

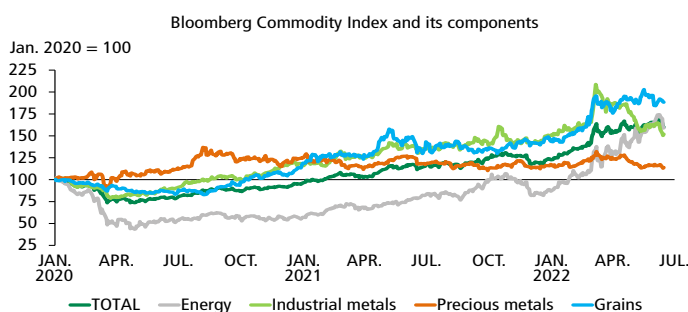
COMMODITY TRENDS

Will the Commodity Markets Successfully Rebalance?

With inflation accelerating, many central banks have had to quickly raise their policy rates. In the US and Canada, rates have jumped by 150 and 75 basis points this year. This monetary tightening should cool off demand, specifically housing investment, and relieve upward price pressures on several commodities. However, the war in Ukraine is still disrupting supply, especially of energy and grains. These components in the Bloomberg Commodity Index have, therefore, spiked by 80% and 30%, respectively, since the start of the year (graph 1). Moreover, the current geopolitical climate indicates that supplies of oil, natural gas and food products will remain limited for several more months. As the latest COVID-19 restrictions are lifted and the summer season kicks off, prices of many commodities including natural gas and oil are likely to stay high.

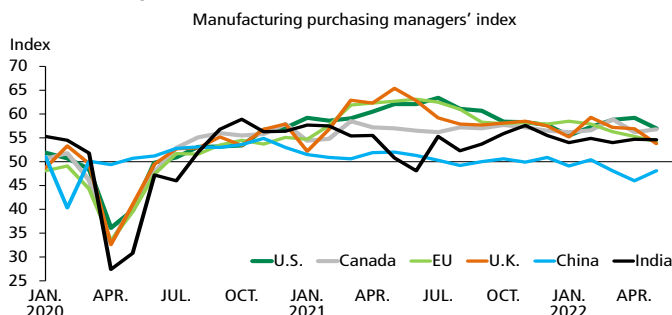
The resurgence of the virus in China triggered another round of harsh, rapidly enforced lockdowns, which curbed manufacturing activity in March and April (graph 2). As China is the largest consumer of industrial metals and second largest consumer of oil, the country's weaker demand provided some momentary commodity price relief. The public health situation now seems to be under control, and the Chinese economy is picking up again. With value chains stretched to their limit, a sharp and vigorous rebound like we saw in 2020 could cause energy and metal prices to spike. However, the longer lockdowns have distorted China's supply chains further, and domestic economic challenges augur for a more gradual recovery. Chinese manufacturers may also be able to obtain discounted Russian commodities.

GRAPH 1
Supply issues are keeping commodity prices high



Sources: Datastream and Desjardins, Economic Studies

GRAPH 2
With the exception of China, the pace of manufacturing is still brisk in many countries



EU: European Union
Sources: Datastream and Desjardins, Economic Studies

CONTENTS

Editorial	1	Base Metals	4	Other Commodities	7
Energy	2	Precious Metals	6	Tables	8

Jimmy Jean, Vice-President, Chief Economist and Strategist • Marc-Antoine Dumont, Economist • Joëlle Noreau, Senior Economist

Desjardins, Economic Studies: 514-281-2336 or 1 866-866-7000, ext. 5552336 • desjardins.economics@desjardins.com • desjardins.com/economics

NOTE TO READERS: The letters k, M and B are used in texts and tables to refer to thousands, millions and billions respectively.

IMPORTANT: This document is based on public information and may under no circumstances be used or construed as a commitment by Desjardins Group. While the information provided has been determined on the basis of data obtained from sources that are deemed to be reliable, Desjardins Group in no way warrants that the information is accurate or complete. The document is provided solely for information purposes and does not constitute an offer or solicitation for purchase or sale. Desjardins Group takes no responsibility for the consequences of any decision whatsoever made on the basis of the data contained herein and does not hereby undertake to provide any advice, notably in the area of investment services. The data on prices or margins are provided for information purposes and may be modified at any time, based on such factors as market conditions. The past performances and projections expressed herein are no guarantee of future performance. The opinions and forecasts contained herein are, unless otherwise indicated, those of the document's authors and do not represent the opinions of any other person or the official position of Desjardins Group. Copyright © 2022, Desjardins Group. All rights reserved.

Energy

European Union's Embargo on Russian Oil

FORECASTS

The European Parliament has embargoed Russian oil, the Organization of the Petroleum Exporting Countries and its partners (OPEC+) is struggling to meet its growth targets, and the potential for increased production in the rest of the world is limited. All this points to a limited global oil supply. With demand staying high despite rising energy prices, we're revising our oil scenario upwards and expect WTI (West Texas Intermediate) to average US\$107 per barrel in 2022. However, prices have recently hit an unsustainable high, and demand may wane in the next few months. Moreover, the inherent risks of the war in Ukraine and the pandemic could push prices in either direction. On the natural gas side, severely limited global supply could make it difficult to replenish inventories in the lead-up to winter. We therefore expect natural gas to average US\$7.80/MMBTU (Million British Thermal Units) this year.

OIL

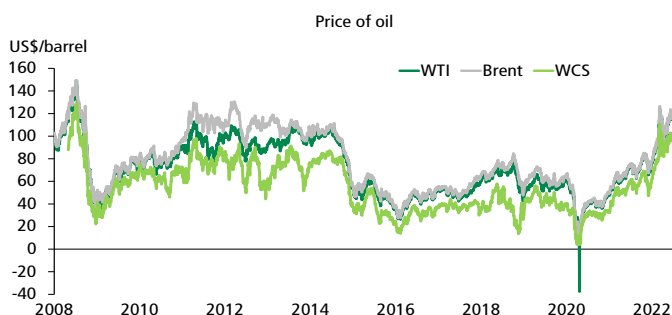
On May 30, 2022, the European Union (EU) banned imports of oil and petroleum products from Russia, with a temporary exception for pipeline imports. EU Council President Charles Michel said that the ban would impact 90% of imports by the end of the year. Since the EU imported 2.2 mb/d (million barrels per day) of crude oil and 1.2 mb/d of refined products from Russia in 2021, the International Energy Agency (IEA) anticipates a drop of 3.0 mb/d in Russian production in 2022. In the face of dwindling supply, the price of WTI has risen by 50% this year (graph 3). Nonetheless, some of Russia's exports could be redirected to other countries, like China and India, and high prices could cap rising demand for the rest of the year.

Although OPEC+ raised its monthly growth target from 0.432 mb/d to 0.648 mb/d for July and August, it has failed to meet its target since November 2021. While periods of maintenance and bad weather had initially tamped down the increases, the organization's production is now being dragged down by the drop-off in Russia's output (graph 4). Consequently, OPEC+ is 2.8 mb/d behind the level stated in the production

agreement that began in August 2021, and 2.1 mb/d excluding the decline in Russian supply. Although surplus capacity is available and could quickly be put into operation, mainly in Saudi Arabia and the United Arab Emirates, member countries are still indicating they don't want to use it.

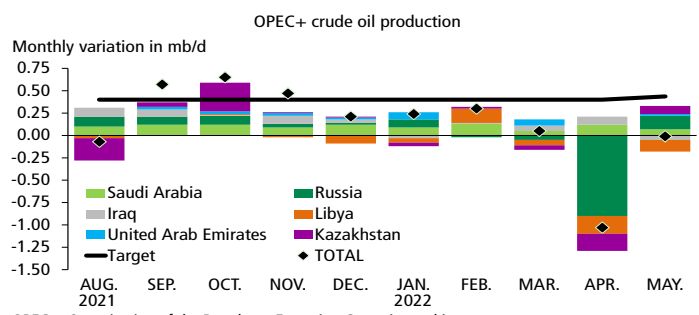
Meanwhile, US producers are maintaining their steely discipline, focusing on returns to investors instead of sharply upping production. However, some action is being taken as the number of drill rigs in operation has jumped by 25% in the first half of the year. This trend is expected continue in the very short term. The IEA is forecasting US production of 18.0 mb/d this year. However, supply chain disruptions and a shortage of skilled labour are tempering any increase in supply. Canada and Brazil are expected to produce 5.8 mb/d and 3.1 mb/d, respectively. These increases, combined with the sale of black gold from strategic reserves, should make it possible to avoid falling back into a deficit situation this year (graph 5 on page 3). However, the decrease in Russian production and the rebound in demand in emerging countries, mainly China, could push the international oil market back into deficit next year.

GRAPH 3
Global supply remains limited



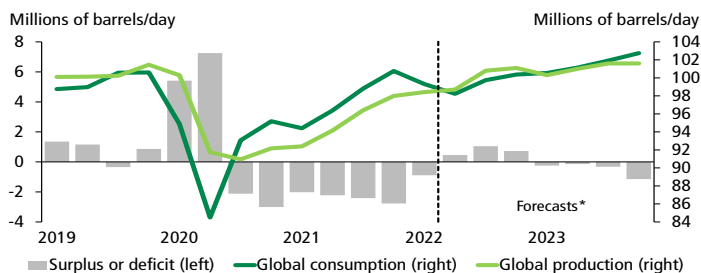
WTI: West Texas Intermediate; WCS: Western Canadian Select
Sources: Datastream, Bloomberg and Desjardins, Economic Studies

GRAPH 4
OPEC+ members are struggling to meet production targets



OPEC+: Organization of the Petroleum Exporting Countries and its partners;
mb/d: millions of barrels per day
Sources: International Energy Agency and Desjardins, Economic Studies

GRAPH 5
Deficits should be avoided in 2022



* International Energy Agency (IEA) outlook assuming members adhere to the March 2022 production agreement.

Sources: IEA and Desjardins, Economic Studies

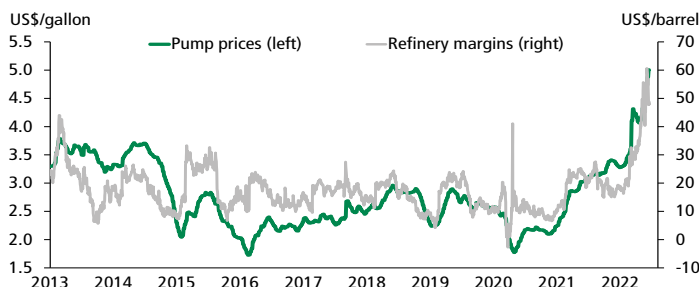
GASOLINE

US gasoline prices hit a record high of US\$5.01 per gallon even as the refineries' margins—the gap between the price of crude oil and the refined product—creep upward (graph 6). Since demand for gasoline fell heavily at the height of the pandemic, the companies closed down some of their least profitable refineries. Others were hit by fires, explosions or hurricanes, and were quite simply too costly to repair, particularly during the energy transition. As a result, US refining capacity remains 1.0 mb/d below its pre-pandemic level (graph 7). As with crude oil, the rollout of additional capacity is being hampered by supply chain issues and trouble hiring skilled workers. Gasoline prices are therefore likely to stay high for a few more months.

NATURAL GAS

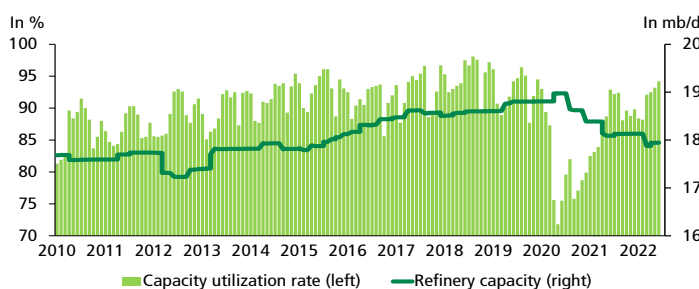
The deficit on the natural gas market has driven Henry Hub prices up to around US\$8.00/MMBTU in recent months, an increase of 50% so far (graph 8). Affected by the war in Ukraine and supply chain problems, there is limited potential for increased global supply in the short term. The result is a struggle to boost inventories in preparation for winter while demand remains brisk. Natural gas prices are, therefore, likely to remain high until 2023. Meanwhile in Europe, Russia has cut off natural gas deliveries to businesses in Denmark and the Netherlands, and to all of Poland and Bulgaria. Fears that Russian exports will be curtailed or cut off completely are lingering, keeping prices high.

GRAPH 6
Gasoline prices and refinery margins hit new records



Sources: Datastream, Bloomberg and Desjardins, Economic Studies

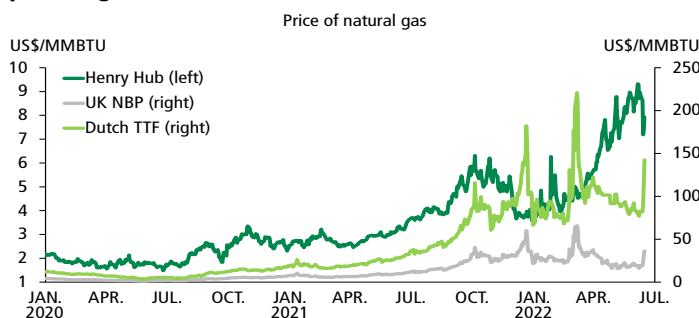
GRAPH 7
US refinery capacity remains 1 mb/d below its pre-pandemic level



mb/d: millions of barrels per day

Sources: Datastream and Desjardins, Economic Studies

GRAPH 8
Low inventories and limited supply are keeping natural gas prices high



MMBTU: Million British Thermal Units

Sources: Bloomberg and Desjardins, Economic Studies

Base Metals

A Rebound in Chinese Demand

FORECASTS

The reopening of the Chinese economy has pushed industrial metal prices back up. Yet increased supply and slowing global economic growth suggest that prices will normalize, particularly due to the more widespread slowdown in China. Still, prices will remain high, especially in light of current high energy prices. We are forecasting an annual average of 4,625 for the LME (London Metal Exchange) index this year. Should the geopolitical climate deteriorate further, or the Chinese economy rebound vigorously, industrial metal prices could resume their climb. On the other hand, if demand is weaker than expected, they may correct sharply.

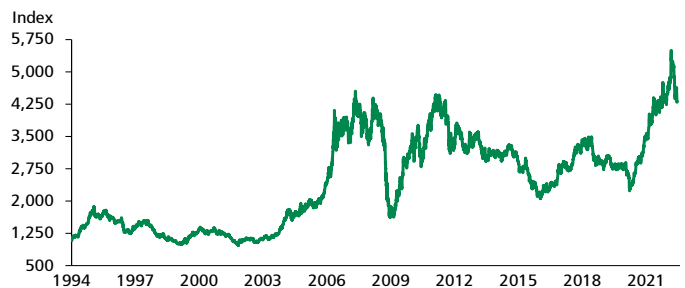
China's US\$5.3 trillion economic recovery plan—30% of its GDP—pays particular attention to the recovery of industrial output and infrastructure investment. However, it's more conservative in terms of real estate construction, to avoid market speculation, which limits gains in GDP and demand for base metals. A strong rebound is still expected, but annual Chinese GDP growth for 2022 has been adjusted from 3.8% to 3.4%. Against this backdrop, the LME index is expected to recover just some of the 20% loss it has suffered since its early-March peak of 5,506 (graph 9). This weaker demand coincides with a rise in production costs, due mainly to high energy prices. However, the increase in supply should be the dominant factor, pushing industrial metal prices down in the second half of the year, although supply chain problems could limit this drop. Furthermore, inventories of several metals including aluminum, nickel and zinc are low, and so the market could remain volatile.

ALUMINIUM

In the wake of lockdowns in China, the price of aluminum has fallen 30% from its peak in March (graph 10). It should regain some ground as industrial production recovers. On the supply side, energy prices continue to temper production in Western and Central Europe, and North American production has been idle. The drop in Russian production remains limited because sanctions are not yet affecting industrial metals. Lastly, global supply is expected to start growing again in the second half of the year, and inventories should gradually rebuild. This is likely to trim the price of aluminum over the next few quarters, especially in 2023. However, aluminum will probably remain expensive as demand is expected to grow, especially due to the energy transition.

GRAPH 9

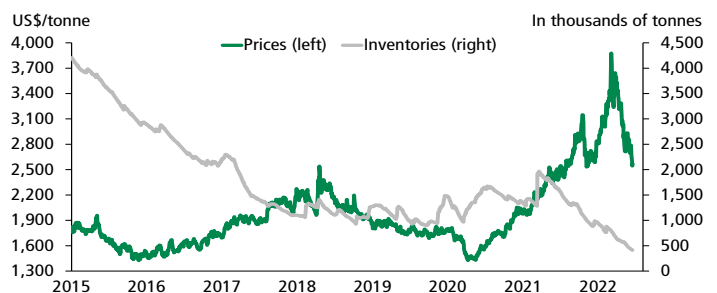
Lockdowns in China are pushing the LME index down



LME: London Metal Exchange
Sources: Datastream and Desjardins, Economic Studies

GRAPH 10

Lockdowns in China have pushed the price of aluminum down



Sources: Datastream and Desjardins, Economic Studies

COPPER

Copper prices fell 10% due to the public health situation in China (graph 11). Major copper mining projects like Quellaveco in Peru, Timok in Serbia, and Quebrada Blanca Phase 2 in Chile are due to start up by the end of the year and into early 2023. This supply, combined with slowing demand due to a global economic slowdown, should stabilize the copper market and push its price down in 2022 and 2023. However, the price could rise if these new mining projects are delayed, or Chinese demand surges. The medium-term situation is more uncertain, because the number of projects in the development or planning stages might not be able to meet anticipated needs, particularly with the shift to a greener economy. Consequently, although the price of copper is expected to fall, it will likely remain high.

NICKEL

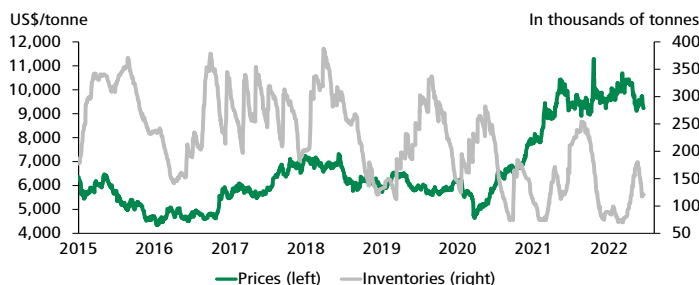
Although the short squeeze sent the price of nickel skyrocketing this winter, it has come back down from its record high of US\$48,241 per tonne to stabilize around US\$28,000 per tonne (graph 12). Despite this drop, the price of nickel has racked up a 23% gain this year. Just like aluminum and copper, the slowdown in the global economy combined with solid growth in supply should keep nickel prices on a downward trend in the second half of 2022 and into 2023. However, the risks inherent in the war in Ukraine, supply chain issues and the Chinese recovery could have the opposite effect.

OTHER METALS

Low zinc production continues to drive up its price. As a result, the market could see a second straight year of deficit and remain volatile. The price of zinc has risen 3% this year (graph 13). Steel prices, meanwhile, are down 25% this year as we go to press. Although Chinese production is limited, mostly due to environmental restrictions imposed by the country's authorities, weakening demand is driving prices down further.

GRAPH 11

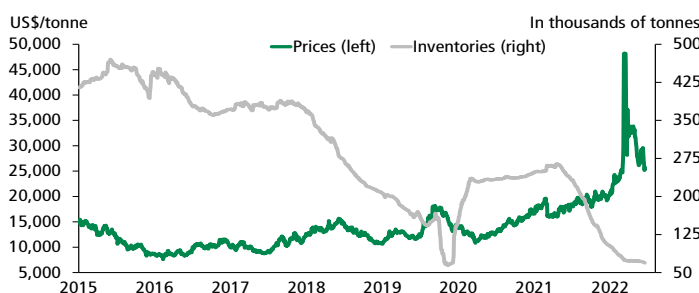
Increased supply should drive copper prices down



Sources: Datastream and Desjardins, Economic Studies

GRAPH 12

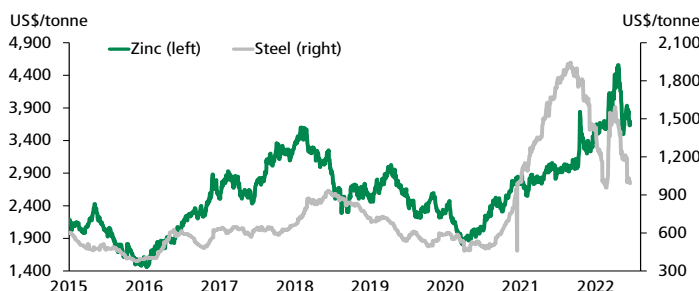
Low nickel inventories are tempering price cuts



Sources: Datastream and Desjardins, Economic Studies

GRAPH 13

Demand for steel is flagging



Sources: Datastream and Desjardins, Economic Studies

Precious Metals

Gold Prices Buckle under Bond Yields

FORECASTS

Rising bond yields are expected to continue tarnishing gold prices. However, as it's a safe haven, the geopolitical environment and high inflation should mitigate the hit. In addition, volatile financial markets and commodity prices could push prices up. As such, our average price of gold in 2022 is around US\$1,850 per ounce.

GOLD & SILVER

Gold's resistance to the rise in bond yields has finally ended. It has lost 3% since its plateau in March and April, and 2% this year (graph 14). The US dollar has appreciated 9% this year, which has also pushed down the price of gold. Yet high inflation, poor stock market performance and geopolitical uncertainty continue to have the opposite effect. Although the price of gold is expected to decline in 2022, it could rise if the situation worsens in Europe or inflation expectations surge. Silver has also declined 7% this year (graph 15). Given that silver plays a dual

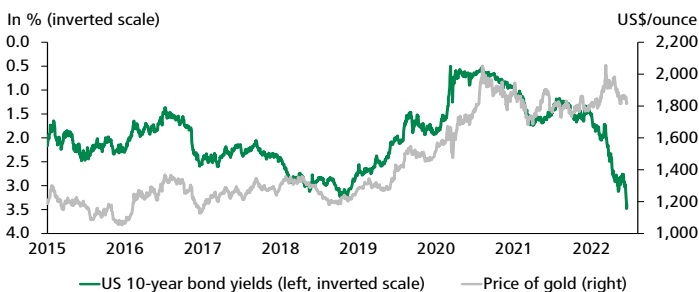
role as a precious and industrial metal, the public health situation in China has contributed to its poor performance.

PLATINUM & PALLADIUM

Platinum and palladium prices both dropped back from their March peaks, following the start of the war in Ukraine, and are now down 1% and 5%, respectively, this year (graph 16). Automotive production has fallen, mainly because of the lockdowns in China, driving prices down further. Palladium supply remains limited as Russia accounts for about 40% of the world's mining production. As a result, prices for these metals are expected to remain high.

GRAPH 14

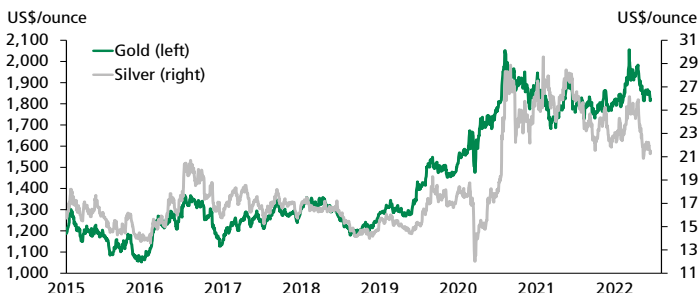
Gold hasn't moved much on higher bond yields



Sources: Datastream and Desjardins, Economic Studies

GRAPH 15

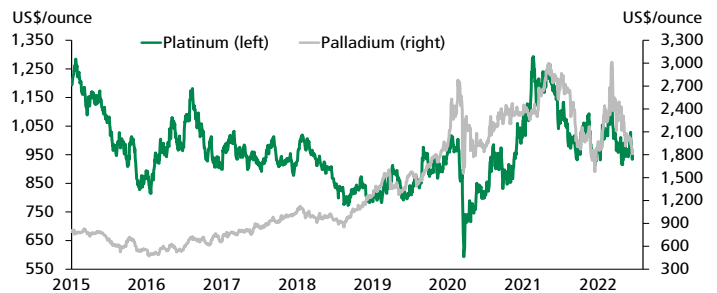
Uncertainty benefits precious metals



Sources: Datastream and Desjardins, Economic Studies

GRAPH 16

Low automotive production is hurting platinum and palladium prices



Sources: Datastream and Desjardins, Economic Studies

Other Commodities

Still a Lot of Tension in the Forestry and Agricultural Markets

FOREST PRODUCTS

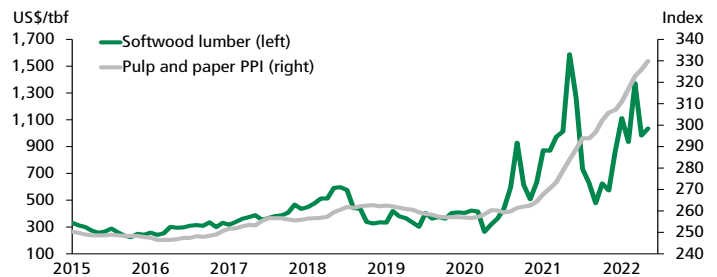
On the pulp and paper market, supply chain issues are combining with rising commodity costs, and production is limited. Many factors are keeping prices high. However, softwood lumber prices declined in May (graph 17). Demand for single-family or multi-family homes is not being fully met anywhere in North America. However, rising interest rates will somewhat temper the pace of housing starts. Furthermore, the recently frantic demand for renovation materials could cool off. We still don't have a read on the effects of the war in Ukraine on lumber prices. Russian exports have been suspended and will alter the trade balance in Europe and, possibly, North America. It will be a few more months before we can measure the effects, by which time we will be in the midst of hurricane season when more wood will likely be required, and forest fires will be a bigger threat to the harvest. **Lumber prices may therefore not be immune to an increase. We should expect many fluctuations in the coming months, similar to what we saw last year.**

AGRICULTURAL COMMODITIES

For weeks now, grain prices, which have been very high since the war in Ukraine broke out, have been fluctuating without really showing a notable decline (graph 18). Nerves are on edge due to several factors—both upside and downside. Bad weather-related limits on wheat exports in India and very dry conditions in Europe could send prices climbing. The scarcity of palm oil is shifting the focus to substitutes (including soybeans), and poor harvests in South America (soybeans) are limiting supply. At the same time, it is too early to gauge the effects of China's lockdowns on soybean demand. Additionally, there is talk of possibly opening up a sea passage to route a portion of Ukraine's wheat, which could ease pressure on wheat and corn, but that's highly uncertain. **High fertilizer costs and shortages are adding to the difficulties** (graph 19). **Without a solution, it could potentially affect crop yields, exacerbating grain shortages and sustaining—or even increasing—prices.**

GRAPH 17

Price of softwood lumber sinks again

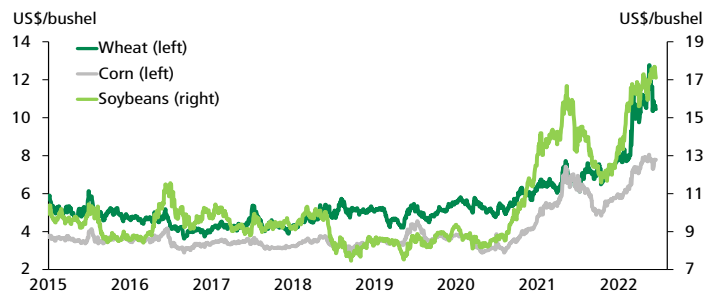


tbf: thousand board feet

Sources: U.S. Bureau of Labor Statistics, Datastream and Desjardins, Economic Studies

GRAPH 18

Since supply can't adjust in the short term, grain prices will stay high



Sources: Datastream and Desjardins, Economic Studies

GRAPH 19

Fertilizer prices in North America are still high



Sources: Bloomberg and Desjardins, Economic Studies

TABLE 1
Commodities

	SPOT PRICE	VARIATION (%)				LAST 52 WEEKS		
	June 15	-1 month	-3 months	-6 months	-1 year	High	Average	Low
Index								
Reuters/Jefferies CRB	314.8	2.0	11.9	40.6	49.8	329.6	252.6	204.2
Bloomberg Commodity Index	129.4	0.9	6.2	35.5	38.4	136.6	108.5	90.1
Bank of Canada	877.3	3.3	-1.7	41.4	41.6	892.3	701.5	561.8
Energy								
Brent oil (US\$/barrel)	118.6	6.1	19.4	60.2	60.1	128.2	88.9	65.3
WTI oil (US\$/barrel)	115.3	4.4	19.6	62.7	59.9	123.7	86.2	63.5
Gasoline (US\$/gallon)	5.01	15.7	16.0	51.0	63.1	5.01	3.57	3.06
Natural gas (US\$/MMBTU)	7.42	-3.2	62.4	95.2	129.0	9.32	5.16	3.19
Base metals								
LME index	4,324	-1.3	-16.8	2.2	3.7	5,506	4,532	3,993
Aluminium (US\$/tonne)	2,570	-6.9	-20.8	-0.6	4.3	3,878	2,879	2,375
Copper (US\$/tonne)	9,225	0.4	-6.4	0.1	-3.3	11,300	9,680	8,894
Nickel (US\$/tonne)	25,759	-5.2	-46.6	34.4	45.5	48,241	23,728	17,126
Zinc (US\$/tonne)	3,699	5.9	-2.2	12.3	22.7	4,563	3,472	2,809
Precious metals								
Gold (US\$/ounce)	1,822	0.4	-5.4	3.1	-2.1	2,056	1,832	1,728
Silver (US\$/ounce)	21.5	3.0	-12.9	-1.6	-22.3	27.7	23.8	20.8
Platinum (US\$/ounce)	945	0.2	-6.1	3.7	-18.2	1,155	1,009	911
Palladium (US\$/ounce)	1,865	-3.5	-22.8	18.3	-32.2	3,015	2,240	1,576
Other commodities								
Lumber (US\$/tbf)	564	-38.8	-51.4	-49.1	-44.2	1,464	849	454
Wheat (US\$/bushel)	10.50	-10.0	-9.0	38.9	58.6	14.25	8.51	6.09
Corn (US\$/bushel)	7.80	-0.8	5.5	35.7	16.1	8.07	6.35	4.82
Soybean (US\$/bushel)	17.09	0.5	4.6	36.5	16.3	17.70	14.36	11.57

CRB: Commodity Research Bureau; WTI: West Texas Intermediate; MMBTU: Million British Thermal Units; LME: London Metal Exchange; tbf: thousand board feet

NOTE: Commodity table based on previous day's closing prices.

TABLE 2
Commodities prices: History and forecasts

ANNUAL AVERAGE	2020	2021	2022f	2023f
WTI oil (US\$/barrel)	39	68	Target: 107 (range: 95 to 115)	Target: 93 (range: 70 to 125)
Natural gas Henry Hub (US\$/MMBTU)	2.13	3.72	Target: 7.80 (range: 5.00 to 9.00)	Target: 8.00 (range: 4.00 to 13.00)
Gold (US\$/ounce)	1,771	1,790	Target: 1,850 (range: 1,750 to 1,925)	Target: 1,745 (range: 1,400 to 2,000)
LME index—base metals	2,810	4,090	Target: 4,625 (range: 4,400 to 4,850)	Target: 3,770 (range: 3,000 to 5,000)

f: forecasts; WTI: West Texas Intermediate; MMBTU: Million British Thermal Units; LME: London Metal Exchange

Sources: Datastream and Desjardins, Economic Studies