

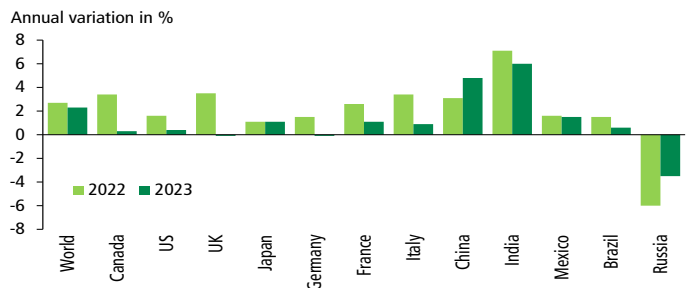
COMMODITY TRENDS

Price Downsides Limited by Supply Disruptions

The global economy is slowing down as the major central banks continue to tighten monetary policy in response to the worst inflation seen in decades. Add to that China's zero-COVID policy and the war in Ukraine, which are hampering supply chain recovery and global economic growth. Recession risks are up, and we forecast a mild contraction in Europe and Canada.¹ Against this backdrop, global economic growth is now estimated at 2.7% in 2022 and 2.3% in 2023 (graph 1) and the demand outlook has been downgraded for several commodities.

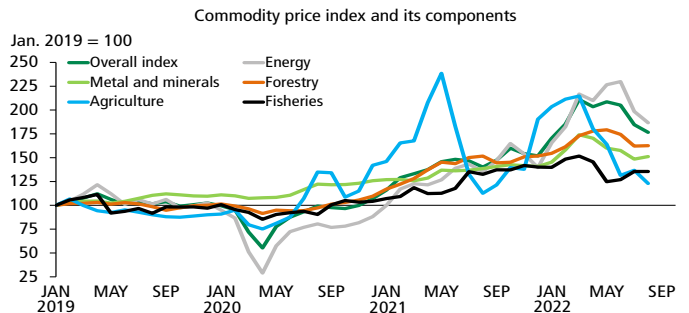
After surging early this year, many commodity prices have returned to levels seen before the war in Ukraine. The correction has been particularly pronounced in the agriculture component of the Bank of Canada commodity price index, which has fallen roughly 37% since peaking in March (graph 2). The metals and minerals, and forestry components were quick to follow suit, with prices tumbling back down to near January 2022 levels. The overall index, however, remains propped up by energy prices, where performance is mixed among components. Although oil prices have come back down to around US\$90 per barrel, natural gas prices have continued to soar, driven by warmer than usual temperatures and geopolitical tension in Europe, and are expected to remain high through winter 2023. But no commodity is safe from sudden and unpredictable movements should the economic slowdown be more severe than expected or the global geopolitical situation worsen. That said, the peculiarity of the current economic cycle and supply disruptions could limit room for downside.

GRAPH 1
Global growth projected to slow in 2023



Sources: Datastream and Desjardins, Economic Studies

GRAPH 2
Gains from the war in Ukraine have been largely wiped out



Sources: Bank of Canada and Desjardins, Economic Studies

¹ For more details, see: [A Recession Seems Likely in Canada and Other Countries](#), Desjardins, Economic Studies, *Economic Viewpoint*, August 25, 2022, 4 p.

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Energy

Energy Sector Investment a Concern for the Coming Years

FORECASTS

The oil demand outlook has been clouded by a slowing global economy and consumer purchasing power being eroded by inflation. Production has been higher than expected, particularly in Russia, which has contributed to recent weaknesses in prices. Consequently, we've downgraded our oil scenario for 2022 to a year-end WTI (West Texas Intermediate) price of US\$90 per barrel. But nothing is certain on the supply side. The rapid decline in prices over the past few weeks has led some producers, mainly in the Middle East, to announce production cuts. Also, a lack of investment in the sector in recent years means there's limited ability to increase supply in the medium term, which should keep prices higher. On the natural gas market, a significant deficit is continuing to drive up prices. Although storage levels should be sufficient for winter, we project an average annual Henry Hub price of US\$7.30 per MMBTU (Million British Thermal Units) for 2022.

OIL

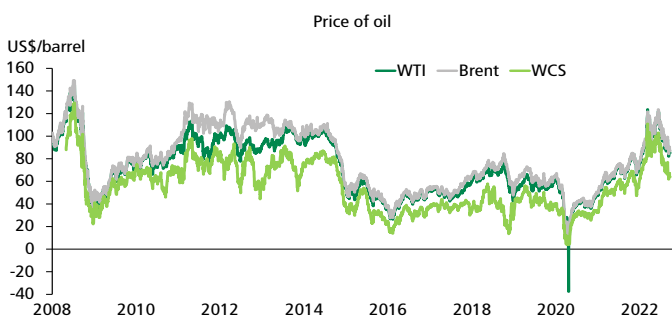
Russian oil production has so far proved resilient, declining just 3% since March 2022 in contrast to expectations closer to 30%. However, the impact of sanctions is being felt more strongly as time goes on. Russian crude oil imports into the EU and United Kingdom have fallen by 0.9 MMb/d (million barrels per day) since the start of the year, while imports from the US have risen by 0.4 MMb/d. The EU's embargo on Russian oil will take full effect by the end of the year, representing an additional 1.4 MMb/d of Russian crude production that will have to find new homes. China and India have been the substitute for the EU market so far, but the global economic slowdown and their smaller demand are starting to weigh on their appetite for Russian oil. Still, the resilience of Russian supply has contributed to oil prices climbing back down from spring highs of US\$120 per barrel (graph 3) and the market should remain in surplus for the first half of 2023. However, the Organization of the Petroleum Exporting Countries and its partners (OPEC+) recently announced it would be reducing production by 0.1 MMb/d as of October.

Although not a drastic cut, it does signal the cartel's intent to keep oil prices stable and relatively high.

The United States is attracting increasing attention for plans to replenish its Strategic Petroleum Reserve, which has fallen to its lowest level since October 1985 (graph 4). Details are sparse, but the first contracts are expected to be awarded in the coming months for delivery in 2023. This could be a way for the US government to keep demand and prices steady. US supply is therefore expected to continue growing, as prices should remain sufficiently high to keep businesses profitable and the European Union needs oil. Crude oil production has also exceeded 12 MMb/d for the past few weeks now, a level not seen since March 2020, although the number of active drilling rigs fell sharply in early September, which could limit supply growth.

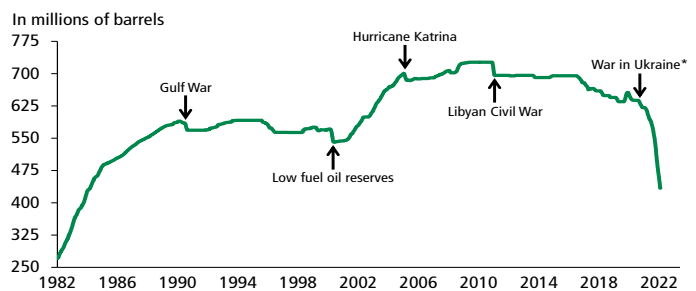
Uncertainty remains a key challenge. As previously mentioned, we expect a weak global economy to lead to a decline in oil consumption in early 2023. That said, if the economic slowdown

GRAPH 3
Oil prices have returned to pre-Ukraine war levels



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

GRAPH 4
The US Strategic Petroleum Reserve has fallen to a multi-decade low



* Transfers had begun before the war broke out in Ukraine as a price stability measure.
Sources: Datastream and Desjardins, Economic Studies

becomes more severe or the US officially enters a recession, we could see an even stronger correction in oil demand and prices. Beyond 2023, the demand and supply outlook is marred by uncertainty surrounding the energy transition. Unlike in the past, the rise in oil prices hasn't gone hand in hand with an increase in investment (graph 5). It seems high energy prices are no longer enough to stimulate US production. Instead, producers are more concerned with profitability and investor returns. A lack of investment today could limit supply growth potential in the medium term and keep oil prices higher.

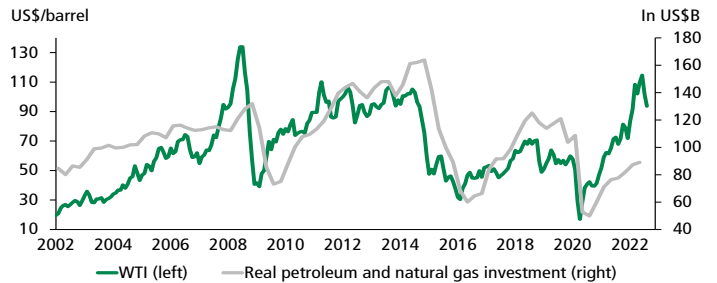
GASOLINE

Gasoline prices have also come down from their spring peak of US\$5 per gallon to below the US\$4 mark (graph 6). On the refinery side, utilization of operable capacity has remained high over the summer, peaking at 94.5% in August. After soaring this spring, refining margins, the difference between the price of crude oil and the price of the refined product, have returned to more normal levels. Nevertheless, gasoline prices should continue to gradually fall as the economy slows and the high prices seen in recent months have curbed demand.

NATURAL GAS

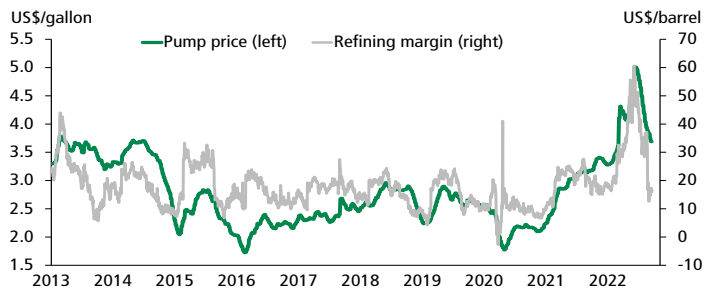
Natural gas prices have picked up again, particularly in Europe, as Russia keeps threatening to turn off the pipeline for good. Henry Hub, UK NBP and Dutch TTF prices have risen 95%, 46% and 170%, respectively, since the start of the year (graph 7). Although Europe's natural gas reserves are reasonably well stocked for winter, a cut-off of Russian supply could drive prices up even higher and keep them there for a few months. We therefore expect natural gas prices to remain high into the second half of 2023. High energy prices are showing up on European electricity bills, which have nearly tripled since January 2019. To limit the economic fallout, the UK government introduced the Energy Price Guarantee that promises to save the average household £1,000 a year. The European Union is expected to announce a similar measure very soon.

GRAPH 5
Muted investment reaction to higher prices



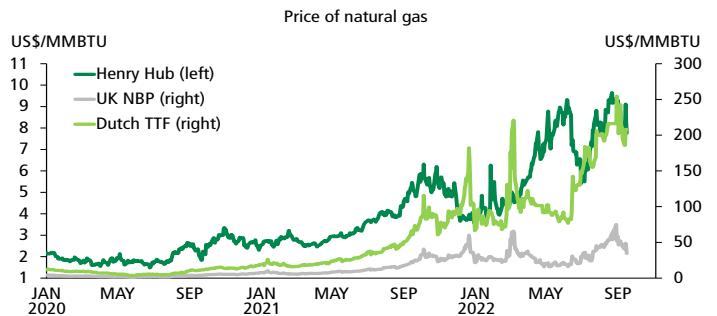
WTI: West Texas Intermediate
Sources: Datastream and Desjardins, Economic Studies

GRAPH 6
Gasoline prices and refining margins have fallen



Sources: Datastream, Bloomberg and Desjardins, Economic Studies

GRAPH 7
Tensions in Europe are keeping natural gas prices high



MMBTU: Million British Thermal Units
Sources: Bloomberg and Desjardins, Economic Studies

Base Metals

Low Inventories Are Creating a Price Floor

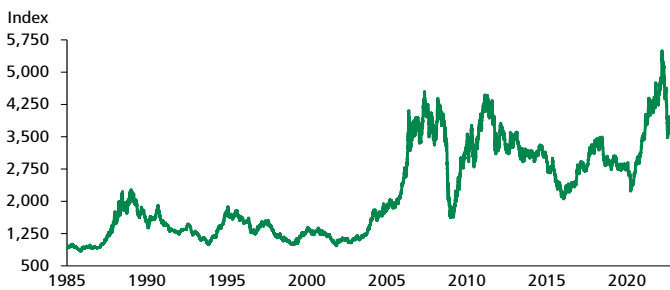
FORECASTS

A decline in the consumption of goods and a slowing economy, particularly in China and Europe, are setting the stage for a pullback in industrial metals prices. We expect the LME (London Metal Exchange Index) to take another moderate hit in 2022, ending the year with an annual average of 4,220. We also expect the downtrend to continue into 2023 as a recession becomes more likely in Canada and some EU member states. However, this downside could be mitigated by low inventories, and uncertainty is likely to keep markets volatile.

The rebound fuelled by China's reopening is now behind us. After beginning to fall again, the LME is holding at around 3,650 points, bringing its year-to-date loss to 18% (graph 8). Driving the downtrend is a slowdown in manufacturing activity, particularly in emerging countries, which is sapping demand. Base metal inventories have fallen sharply, with aluminum and nickel 78.6% and 76.4% below their 5-year medians (graph 9).

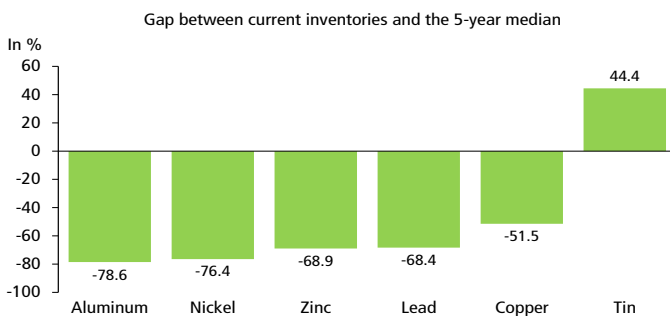
Only tin is in positive territory at +44.4%. Against this backdrop, even though downsides are expected, prices should still remain above pre-pandemic levels. However, between an unstable geopolitical environment, economic uncertainty in China and recession risks, there are multiple factors that could swing prices in either direction.

GRAPH 8
Economic demand outlook points to a drop in the LME index



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

GRAPH 9
Metal inventories are low

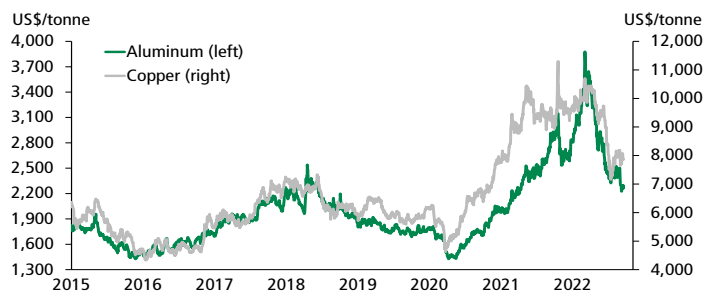


Sources: Datastream and Desjardins, Economic Studies

ALUMINIUM

The price of aluminum has fallen 19% since the start of the year (graph 10). Aluminum supply continues to grow, mainly due to Chinese production, with global output posting a 2% year-on-year gain in July, according to World Aluminium. However, China has imposed restrictions on electricity use, which should put a damper on Chinese supply. In Europe and North America, production continues to contend with high energy prices. With falling demand expected to be offset by limited global supply and low inventories, the downward potential of aluminum prices is therefore limited. The medium-term outlook remains favourable, with expectations of increased aluminum use in manufacturing as part of the energy transition.

GRAPH 10
Increasing supply and gradual inventory replenishment should push copper prices down



Sources: Datastream and Desjardins, Economic Studies

COPPER

High prices in recent months have pushed mines to ramp up production. Combined with a slowdown in demand, the price of copper has fallen 19% since the start of the year (graph 10 on page 4). However, supply chain disruptions persist. Mine output in Latin America remains uncertain due to a risk of labour strikes, local opposition to mines, declining ore quality and droughts. Much like with aluminum, the energy transition is expected to drive growing demand for copper over the medium term. However, the supply-side situation is less clear. New mining projects will need to be developed to meet the anticipated rise in demand. As a result, we expect the price of copper to remain high.

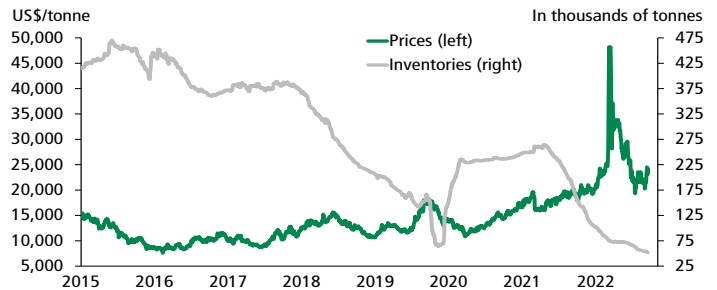
NICKEL

The price of nickel fluctuated around US\$24,000 per tonne in recent weeks (graph 11). A current market surplus suggests prices will continue to decline over the second half of 2022 and into 2023, but they're still expected to remain above pre-pandemic levels. Additionally, the inherent risks of the war in Ukraine, supply chain disruptions and China's recovery could all put upward pressure on nickel prices.

OTHER METALS

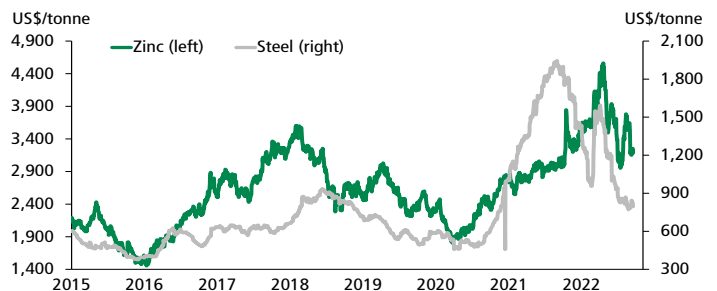
Zinc production continues to face challenges, limiting the potential for its price to decrease. So far, the price of zinc has fallen 11% in 2022 (graph 12). With the market in deficit, zinc prices are expected to remain high for another few months still. As for steel, prices have fallen 40% since the start of the year, with lockdowns in China and the war in Ukraine adding to uncertainty about the 2022 and 2023 demand outlook. Support may come from China's recovery plan, but it might not be enough to counter the global economic slowdown, which could drag prices down further.

GRAPH 11
Low nickel inventories are limiting price declines



Sources: Datastream and Desjardins, Economic Studies

GRAPH 12
Demand for steel is on the decline



Sources: Datastream and Desjardins, Economic Studies

Precious Metals

Gold Prices under Competing Pressures

FORECASTS

Oposing forces are exerting pressure on the price of gold. On one side, geopolitical uncertainty, an economic slowdown and recession risks are pushing prices upward. On the other side, rising bond yields and a firm US dollar are pulling them down. We expect gold prices to moderately bounce back by year-end 2022 and in early 2023 as the economic climate deteriorates. We project that the 2022 annual average gold price will come in at US\$1,810 per ounce, after which it will resume its downward trend.

GOLD & SILVER

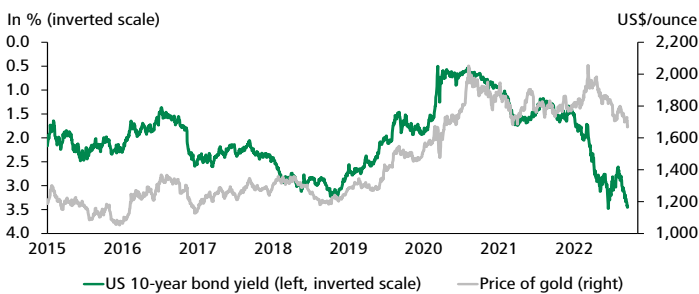
Gold regained some ground in August as China-US tensions and recession risks pushed investors into safe havens, bringing the price decrease for 2022 to approximately 5% (graph 13). However, the US dollar has also risen in value, pushing the price of gold down. Also compounding the effect has been bond yields resuming their upward trend. In the current economic and geopolitical context, gold's status as a safe haven is likely to keep its price up for the next several months. Silver, on the other hand,

has suffered a larger loss, falling 20% since the start of the year (graph 14). Its price movements have been tracking gold.

PLATINUM & PALLADIUM

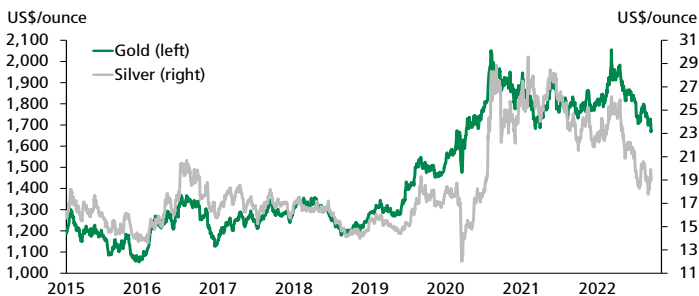
Platinum and palladium prices remain volatile. They're posting respective gains of -12.4% and 2.2% for 2022 (graph 15). We expect the price of palladium to remain high, with Russia representing roughly 40% of global mining production and obvious supply chain disruptions. Non-Russian production is expected to pick up, however, in the second half of 2023.

GRAPH 13
Gold's price decline remains limited



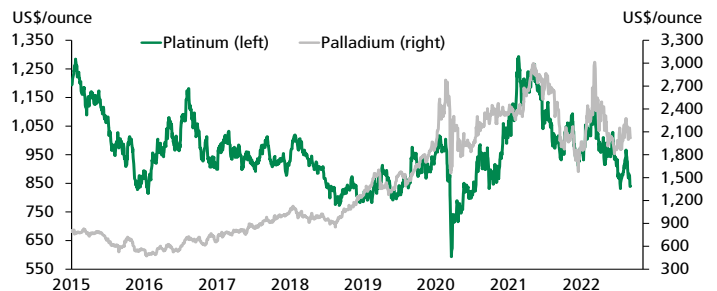
Sources: Datastream and Desjardins, Economic Studies

GRAPH 14
Silver has taken a steeper plunge



Sources: Datastream and Desjardins, Economic Studies

GRAPH 15
Limited palladium supply is boosting prices



Sources: Datastream and Desjardins, Economic Studies

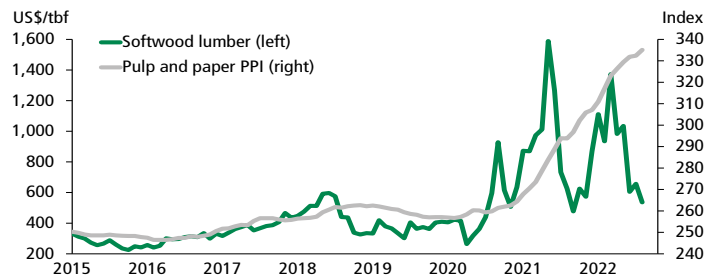
Other Commodities

Softwood Lumber Prices Are Down While the Grain Outlook Remains Uncertain

FOREST PRODUCTS

Softwood lumber prices have slumped in recent months (graph 16) with multiple factors acting to cool demand since spring. Prices themselves have soured some buyers of materials and future homebuyers. On top of that, interest rate hikes, surging energy prices and inflation have combined to crimp consumers' purchasing power (graph 17). Although not quite at the lows seen in September 2021, prices have fallen as a result, having been on a slight downward trend for several weeks. Still, there's some pressure on demand, with needs still unmet on the housing front. As for pulp and paper, prices remain high due to rising costs of raw materials, chemicals and fossil fuels, as well as storage costs for some companies. **The economic slowdown, or looming recession, will reduce demand for all forest products, which should temper prices at the end of 2022 and into 2023.**

GRAPH 16
Softwood lumber prices are easing again

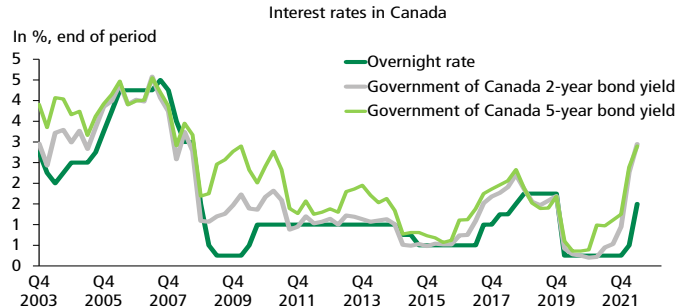


tbf: thousands board feet
Sources: Datastream and Desjardins, Economic Studies

AGRICULTURAL COMMODITIES

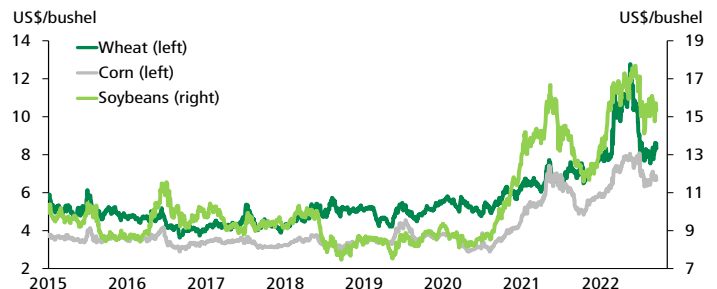
Even though the northern hemisphere is well into harvest season, Mother Nature still has some tricks up her sleeve and we may yet see some disappointing yields and production volumes. While spring and early summer saw prices dip, they're on the rise again, for soybeans and corn in particular (graph 18). That's despite relief from the deal reached by Ukraine and Russia in late July to reopen ports for grain exports. As for wheat, prices haven't moved much since mid-July. The tension remains palpable: any breach of the agreements between Russia and Ukraine for the transport of siloed crops could send prices skyward again. Overall, as we approach the end of summer, wheat, corn and soybean prices stand at pre-Ukraine war levels—but still significantly above late 2010s prices. **We could see prices fall in 2023 due to slackening demand, but only if Ukrainian exports continue. Prices will remain above historic averages but below 2022 levels.**

GRAPH 17
Borrowing costs have risen considerably and could climb further



Sources: Bank of Canada and Desjardins, Economic Studies

GRAPH 18
With no possibility for supply adjustments in the short term, grain prices will remain high



Sources: Datastream and Desjardins, Economic Studies

TABLE 1
Commodities

	SPOT PRICE	VARIATION (%)				LAST 52 WEEKS		
	Sep. 16	-1 month	-3 months	-6 months	-1 year	High	Average	Low
Index								
Reuters/Jefferies CRB	278.9	-3.1	-12.1	-0.6	24.5	329.6	271.7	218.1
Bloomberg Commodity Index	116.7	-3.9	-10.4	-3.3	18.4	136.6	114.9	95.1
Bank of Canada	698.2	-3.4	-20.0	-17.2	16.7	910.7	745.8	598.1
Energy								
Brent oil (US\$/barrel)	91.4	-1.1	-23.9	-7.0	20.6	128.2	96.3	69.0
WTI oil (US\$/barrel)	85.6	-4.1	-27.2	-9.9	17.8	123.7	93.1	65.6
Gasoline (US\$/gallon)	3.69	-6.3	-26.3	-14.5	16.6	5.01	3.86	3.17
Natural gas (US\$/MMBTU)	7.76	-16.8	4.0	63.5	45.5	9.68	6.14	3.56
Base metals								
LME index	3,689	-4.2	-13.0	-28.6	-14.4	5,506	4,427	3,473
Aluminium (US\$/tonne)	2,268	-5.0	-8.6	-29.9	-20.6	3,878	2,836	2,225
Copper (US\$/tonne)	7,869	-1.3	-13.3	-21.7	-15.8	11,300	9,303	7,160
Nickel (US\$/tonne)	24,229	9.3	-3.7	-47.1	24.8	48,241	24,591	17,925
Zinc (US\$/tonne)	3,184	-15.2	-12.3	-16.4	3.7	4,563	3,572	2,952
Precious metals								
Gold (US\$/ounce)	1,675	-5.7	-8.7	-12.3	-4.7	2,056	1,822	1,667
Silver (US\$/ounce)	19.0	-5.6	-11.4	-23.9	-19.1	26.2	22.4	17.8
Platinum (US\$/ounce)	892	-4.3	-5.4	-12.0	-4.8	1,151	971	831
Palladium (US\$/ounce)	2,089	-1.6	12.0	-14.4	2.9	3,015	2,101	1,576
Other commodities								
Lumber (US\$/tbf)	474	-20.5	-16.7	-58.4	-20.3	1,464	838	474
Wheat (US\$/bushel)	8.60	9.4	-20.2	-19.6	20.6	14.25	8.87	6.90
Corn (US\$/bushel)	6.68	4.5	-15.9	-6.0	30.0	8.09	6.55	4.82
Soybean (US\$/bushel)	15.00	-0.1	-12.6	-7.6	18.0	17.70	14.83	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: 97 (range: 90 to 105)	Target: 82 (range: 60 to 110)
Natural gas Henry Hub (US\$/MMBTU)	2.13	3.72	Target: 7.15 (range: 6.00 to 8.50)	Target: 5.80 (range: 3.00 to 10.00)
Gold (US\$/ounce)	1,771	1,790	Target: 1,810 (range: 1,725 to 1,875)	Target: 1,705 (range: 1,400 to 2,000)
LME index—base metals	2,810	4,090	Target: 4,220 (range: 3,900 to 4,500)	Target: 3,260 (range: 2,600 to 4,000)

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