

# Commodities Outlook for November 2019

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

## 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						
2006	66.10	6.74	5.77	290	4.02	257	86.23	64.08	
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	
y-t-d 2019	56.72	2.59	1.25	355	4.88	343	114.90	70.95	
2018	Nov	57.00	4.09	1.41	337	5.05	361	116.04	57.61
	Dec	48.95	4.04	1.24	320	5.17	357	119.83	58.44
2019	Jan	51.45	3.11	1.49	347	5.17	362	125.31	60.78
	Feb	54.96	2.69	2.46	401	4.99	361	127.44	55.71
	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
	m-t-d Nov	56.73	2.76	2.26	390	5.13	344	119.49	64.69
Forecast 2019 avg.		56.50 ↑	2.60	1.39 ↑	356 ↑	4.90	344	115.00 ↑	69.80 ↑
2020 avg.		55.00	2.80	2.00 ↓	355	5.40	370	117.00 ↑	75.00

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
2006		3.05	1.17	1.48	11.00	605	11.58
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
y-t-d 2019		2.72	0.81	1.17	6.31	1382	16.09
2018	Nov	2.81	0.88	1.18	5.10	1221	14.36
	Dec	2.76	0.88	1.19	4.91	1250	14.67
2019	Jan	2.69	0.84	1.16	5.19	1292	15.61
	Feb	2.85	0.84	1.23	5.74	1320	15.81
	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
	m-t-d Nov	2.67	0.82	1.16	7.35	1485	17.46
Forecast	2019 avg.	2.73	0.81	1.15	6.40 ↓	1395 ↓	16.25 ↓
	2020 avg.	2.95	0.85 ↓	1.10	8.00 ↓	1500	18.00 ↓

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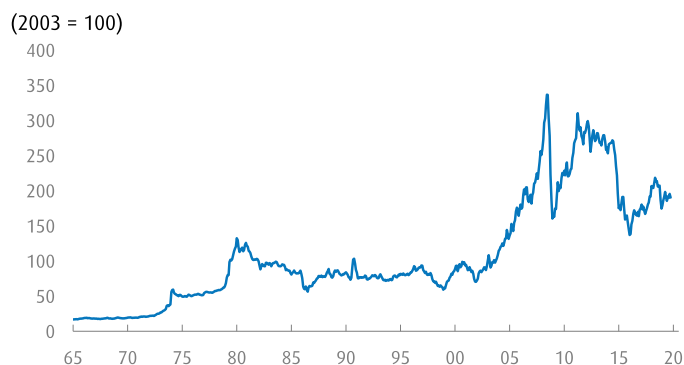
## Commodity Indices and Forecasts (US\$-terms : 2003 = 100)

		All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities (C\$-terms)
	2010	234.6	232.7	291.1	92.0	163.4	172.5
	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
<b>Forecast</b>	<b>2019</b>	<b>190.3</b>	<b>164.3</b>	<b>267.9</b>	<b>123.1</b>	<b>140.6</b>	<b>180.4</b>
	<b>2020</b>	<b>196.1</b>	<b>160.6</b>	<b>290.6</b>	<b>123.6</b>	<b>152.1</b>	<b>183.9</b>
	2018 Q1	204.8	183.3	268.2	180.9	144.2	184.6
	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
<b>Forecast</b>	<b>Q4</b>	<b>191.9</b>	<b>159.9</b>	<b>279.9</b>	<b>126.2</b>	<b>142.9</b>	<b>181.5</b>
	<b>2020 Q1</b>	<b>194.0</b>	<b>157.9</b>	<b>289.7</b>	<b>123.3</b>	<b>147.4</b>	<b>183.4</b>
	<b>Q2</b>	<b>197.2</b>	<b>160.5</b>	<b>293.6</b>	<b>123.5</b>	<b>154.7</b>	<b>185.5</b>
	2018 Oct	207.3	205.8	248.0	116.3	147.8	192.2
	Nov	186.5	169.2	245.9	118.9	144.6	175.6
	Dec	174.5	146.5	248.0	111.7	146.5	167.4
	2019 Jan	178.9	151.3	251.5	120.3	147.9	170.4
	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

Commodity price indices and forecasts are by BMO Capital Markets Economics

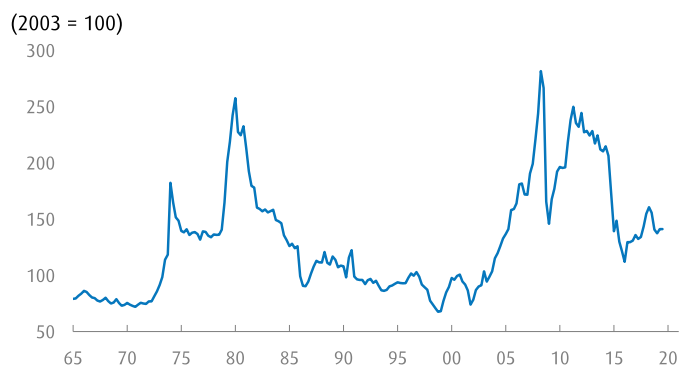
Forecasts are independent of those used by BMO Capital Markets Equity Research

### 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
<b>Metals &amp; Minerals</b>	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
<b>Oil and Gas</b>	54.6	100.0
Crude Oil	47.6	87.2
Canadian Natural Gas	7.0	12.8
<b>Forest Products</b>	6.5	100.0
Lumber	5.5	84.1
OSB	1.0	15.9
<b>Agricultural Products</b>	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
<b>All Commodities</b>	100.0	—

Source: BMO Economics

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

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