

COMMODITY TRENDS

Are Commodity Prices Really Immune to Economic Weakness?

This issue of Commodity Trends introduces our forecast for the differential between WTI (West Texas Intermediate) and WCS (Western Canadian Select) oil prices, and our aluminum, copper, nickel and iron price projections. They are presented in their respective sections (energy and base metals) and in Table 2 on page 7.

Commodity prices were initially propelled by the resilient global economy early in the year, but then saw a fairly broad-based drop as recession fears were stoked once again by the recent financial market turbulence (graph 1). Only precious metals bucked this trend due to their inverse relationship to the economic environment. This is a reminder that commodity prices aren't immune to the effects of broader economic weakness. However, our baseline forecast remains a moderate decline.

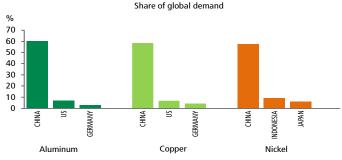
Signs of fractures are beginning to show in the global economy, and we anticipate that recessionary conditions will push commodity prices lower. The Chinese economic rebound should mitigate this, in part because of the country's outsized weight in commodities consumption, particularly for industrial metals (graph 2). That said, expected downturns in the other major economies mean that China won't necessarily be immune to the consequences of slower global growth. And commodities aren't immune to sudden changes in market conditions, as we saw with the voluntary cut in production by the Organization of the Petroleum Exporting Countries and its partners (OPEC+).

GRAPH 1 Prices of Several Commodities Have Declined amid the Recent Financial Turmoil



WTI: West Texas Intermediate; WCS: Western Canadian Select Sources: Datastream and Desiardins Economic Studies

GRAPH 2 China Is the Biggest Consumer of Industrial Metals



* 2020 data. Sources: World Bank and Desjardins Economic Studies

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

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Energy

From Market Surplus to Deficit?

FORECASTS

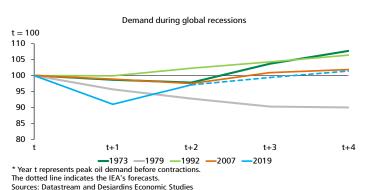
Although oil prices are likely to remain volatile due in part to economic and geopolitical uncertainty, they probably won't fall much. First, the US government has signalled its willingness to buy back oil for its Strategic Petroleum Reserve as a way of stabilizing demand. Second, OPEC+ announced it's cutting production, and others could follow suit if prices collapse. Against this backdrop, we expect West Texas Intermediate (WTI) to average US\$75 per barrel in 2023. It's a different situation for natural gas. Fragmentation of supply due to the war in Ukraine may cause natural gas prices to rise later in 2023, despite the economic slowdown. We expect prices to average US\$3.60 per MMBTU in 2023.

OIL

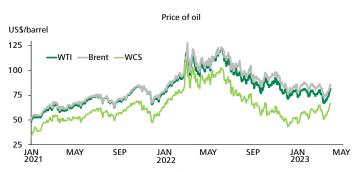
The International Energy Agency (IEA) continues to forecast 2 million barrels in daily oil demand growth in 2023, a 2% year-over-year change. Several factors support this projection. First, emerging market economies are resilient, particularly given the rebound of the Chinese economy. Second, oil availability and affordability in some countries make it a good alternative to natural gas for power generation. Finally, replenishment of the US Strategic Petroleum Reserve (SPR) could temporarily boost demand for oil. Still, global recessions have historically resulted in significant declines in oil consumption, albeit to varying degrees (graph 3). Recent market volatility has increased downside risks to oil demand.

On the supply side, OPEC+ announced it's cutting production by 1.66 MMb/d the rest of the year starting in May. While unexpected, the news isn't surprising. The cartel has been signalling for months that it's willing to cut production to stabilize prices. With oil in increasingly short supply worldwide, the market should remain in deficit for the rest of 2023 (graph 4). This huge mismatch between supply and demand could drive prices higher, especially in the second half of the year. But the risks to oil demand are tilted to the downside, and the deficit could be smaller than expected. Meanwhile Russian oil production remains resilient and close to its pre-Ukraine war level. However, exports have taken a hit, declining by 0.5 MMb/d in February to 7.5 MMb/d. India and China remain the largest buyers and collectively account for 70% of Russian oil exports. While these countries may be uncomfortable with the idea of becoming dependent on Russia, they intend to take advantage of the deep discounts available on Russian oil.

GRAPH 3 A Recession Usually Sees a Drop in Oil Demand



GRAPH 4
Financial Uncertainty Has Pushed down Oil Prices



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



The US was supposed to begin replenishing the SPR soon, but the announcement by OPEC+ could throw a wrench in those plans. As US Energy Secretary Jennifer Granholm said recently, it could take years to refill given today's increasingly tight, fragmented energy market. The federal government can still stabilize demand by replenishing the SPR, but supporting supply could be challenging because the reserve is down to 3.7 billion barrels—its lowest level since 1983. Increased US production should provide a bit of support, however. The US Energy Information Administration's latest forecast is for 4.7% annual growth in US crude oil production in 2023. Canada's production is expected to reach 5.8 million barrels per day in 2023. With sufficient—albeit tighter—export capacity, we think that the WTI–WCS differential will average US\$20.50 per barrel in 2023 (graph 5).

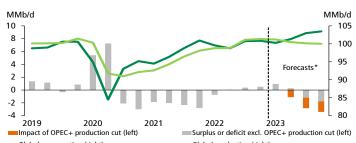
GASOLINE

Despite lower crude oil prices in March, gasoline prices increased slightly. This was due to higher refinery margins on the back of lower-than-anticipated production (graph 6). Refinery margins are expected to remain high amid the European Union's ban on imports of Russian refined oil products such as gasoline and fragmented global supply. This should be partially offset by lower crude oil prices.

NATURAL GAS

After unseasonably warm temperatures in January and February, natural gas inventories in the US continue to grow rapidly and are now 20% above their five-year average. As a result, the Henry Hub price has declined significantly and is currently around US\$2.35 per MMBTU, a level not seen since before the pandemic (graph 7). However, prices could rise again with temperatures closer to seasonal norms.

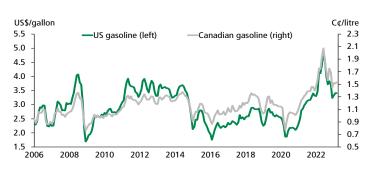
GRAPH 5 Demand Is Expected to Grow Faster than Supply



—Global consumption (right)

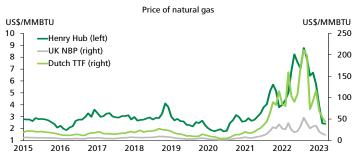
* International Energy Agency (IEA) outlook assuming members adhere to the production agreement and no change in the demand outlook. Sources: IEA and Desjardins Economic Studies

GRAPH 6 Gasoline Prices Have Risen Slightly



Sources: Datastream, Bloomberg and Designdins Economic Studies

GRAPH 7 A Mild Winter and High Inventory Levels Have Pushed down **Natural Gas Prices**



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



Base Metals

How Long Can Base Metal Prices Hold Up?

FORECASTS

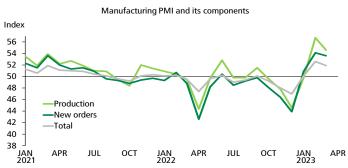
Amid a Chinese economic rebound and the risk of a financial crisis, base metal prices were volatile early in the year. While prices may recover some of the recent lost ground in the very near term, the decline in demand for goods and the widespread economic slowdown are likely to lead to further price declines later in 2023. While the size of these declines is uncertain, we don't expect them to completely erase the gains made since the beginning of the pandemic. In the medium term, the demand outlook is more encouraging as the energy transition accelerates and infrastructure projects—largely linked to carbon reduction efforts—multiply. However, the recent financial market volatility is a reminder that industrial metal prices aren't immune to the effects of changing investor sentiment.

Base metal prices were already falling from their early-year peak driven by a rebound in Chinese industrial activity (graph 8), but recent fears of a financial crisis have exacerbated the decline. In addition, Chinese industrial activity should increasingly face tougher conditions as global consumption of goods slows. Elsewhere in the world, interest rates are biting harder. US industrial production stalled in February, having fallen by 0.6% in November and 1.4% in December, and increasing by 0.3% in January. With further rate increases expected in many countries, demand for metals outside China is likely to continue to weaken.

ALUMINUM

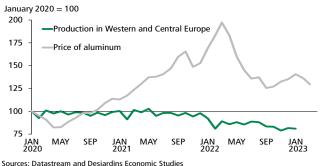
Aluminum prices have declined 9.4% since the beginning of February as the stronger US dollar has reduced its affordability and the demand outlook has weakened (graph 9). However, production is slowing—in Western and Central Europe, it's 20% below its pre-Ukraine war level. Despite the expected economic slowdown, the potential for further price weakness is limited, and we expect prices to average US\$2,440 per tonne in 2023. The price of aluminum should benefit from the economic rebound in 2024, and we therefore expect an annual average of US\$2,570 per tonne next year. This price level, combined with the growing need for green aluminum, should enable Canadian aluminum smelters to weather the anticipated economic turbulence.

GRAPH 8
Chinese PMIs Continued to Rebound Strongly at the Start of the Year



Sources: National Bureau of Statistics of China and Desjardins Economic Studies

GRAPH 9 Low Aluminum Production Could Limit Its Price Decline



Sources: Datastream and Desjardins Economic Studies



COPPER

The price of copper has also declined since early February. Signs of slowing demand are building as global copper inventories have increased by 1.6% over the past two months (graph 10). However, we expect copper prices to remain well-supported The Chinese economic rebound, uncertainties surrounding production from Chilean and Peruvian mines, and the possibility of new sanctions on Russian exports could all put upward pressure on copper prices. As such, we expect copper to average still-high levels of US\$8,390 per tonne in 2023 and US\$8,225 in 2024.

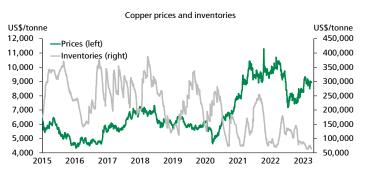
NICKEL

The LME (London Metal Exchange) nickel price has fallen from its peak of US\$30,234 per tonne in January of this year. Abundant supply from Indonesia and China is expected to continue driving down nickel prices this year (graph 11). We expect nickel to average US\$23,250 per tonne in 2023 and US\$21,550 in 2024. Volumes traded—and confidence in LME nickel contracts—remain low following last year's short squeeze. Global Commodities Holdings will launch a nickel price index at the end of March, with the aim of offering an alternative to the LME.¹

IRON ORE

As with other base metals, prices for iron ore are projected to decline this year (graph 12). We expect prices to average around US\$112 per tonne in 2023 and US\$92 in 2024. However, the Chinese economic rebound and limited supply could put upward pressure on iron ore prices.

GRAPH 10 Copper Prices Have Declined



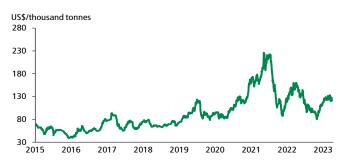
Sources: Datastream and Desjardins Economic Studies

GRAPH 11 Nickel Prices Have Dropped Sharply



Sources: Datastream and Desjardins Economic Studies

GRAPH 12 Iron Prices Rebounded after China Withdrew Its Public Health Measures



Sources: Datastream and Desjardins Economic Studies

¹ This index will only include consumers and producers directly involved in the physical nickel trade to better represent market fundamentals.



Precious Metals

A Safe Haven in Gold

FORECASTS

While the price of gold may lose some ground in the very near term, financial market uncertainty may drive investors towards it. In addition, the anticipated deterioration in the economy—likely coupled with a decline in bond yields—should also boost the price of gold. As a result, we expect gold to rebound in the second half of the year and end 2023 at an average of US\$1,860 per ounce.

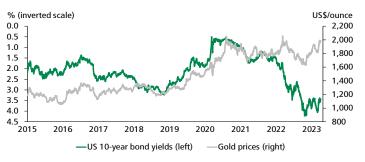
GOLD & SILVER

The price of gold is up 2.9% since the beginning of February. While the historical relationship between gold and the US 10-year bond yield suggests that gold should have depreciated (graph 13), economic and geopolitical uncertainty combined with fears related to the fragility of the banking sector pushed it higher. While gold may lose some ground in the very near term, the anticipated recession should push it higher as investors are likely to turn to safe haven assets. Silver, on the other hand, has increased 1.8% since the start of February (graph 14). A more persistent-than-expected rebound in industrial demand in China may help underpin its price.

PLATINUM & PALLADIUM

Platinum and palladium have declined by 1.8% and 12.1% respectively since the beginning of February (graph 15), partly due to poor performance in global automotive sales as these metals are used to manufacture catalytic converters. The two commodities are also less attractive to investors as a safe haven than gold and silver are. Motor vehicle sales in China plummeted

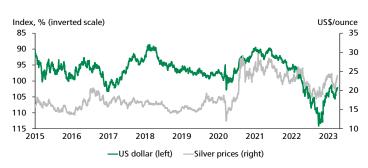
GRAPH 13 Economic and Geopolitical Uncertainty Keeps Fuelling Gold Prices



Sources: Datastream and Desjardins Economic Studies

34.8% due to the withdrawal of purchase subsidies, which negatively impacted the demand outlook. Once again, however, if the Chinese economic rebound surprises to the upside, that could put upward pressure on the prices of these metals in the coming months.

GRAPH 14 A Rebound Was Also Observed on the Silver Side



Sources: Datastream and Desiardins Economic Studies

GRAPH 15 Platinum and palladium prices remain highly volatile



Sources: Datastream and Desjardins Economic Studies



TABLE 1 Commodities

	SPOT PRICE	% CHANGE				ı	LAST 52 WEEKS	;
	Dec. 31	1-month	3-month	6-month	1-year	High	Average	Low
Index								
Reuters/Jefferies CRB	271.1	2.4	-1.7	-4.0	-12.0	329.6	284.7	254.0
Bloomberg Commodity Index	106.5	1.3	-4.5	-8.2	-18.7	136.6	117.1	102.2
Bank of Canada	581.4	-5.7	-0.2	-15.6	-29.5	8.888	709.3	571.4
Energy								
Brent oil (US\$/barrel)	84.9	5.7	-0.4	-10.2	-22.1	123.7	95.1	72.6
WTI oil (US\$/barrel)	80.7	0.5	1.1	-9.9	-22.6	122.1	90.1	66.6
WCS oil (US\$/barrel)	54.5	-5.1	-4.2	-7.3	-40.3	103.0	68.6	43.0
Gasoline (CAN\$/litre)	3.50	1.2	7.3	-10.6	-14.5	5.01	3.88	3.09
Gasoline (US\$/gallon)	1.52	0.0	0.0	0.0	0.0	2.15	1.77	1.41
Natural gas (US\$/MMBTU)	2.11	-19.2	-38.4	-68.8	-69.9	9.68	6.05	1.99
Base metals								
LME Index	3,934	-0.8	-7.9	8.8	-23.1	5,230	4,050	3,453
Aluminum (US\$/tonne)	2,323	1.8	-9.5	-1.5	-27.6	3,444	2,488	2,092
Copper (US\$/tonne)	8,740	-2.0	-4.7	14.0	-15.0	10,452	8,558	7,160
Nickel (US\$/tonne)	22,910	-0.1	-13.9	2.7	-30.5	33,875	25,622	19,333
Zinc (US\$/tonne)	2,853	-3.9	-14.8	-3.4	-37.0	4,563	3,328	2,736
Iron ore (US\$/tonne)	128.5	-1.2	4.0	34.6	-16.8	155	115	80
Precious metals								
Gold (US\$/ounce)	2,022	6.1	5.8	22.3	2.3	2,022	1,807	1,628
Silver (US\$/ounce)	24.0	13.8	1.4	25.2	-6.3	25.9	21.4	17.8
Platinum (US\$/ounce)	1,011	2.3	-4.4	15.8	3.2	1,100	953	831
Palladium (US\$/ounce)	1,482	3.5	-14.8	-28.1	-37.9	2,495	1,914	1,361
Other commodities								
Lumber (US\$/MBF)	376	6.6	9.4	-24.5	-57.6	1,054	543	337
Wheat (US\$/bushel)	6.92	3.0	-7.0	-22.4	-37.9	12.78	8.55	6.54
Corn (US\$/bushel)	6.48	6.6	-2.7	-3.6	-14.7	8.09	6.85	6.06
Soybean (US\$/bushel)	15.10	2.2	0.3	11.6	-8.8	17.70	15.24	13.16

CRB: Commodity Research Bureau; WTI: West Texas Intermediate; MMBTU: Million British Thermal Units; LME: London Metal Exchange; MBF: thousand board feet NOTE: Commodity table based on previous day's close.

TABLE 2 Commodity prices: History and forecasts

ANNUAL AVERAGE	2021	2022	2023f	2024f				
Energy								
WTI oil (US\$/barrel) Brent oil (US\$/barrel) WTI–WCS spread (US\$/barrel) Henry Hub natural gas (US\$/MMBTU)	68 71 54 3.72	95 98 75 6.51	75 78 55 3.60	82 85 62 4.55				
Base Metals								
Aluminum (US\$/tonne) Copper (US\$/tonne) Nickel (US\$/tonne) Iron ore (US\$/tonne)	2,473 9,312 18,460 160	2,706 8,832 26,263 120	2,425 8,395 23,010 113	2,570 8,225 21,550 92				
Precious metal								
Gold (US\$/ounce)	1,800	1,803	1,870	1,740				

f: forecasts; WTI: West Texas Intermediate; MMBTU: Million British Thermal Units; WCS: Western Canadian Select Sources: Datastream and Desjardins, Economic Studies