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Economic Development Winnipeg

# WEEKLY ECONOMIC DIGEST

## SUPPLY CHAIN CONGESTION AND INFLATION

### DEMAND FOR SHIPPING EXPERIENCING A SIGNIFICANT INCREASE

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### Bottom Line

Supply chain disruptions due to COVID-19 continue to affect multiple industries. In some cases, goods that are inputs to other products (intermediary goods) are in short supply compared to demand. This demand surge is largely driven by COVID-19, or COVID-19 disruptions of labour or product markets.

The rapid shift in the marketing channel for goods delivered by ecommerce is responsible for increased related shipping services and related jobs. High-capacity utilization has resulted in congestion of the logistics system, particularly in intermodal shipping.

In the short-term overtime, hiring more staff, and other tweaks to the supply chain help boost capacity utilization. Some shipping costs have surged, encouraging purchasing delays and the substitution of alternative goods or services. At the same time, efforts are being made to encourage the expansion of shipping capacity to handle the increased shipping demand.

## Bottom Line Continued

In the medium to longer term there are challenges with expanding the transportation workforce, changing port layouts to boost efficiency and remove the worst throughput bottlenecks. Expanding the intermodal shipping fleet and ports will take more time.

While consumers typically do not have a lens into logistics, we are all affected by supply chain congestion. Christmas shopping challenges this season will make supply chain congestion relevant to most consumers.

# ANALYSIS

The global pandemic has been enormously disruptive and will continue for the foreseeable future. As we know, Covid has had uneven effects on product and service markets. In some cases, it is about **demand recovery**. In other cases, it has been about dealing with **unexpected ramp-up in demand** as demand shifted to higher levels due to changing spending needs. Both have been driven directly by COVID-19 or indirectly by COVID-19 restrictions.

### Working Towards a Demand Recovery

Tourism, air travel, restaurants and large events experienced sharply reduced demand for much of the pandemic. High vaccine uptake and the use of vaccine certificates/passports have created a firm base for recovery. Challenges include:

- ramping up the hiring and training of inexperienced staff, and
- showing clients that they are taking their safety seriously.

### Dealing with a Demand Surge

The opposite has occurred for some other products/services, where demand has surged during the pandemic. In some cases, this has been worsened by supply shortages that are taking time to clear.

We saw this play out earlier with several products and services during the pandemic. In March/April 2020 there were widespread lockdowns in Canada, with millions working from home and millions temporarily laid-off or in an uncertain work situation. Uncertainty was extremely high. Income and business supports were being designed and deployed at a pace more familiar to those involved in software sprints. Many companies were having to make decisions to conserve cash in the face of cut orders and slowed production. Purchases slowed reducing work in process and unsold inventory.

The support for income and business materialized and were improved with rapid redesigns and rollouts./1 These programs supported aggregate demand, but when combined with work from home measures after the first lockdowns, and various COVID-19 related restrictions that toggled off and on during the pandemic, some significant shifts in demand have occurred.

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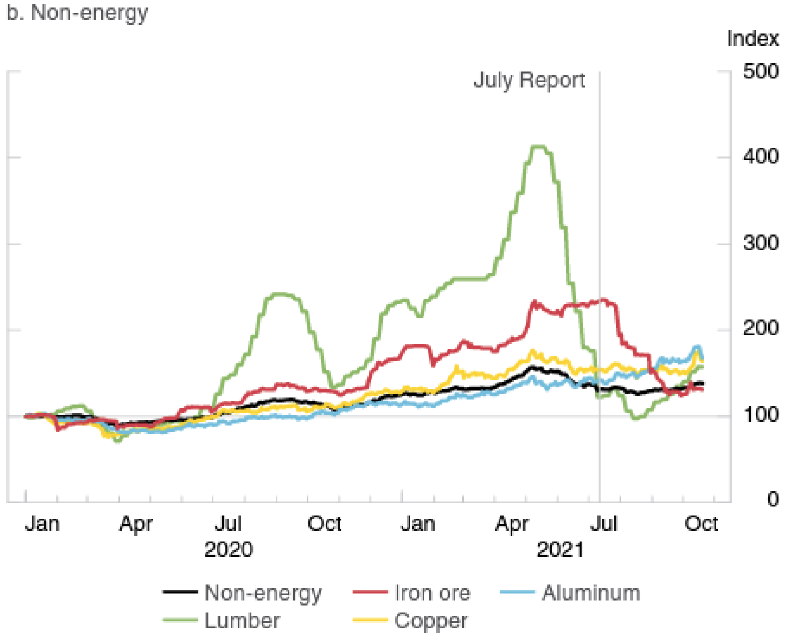
/1 See **WED Volume 1**, Issues **6**, **8**, **10** and **11** in particular.

# ANALYSIS




The **lumber value chain** was effected, as illustrated by the Bank of Canada's Chart 3, panel b chart of commodity prices on page 9 of the **[October 2021 Monetary Policy Review](#)**. Lumber prices had a mid-2020 surge, slipping lower during the fall of 2020, and then surging to an all-time high in early May 2021, before crashing down to more normal levels by July 2021. /2

**Container Freight**

A commodity that is currently experiencing a price surge is **[ocean freight](#)**, /3 particularly the container vessels on the China-North America (West Coast), and China-Europe trips, up sharply over the 2019 average. This is illustrated by Chart 2 on page 4 of the **[October 2021 Monetary Policy Review](#)**. /4 We discussed several factors driving this in **[WED Vol 2, Issue 35](#)**.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/2 This was a result of both a surge in demand (work from home and renovations as a substitute for travel played a part), and less supply being available. As prices rose, buyers cut projects, or substituted other goods, while suppliers raced to bring more supply to market. Once supply and demand were better balanced, prices dropped back.

/3 See **[Geman, Helyette](#)** (Editor) "Risk Management in Commodity Markets: From Shipping to Agriculturals and Energy," chapter 11 and some of chapter 12 on risk management in the shipping industry.

/4 You can see weekly ocean freight price series **[here](#)**, from the **[Baltic Exchange](#)**.

# ANALYSIS

## Container Freight Continued

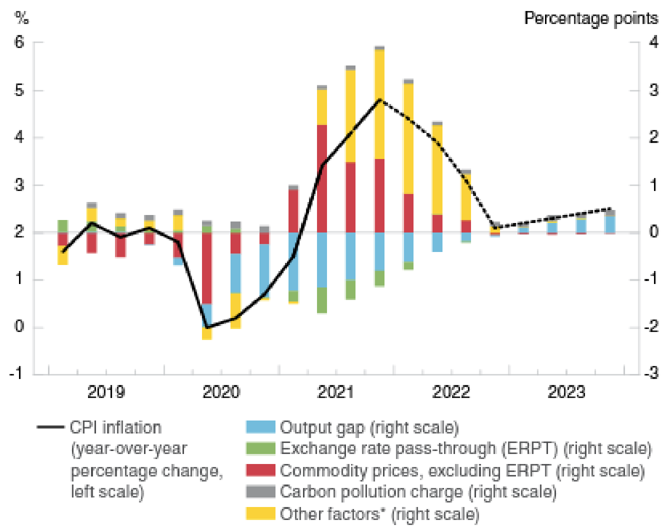
The import demand for containers from China to North America (NA) is so strong compared to export demand from NA to China that the share of international containers returning to the **Port of Los Angeles, California** /5 empty has averaged 76% in 2021, with a high of 83% in September 2021 (in TEU terms) compared to total exports.

Port Metro Vancouver's (**PMV**) empty outbound to total outbound ratio (in TEU's) is averaging 49% in 2021 year-to-date, with a high of 54% in September 2021, as noted in **Container-Statistics-Monthly-September-2021** report. This is well above the 2008 through 2020 average ratio of 23%, and 2020's 35% ratio. /6 The lack of empty containers is a significant problem for those crop and/or crop product exporters who normally fill containers in the countryside or at port.

**Lengthened container cycle times**, and port congestion, has affected many industries. The unusual and uneven effects of supply chain disruptions resulted in the Bank of Canada devoting more than normal discussion in the **October 2021 Monetary Policy Review** to the analysis of supply chain disruptions. Chart 14 from page 24 shows their estimates of factors driving CPI inflation in 2021 and 2022. The yellow bar includes these supply chain disruptions, and the commodity price pressures (red bars) are both expected to fade out in 2022, and back to the target mid-point of 2% by 2024.

**Chart 14: CPI inflation is expected to ease as pandemic-related factors fade**

Contribution to the deviation of inflation from 2 percent, quarterly data




* Includes, in particular, the effects of supply-related disruptions, such as shortages of semiconductors, on inflation

Note: Numbers may not add to total because of rounding.

Sources: Statistics Canada and Bank of Canada estimates, calculations and projections

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/5 The Port of Los Angeles and nearby Long Beach are the two largest container ports in North America as measured by annual TEUs (TEU = Twenty-foot-equivalent) throughput.

/6 If we consider PMV's (Outbound-Empties/Total Outbound) TEU ratio from 2008 – 2020, it has averaged 23%. This is calculated from the report **Container-Statistics-Monthly-2008-to-2020.pdf**.

See Box 1 for a Christmas shopping example.

# BOX 1: EFFECTS ON CHRISTMAS SHOPPING 2021

Christmas shopping will be a little bit more complicated this year because of these supply chain issues. Some are suggesting buying products early, but this may not be the right approach, and as noted on CTV, this **may worsen supply chain congestion**.

Some products are experiencing excess demand, while shipping delays are holding up many other products that cross the Pacific in containers. For example, the demand surge for semiconductors is resulting in fewer consumer electronic goods being available at any one time. The high overall demand for container freight has led container shipping to be congested.

When we combine shortages of products and congested shipping, last minute orders are less likely than normal to arrive by Christmas. If we add even more orders to the queue that comes from Asia, this will just add to the shipping congestion, prolonging the supply chain chaos.

We can compare this shipping congestion effect to a traffic jam. Consider a Main Street traffic jam in downtown Winnipeg during rush hour. If people trying to get home insist on using Main instead of trying another route, it takes longer for everyone to get home. Alternatively, if some people choose another route, the traffic jam clears faster. /7

**Some advice to avoid disappointing kids or adults on your lists.** Consider buying local goods and services available today. Avoid panic buying similar to the senseless stockpiling of toilet paper at the start of the pandemic. If you can wait to buy that big electronic toy or other item that is heavily backordered, you could buy it for your child at another occasion later in 2022. Certificates/tickets for local services can also work for those on your list. By substituting other goods and/or delaying purchases, this will help clear the supply chain chaos a bit faster, ease related price pressures and avoid disappointing your loved one with an IOU in an empty box under the Christmas tree.

/7 Other similar parallels. The Suez Canal obstruction due to a ship being stuck across the canal is much like a road traffic accident temporarily reducing the number of road lanes on a major arterial road. Similarly, the shutdown of a major port has a similar effect as multiple lane closures. Shipping congestion tends to take longer to clear, since far more factors are involved, and the trips are of much greater length.

# ANALYSIS

### Other Intermediary Goods Shortages

Several other intermediary goods (inputs into other products) continue to experience shortages (e.g., semiconductors), affecting vehicle production among many industries. Shortages of **transformers**, and **wires** plague the power and utilities industry. Power shortages in **China** (Coal) and **Europe** (Natural Gas) continue to disrupt manufacturing. As a result, stock-outs, and/or price increases are occurring as product and service markets are resolved.

### Looking Forward

Restarting economic activities will be a challenge for some time yet, even if we can avoid lockdowns via a combination of high vaccination rates, the use of vaccination certificates/passports and non-pharmaceutical interventions. Sorting out supply chain disruptions is a key part of the puzzle. Remaining challenges include labour force matching, reskilling and the support needed to address labour shortages in supply chains.

## INQUIRIES AND CONTACTS

If you require help accessing government programs, contact our YES! Winnipeg team through the **Help us help you form**.

General inquires: **wpginfo@edwinnipeg.com**
Marketing & communications inquiries:
**marketingandbranding@edwinnipeg.com**

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