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NORTH AMERICAN TRADE INTEGRATION AT RISK: EMPLOYMENT IMPACTS FROM TARIFF DISRUPTION IN CANADA

Daniel Covarrubias, Ph.D.
Heleodoro Lozano



ABOUT THIS SERIES

This report is part of a three-part series analyzing the labor market consequences of proposed U.S. tariffs on North American trade. Each report focuses on one member of the USMCA region, the United States, Mexico, and Canada, and assesses how disruptions to deeply integrated cross-border supply chains could affect employment across key sectors.

The series applies a common analytical frame, trade-linked employment exposure modeling, to evaluate the number of jobs in manufacturing, agriculture, and mining that depend on North American trade flows. While each national report is tailored to the available data and sectoral structures of its economy, all share the objective of providing actionable insights for policymakers, business leaders, and labor market institutions navigating the risks of tariff escalation and regional fragmentation.

This third volume focuses on Canada, examining how its resource-rich economy, diverse industrial base, and deep integration with U.S. markets influence employment vulnerabilities to trade policy shifts. Previous volumes centered on Mexico and the United States complete the trilateral view of North America's economic interdependence and shared exposure.

EXECUTIVE SUMMARY

The ongoing announcements of sweeping tariffs on Mexican and Canadian imports, currently at 25% on most goods and 10% on Canadian energy resources, pose unprecedented challenges to North American economic integration. Our analysis of Canada's 13 provinces, including major manufacturing hubs, agricultural centers, resource-rich territories, and coastal economic powers, reveals that **over 1.5 million jobs** could face exposure to potential trade disruptions, with manufacturing bearing the most considerable impact at approximately 1.08 million jobs, while agriculture, forestry, and mining sectors face exposure of 437,000 jobs.

Canada Employment Exposure:

SECTOR	TOTAL EMPLOYMENT	NA TRADE SHARE (WEIGHTED AVG)	JOBS AT RISK
Manufacturing	1,516,910	71.1%	1,077,945
Agriculture, Forestry, and Mining	616,575	70.9%	437,055
Total Exposure*	2,133,485	71.0%	1,515,000

Provincial Distribution:

PROVINCE	JOBS AT RISK	%SHARE OF EXPOSURE
Ontario	589,404	38.9%
Quebec	326,312	21.5%
Alberta	268,562	17.7%
British Columbia	112,756	7.4%
All other provinces	218,966	14.5%

Key Findings:

- Over 1.5 million Canadian jobs face exposure to North American trade disruptions
- Manufacturing accounts for 71% of exposure (1.08 million jobs)
- Three provinces (Ontario, Quebec, Alberta) account for 78% of total exposure
- Resource-dependent provinces show the highest trade dependency rates (80%+)

UNDERSTANDING ENERGY TARIFF DIFFERENTIALS

The proposed tariff structure treats Canadian energy differently from other goods:

- Standard Goods: 25% Tariff
- Energy Resources: 10% Tariff

Impact on Analysis:

For resource-rich provinces like Alberta and Saskatchewan, this differential creates a mixed exposure profile. Our analysis uses aggregated trade shares across all export categories, meaning:

- Energy exports face lower tariff pressure (10%)
- Manufacturing and agricultural exports face standard rates (25%)
- Overall provincial exposure reflects this weighted mix

This explains why Alberta shows a 89.5% trade dependency in the Agriculture/Forestry/Mining sector. While energy faces lower tariffs, the broader resource economy remains highly integrated with U.S. markets and vulnerable to any trade disruption.

Economic Context:

These potential impacts emerge against a backdrop of deep regional integration, with North American trade representing:

- 30% of global GDP
- \$1.8 trillion in annual intra-regional trade
- \$3.5 million in cross-border commerce every minute

This analysis provides data-driven insights into the scope and scale of possible disruptions. The findings suggest that while all analyzed states face significant exposure, the impact varies considerably by region and sector, reflecting the complex nature of North American economic integration.

BACKGROUND

The Current Situation

The United States has announced unprecedented tariffs on approximately \$900 billion in Mexican and Canadian imports, marking a significant departure from three decades of regional economic integration. While most imports face a 25% tariff, Canadian energy resources are subject to a lower 10% rate, a distinction that acknowledges North American interdependence even as it threatens broader economic ties.

North America as an Economic Powerhouse

The USMCA region has emerged as a remarkable economic force, representing 30% of global GDP and serving a market of 501 million consumers. The scale of integration is evident in the region's \$1.8 trillion in annual intra-regional trade, translating to an astounding \$3.5 million crossing our borders every minute. This level of economic integration positions North America as a global leader.

NAFTA's original vision, conceived three decades ago, went beyond simple regional integration; it aimed to reduce North America's dependence on external markets, particularly China, by creating a competitive trading bloc that could rival other global powers. The architects of NAFTA recognized that by combining U.S. innovation and capital with Canadian resources and Mexican manufacturing capabilities, North America could reduce its reliance on distant supply chains while building a more resilient regional economy.

The success of this strategy is evident in the tremendous growth of intra-regional trade. Since NAFTA's inception in 1994, U.S.-Mexico trade has grown eightfold, from \$100 billion to near \$840 billion annually, while U.S.-Canada trade has more than tripled, from \$242 billion to nearly \$800 billion. This growth reflects the careful cultivation of complementary advantages: geographic proximity that reduces transportation costs and supply chain vulnerabilities, the development of specialized industrial clusters, and the strategic integration of production processes across borders.

Comparative Analysis of Major Trading Blocs

The power of North American integration becomes even more apparent when compared to other major trading blocs. While the European Union serves 450 million consumers with 13.4% of global GDP, and ASEAN reaches 693 million consumers with 7.2% of global GDP, North America has achieved a greater economic impact with its 501 million consumers. The CPTPP, despite encompassing 523 million consumers, accounts for just 9.8% of global GDP, while Mercosur serves 300 million consumers and accounts for 2% of global GDP. These comparisons underscore how effectively North American integration has translated market size into economic power.

Bloc	Consumers (Millions)	Global GDP Share
North America (USMCA)	501	30.0%
European Union	450	13.4%
ASEAN	693	7.2%
CPTPP	523	9.8%
Mercosur	300	2.0%

Canada's Unique Position

Canada occupies a unique position within North American trade integration, serving as both a major resource supplier and a sophisticated manufacturing hub. The Canadian economy has evolved to become deeply intertwined with U.S. supply chains, particularly in automotive manufacturing, energy production, and agricultural exports. This integration has created specialized economic clusters along the border, from automotive corridors in Ontario to energy hubs in Alberta and British Columbia.

The depth of this integration is reflected in trade patterns that have developed over three decades. Canadian provinces have built their economic strategies around reliable access to U.S. markets, developing infrastructure, workforce skills, and production capabilities specifically designed to serve continental demand. This specialization has created significant efficiencies but also substantial dependencies that make the Canadian economy particularly vulnerable to disruptions in cross-border trade.

Purpose and Methodology

This analysis provides a detailed assessment of how the proposed tariffs could affect employment across Canada's provinces that are deeply integrated into North American trade networks and are most exposed. We examine provinces representing diverse geographic regions and economic profiles: manufacturing powerhouses (Ontario), resource-rich provinces (Alberta, Saskatchewan), agricultural centers (Manitoba, Saskatchewan), and diversified economies (British Columbia, Quebec). These provinces span from the Pacific to the Atlantic, sharing deep connections to cross-border commerce.

By combining detailed trade flow data with current employment figures, we create a comprehensive picture of potential workforce impacts in both the immediate and longer term. Our analytical approach operates on two levels. First, we calculate current employment linked to North American trade by examining the proportion of each province's global trade that involves the United States and Mexico. This allows us to estimate how many jobs in each sector depend on the established cross-border trading relationships that have developed over three decades of integration.

Second, we model potential job disruptions under various scenarios, recognizing that trade relationships don't simply disappear but rather adjust and evolve in response to policy changes. This scenario-based approach helps understand the range of possible outcomes, from mild disruptions that might be quickly absorbed to more severe impacts that could reshape regional economies.

ANALYSIS 1: EMPLOYMENT EXPOSURE TO NORTH AMERICAN TRADE

The Trade-Linked Employment Exposure Model

We base our approach on a method commonly used in global labor and trade research: *the trade-linked employment exposure model*. This model estimates the number of jobs in a given sector that rely on exports to a specific region or set of countries. Versions of this model have been used by the World Bank (2020), the National Bureau of Economic Research (NBER) (2025), and the Institute for Research on Public Policy (IRPP) (2023) to assess exposure to trade shocks, particularly in manufacturing and agriculture-heavy economies.

Methodology

Our first analysis uses a "trade-dependence" method to understand how deeply each province's workforce is integrated into North American commerce. This approach recognizes that jobs in the manufacturing, agriculture, forestry, and mining sectors often depend on complex cross-border supply chains developed over decades of regional integration.

The analysis begins by examining the full scope of each province's trade with the United States and Mexico. We aggregate all northbound and southbound trade flows, combining exports to and imports from both countries, to capture the complete picture of cross-border commerce.

By comparing North American trade to total global trade, we calculate a "North American trade share" for each sector within each province, expressed as:

$$NA\ Trade\ Share = (Trade\ with\ U.S.\ +\ Mexico) / (Total\ Global\ Trade)$$

Finally, we estimate potential jobs at risk by applying this trade share to current employment figures in each sector:

$$Jobs\ at\ Risk = Sector\ Employment \times NA\ Trade\ Share$$

Throughout this analysis, we use both "jobs at risk" and "employment exposure" to indicate positions that depend significantly on North American trade flows. These terms measure potential vulnerability to trade disruptions rather than predicted job losses.

In practice, changes in trade patterns could manifest as fewer new hires, shorter work hours, or partial restructuring rather than outright job losses. Our figures, therefore, represent an upper-bound measure of workforce exposure to changes in cross-border commerce.

It's important to note that these "at-risk" numbers should be interpreted as measures of exposure rather than predictions of job losses. They indicate the number of workers who operate in sectors that depend significantly on North American trade, making them potentially vulnerable to significant disruptions in cross-border commerce. These figures help understand the scope of potential impact and identify which regions and sectors might need targeted support or transition assistance.

The analysis classifies provinces into three exposure categories based on quantifiable measures of trade vulnerability. High Exposure provinces meet at least one of these criteria: over 400,000 total jobs at risk, both manufacturing and agricultural/mining trade shares above 50%, or any sector with a trade share above 70%. Moderate Exposure states show either more than 200,000 total jobs at risk or trade shares above 40% in either the manufacturing or agricultural/mining sectors. Lower Exposure provinces fall below these thresholds in terms of both total jobs and trade shares. This classification captures both the absolute scale of potential impact through total jobs and the relative vulnerability through trade dependency percentages.

Data Sources

The data collected for this analysis originates from public government sources:

- Trade data from: Statistics Canada. Table 12-10-0173-01 Canadian international merchandise trade by province and country, and by product sections, customs-based, annual.
- Employment figures from: Statistics Canada. Table 36-10-0489-01 Labour statistics consistent with the System of National Accounts (SNA), by job category and industry.

Citations

- World Bank (2020). Leveraging Trade for More and Better Jobs.
- NBER Working Paper No. 33481 (2025). Firm Trade Exposure, Labor Market Competition, and the Worker.
- Institute for Research on Public Policy (2023). Measuring Community Workforce Exposure to U.S. Exports.

PROVINCIAL TRADE EXPOSURE RANKINGS

Canada Employment Exposure:

RANK	PROVINCE	JOB AT RISK	EXPOSURE	NA TRADE SHARE
1	Ontario	589,404	High	66.4%
2	Quebec	326,312	High	60.1%
3	Alberta	268,562	High	82.6%
4	British Columbia	112,756	Moderate	46.4%
5	Manitoba	74,454	High	76.3%
6	Saskatchewan	59,818	High	72.3%
7	New Brunswick	41,232	High	80.5%
8	Newfoundland & Labrador	8,417	Moderate	41.1%
9	Prince Edward Island	8,975	High	68.5%
10	Nova Scotia	12,698	Lower	29.2%
11	Yukon/NWT/Nunavut	871	Lower	21.6%

Classification Criteria:

- High Exposure: >400,000 jobs at risk OR both sectors >50% trade share OR any sector >70%
- Moderate Exposure: 200,000-400,000 jobs at risk OR either sector >40% trade share
- Lower Exposure: Below these thresholds

Key Observations:

- The top 3 provinces (ON, QC, AB) account for 78% of national exposure
- 8 of 11 provinces/territories classified as High or Moderate exposure
- Resource-dependent provinces show highest trade dependency percentages
- Even provinces with lower total jobs show high percentage dependencies

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: ONTARIO

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	133,950	706,795
Exports to U.S.	\$47,406,202,000	\$109,280,338,900
Imports from U.S.	\$56,060,085,300	\$131,466,739,100
Exports to Mexico	\$617,745,600	\$2,975,273,000
Imports from Mexico	\$4,040,708,800	\$29,114,668,400
Sum of US+MEX Trade	\$108,124,741,700	\$272,837,019,400
Global Exports	\$83,586,365,000	\$123,651,054,100
Global Imports	\$93,581,492,900	\$256,213,101,800
Sum of Global Trade	\$177,167,857,900	\$379,864,155,900
NA Trade Share	61.0%	71.8%
Jobs at Risk	81,749	507,655

Analysis

- Manufacturing represents the largest exposure, with 507,655 jobs at risk (71.8% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 81,749 jobs (61.0% trade share)
- Combined exposure of 589,404 jobs demonstrates Ontario's significant integration into North American trade networks

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: QUEBEC

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	100,020	452,875
Exports to U.S.	\$40,264,327,200	\$35,049,698,300
Imports from U.S.	\$12,433,155,900	\$17,848,354,400
Exports to Mexico	\$811,960,800	\$724,746,600
Imports from Mexico	\$227,949,600	\$2,468,785,400
Sum of US+MEX Trade	\$53,737,393,500	\$56,091,584,700
Global Exports	\$53,762,228,100	\$48,042,896,100
Global Imports	\$33,524,907,500	\$47,911,197,000
Sum of Global Trade	\$87,287,135,600	\$95,954,093,100
NA Trade Share	61.6%	58.5%
Jobs at Risk	61,576	264,736

Analysis

- Manufacturing represents the largest exposure, with 264,736 jobs at risk (58.5% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 61,576 jobs (61.6% trade share)
- Combined exposure of 326,312 jobs demonstrates Quebec's significant integration into North American trade networks.

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: ALBERTA

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	181,310	140,430
Exports to U.S.	\$142,762,459,400	\$13,984,359,600
Imports from U.S.	\$5,483,309,500	\$17,569,628,600
Exports to Mexico	\$327,667,900	\$114,540,600
Imports from Mexico	\$694,432,500	\$1,185,716,000
Sum of US+MEX Trade	\$149,267,869,300	\$32,854,244,800
Global Exports	\$158,014,395,400	\$17,545,775,200
Global Imports	\$8,748,879,200	\$25,868,032,500
Sum of Global Trade	\$166,763,274,600	\$43,413,807,700
NA Trade Share	89.5%	75.7%
Jobs at Risk	162,288	106,273

Analysis

- Manufacturing represents the largest exposure, with 106,273 jobs at risk (75.7% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 162,288 jobs (89.5% trade share)
- Combined exposure of 268,562 jobs demonstrates Alberta's significant integration into North American trade networks

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: MANITOBA

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	23,510	71,435
Exports to U.S.	\$5,768,376,100	\$4,943,237,300
Imports from U.S.	\$4,686,200,200	\$15,693,075,500
Exports to Mexico	\$331,277,500	\$10,232,200
Imports from Mexico	\$278,801,300	\$1,093,213,500
Sum of US+MEX Trade	\$11,064,655,100	\$21,739,758,500
Global Exports	\$9,685,681,700	\$5,548,581,500
Global Imports	\$5,661,384,200	\$21,457,691,900
Sum of Global Trade	\$15,347,065,900	\$27,006,273,400
NA Trade Share	72.1%	80.5%
Jobs at Risk	16,950	57,504

Analysis

- Manufacturing represents the largest exposure, with 57,504 jobs at risk (80.5% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 16,950 jobs (72.1% trade share)
- Combined exposure of 74,454 jobs demonstrates Manitoba's significant integration into North American trade networks

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: SASKATCHEWAN

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	56,560	30,425
Exports to U.S.	\$25,123,597,000	\$1,283,971,200
Imports from U.S.	\$2,200,130,500	\$10,121,899,500
Exports to Mexico	\$635,687,400	\$3,035,900
Imports from Mexico	\$67,717,700	\$341,813,500
Sum of US+MEX Trade	\$28,027,132,600	\$11,750,720,100
Global Exports	\$43,576,565,500	\$1,436,798,400
Global Imports	\$2,616,252,800	\$12,585,135,500
Sum of Global Trade	\$46,192,818,300	\$14,021,933,900
NA Trade Share	60.7%	83.8%
Jobs at Risk	34,317	25,497

Analysis

- Manufacturing represents exposure of 25,497 jobs (83.8% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 34,317 jobs (60.7% trade share)
- Combined exposure of 59,814 jobs

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: NEW BRUNSWICK

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	13,285	35,195
Exports to U.S.	\$8,910,218,300	\$5,515,891,800
Imports from U.S.	\$8,201,006,100	\$1,512,678,800
Exports to Mexico	\$5,141,400	\$1,078,900
Imports from Mexico	\$70,753,900	\$171,900,100
Sum of US+MEX Trade	\$17,187,119,700	\$7,201,549,600
Global Exports	\$10,265,834,200	\$5,607,075,300
Global Imports	\$14,165,422,000	\$2,341,820,600
Sum of Global Trade	\$24,431,256,200	\$7,948,895,900
NA Trade Share	70.3%	90.6%
Jobs at Risk	9,346	31,886

Analysis

- Manufacturing represents exposure of 31,886 jobs (90.6% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 9,346 jobs (70.3% trade share)
- Combined exposure of 41,232 jobs

PROVINCE TRADE EXPOSURE ANALYSIS

HIGH EXPOSURE

Province: PRINCE EDWARD ISLAND

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	5,890	7,500
Exports to U.S.	\$506,941,600	\$198,110,500
Imports from U.S.	\$1,622,100	\$24,064,600
Exports to Mexico	\$129,400	\$274,000
Imports from Mexico	\$211,500	\$800
Sum of US+MEX Trade	\$508,904,600	\$222,449,900
Global Exports	\$630,465,800	\$335,270,600
Global Imports	\$2,243,800	\$58,485,200
Sum of Global Trade	\$632,709,600	\$393,755,800
NA Trade Share	80.4%	56.5%
Jobs at Risk	4,737	4,237

Analysis

- Manufacturing represents exposure of 4,237 jobs (56.5% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 4,737 jobs (80.4% trade share)
- Combined exposure of 8,975 jobs

PROVINCE TRADE EXPOSURE ANALYSIS

MODERATE EXPOSURE

Province: **BRITISH COLUMBIA**

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	88,810	158,235
Exports to U.S.	\$18,813,703,200	\$6,300,107,400
Imports from U.S.	\$11,171,950,200	\$9,797,650,900
Exports to Mexico	\$54,839,800	\$34,168,000
Imports from Mexico	\$751,438,600	\$1,594,306,700
Sum of US+MEX Trade	\$30,791,931,800	\$17,726,233,000
Global Exports	\$40,989,166,900	\$8,658,270,100
Global Imports	\$21,607,135,500	\$31,951,721,600
Sum of Global Trade	\$62,596,302,400	\$40,609,991,700
NA Trade Share	49.2%	43.6%
Jobs at Risk	43,687	69,069

Analysis

- Manufacturing represents the largest exposure, with 69,069 jobs at risk (43.6% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 43,687 jobs (49.2% trade share)
- Combined exposure of 112,756 jobs demonstrates British Columbia's significant integration into North American trade networks

PROVINCE TRADE EXPOSURE ANALYSIS

MODERATE EXPOSURE

Province: NEWFOUNDLAND AND LABRADOR

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	12,600	7,200
Exports to U.S.	\$6,093,330,200	\$725,175,900
Imports from U.S.	\$768,435,000	\$26,502,700
Exports to Mexico	\$8,759,400	\$99,200
Imports from Mexico	\$600	\$137,200
Sum of US+MEX Trade	\$6,870,525,200	\$751,915,000
Global Exports	\$12,669,547,100	\$776,294,900
Global Imports	\$2,175,607,800	\$1,317,905,700
Sum of Global Trade	\$14,845,154,900	\$2,094,200,600
NA Trade Share	46.3%	35.9%
Jobs at Risk	5,831	2,585

Analysis

- Manufacturing represents exposure of 2,585 jobs (35.9% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 5,831 jobs (46.3% trade share)
- Combined exposure of 8,417 jobs

PROVINCE TRADE EXPOSURE ANALYSIS

LOWER EXPOSURE

Province: NOVA SCOTIA

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	13,305	36,310
Exports to U.S.	\$1,741,383,100	\$2,084,576,900
Imports from U.S.	\$281,488,100	\$125,278,200
Exports to Mexico	\$1,289,500	\$27,934,500
Imports from Mexico	\$919,700	\$380,600
Sum of US+MEX Trade	\$2,025,080,400	\$2,238,170,200
Global Exports	\$3,035,984,300	\$2,398,472,800
Global Imports	\$2,461,243,100	\$8,024,361,700
Sum of Global Trade	\$5,497,227,400	\$10,422,834,500
NA Trade Share	36.8%	21.5%
Jobs at Risk	4,901	7,797

Analysis

- Manufacturing represents exposure of 7,797 jobs (21.5% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 4,901 jobs (36.8% trade share)
- Combined exposure of 12,698 jobs

PROVINCE TRADE EXPOSURE ANALYSIS

LOWER EXPOSURE

Province: YUKON, NORTHWEST TERRITORIES, AND NUNAVUT

Item	Agriculture, Forestry, and Mining	Manufacturing
Sector Employment	8,355	595
Exports to U.S.	138,326,800	4,250,000
Imports from U.S.	176,900,600	23,492,400
Exports to Mexico	1,700	1,012,100
Imports from Mexico	-	3,000
Sum of US+MEX Trade	\$315,229,100	\$28,757,500 B
Global Exports	3,802,674,900	11,666,500
Global Imports	181,395,500	69,973,600
Sum of Global Trade	\$3.98 B	\$81,640,100
NA Trade Share	7.9%	35.2%
Jobs at Risk	661	210

Analysis

- Manufacturing represents exposure of 210 jobs (35.2% NA trade share)
- Agriculture, Forestry, and Mining show exposure of 661 jobs (7.9% trade share)
- Combined exposure of 871 jobs

ANALYSIS 2: SCENARIO-BASED IMPACT ASSESSMENT

After examining the baseline exposure of jobs to North American trade, we now turn to understanding how different levels of trade disruption might affect employment across provinces. While our first analysis identified the total number of jobs connected to cross-border trade, this second analysis recognizes that trade adjustments occur gradually and at varying levels of intensity. By modeling multiple scenarios, we can better understand the range of potential workforce impacts as businesses adapt to new trade conditions.

Methodology

Our second analysis takes a forward-looking approach by developing scenarios that reflect different levels of potential trade disruption. This methodology recognizes that trade patterns adjust gradually rather than stopping abruptly, with impacts varying based on the severity and duration of trade barriers. By modeling multiple scenarios, we can help policymakers understand the range of possible workforce impacts and plan appropriate responses.

We developed three scenarios based on historical patterns from previous trade disputes and economic research on business adaptation to trade barriers. Each scenario considers both direct tariff impacts and broader ripple effects through supply chains:

Scenario A (Mild Impact) examines a 10% reduction in cross-border trade. This represents a short-term disruption where businesses mainly absorb costs or find temporary workarounds. For example, if a state has 100,000 jobs linked to North American trade, this scenario would affect 10,000 jobs through reduced hours, hiring freezes, or similar adjustments.

$$\text{Jobs Affected} = (\text{Jobs at Risk from Analysis 1}) \times 10\%$$

Scenario B (Moderate Impact) models a 25% reduction in trade flows, reflecting medium-term adjustments in which some businesses begin shifting supply chains while others maintain existing relationships despite higher costs. This level of disruption might emerge if tariffs persist for several months, forcing more substantial business adaptations.

$$\text{Jobs Affected} = (\text{Jobs at Risk from Analysis 1}) \times 25\%$$

Scenario C (Severe Impact) examines a 40% reduction in cross-border commerce, representing long-term structural changes in trading patterns. At this level, we would expect to see significant supply chain reorganization, with some companies permanently shifting production or seeking alternative suppliers outside North America.

$$\text{Jobs Affected} = (\text{Jobs at Risk from Analysis 1}) \times 40\%$$

It's crucial to understand that these scenarios represent different points along a spectrum of possible outcomes. They help anticipate potential workforce impacts and develop appropriately scaled responses. The actual impact in any given state or sector will depend on multiple factors, including the specific industries involved, alternative market availability, and the ability of businesses to adapt their operations.

Accounting for Elasticity and Adaptation

The scenario reductions (10%, 25%, and 40%) reflect varying degrees of trade disruption, but real-world impacts also depend on factors such as price elasticity, business cost-absorption strategies, and alternative sourcing options. Some companies might absorb tariff costs rather than pass them fully to consumers, while others might swiftly relocate supply chains. Consequently, the scenario results should be interpreted as potential ranges rather than definitive predictions of the number of jobs affected.

The scenario framework helps policymakers understand:

- Scale of potential workforce impacts
- Which provinces need immediate support mechanisms
- Where long-term economic diversification is most critical

NATIONAL SCENARIO ANALYSIS SUMMARY

Overview: The following scenarios model potential employment impacts under different levels of trade disruption, applied uniformly across all provinces.

SCENARIO	REDUCTION IN TRADE	JOBS IMPACT MANUFACTURING	JOBS IMPACT AG/FOREST/MINING	TOTAL JOBS IMPACT
A – Mild Impact ¹	10%	107,795	43,706	151,501
B – Moderate Impact	25%	269,486	109,264	378,750
C- Severe Impact	40%	431,178	174,822	606,000

Provincial Distribution (Scenario B - Moderate Impact):

- Ontario: ~150,800 jobs affected
- Quebec: ~82,000 jobs affected
- Alberta: ~64,600 jobs affected
- All other provinces: ~81,350 jobs affected

Important Notes:

- ⚠ These are NOT job loss predictions -they represent potential exposure ranges
- ⚠ Actual impacts depend on: business adaptation, alternative markets, policy responses
- ⚠ Timeline matters: short-term disruptions may be absorbed; long-term changes trigger restructuring
- ⚠ Sector elasticity varies: some industries can adapt quickly, others face structural constraints

SCENARIO-BASED IMPACT ASSESSMENT

ONTARIO

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	61.0%	9,555 jobs	23,887 jobs	38,219 jobs
Manufacturing	71.8%	50,765 jobs	126,914 jobs	203,062 jobs

Interpretation: Under moderate disruption (Scenario B), Ontario could see impacts to approximately 150,800 jobs. Under severe disruption (Scenario C), potential impacts could reach 241,281 jobs.

QUEBEC

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	61.6%	6,329 jobs	15,823 jobs	25,316 jobs
Manufacturing	58.5%	26,474 jobs	66,184 jobs	105,894 jobs

Interpretation: Under moderate disruption (Scenario B), Quebec could see impacts to approximately 82,007 jobs. Under severe disruption (Scenario C), potential impacts could reach 131,211 jobs.

ALBERTA

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	89.5%	15,199 jobs	37,998 jobs	60,797 jobs
Manufacturing	75.7%	10,627 jobs	26,568 jobs	42,509 jobs

Interpretation Under moderate disruption (Scenario B), Alberta could see impacts to approximately 64,566 jobs. Under severe disruption (Scenario C), potential impacts could reach 103,306 jobs.

SCENARIO-BASED IMPACT ASSESSMENT

BRITISH COLUMBIA

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	49.2%	4,879 jobs	12,197 jobs	19,515 jobs
Manufacturing	43.6%	6,907 jobs	17,267 jobs	27,628 jobs

Interpretation: Under moderate disruption (Scenario B), British Columbia could see impacts to approximately 29,464 jobs. Under severe disruption (Scenario C), potential impacts could reach 47,143 jobs.

MANITOBA

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	72.1%	1,626 jobs	4,066 jobs	6,506 jobs
Manufacturing	80.5%	5,750 jobs	14,376 jobs	23,002 jobs

Interpretation: Under moderate disruption (Scenario B), Manitoba could see impacts to approximately 18,442 jobs. Under severe disruption (Scenario C), potential impacts could reach 29,507 jobs.

SASKATCHEWAN

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	60.7%	3,172 jobs	7,931 jobs	12,689 jobs
Manufacturing	83.8%	2,550 jobs	6,374 jobs	10,199 jobs

Interpretation: Under moderate disruption (Scenario B), Saskatchewan could see impacts to approximately 14,305 jobs. Under severe disruption (Scenario C), potential impacts could reach 22,888 jobs.

SCENARIO-BASED IMPACT ASSESSMENT

NEW BRUNSWICK

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	70.3%	1,061 jobs	2,653 jobs	4,244 jobs
Manufacturing	90.6%	3,189 jobs	7,972 jobs	12,754 jobs

Interpretation: Under moderate disruption (Scenario B), New Brunswick could see impacts to approximately 10,624 jobs. Under severe disruption (Scenario C), potential impacts could reach 16,999 jobs.

NOVA SCOTIA

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	36.8%	667 jobs	1,667 jobs	2,668 jobs
Manufacturing	21.5%	780 jobs	1,949 jobs	3,119 jobs

Interpretation: Under moderate disruption (Scenario B), Nova Scotia could see impacts to approximately 3,617 jobs. Under severe disruption (Scenario C), potential impacts could reach 5,787 jobs.

PRINCE EDWARD ISLAND

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	80.4%	474 jobs	1,184 jobs	1,895 jobs
Manufacturing	56.5%	424 jobs	1,059 jobs	1,695 jobs

Interpretation: Under moderate disruption (Scenario B), Prince Edward Island could see impacts to approximately 2,244 jobs. Under severe disruption (Scenario C), potential impacts could reach 3,590 jobs.

SCENARIO-BASED IMPACT ASSESSMENT

NEWFOUNDLAND AND LABRADOR

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	46.3%	578 jobs	1,444 jobs	2,311 jobs
Manufacturing	35.9%	259 jobs	646 jobs	1,034 jobs

Interpretation: Under moderate disruption (Scenario B), Newfoundland and Labrador could see impacts to approximately 2,090 jobs. Under severe disruption (Scenario C), potential impacts could reach 3,345 jobs.

YUKON, NORTHWEST TERRITORIES, AND NUNAVUT

Sector	NA Trade Share	Scenario A (10% drop)	Scenario B (25% drop)	Scenario C (40% drop)
Agriculture, Forestry, and Mining	7.9%	150 jobs	375 jobs	601 jobs
Manufacturing	35.2%	23 jobs	57 jobs	91 jobs

Interpretation: Under moderate disruption (Scenario B), Yukon, Northwest Territories, and Nunavut could see impacts to approximately 432 jobs. Under severe disruption (Scenario C), potential impacts could reach 692 jobs.

THE CASCADING EFFECTS OF TRADE DISRUPTION AND POLICY IMPLICATIONS

Our analysis reveals the deep and complex integration of North American trade into provincial economies, with implications that extend far beyond simple import-export calculations. Over 1.5 million jobs across Canada are exposed to potential trade disruptions, with manufacturing bearing the greatest impact at 1.08 million jobs and agriculture, forestry, and mining accounting for 437 thousand jobs.

The geographical scope stretches from British Columbia through the Prairies to Ontario, Quebec, and the Atlantic provinces, revealing how North American trade integration affects provinces across the entire nation. Ontario and Quebec, as Canada's manufacturing powerhouses, demonstrate the deepest integration with over 930,000 combined jobs at risk, while resource-rich provinces like Alberta and Saskatchewan show critical dependencies in energy and agricultural exports.

The scenario analysis further illuminates how initial trade disruptions could cascade through provincial economies. Even a modest 10% reduction in trade flows could affect over 150,000 workers across multiple provinces. More severe disruptions, potentially affecting up to 40% of cross-border trade, could trigger structural changes in regional economies that have spent decades optimizing around integrated North American supply chains.

While Scenarios A (10%), B (25%), and C (40%) provide a spectrum of possible disruptions, they do not assign specific timelines. A mild, short-term disruption might be absorbed through temporary cost measures and slight supply-chain adjustments; by contrast, a prolonged or severe disruption (30–40% or more) could trigger long-term, structural changes—such as permanent relocation of production facilities, new trade alliances, or reconfiguration of major logistics corridors. Policymakers and businesses should consider both immediate and long-range responses accordingly.

Our findings demonstrate how thoroughly North American economic integration has transformed provincial economies three decades after NAFTA's inception. The intricate network of supply chains, specialized workforce development, and complementary production processes that have developed represent more than just trade statistics; they reflect the evolution of a continental market that has enhanced the competitive position of all three nations.

These deep linkages suggest that any significant disruption to North American trade patterns would require careful consideration of both national-level impacts and the specific vulnerabilities and adaptation challenges faced by individual provinces and sectors. The data presents a clear picture: the economic ties binding North American partners together have grown too complex and vital to be easily undone without substantial consequences for workers, businesses, and communities across Canada.

Future Considerations

Several additional factors could influence the ultimate impact of trade disruptions on provincial economies. Macroeconomic conditions, including fluctuations in global demand, exchange rates, and broader economic cycles, may either moderate or intensify the effects of tariffs beyond our current estimates.

While comprehensive, the provincial-level analysis necessarily aggregates impacts that could vary significantly at more local levels. Within each province, certain regions or specific industrial sectors may face disproportionate effects due to their particular trade dependencies and economic structures. More granular analysis at the regional or municipal level could help refine these estimates and identify local areas requiring particular attention.

The resilience and adaptability of Canadian businesses, workers, and communities should not be underestimated. Throughout history, Canadian provinces have demonstrated a remarkable ability to adjust to changing economic conditions. However, the speed and scale of potential trade disruptions examined in this analysis would present challenges that require coordinated policy responses and targeted support for affected workers and communities.

Policy Recommendations

- Support workforce transition programs for affected workers
- Invest in diversification of export markets where possible
- Enhance trade infrastructure to reduce transaction costs
- Provide targeted assistance to highly exposed sectors and provinces
- Maintain dialogue and diplomatic engagement to preserve trade relationships

This analysis provides a foundation for understanding the scope and nature of Canada's exposure to potential North American trade disruptions. It underscores the importance of preserving and strengthening the economic partnerships that have been built over three decades of integration, while also preparing for the possibility of significant adjustments to long-established trading relationships.

ABOUT THE AUTHORS

DANIEL COVARRUBIAS, PH.D.

Daniel Covarrubias is the Director of the Texas Center for Border Economic and Enterprise Development at the A.R. Sanchez, Jr. School of Business at Texas A&M International University (TAMIU). The essential purpose of the Texas Center is to provide support to private and public entities with research, knowledge, information, and assistance in border and binational socio-economic development efforts. The Center hosts the TAMIU Logistechs Living Lab, a research initiative focused on improving the efficiency and competitiveness of cross-border trade and transportation through the use of exponential technologies.

His research is centered on Cross-Border Regional Development, Clusters, Regional Innovation Systems, and Logistechs. He is a leading voice on Logistechs, innovation, cross-border trade and transportation, and international trade, frequently contributing as an expert in media outlets such as the Wall Street Journal, the Texas Standard, and PBS.

HELEODORO LOZANO

Program Manager with over 27 years of institutional knowledge and multidisciplinary expertise at the Texas Center. Over the course of his tenure, he has served as Research Project Coordinator, leading studies from inception to publication and overseeing data collection, analysis, and reporting. His work bridges technical systems with research outcomes, drawing on his experience as the Center's IT Developer and Administrator to ensure seamless integration of technology and data-driven insights.