reason — the locals have little to no formal decision-making power. Box 1, below, discusses the First West version of a multi-brand model in more detail.

- **Hybrid Unitary:** In a hybrid unitary structure, credit union parties to the discussion merge into a single legal entity but with a twist: the entity's articles of association, by-laws, and internal organization *formally* allocate decision making between headquarters (the centre) and branches/locals. Decisions and information are thus more evenly distributed between these two levels of the organization, albeit with a bias towards decisions flowing from the centre to the local level. There is no way for locals to exit the structure in this model, but the local could conceivably retain a high degree of autonomy, up to and including its own version of a multi-brand model operating under one "umbrella brand." Rabobank's recent organizational changes make it the exemplar of a hybrid unitary model.
- **Federation:** In a federated decision-making structure, the merging credit unions retain their legal identity but formally bind themselves into a federation through by-laws backed by legislative accommodation to ensure that the federation is treated as a group for regulatory purposes (particularly in the areas of capital and liquidity). The combination of legislation, regulation, by-laws, and informal practices set out the decision-making power within the group. This involves an even more equal distribution of decision making and information flows between the centre and the locals. The local credit unions retain an exit option in this model, but it can be severely constrained by legislation, regulation, and incentives. The federation approach can also layer on top of a multi-brand model, with the locals not only retaining an exit right but also their own distinct brand identity (the better to execute on an exit decision). In Canada, Desjardins is the

Box 1: What about the Multi-Brand Model? The Case of First West

The multi-brand credit union, as embodied by First West, seems to hold out the promise of preserving a degree of local identity and autonomy while allowing for the efficiencies of a single legal entity. But does it? Here, I talk about the strengths and limitations, particularly with respect to the allocation of formal decision making, of the multi-brand model, using First West as a case study.

Background

First West was formed in 2010 as the result of a merger between Envision Financial and Valley First Credit Union. It later added Enderby & District Financial as well as Island Savings. First West describes these divisions as "the marketing and sales delivery channels of our products and services" and stresses that First West provides "shared services."

Strengths

- Credit unions retain local identity as "divisions of First West."
- Merged credit unions have "regional councils" that consist of elected directors and appointed advisors and operate as committees of the board. They have authority for issues ranging from "business development, strategic planning and regional issues to community investment and identifying potential candidates for director elections."
- First West operates as a single legal entity, allowing for unified control over capital, liquidity, pricing, product development, and other key decision making.

Limitations

- Regional councils have little to no formal decision-making power and exist at the whim of the board.
- Multiple brands may pose challenges/confusion for consumers, particularly in an "open banking" context. Third-party aggregators and comparison websites may find it confusing to integrate First West and its divisions into platforms.
- Diffuse brand identity may cause concern among regulators, particularly with respect to the deposit insurance guarantee.
- Multiple brands imply higher marketing costs (these may be offset, however, by brand loyalty).

prototypical example of a federation.

- **Confederation:** In a confederation, the merging credit unions (usually more than two) retain their legal identity but bind themselves to operate together contractually. It is characterized as a “shared service plus” model. They do not, however, constitute a formal group from a regulatory perspective but continue to be regulated individually. Decision making and information flows tend to move from the locals to the centre rather than the other way around. Members of the confederacy have the ever-present power of substituting exit for voice. They stay in the confederation by choice, out of some combination of loyalty, incentives, and cultural fit. Their ability (and likelihood) of retaining their brand identity (i.e., having a multi-brand approach) gives this exit option additional force.

Table 4, below, summarizes the application of this taxonomy to the thirteen entities examined in this research.

5.0 WHERE *SHOULD* DECISION MAKING SIT?

I have used the interdependency perspective to look at where decisions actually sit in thirteen financial entities, twelve of which are co-operatives. But is there any way to think about what kind of entity credit unions *should* create in a merger and, along with that choice, where decisions *should* sit (local, centralized, or shared)? While I do not hazard a strong opinion on this, I outline below some important considerations for any two or more credit unions contemplating a merger.

In trying to sort out a correct structure for any two or more credit unions seeking to merge, it is important to bear in mind that there is always some degree of path dependency at work in the evolution of a credit union and its potential merger partners. In its simplest form, path dependency expresses the idea that history matters — what you do today is shaped by what you decided in the past. If you trained only to be a plumber, you might find it difficult to become a medical doctor. More subtly, the idea suggests that certain patterns of behaviour, structures, or products become dominant and entrenched because of positive feedback loops.

The classic application of a path dependence analysis is to the “format wars” between the VHS and Sony Betamax systems of the 1980s. The eventual domination of the VHS format

Table 3: Classifying Credit Unions and Co-operative Banks

Entity	Structure	Entity	Structure
Atlantic Canada	Confederation	Handelsbanken (IOF) ³	Unitary
Caisses Acadiennes	Federation	Heritage CU (Australia)	Unitary
Crédit Agricole (France)	Federation ¹	Navy Federal CU (USA)	Unitary
Crédit Mutuel (France)	Federation ²	NCSE CU (USA)	Unitary
Desjardins (Quebec)	Federation	Rabobank (Netherlands)	Hybrid Unitary
First West (Canada)	Unitary	UN Federal CU (USA)	Unitary
Raiffeisenbanken (Germany)	Confederation		

Notes: 1, 2. Both Crédit Agricole and Crédit Mutuel are formally three-tier groups. While the groups refer to themselves as a confederation, they are in fact federations treated as a single entity for regulatory purposes. Further, there is very limited power to exit as demonstrated by Crédit Arkéa’s multi-year efforts to leave the Crédit Mutuel group.

3. While Handelsbanken distributes a remarkable amount of decision power to its branches compared with conventional investor-owned banks, its final decision-making authority rests with shareholders and is therefore highly centralized, allowing for no local democratic control whatsoever (although interestingly, workers have a prominent seat at its board).

4. This table is the distillation of thirteen case studies that are available upon request.

has been explained by Sony's decision to ban pornographic tapes, which resulted in consumers (who wanted to watch pornographic videos) gradually adopting more VHS players. This led to the dominance of VHS in video rental stores, and finally to the greater volume of titles released in the VHS format. Once these patterns were established, they became self-reinforcing and eventually drove out the Betamax system, despite its purported technical superiority. Similar arguments have been made for the spread of QWERTY keyboards,¹⁰ technological and sector clusters, or even the impact of job loss on career trajectories (a process called hysteresis).

To determine a structure for merged credit unions and their decision making, merger parties need to make qualitative judgements on a number of matters:

- their willingness to give up their legal identities
- the consistency of their cultures
- what members and policymakers perceive as legitimate
- their willingness to trade off autonomy for efficiency (in the absence of a shared and unifying culture)

The path dependence perspective provides an important way of framing these questions. To see how, I look at path dependency from two complementary perspectives. The first involves an assessment of how other financial co-operatives have come together — what I call the *external* perspective. The second considers the historical evolution of the credit unions party to the negotiations — what I refer to as the *internal* perspective.

From the external perspective, the federated and confederated structures discussed earlier have their own unique paths. Rabobank, Desjardins, Crédit Agricole, Crédit Mutuel, and even the loosely structured confederate German co-operative banking sector have all, for a very long time, operated under a common IT/banking platform, and in many cases, a common auditor/internal regulator. Over time, they have stitched together something approximating a common culture. Even where significant regional differences persist, they have an attachment to their overarching brands and have worked hard to keep some rough balance among the membership in the federation/confederation while avoiding too much outright competition within the group. Further, in some cases, legislators have been instrumental in binding the groups together. For example, the federation's central role

in the Desjardins system owes no small part of its existence to provincial government policy, which, as noted earlier, tied audit and inspection subsidies to a requirement that these functions be performed by the federation (later confederation and then back to federation).¹¹ It is one thing to collaborate under a federated structure like Desjardins, which has the advantageous circumstances of shared IT, brand, culture, and regulatory oversight and incentives, but quite another to do so among a group of credit unions that may not share brands, IT platforms, and cultures, or have a regulator pushing them towards a strategic outcome.

Perhaps of even greater importance, the external path-dependency perspective suggests there is a near-universal trend towards moving more power to the centre in order to address three critical challenges:

- to better meet the growing competitive threat
- to fully integrate into the digital age
- to meet increased regulatory requirements (discussed earlier in surveying where key decisions lie)

As the Financial Stability Institute (FSI), an arm of the Bank for International Settlements, recently put it: "For most financial co-operatives, all alternatives seem to lead to enhanced co-operation arrangements" (Coelho et al. 2019, 26). Interestingly, the FSI expresses a high degree of optimism about the prospects for enhanced co-operation, "since most [financial co-operatives] operate locally and therefore do not compete against each other" (ibid.). However, this is clearly not the case for many of Canada's credit unions (within province and now, across provinces), where proximity invites a degree of competition that is likely to make a federated or confederated model challenging.

At the same time, a more internal or inward-looking perspective stresses likely resistance to the idea of stripping away local identity, powers, branches, resource flows, and jobs. Where a collaborative arrangement or merger contemplates an urban and rural marriage, the Desjardins experience from the 1990s suggests, for example, that credit unions in rural areas may feel less pressure to adapt to centralized norms, given the lesser degree of on-the-ground competition (Poulin and Tremblay 2005). Meanwhile, larger credit unions may feel as if their size allows them to go it alone, partner with an out-of-province federal credit union, or simply pick up the pieces as other credit unions give up under the weight of

disruptive, competitive, and regulatory pressures. These are not coordination challenges but rather co-operation problems — each party feels that individually they can do better on their own, even if they recognize that collectively, coming together would be a good thing. To conclude, credit unions contemplating mergers or a closer working relationship should filter the analysis around where to situate decision points through their own unique circumstances and paths.

6.0 LEGITIMACY: A STAKEHOLDER PERSPECTIVE

The internal path dependency underlines the importance of legitimacy considerations. Here the question is which model — as opposed to the narrow decision-point analysis used earlier — will be perceived as most legitimate? Again, the answer to this question will depend on the unique circumstances of the credit unions sitting down to merge or collaborate more tightly. I offer the table below as a tool that credit unions contemplating mergers or more close-knit arrangements can use to look at the models through the eyes of different stakeholders.

7.0 CONCLUSION

All too often, credit union mergers are akin to marriages of convenience. Maybe a long-time general manager is nearing retirement and no one is next in line to take over. Or maybe a small credit union is struggling and its board feels as if a merger is the best course forward. Alternatively, the regulator may be encouraging a credit union to merge out of existence, recognizing that its path forward is precarious. In all these situations, the merger takes place less by volition than by exigency and as such, there is unlikely to be much, if any, discussion about the structure of the resulting merged entity or where key decisions might sit. The smaller credit union will simply conform to the larger credit union and that is the end of that.

But with a fast-changing operating environment, there is an increasing need to consider marriages of equals or near-equals, including the possibility of a large number of credit unions coming together at once or over some defined period of time. In these circumstances, it will be more difficult to avoid challenging conversations about the resulting structure, its local responsiveness and legitimacy, and the division of decision making. In fact, we know from history that many credit union efforts to achieve economies of scale have crashed on these kinds of questions:

Table 4: Advantages and Disadvantages of the Various Models

	Unitary Model: A single legal entity with a single centralized board of directors	Hybrid Unitary Model: A single legal entity with a parallel democratic governance system anchored in articles of association and by-laws	Federation Model: A group consisting of distinct legal CU entities that share services and governance	Confederation Model: A loosely organized group of legally distinct credit unions sharing services and with ready exit options
Legal Considerations				
Regulator and Deposit Insurer Perspective				
Credit Union Perspective				
Member Perspective				
Political Perspective				

- the major National Initiative of the 1990s that would have collapsed all the centrals
- the subsequent proposed mergers among Prairie centrals
- the proposed integration of wholesale finance operations between Concentra and Central 1
- the failed efforts to create PayCo

Where credit unions have succeeded, as with the formation of Aviso Wealth (watch for a forthcoming case study), they have addressed and solved the governance, legitimacy, and structural issues first, not as an afterthought.

While I have resisted the temptation to offer a recommendation for the appropriate form for the entity that might result from a credit union merger (or mergers), there does seem some good circumstantial evidence, from a path dependency perspective, that the hybrid unitary model is the one that may be best suited to the evolving Canadian context. It preserves a degree of local influence while moving important decision making to the centre, in line with the *global* trend. It arguably provides the best of both worlds, eliminating *de jure* local autonomy to remove the threat of exit and gain important efficiencies, but also giving weight to *de facto* local control and underlining legitimacy considerations. The intriguing case of Handelsbanken, although the organization is not a co-operative, suggests there are important competitive, efficiency, and legitimacy advantages to this way of balancing the need for efficiency with local responsiveness.

I arrive at this conclusion after having reviewed the decision-making structure and history of twelve financial co-operatives plus one extremely successful non-co-operative (Handelsbanken) with a remarkably decentralized decision-making structure. I stress that credit unions considering a merger or some other more elaborate form of partnership should assess the relative merits of the different models based on their unique circumstances and histories, their unique paths. While I do not make a formal recommendation as to where the resulting structure should sit from a regulatory perspective — provincial or federal — I do offer some points for consideration. Could the chosen model fit in a federal policy environment? Is the province receptive to the arrangement? What about stakeholders?

The current renewed appreciation of collective action is

noteworthy. While I have suggested that there are reasons to be skeptical about its ability to endure, that does not mean it is unimportant or should be ignored. Rather, credit unions should harness that energy as they seek solutions to the multitude of threats facing their system — and it is still clearly a system — and settle on a path that can obtain the sorely needed efficiency without sacrificing the local responsiveness that the pandemic has taught is vitally important for legitimacy and ultimately anti-fragility.

ENDNOTES

¹ As we discuss later, this local-centre distinction can also be applied to the current credit union system and the relationship between credit unions and their centrals. In most provinces and regions of the country outside of Quebec, we use the term “confederacy” to describe the current configuration.

² This figure assumes a static state of the world. As such, it sets aside the important questions of resilience and anti-fragility that arise in a more dynamic world characterized by large, seemingly random (but, in fact, not) shocks such as COVID-19.

³ But not always. For an excellent discussion, see Roberto Weber, “Organizational coordination: A game-theoretic view,” available at https://kilthub.cmu.edu/articles/Organizational_Coordination_A_Game-Theoretic_View/6571286.

⁴ Where citations are used in this discussion, they reflect wording taken from Weber, *op cit*.

⁵ This may appear to be an unrealistic assumption. However, the failure to communicate can be characterized as a failure to understand rather than a physical (or digital) constraint against an exchange of information.

⁶ Or imagine another scenario where you (the player) choose option 2 (reading from the left). In this case, if all the other players choose option 2, your payoff would be 40 (reading from the top down). But if even one of the other 6 players chooses 1, the payoff falls to 20.

⁷ See note 3 in the table below.

⁸ This was, notably, the case in the Province of Quebec, which, in the 1930s, subsidized the creation of a centralized supervision function in the Desjardins system (Poulin and Tremblay 2005).

⁹ Importantly, *reporting* is distinct from *managing* capital and liquidity, two aforementioned decision items that are much more subject to technical and regulatory pressures because of their consequential nature. Financial reporting here is often seen as a proxy for the local's identity, its sense of self relative to the other credit unions or branches within a given system or entity.

¹⁰ The QWERTY keyboard is the standard typewriter and computer keyboard in countries that use a Latin-based alphabet. QWERTY refers to the first six letters on the upper row of the keyboard.

¹¹ These subsidies persisted until the early 1970s. For a discussion, see Pierre Poulin and Benoît Tremblay, *Desjardins en Mouvement : Comment une grande coopérative de services financiers se restructure pour mieux servir ses membres* (Montréal: Presses HEC Montréal and Desjardins Éditions Dorimène, 2005).

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JOHNSON SHOYAMA

Canadian Centre for the
Study of Co-operatives

U R E G I N A ▼ U S A S K

Diefenbaker Building, 101 Diefenbaker Place,
University of Saskatchewan
Saskatoon, Saskatchewan
S7N 5B8

Ph: 306-966-8509

Email: coop.studies@usask.ca