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

Regulatory Disruption: A Guide for Credit Union Boards

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

April 2020

usaskstudies.coop

JOHNSON SHOYAMA
Canadian Centre for the Study of Co-operatives
UREGINA USASK

Copyright © 2020 Marc-André Pigeon

All rights reserved. No part of this publication may be reproduced in any form or by any means without the prior written permission of the publisher. In the case of photocopying or other forms of reprographic reproduction, please consult Access Copyright, the Canadian Copyright Licensing Agency, at 1–800–893–5777.

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

TABLE OF CONTENTS

1.0 Federal-Provincial Dynamics: Potential Impact of the Evolving Policy Environment 1

2.0 New Incentives, New Possibilities, New Risks: Outlining the Changing Context 1

3.0 A Framework for Analysis 2

- 3.1 Cognitive Frames 3
- 3.2 Legitimacy 4
- 3.3 Strategic Interdependencies 4

4.0 Imagining a Credit-Union-Friendly Federal Policy Environment 6

- 4.1 The Big Bang Scenario 7
- 4.2 Go Slow Approach 7

5.0 Conclusion 8

Annex A: Mapping the Interdependencies 9

- Scenario A: Modelling the Dilemma of Whether to Exit or Remain 9
- Scenario B: A Dynamic, Sequential Game with the Provinces 10

Endnotes 12

1.0 FEDERAL-PROVINCIAL DYNAMICS: POTENTIAL IMPACT OF THE EVOLVING POLICY ENVIRONMENT

Take-up of the federal credit union option has been slow.[1]

It has been eight years since the federal option came online in 2012; ten if we date the process back to when the federal government introduced the framework legislation in 2010. So far, only two credit unions—UNI Financial Cooperation and Coast Capital Savings—have crossed the Rubicon.

But the context is changing. And with that, the incentives to go federal will change as well. That's what this paper is about—linking the changing context to the incentives to go federal and examining the considerations that flow from there. First, I will discuss the context and then consider some strategic questions that arise from the discussion. Then I will propose a way for credit unions to organize their thinking as they go about answering these questions.

If we take this shifting context seriously, then I suggest that credit unions should be asking themselves two questions. First, should they pursue the federal option, given these changes? And if a preponderance of credit unions answer yes to that question, is there value in having the system advocate *collectively* for a federal policy environment that is friendlier to credit unions? The conclusion to this paper offers some thoughts on what such a policy environment might look like. My hope is that this analysis—coupled with previous Canadian Credit Union Association work on some of the more operational considerations around going federal—can be used to inform not only the strategic thinking of credit unions but also the collective efforts of the system.

2.0 NEW INCENTIVES, NEW POSSIBILITIES, NEW RISKS: OUTLINING THE CHANGING CONTEXT

How is the context changing?

We know that in addition to the two credit unions that are now officially federal, two others are moving ahead with plans to take up the federal option. And we know that three larger credit unions have federal bank subsidiaries.[2] These banks could serve as stepping stones to becoming federal credit unions—or not—but at the very least, they change some of the internal system dynamics.[3] To the extent that they are seen as competing institutions, they also potentially stretch the ties that bind.

We are aware that the federal government amended the *Bank Act* to add features to the credit union framework legislation, which, although not well known, incentivize continuance. These features include:

- a loan guarantee to help with any transitional liquidity difficulties
- the potential for transitional relief from the requirement to stop selling insurance products out of branches
- the possibility for applicants from several provinces to seek a "continue and merge" strategy
- powers for the Minister of Finance to exempt applicants from requirements related to continuance (Part III of the *Bank Act*) and governance (Part V of the *Act*)

We understand that the Centrals are wrestling with what to do about their mandatory liquidity pools should one or more large credit unions move to the federal level, not to mention the challenging business model (capital and liquidity) and governance issues (around the role of federal credit unions in central governance) that would flow from this kind of shift.

Beyond these parochial but vitally important considerations, Centrals are also staring down a payments modernization process that could chip away—albeit slowly—at what has been, historically, their core function, namely the *exclusive* provision of clearing and settlement services for credit unions. As currently proposed, the modernization framework appears set to allow a broad range of entities to engage in at least some transactions on what is called the "real-time rail" in a cost-effective fashion.[4]

While the group clearing structure has largely digested the challenges created by the cessation of OSFI[5] regulation in 2017, it is important to remember what has been lost in that process. Although imperfect, OSFI regulation had the virtue of providing common regulatory oversight (rules of the game) that facilitated collaboration and a degree of trust across provincial boundaries. At the same time, there is considerable uncertainty about pre-positioning emergency lending agreements with the Bank of Canada, a vital signalling tool in the event of any kind of crisis event, particularly a deposit run.

We also know that provincial governments and their regulators, if they haven't already done so, may start asking themselves questions—as New Brunswick did—as to whether it is worth continuing to regulate a shrinking number of large and potentially systemically important credit unions. The pointed question here is: What are the relative costs and benefits of keeping regulatory control over credit unions? Can we (as provinces) have most or all of the benefits—locally controlled and headquartered credit unions—but pass the prudential risk onto the federal government? The credit unions left behind, for their part, might well wonder how the whole system will hang together if a few large credit unions become federal and exit the liquidity pools as a consequence.

Beyond these kinds of pragmatic considerations, we also have to be mindful of the ever-present jurisdictional question. Given the legal provincial bonds of association, at what point do regulators grow concerned with provincial credit unions serving members—most often expressed in the form of taking deposits—who reside out of province? While the issue may be dormant now, will that always be the case? At what point do federal (and even provincial) regulators start worrying about a credit union with a large and growing nonresident member base? At 5 percent of members? Ten percent? Forty percent?

We also know that the external federal regulatory environment has undergone some significant changes in the last couple of years and is about to undergo yet more—e.g., payments modernization, open banking—changes that could fundamentally reshape the federal/provincial dynamic in banking policy. The federal credit union option is only the most visible of these policy changes, but there are others of equally great importance. I will mention just two.

First, at the most fundamental level, the federal government appears to have taken a philosophical turn towards "functional-based" regulation, a departure from the "entity-based" regulation that has long framed the way policymakers think about the federal/provincial jurisdictional divide.[6] Under a functional-based regulation, policymakers design the rules of the game by looking at *activities* or *functions* rather than the type of legal entity (banks, insurance companies, credit unions) that performs them. In practice, this means, for example, that the federal government is developing a set of market conduct rules governing "retail payments" that will stretch across federal entities and right down through to provincial credit unions. While the federal government has been consistent in saying that it thinks credit unions already meet its standards, the fact that it is applying the standards at all is the important point.

Second, as noted above, the same idea is already informing the federal government's policy work around payments modernization and is also likely to significantly influence its policy development work on an open banking strategy, another potentially radical shift in the rules of the game that could challenge existing credit union structures. Simply put, an open banking policy framework like the one in the UK and the European Union[7] gives consumers greater control over their banking data, allowing them, potentially at least, to effortlessly share their data with third-party payments services providers and account aggregators that offer the promise of enhanced services.

Finally, we know that the economic and competitive contexts have their own decidedly significant effects on the incentives driving credit union behaviour both as independent entities and as members of a broader system of credit unions. These include an economic recovery that until the COVID-19 crisis, had proven unremarkable in terms of the intensity of economic growth but had been distinguished by duration. It was one of the longest recoveries in recorded history and now Canada and the world find themselves in a situation where a recession is all but inevitable, with a depression not out of the realm of possibility.

The economic context also includes a household sector that is indebted to an unprecedented extent and which will find its capacity or willingness to borrow severely challenged by the downturn. One data point highlights the risk here: Household sector debt in Canada represents 100 percent of GDP, the highest amongst OECD countries and a serious impediment to recovery.[8]

3.0 A FRAMEWORK FOR ANALYSIS

How can credit unions and their boards make sense of these changes? I will use a framework developed at the Canadian Centre for the Study of Co-operatives based on its long experience of studying both successful and failed co-operatives. The framework consists of three filters — cognitive frames, legitimacy, and interdependencies — that management and boards can use to make sense of the kind of shifting context discussed above. I will consider each in turn.

What Does Open Banking Mean for Provincial Credit Unions?

Beyond the obvious competitive implications, I would suggest that Open Banking could be another stressor on the system's current provincial structures. How so? I see two challenges.

First, the Open Banking framework will make it easier for provincial credit unions to compete for deposits from other provinces, but as I suggest in the body of the text, the question then arises about the degree of comfort federal and provincial governments have with this trend.

Second, imagine a scenario where a Fintech entity offers a service that shops around a customer's loan request—say, a mortgage for a new home. The Fintech polls various lending entities to see who can offer the best deal. If the customer resides in Ontario, the Fintech shows offers by Ontario credit unions and a variety of federally regulated banks. In that sense, there is little to distinguish this situation from a mortgage broker today apart from the virtual nature of the service.

But what about British Columbia or New Brunswick credit unions? What if they wanted to—and could (operationally)—offer that prospective Ontario member a better deal on the mortgage? The jurisdictional question means they cannot; the Fintech will have to screen out bids by out-of-province credit unions. While this may not seem like much of an impediment, it is not altogether clear that Fintechs will devote the resources to screening out credit unions by province or willingly incur the risk that they might incorrectly apply the screening process.

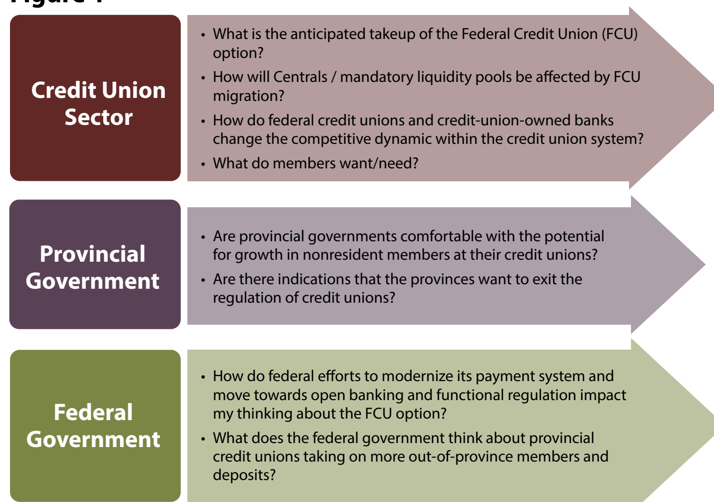
3.1 Cognitive Frames

The crucial insight here is that all of us selectively interpret the past—often based on our own unique trajectories and experiences—to imagine the future. In other words, we all come at the decision-making process with a certain amount of baggage, with emotions often—despite our best rational intentions—providing an implicit weighting that filters past experience and shows the way forward. We are also under the influence of well-known cognitive biases such as loss aversion (the tendency to weigh losses more than we do symmetric gains), recency bias (the tendency to weigh recent events more heavily than distant ones), and others. We are hardly the fully rational beings that we might think we are.

Over and above these individual-level considerations, the cognitive frames perspective points to the importance of being aware of certain "meta" narratives: ways of thinking about the past, present, and the future that we all digest in one form or another through our media consumption and social interactions. These, too, can influence our decisions in ways that may not always be helpful.

The first step in foregrounding these cognitive frames is to make sure we have taken a good hard look at how the context is changing. In the banking arena, this means looking *beyond* the abundant discourse about technological "disruption" to understanding the often neglected policy context, as I set out to do above. The second step is to ask questions flowing out of that context-setting exercise, which is what I have done in Figure 1 below. From there, more information gathering is in order.

Figure 1



3.2 Legitimacy

People are familiar with the concept of legitimacy in the political arena, where "legitimate" governments can more easily make big policy changes than "illegitimate" governments that are likely to be voted out of office at the next opportunity. With for-profit publicly-traded companies, the legitimacy perspective is fairly obvious and largely uncontroversial: The share price is the barometer of legitimacy. If the company is doing well and staying out of trouble with its employees and communities, the share price does well. If it's not, the share price trends downwards. No more questions to ask.[9]

In a co-operative context such as that of a credit union, the legitimacy question is paramount for the same reason that it is in the political arena: Like governments, credit unions as co-operatives are ultimately democratic institutions. Even where member participation is low, the democratic potential is always latent and can be rallied around controversial decisions. As a result, similar considerations apply: The credit union membership is likely to have interests and preoccupations much broader than simple profit maximization. They want excellent service at competitive prices, but they may also want to feel good about how their credit union does business.

By embedding the legitimacy perspective in the changing context discussed earlier, we can foreground some important strategic questions around the decision to go federal:

- What percentage of our members live out-of-province and how might that—again—affect the legitimacy of our claim of being a provincial institution?
- What percentage of our members are likely to move out-of-province and expect seamless service across provincial boundaries?
- What percentage of our members might want to support children/family with out-of-province services that we—as a provincial entity—would be hard-pressed to provide (e.g., a mortgage on a condo for the kids attending university)?
- What percentage of our members feel it is important to do business with a local institution? Do they define "local" by the jurisdiction of incorporation or by the local presence of a headquarters?
- Do provincial/federal decision makers give more weight to our views based on where we are incorporated or on where we are headquartered?
- How do provincial/federal decision makers weight the support of our members? What constitutes an acceptable degree of support for our decision to go federal?

3.3 Strategic Interdependencies

The concept of strategic interdependencies involves what are termed social dilemmas—situations where the pursuit of self-interest by each individual (credit union in this case) does not necessarily result in the most efficient or effective outcome for the group. In situations with strategic interdependencies, the choices made by one individual or group can have repercussions on the choices made by others (and of course vice-versa). In such circumstances, creating the right set of incentives (understood broadly to contain both financial and nonfinancial aspects), beliefs, and environment can have positive spillover effects on the other parts of an organization or a system, while creating the wrong set of incentives, beliefs, or environment can have negative consequences. Callout 2, see right, discusses a classic social-dilemma situation in what economists call a "public goods" game.

The credit union sector faces many such social dilemmas. For example, when a credit union generates negative media attention—for whatever reason—that can affect the broader system. Similarly, the pursuit of the federal option changes the dynamics and incentives for those who remain provincial. These decisions can also impact provincial and federal governments. To illustrate, Annex A outlines two efforts to sort through some of these strategic interdependencies using simple game theory models. While the scenarios are interesting in and of themselves, the major takeaway from Scenario A is to show how under a set of plausible assumptions about incentives and rational behaviour, a provincial credit union might find itself moving inexorably towards continuance even though credit unions collectively might prefer to stay within their provincial boundaries. Scenario B examines the possible outcome of a provincial decision to reduce its exposure to the credit union sector either through a reduction in deposit insurance coverage or by forcing the credit union system towards the federal model. This scenario illustrates the highly interdependent nature of decision making in the credit union space, given the big policy shifts and potential economic shocks lurking on the horizon.

A Primer on Social Dilemmas: The Public Goods Game

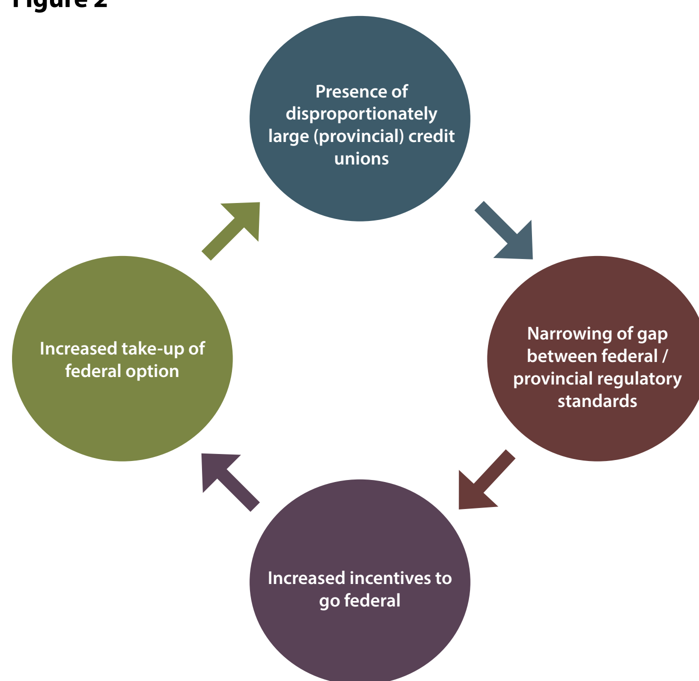
Researchers have demonstrated the concept of a social dilemma in a number of experiments. One of the better known and more interesting experiments consists of a "public goods game" that was conducted across multiple cities/countries using identical design parameters. The game was set up to play out over ten rounds. In each round, participants—who were strictly anonymous—had a choice to contribute to a "public good"—a common pot of money—or to keep the amount given to them at the start of the round. The game was designed so that the dominant—or selfishly rational—approach to "playing" was for everyone to keep their endowment at the start of each round and contribute nothing to the common pool.

Remarkably, people in the early rounds gave upwards of 50 percent of their endowment to the common pool. As the experiment moves through the ten rounds, however, contributions tended to decline in all countries. Why? The answer appears to be that there is a *universal* co-operative impulse at play until there isn't, until participants see that some people refuse to play by the implicit rules and "free ride" on the contributions of others. They punish the free riders in the only way they can—by withdrawing their donations from the common pool in subsequent rounds. But note what happens when the game is changed so that participants can exact a monetary punishment from those who fail to contribute to the common pool. Suddenly, contributions either hold up over multiple rounds or, in situations where participants get to know each other, contributions *increase* in later rounds.

These findings show that social dilemmas can be overcome by smart institutional design. If people inclined towards "altruistic punishment" are given a chance to punish free riders, and if people are given the opportunity to get to know each other in a given situation, there is a good chance that free riders will get marginalized and co-operation will endure over time. For credit unions, these findings suggest that the system's ability to co-operate effectively depends at least in part on repeated interactions and some ability to altruistically punish credit unions that free ride, where punishment can mean something as simple as a sharp word or a rumour mill. Annex A applies this idea of a social dilemma to the credit union context.

But there are other dynamics at play — feedback loops that make it difficult to pin down exactly who is likely to do what. Figure 2 illustrates one possible dynamic, showing how the growing concentration of assets in a handful of large credit unions, through mergers or other means, might drive a narrowing of federal/provincial regulatory standards, which, in turn, increases incentives to go federal. If this does, indeed, drive increased take-up of the federal option, the concentration of assets within the provincial system becomes more acute, renewing the cycle.

Figure 2



There are two obvious rejoinders to this scenario. First, the regulatory/legislative process is slow, and credit unions are able to influence it at the provincial level. In other words, the gap does not *necessarily* need to close. While this is certainly true at some points in time in some provinces, a sharp economic downturn or liquidity problems—even out-of-province liquidity problems—could kick the above dynamic in gear. Alternatively, CCUA[11] could be successful in advocating for a more favourable federal policy environment, in which case the gap would narrow from the other direction, driving the cycle depicted above.

The second rejoinder is that this process will eventually wear itself out if enough large credit unions take up the federal option, leaving behind a set of relatively small provincial

entities with much less concentration risk. Two questions follow. First, how do those credit unions remain competitive if their Central finds itself with fewer resources than in the past because of the departure of these large credit unions? Second, will the provincial government want to retain even this residual responsibility? Or might it instead encourage mergers and migration, bearing in mind that the remaining credit unions at that point will likely have lost most or all of their government relations clout with provincial policymakers?

There are any number of dynamics like the one depicted in Figure 2 or "games" such as those mapped out in Annex A. To think through the consequences of these different possibilities, I suggest that credit unions ask themselves the following kinds of questions:

- Setting aside credit unions that have publicly declared their interest in the federal option, what do we know about the intentions of *other* credit unions in our province concerning the federal option?
- Are regulators encouraging mergers and consolidation? Does this tell us anything about their long-term objectives?
- Have provincial authorities given a clear signal they want to stay in the business of regulating credit unions? If they have, does that mean they will stop credit unions from going federal? Or let just a few through—maybe those that have already left or are about to? And if they just let a few through, when do they close the door? If we think the province might eventually close the door, does my credit union want to get out before they do? Are others thinking the same way?
- If my province has clearly signaled that it wants to continue regulating credit unions for the foreseeable future, could its view change if adjacent province(s) decide to exit the business of regulating credit unions? What if there was some kind of negative event—a severe economic downturn such as the one that shook the industry in the 1980s and early 1990s?
- While the provinces stuck by the credit union system in both those previous downturns, will they do so going forward, given

  (a) the much more concentrated nature of the sector;

  (b) the ready safety valve of the federal credit union option;

  (c) the trend towards functional regulation;

  (d) the move towards open banking; and

  (e) the opening up of the payments system?

While I do not purport to have the answers to these questions, the mere fact that they come to mind—and have likely been raised within the system—points to their potential to unleash difficult-to-predict dynamics.

4.0 IMAGINING A CREDIT-UNION-FRIENDLY FEDERAL POLICY ENVIRONMENT

The discussion thus far is premised on the idea that there are deep and important structural changes happening, or about to happen, that motivate some important strategic questions, which in turn could shake long-standing credit union structures. If they incent enough credit unions to take up the federal option, or enough provinces to rethink their commitment to the sector, they could bring about a tipping point where the system is compelled to go federal en masse. Australian credit unions experienced something like this in the 1990s, when the government forced credit unions to move from state-level to federal-level regulation. While it is difficult to imagine the federal government having the power or desire to do something like that here, Australia's credit union system did face the familiar challenge of entering a regulatory environment that was not very friendly to smaller institutions, let alone those that were co-operatively structured.

If the idea of a tipping point is even remotely plausible, might there not be a case for credit unions to avoid the social dilemma outlined above—each credit union acting in its own narrow interest but with potentially negative consequences for the whole—and start thinking about *getting ahead* of the situation? And what might that kind of proactive approach look like? One answer is to work collectively to make the federal environment more credit-union-friendly, recognizing that any successful effort directed that way is likely to bring about the tipping point that motivated the effort to begin with (see Figure 2). I propose two ways of going about this, each with its own set of advantages and disadvantages.

4.1 The Big Bang Scenario

In the big bang scenario, credit unions would collectively agree that one way or another, the system is likely to end up in the federal space. Given this shared belief, the question then becomes, does it make sense to use the system's collective weight *today* to secure a regulatory structure more friendly to smaller co-operative institutions *tomorrow*? The system could propose that this process play out over a ten-year planning horizon in order to give credit unions and regulators ample time to prepare and adapt. The plan could also contemplate a "glide path" whereby credit unions might be let into the federal sphere at, say, the five-year mark with their existing capital and liquidity structures, *provided* they had a clear plan to migrate to the co-op friendly regulatory "end state" by year ten.

Advantages

- Instead of being compelled to go federal (because of the dynamics discussed earlier) and getting nothing in return, the credit union system uses its collective weight to secure a regulatory environment better suited to smaller, co-operatively structured institutions.
- Provincial governments would likely welcome this proposal knowing the sector was behind it, thus removing political risk from the equation.
- This proposal would address three long-standing policy concerns at the federal level:
    - First, it would get the provinces out of the business of regulating banking institutions, an area that it considers a federal responsibility. In so doing, it would simplify the policy process around payments modernization, open banking, the retail payments framework, cybersecurity, emergency lending assistance, and countless other banking-related policy conversations.
    - Second, it would remove the (perceived) moral hazard problems associated with unlimited provincial deposit insurance schemes and the related (perceived) implications of those schemes for financial stability.
    - Third, it would make it easier for the credit union system as a whole to offer national-level competition to the big banks, a long-standing federal policy objective. Politically, this kind of proposal might find some favour, given its proactive nature—credit unions can say they're not waiting for something to happen—and these larger policy rationales.

Disadvantages

- The system is a long way from agreeing about the need to go federal or the impact of the changing context.
- There is no pre-existing political appetite for this idea, and financial sector policymakers are probably content to wait things out and take in the credit union system piecemeal, especially if policymakers can get the larger credit unions in first without having to compromise on regulatory standards.
- The banks would lobby against this measure, and existing federal credit unions might also object on the grounds that they had to meet the existing standards so why shouldn't other credit unions?

4.2 Go Slow Approach

In the go slow approach, credit unions would continue to do what they are already doing, namely, advocating for more co-op friendly proportional regulation.

Advantages

- This is the least disruptive or controversial approach, especially in light of some of the recent failed Tier 2 conversations.
- There is already some advocacy for these kinds of changes, and federal regulators have recently shown some signs that they are considering the idea of a more proportionate "small bank" regulatory structure.[12]

Disadvantages

- While the OSFI has signalled that it is moving to provide accommodation for smaller institutions, the idea of introducing more competition into the banking space has been around for a long time with no obvious impact. If anything, the large banks have increased their market share.
- There is no obvious political pressure behind creating meaningful accommodation for smaller banks. It's an

> idea that's coming strictly from the bureaucratic side of things. Given the small number and weight of federal credit unions in the banking system, it will be a struggle to get federal politicians (or policymakers) to advocate for or support more generous treatment of smaller financial institutions in a way that is sensitive to co-operatives.

I have no particular view on which approach is more appropriate, only to observe that there is some merit in continuing to work towards making the federal environment more credit-union-friendly.

5.0 CONCLUSION

Could we soon have something approaching a critical mass of federal credit unions? It is starting to look that way.

BC-based Coast Capital Savings is now a federal entity, while two other credit unions are on their way—Saskatchewan-based Innovation Credit Union and First West in British Columbia. Meanwhile, UNI Financial Cooperation has three years of operating in the federal environment under its belt.

At a minimum, the federal credit union trend forces the conversation about continuance—provincial credit unions have to ask themselves whether the move is right for them, while provincial regulators need to settle on whether they want to stay in the game. But the migration of these credit unions also introduces new dynamics into existing structures, dynamics that may be amplified by the broader policy conversations discussed earlier, especially considering the increasing shift towards digital banking.

It seems difficult to escape the conclusion that *something* has to give. While I have suggested that one potential outcome is for the system to come up against a tipping point of migration (voluntary or not), it is also not difficult to imagine that some or all the provinces might follow Quebec's lead and declare their desire to continue to regulate a vibrant credit union system come what may.

While it is impossible to know which situation will avail, the underlying theme of this paper is to stress the importance of credit unions asking the kinds of strategic questions outlined here, which flow out of the shifting policy and technology environment.

ANNEX A: MAPPING THE INTERDEPENDENCIES

To underscore the interdependent nature of decision making about the federal option, given the changing context discussed at the outset of this paper, I propose two simple models. They are only two of many models that one could devise. I chose them based on their simplicity and rough alignment with the situation as I understand it. I assume the participants are rational, know the preference structure of the other party to the game, and have a shared base of common knowledge.

Scenario A: Modelling the Dilemma of Whether to Exit or Remain

In Scenario A, a large credit union has just completed its journey to the federal sphere, leaving an extremely bifurcated provincial credit union system behind. The two remaining large credit unions account for 80 percent of system assets and membership. They each have a decision to make about whether to follow the lead of their peer (exit) or commit to the provincial environment (remain). The two credit unions do *not* have open lines of communication. They are making their decision independently of one another. The decision is shaped by the following facts:

- If the two credit unions remain as provincial entities, they will face some additional capital and liquidity requirements, but given their collective weight and influence over the policy process, would likely be able to minimize the impact of these additional requirements.
- If one of the two credit unions decided to exit the provincial sphere, it would enjoy a "first mover" advantage—a speedier continuance process. The credit union left behind would bear significant new regulatory costs as the last remaining large credit union in the province.
- If both credit unions decide to exit, they would face a slower—and less incentivized—federal continuance process and might encounter a regulator suddenly concerned about the rest of the credit union system.

This game is modelled with what is called the "matrix form," with the numbers in parenthesis representing (somewhat arbitrary) costs measured in "units" that can be thought of as millions of dollars.

		Credit Union B	
Credit Union A		Remain	Exit
	Remain	(-2, -2)	(-5, -1)
	Exit	(-1, -5)	(-4, -4)

The Logic of the Game

To read the consequences of each decision (remain, exit), recognize that the first value in the parenthesis corresponds to Credit Union A's cost while the second corresponds to Credit Union B's cost. In this game, credit unions A and B will both choose to exit provincial regulation and take up the federal option. The logic is as follows:

- Credit Union A knows that if it chooses to remain in-province, Credit Union B will exit to benefit from the first-mover advantage, incurring a cost of -1 units (instead of the -2 units it would cost if A and B both decided to remain). Credit Union A, on the other hand, will incur a cost of -5 units.
- Similarly, Credit Union B knows that if it chooses to remain in-province, Credit Union A will exit to benefit from the first-mover advantage, incurring a cost of -1 units, whereas Credit Union B will incur a cost of -5 units.
- As a result, both credit unions choose to exit and incur a total cost of -8 units {(-4) + (-4)}, which is twice the cost of the -4 units {(-2) + (-2)} they would have collectively paid if they'd been able to co-ordinate their behaviour and remain provincial.
- This is a classic example of a social dilemma where the outcome of the rational independent decision making yields less than ideal outcomes, which could only be achieved if there was sufficient trust, communication, and other structural incentives to align behaviour between the two credit unions.

Objections and Rejoinders

I have set up the game to illustrate the potential social dilemma that arises from the interdependent nature of the decision in one *hypothetical* scenario, given the current context. Bearing that in mind, let us nevertheless address some obvious objections.

Objection 1: Credit unions talk all the time—they would be able to co-ordinate their behaviour, so this scenario is

unrealistic. *Rejoinder:* This is true, but given recent events, it is not clear that there is a great deal of trust among credit unions around jointly co-ordinated behaviour. Board confidentiality and fiduciary duty may also restrain open conversation.

Objection 2: There is no first-mover advantage. If anything, the costs of going first have proven significant. Again, this is an unrealistic scenario. *Rejoinder:* This is also true, but UNI Financial Cooperation could be considered a first mover, and it benefitted from some favourable federal (and provincial) decisions. It is not clear that credit unions in other provinces would get the same benefits, but we do know that the OSFI has capacity constraints, and multiple, simultaneous credit union applications could slow down the approvals process. It also seems reasonable to assume that if both remaining large credit unions exit, this would have serious implications for the rest of the provincial credit unions, thus prompting some reflection and possible delays from the provincial regulator.

Objection 3: Credit unions don't know each other's preferences, so how could they possibly make a decision like the one contemplated here? *Rejoinder:* Game theorists often have to make these kinds of simplifying assumptions to foreground the underlying game-like logic.

Consequences

What does this have to do with the shifting policy and technological change environment? This is a reasonable question/objection, one that I did not foreground earlier for the sake of simplifying the discussion.

Scenario B: A Dynamic, Sequential Game with the Provinces

Scenario B starts from the premise that a given province has become increasingly uncomfortable with its unlimited deposit insurance scheme because of the attendant residual fiscal risk. This kind of heightened concern could be motivated by any number of considerations, but for the purposes of this analysis, let us assume there has been some kind of deposit run in another province that has prompted rating agencies to take a closer look at provincial exposure to the credit union sector.

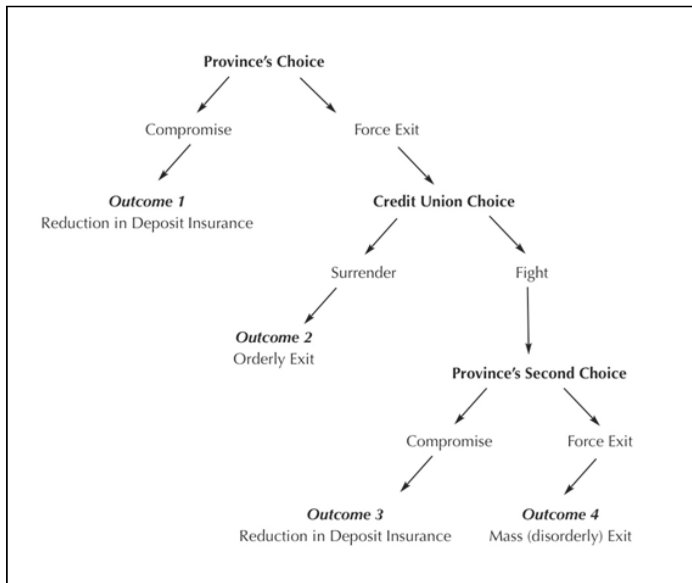
The province in question decides that it will either work with the system to lower the coverage or exit the business of regulating credit unions altogether and pass on the residual fiscal risk to the federal government. The scenario assumes that credit unions want to remain as provincial entities and, given the context, are prepared for a reasonable compromise on lowering deposit insurance.

In this scenario, I describe each sequential move and illustrate it with a "tree" (extensive form) diagram as discussed and depicted next:

- Choice 1 (Province): The province's first decision is whether to:
  - (a) negotiate with the credit union sector for lower deposit insurance coverage = game over
  - (b) move aggressively to push the credit union sector into the federal realm
- Choice 2 (Credit Unions): The credit unions can either:
  - (c) surrender by agreeing to an orderly, staged exit = game over
  - (d) fight back against the province's efforts to force exit by mounting a vigorous government relations campaign
- Choice 3 (Province): The province's second and final decision is whether to:
  - (e) compromise and negotiate a reduction in deposit insurance coverage = game over
  - (f) evict credit unions and force en masse exit = game over

Further, the following is common knowledge—facts understood by both sides:

- The province favours Outcome 2 to Outcome 1 {2, 1} and {1, 3}. It prefers a surrender and exit to a fair reduction in deposit insurance; it also prefers a fair deal at the outset to going through a fight with the credit unions only to end up at the same place (i.e., a fair reduction in deposit insurance).
- The credit unions prefer Outcome 1 to Outcome 3 {1, 3} and {3, 2}. They too prefer a fair reduction in deposit insurance at the outset (outcome 1) to one later (outcome 3), after a costly high-profile fight; they also prefer a reduction in deposit insurance later (outcome 3) to a surrender and exit (outcome 2).



The outcome of the game hinges on the credit union sector's ranking of Outcome 4 relative to Outcome 2 and the province's ranking of Outcome 4 to Outcome 3. There are four possible cases:

1. Credit unions prefer an orderly staged exit (Outcome 2) to a sudden push out the door (Outcome 4), while the province prefers to exit the business of regulating credit unions to any compromise. In this case, the province will be aggressive, predicting that credit unions will surrender, and it will be right. Outcome 2 prevails.
2. Credit unions prefer an en masse exit (Outcome 4) to a staged exit (Outcome 2) and the province prefers Outcome 4 to Outcome 2. An en masse exodus is guaranteed, even if both sides would ultimately prefer a quick, fair deal to reduce deposit insurance. Outcome 4 prevails.
3. Credit unions prefer a surrender and an orderly exit (Outcome 2) to a disorderly en masse exit (Outcome 4), but the province is wary of a forced disorderly exit and would prefer to negotiate lower deposit insurance coverage. Outcome 1 prevails.
4. Credit unions prefer an en masse exit (Outcome 4) to an orderly exit (Outcome 2), but the province is averse to a mass exit, preferring Outcome 3. In this case, the province will predict that the credit unions will fight if provoked and settle for Outcome 1 immediately.

Discussion

The above analysis presupposes, again, that each side knows the other's preferences—their ranking of the different options. If they do not, each side may test the other to see what happens.

In all likelihood, the result of this kind of deliberation would lead to Outcome 1 or Outcome 2. Given the nature of deposit insurance, it is difficult to see how it is in any party's interest to bring the negotiations into the public realm. That said, the sector's willingness to play this (dangerous) game and the province's willingness to force an exit will be determinative.

It is also fair to question the realism of this scenario. Would a run-in with another province compel a province to go down this road to begin with? Perhaps, but not necessarily. Provincial governments, for example, did not show any inclination this way when Home Capital experienced its funding challenges in 2017. Alberta is highly unlikely to unwind its support for credit unions, given its ownership of a state-owned banking entity (ATB Financial), and BC has recently recommitted to unlimited deposit insurance. Manitoba has not shown any inclination towards revisiting its (implicit) guarantee, nor has there been any such discussion to our knowledge in Saskatchewan. Then again, big policy and contextual changes can upend our expectations about the solidity of these arrangements, as they did in 2007–09.

As with the first scenario, the underlying point is to emphasize the interdependent nature of decision making and the importance of foregrounding this perspective in strategic thinking about the impact of the shifting policy and economic environment at the management and board level.

ENDNOTES

[1] Beginning in 2012, provincially incorporated credit unions could shift their incorporations to the federal level, thereby allowing them to operate across provincial boundaries.

[2] They are Alterna Bank (owned by Alterna Savings and Credit Union Limited in Ontario), Vancity Community Investment Bank (owned by Vancity in British Columbia), and Motusbank, owned by Meridian Credit Union in Ontario.

[3] It is important to note, however, that there is no direct route for a provincial credit union to amalgamate with a federal bank subsidiary unless it is part of a demutualization. To take advantage of the favourable federal amalgamation provisions, the federal bank would first have to be "mutualized" and then the provincial credit union could proceed with a formal amalgamation process. For a discussion of this option and the potential of creating a federal credit union subsidiary, see: https://usaskstudies.coop/documents/pdfs/federal_credit_unions_paper_joe_dierker_addendum2.pdf

[4] Transactions that flow through the "real-time" rail will clear and settle instantaneously instead of the next day (or longer) as is currently the case. Bank and credit union customers will have instant and irrevocable access to their money.

[5] Office of the Superintendent of Financial Institutions.

[6] For an interesting discussion, see Chris Nicholls, "Bank on It: *Bank Act* Restrictions on Use of the Terms "Bank" and "Banking"; A Case Study of Institutional vs. Functional Financial Services Regulation." *Canadian Business Law Journal* 61, no. 3 (March 2019): 293.

[7] Technically, the EU policy framework is called the Second Payments Services Directive, or PSD2. While it differs from the UK's Open Banking policy in some important respects, the two policies have largely similar objectives of increasing consumer choice by giving them ownership rights over their data and facilitating the sharing of their data with third-party service providers such as Fintech companies.

[8] Organization for Economic Co-operation and Development, *OECD Economic Outlook*, November 2017, available here.

[9] To illustrate, Tesla's share price has of late fluctuated closely in response to chief executive officer Elon Musk's controversial Twitter activity, which markets have interpreted as indicative of Musk coming under stress owing to the company's challenges with turning a profit. See, for example, "A Brief History of Elon Musk's Market-Moving Tweets" at https://www.wired.com/story/elon-musk-twitter-stock-tweets-libel-suit/.

[10] A case in point is the recent Globe and Mail coverage of alleged fraud at Pace Credit Union in Ontario. See here for more: https://www.theglobeandmail.com/business/article-pace-credit-union-executives-accused-of-fraud-over-years-of-secret/

[11] The Canadian Credit Union Association.

[12] See here, for example: http://www.osfi-bsif.gc.ca/Eng/fi-if/in-ai/Pages/smsb.aspx

JOHNSON SHOYAMA
Canadian Centre for the Study of Co-operatives
UREGINA USASK

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

Ph: 306-966-8509
Email: coop.studies@usask.ca