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UNIVERSITY OF TORONTO

# UPSCALING ASSOCIATIONAL GOVERNANCE: STARTUPS, SCALEUPS, AND THE POLITICS OF SYSTEMIC CHANGE

Darius Ornston and Travis Southin

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**Executive Summary**

How do countries enter new, high-technology industries? The literature on comparative political economy has historically focused on national institutions, whereas economic geographers have privileged local conditions. Tracing the growth of entrepreneurial activity in Canada, a country that has struggled to scale new high-technology enterprises, this paper argues that both accounts are incomplete. Examining Waterloo, Toronto, and Ottawa, we describe how "regional innovation centres" have created protective space for vibrant entrepreneurial communities within an otherwise inhospitable institutional setting. At the same time, these associations have failed to tackle and, in some ways, exacerbated the systemic barriers to scaling high-tech firms. Where we observe institutional reform, it was driven by national associations that emerged independently from, and existed in tension with, regional initiatives. In doing so, the paper highlights the value of combing comparative political economy and regional studies to better understand the process by which communities "upscale" associational governance.

How do countries enter disruptive new industries? Political science and economic geography offer different explanations. Historically, comparative political economists have privileged national institutions, describing how deep, flexible capital and labour markets (Hall & Soskice, 2001; Hassel & Palier, 2021), encompassing, cross-sectoral producer associations (Ornston, 2012; Thelen, 2019), or ambitious innovation policies (D. Breznitz, 2007; Thurbon et al., 2023) enable countries to develop or diversify into new technologies. By contrast, economic geographers point to regional dynamics, as firms use a progressively denser and more sophisticated network of local institutions to scale new business models and transform national economies (Feldman et al., 2005; Powell et al., 2012; Storper et al., 2015).

Tracing the rise of high-technology entrepreneurship in a historically low- and medium-technology economy, Canada, we argue that both these accounts are incomplete. Comparative political economists often overlook the degree to which local associations can compensate for weak national institutions. In connecting actors, investing in public goods, legitimizing new business models, local associations can create "protective space" (Smith & Raven, 2012) for young startups. At the same time, we demonstrate that the same "regional innovation centres" (RICs) which nurtured vibrant entrepreneurial communities in Waterloo, Ontario (as well as Ottawa and Toronto) struggled to transform the sub-optimal national institutions that constrain high-technology firms (and, in some ways, made scaling even harder). Comparing associations, we demonstrate that institutional reform, to the extent that it occurred, was shaped by national-level associations which developed independently from, and existed in tension with, their regional counterparts.

In doing so, we make several theoretical contributions. We contribute to a growing body of literature on local agency (Grillitsch & Sotarauta, 2020), illustrating how local communities

can use associational governance to construct viable, entrepreneurial ecosystems within an unfavourable national context (Gartzou-Katsouyanni, 2020; Medve-Bálint, 2024). We simultaneously shed greater light on the limits of local agency, as the political capture of local associational governance and the difficulty of forging a national coalition make it difficult to pursue systemic institutional reform and transformative economic change. Although both comparative political economists and economic geographers have recognized that associational governance needs to evolve as industries mature (D. Breznitz, 2007; Feldman et al., 2005; Powell et al., 2012; Storper et al., 2015), we bring these two disciplines into dialogue to highlight the challenge of "upscaling" local associational governance and, in so doing, outline a new research agenda.

## Upscaling Associational Governance

The rapid diffusion of information and communication technologies, including artificial intelligence, as well as the sustainability transition and increasing geopolitical competition, have fostered increasing interest in diversification or the process by which countries enter and develop disruptive new industries (Juhász et al., 2024; Thelen, 2019; Thurbon et al., 2023). The precise ingredients vary. For comparative political economists, the answer generally rests with national institutions.[1] Some focus on market-friendly institutions, including advanced users, liquid capital markets, and flexible labour markets with abundant, transferrable skills (Albert, 1993; Hall & Soskice, 2001; Hassel & Palier, 2021; Kristensen & Levinsen, 1983). Others emphasize public sector leadership, specifically industrial policies that mobilize capital and knowledge around

[1] While there is a robust literature on sub-national industrial orders, these are generally perceived to protect traditional industries rather than driving transformative change, and they do so by blocking national reform rather than accelerating it (Herrigel, 1996; Kristensen, 1996; Piore & Sabel, 1984).

emerging national champions (Amsden, 1989; D. Breznitz, 2007; Denney et al., 2023; Weiss, 2014). For others, the reforms above are rooted in associational governance, specifically an encompassing, cross-sectoral producer coalition (Ornston, 2012; Rothstein, 2022; Seidl, 2023; Thelen, 2019).

The literature on economic geography offers a valuable corrective to comparative political economy's methodological nationalism, rooting industry emergence and growth in the presence of local boundary-spanning organizations such as large firms, knowledge-bearing institutions, and regional associations (Feldman et al., 2005; Powell et al., 2012; Storper et al., 2015). These organizations generate cross-sectoral buzz by combining deep, specialized expertise in novel ways (Berkes & Gaetani, 2020; McCarthy et al., 2018; Powell et al., 2012; Storper & Venables, 2004). These cross-sectoral connections support investment in public goods such as research laboratories, training programs, or physical infrastructure (Dalum et al., 2005; Farole et al., 2011; Sabel, 1993). Finally, local buzz can also attract internal and external resources, including financial investment, human capital, and complementary service industries (Bathelt et al., 2004; Nelles & Wolfe, 2022; Storper et al., 2015; Walshok & Shragge, 2014), which transform local markets and, by extension, national economies.

This latter framework explains why, as comparative political economists have increasingly come to appreciate (Bulfone, 2023; Iversen & Soskice, 2019; Regan & Blyth, 2025), high-technology activity is actually concentrated within a limited number of large, metropolitan regions (Berkes & Gaetani, 2020; Moretti, 2013; Powell et al., 2012). At the same time, the ability of these regional entrepreneurial ecosystems to attract and recombine expertise, financial capital, and complementary service industries presupposes a high-functioning national innovation system and entrepreneur-friendly institutions. These conditions might exist in the

United States (Feldman et al., 2005; Storper et al., 2015) or Sweden (Grillitsch & Nilsson, 2015; Grillitsch & Sotarauta, 2020), but it does not accurately capture the challenges confronting entrepreneurs in a less hospitable environment characterized by capital scarcity, human capital shortages, a dearth of complementary service industries, modest or laissez-faire innovation policies, and significant regulatory barriers. In this more challenging context, we argue that local associational governance plays a different role.

Drawing inspiration from the literature on sustainability transitions, we hypothesize that local associations are more likely to succeed by creating "protective space" (Smith & Raven, 2012) from national institutions. Instead of attracting large inflows from deep and fluid financial and labour markets, local buzz is more likely legitimize modestly successful high-technology ventures (Gartzou-Katsouyanni, 2023; Ornston, 2021). To the extent that local associations mobilize capital, modest public funding and scarce local resources support relatively modest, capital light public goods such as seed grants, subsidized real estate, or business advice (S. M. Breznitz & Zhang, 2019; Conteh, 2020; McCarthy et al., 2018; Zhang et al., 2024). Finally, instead of combining exceptionally deep and diverse expertise and financial capital to create "cross-sectoral buzz" (Storper et al., 2015), social connections are more likely to diffuse knowledge about how to circumvent national constraints (Herrmann, 2009; Lange, 2009; Ornston, 2021). For example, mentors might encourage entrepreneurs to avoid capital-intensive markets in favour of smaller, specialized niches (Creutzberg et al., 2024; Kristensen & Levinsen, 1983).

In contrast to scholarship that views local associational governance as a platform for "systemic" reform and industrial transformation (Dutt et al., 2016; van Weele et al., 2018), we argue that these organizations are unlikely to support and may actually inhibit the scaling of new

business models. The generic business advice that helps startups to navigate daunting institutional conditions is less useful for high-growth firms seeking specialized expertise and resources. In fact, if mentors encourage startups to focus on smaller, slower growing markets, these networks could even *discourage* scaleup activity (Ornston & Watkinson, 2026). Furthermore, although regional associations may use local resources and modest, national programs to fund seed grants, soft loans, subsidized real estate, and other small-scale supports (Conteh, 2020), these measures do not help scaling enterprises that require more activist innovation policies (Denney et al., 2023) and can slow growth by limiting labour market turnover (Zhang et al., 2024). Closer attention to local and national politics illuminates additional challenges. A commitment to providing protective space can make it harder for local associations to redirect resources to high-growth firms and, to the extent that these supports are co-funded by the government, this can discourage anti-system critiques or "regime disruption" (Kivimaa & Kern, 2016; Köhler et al., 2019). Finally, strong regional associations can impede coalition building, specifically the national alliances necessary to address the systemic, institutional barriers to scaling high-technology enterprise.

To this end, we hypothesize that the most successful efforts to scale firms and pursue systemic reform will be initiated not by local organizations (Dutt et al., 2016; van Weele et al., 2018), but rather by national associations. In a relatively inhospitable institutional climate, only national associations possess the critical mass of scaleups necessary to exchange specialized advice. Second, national-level organizations are better positioned to tackle the political, regulatory, and institutional barriers that scaleups face. By pooling their resources, these organizations have a better chance of influencing the policymaking process than their local counterparts and are less encumbered by their commitment to preserving protective space. In

short, although we claim that there is greater space for localized pockets of high-technology entrepreneurship than the literature on comparative political economy suggests, we argue that regional experiments are unlikely to scale without the kinds of supportive national institutions articulated by comparative political economists. National associations, rather than local ones, are better positioned to champion this type of systemic reform and so efforts to scale high-technology industry require a parallel upscaling of associational governance. Because of the inter-firm and inter-regional tensions noted above, this process of upscaling associational governance is not automatic, but rather represents a challenging and contentious political process.

**Case Selection and Methods**

To evaluate these claims, we trace the evolution of high-technology entrepreneurship in Canada, a country that has historically failed to scale high-technology firms (Denney et al., 2023). Although the liberal market economy benefits from liquid equity markets and a high share of university graduates, the conservative financial system has prioritized resource extractive industries and construction over the tech sector (Coleman, 1988). In particular, Canada lacks large, established venture capital firms that might fund firms, coach them, organize them into peer-to-peer networks, connect them to complementary services, and build cross-regional and cross-sectoral coalitions (Ferrary & Granovetter, 2009; Rothstein, 2022). Manufacturing activity has been dominated by US multinationals and the resulting branch plant dynamic has prioritized assembly and distribution over advanced functions such as design and marketing (Anastakis, 2013; Atkinson & Coleman, 1989). Partly as a result of this sectoral profile, in addition to a small domestic market fragmented by inter-provincial trade barriers and a weak competition

policy that shelters uncompetitive firms in non-tradeable industries (OECD, 2021), Canadian firms trail their US counterparts on a wide variety of measures of innovation (D. Breznitz, 2021; Nicholson, 2016).

Nor has the state stepped in to address these deficiencies. In contrast to the US and other innovation leaders, the Canadian government has pursued a laissez-faire approach to industrial policy, using tax incentives to subsidize basic research and human capital investment rather than selective grant aid or procurement (D. Breznitz, 2021; Scharf, 2022; Smardon, 2014; Southin, 2022). This policy mix reflects the political power of Canada's dominant social blocs, resource-extractive industries such as forestry and mining as well as branch plant manufacturing (Atkinson & Coleman, 1989) and the associated fragmentation of domestic industry (and high-technology industry in particular) (Atkinson & Coleman, 1989). Canada has hosted large, high-technology firms such as Nortel and RIM in the past, but these firms never attempted to create a national coalition, not least because of their ability to directly negotiate specific concessions. As a result, neither their presence, nor their decline, dramatically reshaped the institutional context above (Atkinson & Coleman, 1989; McNish & Silcoff, 2015).

Despite these institutional headwinds, Canada has developed an increasingly dynamic startup scene in recent decades. The Toronto-Waterloo corridor now ranks as one of the largest high-technology clusters in North America, buoyed by robust startup activity (CBRE, 2020; Denney et al., 2021; Wachsmuth & Kilfoil, 2021). Even Ottawa, which was deeply impacted by the loss of its anchor firm, Nortel (Ornston & Camargo, 2024), has developed a more diversified high-technology ecosystem based around e-commerce, autonomous vehicles, cybersecurity, and other niches (Creutzberg et al., 2024). The Canadian case thus provides an opportunity to examine how high-technology industries emerge *without* the large, internal markets and deep

pools of capital that characterize China and the US (D. Breznitz & Murphree, 2011; Taylor, 2004) or the ambitious innovation policies of Finland or Israel (D. Breznitz, 2007; Ornston, 2012).

To preview our findings, we find that startup activity emerged locally, supported by RICs and other associational bodies rather than national innovation policies or associations (Atkinson & Coleman, 1989; Denney et al., 2021; Ornston, 2021). We focus on the evolution of the entrepreneurial ecosystem in the Waterloo region, roughly 100 km west of Toronto, but we use Ottawa and Toronto as shadow cases to demonstrate that our argument generalizes. Section three describes how Waterloo's industry association, Communitech, created protective space for high-technology startups in the 1990s and 2000s. Even as local associational governance evolved and deepened in ways that are consistent with US studies (Feldman et al., 2005; Storper et al., 2015), section four reveals that these organizations nonetheless struggled to support scaling firms. Consistent with this claim, section five demonstrates how their failure to do so inspired national organizations such as the Council of Canadian Innovators (CCI) and the Lazaridis Institute and provides evidence that these bodies have been more effective at delivering the connectivity and public goods that support scaling enterprises. In fact, when Communitech belatedly shifted its focus to scaleups, it attempted to construct a parallel national network. Upscaling associational governance, however, has proven much more challenging for a regionally embedded organization. Section six builds on this tension to trace out an agenda for future research.

Analysis is based principally on 205 semi-structured interviews conducted with representatives from high-technology firms between 2015 and 2025. Focused principally on the Ottawa, Toronto, and Waterloo entrepreneurial ecosystems, this sample included startups (n =

32), scaling firms (n = 82), and representatives from large established enterprises (n = 9).[2] Our analysis also includes interviews with industry associations and local intermediary organizations, including Communitech, MaRS, and Invest Ottawa (n = 28), experts familiar with the startup community such as academics and journalists (n = 14), venture capitalists (n = 8), and policymakers at the local (n = 12), provincial (n = 4), and federal (n = 16) level.[3] Interview data were triangulated against a content analysis of every Communitech Tech News post (n = 794) between 2015 and 2023 (Communitech, 2025), as well as a narrower comparison between Communitech's (n = 140) and CCI's more recent website activity (n = 60) between February 2022 and June 2023 (Council of Canadian Innovators, 2025). We also used the Federal Register of Lobbyists to track and compare Communitech and CCI's lobbying activity from 2016 to 2024 (Office of the Commissioner of Lobbying in Canada, 2025).[4]

## Associational Governance, Protective Space, and the Local Origins of High-technology Entrepreneurship in Canada

Although Waterloo, with roughly 500,000 inhabitants, has benefited from the presence of a world class engineering university since 1959 (Bramwell & Wolfe, 2008), the region long failed to capitalize on this advantage and was better known as a feeder to foreign multinationals such as Microsoft rather than a high-technology hub. One industry veteran characterized Waterloo as "essentially a Mennonite farming community. [We] had a wonderfully vibrant farming community and somewhat long in the tooth textile and automotive assembly areas, as

[2] We defined a scaleup firm as one with at least $2 million in revenue that has experienced annualized growth of 20% over a three-year period (Fairlie et al., 2016).
[3] All interviews were conducted under University of Toronto Ethics Review Board-approved research protocols. In line with those protocols and the process of securing consent, we have removed names and any other identifying information from our interview data.
[4] Communitech's registrations stretch back earlier to 2014, but we limit any direct comparisons with CCI to 2016-2024.

well as a fledgling mathematics and actuarial area because of the insurance companies."[5] By the 2016 Canadian census, however, the region ranked among the top five on multiple measures of software and high-technology employment concentration (Ornston, 2021, p. 392; Statistics Canada, 2016) and first in Canada in per-capita adjusted measures of venture capital investment and employment in venture-backed startups (CVCA, 2020; Florida & Hathaway, 2018). Until its amalgamation into the broader Toronto-Waterloo Innovation Corridor, Waterloo was the only region with fewer than a million residents in Startup Genome's list of twenty-five startup ecosystems, ranking second to Silicon Valley in startup density (Compass, 2015; Startup Genome, 2015).

How did Waterloo transition from a sleepy exporter of technology talent into a startup hub? Like high-technology clusters in the United States (Feldman et al., 2005), a "robust actor" (Padgett & Powell, 2012), Professor Wes Graham, played a catalytic role by establishing Structured Computer Systems (later Watcom) in 1974. His entrepreneurial success inspired peers within the university's relatively small and tight-knit social networks, prompting other professors to launch their own firms (Wolfe, 2009, p. 205). These informal relationships were institutionalized as the Atlas Group in the early 1990s, where a rotating host would present a five- to ten-minute story followed by discussion and collective problem-solving. One founder commented, "We all felt a little isolated in a community that wasn't a tech town. We [founders] didn't have a lot of local influences …. We recognized that we were all jetting around, all primarily export, all high R&D, and we never really had a forum to talk to other people in our

[5] Interview with firm representative (29 November 2017).

situation."[6] Another early member confirmed, "The notion of [Atlas] was the peer-to-peer training. We wanted to learn from one another …. because we had no one else to talk to."[7]

Recognizing that the growing tech sector's needs would not be satisfied with coffee and donuts alone,[8] this casual roundtable was replaced by a formal industry association with a president and permanent staff, not least to raise the region's profile and secure provincial and federal resources (Ornston, 2021, p. 398). Established in 1997, Communitech's very name, "Communitech" evoked a spirit of collection action and was soon complemented by references to the region's unique Mennonite heritage, including its commitment to "barn raising" (Bathelt & Spigel, 2019; Ornston, 2021). This ability to speak with "a collective voice"[9] and "sing from the same song sheet"[10] enabled the region to attract both private and public sector support (Conteh, 2020; Ornston, 2021). For example, the organization's initial entrepreneur-in-residence program and the renovation of the Tannery Building were both co-funded by the province of Ontario (Howitt, 2019, pp. 109–114). A federal policymaker observed, "From a political perspective … you see a lot of the glitz and polish coming out of Kitchener-Waterloo. It's an attractive thing for politicians of any stripe to be associated with, a growth story."[11] A colleague, after acknowledging their responsibility to other regions, conceded, "We try to reconcile these [factors], but there is, 'The squeaky wheel gets the grease.' [Waterloo is] very loud."[12]

With only modest local, provincial, and federal resources, however, Communitech invested mainly in small-scale protective space for young startups (S. M. Breznitz & Zhang, 2019; van Weele et al., 2018). For example, Communitech complemented the peer-to-peer

[6] Interview with firm representative (2 February 2021).
[7] Interview with firm representative (1 April 2021).
[8] Interview with firm representative (2 February 2021).
[9] Interview with firm representative (2 February 2021).
[10] Interview with academic (17 August 2018).
[11] Interview with federal policymaker (30 July 2018).
[12] Interview with federal policymaker (30 July 2018).

mentoring of the Atlas Group with more structured forms of advice, importing senior entrepreneurs-in-residence and outside speakers (Will, 2017). An entrepreneur explained, "You think 'I can do this. This will be really easy.' But it's not. Communitech can tell us who [we] should go for services, legal, accounting, how to register a company, what to look for in my business plan. We [had] a mentor who had done a startup before."[13] Another commented, "When we first started all three of us were engineers. We had no business plan, no business model, nothing. People told us we should build a business around it. We didn't know what that even meant."[14] By 2010, the provincially designated "Regional Innovation Centre" was complemented by a co-working space, the Tannery Building. Alongside subsidized real estate, Communitech offered seed capital, marketing opportunities at co-located corporate labs, assistance with talent recruitment, and a wide array of events (Cicci & Ornston, 2024, p. 728; Deloitte, 2017, p. 165). The latter not only spread practical advice and facilitated networking, but also legitimized this new business model, transforming ventures that others from outside the region dismissed as minor successes[15] into local "rock stars."[16]

The most frequently cited public good at Communitech remained social connectivity and peer-to-peer mentoring networks in particular. Fifteen out of the twenty current or former Communitech clients interviewed for this project identified this legacy of the Atlas Group as one of the region's greatest strengths. These ties diffused practical knowledge about how to operate a high-technology firm, broadening the reach of the organization's advisory services. The founder

[13] Interview with firm representative (28 November 2017).
[14] Interview with firm representative (25 July 2022).
[15] Interviews with industry association representatives (19 and 24 August 2018) and venture capitalist (11 December 2019).
[16] Interview with former entrepreneur and university employee (24 November 2020).

above identified these peer-to-peer networks as a valuable complement to their mentor.[17] These benefits also extended to non-founders, as described by a former startup employee,

> One of the first things I did [when I moved here] was to join a peer-to-peer group at Communitech … The thing that struck me was the way the community was open and willing to share with each other. I came in as an outsider and I had people to reach out to with questions. How do I do SRED [Scientific Research and Experimental Development] tax credits? Who is the best person to go to? What should my option plan look like?"[18]

In a relatively capital scarce environment with few industry veterans or complementary service providers, these peer-to-peer mentoring networks also taught entrepreneurs how to navigate institutional constraints. For example, firms might be encouraged to bypass Canadian institutions by tapping into "global pipelines" (Bathelt et al., 2004) to access talent,[19] risk capital,[20] or specialized service providers (Bathelt et al., 2011, p. 482). This could involve organizational and institutional improvisation (Herrmann, 2009), for example, by using dual office structures to move closer to international customers[21] or creating hybrid working regimes to access international talent.[22] Founders were also advised to alter their business strategy, targeting technically demanding niches with lower capital and marketing requirements.[23] One advisor said, "I'm always telling students if you can find a business-to-business niche, you're far better off than trying the big consumer plays because they take incredible resources."[24] Another mentor quipped,

[17] Interview with firm representative (28 November 2017).
[18] Interview with venture capitalist (23 November 2017).
[19] Interview with venture capitalist (23 November 2017).
[20] Interview with firm representative (15 August 2018).
[21] Interview with firm representative (23 November 2017).
[22] Interview with firm representative (29 January 2021).
[23] Interview with intermediary organization representative (15 January 2021).
[24] Interview with former entrepreneur and university employee (24 November 2020).

> Recognize who we are, where we are. We're playing Triple A Ball. And you know what? That's okay. … When I go and pitch my business to VCs in [Silicon] Valley, I'm waiting for them to say, "Oh, that's a great lifestyle business." … That's perfect, because what that tells me is, they're not going to look at it, right?[25]

Despite variation in their specific organizational features, strengths, and weaknesses (Cicci & Ornston, 2024; Creutzberg et al., 2024), we observe parallel dynamics in other Canadian entrepreneurial ecosystems such as Toronto and Ottawa. In Toronto, long a center for the sales and marketing operations of foreign, mostly US, high-technology firms, domestic entrepreneurship followed a multi-generational organizational effort, which included analogues to the Atlas Group such as Bar Camp (2005-2015) and TechTO (2014-present), as well as a collection of incubators, accelerators, and RICs, most notably the MaRS (Medical and Related Sciences) Discovery District (Cicci & Ornston, 2024; Denney et al., 2021). Juxtaposing the contemporary support available at MaRS with the late 1990s, a former entrepreneur explained, "When I was starting my company, there was nothing. I was on my own. There was nobody to turn to. I knew no other entrepreneurs; I was making all the mistakes on my own."[26]

Ottawa differed in that a local, high-technology flagship firm, Nortel, created opportunities to start *and* scale firms by entering its supply chain and leveraging specialized infrastructure (Ornston & Camargo, 2024, pp. 68–69). The firm's easy access to government led Nortel to eschew national coalition building or systemic policy reform (Atkinson & Coleman, 1989), but it did engage in a bottom-up process of regional association building in Ottawa that parallels the literature on regional studies (Feldman et al., 2005; Powell et al., 2012; Storper et al., 2015). Reflecting Nortel's influence, the Ottawa-Carleton Research Institute (OCRI) focused less on peer-to-peer mentoring or subsidized real estate and instead prioritized

[25] Interview with firm representative (29 January 2021).
[26] Interview with former founder (29 April 2021).

telecommunications education, research, and infrastructure (Cicci et al., 2023, p. 29), supporting a large but specialized ICT sector (Creutzberg et al., 2024, p. 556). When Nortel's collapse threw the entire tech sector into disarray (Ornston & Camargo, 2024, pp. 69–70), however, OCRI, redubbed Invest Ottawa, drew on a local, Atlas-like peer-to-peer mentoring network, Fresh Founders, to design entrepreneurial programming that more closely resembled Communitech and served a more diverse array of firms (Creutzberg et al., 2024, p. 558).

**Protective Space or Stunted Development? The Limits of Local Associational Governance**

While Communitech's programming was often viewed as useful by startups, scaleups found these resources less helpful. Of the 82 representatives from scaling firms we interviewed, only four reported actively relying on one of the RICs.[27] Other scaling scaleups,[28] plus several startups,[29] remarked that subsidized office space, seed grants, and coaching were valuable when launching their firms, but noted that they outgrew these supports over time. In addition to losing their eligibility, scaling firms and veteran entrepreneurs found "cheap rent and, like, advisors that have some experience in doing things,"[30] less relevant for their firms. Questioned about the peer-to-peer knowledge exchange that many startups identified as Communitech's core strength, a representative from one scaling firm responded,

> I'm not learning as much from [another local firm]. We used to have the commonality of a large addressable market in the public sector. When you're starting some of those early, high-level tips [are useful]. But we're in the business of [identifies niche] right now … That's pretty specific. So, then you start looking

[27] Interviews with firm representatives (26 July 2018, 1 June 2019, 19 July 2019, and 20 August 2021).
[28] Interviews with firm representatives (19 July 2017, 1 August 2019, 13 August 2018, and 14 August 2018).
[29] Interviews with firm representatives (15 August 2018, 29 January 2021, 16 February 2021, 25 July 2022, and 12 May 2023).
[30] Interview, firm representative (20 January 2023).

> and saying, "Do I start relating more to someone because they're in proximity to me? Is proximity a valuable asset?"[31]

In Waterloo, larger enterprises, scaleups, and veteran entrepreneurs frequently spoke positively about Communitech and their desire to engage with it. But this positive assessment was not based on personal benefit.[32] Established and scaling companies instead emphasized a sense of communal responsibility and the obligation to honor a "call to action"[33] or "pay it forward."[34]

Others in the scaleup community were more critical, identifying three ways in which Communitech actively hindered scaling. First, when mentors encouraged firms to specialize in smaller, highly technical niches, they steered entrepreneurs away from the more lucrative markets that might support faster growing enterprises.[35] Second, some expressed frustration with an "incubator-accelerator industrial complex" (McIntyre & Schwartz, 2019) trapping capital and talent in smaller, less productive firms and, by extension, making it harder for scaleups to mobilize the resources to fuel rapid growth. [36] A representative from one scaling firm complained,

> What I see is policy being dictated by politicians. I don't agree with half of what they do in the Vector Institute, MaRS, and Communitech. Who should be really helping or [represented] at the table? The people who are producing revenue for Canada or the people with a dream and hope? In the end, you have to look at the track record. MaRS and Communitech have a horrible track record of producing winners in Canada."[37]

[31] Interview with firm representative (20 April 2021).
[32] Interviews with former (10 July 2018) and serial (15 August 2018 and 29 January 2021) entrepreneurs.
[33] Interview with firm representative (15 August 2018).
[34] Interview with firm representative (19 July 2017).
[35] Interviews with firm representatives (22 August 2019 and 8 May 2023), industry association representative (19 August 2019) and venture capitalist (11 December 2019).
[36] Interview with industry association representative (19 August 2019) and firm representative (20 April 2021).
[37] Interview with firm representative (14 August 2018).

Others in the Waterloo community pushed back against this claim, but an Ontario study has linked the recurring use of early-stage support to lower firm growth (Zhang et al., 2024) and some conceded, "We do a good job with startups. We don't kill them fast enough though. You can't coddle them, you have to kill them. …. We're great at starting, not killing or growing."[38]

Third, the dense peer networks that diffused knowledge discouraged regionally embedded scaleups from using higher salaries to poach talent away from smaller, less productive firms. The veteran entrepreneur above described,

> An unwritten rule that we wouldn't poach each other's employees. It was ok to hire people, [but] you would never go and poach, you know, an entire team from someone. You just didn't do that. Or if you were going to hire somebody senior, you kind of gave them a heads up.[39]

This, in turn, created challenges for rapidly growing firms. A former employee described how,

> Recruitment is a nightmare for engineering and designer talent. It really makes it difficult to step on people's toes. So, for example, my recruitment team goes chasing someone down and they were working at my friend's company, and I go, "Oh shit." I gotta write my friend a message and be like, "I'm sorry Mike." Right? But I always got to make sure I'm maintaining that relationship.[40]

To this point, the firms that were most willing to aggressively recruit talent with above-market salaries were headquartered outside of the region and unconcerned with the reputational hit they sustained in doing so.[41]

[38] Interview with firm representative (2 February 2021).
[39] Interview with firm representative (2 February 2021).
[40] Interview with firm representative (11 February 2021).
[41] Interviews with employee, innovation intermediary (15 January 2021) and firm representatives (11 February and 20 April 2021).

If scaleups found Communitech's programming irrelevant, or even counterproductive, this is not to suggest that they did not require any support. As noted above, Canadian scaleups cannot draw on the liquid financial and labour markets that characterize the United States (Baumol et al., 2007; Hall & Soskice, 2001) and they face chronically low rates of technology adoption by the private sector (Nicholson, 2016). Nor can firms draw on the activist industrial policies that characterize other high-technology leaders (D. Breznitz, 2007; Maggor, 2021; Ornston, 2012; Weiss, 2014). Canadian studies suggest a significant appetite for government intervention, but scaleups prefer larger and more targeted, direct support in addition to demand-side instruments, most notably government procurement (Denney et al., 2023; Southin, 2022). In interviews, high-growth companies also complained about a diverse array of regulatory and institutional obstacles, including taxation,[42] intellectual property,[43] standard setting,[44] and the overall regulatory burden.[45] In other words, scaleups are interested in "regime disruption" or the deeper and more systematic reform of Canadian public policies and institutions (Denney et al., 2023; Kivimaa & Kern, 2016; Köhler et al., 2019).

A variety of measures suggest that Communitech has fallen short on this front. As noted above, few of the scaleups we interviewed were actively drawing on Communitech or the other RICs. A content analysis of Communitech's own website confirms that the organization's programming has, in fact, been geared toward smaller, younger firms. Historically, 37% of their blog posts addressed seed or startup firms and only 12% mentioned scaleups. Their focus has shifted in recent years, as exemplified by their attention scaling in their post-2018 lobbying

[42] Interviews with firm representatives (6 June 2018, 2 August 2018, 14 August 2018, 26 October 2018, and 8 August 2019).
[43] Interviews with firm representatives (6 June 2018, 26 July 2018, 15 August 2018, 25 February 2019, 1 May 2019, and 1 August 2019).
[44] Interviews with firm representatives (22 June 2018, 26 July 2018, and 13 September 2019).
[45] Interviews with firm representatives (31 July 2018, 19 July 2019, 13 September 2019, and 20 December 2022).

activity, but their February 2022 – June 2023 posts continue to mention younger, smaller firms (31%) more frequently than their high-growth counterparts (16%). As discussed in more detail below, the organization's accountability to the local community and the relatively small number of scaleups in the Waterloo region have made it harder for the organization to be more selective or concentrate funding on a handful of enterprises (Cicci & Ornston, 2024, p. 730).

At a more general level, Communitech has eschewed legislative reform. Only 10 of the 794 news posts between 2015 and 2023 involved explicit policy advocacy. In comparison, 131 posts highlighted Communitech's programming. In the words of an industry representative, "Communitech is not the group that's actually doing the lobbying. They're talking to all these guys, but they're very much just on the sidelines."[46] Another interviewee, contrasting Communitech with the Council of Canadian Innovators below, elaborated,

> When the last budget was released, [CCI] sent out an advice paper on how that affects small business in Canada, which is giving us better insight. How does the budget affect us? There's no way I'm going to be sitting there reading the budget, but they did. What's the impact for us? I've never seen Communitech take that side of it. …. CCI does have a more federal [focus], whereas Communitech is more regional.[47]

To be clear, Communitech, like all of the RICs, had to compensate for the limited resources and policy tools at the local and municipal level by attracting provincial and federal funding. Indeed, it has been highly successful in using the government's strategic priorities and existing programs to create protective space for its startups (Conteh, 2020; Deloitte, 2017; Ornston, 2021).[48] But, in addition to constructing a constituency that would oppose the targeting or reorientation of resources, public funding restricted Communitech's lobbying activities and

[46] Interview, firm representative (20 January 2023).
[47] Interview, firm representative (7 February 2023).
[48] Interview with academic (23 May 2025).

discouraged an adversarial approach.[49] As a representative from another innovation intermediary characterized it, "We're really plugged in with government …. [but] we need to be fairly careful right? We're not lobbyists, we walk a fine line in how we do it."[50] As a result, when the federal government's 2024 proposal to increase the capital gains tax provoked outrage within the tech community, Communitech, alongside other RICs, adopted a markedly more conciliatory stance, suggesting only minor modifications to align the reform to US tax policy (Silcoff, 2024). In other words, the organization's commitment to creating protective space limits its ability to pursue disruptive policy reform.

Finally, it is questionable whether Communitech would have succeeded even had it pursued more radical policy reform. A single regional association was in no position to reshape public policy by itself.[51] Meanwhile, Communitech's status as a regional association impeded the type of national coalition building necessary to drive reform (Atkinson & Coleman, 1989; Southin, 2022). References to the region's Mennonite heritage and culture of "barn raising" may have united local stakeholders (Bathelt & Spigel, 2019; Nelles, 2014; Ornston, 2021) and reassured federal policymakers,[52] but other regions found Communitech's rhetoric irrelevant, "hokey"[53] or even off-putting.[54] This hostility reflects the competitive dynamic between regional innovation centres. Commenting on Communitech's CEO, an industry veteran remarked, "[Iain Klugman's] background was communications, and I think part of what Waterloo is great at is the marketing and the branding …. [They] were literally strong-arming people to come to Waterloo. They just, there was this mafia that existed there."[55] Another provided an illustrative example,

[49] Interview with representative from an innovation intermediary (13 August 2018).
[50] Interview with innovation intermediary representative (29 April 2021).
[51] Interview with representative from an innovation intermediary (5 July 2022).
[52] Interview with academic (12 May 2021).
[53] Interviews with firm representative (1 April 2021) and venture capitalist (23 November 2017).
[54] Interview with innovation intermediary representative (24 August 2018).
[55] Interview with academic (12 May 2021).

"We proposed to [build] a hub, an innovation center, we called it the I-Hub and we had done a whole bunch of work around it …. Iain Klugman took our plan, and that became the hub. [He] will tell you, they took the blueprint, and they were able to implement it."[56]

Other RICs such as MaRS, OCRI, and Invest Ottawa faced similar obstacles, even though their origins and organizational structure varied (Cicci et al., 2023). The Ottawa-Carleton Research Institute (OCRI) was more effective than Communitech at supporting scaleups with investments in specialized infrastructure, but it did so by focusing almost exclusively on the telecommunications industry. This narrow local identity alienated members of the Ottawa tech community (Creutzberg et al., 2024, p. 557; Ornston & Camargo, 2024, p. 70) and was hardly capable of supporting a national coalition. The municipal government takeover of a renamed and reorganized "Invest Ottawa" increased inclusivity, but its investment promotion mandate led it to clash with other RICs.[57] This inter-regional competition for FDI and public investment applies to Communitech as well, which devoted over a quarter of its news posts (227 out of 794) to regional promotion.

MaRS' unique governance structure provided a layer of insulation from the local startup community that Communitech and Invest Ottawa lacked (Cicci & Ornston, 2024, p. 721), but it, too, faced familiar challenges. Like OCRI, it focused on a limited number of sectors and was thus unable to unite the entire high-technology community across Toronto, much less Canada (Cicci & Ornston, 2024, p. 725). Furthermore, MaRS' founding mission, delivering subsidized coworking space to startups, alienated scaleups in three ways. First, scaling enterprises were less dependent on and interested in subsidized real estate than their younger counterparts. Second, a real estate play in downtown Toronto required a significant infusion of provincial and federal

[56] Interview with former innovation intermediary representative (25 July 2018).
[57] Interview with former employee, innovation intermediary (15 August 2018).

money, limiting MaRS' ability to critique public policy from the beginning.[58] Finally, MaRS' decision to cross-subsidize this protective space by charging a premium to large, predominantly foreign, high-technology firms was an irritant to scaleups, who viewed MaRS as collaborating with their competitors (McIntyre, 2018).[59]

**Associational Upscaling and Systemic Change: The Council of Canadian Innovators**

Where we observe systemic change in Canada, it has been driven by a separate organization, the Council of Canadian Innovators (CCI). Precipitated by a 2015 letter writing campaign to protest a proposed tax increase on stock options, CCI united 50 high-technology CEOs within a national organization (Bergen, 2016).[60] By 2026, its ranks had swelled to over 170 members. Like Communitech, Invest Ottawa, MaRS, and OCRI, CCI seeks to develop Canada's entrepreneurial ecosystem by increasing connectivity and investing in public goods. Since its founding, however, CCI's membership has been reserved for, and the organization has focused exclusively on the needs of, high-technology scaleups (CCI, 2026).

To achieve this, CCI has, from its earliest days, sought to build a broad national coalition. Executive Director Ben Bergen's 936-word letter introducing the organization mentioned "domestic" Canadian firms six times (Bergen, 2016). Its current website proclaims that, "For far too long, Canada's public policy regarding innovation has been dominated by foreign multinationals and other actors whose primary purpose is not to create economic growth in Canada" (CCI, 2026) and 45 (75%) of its 60 blog posts used nationalist rhetoric. This consistent

[58] Interviews with innovation intermediary representatives (18 June 2021 and 17 September 2021).
[59] Interviews with firm representatives (6 June 2018, 14 August 2018, 15 August 2018, and 31 October 2018). This was also a point of friction within Communitech.
[60] Like the 2024 capital gains tax proposal, Communitech's response was muted. The organization's website mentioned taxation only 3 times in 159 posts between 2015 and 2016.

emphasis on Canadian tech and the external threat posed by US firms muted the inter-regional rivalry among Ontario RICs and enabled CCI to assemble an inter-provincial coalition. It also drew in firms from a diverse array of industry verticals who did not feel represented in organizations such as MaRS or OCRI.

This national focus in turn enabled CCI to develop novel connections. More specifically, CCI's ability to convene over one hundred scaleups within a single organization allowed peer-to-peer networking in a way that was not possible in more thinly populated regional ecosystems.[61] Commenting on their plans to go public, the firm representative above who said they were not learning from their peers in Waterloo remarked,

> That's a very unique experience. We're talking to people who have done that [in our niche]. Learning what a good prospectus is, what lead bank to use, who are the lawyers we should be using, and stuff like that. … For us, the greater connector has been the Council of Canadian Innovators …. That peer group is excellent, and it's grown from its inception.[62]

Peer-to-peer mentoring may not be CCI's primary purpose, but scaleups who valued this connectivity pointed to other, new national organizations that filled this niche.[63] Although structured differently from CCI, the Lazaridis Institute's national scope was able to achieve a similar density of expertise, supporting scaleups who "outgrew" local intermediaries such as MaRS.[64] As one alumnus described it,

> The Lazaridis program was great for that peer-to-peer connection. We're still connected with our cohort. We still talk and that's because I think every company needs it, you've got to find some people with industry knowledge …. like someone who has scaled up marketing from a million to one hundred billion three

[61] Interviews with firm representatives (6 September 2018 and 25 February 2019).
[62] Interview with firm representative (20 April 2021).
[63] Interviews with firm representatives (1 May 2019 and 2 February 2021) and venture capitalist (30 September 2022).
[64] Interview with firm representative (20 January 2023).

> times kind of thing. There are different things that a company needs at these different steps. For the peer-to-peer, Lazaridis, was great.[65]

CCI's primary purpose was public policy reform. Without legacy investments in subsidized real estate or startup programming to sustain, CCI could be more open and aggressive in its lobbying efforts. In comments widely echoed by other scaleups,[66] one CEO explained,

> That's why we joined CCI, right? Because we are a small company, right? We have a very small voice. I could never get in front of the people that I get in front of without working with a lobbying group like CCI …. I feel horrible saying that lobbying is the answer, because lobbying is absolute poison if you look at the U.S., but here we are, you know? I think what we're doing here with CCI is at least altruistic, where we are trying to create and keep innovation within the borders of the country. I think that is, you know, lobbying with a good purpose, a good message, right?[67]

On top of reorienting funding away from startups toward scaleups, interview subjects identified a wide range of specific policy issues from healthcare regulation[68] to patenting[69] and data,

> The reason I joined CCI [is that] I am tired of having a Canadian government that doesn't even passively support the growth of scale-up firms. What is your policy for retaining digital communiques and documentation? There is no national data strategy. It's frustrating, because we know how to do it right.[70]

A content analysis of the organizations' websites and lobbying activities supports these claims about the volume and breadth of CCI's lobbying activity. Whereas only 1 of Communitech's 140 posts between February 2022 and June 2023 engaged in policy advocacy,[71] 85% (51) of CCI's

[65] Interview with firm representative (7 February 2023).
[66] Interviews with firm representatives (6 June 2018, 3 July 2018, 8 August 2018, 9 August 2018, 14 August 2018, 25 February 2019, 8 October 2019, and 28 February 2023).
[67] Interview with firm representative (27 July 2018).
[68] Interviews with firm representatives (6 July 2018 and 7 February 2023).
[69] Interview with firm representative (26 July 2018).
[70] Interview with firm representative (26 August 2019).
[71] This is in line with historical trends. 10 out of Communitech's 794 posts adopted a clear policy position.

60 posts did. This is also clear in the Federal Registry of Lobbyists, which captures Communitech's active but quiet campaign to pull resources to the Waterloo region, engaging 23 federal actors 554 times on 19 issues between 2016 and 2024. This is impressive, but CCI reported 1,824 contacts with 44 different federal actors on 28 issues, reflecting a broader and more ambitious effort to address the diverse regulatory issues above.

It is too early and beyond the scope of this paper to determine whether CCI's activity will overcome the powerful inertial forces that structure Canadian innovation policy and national institutions (Atkinson & Coleman, 1989; D. Breznitz, 2021; Nicholson, 2016), but a review of recent policy reforms suggest that it has been more impactful than its regional counterparts. In addition to abandoning its tax reform proposals in 2015 (and 2024) under heavy protest by CCI, government action has mirrored CCI requests for more direct support, easier access to talent, public procurement reform, and intellectual property rights in its public communications and lobbying activities (Bergen, 2017). For example, the federal government's 2016 innovation policy strategy reoriented spending, albeit incrementally, away from horizontal tax credits toward more direct, targeted measures (Southin, 2022). The same year, CCI was listed as the only non-governmental referral partner in the federal government's Global Talent Stream pilot, which reduced visa processing times for skilled workers coming to Canada. In 2018, the federal government announced its first national Intellectual Property Strategy, citing CCI in its promotional materials (ISED Canada, 2018). An Ontario Expert Panel (including CCI co-founder Jim Balsillie), Action Plan, and dedicated agency (Intellectual Property Ontario) followed in 2019, 2020, and 2022 (Balsillie et al., 2019). On procurement, the federal government, Ontario, and Quebec announced initiatives modelled after the US government's Small Business Innovation Research program in 2017, 2019, and 2020 respectively (Southin,

2022, p. 34). Federal civil servants identified CCI as an "influential" force behind these reforms (Southin, 2022, p. 154). A provincial counterpart remarked,

> I think you probably know that Jim Balsillie has been leading the charge here, working with a key number of people on the intellectual property file. What I can signal to you is that the government, probably more so than in previous years, is listening to the narrative that's coming out of CCI. The intellectual property action plan that the province is working on is part of that strategy as well.[72]

The reforms are particularly striking not only because they tackle longstanding grievances in the scaleup community (Denney et al., 2023; Southin, 2022), but also because of the relative lack of attention by Communitech and the other RICs. While Communitech has long prioritized talent and immigration in its communications to the government and broader public, intellectual property and procurement were seldom discussed. Of the 279 posts between 2015 and 2017, only 3% (n = 7) mentioned procurement and 1% (n = 2) covered intellectual property. Nor, in contrast to immigration (n = 9) and regional development (n= 4), did Communitech report any lobbying contacts on these topics. Only after 2017 did Communitech begin to comment more frequently on CCI priorities such as intellectual property (n = 37, 7%) and procurement (n = 34, 7%).[73]

This belated shift in focus applies not only to the institutional barriers that make it harder to scale high-technology firms, but also to scaleup firms themselves. Although Communitech never completely neglected scaleups, only 8% (n = 22) of its news posts mentioned scaleups between 2015 and 2017, and the organization did not conduct any federal lobbying on this subject.[74] That mix has changed in recent years. After 2018 (and particularly after 2020),

[72] Interview with policymaker (21 December 2020).
[73] In terms of lobbying activity, Communitech did not target procurement until 2021-2023 (n =12) and was never active on intellectual property.
[74] By contrast, 40% (n = 111) of Communitech's 279 posts during this time period addressed seed or startup firms.

Communitech covered scaleups (n = 72, 14%) almost as frequently as it focused on seed or startup firms (n = 128, 24%), and scaleups were a leading lobbying subject in 2021, 2022, and 2024.

While Communitech's recent evolution into a champion for scaleups could be interpreted as falsifying the hypotheses at the beginning of this paper, closer examination highlights the limits of regional associational governance. First, Communitech's pivot followed a steep 2019 cut to funding for startups by the province of Ontario. One industry observer remarked, "I think Communitech did acknowledge that it's not about startups, it's about scaleups," but then continued "That's the problem that the government is focused on. I joke, you know, you do a quick find and replace of 'startup' with 'scaleup' in your applications to the government."[75] A representative from an intermediary organization was even more direct,

> Let me clarify a couple of things. The government has put a focus on the RICs to say, 'We want you to focus more on upstream clients.' Right? These clients that are going to go and actually create businesses and create jobs. All the RICs are doing the same thing. They're all focusing on their high potential clients … as a result of government direction.[76]

As a result, it is not clear that regional associational governance would have evolved had CCI not attacked the "incubator-accelerator industrial complex" (McIntyre & Schwartz, 2019) and pushed for a reorientation of funding toward scaleups (Bergen, 2017; Desai & Moffat, 2018).

Furthermore, when Communitech succeeded in supporting scaleups, it did so by upscaling associational activity. To generate the organizational density to support the peer-to-peer exchange of specialized knowledge, Communitech and the other RICs opened up their programming to firms from outside the region. To increase its clout in Ottawa, Communitech

[75] Interview with firm representative (1 April 2021).
[76] Interview with innovation intermediary representative (18 June 2021).

used the Canadian Digital Media Network to construct a coalition of regional hubs[77] and joined Invest Ottawa and MaRS in creating the Innovation Economy Council, which pushed back against CCI's claims about intellectual property and foreign direct investment (McKenna, 2021). Under Chris Albinson, who took over in 2021, Communitech borrowed from CCI's playbook even more heavily. Communitech's "Own the Podium" initiative abandoned Mennonite barn raising for a reference to Canada's most successful Olympic performance (Albinson, 2021) and was accompanied by a "True North" venture capital fund designed to support Canadian scaleups (McIntyre, 2021). Under Albinson (2021-2023), the share of posts devoted to regional promotion fell from 37% (n = 192) to 13% (n = 35), the share of nationalist posts increased from 2% (n = 11) between 2015 and 2020 to 23% (n = 62), and the number of reported lobbying contacts tripled. [78]

This process of "upscaling" associational governance, however, was fraught for a regionally embedded organization like Communitech than CCI. One local described the challenge thusly,

> Communitech has an inherent conflict of interest, it is being pulled in too many directions. You have a mandate to bring FDI to town, to have early-stage research, commercialize through things Velocity, you have startup programming, you have, supposedly, scaleup programming, and you have corporate innovation …. Its governance, frankly, is failing the community.[79]

While Chris Albinson sharpened the organization's strategic focus, his decision to elevate national scaleups fueled criticism that he was "forgetting" or had "left behind" local

[77] The Canadian Digital Media Network, which was a deliberate strategy to construct a national coalition, preceded CCI by several years. But its architects were wary of alienating local stakeholders and, anticipating the blowback Chris Albinson provoked, intentionally pursued an incremental and low-profile strategy. Interviews with innovation intermediary representatives (1 December 2017, 19 July 2018, and 1 August 2018).
[78] Specifically, they increased from 70 between 2018 and 2020 to 221 between 2021 and 2023.
[79] Interview with firm representative (20 April 2021).

entrepreneurs (McIntyre, 2023). A veteran entrepreneur reflected, "I think we've lost our way by becoming more of a provincial and national association."[80] Albinson resigned unexpectedly in 2024 in an environment of high staff turnover and decreasing membership (McIntyre, 2024). Communitech's bid to reorganize itself as a national organization may yet succeed, but its stumbles suggest that the political barriers to upscaling regional associational governance are formidable.

## Conclusion

Communitech's struggles shouldn't obscure the power of local agency (Grillitsch & Sotarauta, 2020). Drawing inspiration from economic geography and regional studies, we have demonstrated how local associational governance can create the protective space from national institutions by connecting actors and investing in public goods. This extends not only to the preservation of preexisting niches (Herrigel, 1996; Kristensen, 1996) and diversification into low-technology industries (Gartzou-Katsouyanni, 2023), but also high-technology entrepreneurship (Herrmann, 2009; Medve-Bálint, 2024). In contrast to these more optimistic accounts (Gartzou-Katsouyanni, 2023; Grillitsch & Sotarauta, 2020; Medve-Bálint, 2024), however, we find that these local actors were poorly positioned to engage the systemic barriers confronting high-growth firms. In fact, their emphasis on niches, commitment to protecting lower productivity startups, and regional commitments actively inhibited scaling. Growing new business models and, by extension, new industries, required upscaling associational governance to the point where scaleups could network with one another and forge a national coalition. In a Canadian context, like others (Gartzou-Katsouyanni, 2020), pan-regional cooperation proved

[80] Interview with firm representative (2 February 2021).

challenging for locally embedded associations. Systemic reform was instead initiated by new, explicitly national organizations such as the Council of Canadian Innovators and the Lazaridis Institute.

We recognize that these challenges are not universal. As noted above, entrepreneurs with access to deep, liquid pools of capital, flexible labour markets, and sophisticated end users might be able to grow without upscaling associational governance or require only minor modifications to national institutions (Baumol et al., 2007; Hall & Soskice, 2001). In other countries, the state might use activist industrial or innovation policies to redistribute resources away from legacy industries toward new, emerging ones (Amsden, 1989; D. Breznitz, 2007; Weiss, 2014). Where upscaling associational governance is required, it might prove easier in smaller states where inter-regional differences are more muted or where encompassing, national associations may already exist (Campbell & Hall, 2017; Katzenstein, 1985; Ornston, 2018). These dynamics might also look different with a different type of "robust actor." For example, a very large and engaged anchor firm might be capable of unilaterally overpowering local actors and refashioning national politics, particularly in a smaller country (Casper, 2007; Moen & Lilja, 2005; Thelen, 2019).

Other communities, however, would benefit from closer attention to the process by which new industries upscale associational governance to transform national institutions and growth models. We have identified one possible pathway, "layering" (Streeck & Thelen, 2005) a new organization, CCI, atop local ones and using nationalist rhetoric to unite the tech sector. It is beyond the scope of this paper to fully investigate the effectiveness and consequences of CCI's mercantilist framing, although this merits further study. CCI's decision to emphasize the threat posed by large US tech firms transcended sectoral and regional divisions within the tech community and had the added benefit of placing policymakers in a "loss frame" (Weyland,

2009). But it also appeared to narrow policy discourse, favouring statist and protectionist solutions and obscuring alternative explanations for low technology adoption such as the country's weak competition policy and corporate concentration in non-tradeable industries (OECD, 2021). Moreover, while this paper sheds light on CCI's critique of the Canadian "incubator-accelerator industrial complex" (McIntyre & Schwartz, 2019), this adversarial position risks fracturing the national coalition necessary to drive systemic reform. Greater attention to the comparative politics of upscaling associational governance could better highlight the tradeoffs associated with CCI's strategy and uncover alternatives, including the successful "conversion" (Streeck & Thelen, 2005) of regional associations. In addition to illuminating the circumstances under which countries do and do not diversify into new, high-technology industries, this research agenda would deepen the emerging dialogue between comparative political economy, economic geography, and regional studies.

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