

COMMODITY TRENDS

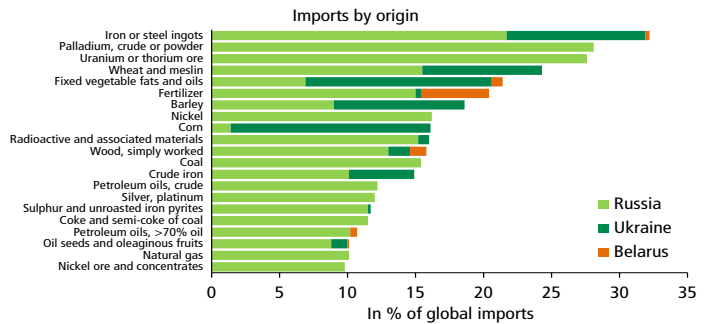
Commodities: Price Spikes and Instability

Since Ukraine, Russia and Belarus are leading producers of a wide range of commodities (graph 1), the war in Ukraine has sent shockwaves through global markets. For the time being, the economic sanctions don't extend to Russia's natural resources, but they are impeding the country's international trade and economic flow. Add to that the boycott of certain Russian products and the destruction of the Ukrainian economy, and it's likely that oil, natural gas, metal and agricultural production could be limited for months to come.

A number of commodity prices have, therefore, spiked in recent weeks (graph 2). For wealthier countries like Canada, limited supply will mean higher prices, and delivery and production delays. For poorer and developing countries, supply itself is at risk. Moreover, we could see a structural downturn in the market for several commodities if the geopolitical climate continues to deteriorate. In this case, prices could reach new highs, particularly for grains.

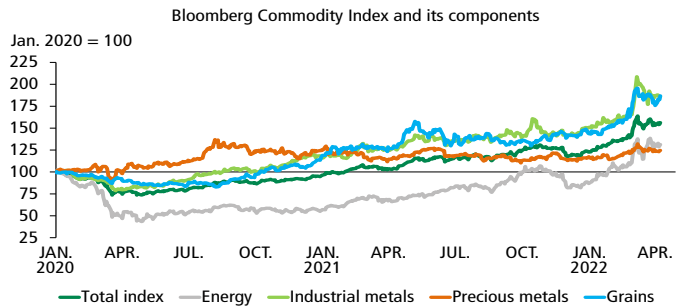
But the economic fallout of the war in Ukraine extends far beyond commodities. The uncertainty it brings, particularly in the financial markets, as well as the new constraints on supply chains, are factors that will adversely affect the economic outlook. Although Europe will be hardest hit, our [forecasts](#) for global economic growth this year have been downgraded to 3.1%. With economic activity slowing and inflation accelerating, some consumers may be discouraged by high commodity prices. Such a pullback in demand could offset inflationary pressures and help stabilize commodity prices. In addition, increased supply is expected to bring down the price of several commodities towards the end of the year.

GRAPH 1
The countries currently involved in the war are leading producers of a wide range of commodities



Sources: Oxford Economics, World Integrated Trade Solution and Desjardins, Economic Studies

GRAPH 2
Many prices jumped when war broke out in Ukraine



Sources: Datastream and Desjardins, Economic Studies

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Energy

A New Oil Shock

FORECASTS

Although global oil demand has been downgraded somewhat due to the war in Ukraine, the lifting of the remaining public health measures should drive demand higher over the coming months. The supply situation remains uncertain, however. The Organization of the Petroleum Exporting Countries and its partners (OPEC+) has been struggling to meet production targets, and the war in Ukraine has only made things worse. Meanwhile US producers remain highly disciplined when it comes to production. All signs therefore point to limited supply going forward. As a result, we are revising our scenario upwards and estimate the annual average of WTI (West Texas Intermediate) at US\$98. However, the inherent risks of the ongoing pandemic and the unpredictable nature of the war in Ukraine could push prices higher or lower. On the natural gas side, supply is also severely limited. The war is exacerbating existing supply and production issues in this deficit market. We now expect the average price of natural gas to be US\$4.45/MMBTU (Million British Thermal Units) this year.

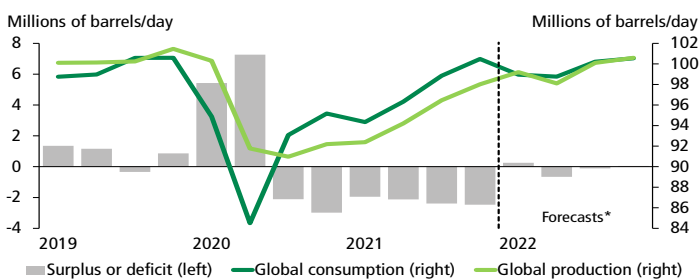
OIL

Russia is facing economic sanctions and other challenges that are disrupting its international trade and economic flow. Moreover, a number of consumers, businesses and countries are boycotting Russian products, including oil. The International Energy Agency (IEA) expects Russian crude oil production to drop by 30%, or about 3 mb/d (million barrels per day), starting in April. Since Russia is the world's third-largest oil producer, this drop in production would put the global market back in a deficit in the second and third quarters of this year (graph 3) in contrast to the surpluses previously projected. It should be noted that this forecast does not include the U.S. contingency plan to draw on its strategic reserves. Uncertainty, limited global supply and low oil inventories have exerted additional upward price pressure, sending WTI and Brent prices skyrocketing by 29% and 27% respectively since the beginning of the year (graph 4). Filling the void in the short term will be difficult, if not impossible. Producers that could step up, like Saudi Arabia and the United Arab Emirates (UAE), refuse to boost production

beyond OPEC+'s current targets. An alternative would be to ease sanctions against Iran and Venezuela, but talks between the West and Teheran are currently on hold. If the parties did strike a deal, however, Iran could increase production by 1 mb/d within six months. Venezuela could add a modest 0.25 mb/d. In other words, prospects are bleak for ramping up supply in the short term.

The Biden administration announced it will release 1 mb/d of crude from the strategic petroleum reserve daily for the next six months. This historic measure should ease price pressures as supply adjusts. On the production side, several constraints currently limit the ability of US producers to react quickly to the crisis. They've also maintained a disciplined focus on delivering strong returns for shareholders and gradually upping production (graph 5 on page 3). But that will have to change. High energy prices and the hardened tone of the White House towards producers should prompt them to boost US supply. It could take a few months to see an increase, however. In Canada, the oil

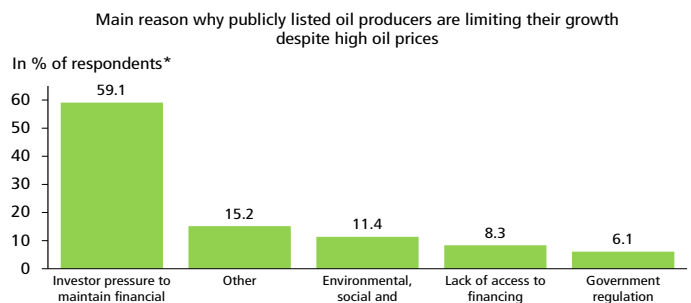
GRAPH 3
The oil market returns to a deficit



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

Sources: IEA and Desjardins, Economic Studies

GRAPH 4
US producers focus on providing strong returns to investors



* 132 respondents.

Sources: Federal Reserve Bank of Dallas and Desjardins, Economic Studies

industry is entering its scheduled maintenance period, which means the market will see a supply drop of about 0.3 mb/d in the second quarter. According to the IEA, domestic production is still expected to hit a record 5.9 mb/d this year.

GASOLINE

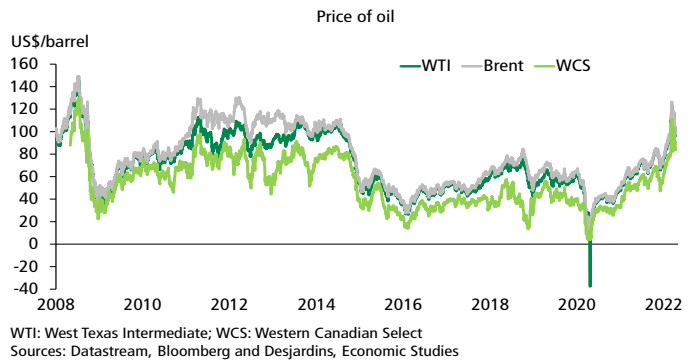
US gasoline prices have been tracking the rise in the price of crude. Prices at the pump have soared 27% since the beginning of the year to a new all-time high (graph 6). The price of gasoline could remain elevated and volatile until oil production adjusts. In Canada, the federal carbon tax aimed at fighting climate change rose from C\$40 per tonne to C\$50 per tonne on April 1. The increase adds \$0.0221 to the price of every litre of gasoline in provinces that use the federal carbon pricing system.

NATURAL GAS

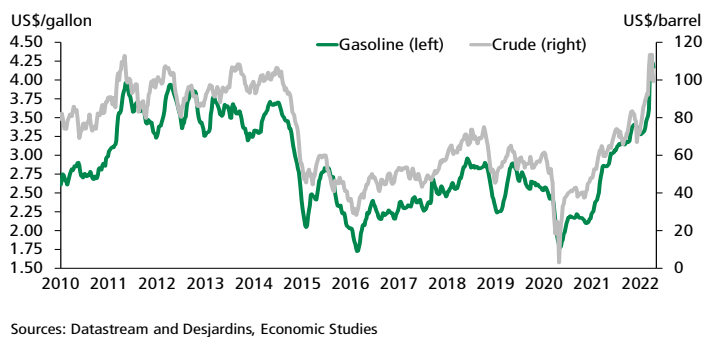
For now, economic sanctions don't extend to Russian oil and natural gas exports. But fears that Russian exports will be curtailed or cut off completely have driven prices to record highs in the United Kingdom (UK NBP: US\$65.70/MMBTU) and continental Europe (Dutch TTF: US\$220.80/MMBTU) (graph 7). Though prices have fallen from their peak, they remain elevated because many European countries depend on Russian natural gas and the situation remains unpredictable. This dependence is, however, seen as a vulnerability, and more and more countries are putting together contingency plans to diversify their sources. In 2020, Russia accounted for 66% of Germany's natural gas imports. Germany is making huge investments in its infrastructure and in alternative energy sources like wind to wean itself off Russian gas by 2024.

Although US natural gas exports had already risen in recent months, President Joe Biden unveiled a plan to export an additional 15 billion cubic feet this year, enough to replace about 10% of Russian imports. But it won't be easy. A critical lack of infrastructure on both sides of the Atlantic will complicate things for both US producers and European consumers. Unlike oil, which can be easily transported by tanker, natural gas has to be liquefied using a costly cooling process and handled at specialized port terminals. Liquefied natural gas terminals in the United States and Europe are already operating at full capacity, and it will take a few years to build additional terminals. Once again, without a short-term solution, prices will likely remain high until supply adjusts over the next few months, especially in Europe.

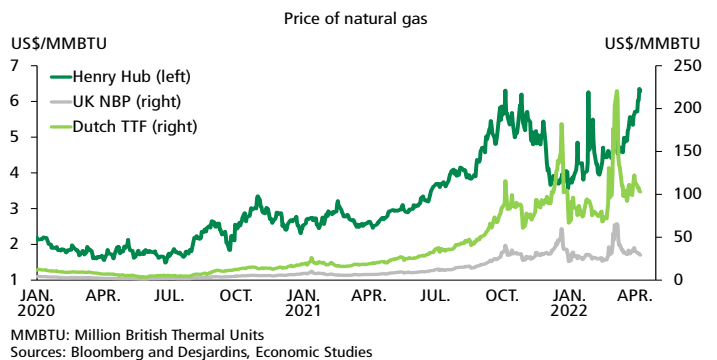
GRAPH 5
Oil prices surged when war broke out in Ukraine



GRAPH 6
Limited crude supply and uncertainty sent gasoline prices soaring



GRAPH 7
Natural gas prices remain volatile



Base Metals

Increasingly Tight Supply

FORECASTS

Sustained demand and limited supply continue to drive price growth for base metals. Supply chain disruptions caused by the war in Ukraine along with a resurgence of COVID-19 cases in China will likely temper increases in the global metal supply over the next few months. But the economic slowdown in China and elsewhere should cool demand. We expect the LME (London Metal Exchange) Index to remain elevated in the first half of the year before falling in the second half as supply begins to adjust. We expect the LME Index to average about 4,650 this year.

Demand was already outpacing supply when war broke out in Ukraine, adding even more price pressure and volatility. The LME Index is now up 14.5% on the year, passing the 5,000 mark for the first time ever (graph 8). Though Russia does produce base metals, the situation isn't quite as dire as it is with oil and natural gas. China remains the biggest player, but many regions of that country are dealing with a spike in COVID-19 cases. China has been following a zero-COVID policy and quickly imposing strict lockdowns in response to outbreaks. Industrial metal producers and consumers in a number of cities have already had to shut down operations. So far, these lockdowns have coincided with periods of slower economic activity due to Chinese New Year and the Winter Olympic Games (graph 9). But now that these events are over and the metal-hungry Chinese construction industry is gearing up again, we could see upward price pressure. On the flip side, the broad-based slowdown in economic growth and the possibility of China purchasing Western-boycotted Russian commodities at a discount could ease price pressures.

ALUMINUM

Global aluminum production remains extremely tight on continued demand, which has been driven by three factors. First, Russian production is facing numerous challenges, including boycotts, supply issues and the indirect consequences of economic sanctions. Second, skyrocketing European energy prices are slowing continental production. Third, the spike in COVID-19 cases in China is disrupting metal supply and demand. The market deficit combined with growing uncertainty has sent the price of aluminum soaring 19.4% this year (graph 10 on page 5). Prices should recede as supply comes back online. Consumers also increasingly prefer metal from socially and environmentally responsible countries. The economic outlook is therefore encouraging for Canadian aluminum, which ticks all the boxes.

GRAPH 8

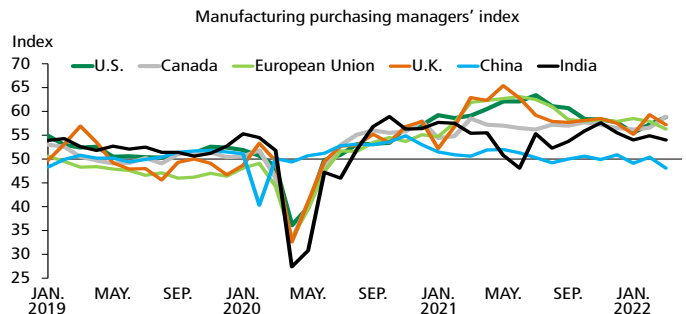
The LME Index hit a record high on severely disrupted supply



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

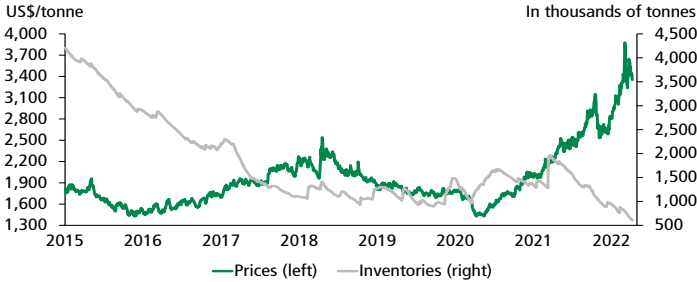
GRAPH 9

China's manufacturing sector is feeling the pinch of the country's slowing economy



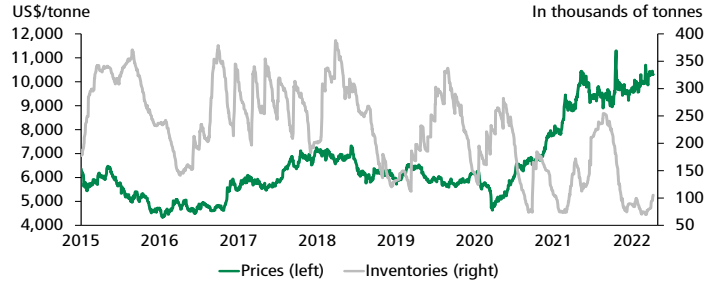
Sources: Datastream and Desjardins, Economic Studies

GRAPH 10
Aluminum prices and inventories



Sources: Datastream and Desjardins, Economic Studies

GRAPH 11
Copper prices and inventories



Sources: Datastream and Desjardins, Economic Studies

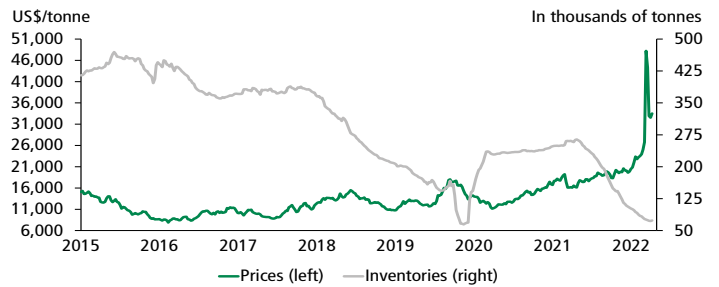
COPPER

Copper production capacity is sorely lacking today due in large part to recent underinvestment. There's also strong demand as the global economy recovers and continues to transition to renewable energy. Because there isn't sufficient supply to meet global demand, copper inventories are struggling to recover (graph 11). Prices are up 33% since the start of 2021. The war in Ukraine has further disrupted supply chains and exacerbated upward price pressure. But the economic slowdown in China and elsewhere should provide some relief.

NICKEL

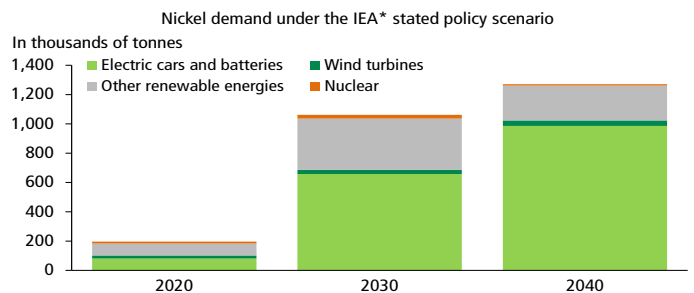
The price of nickel has been extremely volatile in recent weeks as a short squeeze has driven it to a record high of US\$48,241 per tonne (graph 12), forcing trading to be suspended on the LME platform for a week. The price has fallen since, but is still up a stunning 60% this year. With limited supply exacerbated by the war in Ukraine, the price could remain elevated for a few months. Demand outlooks are also encouraging, as demand for batteries is expected to rise, especially during an oil shock (graph 13).

GRAPH 12
Nickel prices and inventories



Sources: Datastream and Desjardins, Economic Studies

GRAPH 13
Strong growth in nickel requirements from electric cars and batteries



IEA: International Energy Agency; * More conservative scenario using policies that are already in effect and those that are in development.
Sources: IEA and Desjardins, Economic Studies

Precious Metals

Risk Benefits Gold

FORECASTS

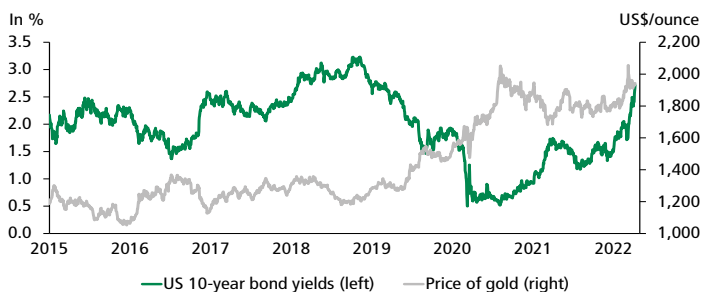
The price of gold has risen amid the current geopolitical crisis and COVID-19 resurgence. But while it may remain high in the short term, it could moderate if uncertainty eases and bond yields rise. As a result, we expect the average price of gold to be about US\$1,895 per ounce this year.

GOLD & SILVER

So far, rising US 10-year bond yields haven't affected gold prices. Growing uncertainty, poor stock market performance and high inflation in recent months have offset downward price pressure. The price of gold is up 7.9% since the beginning of the year (graph 14). It could continue to perform well if the situation in Europe deteriorates, the pandemic drags on or inflation expectations become unanchored. Silver too has put in a strong showing this year, rising 6.7% (graph 15). If the war ends faster than anticipated, gold and silver prices could fall.

GRAPH 14

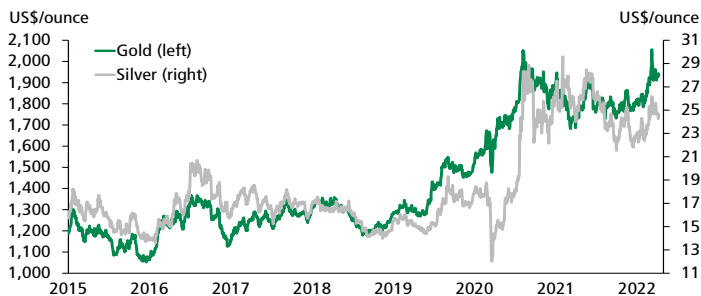
Gold hasn't moved on higher bond yields



Sources: Datastream and Desjardins, Economic Studies

GRAPH 15

Uncertainty benefits precious metals



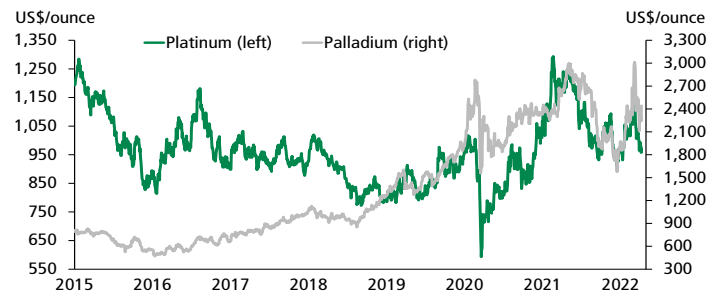
Sources: Datastream and Desjardins, Economic Studies

PLATINUM & PALLADIUM

Russia accounts for about 40% of the world's palladium mining production. The price of palladium has therefore skyrocketed since the war broke out, jumping 32.1% so far this year (graph 16). However, demand from the automotive industry has weakened on high inflation and palladium prices, which could eventually ease upward price pressure. Palladium is primarily used in catalytic converters for gas-powered vehicles, but manufacturers could partially substitute it with platinum. However, the price of platinum has come down from its March peak, bringing its gain for 2022 to 1.4%. Limited supply of both metals should keep prices high. But weaker than expected demand or a quick conclusion to the war in Ukraine could send prices lower.

GRAPH 16

Platinum and palladium prices



Sources: Datastream and Desjardins, Economic Studies

Other Commodities

Extraordinary Times Call for Extraordinary Prices

FOREST PRODUCTS

The softwood lumber market remains very tight on the back of strong demand. A shortage of new listings is forcing many US and Canadian households to build their own homes. Since the beginning of the pandemic, the average size of a new home has increased, especially south of the border. Building material prices were already under pressure, and we've seen a rise in the share of single-family homes, which take more wood to build than multi-family housing (graph 17). It's also difficult to increase the softwood lumber supply, which is driving prices higher as well (graph 18). **Prices haven't topped their spring 2021 record, but the conditions are right for prices to remain elevated for several months.** Pulp and paper production isn't expected to rise anytime soon either. North American companies are also being hit with higher input costs, supply issues and labour shortages, which will keep prices high for at least the first half of the year.

AGRICULTURAL COMMODITIES

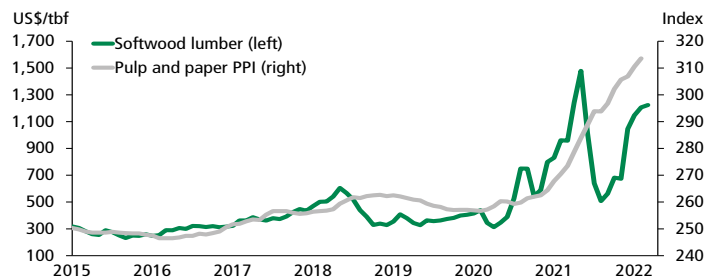
In late February, the price of wheat hit its highest level ever. Together Russia and Ukraine account for more than a quarter of all global wheat exports. The war therefore added to already palpable price pressure (graph 19). And with extremely dry conditions in the central and southern United States, we don't expect a record-setting crop this year. Corn prices are also up since the war started. Prices were already high and nearing their March 2013 peak. But a number of factors point to lower prices, including an abundant crop in South America and lower demand from US ethanol producers. Soybean prices haven't been as hard hit by the war in Ukraine. But they've been flirting with their 2012 high for weeks, and concerns about a potentially disappointing South American crop could show up in prices. **Over the coming months, a number of factors will influence oilseed and grain prices, including the duration and intensity of the war in Ukraine and higher energy, fertilizer and other input costs.** These factors could contribute to volatility and send prices higher or lower.

GRAPH 17
Demand for building materials remains strong



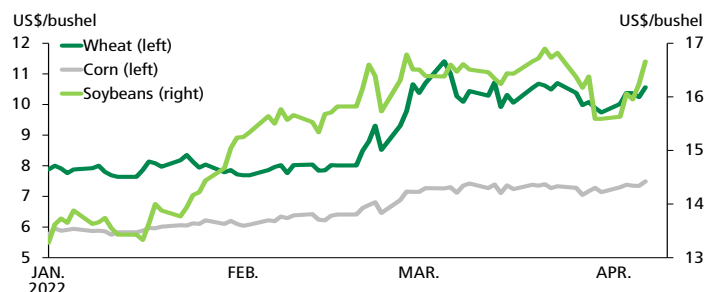
Sources: Datastream and Desjardins, Economic Studies

GRAPH 18
Forest product prices



tbf: thousand board feet
Sources: U.S. Bureau of Labor Statistics, Datastream and Desjardins, Economic Studies

GRAPH 19
Grain prices



Sources: Datastream and Desjardins, Economic Studies

TABLE 1
Commodities

	SPOT PRICE	VARIATION (%)				LAST 52 WEEKS		
	April 8	-1 month	-3 months	-6 months	-1 year	High	Average	Low
Index								
Reuters/Jefferies CRB	298.2	-3.5	25.4	26.7	59.2	309.1	232.3	186.4
Bloomberg Commodity Index	126.4	-4.7	24.8	23.2	49.8	132.6	101.1	83.6
Bank of Canada	820.1	3.0	25.1	30.4	50.7	872.2	645.6	544.3
Energy								
Brent oil (US\$/barrel)	102.7	-19.9	25.4	24.5	62.2	128.2	80.8	63.1
WTI oil (US\$/barrel)	98.3	-20.6	24.5	23.6	64.9	123.7	78.0	59.6
Gasoline (US\$/gallon)	4.17	1.7	27.1	30.7	46.0	4.32	3.30	2.85
Natural gas (US\$/MMBTU)	6.28	38.7	60.3	12.8	148.9	6.36	4.25	2.52
Base metals								
LME index	5,156	-4.8	14.0	18.1	32.8	5,506	4,441	3,812
Aluminium (US\$/tonne)	3,352	-3.4	15.4	13.7	47.9	3,878	2,786	2,246
Copper (US\$/tonne)	10,305	1.4	6.3	9.8	14.3	11,300	9,717	8,864
Nickel (US\$/tonne)	33,867	-29.7	62.4	76.2	101.8	48,241	21,482	15,989
Zinc (US\$/tonne)	4,310	4.8	21.0	37.1	52.1	4,423	3,282	2,734
Precious metals								
Gold (US\$/ounce)	1,943	-5.5	8.4	10.4	10.6	2,056	1,823	1,728
Silver (US\$/ounce)	24.6	-5.7	10.7	9.2	-2.8	28.5	24.6	21.5
Platinum (US\$/ounce)	972	-15.6	1.3	-5.5	-20.5	1,267	1,053	911
Palladium (US\$/ounce)	2,442	-18.6	28.3	19.5	-7.8	3,015	2,371	1,576
Other commodities								
Lumber (US\$/tbf)	950	-31.5	-20.3	31.9	-14.1	1,686	948	454
Wheat (US\$/bushel)	10.52	-17.4	38.6	43.3	67.2	14.25	7.75	6.09
Corn (US\$/bushel)	7.49	2.6	26.1	49.8	30.0	7.49	6.14	4.82
Soybean (US\$/bushel)	16.66	0.4	20.0	37.9	17.7	16.90	14.07	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: 95 (range: 70 to 130)	Target: 79 (range: 60 to 100)
Natural gas Henry Hub (US\$/MMBTU)	2.13	3.72	Target: 4.45 (range: 3.75 to 5.50)	Target: 3.60 (range: 2.75 to 5.00)
Gold (US\$/ounce)	1,771	1,790	Target: 1,890 (range: 1,600 to 2,200)	Target: 1,735 (range: 1,300 to 2,000)
LME index—base metals	2,810	4,090	Target: 4,755 (range: 4,300 to 5,300)	Target: 3,650 (range: 3,000 to 4,500)

f: forecasts; WTI: West Texas Intermediate; MMBTU: Million British Thermal Units; LME: London Metal Exchange
 Sources: Datastream and Desjardins, Economic Studies