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Analysis of Regulatory and Non-Regulatory Barriers to Interprovincial Red Meat Trade in Canada

Research Report Prepared for CAPI by Elisabeta Lika and Al Mussell



Research
Report



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I. Introduction.....	4
Purpose and Objectives	4
Approach	4
Organization of the Report	5
II. The Context for Federal and Provincial Meat Inspection, and Interprovincial Trade	5
Introduction.....	5
Canadian Policy Context	5
International Policy Context	6
Canadian Market Context	7
Conceptual Issues.....	8
Considerations and Limitations	8
III. Differences between Provincial Meat Inspection Regulations and Federal Inspection Requirements	9
Federal regulations governing red meats and meat product production and marketing.....	9
Comparison of federal and provincial regulations for red meat and meat products.....	11
Summary.....	12
Implications	14
IV. Sub-national Meat Inspection Regimes in the US	14
US Cooperative Interstate Shipment Program for Meat Processors.....	14
Synthesis	15
V. Stakeholder Consultations	16
Attitudes Toward Regulatory Structure	16
Advantages/Benefits of Federal Standards and Inspection versus Provincial.....	17
Disadvantages/Costs of Moving to Federal Standards and Inspection versus Provincial	17
Barriers to Adopting Federal Standards	17
Additional Issues	18
VI. Economic Impacts of Increased Interprovincial Meat Trade	19
VII. Conclusions.....	20
References	22

Note from CAPI

The policies surrounding Canada's red meat industry are complex and in need of reforms. The following report is aimed at demystifying the regulatory framework in which it operates, while providing analysis of the challenges the red meat industry faces in Canada. Regulatory and non-regulatory barriers to the interprovincial trade of red meats represent significant economic losses.

The Canadian Agri-Food Policy Institute (CAPI) commissioned the following paper, authored by CAPI's Al Mussell, Elisabeta Lika, and Margaret Zafiriou based on its observance of a need for clarity regarding the current federal/provincial regulatory framework governing the red meat trade, as well as the need for policy reforms within it.

Key Takeaways

- The Canadian red meat market has multiple layers. Canada is a major net exporter of pork, and significant production occurs in both eastern and western Canada. Canada is a smaller net exporter of beef, with production concentrated in western Canada.
- Beef exports occur mostly from western Canada, and eastern Canada has a beef deficit. Thus, there is ranging interest in the regional shipment of red meats within the country.
- Slaughter and meat processing regulations vary across the country. Federally licenced facilities are authorized to engage in interprovincial and international trade. Those that are licenced provincially may only sell their products within provincial borders. The vast majority of animals slaughtered for meat in Canada are processed at federally licenced facilities.
- Provinces have authorities for meat inspection as a matter of jurisdiction and agricultural policy. This allows provinces to restrict interprovincial trade (from external provincially inspected plants) and protect their existing plants.
- It can be anticipated that red meat, especially beef, will become more scarce and expensive, and that this will create further pressure to distribute it within Canada with increased efficiency and fewer regulatory barriers.
- The lack of policies ensuring provincial standards meet federal standards is restricting domestic and international market access for provincially inspected facilities. In contrast, the state/federal regulatory framework in the U.S. incentivizes access to inter-state and international markets.
- There are sharp variances between provincial and federal standards and inspections. Some provinces employ standards that more closely resemble that of restaurants. A regulatory approach that ensures provincial establishments meet federal standards would be most practical for provinces that already have near-federal standards/inspection.
- Canada's governance structure and open trade posture make the matter of increasing opportunities for interprovincial trade in meat complex, and narrow the path for potential policy reform.
- Stakeholders consulted for this report generally expressed concerns regarding regulation and losses in efficiency, and that provincial and federal regulations could be arbitrary and costly.
- Stakeholders also noted that letting differing provincial standards and inspection hamper interprovincial trade is an unnecessary and costly barrier to economic growth and development that is injuring the red meat sector. These roadblocks to interprovincial trade represent an estimated \$500 million loss of opportunity.

I. Introduction

Canada has two systems of meat inspection, consistent with agriculture as a matter of joint jurisdiction of the provincial and federal governments. Provincial red meat¹ processing plants that satisfy provincial regulatory licensing requirements are eligible to market meat within the province, but cannot sell product interprovincially to other provinces or export outside the country. Meat processing plants that wish to market outside of the province or internationally are required to be licensed by the Canadian Food Inspection Agency (CFIA) through federal meat inspection regulations and standards. The result is often less stringent provincial regulations and smaller scale provincial plants relative to federal ones that impact the competitiveness and resilience of the sector (Rude, J, 2020; Mussell and Robinson, 2021).

The two regulatory systems create two very distinct processed meat markets and geographic fragmentation in red meat marketing and trade across the country. This leads to de facto interprovincial trade barriers that reduce economic welfare in Canada. Studies have shown how productivity and GDP can be enhanced by reducing internal trade barriers (Alvarez, J., I. Krznak, and T. Tombe, 2019). Efforts continue to be made to reduce interprovincial trade barriers in Canada with the signing of the Canadian Free Trade Agreement (CFTA) between the federal government and the provinces in 2017.² However, because Federal-Provincial-Territorial (FPT) Ministers of Agriculture agree that competitiveness is key to promoting recovery, resilience and growth of the sector, they have requested that FPT officials study the barriers (regulatory and non-regulatory) to the interprovincial trade of red meat to help identify ways to reduce the regulatory burden in the domestic red meat industry and boost Canada's future prospects for economic growth and resilience.

Purpose and Objectives

The purpose of this project is to provide an overview and economic analysis of regulatory and non-regulatory challenges and barriers to internal domestic trade in red meats in Canada. The objectives are:

- To analyze the regulatory challenges that need to be addressed to enable interprovincial trade of red meat in Canada while maintaining international market access;
- To assess other contributing barriers (regulatory and non-regulatory) to domestic red meat trade and benefits to enhanced interprovincial trade;
- To provide recommendations for a path forward for decreased regulatory burden and increased efficiency and economic growth opportunities for the sector.

Approach

To meet these objectives, the structure of the regulatory environment impacting the red meat processing industry in Canada is reviewed at both the provincial and federal levels. This will include a discussion of the international and domestic regulatory environment that impacts the structure and performance of the red meat industry, the institutions and legislation governing the industry, and the high-level differences between provincial and federal inspection standards for meat processing plants across Canada. The operation of sub-national meat regulation and inspection in the United States and its extension to marketing beyond the state level is reviewed. Based on the literature, an estimate of the

¹ As explored here, red meat refers to meat of ruminants (beef, veal, goat, sheep, deer, bison, etc.) and pork.

² Home - Canadian Free Trade Agreement | Accord De Libre-Échange Canadien (cfta-alec.ca)

costs/barriers to interprovincial meat trade in terms of lost efficiency will be estimated. Conclusions with recommendations for a path forward are developed with the assistance of consultations with stakeholders in the meat processing industry across Canada who know first-hand about the barriers and costs and benefits of provincial versus federal standards.

Organization of the Report

Section 2 describes the regulatory and policy context for meat production and inspection in Canada, including the economic importance of the industry in Canada, and the institutional and regulatory environment domestically and internationally that impacts its performance. Section 3 provides an overview of the differences between federal and provincial standards in meat inspection in Canada. Section 4 explores comparable sub-national regulations in the United States. Section 5 presents the results of CAPI consultations on regulatory alternatives with industry stakeholders. Section 6 draws from the literature to estimate the economic value of increased inter-provincial trade in red meat. Section 7 concludes the report.

II. The Context for Federal and Provincial Meat Inspection, and Interprovincial Trade

Introduction

Canada is a surplus producer of red meats- especially pork and beef. As such the international context is important for red meat inspection policy in Canada. Livestock and meat production are also concentrated regionally within Canada. For example, based on the relative regional production and consumption intensities, Alberta and much of western Canada are surplus in beef, while eastern Canada is deficit in beef, which by itself creates incentives for interprovincial movement. Canada as a whole is a net exporter of cattle and beef but is also deficit in lean grind/manufacturing beef, requiring significant imports.

Canadian Policy Context

Section 91 of the *Constitution Act* sets out the jurisdiction of the federal government, with Section 92 setting out the jurisdiction of provinces. Section 91(2) provides the federal government with authority over the regulation of trade and commerce - which is very broad authority, including both national and international commerce. Section 91(27) gives the federal government the authority for criminal law. This authority supports a range of federal legislation relevant to meat, such as prohibiting the sale of unsafe food, and the penalties/enforcement for violations. Section 92(16) provides provinces the authority for “Generally all Matters of a merely local or private Nature in the Province”. The interpretation has been that provincial jurisdiction covers intra-provincial trade, while federal jurisdiction covers inter-provincial trade and international trade.

Under Section 95, agriculture is a responsibility of both federal and provincial governments.³ This allows both federal and provincial governments to make laws for agriculture; meat being an agricultural product, provinces can establish, among other things, provincial standards for meat products. Equally, it allows the federal government to establish standards for meat products.

³ <https://laws-loHugieis.justice.gc.ca/eng/Const/index.html>

In turn, this means that provinces can have different standards, and these differences in regulatory standards between provinces could restrict trade. Section 121 of the Constitution Act requires that “All Articles of the Growth, Produce, or Manufacture of any one of the Provinces shall,..., be admitted free into each of the other Provinces.” This has been interpreted as meaning that a province cannot erect a tariff or duty against another, but it has allowed for differences in regulatory standards that may serve as a barrier to trade.

This creates the prospect that trade within Canada in agri-food products could be fragmented. It was in this context that technical agreements to facilitate interprovincial trade have been established. The Federal-Provincial Agreement on Internal Trade was completed in 1995, and later replaced by the Canadian Free Trade Agreement (CFTA) in 2017. These agreements have provided a platform on which to establish the analogue to bilateral and multilateral equivalency agreements. Article 403 of the CFTA establishes that “Parties shall enter into negotiations to reconcile regulatory measures, identified by a Party, that act as a barrier to trade, investment, or labour mobility within Canada.” Consistent with this, in 2018, the CFIA signed a reconciliation agreement that saw the elimination of requirements for grade inspections prior to the conveyance of apples and potatoes, and quality inspections for blueberries under the now repealed *Fresh Fruit and Vegetable Regulations* (replaced by the *Safe Food for Canadians Act*⁴ and Regulations) that were different based on province of origin and destination. To date, reconciliation agreements of this sort dealing with meat inspection have not been established.

International Policy Context

The international standards guidelines and recommendations guiding national regulations on meat inspection is Codex Alimentarius - a food code containing a “collection of standards, guidelines and codes of practice”.... aimed to protect consumer health and promote fair practices in food trade.⁵ Codex provides the starting point to frame federal food inspection standards for Canada, with Canada and other Codex member countries accepting imports of product from countries that meet its standards, also developed under the umbrella of Codex, and under international animal health standards, OIE (Office International des Epizooties).⁶

However, countries can interpret differently how these standards and guidelines map into their own regulatory requirements. For example, countries can set a range of maximum residue limits (MRL's) that are each consistent with Codex. To prevent small differences in technical standards from prohibiting trade, countries commonly establish “equivalency” agreements. These are essentially bilateral agreements of “mutual recognition”, in which countries acknowledge the authority for other countries to establish certain standards different than their own, but agree to treat them as equivalent to their own.

Importing countries can also require that their own regulatory agencies certify establishments in countries that export to them. Certification of exporting establishments provides additional assurance that they will meet the importing country's standards, given the nature of inspection and/or the potential for corruption in the exporting country. CFIA does not normally certify individual establishments in exporting countries but rather focuses on recognition of systems that govern foreign

⁴ Safe Food for Canadians Act (justice.gc.ca)

⁵ <https://www.fao.org/fao-who-codexalimentarius/en/>

⁶ Terrestrial Code Online Access - WOA - World Organisation for Animal Health

establishments⁷; but some countries which import from Canada require certifying individual establishments in Canada themselves.

Apart from technical standards, countries must also comply with international trade rules in the manner through which inspection/regulation occurs. The most fundamental of these is Article III of the General Agreement on Tariffs and Trade (GATT) incorporated into the various rules under the World Trade Organization (WTO). Article III is sometimes referred to as the “national treatment obligation” and it prohibits discrimination against product on the basis of origin.⁸ In the case of meat inspection, if imported products were viewed as having to meet additional requirements that are not required by domestic products, in effect imposing additional costs on imports, it could be viewed as contravening GATT Article III. The Agreement on Sanitary and Phytosanitary (SPS) Measures incorporates GATT Article III at the technical level. Appendix C 1(f) requires that “any fees imposed for the procedures on imported products are equitable in relation to any fees charged on like domestic products or products originating in any other Member country and should be no higher than the actual cost of the service”. Agri-food inspection services provided by governments are classed as least-distorting domestic agricultural support (“green”) under WTO.

Canadian Market Context

The Canadian red meat market context is multifaceted. Canada is a major net exporter of pork, and significant production occurs in both eastern and western Canada. Canada is a smaller net exporter of beef, with production concentrated in western Canada. Beef exports originate mostly from western Canada, and eastern Canada is deficit in beef. Thus, there is varying interest in the regional shipment of red meats within the country.

There is no limit on movement within Canada of federally inspected meat, and the overwhelming majority of both cattle and hog slaughter is in federally inspected facilities. This is illustrated in Table 2.1 for 2021. The table shows that about 94 percent of the cattle slaughter and about 96 percent of the hog slaughter was in federally inspected establishments. The situation for sheep was different, with about 26 percent of the slaughter in federal establishments.

Table 2.1 Total Red Meat Slaughter, Canada 2021 (Head)

Cattle		Hogs		Sheep/Lamb	
Federal	Provincial	Federal	Provincial	Federal	Provincial
3,287,707	195,241	20,900,935	916,927	141,502	406,848

⁷ CFIA does not certify, but within countries establishments still must be determined to be eligible. See Foreign countries establishments eligible to export meat products to Canada - Canadian Food Inspection Agency

⁸ The addendum to Article III states “Any internal tax or other internal charge, or any law, regulation or requirement of the kind referred to in paragraph 1 which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, or a law, regulation or requirement of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III”

However, in all cases, significant value is derived from provincially inspected establishments, with the potential that this could be increased if domestic market access was broadened. Also in all cases, a processor's business operations are critically impacted by the nature of inspection; in particular, inspection decisions can impact meat marketing and revenue, human resources, and costs.

Meat processors have a variety of market destinations, inter-provincial, international, and intra-provincial. Large meat processors usually market to national retailers and foodservice operators domestically and compete with imports. Large processors also export, and hence must comply with federal inspection standards. Smaller processors operate at a smaller scale and normally service local or regional markets within their province; they face little direct competition from imports and may not see the need to comply with federal standards.

Moreover, the costs of compliance associated with federal inspection are generally higher than for provincial inspection. This relates to a range of factors including facilities' standards, operating standards, and process-related costs associated with a Preventative Control Plan (PCP)⁹ and the protocols that support it, and the costs of inspection fees. Meat inspection costs are increasingly charged to processors (on a fee for service cost-share basis), so there is a cost incentive to match inspection with market requirements.

Conceptual Issues

Regulations, regulatory standards, and inspection are commonly treated under the same umbrella. These are clearly related- for example, very tight standards could require high levels of inspection effort and/or higher levels of training and credentials on behalf of inspectors. At the same time, in consideration of outcome-based measures, it may be possible to operate with less stringent standards but greater inspection effort to validate satisfying standards. Conversely, highly stringent standards on some aspects of physical plant and/or process may actually serve as a substitute for inspection effort.

Considerations and Limitations

The considerations and constraints facing reform of meat inspection regulation are multi-layered.

- In order to export and market internationally, countries must operate within the terms of GATT Article III and the WTO SPS agreement, and the protection that these rules provide, hence national standards are necessary.
- Canada holds imports from other countries to federal standards. There is a possibility that if further accommodation of provincial inspection is made that facilitates interprovincial movement, this carries the risk that exporters to Canada will perceive that they are required to meet higher standards and bear higher costs than portions of the domestic industry - a potential violation of the national treatment provisions in GATT and like treatment under the WTO SPS agreement. As a matter of fact, provincially licensed plants with lower inspection standards/costs than federal plants probably already violate this concept; but at existing levels it may not be perceived as a material trade irritant.
- Extension of provincial inspection and standards to cover interprovincial trade could lead importing countries, not currently requiring extensive certification of Canadian plants for export,

⁹ A PCP is required by the CFIA as part of the SFCA. Preventive control plan (PCP) - Canadian Food Inspection Agency (canada.ca)

to require higher standards for certification, placing market access for all Canadian red meat exports at risk. This would be a rational response if it is perceived that more product throughout the country was not meeting federal standards.

- Provinces have authorities for meat inspection as a matter of jurisdiction and agricultural policy; provinces can set their own standards on this basis. This allows provinces to restrict interprovincial trade (from external provincially inspected plants) and protect their existing plants.
- Some provincially inspected establishments, which serve local/regional customers, probably have no interest in expansion to market interprovincially. This would also lead to higher associated incremental costs of facilities, operations, process and inspection. On the other hand, other facilities, which initially were conceived under provincial inspection, may have grown with their customers and markets, and now wish to ship interprovincially, at some increase in cost.
- There are cost differences between federal and provincial meat inspection; the most obvious is the direct expense of inspection services themselves- based on user fees, cost-shared by the processor under federal inspection, but funded by provinces for provincial inspection.
- Under a more outcome-based regulatory system, there is an interplay between regulatory standards and inspection. In making in-depth comparisons across jurisdictions, information on both standards and inspection resources (numbers of positions, credentials, and training) are required.

III. Differences between Provincial Meat Inspection Regulations and Federal Inspection Requirements

Slaughter and meat processing regulations vary across the country. Federally licenced facilities are authorized to engage in interprovincial and international trade. Those that are licenced provincially may only sell their products within provincial borders. The vast majority of animals slaughtered for meat in Canada are processed at federally licenced facilities. The Canadian Food Inspection Agency (CFIA) estimates that 95 percent of food animals in Canada are slaughtered in federally licensed facilities. Among these, a handful make up the lion's share of the national market. For example, three meat - packing establishments in Alberta process nearly three-quarters of Canada's beef production, including a single facility that processes 40 percent of the national supply.

Establishments that purchase meat for further processing that are federally inspected must use suppliers that are also federally inspected to preserve continuity/integrity of the federal standard. Provincially inspected facilities can purchase meat from either federally inspected establishments or within-province provincially inspected establishments.

Federal regulations governing red meats and meat product production and marketing

With regard to meat and meat products, federal regulations operate under two main legislative frameworks. First, all meat and meat products sold in Canada must comply with the *Food and Drugs Act* and Food and Drugs Regulations made under this Act. *The Food and Drugs Act*, which is overseen by Health Canada, prohibits the sale of unsafe food products and establishes minimum health and safety provisions for all foods sold in Canada. It prohibits the sale of unfit or poisonous food (s. 4(1)), prohibits the manufacture, preparation, preservation, packaging or storage of food for sale under unsanitary conditions (s. 7), and makes it unlawful to label, package, treat, process, sell or advertise any food in a manner that is false, misleading or deceptive or is unlikely to create an erroneous impression regarding

its character, value, quantity, composition, merit or safety (s. 5(1)). The *Food and Drugs Act* grants Parliament the power to make regulations for “carrying the purposes and provisions of this Act into effect” (s. 30(1)).

Second, meat and meat products destined for interprovincial and international trade fall under the new federal *Safe Food for Canadians Act and its Regulations* (SFCA + R), which apply to slaughter and processing activities. Prior to December 2018, meat production was overseen by the federal *Meat Inspection Act* and its regulations. In response to recommendations that the federal government “modernize and simplify federal legislation and regulations that significantly affect food safety”, the different authorities administered and enforced by the Canadian Food Inspection Agency (CFIA) (the *Meat Inspection Act*, the *Fish Inspection Act*, the *Canada Agricultural Products Act*, the food provisions of the *Consumer Packaging and Labelling Act*, and the 14 sets of associated regulations) were consolidated into a single statute and accompanying set of regulations.

Previously, all federally inspected meat establishments were required to have Hazard Analysis and Critical Control Point (HACCP) systems in place. Under the *SFCA + R*, the specific requirement that abattoirs and meat processors implement a HACCP system was replaced with the requirement that operators prevent, eliminate or reduce the level of biological, chemical and physical hazards that present a risk contamination. Processors must (1) identify and analyze all hazards, biological, chemical and physical, that present a risk of contamination, (2) for each hazard identified, use control measures to prevent, eliminate or reduce them to an acceptable level, and (3) for each control measure (including any treatment or process), have evidence to show that it is effective.¹⁰

Under the new *SFCA + R*, inspectors can focus effort on areas of higher risk. This approach is designed to improve CFIA’s ability to respond to current and emerging risks in federally inspected meat slaughter and processing establishments across the country. Inspectors will no longer duplicate efforts through other inspections or capture data that is already being captured in other systems, such as certain sampling tasks, which are already tracked by CFIA’s Science Branch. This allows inspectors to schedule tasks around other requirements, such as daily presence and export/import responsibilities, with more ease. Inspection oversight at an establishment remains unchanged¹¹

CFIA inspectors verify the effectiveness of an operator's controls during the slaughter process. Some of the ways they do this are by:

- inspecting or overseeing the inspection of carcasses and its components;
- ensuring that suspect carcasses are properly set aside for veterinarian inspection;
- observing the removal and handling of specific animal tissues at risk for BSE;
- interviewing and observing plant personnel and processes;
- sampling and testing carcasses to verify that the operator's controls are working;
- reviewing test results as well as corrective measures taken when positive results are identified;
- reviewing operator documentation and records, such as:
 - the PCP and supporting records, including sanitation and chilling procedures;

¹⁰ See Safe Food for Canadians Regulations sections 47 and 48 <https://inspection.canada.ca/preventive-controls/regulatory-requirements/eng/1616007201758/1616008092049?chap=0#s3c3> . Additional requirements apply for E.Coli 1057 in beef plants

¹¹ <https://inspection.canada.ca/chronicle-360/food-safety/meat-inspection/eng/1541536780795/1541536781023>

- monitoring records; and
- procedures for and records of steps taken when an issue is identified.

Prior to the introduction of the *SFCA + R*, work by FPT governments on issues of interprovincial trade and differences in standards produced the Canadian Meat Hygiene Standards document (2007). Its intent appears to have been to avoid the technical and prescriptive nature of federal standards that preceded the *SFCA + R*, and to use Codex principles as guidelines for standards. As such, the Meat Hygiene Standards document uses guidance language (e.g. adequate lighting, appropriate separation of incompatible materials, etc.) and does not establish prescriptive empirical standards. It appears as though the Meat Hygiene Standards were influential and/or incorporated into sections of the *SFCA + R*.

Comparison of federal and provincial regulations for red meat and meat products

Federally regulated and inspected facilities exist in all provinces across the country; at the same time the provinces can regulate and inspect provincial meat plants. This creates differences in regulatory standards in provinces across the country. Moreover, provinces allocate different resources for meat inspection and to support training and the credentials required for meat inspectors. The section below provides an overview of various elements of provincial standards related to red meat inspection.

Physical Facilities

Rules under federal and provincial standards related to physical facilities (the building and materials) for abattoir or meat processing operations tend to cover items such as surfaces, flooring, walls, catch basins, rails, racks, hooks, tables, and lighting. Some provinces have extensive requirements, which relate to areas where meat is processed, such as covering and leak proof joints between walls and floors, or floors to be made of shock-resistant material. Some provincial regulations include requirements for aspects that do not directly relate to meat quality, such as requirements to keep inedible, condemned or waste material in a separate room at a specified temperature (10°C or less). Another example cited by several sources that can vary across provinces was the requirement for separate rooms, such as a staff changing or dressing room, or a washroom and separate office for inspectors. These more prescriptive requirements can be expensive, and when applied to small facilities in the same way as large facilities, can reduce the cost competitiveness of smaller facilities. Several provinces specify offices are required for inspectors only if facilities are at a certain size.

Inspection

Provinces approach inspection in different ways, both for inspecting facilities and inspection of animals before and after slaughter. In several provinces, inspection of abattoir and meat processing facilities fall under multiple government agencies, such as the provincial departments of Health and Agriculture. Each agency has different inspection frequencies for facilities, and Ontario has facility audits as well as inspections. However, provinces generally require inspections of the physical facility if it is licenced. Some provinces require inspection before and after each animal is slaughtered (ante- and post-mortem). Other provinces have tiered systems that inspect only smaller, local facilities. In Saskatchewan, *ante*- and *post-mortem* inspections are voluntary under the Domestic Meat Inspection (DMI) Program, and in Newfoundland and Labrador, inspection of animals before and during slaughter is also voluntary.

Table 3.1 below, reprinted from Levangie (2021), provides further details on which provinces require ante- and post- mortem inspections, which provinces have multiple tiers of inspection or licencing, and which allow some form of on-farm slaughter that is legal for sale but not considered inspected.

Table 3.1 Elements of Provincial Standards on Slaughter Inspection

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL
Ante/post mortem inspections	Yes, (for regular facilities)	Yes (for regular facilities)	Optional	Yes	Yes	Yes (for regular facilities)	No	Yes	Yes	Optional
On-farm slaughter can be sold to single individual	Yes, w licence	Yes, w licence	Yes	Only poultry	No	No	No	Yes	No	No
Multiple tiers of inspection	Yes	Yes	Yes	No	No	Yes	No (no ante/post-mortem)	No	No	No

Source: Reprinted from Levangie (2021) <https://www.nfu.ca/wp-content/uploads/2021/11/Taking-Stock-of-Abattoir-Regulations-November-2021.pdf>

Summary

In order to consider the differences between provincial and federal regulations of red meat processing plants for policy purposes, some abstraction is necessary to avoid being overwhelmed with the many technical details contained in regulation, and instead characterize significant aspects. To do so, basic criteria were developed for regulation, in part derived from the above sections, and federal and provincial standards assessed relative to these basic criteria. These were informed through reviews of federal and provincial regulations, and validated by officials (as available).

Table 3.2 provides a summary based on these criteria. The columns of the table present the criteria identified- whether animal inspections take place (*ante mortem* or *post mortem*), whether inspectors are required to be on site for processing operations to occur, or for slaughter operations to occur, and whether a PCP is required. The rows identify the various jurisdictions for which information is identified.

The observations in the table show the following. The federal standards require all the criteria; whereas none of the provinces or territories require them all. Most provinces and territories require multiple criteria that are often different from federal standards. There are also material differences between provinces. A number of provinces do not require animal inspection, or make it voluntary. Another major difference is whether inspection staff must be on the premises during the plant's operations, and whether this is applied to slaughter or to meat processing. Many provinces have Ministries of Health involved in meat inspection, often through municipal public health authorities, and the jurisdiction can range from being entirely under health departments, agriculture ministries, or shared between the two.

The table leaves out other criteria that factor into differences between jurisdictions, but are outside the scope of this analysis. The first relates to technical standards - both in operations and in physical facilities. The second relates to the information required for inspection, including the resources available for inspection, the minimum required professional credentials for specific jobs in inspection

systems, and the resources allocated to the training of professionals who inspect. The table could be improved through further validation and vetting by provincial officials.

Table 3.2 Summary of Selected Criteria for Meat Inspection

	Ante Mortem Inspection	Post Mortem Inspection	Inspector On-site: Processing	Inspector On-site: Slaughter	PCP Required	Single Agency
Federal	Yes	Yes	Yes	Yes	Yes	Yes
BC	Yes	Yes	No	Yes	Yes	No
AB	Yes	Yes	Yes	Yes	No	No
SK	Voluntary	Voluntary	No	No	Standards based on HACCP principles	No
MB	Yes	Yes	No	Yes	Recommended but not required	No
ON	Yes	Yes	Risk-based frequency	Yes	Yes	Yes
QU	Yes	Yes	Yes	Yes	No	Yes
NB	No	No	No	No	No	Yes
NS	Yes	Yes	Yes	Yes	No	Yes
PEI	Yes	Yes	No	No	No	Yes
NL	Voluntary (At the request of an operator)	Voluntary	No	Voluntary (At the request of an operator)	No	Yes
YK	Yes	Yes	No	Yes	No	Yes
NWT-NU	Yes	Yes	No	Yes	No	Yes

Implications

The information above reveals several key points. There are clear differences between provinces in terms of standards for meat processing, based on basic criteria. A more detailed technical analysis would surely bring out even greater differences. There are also differences in the provincial resources made available for inspection, which was not assessed here.

Some provinces employ standards that more closely resemble regulation of restaurants by a public health authority, in which case inspection only occurs periodically with the inspection of animals often done voluntarily or not at all. The differences across provinces are in some cases striking.

In turn, there are sharp differences in standards and inspection required by provinces relative to federal standards and inspection. At a high level, some provinces have standards and inspection requirements that are comparable to federal standards- at least in terms of when inspectors must be present for inspection. Other provinces' standards differ sharply from federal standards.

Hence, in considering options to expand interprovincial trade, it will be difficult to find a single solution that can work for all. In particular, an approach that enables provincial establishments to meet federal standards will be most practical for provinces that already have near-federal standards/inspection. For others it could be practically out of reach, or another approach entirely would be necessary.

IV. Sub-national Meat Inspection Regimes in the US

The United States has federal standards for meat processing plants and federal inspection done by the USDA-Food Safety Inspection Service (FSIS). It also has state regulations governing meat-processing establishments for inspection at the state level, provided that state regulatory requirements meet or exceed federal standards, and that the meat is sold within the state.¹² The US has also established initiatives to create conditions in which establishments under state inspection can market outside of the state, or in the export market.

US Cooperative Interstate Shipment Program for Meat Processors

The Cooperative Interstate Shipment (CIS) Program for Meat Processors, authorized in the 2008 Farm Bill and launched by FSIS in 2012, creates specific conditions under which state-inspected meat plants can operate as federally-inspected facilities, and market product outside of the state. The qualifying plants also get the opportunity to export, provided the CIS participating state has entered into supplemental agreements that address the export of CIS inspected products. No states currently have a supplemental agreement for exporting product. The CIS program is limited to states that have established a Meat and Poultry Inspection (MPI) program for products to be shipped solely within the state. The goal of the program is to promote and support the expansion of business opportunities for state-inspected meat and poultry establishments.¹³ Participation in the program is limited to plants that employ 25 or fewer employees on average.

¹² For a brief overview, see https://www.fsis.usda.gov/sites/default/files/media_file/2021-02/Fed-Food-Inspect-Requirements.pdf

¹³ <https://www.fsis.usda.gov/inspection/apply-grant-inspection/state-inspection-programs/cooperative-interstate-shipping-program>; <https://www.usda.gov/media/press-releases/2022/03/21/usda-expands-cooperative-interstate-shipment-program-meat>

State plants thus enrolled are required to comply with federal standards- including federal regulatory sanitation performance standards; maintaining the same water source and sewage system standards that FSIS requires for federally regulated establishments; developing and implementing a Hazard Analysis Critical Control Point (HACCP) Plan; and developing written Standard Operation Procedures (SSOP). Meat and poultry products produced under the program bear an official federal mark of inspection.

Establishments apply through an agency administering the state Meat and Poultry Inspection (MPI) program. The state makes the determination to recommend an establishment for the CIS program. FSIS coordinates with states to select establishments for CIS. To be eligible to participate in the CIS program, state MPI programs must meet a number of criteria to demonstrate that the inspection that it provides to state-inspected plants will be the same as the inspection the FSIS provides to official federal establishments.

State inspection personnel may remain as the establishment's onsite inspectors under CIS, provided they have equivalent training and inspect the plant under equivalent regulatory standards as their federal counterparts in FSIS-inspected establishments. The participating state must demonstrate that it has the necessary legal authority to administer and enforce requirements that are the same as the *Federal Meat Inspection Act* (FMIA), the *Poultry Products Inspection Act* (PPIA) and applicable regulations. The state must also be capable of collecting regulatory samples at the same frequency as federal inspectors and use the same analytical methods at laboratories that meet the same level of accreditation as the FSIS, producing the same results as FSIS' laboratories.

FSIS appoints a "selected establishment coordinator" (SEC) to provide oversight and enforcement of the CIS program. The SEC is responsible for verifying that selected establishments receive necessary inspection services from designated personnel and is authorized to initiate any appropriate enforcement action provided for in the Agency's Rules of Practice regulations. The SECs are required to file quarterly reports on the status of the establishments under their jurisdiction. The FSIS provides oversight and enforcement of the program, and is required to reimburse states for at least 60% of their eligible costs associated with providing this interstate eligible inspection service.

Synthesis

The CIS program in the US presents an attempt to allow for market expansion of small meat plants currently under state inspection. Essentially the approach is to further enlist states to carry out a federal mandate in meat inspection, and to deputize state government meat inspectors in the enforcement of standards enforced by the FSIS. The situation is somewhat different than it is in Canada because of the provision that US states' standards/inspection must be *at least equal to* the federal standard, so state regulatory standards and inspection practices are not required to be equivalent to federal standards. This makes the shift from a state-regulated situation to regulation by FSIS, apparently, much less of an issue in the US than it is in Canada. Thus, CIS and its most recent program variations can proceed relatively easily.

However, it also begs some questions. If the state regulated/inspected approach is entirely equivalent to federal FSIS standards, the state level should be redundant.¹⁴ Thorough guidance is provided to states

¹⁴ The inspection cost allocations under state inspection are unclear; if the cost share/total cost to processors is lower under state inspection vs federal that would provide a point of differentiation.

regarding the meaning of “at least equal to”¹⁵; the audit procedure, however, seems to consist of annual self-reporting by states and a triennial federal inspection. This would seem to open the door to at least minor, or temporary, variances in state versus federal systems. In turn, if this is a concern, then this undermines CIS, especially with respect to exports. Equally, absent a basis to establish an “at least equal to” standard for provincial establishments versus federal standards in Canada, the US CIS program does not provide an obvious pathway for expansion of market access for provincially inspected facilities.

V. Stakeholder Consultations

To understand the attitudes and experience of meat processors with provincial versus federal meat regulation and inspection, individual interviews were conducted with a small number of stakeholders-processors (5), industry associations (2), former officials (1), and former industry executives (1). With regard to processors, most of the firms contacted had experience or had considered conversion from provincial to federal regulation. In all, nine interviews were conducted. Clearly, the sample of interviews was not statistically representative of red meat processing or regions; rather the responses are anecdotal and provide informative and directional value.

The interviews were conversational, and used the following three questions as a point of departure:

- What do you see as the benefits or advantages of moving from provincial to federal regulation/inspection?
- What do you see as the costs or disadvantages of moving from provincial to federal regulation/inspection?
- What are the critical barriers or stumbling blocks for conversion from provincial standards to federal?

Attitudes Toward Regulatory Structure

In discussions, two prevailing perspectives on provincial versus federal standards became apparent. Stakeholders generally expressed concerns regarding the regulations and losses in efficiency from conversion, and that provincial and federal regulation could be arbitrary and costly. However, one clear perspective emerged around treating provincial standards and inspection as a barrier to interprovincial trade, which was simply an unnecessary and costly barrier to economic growth and development that is harming the red meat sector. According to this view, provincial standards and inspection requirements are essentially equivalent to federal ones for all practical purposes and in failing to recognize this, unnecessary regulatory barriers are created.

A second, very different perspective emerged that emphasized the importance of having clearly defined federal standards, which are fundamental to Canada’s international trade obligations of like treatment for domestic and imported product. This perspective focused on the differences between provincial and federal standards, and raised concern about the optics of having multiple levels of food safety standards. Also, initiatives to expand marketing outside provincial boundaries for provincially regulated establishments could be seen as advantaging that portion of the domestic industry relative to foreign suppliers, carrying the risk of a trade challenge.

¹⁵ https://www.fsis.usda.gov/sites/default/files/import/At_Least_Equal_to_Guidelines.pdf

Advantages/Benefits of Federal Standards and Inspection versus Provincial

The obvious advantage of meeting federal standards is the ability to market outside the province and/or to the export market. In turn, facilitating broader domestic and export markets can expand the marketable harvest range of cuts from the animal - which can both increase revenue and reduce unit cost. One processor mentioned that prior to conversion to federal inspection; they were unable to ship directly to retailer distribution centres and could only ship to individual stores. Another processor sought conversion to federal inspection out of difficulties with provincial inspection. Federal standards were also seen as a critical step for adoption of private quality/food safety standards, such as the Global Food Safety Initiative (GFSI) and Safe Quality Food (SQF), increasingly valued by or required by customers. Products from federally inspected establishments can sell for a premium over provincially-inspected products.

Disadvantages/Costs of Moving to Federal Standards and Inspection versus Provincial

The conversion from provincial to federal standards was seen as involving a range of disadvantages and costs. The most uniformly observed disadvantage was the cost of inspection itself - the costs of inspection are covered by provincial governments, but these are cost-shared under federal standards with a portion charged to the processor. One processor, a large provincially inspected primary processor, indicated that the increase in inspection costs under federal inspection was roughly equal to the company's earnings.

Facilities' costs were also seen as an issue for some interviewees. For some (but not all), space to accommodate inspectors at all stations in the plant would require extensive renovations; in other cases, additional office space to accommodate CFIA inspectors would be an issue. In other cases, alterations to physical facilities were not seen as a concern and/or additional space requirements could be accommodated without any changes.

Some provincial plants represented in the interviews were multiple species establishments; operators worried that under federal inspection the plant would need to focus on a single species and that as a result, they would have to narrow their product offerings, lose revenue, and would have difficulty using all of their human resources- as specialization would initially reduce volumes and variety. One interviewee indicated that conversion to federal standards would increase their sales but would decrease their margins compared to their existing business line, as expansion of sales would take place but would be impacted by price competition from existing federal plants and they would no longer receive the price premiums obtained in existing niche markets.

Provincial plants moving to federal inspection would have to align their markets in which they participate. One interviewee had to drop their provincially inspected suppliers when they converted to federal standards; as a result, they had difficulty sourcing some inbound products and had to downsize their product portfolio. They also found that purchasing federally inspected inbound products for processing carried a price premium, and that it was more difficult to get leverage or develop relationships with the large federal plants supplying them.

Barriers to Adopting Federal Standards

The principal barriers to conversion from provincial to federal standards were the direct costs (cost-share) associated with federal inspection, and required upgrades to physical facilities. Almost all

interviewees raised the point that the CFIA inspection fees were a material cost consideration. Some interviewees indicated that regardless of physical plant alterations (some processors observed that none would be required), bearing the costs of CFIA inspection fees would be limiting.

Alterations to physical plant were an issue for some provincial plants. It was noted that making the needed renovations would be especially difficult for plants in continuous operation; it would be much easier to build a plant to federal standards from scratch. The principal physical barriers raised were necessary space to accommodate inspectors at specific stations on the plant floor, and also space to accommodate offices for CFIA inspectors- which were viewed as requiring greater office space than did provincial inspectors. Others were related to the sloping of the floor, ventilation and building temperature control, building insulation, and refrigeration systems.

Another aspect that was raised is the fact that with the introduction of the SFCA + R, regulations and inspection require a more outcome-based approach and become less prescriptive. For example, where previous federal regulations prescribed the height of walls in a plant, the new regulations call for “adequate separation”. Logically this should provide a pathway toward adoption of federal standards, if provincial plants can demonstrate the desired outcomes. This is consistent with a previous FPT effort to establish a Canadian Meat Hygiene Standard in order to demonstrate equivalence across provinces. In parallel with the SFCA + R, inspection modernization has become more risk-based, which allows inspection efforts in a plant to be deployed based on risk to a greater extent. Despite this acknowledgement, it was felt that the SFCA + R still remains relatively prescriptive.

Additional Issues

Few solutions or ideas were brought forward to address the problem of local sale and distribution of provincially inspected meat in border communities. The idea that a provincial label could simply be attached for locally - distributed product in an adjacent province was advanced; however, this does not resolve the matter and could never address the issue in food service.

Some interviewees raised the issue of the role of smaller plants, typically provincially regulated. The view was expressed that no new provincially inspected plants are being built due to the market disadvantages relative to federally inspected plants. It was felt that this development leaves a gap for smaller producers of livestock. Large producers are well positioned to supply large plants, but small producers are not; small producers supply small plants. Small plants also provide a producer link to retail, through custom slaughter and cut/wrap services not available through larger establishments. Thus, there was a desire among some to look at how smaller plants could be made more viable- whether through regulatory change or otherwise.

Interviewees were asked whether they thought that the provisions of the CFTA could be used to deal with provincial-federal regulatory issues (beyond the problem of local distribution and border towns). Some respondents did not feel qualified to assess this prospect, but for those who were comfortable discussing it, the prospect that provincial and federal governments could agree on concepts of equivalence that could then allow for interprovincial trade was not rejected. It was felt that this turned on the overlay and precedence of the CFTA versus SFCA + R. There was no sense that a province with provincial plants that felt threatened by this would be opposed or opt out.

Finally, it should be noted that the interviews occurred with a small cross-section of the industry, and while informative, they do not carry the weight of more extensive or statistically significant survey. As such, these consultations are anecdotal and should be interpreted accordingly.

VI. Economic Impacts of Increased Interprovincial Meat Trade

As mentioned in the Introduction, the FPT Ministers of Agriculture aim to improve the competitiveness and resilience of the Canadian agriculture and agri-food sector. This requires reducing barriers to interprovincial trade that impact the red meat industry. There is an extensive literature on the impacts of internal barriers to trade. It is a well known fact that reducing these barriers can lead to improved productivity growth and economic well-being in Canada. While our analysis did not empirically estimate the benefits from reduced barriers to interprovincial trade in red meats, it is possible to make use of indirect approaches to estimate aggregate impacts on interprovincial trade, including by taking assumptions from the literature.

It can be anticipated that many provincially inspected red meat processing establishments would not be interested in expanding outside of their existing provincial market area even if it was available to them. For others, the expected gains in revenue from marketing interprovincially would not justify the increase in costs associated with complying with federal standards. In other cases, red meat processors that are currently limited to marketing within their province could benefit from expansion in marketing outside of the province and might be able to justify the costs of doing so. Capturing an accurate direct economic benefit estimate would thus require an extensive attitudinal survey of provincially inspected establishments, supported by a cost analysis at the plant level.

Instead, we draw on an analytical model, which estimated the potential benefits from removal of interprovincial trade barriers developed by Bemrose *et al* (2017). The model used data on intra-provincial product movement relative to interprovincial movement, taking account of distance for intra-provincial movement, to infer provincial border effects. Using data for 2004-2012, Bemrose *et al* estimated the consequences of provincial border effects to be the equivalent of a 6.9 percent tariff on all goods. For food products, the tariff equivalent was estimated at 4 percent.

In a presentation prepared for the FPT regulatory committee in February 2022, Professor Trevor Tombe of the University of Calgary drew upon Bemrose *et al* and his own work to estimate that the annual monetary value of the provincial border effects on interprovincial trade in food was \$1.7 billion. Based on parameters identified in the same presentation for meat, the border effect was estimated at approximately \$500 million.

This estimate can be broken down as follows based on the following assumptions: first - the tariff equivalent of border effects for food of 4 percent estimated by Bemrose *et al*. Secondly - an estimate of the marginal cost of trade frictions of .5 percent as presented to the FPT Strategic Planning session by Tombe. Third- Canadian GDP of \$2.5 trillion. The estimate is thus:

$$.04 \times .005 \times \$2.5 \text{ trillion} = \$500 \text{ million}$$

This compares with an aggregate estimate of overall economy-wide provincial border effects in trade by Alvarez *et al* (2019) of \$92 billion, and an estimate of the tariff equivalent of border effects of from 6.9-8.1 percent by Albrecht and Tombe (2016). The general sense from the empirical research is that provincial border effects for food are smaller than for some other economic sectors, but still material.

However, these findings need to be placed in some context. The empirical border effects measure the degree of dispersion between trade within a province versus trade between provinces in actual economic data and thus how “thick” provincial borders are. However, the measured effects do not indicate the source of this thickness. It could be that the fragmentation of meat regulation/inspection across provinces versus federal inspection is responsible for greater trade within a province than across provinces, but this is not definitive. Moreover, the results do not indicate that harmonizing regulations or otherwise facilitating interprovincial trade would generate a concomitant increase in GDP. Thus, the empirical estimates should be taken as directional and relative in nature. Nonetheless, the interpretation is that the inefficiency costs are significant.

VII. Conclusions

This paper surveys and places in a more strategic context the many issues surrounding interprovincial trade in red meats, and provincial versus federal regulations around meat inspection that lead to internal barriers. It attempts to capture a complex of factors ranging from authorities of governments and how these authorities are used, to livestock and meat marketing, international trade and its accompanying rules and governance, and elements of risk in food safety and quality. In so doing, it attempts to abstract from the deep technical detail of meat standards regulations themselves.

Canada’s governance structure and open trade posture make the matter of increasing opportunities for interprovincial trade in meat complex, and narrow the path for potential policy reform. The following observations frame this policy context:

- There can be material differences in standards across provinces and between provinces and federal standards. Independent of issues of jurisdiction and authority, this effectively rules out the notion of exemption or deemed equivalence as a feasible pathway for increased interprovincial market access for provincially inspected establishments. Conversely, any feasible pathway will need to involve demonstration of equivalence.
- Canada requires a national standard for meat regulations as a basis for functional international trade; Canada has a significant interest in being able to export red meat given the size and importance of its red meat industry. Sub-national standards pose some ambiguity, especially in regards to equivalence of treatment between imports and domestic product under GATT Article III and the WTO-SPS Agreement. A perceived expansion in market access that can be served by processing plants under sub-national standards increases this ambiguity; this could be sufficient to trigger a formal trade complaint by a country wishing to export to Canada, or a competitor in third country markets.
- There are differences in standards between provincial versus federally licensed plants, as well as between provinces. This complicates matters as it makes it more difficult to identify a single approach that can work for all.
- The most promising pathway to facilitate greater interprovincial trade in red meats is through conversion of provincially inspected establishments to meet federal standards. The general regulatory environment under the new *SFCA + R* is consistent with outcome-based measures. The Canadian Meat Hygiene Standards could be used to guide and assess equivalence in outcomes between provincial and federal standards.
- Equivalence is principally a matter of technical standards and performance; however, resources for inspection also play a role. Data was not available for analysis of existing meat inspection human resources, required credentials, and meat inspection training resources from the federal and various provincial inspection systems. This data should be collected and presented as a

component of assessing equivalence of outcomes and conversion from provincial to federal standards.

- Equivalence is the basis upon which the US allows for expansion in state-regulated and inspected meat plants to market outside the boundaries of the states, for potential export. While this approach has been inaccessible to Canadian processors, in a more outcome-based regulatory environment in Canada, the idea of equivalence could provide a path forward.
- One particularly important barrier that prevents conversion from provincial to federal standards is the cost of inspection. The costs borne by processors for (federal) CFIA inspection fees are perceived to be excessive by processors, both in absolute terms and in comparison to provincial standards.
- There may be provincially regulated plants operating according to standards such that they could readily comply with outcome-based federal regulations; the critical barrier is the cost of inspection in the federal system. If the federal cost-shared inspection fees were waived, this could be sufficient to induce these provincial plants to convert to federal standards.
- While the specific costs associated with not being able to market interprovincially are unknown, if the plant is operating under provincial meat inspection regulations, research on the border effects and loss in efficiencies associated with the thickening of provincial borders to interprovincial meat trade suggests that the costs are quite material- perhaps \$500 million per year.

Thus, by acknowledging the complexity of the issues, there is an ongoing economic motivation to facilitate increased interprovincial trade in red meat. The best solution is to use demonstrated equivalence as a mechanism for interested provincial establishments to convert to federal standards. In turn, this may use the platform provided by the CFTA to further develop standards of recognition and equivalence and requisite FPT arrangements to help provincial facilities meet federal standards.

It is anticipated that this approach will work better or more easily for some provinces than others, and may be more difficult and perhaps out of reach for others. This presents the prospect of creating inequities across provinces that may need to be addressed. The matter of cost-shared fees may remain outstanding regardless of demonstrated equivalence in standards, with the potential that reducing or waiving of fees could serve as an important incentive for encouraging provincial plants to convert to federal standards. However, due to the competitive nature of red meat processing and the significance of inspection fees for processors, it is likely that consideration of reducing inspection fees would need to be extended to all federal plants, and not just new conversions from provincial to federal standards.

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