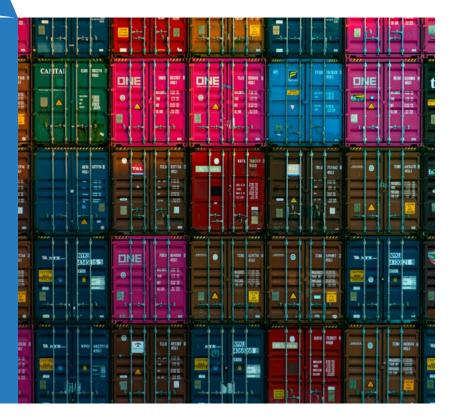


Paper Planes #3: Supply and Demand, Demand, Demand.

September 2022

Australian and New Zealand businesses continue to face many challenges as local costs increase and raw material prices continue to rise. Most notably are labour shortages and the ongoing concerns around supply chain issues for both markets. Internationally there are four main elements to the continued higher-price conditions for raw materials that we naturally find ourselves in: energy, container availability, pulp and currency fluctuations. All of these components are in demand globally and therefore prices continue to rise.



HOW ENERGY IS AFFECTING COST!

According to JP Morgan's Business Leaders Outlook, Australian business leaders expect the war in Ukraine to impact their trade and those anticipated impacts span a number of problems including energy across New Zealand.

Across New Zealand, Go Logistics, Managing Director, Chris Edwards, says supply chain disruption is even worse than when Covid-19 first hit, highlighting this is the worst single point over the past two years New Zealand has endured.

Natural Gas

- Sazprom announced technical problems with Nord Stream I pipeline; gas flows via this pipeline were reduced by 60%. A political motive to reduce supply to Europe is likely, as the flow via alternative routes has not been increased
- Sermany, Czech Republic, Austria, Slovakia, and Italy report 50% lower natural gas deliveries from Russia following the Nord Stream I announcement. Russian deliveries to France were stopped due to the outage
- > Natural gas prices for delivery in the next months increased by 50-60% due to fears of a very tight supply market

- > Reduction decreases current European imports by 8-9%, refill speed of storages is expected to decrease. Storages across Europe are currently back to 52% inventory level on average, after only 25% at the end of March
- > US LNG export terminal Freeport is shut down following a fire. US LNG exports will decrease by around 15-20% until the end of this year

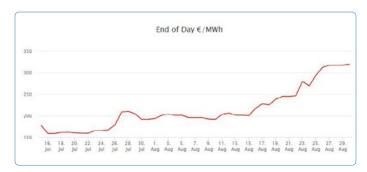


Diagram 1: International Natural Gas Benchmarks

Electricity

An increase in natural gas prices is significantly impacting power futures, while on some days spot prices can be lower depending on the production of renewables

Crude Oil

> Oil prices are trending lower on growing fears of an economic downturn

Coal

> Countries in Europe are considering reopening already mothballed coal-fired power plants. Increased coal demand from Europe could further tighten the thermal coal market

INTERNATIONAL FREIGHT & LOGISTICS

According to an analysis by Rabobank, international shipping spot container prices will slowly fall over the next coming year, but are unlikely to return to pre-pandemic levels, while normal ocean freight conditions are not expected to be seen before 2024. Although inflation and record-low consumer confidence were exerting downward pressure on ocean rates, container rates remained high because the imbalanced global trade was hindering costeffective repositioning of empty containers.

Rabobank expects schedule reliability for containers to also recover, albeit slowly, while congestion remains to be forecasted until the first half of next year. The bank's analysts also said reliability of ocean container freight schedules had dropped from almost 80% pre-pandemic to about 30%, as continued port congestion and the slow addition of new shipping capacity were contributing to uncertain reliability.

For New Zealand, the shipping freight lines is still coming into play, however air cargo increases are impacting now. Russia is traditionally a big player in the air cargo sector, but international sanctions against Russia have removed its aircraft as a freight option which hurts New Zealand companies the most. Because of the embargoes on those aircraft there's now a huge push to try to find air freight capacity from Europe into the rest of the world. With air freight costs already high because of the pandemic, and now increasing even further leads to increased costs across the board with a five time multiplier.

SCHEDULE RELIABILITY FOR SHIPPING

For the first time since the start of the pandemic, liner schedule reliability has improved on a year-on-year basis, however 6 out 10 boxes are still arriving late due to the dismay of shippers forking out freight prices five times their historical average. 'The recent Sea-Intelligence report states that global schedule reliability seems to have broken the trend seen since the start of this year, with schedule reliability increasing by 3.6% in June 2022 to 40%.'

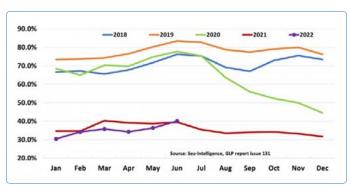


Diagram 2: Global Schedule Reliability, Sea-Intelligence Report 2022.

Driving factors include:

- > An increase in consumer spending during COVID-19 drove demand for ocean carriers and containers, with retailers rushing to restock depleted inventories.
- > Rabobank said an imbalance in global trade flows was thwarting the cost-effective repositioning of empty containers.

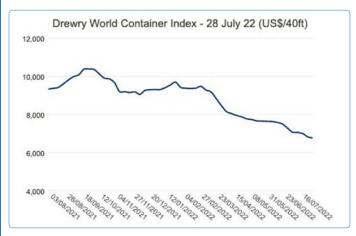


Diagram 3: World Container Index

CURRENCY UPDATE

With a strengthening US dollar, the volatility of exchange rates will see this transfer into higher landed costs.



Diagram 4: Macrotrends, 2022



Diagram 5: Macrotrends, 2022

2

PULP PRICING

Since January pulp pricing has increased by approximately 35% as a result of:

- March 22 pulp prices increase by approximately USD 150.
- > Global pulp market continues to stay tight with customer's focus on securing enough raw materials
- > Prices reported by Mills to stay high in the second half of 2022
- Stocks of wood pulp at European ports decreased in April, falling 8.5% or 94kt month on month
- > Total stocks were 9.6% lower than last year

The third quarter in 2022 has seen further upward pressure on paper prices due to the increased costs of pulp, and world pulp sources do not see this reversing any time soon due to a fall in world inventory levels of about 10%.

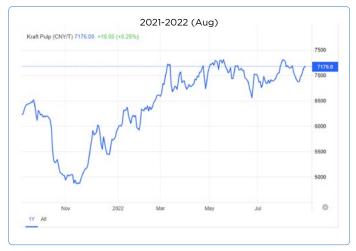


Diagram 6: Global Kraft Pulp, Trading Economics, 2022

IN SUMMARY

On a brighter note, shipping reliability is improving globally albeit off a low base and costs are perhaps at their peak into the ANZ market. However, there are still four continuing key factors placing further upward pressure on prices:

- > Energy costs around the world are increasing, this includes gas electricity and coal;
- > The global pulp shortage and low inventory levels are placing pressure on pulp costs;
- > Global manufacturers are continuing to look at satisfying local demands first together with a rebalancing of containers adding to delays and costs;
- > Local currency volatility with a strengthening USD.

Sources:

Sea-Intelligence, 2022.
Trading Economics, 2022
Australasian Paper Industry Association, 2020-22.
Ball & Doggett, 2022.
The Real Media Collective, 2022.
Industry Edge, 2022.
Stuff, 2022.
Powernext, 2022.

+ 61 3 9421 2206 info@paperindustry.asn.au

Suite 6, 151 Barkly Avenue Richmond VIC 3121 Australia

paperindustry.asn.au



