



# Market-Based Competition and the Canadian Telecommunications Sector

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This study was commissioned by the Centre for Civic Engagement. The CCE is a non-partisan Canadian charity dedicated to conducting original research on public policy issues related to Canadian prosperity, productivity, and national flourishing. The CCE's research informs an active program of policy seminars, events, conferences, and lectures all aimed at providing the policy making community with actionable insights that encourage informed decision making on issues that matter to Canadians.

# Introduction

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Although successive Canadian governments have affirmed their support for greater competition in the telecommunication sector, their policy choices in the name of a so-called “fourth player” have come in the form of artificial competition or government-induced competition rather than a more sustainable, market-based approach.

The outcomes have been rather disappointing. While there are more players in the market than there were when the fourth-player policy was launched in 2008, it has required ongoing government intervention in order to sustain them. This has come with market distortions, opportunity costs, and other unseen consequences. Just consider for instance that the incumbent firms have had to spend more on acquiring spectrum (\$29 billion) since 2020 than they’ve spent on their networks (\$25 billion) over the same period.<sup>1</sup>

The situation seems to be reaching a boiling point. Politicians are fighting with companies, the companies are in tension with one another, and government policy is becoming increasingly interventionist and anti-investment. One gets the sense that the status quo is becoming unsustainable. Now is the time for a policy conversation about a better path forward.

This study offers an alternative conception of competition than the prevailing one in Canada based less on the number of market participants per se and instead focused on creating the conditions for greater market-based competition in the industry. In particular, it considers the case for liberalizing foreign ownership restrictions under the Telecommunications Act in order to enable more sustainable, market-based competition.

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<sup>1</sup> Robert W. Crandall, “How Canada’s wireless spectrum policy drives up mobile rates,” *Policy Options*, October 19, 2021, <https://policyoptions.irpp.org/magazines/october-2021/how-canadas-wireless-spectrum-policy-drives-up-mobile-rates/>.

# Static versus Dynamic Competition

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When markets are competitive, consumers tend to benefit. Competitive markets and the competitive behaviour between firms that they engender produce a wide range of positive outcomes, including lower prices, higher quality goods and services, greater variety, more innovation, and even greater economic competitiveness on the whole.<sup>2</sup> This is one of the basic insights of economics.

The telecommunications sector is no different. All things being equal, the evidence tells us that more competition in the sector generally produces better outcomes.<sup>3</sup>

Yet it's important to recognize that not all forms of competition are equal. One vision of competition, which focuses narrowly on the number of firms in a particular market, might be described as static. It assumes that more firms are always better for consumers and is prepared to use the levers of government policy to support and sustain new market entrants. As will be discussed below, this form of artificial or government-induced competition has largely been the source of policymaking for successive Canadian governments with regard to the telecommunications sector.

There is another vision of competition that's less focused on the number of market participants per se and is instead concerned with how the dynamic process of technological change can create competitive forces between firms, even when there's relative market concentration. As economist Neil Quigley explains:

"Where technical change provides a credible threat to a network that is already in place, high levels of competition and substantial benefits to consumers do not, in fact, require that numerous competing providers operate in the market. Investment in new technologies and services that allow a firm to compete with existing technologies may provide greater benefits than competition among providers of the same technologies and services in the market...Consumers will benefit from this investment even if incumbent firms are not replaced by potential competitors."<sup>4</sup>

The telecommunications sector is certainly one that experiences these dynamics of rapid technological change. Think about how quickly we've gone from the exclusive use of landlines to cell phones to broadband internet to fibre optics and now to satellite technologies. Even within wireless networks, the move from 3G to 5G evidences the consumer benefits from technological network upgrades. So long as the industry is free to attract investment capital (which it currently is not) and the pace of technological change keeps up, incumbent firms have strong incentives to compete with each other for the benefit of consumers and the Canadian economy.

<sup>2</sup> Heather Boushey and Helen Knudsen, "The Importance of Competition for the American Economy," *Council of Economic Advisors*, July 9, 2021, <https://www.whitehouse.gov/cea/written-materials/2021/07/09/the-importance-of-competition-for-the-american-economy/>; David Bradey et al, "Concentration of the mobile telecommunications markets and countries' competitiveness," *Telecommunications Policy* 46, no.1 (2022), <https://www.sciencedirect.com/science/article/abs/pii/S0308596121001348>.

<sup>3</sup> Wei Li and Lixin Colin Xu, "The Impact of Privatization and Competition in the Telecommunications Sector around the World," *The Journal of Law & Economics* 47, no.2 (2004): 395-430; Donald Lien and Yan Peng, "Competition and production efficiency: Telecommunications in OECD countries," *Information Economics and Policy* 13, no.1 (2001): 51-76.

<sup>4</sup> Neil Quigley, "Dynamic Competition in Telecommunications: Implications for Regulatory Policy," *C.D. Howe Institute*, February 2004, [https://www.cdhowe.org/sites/default/files/attachments/research\\_papers/mixed/commentary\\_194.pdf](https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/commentary_194.pdf).

Another way to understand the distinction here is as follows: a static conception of competition that prioritizes the number of market participants can lead to a policy of artificial or government-induced competition. If one's primary concern is adding new entrants into the market, then the government can use different policy instruments to effectively induce and sustain them. The problem is that their activist origins make it challenging for these firms to transition into a position where they are supported by markets.

A more dynamic conception of competition, by contrast, lends itself to a more market-based policy framework. It essentially assumes that as long as there are not too many market distortions, the market will eventually reach a competitive equilibrium that accounts for its unique particularities, such as capital intensity, market size, technological change, and so on.

This is an important distinction because the case that Canada ought to have four telecommunications players—which is to say that our market equilibrium must be at least four—is inconsistent with trends in comparable jurisdictions and beyond.

Just consider the market structures of other countries. In the United States, for instance, three major firms dominate almost the entirety of the market.<sup>5</sup> An OECD report on wireless market structures in advanced industrial countries found that the vast majority of these states had three to four national mobile network operators.<sup>6</sup> Yet, despite these markets having similar structures to Canada, there's plenty of evidence that Canada outperforms them in investment, network quality, and possibly even prices.<sup>7</sup>

The key point here is that a narrow focus on the number of market participants may be misguided if the goal is to maximize consumer and economic benefits. A more dynamic model of competition would pay less attention to the number of participants per se and be more concerned with creating the conditions for firms to invest and innovate with technologies.

This is particularly relevant in a sector like telecommunications which is prone to what is known as the Bertrand Paradox. This is an economic theory that describes cases where a duopolistic market structure provides the same result with that of perfectly competitive market conditions.<sup>8</sup> In these instances, the most intense competition occurs if the market structure is duopolistic (e.g., Boeing versus Airbus or Coke versus Pepsi) because only in those markets winners can take all. That motivation keeps competition at its utmost level even if there are a relatively small number of market players.

Yet, as we will discuss next, this is not the path the Canadian government has taken. Instead, it has focused on artificially trying to bring a fourth player into the market, stemming from a vision of static competition. What has not been tried to date is a policy framework rooted in a dynamic model of competition whereby the government frees up the ability of firms to attract capital from around the world in order to support greater investment, innovation, and technological change. This would be a more sustainable, market-based form of competition.

<sup>5</sup> Ahmed Sherif, "Wireless network operator subscriber share in the U.S. 2011-2024, by quarter," *Statista*, June 13, 2024, <https://www.statista.com/statistics/199359/market-share-of-wireless-carriers-in-the-us-by-subscriptions/>.

<sup>6</sup> OECD, "Wireless Market Structures and Network Sharing," *OECD Digital Economy Papers*, No. 243 (2014), [https://one.oecd.org/document/DSTI/ICCP/CISP\(2014\)2/FINAL/En/pdf](https://one.oecd.org/document/DSTI/ICCP/CISP(2014)2/FINAL/En/pdf).

<sup>7</sup> "Driving Canada's Productivity: The Impact of the Telecom Sector and Its Role in Improving Productivity," *PWC*, June 2024, <https://canadatelecoms.ca/wp-content/uploads/2024/06/Driving-Canadas-Productivity.pdf>.

<sup>8</sup> Michael R. Baye and Dan Kovenock, "Bertrand Competition," *The New Palgrave Dictionary of Economics*, December 27, 2016, [https://link.springer.com/referenceworkentry/10.1057/978-1-349-95121-5\\_2462-1](https://link.springer.com/referenceworkentry/10.1057/978-1-349-95121-5_2462-1).

# The Fourth-Player Policy: A Policy of Artificial Competition

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Understanding the current state of Ottawa's telecommunications policy needs to start in 2006 with the road not taken. That year, the Telecommunications Policy Review Panel delivered its final report to the newly elected Conservative government under Stephen Harper, assessing how Canada should modernize the telecommunications regulatory landscape. The panel recognized that while Canada's regulatory environment may have served the country well in the past, rapid technological change in information and communication technologies (ICT) necessitated a shift.

The goal of the panel was to ensure that Canada maintained its international economic competitiveness and that consumers had access to the latest technology at the lowest possible prices. The panel ultimately concluded, therefore, that it was "time for significant changes to Canada's current policy and regulatory approaches, some of which date back to the early part of the last century."

The report made several recommendations for how to modernize regulation and spur competition through a greater reliance on market forces. In particular, panel members recommended that the following guidelines be established to guide government policy and regulatory actions concerning the sector:

- Market forces should be relied upon to the maximum extent feasible as the means of achieving Canada's telecommunications policy objectives.
- Regulatory and other government measures should be adopted only where market forces are unlikely to achieve a telecommunications policy objective within a reasonable time frame, and only where the costs of regulation do not outweigh the benefits.
- Regulatory and other government measures should be efficient and proportionate to their purpose and should only minimally interfere with the operation of market forces to meet the objectives.

In practice, these principles envisioned a significant deregulation for the sector, including "limiting economic regulation to markets where a service provider has significant market power." The panel's most notable recommendation, however, concerned the treatment of foreign investment and foreign ownership in the sector. In particular, it recommended the following:

"[the] liberalization of the restrictions on foreign investment in Canadian telecommunications common carriers would increase the competitiveness of the telecommunications industry, improve the productivity of Canadian telecommunications markets, and be generally more consistent with Canada's open trade and investment policies."

This meant, in practice, amending the Telecommunications Act to repeal the legislated foreign ownership restriction, which currently sets out that any firm with more than 10 percent market share of the telecommunications sector must be Canadian-owned, defined as having at least 80 percent of the board being Canadian and 80 percent of the voting shares being held by Canadians.<sup>9</sup>

For all intents and purposes, the stage was set for a considerable overhaul of the Canadian regulatory environment. The panel's recommendations were well received by Max Bernier, the minister of industry at the time. At a telecommunications industry event that year, Bernier told participants that "it is not the role of government to decide how this increasingly complex market should evolve. It is up to you—producers and consumers."<sup>10</sup>

Yet the Harper government ultimately chose the heavy hand of government and artificial competition over market-based competition. In what became known as the "Fourth Wireless Player" policy, the government sought to artificially spur competition in the telecommunications sector.<sup>11</sup>

The essential idea was that the government needed to intervene in the market in order to support new market entrants who would place competitive pressures on the "big three" players (Bell, Rogers, and Telus). This thinking was predicated on the idea of static competition. It was taken for granted that Canada had an insufficient number of market participants, thus minimizing competition between firms and raising consumer prices.

To this end, the federal government launched an ongoing policy of market interventions in order to support and sustain new market entrants into the industry. It started with earmarked spectrum in a 2008 auction and has persisted to the present in the form of ongoing spectrum preferences, unequal access to foreign investment, and mandated tower sharing and wholesale access to the incumbents' wireless networks.<sup>12</sup>

By 2014, when the government was set to host another wireless spectrum auction, the problems with the fourth-player policy were already manifesting. Several of the new entrants were struggling for capital, limited to a small number of markets, and failing to make network investments. One of the new firms in the 2008 auction, Public Mobile, was later acquired by TELUS in 2013.

Others have since followed suit. These cases demonstrate that due to high capital costs and other unique characteristics, the telecommunications market is something of a natural oligopoly. Newcomers should come with a new way of providing services (e.g. Starlink) or through commercial partnerships. Market forces alone cannot accommodate a fourth identical competitor. This has been demonstrated in virtually every market in the world.

<sup>9</sup> *Telecommunications Act, Statutes of Canada 1993*, c. 38, <https://laws-lois.justice.gc.ca/eng/acts/t-3.4/page-2.html#h-459911>.

<sup>10</sup> Paul Beaudry and Sean Speer, "Making the Connection Between Smart Telecoms Policy and the Innovation Agenda," *Macdonald-Laurier Institute*, March 2016, p. 3, <https://macdonaldlaurier.ca/mli-files/pdf/MLICommentaryBeaudrySpeer-03-16-webready.pdf>.

<sup>11</sup> *Ibid.*

<sup>12</sup> "15 Companies Bid Almost \$4.3 Billion for Licences for New Wireless Services," *Government of Canada*, July 21, 2008, <https://www.canada.ca/en/news/archive/2008/07/15-companies-bid-almost-4-3-billion-licences-new-wireless-services.html>.

Yet, despite the cracks in the system, the Harper government decided to double down on the policy. In order to further support the nascent firms, the government provided them with asymmetric access to foreign investment.<sup>13</sup> In particular, it amended the Telecommunications Act to eliminate foreign investment restrictions for telecommunications firms with less than 10 percent market share (this only applied to firms not also covered by the Broadcasting Act). This granted the new entrants disproportionate access to foreign capital that could then be used for auction bids.

Even with the preferential policy treatment, including in spectrum auctions held in 2014 and 2015 that transferred billions of dollars of indirect subsidies from taxpayers to non-incumbent firms, the new entrants never really came to own significant market share, with several later being acquired by incumbent firms when their sale restrictions expired.

Notwithstanding these disappointing results, the Trudeau government has continued with the fourth-player policy. Consider its most recent directive to the Canadian Radio-television and Telecommunications Commission (CRTC)—the industry’s regulator—in which the government stipulated that a key objective for the organization towards the goal of fostering competition and affordability was to “reduce barriers to entry into the market and to competition for telecommunications service providers that are new, regional or smaller than the incumbent national service providers.”<sup>14</sup>

The sustainability challenges of the fourth-player policy were on display in the recent regulatory proceedings regarding Mobile Virtual Network Operators (MVNOs). In a spring 2021 decision, the CRTC granted regional telecommunications providers wholesale access to the incumbent’s cross-country networks in a move aimed at increasing the number of players in various markets.<sup>15</sup> The regional players then became MVNOs outside their home networks, where they bought wholesale network access that they then resold to consumers.

While the initial decision to allow such access was made in 2021, challenges remain in realizing the competition envisioned by the CRTC. For example, in a 2024 arbitration decision regarding pricing for MVNO network access, the CRTC sided with TELUS over Quebecor, prompting the latter company to nix its planned expansion into Manitoba unless the government further intervenes.<sup>16</sup> This part of the MVNO saga encapsulates the sustainability problem with the status quo. The artificial competition of the fourth player policy is built on a foundation of ever ratcheting up government intervention.

<sup>13</sup> Beaudry and Speer, *Making the Connection*.

<sup>14</sup> “Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy,” *Innovation, Science and Economic Development Canada*, February 13, 2023, <https://ised-isde.canada.ca/site/mobile-plans/en/order-issuing-direction-crtc-renewed-approach-telecommunications-policy>.

<sup>15</sup> “Telecom Regulatory Policy CRTC 2021-130,” *Canadian Radio-television and Telecommunications Commission*, April 15, 2021, <https://crtc.gc.ca/eng/archive/2021/2021-130.htm>.

<sup>16</sup> “Telecom Decision CRTC 2024-81,” *Canadian Radio-television and Telecommunications Commission*, April 22, 2024, <https://crtc.gc.ca/eng/archive/2024/2024-81.htm>; John Quintet, “Quebecor Axes Manitoba Plans, Blames CRTC Telus Decision,” *iPhone in Canada*, May 2024, <https://www.iphoneincanada.ca/2024/04/23/quebecor-drops-manitoba-plans-blames-crtc/>.

In the face of these types of heavy-handed policies, what incentives do firms have to incur the risk and costs of investment in new network infrastructure if the government can later unilaterally grant access to their competitors at rates determined by regulators? This move is arguably closer to government-backed expropriation than it is to any form of market-driven competition.

On the investment side, the Trudeau government has also continued to uphold foreign investment restrictions in the sector. Yet, as former Commissioner of Competition Calvin Goldman and his colleagues have written, these investment restrictions effectively protect the industry "from the entry of real and effective foreign-based competitors." They add:

"These significant restrictions have very likely reduced the incentive of foreign-based telecom competitors (such as AT&T and Verizon) from entering Canada on any real scale. From our experience in many other cross-border transactions, acquirors investing substantial funds generally need to know they will have the opportunity to grow the investment over time. That may not necessitate majority ownership, but there needs to be a real voice in the direction of the operating entity in Canada beyond being a minority passive investor."<sup>17</sup>

<sup>17</sup> Calvin Goldman, Larry Schwartz and Richard Taylor, "How Outdated Foreign Ownership Rules Hurt Competition in Telecom and Other Sectors," *C.D. Howe Institute*, March 10, 2023, <https://www.cdhowe.org/intelligence-memos/goldman-schwartz-taylor-how-outdated-foreign-ownership-rules-hurt-competition>.

# A Policy Alternative: Market-Based Competition

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Today, the record of the fourth-player policy is rather clear: successive government interventions have not only failed to establish a sustainable national competitor to the three incumbent firms but they've come at a cost to customers and taxpayers.

While this period of continuity between Conservative and Liberal governments with respect to artificial competition has largely failed, there's an opportunity to shift to a more sustainable, market-based model within the sector, starting with eliminating foreign ownership restrictions altogether. If eliminated, theory and evidence from elsewhere tells us that markets would be able to function better and more competitively.

In practice, this might mean that Canadian firms, irrespective of their size, are able to draw on greater shares of foreign capital to finance their operations and network investments. It may also mean that foreign carriers could possibly enter the market themselves. Whatever happens, it will be driven by market-based decisions rather than regulatory ones.

To this end, a genuine market-driven policy alternative goes further than simply removing the foreign ownership restrictions in the Telecommunications Act. Instead, a market-based competition vision for the sector would also roll back auxiliary fourth-player policies, including preferential set-asides at spectrum auctions for smaller firms, ending the government's wholesale policy, and the various other ways in which government policy has been focused on supporting and sustaining artificial competition.

This point is worth underscoring: amending the Telecommunications Act to repeal the foreign investment restrictions is a necessary yet insufficient policy to boost market-based competition. The government must be prepared to unwind the other policies that have come to comprise the fourth-player policy.

One long-standing objection to liberalizing the Telecommunications Act is that some of the incumbent firms are also subject to the Broadcasting Act and its own foreign investment restrictions. This is beyond the scope of this particular study, but one of us has previously written in favour of liberalizing both acts. Either way, this isn't a compelling reason not to amend the Telecommunications Act.<sup>18</sup> The whole premise of a dynamic competition is that we shouldn't assume that the market structure will remain the same forever. Amending the Telecommunications Act would have a dynamic effect that's hard to fully predict. That's the whole point. Markets will by and large determine the best approach and structure for the Canadian market. The only exception should be national security considerations rather than the conceptual preferences of policymakers.

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<sup>18</sup> Beaudry and Speer, *Making the Connection*.

# Key Takeaways: A Competitive Future for Canadian Telecoms

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While the above has largely focused on the problems inherent in government attempts to spur artificial competition, we should also say that we aren't wholly against government intervention in the telecommunications market.

Given Canada's unique economic geography, there may be a role for government policy to support investment in rural and remote areas such that Canadians, regardless of location, have access to reasonably similar levels of technology.

But in terms of big-picture policymaking, the evidence seems clear that the 2006 Telecommunications Policy Review Panel had it right when the panelists set out that government intervention "should be adopted only where market forces are unlikely to achieve a telecommunications policy objective within a reasonable time frame, and only where the costs of regulation do not outweigh the benefits."

In the absence of such circumstances, the Canadian government should adopt a new competitive vision for the telecommunications sector, one which is dynamic and recognizes the importance of technological competition as a source of enhanced consumer welfare. The goal should be to create the conditions for investment, innovation, and technological development rather than micromanage the market to produce a particular number of market participants. The former is a model of sustainable, market-based competition. The latter is a version of the artificial or government-induced competition that's underperformed over the past nearly two decades.

A key step in this direction is for Canada to take a step forward and liberalize foreign investment rules under the Telecommunications Act. In some instances, this may allow the incumbents to access foreign capital to further compete in network development. Liberalization may also allow a foreign player to enter the market and become a sustainable "fourth player." Either way, these developments will be dictated by market forces rather than government intervention.

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