US Tariffs Stand to Weaken Agricultural Price Mechanisms in Canada

Independent Agri-Food Policy Note
May, 2025
Al Mussell

The Issue

Over decades, agricultural pricing in Canada has effectively become dominated by US pricing- for good reason. Canada is a small market, at least in terms of having the threshold volume to support liquidity in price discovery. Thus, the prices for most commodity grains and livestock in Canada are fundamentally US futures prices, adjusted for currency exchange rate and local handling/transportation costs (or "the basis"). It invokes a view in which US futures markets are the epicenter of global supply and demand and associated market information, where tremendous financial/trading resources exists, where the volume of product facilitates liquidity in trading, and in which markets are North American, if not more global, in scale.

Under this conception, the US and Canada are essentially one market, and a straightforward geographic price adjustment through an additive basis can appropriately represent commodity value in Canada.

But with the threat of material US tariffs on Canadian products, some of these assumptions must change. The immediate focus has been on the extrinsic effects of tariffs on Canadian agri-food- from lost export sales; lost food company earnings; and transmission of economic injury upstream in lower Canadian farm prices and incomes.

But there is an important intrinsic effect- if the North American market in agri-food is fragmenting, it undermines the integrity of a US pricing mechanism applied in Canada. Moreover, changing US trade relations with third countries can create differences in value for Canadian-origin products compared with like US-origin products.

This policy note explores the potential implications of the US lurch to protectionism on agricultural pricing in Canada.

Commodity Price Mechanisms in Canada

A range of agricultural price mechanisms are used in Canada, and relate to US pricing to varying degrees. More unique or idiosyncratic products, such as purebred breeding livestock, are private treaty sales with no formal structure. In other cases, marketing boards negotiate prices with processors/handlers on behalf of producers, with US pricing or "replacement cost" of US product often an element influencing negotiated prices. Supply managed products are formally priced on producer cost of production- but, even then, pricing can contain elements of US pricing reference- examples include industrial eggs; also special classes in milk supply management.

For the balance of farm commodities in Canada- storable grains and oilseeds; cattle; hogs- the pricing is based on the nearby US futures prices, adjusted for the exchange rate and local basis. The integrity of local spot price of a farm product in Canada is highly dependent upon the threat of delivery against a futures contract, and competition in the local market. Only a small minority of futures contracts are actually delivered[1] with the rest offset financially, but this threat of delivery and arbitrage across time and space is sufficient to force convergence between the cash price and the futures price at the point and time of

[1] At the Chicago Mercantile Exchange it is about 2 percent. See https://www.cmegroup.com/education/files/futures-delivery-and-load-out-procedures-effects-on-contract-performance.pdf

delivery. This competition radiates out from futures market delivery locations across space, facilitating local competition throughout Canada and the US- underscored by the prospect of delivery against futures contracts.

To illustrate, suppose the true cost of handling and transport (the basis) at a spot location in Canada versus a US delivery point, say in the Chicago area, was $Can .50/bushel under the nearby futures. If a local elevator offered producers a spot price that was $Can .60/bushel-under, a competitor could profitably attract grain deliveries from producers by offering more- up to the true basis- and, if necessary, deliver against the futures contract to secure its margin. The basis radiates out in this way across geography, disciplined by regional competition.

The Basis

The basis is often defined as the cash price minus the futures price. But, in fact, it is the cash price in Canada that is determined by the basis- along with the US futures price and the exchange rate. The basis at a point is driven by the costs related to space and time versus the futures market- primarily the cost of freight/elevation/handling, which are each, in principle, unrelated to price level. There are much smaller elements of the basis, such as financing and insurance, that actually do vary with the price. Nonetheless, the basis is treated as an additive factor to the futures price, unrelated to either the price level or the exchange rate- as the costs comprising the basis in Canada are primarily incurred in Canadian funds.

Because the basis maps back to concrete cost factors, and it is the local spot price that is determined by the futures price, the exchange rate, and the basis- the basis is not an "error term" or residual factor that soaks up the difference between the cash and futures price. It is a cost-based determinant of the local cash price.

Hedging

Price risk hedging is built upon the convergence of futures and spot market cash prices. An end-user of a futures traded commodity faces the risk of futures prices rising in the future. One way to mitigate this risk is to buy futures contracts, with the intent of selling them just prior to making the purchase of the physical product in the spot market. Because the spot cash price will reliably follow the futures- due to the dynamic described above- if the futures price has increased, the end user will sell back the futures at a profit, which it can apply to the (now higher) local spot price it must pay. Conversely, if prices have not increased as feared and have instead fallen, the end-user will now sell the futures contract at a loss, but this is coupled with a concomitantly lower local spot market price.

Precisely the opposite situation characterizes hedging for a seller. Hedging with futures thus provides a net price stabilizing effect for someone with an interest in the physical product. In theory, a fixed price in the future can be locked-in using this mechanism. Importantly, it requires a steady or only small, anticipated variation in the basis.

What Assumptions Are Implicit in Using a Foreign Price Reference?

For the Canadian agricultural pricing mechanisms described above, there are implicit assumptions, or required conditions, that a US price reference must satisfy in order to be effective. For one, the US price must be relevant in opportunity cost terms. For example, in a Canadian processing fruit or vegetable price negotiation, if US pricing is a component, then it must be feasible for the US product to actually be imported into Canada and/or for the Canadian product to be exported to the US.

Secondly, the access to third-country markets must be equivalent for the US and Canada, or at least relatively similar. For example, if the US lacked secure market

access to a major importing market that Canada has, the demand from this third-country market would impact the demand for Canadian products- but not US products- and the futures price would understate the true value of Canadian product.

The hog market illustrates the situation well. In the April 21st, 2025 *Canadian Hog Market Report*, Kevin Grier writes:

> "the U.S. pork industry faces a tariff of over 100% in China. The U.S. was struggling against tariffs prior to this latest round, but they still managed to move the same type of offals as Canada. Now they are pretty much a no-go. They will be putting it to rendering.
>
> That is of interest to Canadians as it will indirectly put downward pressure on the U.S. hog price. It will negatively impact the bid price that packers will offer on the thinly traded U.S open market hogs. That will in turn influence U.S. formula hog prices. It will also negatively influence other U.S hog formula prices.
>
> All of that of course means a negative impact on Canadian hog price formulas. A lower U.S. price due to unique circumstances in the U.S. could result in renewed calls for a "made in Canada" hog price."

These tariffs have since been lowered in the May 12th, 2025 US-China arrangement. US pork now faces a Chinese tariff of mostly 57 percent, and offals also mostly 57 percent (at least, for up to 90 days).[2] Meanwhile, Canada faces a 37 percent tariff on pork (12 percent MFN tariff, plus 25 percent) imported by China- a material difference versus the US.

A similar situation exists in soybeans. Following the May 12th, 2025 arrangement between the US and China, China will apply a 23 percent tariff on US soybeans (at least, for up to 90 days). This makes US soybeans landed in China more expensive than Canadian soybeans (China has an MFN tariff on soybeans of 3 percent and Canada faces no further tariff).

China is the largest soybean importer, and either China or Japan is typically the largest pork importer.

An effective price reference requires that agricultural policies, and more specifically income stabilization/support programming, to be similar or at least stable and well understood between the two countries. If either Canada or the US enacted a new, radical farm subsidy program that served to distort adjustment to market factors that differed from history, or from each other, it would mean that a price change carried different implications for Canadian vs US farmers. The resulting supply response could be sharply different- creating the prospect of unforeseen market dynamics and greater price volatility.

For a US price reference to work for pricing and hedging in Canada, secure access to the US market is required. This is necessary for the discipline of threat of delivery against futures contracts to operate and discipline pricing across space and time. Canadian product must be treated essentially as like product to US. Small differences in technical issues, such as pesticides, etc. can typically be tolerated and managed; however, for a US price reference to work in Canada, the US-Canada border cannot be "thick".

But regulatory differences between the US and Canada are an emerging issue that impede market convergence. Media reports indicate that the US Food and Drug Administration plans to end its role in food inspection in the US, with this role taken up by state

[2] See USDA-FAS GAIN report https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Tariff%20Rates%20Updated%20following%20May%2012%20Joint%20US-China%20Statement_Beijing_China%20-%20People%27s%20Republic%20of_CH2025-0111.pdf

and local authorities[3]. In an April 15th article, the New York Times reported[4] that the administration has prepared lists of regulations it plans to kill, under an expedited process that avoids the usual public consultation process. In other cases, there is an intent to cease enforcement of regulations viewed as costly or not in line with US administration priorities. According to the reporting, the scope of this deregulation will be broad, encompassing everything from workplace safety, to consumer protection, to environment, to agriculture and food.

These measures would appear to reduce regulatory barriers facing Canadian exports to the US. However, if reduced agri-food regulatory standards in the US have the effect of undermining food safety and quality- or allowing for greater risk of plant or animal disease outbreaks- it could trigger an adverse demand response that affects both domestic and imported products. Some countries could grow concerned about importing US products from a safety and quality perspective. It could also cause a later backlash in the form of a lurch to more overreaching, protectionist standards in the US, especially if increased foodborne illnesses or plant and animal diseases result.

Alternatively, the US may turn to threating its new regulatory standards and approach as the baseline from which to assess negotiate with others, and request alignment of Canadian standards with the US out of cost/efficiency considerations.

US Tariffs Raised Against Canada

For products in compliance with origin rules under CUSMA/USMCA, the US tariffs in place today with Canadian agri-food are overwhelmingly zero, with very few exceptions.

But it can be anticipated that if US tariffs were raised against Canadian agri-food products, it would operate in the following way. Cargoes inbound to the US would have their value assessed based upon the bill of lading. If the bill of lading gives value in Canadian dollars, it would be converted to US funds and assessed the appropriate tariff as a percentage of the bill of lading value. The tariff is payable by the importer of record.

What happens in anticipation and adjustment to this is unclear at this point. Elsewhere[5] we have explored the problem that some products with ready substitutes- or commodities- in the US will be resistant to the tariff, and the bulk of the tariff liability could end up being allocated to exporting seller in a lower price. Depending on the level of the tariff, it could be sufficient to make Canadian exports to the US infeasible. In other cases, if there are no good substitutes to the imported product available in the US, or if the product has a robust demand, the product may be capable of carrying the tariff, and most of the burden of the tariff will be paid by US customers.

So, some Canadian products exported to the US are liable to encounter a discount in the border price up to the value of the tariff; others may not suffer much discount in the border price at all. But by itself the prospect of the value of tariffs being pushed back onto the border price creates important "noise" in the disciplined price arbitrage over time and space required for US futures prices to effectively value Canadian products. The degree to which the incidence of tariff liability in pricing could shift back and forth between buyer and seller across products,

[3] https://www.cbsnews.com/news/fda-food-safety-inspections-plans/?ftag=CNM-00-10aab7e&linkId=800710274

[4] https://www.nytimes.com/2025/04/15/us/politics/trump-doge-regulations.html

[5] How Canada Reassesses its Agri-Food Trade: Approach and Analytics, with an Application. Agri-Food Economic Systems Policy Concepts Paper, March 2025. https://www.agrifoodecon.ca/uploads/userfiles/files/us%20tariffs%20on%20canadian%20agri-food%20exports%20an%20approach%20to%20adjustment(1).pdf

or seasonally, further increases the noise. The tendency of the new US administration to raise tariffs on-again, then off-again surely increases the noise further still.

This presents clear problems to Canadian price mechanisms based on US futures. First, the access required for the threat of delivery against futures markets from spot markets is much less credible with tariffs raised by the US against Canada. In a high-volume commodity business in which margins are notoriously tight, a large tariff- like say 25 percent, previously levied by the US against Canada- could make delivery against futures contracts simply infeasible. If that were to occur, regional competition in procurement and marketing within Canada could still occur- but it would lack a clear and actionable link to the futures as a reference price from which to draw and much of the discipline of competition could be lost.

Secondly, a tariff introduces a different dimension into the spot price- but not truly part of the basis- which is a direct function of the price. For a material tariff like 25 percent, if most of the tariff liability is passed back to the seller in a lower price, it would have two effects. It would need to somehow be factored into the basis for a set location, but as a multiplicative factor on the US dollar value border price- whereas almost all of the cost elements of the basis are additive and in Canadian dollars. Besides the complications that this raises, it could make historical basis charts and relationships used by traders in merchandizing and hedging all but irrelevant.

Third, it presents the prospect of significant fluctuation between the spot cash price and futures within the period in which hedging occurs. At high tariff rates, and in periods of futures price volatility, the implied variation in the basis could make Canadian hedging with US futures much less effective, and perhaps infeasible. More generally, uncertainty that is not currently present creeps into hedging with futures, with the anticipated adjustment that market participants at each stage take a larger margin to fund mitigation. This creates additional costs passed through the supply chain, in addition to the increased uncertainty.

Another aspect is the US policy response to retaliation by third countries. In the first Trump administration, China retaliated to the US tariffs on Chinese steel and aluminum on a number of agri-food products, among them soybeans. The impact was to reduce Chinese imports of US soybeans and reduce US soybean prices. This, in turn, motivated the Market Facilitation Program, which overwhelmingly targeted soybeans (at least initially)[6] and gave further impetus for soybean utilization in biofuels with enabling policy. It can be anticipated that retaliation to US tariffs by other countries in the current and future timeframe will trigger a US policy response that cushions the farm price effects, and as a result alters somewhat the US supply response to market changes.

Conclusion

If this is correct, it presents potent difficulties for Canada from US tariffs and from the associated global trade disruption- quite apart from the tangible effects of reduced US market access and exports, and lower prices for Canadian farm and food products exported to the US. It is a problem of undermining the core price mechanism used to establish the value of much of Canadian farm and food products.

The idea that it would be much more difficult for Canadian farmers to establish forward contracts; that intermediaries could be much less able to make deferred back-to-back sales; that food manufacturers could be unable to lock in forward input prices for

[6] See The Market Facilitation Program: A New Direction in Public Agricultural Policy? by Jonathan Coppess, Gary Schnitkey, Krista Swanson, and Carl Zulauf https://farmdocdaily.illinois.edu/2019/11/the-market-facilitation-program-a-new-direction-in-public-agricultural-policy.html

budgeting purposes; that mitigation of uncertainty could add costs passed through to adjacent stages- is alarming. These functions are central to agricultural marketing and agri-food supply chains. But if Canada stands to have difficulty facilitating price discovery and hedging from US futures, these problems could become real.

What are the alternatives? We have a commodity futures market in Canada with the ICE Canola futures- traded in Winnipeg and deliverable in Saskatchewan- perhaps additional Canadian futures contracts could be added to allow for Canadian agricultural price discovery. However, if this were broadened to a wider set of crops and livestock, it would likely suffer immediately from low liquidity and lack of financial critical mass. There is no delivery location or financial center in Canada that compares with, for example, the Chicago Mercantile Exchange, in terms of volume and liquidity.

Cash settlement is a feature of some futures contracts, and there is no delivery physical delivery mechanism to impose convergence between cash and futures markets. Instead, settlement occurs against a cash price index. The US CME lean hog futures contracts operate in this way, which settles against an index of cash prices collected by the USDA.[7] However it relies on robust price data collection by the USDA, not currently present in Canada, and also spot markets with sufficient volumes that can establish reasonable prices. And, in any event, it is unclear that cash settlement deals effectively with the pricing of seasonally produced and storable grains and oilseeds.

There are other agricultural futures markets in the world. Dalian, China has a very active soybean futures market. The Tokyo Commodities Exchange trades soybeans and corn. The Euronext exchange trades milling wheat, durum, corn, and rapeseed. But surely none of these offer a realistic solution for Canada to the issues raised here, in terms of reliable or reasonable access to deliver against futures contracts, and each suffers from even more fundamental problems of differences in agricultural policies influencing markets and contributing additional noise to price correlation.

Perhaps some other sort of workaround can be found. Finding and assessing these should be a priority.

But we should be prepared for potential difficulties in the operation of pricing in our agricultural marketing mechanisms if material US tariffs were raised against Canada by the US on commodities priced using US futures markets. As it stands, we are already experiencing differences in commodity values between the Canada and the US associated with retaliation against the US by third countries, and this could proliferate.

Ultimately, a devolution in Canadian agricultural price mechanisms will create additional risk carried by producers and consumers as well as intermediaries in the commodity segments impacted. We need to be aware of the prospect for greater volatility in the prices of major agri-food products in Canada that have had stable and reliable links to US futures prices for many years, and considering alternatives and how this issue could be addressed.

.

[7] See National Daily Direct Hog Prior Day Report - Slaughtered Swine
https://www.ams.usda.gov/mnreports/ams_2511.pdf