

# The Canadian Free Trade Agreement and Interprovincial Trade

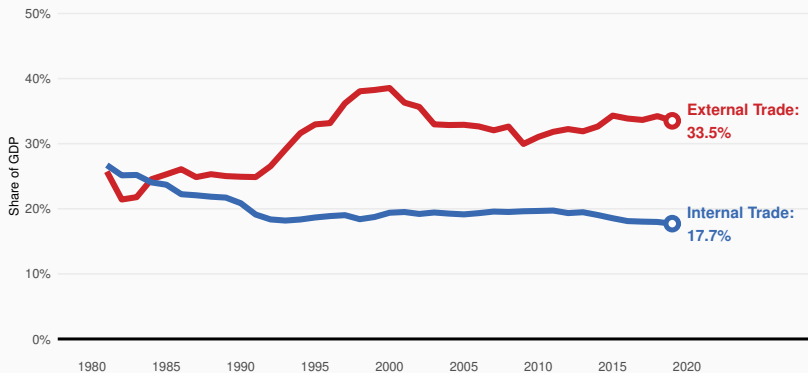
---

**Trevor Tombe (University of Calgary)**

Queen's Institute for Trade Policy, November 2020

# How Important is Internal Trade in Canada?

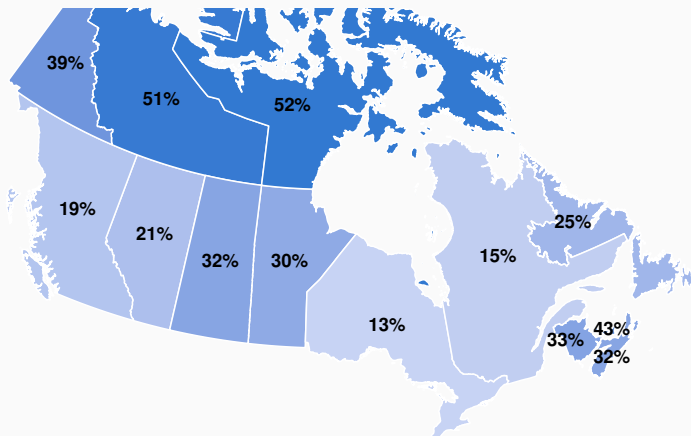
**Figure 1:** Internal and International Trade as a Share of GDP (1981-2019)



Source: Own calculations from Statistics Canada data table 36-10-0222.

# How Important is Internal Trade in Canada?

**Figure 2:** Interprovincial Imports as a Share of GDP (2019)



Source: Own calculations from Statistics Canada data table 36-10-0222.



# Supreme Court of Canada Rulings (R v Comeau 2018 SCC 15)



**LIQUOR  
DISTRIBUTION  
BRANCH**



**LCBO**



# Measuring Internal Trade Costs

---

## The Head-Ries Index of Trade Costs

Pair observed trade data with empirical estimates of trade elasticities to infer the magnitude of unobservable trade costs.

# The Head-Ries Index of Trade Costs

Pair observed trade data with empirical estimates of trade elasticities to infer the magnitude of unobservable trade costs.

## The Head-Ries Index

$$\bar{\tau}_{ni} = \left( \frac{\pi_{ni}\pi_{in}}{\pi_{nn}\pi_{ij}} \right)^{-1/\theta} \quad (1)$$

where  $\pi$ 's are trade shares and  $\theta$  is the elasticity



# The Head-Ries Index of Trade Costs

Pair observed trade data with empirical estimates of trade elasticities to infer the magnitude of unobservable trade costs.

## The Head-Ries Index

$$\bar{\tau}_{ni} = \left( \frac{\pi_{ni}\pi_{in}}{\pi_{nn}\pi_{ij}} \right)^{-1/\theta} \quad (1)$$

where  $\pi$ 's are trade shares and  $\theta$  is the elasticity

**Intuition:** 75% of AB egg spending is local, 15% to SK producers. Meanwhile, 83% of SK egg spending is local, 6% to AB producers. Elasticity of egg trade is -3.8 (Fontagne et al., 2019).

# The Head-Ries Index of Trade Costs

Pair observed trade data with empirical estimates of trade elasticities to infer the magnitude of unobservable trade costs.

## The Head-Ries Index

$$\bar{\tau}_{ni} = \left( \frac{\pi_{ni}\pi_{in}}{\pi_{nn}\pi_{ij}} \right)^{-1/\theta} \quad (1)$$

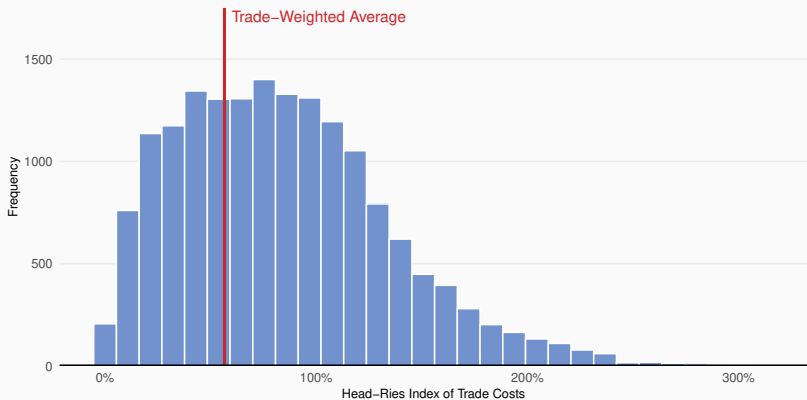
where  $\pi$ 's are trade shares and  $\theta$  is the elasticity

**Intuition:** 75% of AB egg spending is local, 15% to SK producers. Meanwhile, 83% of SK egg spending is local, 6% to AB producers. Elasticity of egg trade is -3.8 (Fontagne et al., 2019).

- Trade cost:  $\left( \frac{0.15 \times 0.06}{0.75 \times 0.83} \right)^{-1/3.8} = 1.75 \rightarrow$  a 75% tariff-equivalent cost

# The Head-Ries Index of Trade Costs

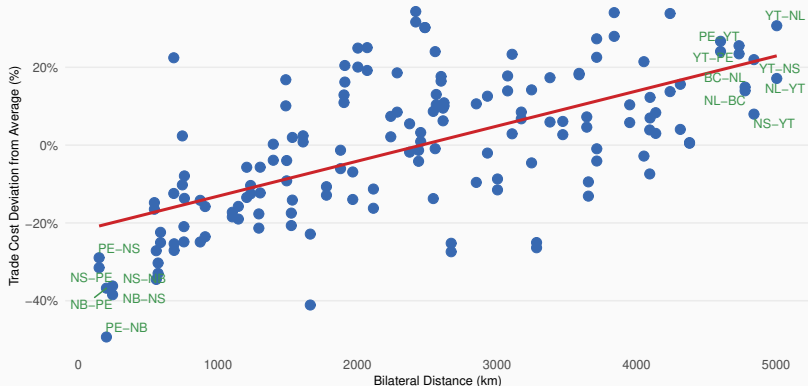
**Figure 3:** Tariff-Equivalent Internal Trade Costs in Canada (2016)



Source: Own calculations from various Statistics Canada tables.

# Geographic Determinants of Trade Costs

**Figure 4:** Head-Ries Trade Costs vs Physical Distance (2016)



Note: Displays the average trade-weighted trade costs versus distance between pairs, controlling for product-specific factors. Specifically, this plots the residuals from a regression of log trade costs on product-specific dummy variables against the distance between Origin-Destination trading pairs in Canada.

**The best estimates of non-geographic internal trade costs:**

Bemrose, Brown, and Tweedle (2020), “Going the distance: Estimating the effect of provincial borders on trade when geography (and everything else) matters,” *Canadian Journal of Economics*

# Estimates of Policy-Relevant Trade Costs

## **The best estimates of non-geographic internal trade costs:**

Bemrose, Brown, and Tweedle (2020), “Going the distance: Estimating the effect of provincial borders on trade when geography (and everything else) matters,” *Canadian Journal of Economics*

**Their Main Aggregate Estimates for Goods:** 6.9 – 8.1%

# Estimates of Policy-Relevant Trade Costs

## **The best estimates of non-geographic internal trade costs:**

Bemrose, Brown, and Tweedle (2020), “Going the distance: Estimating the effect of provincial borders on trade when geography (and everything else) matters,” *Canadian Journal of Economics*

**Their Main Aggregate Estimates for Goods:** 6.9 – 8.1%

## **Other estimates:**

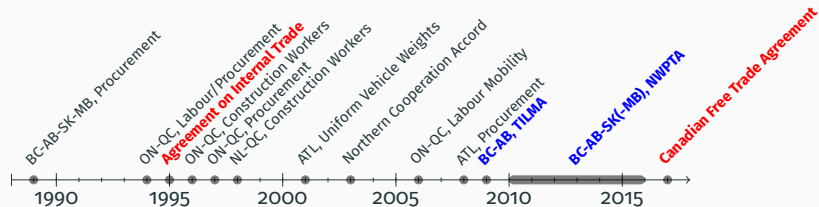
- **Albrecht and Tombe (2016, CJE):** 7.8 – 14.5% overall, average for agriculture and manufacturing is less than 5%

# **Policy Options to Lower Internal Trade Costs**

---



# Key Dates: Selected Internal Trade Agreements in Canada



A long and difficult road for policy makers.

**The Canadian Free Trade Agreement is the most ambitious and far reaching internal trade agreement ever.**

# Canadian Free Trade Agreement

**Agreement in force on July 1, 2017** (Happy 150!)

Establishes rules and procedures to encourage easier goods and services flows across subnational borders.

- Broad coverage: 80% of GDP
- Stricter procurement rules
- “Stronger” dispute settlement (sort of... but... not really)
- Maintains momentum through various working groups

# Canadian Free Trade Agreement

**Agreement in force on July 1, 2017** (Happy 150!)

Establishes rules and procedures to encourage easier goods and services flows across subnational borders.

- Broad coverage: 80% of GDP
- Stricter procurement rules
- “Stronger” dispute settlement (sort of... but... not really)
- Maintains momentum through various working groups

**A (Potentially) Very Big Deal:** A new transparent ongoing process to smooth-out regulatory differences (!)

# Regulatory Reconciliation and Cooperation Table (RCT)

## The RCT Process: Structured Intergovernmental Bargaining

1. Identify a potential barrier. F/P/T governments only.
2. Governments negotiate. A “reconciliation agreement” is (hopefully) reached. Can take many forms.
3. Implement the agreement (following whatever method was negotiated: mutual recognition, harmonization, etc.)

# Regulatory Reconciliation and Cooperation Table (RCT)

## The RCT Process: Structured Intergovernmental Bargaining

1. Identify a potential barrier. F/P/T governments only.
2. Governments negotiate. A “reconciliation agreement” is (hopefully) reached. Can take many forms.
3. Implement the agreement (following whatever method was negotiated: mutual recognition, harmonization, etc.)

**To date:** 10 agreements have been reached.

- Construction codes; energy efficiency standards; aquaculture; corporate registrations; upholstered and stuffed articles; first aid kits; wide-base single tires ...

# Regulatory Reconciliation and Cooperation Table (RCT)

## The RCT Process: Structured Intergovernmental Bargaining

1. Identify a potential barrier. F/P/T governments only.
2. Governments negotiate. A “reconciliation agreement” is (hopefully) reached. Can take many forms.
3. Implement the agreement (following whatever method was negotiated: mutual recognition, harmonization, etc.)

**To date:** 10 agreements have been reached.

- Construction codes; energy efficiency standards; aquaculture; corporate registrations; upholstered and stuffed articles; first aid kits; wide-base single tires ...

**The 2020/21 Work Plan:** 33 items

**The Gains from Internal Trade  
Liberalization and a New Method  
to Prioritize Policy Effort**

---

## Caveats to Keep in Mind

---



## Caveats to Keep in Mind

- **Long-Run Gains:** Estimates do not account for the sometimes long and costly process of adjustment.

## Caveats to Keep in Mind

- **Long-Run Gains:** Estimates do not account for the sometimes long and costly process of adjustment.
- **Aggregate Gains:** Estimates abstract from distribution of costs and benefits across individuals.

## Caveats to Keep in Mind

- **Long-Run Gains:** Estimates do not account for the sometimes long and costly process of adjustment.
- **Aggregate Gains:** Estimates abstract from distribution of costs and benefits across individuals.
- **Legitimate Policy Objectives:** Regulatory variation may serve valid purposes – and may yield efficiency benefits despite inhibiting trade.

## Caveats to Keep in Mind

- **Long-Run Gains:** Estimates do not account for the sometimes long and costly process of adjustment.
- **Aggregate Gains:** Estimates abstract from distribution of costs and benefits across individuals.
- **Legitimate Policy Objectives:** Regulatory variation may serve valid purposes – and may yield efficiency benefits despite inhibiting trade.
- **Federalism:** Potentially unavoidable consequence of a decentralized federation

## A New Flexible Approximation of Gains

Policy makers could benefit from a simple rule-of-thumb to allocate effort across products, sectors, etc.

## A New Flexible Approximation of Gains

Policy makers could benefit from a simple rule-of-thumb to allocate effort across products, sectors, etc.

### The “Marginal Cost of Internal Trade Frictions” (MCTF)

$$\text{MCTF} = \text{“Network Centrality”} \times \text{Internal Trade Share}$$

A sector’s “centrality” is how “important” a sector is as a supplier of intermediate inputs and final goods. It is measured using input-output data. If you like math:  $\gamma = (\mathbf{I} - \mathbf{A})^{-1}\beta$

## A New Flexible Approximation of Gains

Policy makers could benefit from a simple rule-of-thumb to allocate effort across products, sectors, etc.

### The “Marginal Cost of Internal Trade Frictions” (MCTF)

$$\text{MCTF} = \text{“Network Centrality”} \times \text{Internal Trade Share}$$

A sector’s “centrality” is how “important” a sector is as a supplier of intermediate inputs and final goods. It is measured using input-output data. If you like math:  $\gamma = (I - A)^{-1}\beta$

**Intuition:** The MCTF is *almost* equal to a sector or product’s **interprovincial trade** relative to Canada’s **aggregate GDP**.

## Example of MCPF In Action!

Bemrose et al. (2020) estimate **internal trade costs of 4% for food and non-alcoholic beverages**

The **network centrality** of this sector (calculated “easily” from Statistics Canada’s input-output tables) is 0.0643

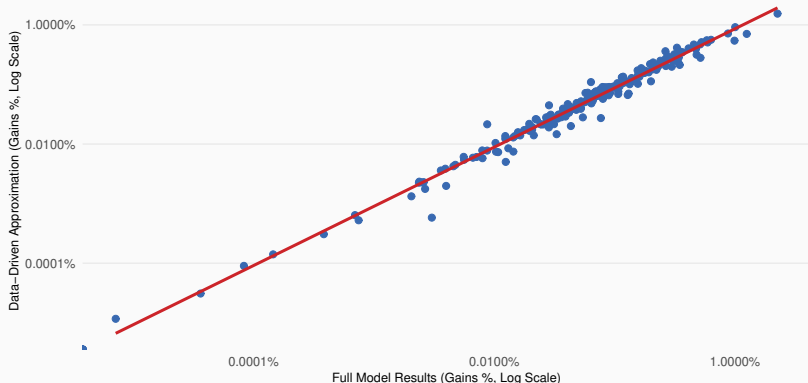
Total **Interprovincial imports** is 26.5% of total expenditures on goods produced by this sector

**The aggregate real GDP cost of internal trade frictions in food/beverages is therefore roughly \$1.6 billion**



# Comparing the MCTF Estimates with a Full CGE Model

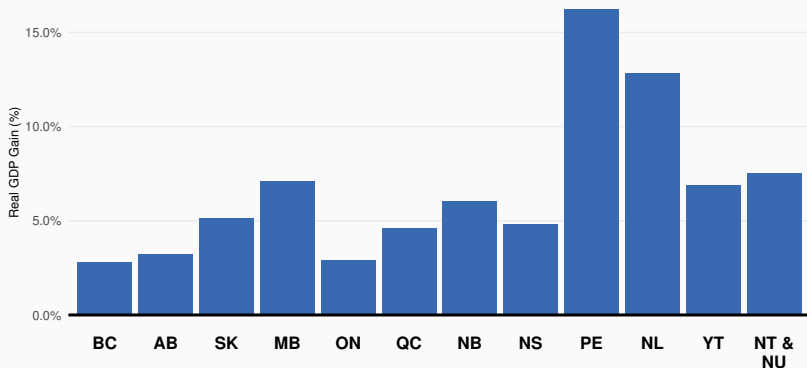
**Figure 5:** Real GDP Gains from Lowering Sectoral Internal Trade Costs by 1%



Source: own calculations from Tombe (2021?), not yet publicly available. Soon! ... hopefully

# Potential Gains from Internal Trade Liberalization

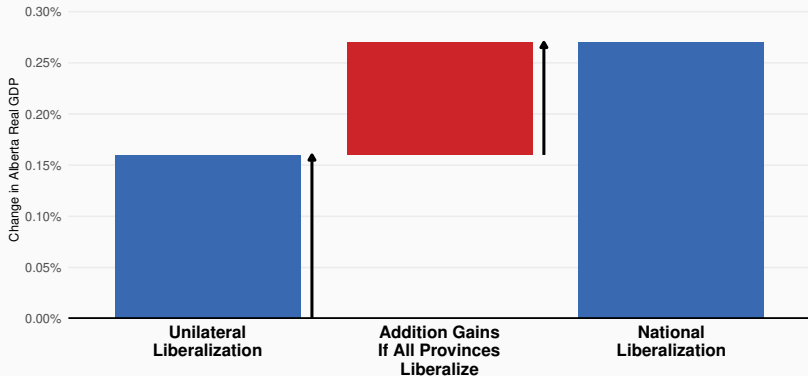
**Figure 6:** Gains from Eliminating Non-Geographic Trade Costs on Goods



Source: Alvarez, Krznar, and Tombe (2019), Table 7. IMF Working Paper No. 19/158.

# Gains from Unilateral Internal Trade Liberalization

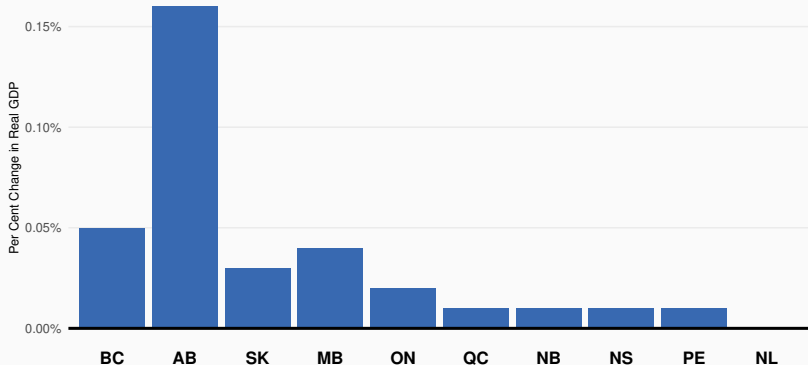
**Figure 7:** Real GDP Gain to Alberta, Unilateral vs Multilateral Liberalization



Displays the gains in real GDP from Alberta unilaterally lowering the cost of imports from other provinces by 1 per cent. Source: own calculations from the Tombe and Winter (2020, CJE Forthcoming) model.

# Gains from Unilateral Liberalization

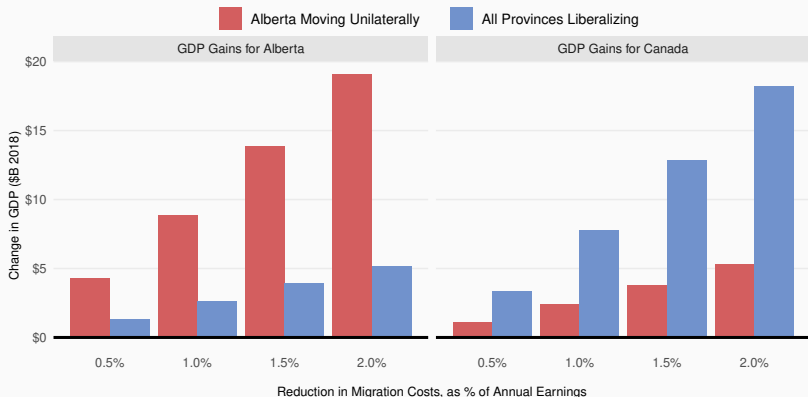
**Figure 8:** Real GDP Gains from a 1% Reduction of Alberta Import Costs



Displays the gains in real GDP from Alberta unilaterally lowering the cost of imports from other provinces by 1 per cent. Source: own calculations from the Tombe and Winter (2020, CJE Forthcoming) model.

# A Related Issue: Interprovincial Labour Mobility

**Figure 9: Real GDP Gains from Easier Labour Mobility**



Source: Tombe and Schwanen (2020), "Alberta's Opportunity: The Ins, Outs and Benefits of Greater Job Mobility," *C.D. Howe Institute Commentary No. 580*, Figure 3.

## **Conclusion**

---

# Concluding Thoughts

## **Significant progress on internal trade policy in Canada**

### **Accelerating progress through the CFTA to enhance Canada's post-COVID recovery requires a careful allocation of effort**

- The RCT capacity is limited
- Direct effort towards highest-return products/sectors

### **Provincial governments can achieve a majority of available economic gains from internal liberalization by moving unilaterally**

- Has both political advantages and disadvantages
- Alberta started, but appears to have completely stalled
- Post-COVID, watch Alberta for more