Supply Chain Disruption and Adaptation Chris Ferris, Senior Economist April 9, 2020

Bottom Line:

The COVID-19 pandemic has led to trade disruptions between Canada and the rest of the world. This is having spin-off effects on Canada's supply chains. In this issue, we consider Canada's food and beverage supply chains.

While food and beverage supply chains are adapting to disruption, we are likely to experience a somewhat slower flow of goods while they are adapting. At the same time, this is likely to lead to somewhat higher costs for goods transportation across Canada. This is due to:

- Shifting the retail mix,
- The ongoing changes to work protocols: on farms, food & beverage processing, in wholesale trade, retail outlets, and transportation,
- A lack of freight backhaul opportunities pressuring freight rates upwards,
- A shortage of containers for outbound food exports, due to less containers coming in from Asia.

Various freight rates have already risen, and are likely to remain elevated until supply and demand come back into balance over the coming months. The precise timing of this depends on how long lockdowns are in place, and how fast freight demand normalizes afterwards.

Analysis

The C.D. Howe Institute published a communique "Prioritizing Integrity of Supply Chains by Addressing Weak Links and Coordinating Actions," on April 2, 2020. It highlights the following supply chain priorities for governments:

- Safeguarding the flow of goods internationally and domestically,
- Collaborating with critical industries to identify & address bottlenecks in supply chains.
- Limiting workplace activities based on specific assessments of the risk of transmission, and
- Supporting industry-led efforts to develop health & safety measures to prevent transmission in the workplace.

This leads to the question: how are some of these insights, and insights from their March 26 communique, "Crisis Business Continuity and Trade" being played out in the economy? We consider food and beverage supply chains here, as they are essential goods.



The chart below shows a (very) simplified version of these supply chains. Transport is indicated by green arrows.

To begin with, ensuring that farmers can get required inputs (*not shown in the chart for simplicity*) and can ship their products to a variety of markets, is crucial for domestic and

Ingredient Imports

Cdn Farm Product Wholesale

Commodity Exports

Food & Beverage Imports

Cdn Wholesalers

Cdn Wholesalers

Cdn Wholesalers

Cdn Retail Channels

export markets to properly function.

At the same time, Canada imports significant volumes of food products. These products go through wholesalers before being distributed to Canadian retail channels (e.g. grocery stores, restaurants, or school, university or work cafeterias).

Domestic and North American Truck Movement

The sudden closure of many non-essential workplaces, and closure of on-premise dining has meant a sudden shift of consumer demand. This has led to much more use of grocery stores, ordering groceries for delivery, and delivery/pick-up of restaurant food. The sudden change in retail mix is being worked-out but has required some changes to packaging at production plants, in wholesaler stock, and at grocery stores.

The closure of on-premise dining in restaurants had made it challenging for long-haul truckers to have access to meals and washrooms on the road. The <u>Canadian Trucking Alliance</u> very quickly brought this to the attention of governments, and the <u>Freight Management Association</u> supported the CTA in ensuring its resolution was a priority (note <u>20</u>, and <u>21</u>). Continued access to washrooms and other facilities at shipper's facilities seems to be an issue still, as noted by the <u>Canadian Chamber of Commerce</u>. It is much improved since initially raised. Adjustments like these are helping to maintain fluidity of supply chains.

The Canadian and US government have worked out protocols (*and continue to refine them*) for moving food & beverage commodities and products across our mutual border. The <u>CTA</u>, FMA and others continue to work to make improvements in domestic and export protocols in the shadow of the COVID-19 pandemic, and for the future.

The lack of normal backhaul opportunities, and other challenges will put upward pressure on truck freight rates in the meantime.

Last-Mile Deliveries

As noted above, with fewer people going out, there have been sharp increases in demand for delivery of groceries and essential items. While companies are increasing their capacity to do this, it is hard to compensate for such a rapid shift in composition of last mile deliveries. Usually consumers cover most of the last mile. But now, much more



is being covered by retailers, e-commerce companies like Amazon and Shopify, and couriers. How some companies are resolving the resulting congestion is through delaying the movement of non-essential goods (<u>Amazon</u> March 23, 2020). To partially replace on-premise meals, many restaurants are offering curbside, drive-through, delivery by their staff and/or using third parties such as **Skip the Dishes**.

Exports of Commodities

One of the most crucial areas is Canada's export and import trade of agricultural goods. Canada is a major exporter of commodities such as wheat, canola, oats, soybeans, dried yellow peas, hogs, beef and further processed foods. Canada imports a wide variety of horticultural goods, and various products of the food and beverage processing industries.

Sean Pratt's April 2 Western Producer article, "Shippers Reassure Nervous Buyers" notes that some of Canada's grain buyers are nervous, given moves by Russia and Kazakhstan to limit wheat or wheat flour exports. Canadian shippers are reassuring our regular buyers that Canada will supply them. The article noted that week 33 rail shipment remained strong. There were reportedly 45 vessels waiting to load last week, which is higher than the same week the previous crop year.

According to the Canadian Grain Commission's <u>weekly statistics</u>, Western Canadian cumulative exports as of week 34 of the 2019-20 crop year (*Aug/Jul*) were 25.5 million metric tonnes (MMT). Wheat (Non-Durum and Durum) represents about 13 MMT of this.

Given the reports of a lack of incoming containers from Asia (usually filled with consumer goods), container stuffing of grains, oilseeds, pulses and special crops is down in Vancouver, and inventories are backing up at trans-loading facilities the West Coast.

Given the backlog in containers, mode switching may be part of the reason for the backlog for bulk vessels. But, in some cases, some destination ports or ultimate customers are not setup to take larger packages of commodities due to trade finance, limits at port facilities or simply a lack of storage space. Other than enhancing trade finance, this may simply mean muddling through for some time. Grain shippers though can be quite creative in finding logistics solutions to improve grain flows.

The longer lag times will likely mean upward pressure on bulk shipping costs, due to demurrage charges for the waiting ships. This is simply a fact of life in shipping, and will be occurring on an ongoing basis.

As for the lack of containers, this could translate into simply reduced volumes of movement over the crop year. If shippers can bid for container capacity, we could see some products given preference, thus changing the mix shipped. Higher value soybeans, pulse, and pulse products often move by containers. Any lower value crops on a per metric tonne basis would likely feel the slowdown effects more.



Fresh or frozen beef and pork products move using specialized cold chain containers, so they may not be as affected as bulk grains and grain products.

Air cargo

According to a March 24 article by the Journal of Commerce (<u>JOC.com</u>), the sharp drop-off in passenger flights has reduced overall air cargo capacity by about 60 per cent. That 60 per cent typically catches a ride in the belly of the passenger jets. There has also been a surge in demand to move essential medical supplies from Asia, along with regular demand for food air cargo.

Thus, the remaining dedicated air cargo capacity is seeing competition for their capacity (<u>Cargojet</u> March 19, 2020). There is also pressure to expand the dedicated air cargo fleet by converting some passenger jets (<u>American Airlines</u> March 24, 2020). This will translate into strong air cargo demands coming through the WAA and other airports with substantial air cargo operations.

Air cargo supply will give **priority will be given to essential food and medical products.** Other goods that typically move by air cargo are having to compete for the remain space, bidding up rates. The same March 24 JOC article cites the <u>TAC Index</u> for Shanghai to North America routes as surging 70 percent versus the previous year to \$5.70/kg.

As supply and demand come back into balance over the following months, air cargo freight prices should then ease.

EDW Contacts for Assistance or Inquiries:

- For Winnipeg businesses looking for help accessing new government programs, please reach out to our Yes! Winnipeg Team through our Help us help you form if you are not sure who to contact on the Y!W team.
- For general inquires please email wpg info at edwinnipeg dot com.
- For Marketing & Communications Inquiries, please email <u>marketing and branding</u> at edwinnipeg dot com.

