

Commodities Find Their Footing

Trade deal progress and weaker dollar drive rebound

The **BMO Capital Markets Commodity Price Index** rose 2.5% in January, showing some resilience following two months of steep declines to end 2018. The dialling back of Federal Reserve rate-hike expectations and resulting U.S. dollar weakness supported gains across the broader commodity spectrum. The rebound in crude oil provided the biggest lift in January, while continued strength points to a further boost for the index in February.

The **Oil & Gas Index** rebounded 3.3% in January following its 14.1% drop in December, reflecting a partial recovery in oil. OPEC+ decided in December to cut production by 1.8 million barrels per day (mmb/d) during the first half of 2019. Saudi Arabia had already started cutting in December and compliance in January ran around 86% for OPEC+ as a whole, though much of the heavy lifting has been done by Saudi Arabia, the UAE and Kuwait. Notwithstanding seasonally low underground storage, natural gas continued to weaken in January on expectations of accelerating U.S. production.

The **Metals & Minerals Index** gained 1.4% in January as precious metals led the way. Gold shook off a slow start, rising to an eight-month high by month-end as signs of an extended pause from the Federal Reserve dragged the U.S. dollar to its lowest level since August. Supply-side factors remain generally supportive in base metals markets, though demand developments continue to drive choppy price action. While base metals prices inched higher throughout January, weak starting points left average prices below December levels across most of the segment.

The **Forest Products Index** leaped 7.7% in January, led by a surge in lumber prices. Spruce-Pine-Fir prices were sparked by the announcement of production curtailments and closures at several western mills (due to issues with log supplies), gaining \$27 to average \$347/mbf for the month. Though prices reached as high as \$398/mbf by month-end, there is some skepticism about this rally, as the run-up is being driven primarily by wholesaler activity. Oriented Strand Board prices remained range-bound, gaining \$2 to average \$210/msf.

The **Agriculture Index** edged up 1.0% in January after a like-sized gain in December. Wheat and canola prices were little-changed during the month, while hog and cattle prices posted solid but largely-seasonal advances. *(Please see this month's livestock commodity feature on page 2).*

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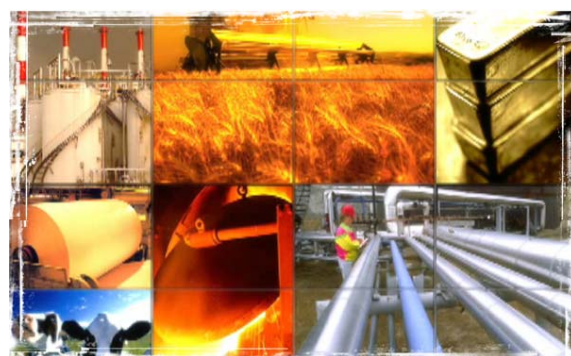
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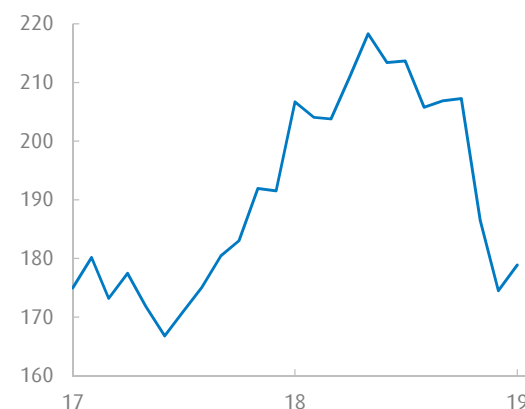
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**BMO CAPITAL MARKETS
COMMODITY PRICE INDEX
(2003 = 100)**

All Commodities Index



	Jan. Level (2003=100)	% Change from	
		Mth. Ago	Yr. Ago
All Commodities	178.9	2.5	-13.5
Oil & Gas	151.4	3.3	-19.2
Metals & Minerals	251.5	1.4	-6.9
Forest Products	120.3	7.7	-30.0
Agriculture	147.9	1.0	5.5



Commodity Focus: Livestock

Markets have firmed, but risks remain

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Livestock prices have moved largely sideways over the past few years, while exhibiting considerable volatility as solid demand growth, rapidly-rising supply, and U.S. trade skirmishes have played tug-of-war in the marketplace (*Chart 1*). Hog and cattle prices tested multi-year lows in mid-2018, but market conditions have since improved in both segments.

On the demand front, conditions have seldom been as strong as over the past few years. Global economic growth averaged an estimated 3.7% per year in 2017 and 2018—the strongest two-year performance since the aftermath of the Great Recession and a clear positive for agricultural product pricing. Food demand growth has been especially strong in North America (*Chart 2*). Since the end of 2015, volume food consumption has increased an impressive 2.8% annualized in the United States and 2.7% in Canada—well above the 30-year average of 1.6% on both sides of the border. Although food consumption growth in Canada has now slowed toward longer-term norms, it remains impressively strong in the all-important U.S. market at 3.6% y/y in 2018:Q3 (though this pace is unlikely to be sustained).

With demand in good shape and feed prices very low, both cattle and hog producers have significantly ramped up capacity and supply over the past half-decade (*Chart 3*). In the hog space, the head count of the North American herd has increased 15.0% from its recent low in 2013, while per-animal slaughter weights have risen modestly as well, up 0.7% over that period. Expansion has been more cautious in the cattle segment, where the herd head count is up a more moderate 4.2% since 2013, though slaughter weights have risen a heftier 2.3%. Other protein segments, including poultry, egg, and dairy, have also expanded aggressively in the favourable demand and cost environment, despite bouts of weakness in selling prices (especially in the dairy space).

In the hog space, CME prices had a tough year in 2018 as rising supply outstripped demand. On a seasonally adjusted basis, hog prices traded at just US\$54/cwt (hundredweight) in August 2018 and, despite staging a moderate recovery to \$63 in January 2019, remained down 16% y/y at the beginning of the year. Although domestic demand growth has been firm, U.S. trade disputes have undermined pork exports—especially the retaliatory tariffs enacted by China and Mexico, which are among the largest foreign markets for U.S. pork. As of November 2018, U.S. pork exports to Mexico had declined 13% y/y (Mexico accounted for 32% of total pork exports in 2017, before the onset of current trade tensions), while

CHART 1: CME CATTLE AND HOG PRICES
Front-month Contract (US\$/cwt)

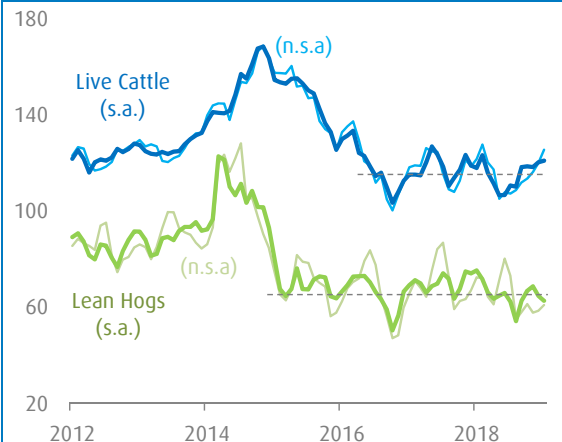


CHART 2: REAL CONSUMER FOOD SPENDING
(y/y % chng)

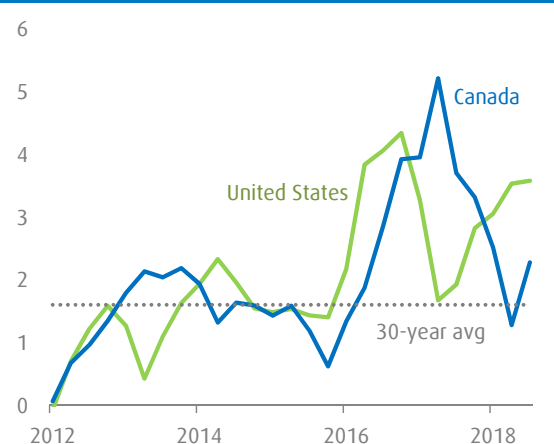
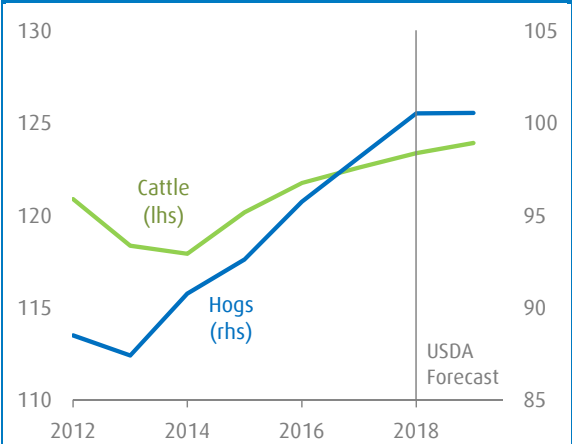


CHART 3: N.A. CATTLE AND HOG HERD
Head Count (mlns)



exports to China had dropped 45% (though China accounted for a lesser 7% of exports in 2017). Fortunately, with feed costs still very low, producer margins are only moderately below long-term norms. The shakier pricing environment has also spurred initial steps toward supply restraint and the U.S. Department of Agriculture (USDA) now expects the North American hog herd to be little-changed over 2019 as a whole. Overall, **hog prices are expected to increase from an average of US\$65/cwt in 2018 to \$67 in 2019 and \$77 in 2020** as supply growth continues to moderate, though there are considerable risks to the forecast. On the downside, prices could underperform if feed costs rise more rapidly than anticipated and trigger distress selling, demand growth slows substantially, or if the recent improvement in market conditions reinvigorates herd expansion. On the upside, prices could outperform if the continued overseas spread of African Swine Fever (ASF) were to weigh more heavily on global supply, or if the disease were to make landfall in North America (ASF results in animal loss but does not pose a risk to human health).

In the cattle space, CME prices came under heavy pressure in mid-2018 as a drought on the U.S. Southern Plains spurred the early placement of animals into feedlots, which added a significant but temporary drag in the market. Most recently, cattle prices have increased in each of the past six months and are now flirting with three-year highs, primarily reflecting the segment's relatively cautious pace of herd expansion over the past few years. As in the hog space, the U.S. cattle and beef industry is being targetted by new foreign tariffs, most notably those enacted by Canada in response to U.S. tariffs on steel and aluminum. Fortunately, the beef segment is not especially reliant on trade, with only 11% of production exported in 2017, against 22% in the pork industry and 48% in the soybean space, which makes new trade barriers less consequential for pricing. And, with feed prices exceedingly low, cattle producer margins are now actually somewhat above long-term norms. Overall, the cattle market appears fairly balanced, with **prices expected to increase from an average of US\$115/cwt in 2018 (and \$120 in December) to \$120 in 2019 and \$122 in 2020**. But, as in the hog space, prices remain vulnerable to an unexpectedly sharp increase in feed prices, an abrupt downshift in demand, or an expected acceleration of herd expansion.

Energy and Materials

		Crude Oil	Natural Gas		Lumber
		(WTI)	(Henry Hub)	(AECO)	
		US\$/bbl	US\$/mmbtu		US\$/mbf
	2006	66.10	6.74	5.76	290
	2007	72.36	6.98	6.02	245
	2008	99.57	8.86	7.79	215
	2009	61.69	3.95	3.48	177
	2010	79.43	4.39	3.89	255
	2011	95.08	4.00	3.67	255
	2012	94.20	2.75	2.39	299
	2013	97.93	3.73	3.09	356
	2014	93.26	4.39	4.08	349
	2015	48.69	2.63	2.12	277
	2016	43.21	2.52	1.63	305
	2017	50.91	2.99	1.67	401
	2018	64.84	3.17	1.19	480
	y-t-d 2019	52.51	2.93	1.48	347
2018	February	62.21	2.67	1.69	523
	March	62.76	2.69	1.57	524
	April	66.26	2.80	1.10	552
	May	69.99	2.80	0.86	634
	June	67.33	2.97	0.91	609
	July	70.97	2.83	1.04	564
	August	67.99	2.96	0.82	468
	September	70.20	3.00	1.04	414
	October	70.76	3.28	1.10	323
	November	57.00	4.09	1.29	337
	December	48.95	4.04	1.25	320
2019	January	51.47	3.11	1.48	347
	m-t-d February	54.26	2.64	1.75	398
Forecast	2019 Avg.	59.00	2.95 ↓	2.76 ↑	355 ↑
	2020 Avg.	61.00	3.05 ↓	1.70	330

Commodity price forecasts are by BMO Capital Markets 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	Zinc	Nickel	Gold	Silver
	US\$/lb			US\$/oz		
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	2.74	0.84	1.18	5.39	1301	15.68
2018						
February	3.18	0.99	1.61	6.16	1334	16.65
March	3.08	0.94	1.49	6.08	1326	16.47
April	3.10	1.02	1.45	6.32	1334	16.60
May	3.09	1.04	1.39	6.51	1304	16.45
June	3.15	1.02	1.40	6.85	1282	16.51
July	2.83	0.95	1.21	6.25	1238	15.71
August	2.74	0.93	1.14	6.09	1202	15.00
September	2.73	0.92	1.10	5.68	1199	14.27
October	2.82	0.92	1.21	5.59	1215	14.58
November	2.81	0.88	1.18	5.10	1221	14.36
December	2.76	0.88	1.19	4.91	1250	14.67
2019						
January	2.69	0.84	1.16	5.19	1292	15.61
m-t-d February	2.81	0.84	1.22	5.69	1316	15.79
Forecast						
2019 Avg.	3.10	0.95	1.20	5.75 ↑	1285	16.20
2020 Avg.	3.30	0.99	1.23	5.90	1260	17.20

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Agriculture

		Wheat US\$/bushel	Canola US\$/tonne	Cattle	Hogs US\$/cwt
	2006	4.02	257	86.23	64.08
	2007	6.38	378	93.92	65.56
	2008	7.98	527	93.60	66.05
	2009	5.30	371	83.85	58.11
	2010	5.81	429	94.95	75.60
	2011	7.10	566	114.54	90.34
	2012	7.50	601	122.65	84.93
	2013	6.84	545	126.40	89.33
	2014	5.88	400	151.50	105.83
	2015	5.08	371	146.49	69.40
	2016	4.36	366	118.61	65.60
	2017	4.36	393	117.90	69.87
	2018	4.95	389	114.64	65.26
	y-t-d 2019	5.16	363	125.86	58.90
2018	February	4.56	403	127.54	71.99
	March	4.75	402	120.05	64.16
	April	4.75	416	117.21	61.01
	May	5.17	414	104.96	71.13
	June	5.01	398	107.63	80.01
	July	5.07	379	107.13	72.90
	August	5.38	384	108.63	54.74
	September	5.04	378	111.77	57.80
	October	5.11	378	113.36	61.13
	November	5.05	361	116.04	57.61
	December	5.17	357	119.83	58.44
2019	January	5.17	362	125.31	60.78
	m-t-d February	5.14	363	126.73	55.85
Forecast	2019 Avg.	5.30	380	120.00	67.00 ↓
	2020 Avg.	5.60	400	122.00	77.00

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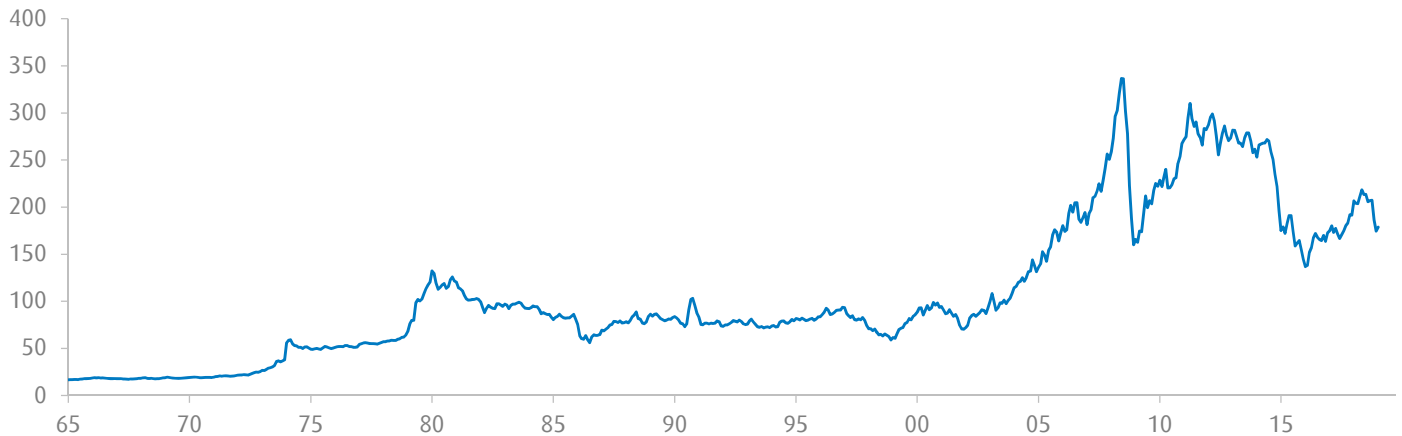
Commodity Indices and Forecasts

US\$-terms : 2003 = 100		All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities C\$-terms
Annual							
	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
Forecast	2019	193.9	172.1	261.9	123.3	152.0	183.7
	2020	198.9	178.0	267.4	115.4	160.0	186.2
Quarterly							
2017	Q2	172.0	142.3	243.6	139.4	139.2	165.3
	Q3	175.5	141.8	252.6	149.3	143.8	157.1
	Q4	188.8	161.9	258.8	165.5	138.0	171.2
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
Forecast 2019	Q1	184.0	157.6	255.4	127.9	148.9	174.8
	Q2	191.9	169.2	259.2	124.8	155.3	181.9
	Q3	198.0	178.2	264.6	124.9	151.1	187.5
Monthly							
2018	Jan	206.7	187.3	270.2	171.7	140.2	183.6
	Feb	204.1	180.5	269.5	184.6	145.5	182.5
	Mar	203.8	182.0	264.9	186.3	146.8	187.8
	Apr	211.0	192.1	268.4	195.0	148.2	191.7
	May	218.3	202.6	266.4	222.2	153.0	200.3
	Jun	213.4	195.5	265.6	214.9	149.2	199.6
	Jul	213.7	205.4	252.5	198.8	147.1	200.4
	Aug	205.8	197.3	246.6	165.6	151.6	191.5
	Sep	206.9	203.6	244.4	148.3	146.2	192.6
	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
Forecast 2019	Jan	178.9	151.4	251.5	120.3	147.9	170.4

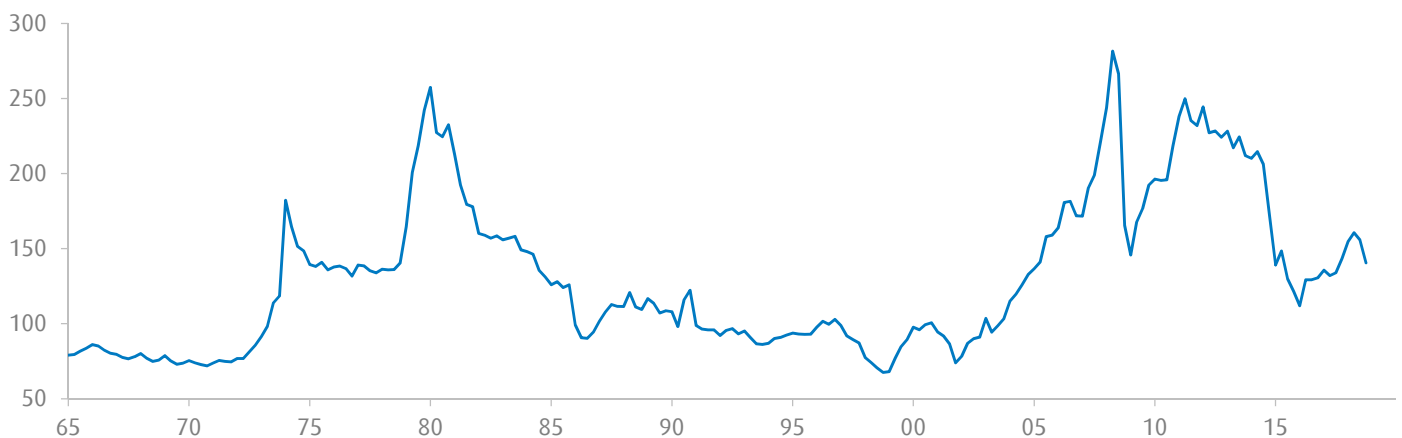
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Historical Charts: All-Commodity Index

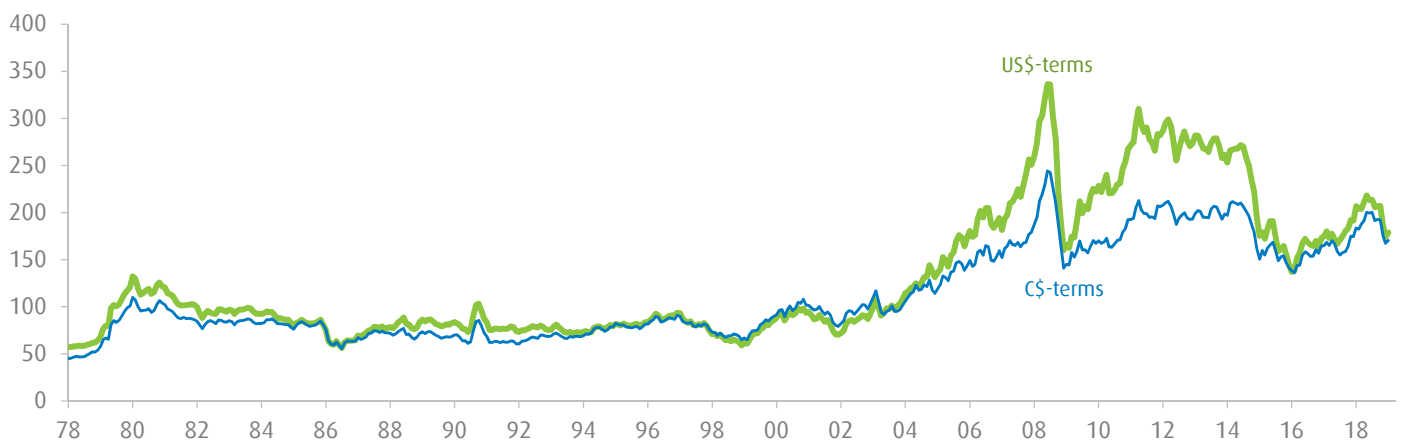
Nominal US\$-Terms (2003 = 100)



Real US\$-Terms (2003 = 100)



Nominal (2003 = 100)



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

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

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