

BARRIERS AND BRIDGES: RETHINKING TRADE WITHIN THE FEDERATION

The Effect of National Borders as an Obstacle to Trade Flows: Consequences for Our Economic and Political Choices

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ABOUT THIS ESSAY

This essay was published as part of the series, Barriers and Bridges: Rethinking Trade Within the Federation, under the direction of Valérie Lapointe by the Centre of Excellence on the Canadian Federation. Editorial co-ordination was by Étienne Tremblay, proofreading was by Zofia Laubitz, and production and layout were by Chantal Létourneau and Anne Tremblay.

This essay was translated from French by John Detre. It is also available in French under its original title *L'effet des frontières nationales comme entrave aux flux commerciaux : conséquences pour nos choix économiques et politiques*.

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To cite this document:

Dion, S. & Vaillancourt, F. (2026). *The effect of national borders as an obstacle to trade flows: Consequences for our economic and political choices*. Institute for Research on Public Policy. <https://doi.org/10.26070/az5w-d294>

In memory of John McCallum.

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INTRODUCTION

The resurgence of protectionism internationally and trade tensions between Canada and the United States have brought the issue of borders in international trade back to the forefront. While at one time many envisioned a future in which national borders would cease to be a significant economic factor, the current situation very much suggests otherwise.

This resurgence has prompted us to update research findings published in 2012 by co-author Stéphane Dion and the late John McCallum on the border effect, which can be defined as the barriers, obstacles or impediments that national borders create for trade flows. The aim of the 2012 study was to contribute to the debate on national unity, and it highlighted the importance of factoring in the Canada-U.S. border effect to explain trade flows between Canadian provinces and with U.S. states (Dion & McCallum, 2012). In our view, updating this research is even more relevant today: the current context is marked by a clear desire to diversify Canada's international trade but also by vigorous debates on Canadian national unity, particularly in Alberta and Quebec.

Context

According to one school of thought in economics, national borders have ceased to be a significant economic factor. Driven by free trade agreements and the globalization of markets, national borders and different languages, currencies and legal systems are no longer seen as obstacles to the exchange of goods and services between countries; they no longer impede access to major markets (Ohmae, 1990).

This view is no longer in fashion, given the resurgence of tariffs and protectionist measures of all kinds. Yet even though we are well aware of the fact that a borderless economy does not exist, we may not be giving due consideration to the border effect in our understanding of the economy and in our public policy choices.

The border effect — the trade barriers created by national borders — is measured by calculating the difference between trade flows simulated in the absence of borders and observed trade flows. This involves using two explanatory variables to model trade relations: (1) the size of the entities being studied (countries, subnational entities), and (2) the distance between them. It is therefore a calculated indicator, not a directly observable one.

In 2026, the border effect issue is of particular concern as it relates to Alberta and Quebec: independence movements there are advocating for the establishment of national borders between their economies and the rest of the Canadian economy. This article will therefore focus on these two provinces, as well as Ontario, which will serve as a basis for comparison.

It should be kept in mind that the theory of the borderless economy was popular in Quebec independence circles during the 1995 referendum debate. They drew two conclusions from the theory: first, that the Canadian internal market was steadily losing its importance for Quebec; secondly, that the Canadian market would remain just as open if Quebec seceded from Canada.

This thesis was defended in conjunction with another one, which held that Canada, with its east-west orientation, made no sense economically because the normal flow of the North American economy was north-south. From this perspective, free trade with the United States was supposed to unleash an “irresistible north-south push,” with trade aligning itself “with natural tendencies and the overriding necessities of geography” (Landry, 1987, p. 88, *our translation for all quotes by former premiers*).

In 1999, Quebec Premier Lucien Bouchard even stated that Canada’s economic weight was no longer the key factor it once was because Quebec’s economic future was with the United States and Europe. In his view, this meant that, in practical terms, Quebec was commercially independent from the rest of Canada (Bouchard, 1999).

Jacques Parizeau, Premier of Quebec from 1994 to 1996, contended that the North American economies had become highly integrated, that Quebec’s economic future was clearly with the United States, and that Canada as an economic entity was “a dead end” (Parizeau, 1997, p. 48; Parizeau, 2009, p. 65).

Today, Quebec independence leaders no longer seem to be talking about a borderless economy. However, they maintain a fuzzy optimism about the consequences that the imposition of national borders between Quebec and the rest of Canada could have for the Quebec economy. They simply assert that it is in everyone’s interest for business to continue as usual and that Quebec’s interests are aligned with those of the United States (Bellerose, 2025). As for Albertan independence activists, their position on the importance of east-west and north-south trade links is unclear. It is therefore important to build a more precise, clearer picture and measure the potential effect of borders as barriers to trade.

In this context, our goal is to determine whether the relative weight of international trade in our economy has indeed grown considerably over the years, whether the weight of interprovincial trade really has declined, and whether, and to what extent, free trade has reduced the measurable effect of the Canada-U.S. border on trade flows between Canadian provinces and U.S. states. Our study covers the period from 1981 to 2024, or from the first to the last year for which Statistics Canada data are available (as at February 2026).

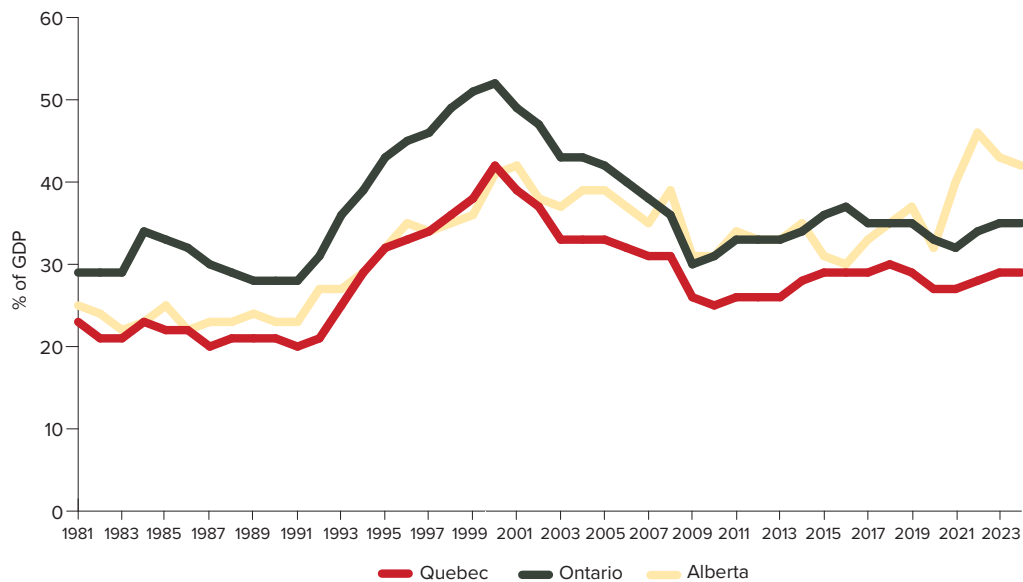
IMPORTANCE OF THE INTERNATIONAL AND CANADIAN MARKETS

Figure 1 shows changes in the value of international exports of goods and services as a percentage of the gross domestic product (GDP) of Quebec, Ontario and Alberta for the period 1981 to 2024.¹

The trend was the same for Quebec, Ontario and Alberta, except from 2021 onward, when Alberta experienced significant growth in international exports. From 1992 to 2000, the share of international exports in the economy grew sharply in the three provinces under consideration, rising from 21 per cent to 42 per cent for Quebec, from 31 per cent to 52 per cent for Ontario,

¹ The data used to create figures 1 and 2 are presented in table A1 in the Appendix.

Figure 1. International exports as a percentage of GDP, 1981-2024, Quebec, Ontario, Alberta



Sources: Statistics Canada, Table 36-10-0697-01: Interprovincial trade, summary level. Statistics Canada, Table 36-10-0221-01: Gross domestic product, income-based, provincial and territorial, annual (x 1,000,000).

Note: International exports = total exports – interprovincial exports

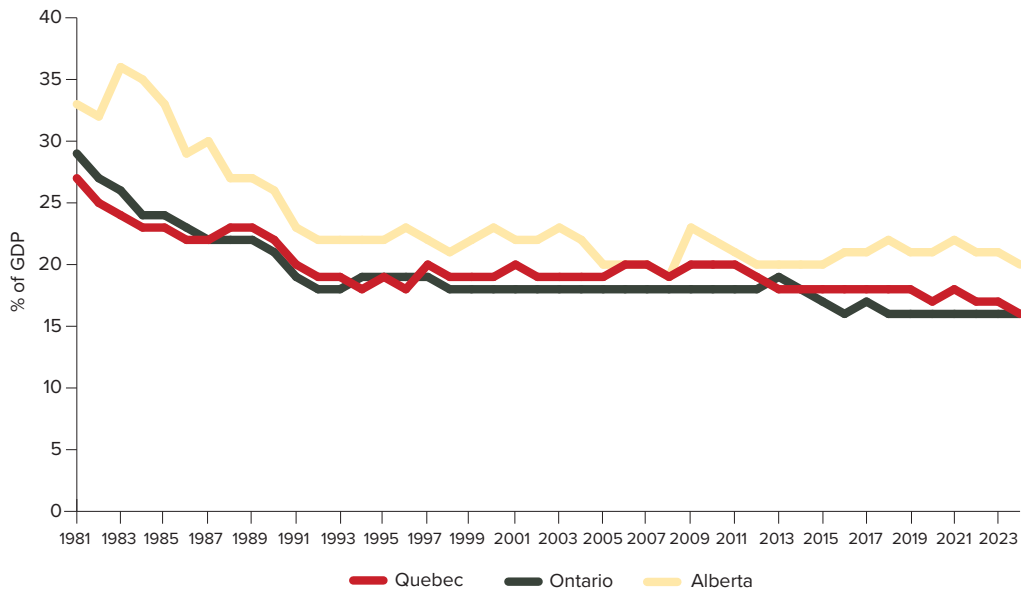
and from 27 per cent to 41 per cent for Alberta. One might have expected that, under the influence of free trade and globalization, the push of our economy toward foreign markets would intensify and become “irresistible.” However, this is not what happened.

Following the signing of the Free Trade Agreement between Canada and the United States (which would become NAFTA) in 1988, and until 2000, there was strong growth in international exports, especially to the United States (Statistics Canada, 2024). Around the year 2000, however, after the economy had absorbed the effects of free trade, the share of international exports in the economy stopped growing and even began to decline, settling in the 30 to 35 per cent range. The share of international exports in Quebec’s economy was lower in 2024 (29 per cent) than in 1995 (32 per cent), the year of the second Quebec referendum. A similar decrease in exports occurred in Ontario, from 43 per cent to 35 per cent. However, in Alberta, over the same period, there was a 10 per cent increase, from 32 per cent to 42 per cent. These variations are partly explained by changes in the world price — and therefore the Alberta price — of a barrel of oil (Macrotrends, 2026).

Figure 2 compares the value of interprovincial exports of goods and services as a percentage of GDP for the same period (1981-2024).

The figure shows that interprovincial exports have remained comparatively stable relative to GDP since the early 1990s. Despite the implementation of free trade agreements, interprovincial trade has been maintained. It remains to be seen what the relative weight of interprovincial trade in the economy will be under the combined effect of the new tariffs imposed by President Donald Trump and Canada’s efforts to reduce interprovincial trade barriers.

Figure 2. Interprovincial exports as a percentage of GDP, 1981-2024, Quebec, Ontario, Alberta



Sources: Statistics Canada, Table 36-10-0697-01: Interprovincial trade, summary level. Statistics Canada, Table 36-10-0221-01: Gross domestic product, income-based, provincial and territorial, annual (x 1,000,000).

Of course, it is possible that foreign trade will expand significantly in the coming years and that, in particular, Canada will succeed in doubling the value of its exports to countries other than the United States within 10 years and achieve the goal set by the Carney government. However, the data show us that foreign trade growth is not constant; foreign trade can shrink. When that happens, the Canadian internal market becomes a stabilizing factor for our economy.

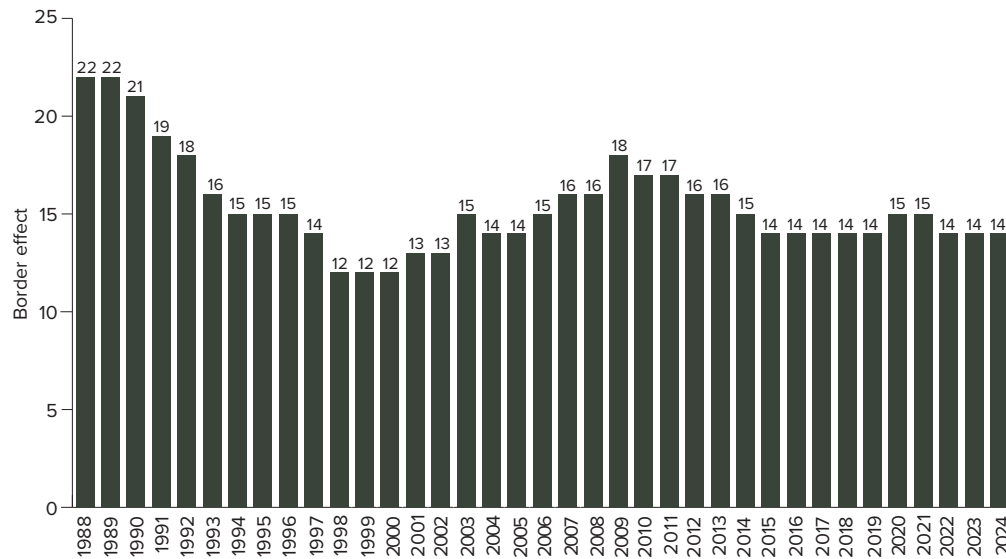
THE BORDER EFFECT ON CANADA

There is a border effect that hinders trade between countries — even between two countries as integrated as Canada and the United States. John McCallum quantified this border effect in a 1995 article (McCallum, 1995). Taking into account the effects of economic size (GDP) and distance between pairs of provinces or states, he showed that, in 1988, the Canadian provinces traded 22 times more with each other than with U.S. states. McCallum called this phenomenon “the interprovincial advantage.”

The discussion that follows is based on comparing the predictions of a so-called “gravitational” model with observed trade flows. According to this model, Quebec’s exports to British Columbia and California, for example, would depend on the size (measured by GDP) of these two entities and their distance from Quebec.² Since the distances between Quebec and these two entities are comparable, and California has a GDP at least 10 times

² The econometric findings used to calculate the border effect are based on GDP as a size indicator. Using population as the determining variable (two out of seven estimates) does not change the conclusions.

Figure 3. Simulated border effect, Canada 1988-2024



Note : We use McCallum's estimate of the border effect for 1988, which is 22. We calculate Ratio 1, which is interprovincial merchandise exports (\$)/merchandise exports to the United States (\$), for each year between 1989 and 2024. Then, for each year, we calculate Ratio 2, which is the value of Ratio 1 for the target year relative to the invariant value of Ratio 1 for 1988. Finally, we multiply by 22, which is the border effect calculated for 1988 by McCallum using Ratio 2. A decrease in interprovincial exports implies a decrease in the border effect calculated in this way. For example, in 2024, Ratio 1 = \$221 billion/\$817 billion = 0.27. Ratio 2 = 0.27/0.43 = 0.62. Therefore 22 * 0.62 (Ratio 2) = 14 (rounded value).

Source: Statistics Canada, International Merchandise Exports, 1988-1998, Table: 12-10-0015-01 (formerly CANSIM 228-0003); 1999-2024, Table: 12-10-0171-01. Statistics Canada, Interprovincial Merchandise Exports, Table: 36-10-0697-01.

higher than British Columbia's, the model suggests that Quebec should export 10 times more goods to California than to British Columbia. In 1988, however, Quebec exported more than three times as many goods to British Columbia as it did to California.

The existence of a border effect between Canada and the United States, as well as between other countries, has been confirmed, in particular, by subsequent research conducted by Helliwell (1988), Downs and Sawchuk (2007) and Nitsch (2000).

The border effect can be inferred numerically for a year other than 1988. To do this, we use data for all of Canada on interprovincial and international exports of goods, and we assume that the other explanatory factors for these two types of trade have remained unchanged over time.

Figure 3 presents our estimates of the border effect between 1988 and 2024. In 1988, it was 22. We see that it falls to 12 in 2000, before stabilizing around 14 or 15 between 2014 and 2024.³

In 2024, despite the full implementation of the Canada-United States Free Trade Agreement in 1988, interprovincial trade in goods was still 14 times higher than trade in goods with U.S. states, taking into account the size and distance between states and provinces.

³ Note that Downs and Sawchuk (2007) calculated a border effect of 124 for exports in 1997, whereas we find a value of 14 for that year. We find a value of 12 for 1998-1999-2000.

CONCLUSION: EXPLAINING THE BORDER EFFECT

As we have just shown, the border effect has stabilized in the last decade around 14 or 15, which is high. What accounts for this? Essentially two things.

First, there is the fact that we are a country. As Canadians, we are more deeply connected to one another than we are to Americans. This is due to our historical ties, our national transportation, communication and higher education networks, our legal framework, and the fact that we share the same currency, the same banking system, the same federal government, and the same federal institutions, laws and regulations. It is also due to the transferability of our health care and pension rights, to our affinities with one another, to our habit of working together, ... and to that thing called national solidarity.

Secondly, the tendency to trade less with Americans than between Canadians can be partly attributed to the barriers to cross-border trade that have persisted even after the full implementation of NAFTA.

Borders continue to play a significant role. The protectionism embraced by other countries remains a reality, as illustrated by the “Buy American” or “America First” policies of our neighbours to the south. Of course, the border effect is particularly evident now, with the escalatory tariffs imposed by President Trump. In Europe, we are making effective diplomatic efforts to prevent Canadian exporters from becoming collateral victims of the industrial and trade strategies adopted by the European Union to counter American protectionism and stem the flow of Chinese goods. In many countries, the electoral weight of protectionist movements is increasing with the rise of the radical nationalist right and the anti-globalization left.

Let us summarize what all this means for Alberta, Quebec and Canadian unity. When the global economy falters, the Canadian internal market provides a common foundation and therefore remains crucial for Alberta and Quebec, as well as for the other provinces. Economic exchanges within Canada remain far more fluid than the ones that Alberta and Quebec could develop with other countries. To benefit from this fluidity, Albertans and Quebecers must remain part of Canada, not turn other Canadians into foreigners. In the event of secession, Alberta, Quebec and the rest of Canada would continue to trade, but the trade would be severely limited.

Making the decision to secede would be serious and likely irreversible. It is therefore essential to rely on established facts, robust concepts, and a reasonable and reasoned vision of an uncertain future. The example of Brexit, with the visible remorse it has now engendered, shows us that misconceptions and fallacies can lead to negative outcomes that are very difficult to reverse (Difford, 2025; Statista, 2026). The leaders of the Quebec independence movement in 1995 claimed that the Canadian market was losing its importance to the Quebec economy because borders no longer mattered. This has not been borne out by the facts. As our data show, and as Stéphane Paquin has pointed out, “the Canadian market is as crucial for Quebec exporters as the American market, even though the Canadian economy is comparable in size to that of New York State” (Paquin,

2025a, *our translation*). Let us hope that the necessary intellectual rigour and logic prevail in the upcoming debates in Alberta and Quebec.

The border effect is here to stay. We must approach the issue with due rigour and consistency and take it into account in two ways. First, we must continue to make our internal market more fluid by eliminating unnecessary barriers to interprovincial trade; second, we must make our trade policy ever more proactive and effective in supporting our exporters in all markets and in defending our interests both in bilateral negotiations and in international forums. We must promote our trade interests more vigorously than ever before in our dealings with the United States but also with other countries and regions, so as to be less dependent on our American neighbours.

The approach outlined above underscores the importance of rethinking trade within our federation. This imperative echoes the very theme of the Centre of Excellence on the Canadian Federation's "Barriers and Bridges" series, which includes this article. In particular, it will be necessary to assess Daniel Teeter and Christopher S. Cotton's concrete proposals. They suggest that exceptions and extensions of barriers to interprovincial free trade should expire automatically if they are not renewed; that new incentives should encourage provinces and businesses to take advantage of trade liberalization; and that investments in infrastructure and workforce training should be increased to enhance the size and competitive strength of the Canadian market (Teeter & Cotton, 2025).

It will also be necessary to leverage the role of the provinces in Canada's trade negotiations and to ensure that the First Nations participate fully at all stages (Paquin, 2025b; Picard, 2025).

Once size and distance are taken into account, Canadian provinces trade 14 times more with each other than with U.S. states. This illustrates the magnitude of the border effect on Canada and, by extension, the crucial importance of streamlining our internal trade and choosing the right strategies to increase and diversify our foreign trade.

APPENDIX

Table A1. International and interprovincial exports, Canada, Quebec, Ontario, Alberta, as a percentage of GDP, 1981-2024

	International exports (as a percentage of GDP)				Interprovincial exports (as a percentage of GDP)			
	Canada	Quebec	Ontario	Alberta	Canada	Quebec	Ontario	Alberta
1981	26	23	29	25	27	27	29	33
1982	25	21	29	24	25	25	27	32
1983	25	21	29	22	25	24	26	36
1984	28	23	34	23	24	23	24	35
1985	27	22	33	25	24	23	24	33
1986	27	22	32	22	22	22	23	29
1987	26	20	30	23	22	22	22	30
1988	26	21	29	23	22	23	22	27
1989	25	21	28	24	22	23	22	27
1990	25	21	28	23	21	22	21	26
1991	24	20	28	23	19	20	19	23
1992	26	21	31	27	18	19	18	22
1993	29	25	36	27	18	19	18	22
1994	33	29	39	29	18	18	19	22
1995	36	32	43	32	19	19	19	22
1996	37	33	45	35	19	18	19	23
1997	38	34	46	34	19	20	19	22
1998	40	36	49	35	18	19	18	21
1999	42	38	51	36	19	19	18	22
2000	44	42	52	41	19	19	18	23
2001	42	39	49	42	19	20	18	22
2002	40	37	47	38	19	19	18	22
2003	37	33	43	37	19	19	18	23
2004	37	33	43	39	19	19	18	22
2005	37	33	42	39	19	19	18	20
2006	35	32	40	37	19	20	18	20
2007	34	31	38	35	19	20	18	20
2008	34	31	36	39	19	19	18	19
2009	28	26	30	31	20	20	18	23
2010	29	25	31	31	20	20	18	22
2011	31	26	33	34	20	20	18	21
2012	30	26	33	33	19	19	18	20
2013	30	26	33	33	19	18	19	20
2014	32	28	34	35	19	18	18	20
2015	32	29	36	31	18	18	17	20
2016	31	29	37	30	18	18	16	21
2017	31	29	35	33	18	18	17	21
2018	32	30	35	35	18	18	16	22
2019	32	29	35	37	18	18	16	21
2020	29	27	33	32	17	17	16	21
2021	31	27	32	40	18	18	16	22
2022	34	28	34	46	18	17	16	21
2023	33	29	35	43	17	17	16	21
2024	32	29	35	42	17	16	16	20

Sources: Statistics Canada, Table 36-10-0697-01: Interprovincial trade, summary level. Statistics Canada, Table 36-10-0221-01: Gross domestic product, income-based, provincial and territorial, annual (x 1,000,000).

Note: International exports = total exports – interprovincial exports

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