

Commodities Slammed by COVID-19 Disruptions

A Publication of BMO Capital Markets Economic Research · Douglas Porter, CFA, Chief Economist, BMO Financial Group

Macroeconomic Developments:

- The rapid spread of COVID-19 and widening economic shutdowns across the globe have sent commodities plummeting.
- Simultaneously, a collapse in OPEC+ negotiations and unexpected price war have crushed oil prices. On the flip side, aside from a brief panic-driven sell-off, gold has benefited from investor demand for safe haven assets.
- **A global recession is increasingly likely in 2020.** However, it is encouraging to see that activity in China's economy, the key driver of global commodities demand, appears to be resuming.
- **Though it remains uncertain as to when the pandemic will be contained globally, most commodities should rebound from their recent lows once the disruptions begin to ease.**

ECONOMIC RESEARCH

+1 (416) 359-6372
economics.bmo.com

Carl Campus, Economist

+1 (416) 359-6792
carl.campus@bmo.com

Aaron Goertzen, CFA, Senior Economist

+1 (416) 359-8229
aaron.goertzen@bmo.com

Sarah Howcroft, CFA, Senior Economist

+1 (416) 359-8458
sarah.howcroft@bmo.com

Art Woo, Senior Economist

+1 (416) 359-4525
art.woo@bmo.com

Commodity Forecast Updates:

- The **BMO Capital Markets Commodity Price Index** sank 5.4% in February.
- **Oil:** WTI forecasts have been slashed to US\$35 in 2020 and \$45 in 2021. Nonetheless, oil prices are likely to remain volatile given the pace of demand reduction and uncertain supply response, mainly from OPEC+.
- **Metals:** starkly weaker outlook for base metals given prolonged demand disruptions. Initial flight to cash triggered liquidation of gold positions, but the massive global policy response should lift prices in the months ahead.
- **Lumber:** forecast for 2020 was cut sharply as evaporating demand led to steep discounting and several mill curtailments with buyers paring back existing inventories.
- **Agriculture:** downward revisions across the board due to the impact of COVID-19 on global demand and markets. Livestock prices have been reduced most significantly, as precautionary stockpiling by consumers has shifted demand toward non-perishable products.

Commodity Price Outlook

Commodity	2019	2020f	2021f	Commodity	2019	2020f	2021f		
Energy				Metals					
Crude Oil ^a	US\$/bbl	57	35 ↓	45 ↓	Gold	US\$/oz	1,393	1,600 ↑	1,525 ↑
Natural Gas ^b	US\$/mmbtu	2.57	2.10 ↓	2.25 ↓	Silver	US\$/oz	16.20	16.50 ↓	17.75 ↑
Agriculture				Forest Products					
Wheat	US\$/bushel	4.94	5.30 ↓	5.40 ↓	Aluminum	US\$/lb	0.81	0.75 ↓	0.82 ↓
Canola	US\$/tonne	344	350 ↓	390 ↓	Copper	US\$/lb	2.72	2.40 ↓	2.80 ↓
Cattle	US\$/cwt	116	110 ↓	120 ↓	Nickel	US\$/lb	6.31	5.85 ↓	6.75 ↓
Hogs	US\$/cwt	70	70 ↓	78 ↓	Zinc	US\$/lb	1.16	0.90 ↓	1.00 ↓
				Lumber	US\$/mbf	360	330 ↓	355	

Sources: BMO Economics, Haver Analytics

f = forecast; ↑, ↓ = forecast changes from last month; ^a WTI; ^b Henry Hub

Energy, Materials and Agriculture

	Crude Oil (US\$/bbl)	Natural Gas		Lumber (US\$/mbf)	Wheat (US\$/bushel)	Canola (US\$/tonne)	Cattle (US\$/cwt)	Hogs	
		Henry Hub (US\$/mmbtu)	AECO						
2007	72.36	6.98	6.02	245	6.38	378	93.92	65.56	
2008	99.57	8.86	7.78	215	7.98	527	93.60	66.05	
2009	61.69	3.95	3.51	177	5.30	371	83.85	58.11	
2010	79.43	4.39	3.89	255	5.81	429	94.95	75.60	
2011	95.08	4.00	3.67	255	7.10	566	114.54	90.34	
2012	94.20	2.75	2.39	299	7.50	601	122.65	84.93	
2013	97.93	3.73	3.08	356	6.84	545	126.40	89.33	
2014	93.26	4.39	4.08	349	5.88	400	151.50	105.83	
2015	48.69	2.63	2.12	277	5.08	371	146.49	69.40	
2016	43.21	2.52	1.64	305	4.36	366	118.61	65.60	
2017	50.91	2.99	1.67	401	4.36	393	117.90	69.87	
2018	64.84	3.17	1.19	480	4.95	389	114.64	65.26	
2019	56.99	2.57	1.36	360	4.94	344	115.84	69.92	
y-t-d 2020	50.71	1.94	1.58	412	5.49	349	118.29	63.51	
2019	Mar	58.14	2.95	1.93	369	4.53	342	128.22	68.57
	Apr	63.86	2.65	0.69	326	4.51	337	126.27	83.66
	May	60.85	2.64	1.30	312	4.58	328	111.32	86.39
	Jun	54.65	2.40	0.46	360	5.25	341	108.57	78.25
	Jul	57.44	2.37	1.01	356	5.06	341	107.55	78.22
	Aug	54.82	2.22	0.76	340	4.75	339	104.56	69.98
	Sep	56.96	2.56	0.53	373	4.79	338	99.66	63.58
	Oct	53.98	2.33	1.71	367	5.08	346	109.98	64.88
	Nov	56.95	2.65	2.11	384	5.16	346	119.49	62.92
	Dec	59.81	2.22	1.82	390	5.42	350	121.72	66.08
2020	Jan	57.53	2.02	1.75	396	5.65	360	125.18	66.80
	Feb	50.53	1.91	1.39	433	5.49	345	118.90	60.59
	m-t-d Mar	38.02	1.84	n.a.	n.a.	5.19	338	104.07	62.28
Forecast	2020 avg.	35.00 ↓	2.10 ↓	1.45 ↓	330 ↓	5.30 ↓	350 ↓	110.00 ↓	70.00 ↓
	2021 avg.	45.00 ↓	2.25 ↓	1.50 ↓	355	5.40 ↓	390 ↓	120.00 ↓	78.00 ↓

Commodity price forecasts are by BMO Economics and are independent of those used by BMO Capital Markets Equity Research

↑ and ↓ indicate annual forecast changes from last month

Base and Precious Metals

		Copper	Aluminum (US\$/lb)	Zinc	Nickel	Gold (US\$/oz)	Silver
	2007	3.23	1.20	1.47	16.89	697	13.40
	2008	3.15	1.17	0.85	9.57	872	15.01
	2009	2.34	0.75	0.75	6.64	973	14.67
	2010	3.42	0.99	0.98	9.89	1225	20.16
	2011	4.00	1.09	0.99	10.38	1570	35.11
	2012	3.61	0.92	0.88	7.96	1668	31.15
	2013	3.32	0.84	0.87	6.81	1411	23.83
	2014	3.11	0.85	0.98	7.65	1266	19.08
	2015	2.50	0.75	0.88	5.37	1160	15.70
	2016	2.21	0.73	0.95	4.35	1248	17.10
	2017	2.80	0.89	1.31	4.72	1258	17.06
	2018	2.96	0.96	1.33	5.95	1270	15.71
	2019	2.72	0.81	1.16	6.31	1393	16.20
	y-t-d 2020	2.63	0.78	0.99	5.90	1589	17.64
2019	Mar	2.93	0.85	1.29	5.92	1302	15.32
	Apr	2.92	0.84	1.33	5.81	1288	15.03
	May	2.73	0.81	1.25	5.44	1283	14.62
	Jun	2.66	0.80	1.18	5.43	1358	14.99
	Jul	2.69	0.81	1.11	6.10	1415	15.75
	Aug	2.59	0.79	1.03	7.11	1497	17.15
	Sep	2.61	0.79	1.05	8.01	1510	18.18
	Oct	2.60	0.78	1.11	7.76	1495	17.66
	Nov	2.66	0.80	1.10	6.89	1472	17.18
	Dec	2.75	0.80	1.03	6.26	1480	17.10
2020	Jan	2.74	0.80	1.07	6.15	1561	17.97
	Feb	2.58	0.76	0.96	5.78	1599	17.91
	m-t-d Mar	2.52	0.76	0.89	5.65	1629	16.48
Forecast	2020 avg.	2.40 ↓	0.75 ↓	0.90 ↓	5.85 ↓	1600 ↑	16.50 ↓
	2021 avg.	2.80 ↓	0.82 ↓	1.00 ↓	6.75 ↓	1525 ↑	17.75 ↑

Commodity price forecasts are by BMO Economics and are independent of those used by BMO Capital Markets Equity Research

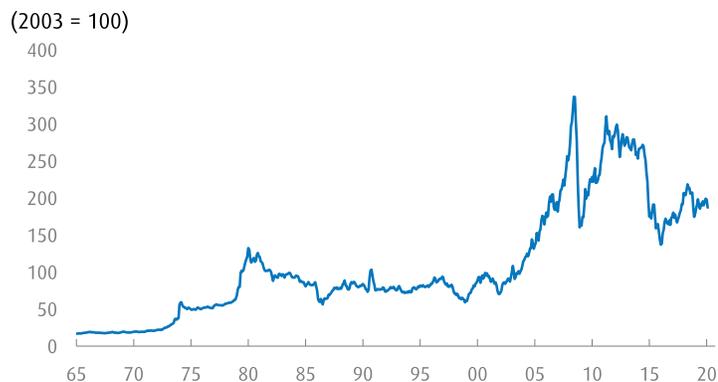
↑ and ↓ indicate annual forecast changes from last month

Commodity Indices and Forecasts (US\$-terms : 2003 = 100)

		All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities (C\$-terms)
	2011	283.7	275.6	364.8	90.1	205.3	200.3
	2012	279.7	270.2	353.8	108.4	216.9	199.5
	2013	271.7	283.0	304.1	128.6	200.1	199.6
	2014	252.1	271.4	270.5	121.3	170.0	198.4
	2015	170.9	142.5	244.8	98.3	151.3	155.5
	2016	160.7	126.9	241.1	110.3	135.9	151.8
	2017	178.1	149.6	249.4	144.8	139.8	165.0
	2018	204.3	189.0	257.5	169.5	147.2	188.8
	2019	191.0	165.6	267.4	124.4	141.3	180.9
Forecast	2020	160.0	102.9	277.9	117.1	146.6	151.6
	2021	179.3	131.3	286.9	123.4	155.5	166.3
	2018 Q2	214.2	196.7	266.8	210.7	150.1	197.2
	Q3	208.8	202.1	247.8	170.9	148.3	194.9
	Q4	189.4	173.8	247.3	115.6	146.3	178.4
	2019 Q1	185.4	160.4	256.6	128.3	143.2	176.0
	Q2	191.7	173.4	258.3	114.5	138.3	182.9
	Q3	192.3	163.5	276.8	123.5	137.9	181.2
	Q4	194.7	165.0	278.0	131.3	145.7	183.5
Forecast 2020	Q1	176.9	130.5	278.7	139.4	148.5	167.2
	Q2	145.3	81.6	272.3	97.8	145.6	139.5
	Q3	155.5	96.0	277.8	111.7	143.7	147.7
	2019 Feb	186.5	160.2	257.9	137.3	145.2	175.9
	Mar	190.9	169.7	260.4	127.2	136.6	181.8
	Apr	198.2	185.0	260.1	112.5	136.0	189.2
	May	191.4	176.6	254.3	108.1	134.0	183.8
	Jun	185.4	158.7	260.4	122.8	144.8	175.8
	Jul	191.9	166.4	268.9	123.1	142.0	179.3
	Aug	189.7	158.7	278.3	118.4	136.2	179.6
	Sep	195.5	165.5	283.3	128.8	135.5	184.7
	Oct	190.3	156.6	280.4	126.9	142.4	179.4
	Nov	194.8	165.7	277.0	132.7	144.9	183.8
	Dec	199.1	172.7	276.6	134.4	149.9	187.3
	2020 Jan	197.7	165.8	282.6	136.5	155.1	184.6
	Feb	187.0	146.0	281.6	151.1	149.5	177.4

Commodity price indices and forecasts are by BMO Capital Markets Economics
 Forecasts are independent of those used by BMO Capital Markets Equity Research

All-Commodity Index — Nominal US\$-Terms



Source: BMO Economics

All-Commodity Index — Real US\$-Terms



Source: BMO Economics

All-Commodity Index — Nominal



Source: BMO Economics

Technical Note

The BMO Capital Markets Commodity Price Index is a fixed-weight, export-based index that encompasses the price movement of 16 commodities key to Canadian exports. Weights are each commodity's average share of the total value of exports of the 16 commodities during the period 2012-16. Similarly, weights of sub-index components reflect the relative importance of commodities within their respective product group.

The all-commodities index and sub-indices consist of the following:

(percent)	Weight in All-Commodities Index	Weight in Sub-Index
Metals & Minerals	29.8	100.0
Gold	10.6	35.4
Silver	1.4	4.6
Aluminum	6.4	21.4
Copper	2.3	7.8
Nickel	3.2	10.8
Zinc	0.9	3.0
Uranium	1.3	4.4
Potash	3.8	12.6
Oil and Gas	54.6	100.0
Crude Oil	47.6	87.2
Canadian Natural Gas	7.0	12.8
Forest Products	6.5	100.0
Lumber	5.5	84.1
OSB	1.0	15.9
Agricultural Products	9.1	100.0
Wheat	4.5	49.5
Canola	3.3	36.6
Hogs	0.3	3.0
Beef Cattle	1.0	10.9
All Commodities	100.0	—

Source: BMO Economics

Unless otherwise specified, all indices reported in this publication correspond to prices in U.S. dollars.

General Disclosures

"BMO Capital Markets" is a trade name used by the BMO Investment Banking Group, which includes the wholesale arm of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Limited in the U.K., Bank of Montreal Europe Plc in Ireland and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Limited, Bank of Montreal Europe Plc and BMO Capital Markets Corp are affiliates. BMO does not represent that this document may be lawfully distributed, or that any financial products may be lawfully offered or dealt with, in compliance with any regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder. This document is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Their contents have not been reviewed by any regulatory authority. Bank of Montreal or its subsidiaries ("BMO Financial Group") has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This document is not to be construed as an offer to sell, a solicitation for or an offer to buy, any products or services referenced herein (including, without limitation, any commodities, securities or other financial instruments), nor shall such information be considered as investment advice or as a recommendation to enter into any transaction. Each investor should consider obtaining independent advice before making any financial decisions. This document is provided for general information only and does not take into account any investor's particular needs, financial status or investment objectives. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

Dissemination of Economic Publications

Our publications are disseminated via email and may also be available via our web site <https://economics.bmo.com>. Please contact your BMO Financial Group Representative for more information.

Additional Matters

This report is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Its contents have not been reviewed by any regulatory authority. BMO Capital Markets does not represent that this report may be lawfully distributed or that any financial products may be lawfully offered or dealt with, in compliance with regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder.

To Australian residents: BMO Capital Markets Limited is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and is regulated by the UK Financial Conduct Authority under UK laws, which differ from Australian laws. This document is only intended for wholesale clients (as defined in the Corporations Act 2001) and Eligible Counterparties or Professional Clients (as defined in Annex II to MiFID II).

To Canadian Residents: BMO Nesbitt Burns Inc. furnishes this report to Canadian residents and accepts responsibility for the contents herein subject to the terms set out above. Any Canadian person wishing to effect transactions in any of the securities included in this report should do so through BMO Nesbitt Burns Inc.

To U.K./E.U. Residents: In the UK, Bank of Montreal London Branch is authorised and regulated by the Prudential Regulation Authority and the Financial Conduct Authority ("FCA") and BMO Capital Markets Limited is authorised and regulated by the FCA. The contents hereof are intended solely for clients which satisfy the criteria for classification as either a "professional client" or an "eligible counterparty", each as defined in Directive 2014/65/EU ("MiFID II"). Any U.K. person wishing to effect transactions in any security discussed herein should do so through Bank of Montreal, London Branch or BMO Capital Markets Limited; any person in the E.U. wishing to effect transactions in any security discussed herein should do so through BMO Capital Markets Limited. In the UK this document is published by BMO Capital Markets Limited which is authorised and regulated by the Financial Conduct Authority. The contents hereof are intended solely for the use of, and may only be issued or passed on to, (i) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons together referred to as "relevant persons"). The contents hereof are not intended for the use of and may not be issued or passed on to retail clients. In an E.U. Member State this document is issued and distributed by Bank of Montreal Europe plc which is authorised and regulated in Ireland and operates in the E.U. on a passported basis. This document is only intended for Eligible Counterparties or Professional Clients, as defined in Annex II to "Markets in Financial Instruments Directive" 2014/65/EU ("MiFID II").

To Hong Kong Residents: This document is issued and distributed in Hong Kong by Bank of Montreal ("BMO"). BMO is an authorized institution under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong) and a registered institution with the Securities and Futures Commission (CE No. AAK809) under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong). This material has not been reviewed or approved by any regulatory authority in Hong Kong. Accordingly the material must not be issued, circulated or distributed in Hong Kong other than (1) except for "structured products" as defined in the Securities and Futures Ordinance, in circumstances which do not constitute it as a "Prospectus" as defined in the Companies Ordinance or which do not constitute an offer to the public within the meaning of that Ordinance, or (2) to Professional investors as defined in the Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules made thereunder. Unless permitted by the securities laws of Hong Kong, no person may issue in Hong Kong, or have in its possession for issue in Hong Kong this material or any other advertisement, invitation or document relating to the products other than to a professional investor as defined in the Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules.

To Korean Residents: This material is not provided to make a recommendation for specific Korean residents to enter into a contract for trading financial investment instruments, for investment advising, for discretionary investment, or for a trust, nor does it constitute advertisement of any financial business or financial investment instruments towards Korean residents. The material is not provided as advice on the value of financial investment instruments or any investment decision for specific Korean residents. The provision of the material does not constitute engaging in the foreign exchange business or foreign exchange brokerage business regulated under the Foreign Exchange Transactions Act of Korea.

To PRC Residents: This material does not constitute an offer to sell or the solicitation of an offer to buy any financial products in the People's Republic of China (excluding Hong Kong, Macau and Taiwan, the "PRC"). BMO and its affiliates do not represent that this material may be lawfully distributed, or that any financial products may be lawfully offered, in compliance with any applicable registration or other requirements in the PRC, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. This material may not be distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations.

Singapore Residents: This document has not been registered as a prospectus with the Monetary Authority of Singapore and the material does not constitute an offer or sale, solicitation or invitation for subscription or purchase of any shares or financial products in Singapore. Accordingly, BMO and its affiliates do not represent that this document and any other materials produced in connection therewith may lawfully be circulated or distributed, whether directly or indirectly, to persons in Singapore. This document and the material do not and are not intended to constitute the provision of financial advisory services, whether directly or indirectly, to persons in Singapore. This document and any information contained in this report shall not be disclosed to any other person. If you are not an accredited investor, please disregard this report. BMO Singapore Branch does not accept legal responsibility for the contents of the report. In Asia, Bank of Montreal is licensed to conduct banking and financial services in Hong Kong and Singapore. Certain products and services referred to in this document are designed specifically for certain categories of investors in a number of different countries and regions. Such products and services would only be offered to these investors in those countries and regions in accordance with applicable laws and regulations. The Information is directed only at persons in jurisdictions where access to and use of such information is lawful.

To Thai Residents: The contents hereof are intended solely for the use of persons qualified as Institutional Investors according to Notification of the Securities and Exchange Commission No. GoKor. 11/2547 Re: Characteristics of Advice which are not deemed as Conducting Derivatives Advisory Services dated 23 January 2004 (as amended). BMO and its affiliates do not represent that the material may be lawfully distributed, or that any financial products may be lawfully offered, in compliance with any regulatory requirements in Thailand, or pursuant to an exemption available under any applicable laws and regulations.

To U.S. Residents: BMO Capital Markets Corp. furnishes this report to U.S. residents and accepts responsibility for the contents herein, except to the extent that it refers to securities of Bank of Montreal.

These documents are provided to you on the express understanding that they must be held in complete confidence and not republished, retransmitted, distributed, disclosed, or otherwise made available, in whole or in part, directly or indirectly, in hard or soft copy, through any means, to any person, except with the prior written consent of BMO Capital Markets.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

BMO Financial Group (NYSE, TSX: BMO) is an integrated financial services provider offering a range of retail banking, wealth management, and investment and corporate banking products. BMO serves Canadian retail clients through BMO Bank of Montreal and BMO Nesbitt Burns. In the United States, personal and commercial banking clients are served by BMO Harris Bank N.A. (Member FDIC). Investment and corporate banking services are provided in Canada and the US through BMO Capital Markets.

BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (Member FDIC), Bank of Montreal Europe Plc, and Bank of Montreal (China) Co. Ltd. and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member FINRA and SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada, Europe and Asia, Bank of Montreal Europe Plc in Europe, BMO Capital Markets Limited in the U.K. and Australia and BMO Advisors Private Limited in India.

© Registered trademark of Bank of Montreal in the United States, Canada and elsewhere.

The Goods | Commodities Slammed by COVID-19 Disruptions

™ Trademark Bank of Montreal in the United States and Canada.

© COPYRIGHT 2020 BMO CAPITAL MARKETS CORP.

A member of BMO Financial Group