

Commodities Hit Hard in August

Index takes biggest step back in 17 months as U.S. dollar, trade woes continue to weigh

The **BMO Capital Markets Commodity Price Index** sank 3.7% in August to a five-month low. Crude oil was knocked by an unexpected build in U.S. inventories around mid-month while other segments faced seasonal pressures and virtually all commodities were subject to trade-related risk aversion. While oil is poised for a rebound, broader conditions appear little improved in September with trade issues still unresolved and the U.S. dollar testing 18-month highs.

The **Oil & Gas Index** dropped 3.9% in August, reversing most of its gain in the previous month though still rising almost 40% over the past 12 months. Oil slipped on concerns that an escalating trade war between the United States and China would slow global growth. More recently, prices have risen notably in early September on signs of falling U.S. inventories and indications that China may comply partially with U.S. sanctions on Iran that will come into place in November, potentially reducing Iranian exports more than expected.

The **Metals & Minerals Index** fell for a fourth consecutive month, retreating 2.3% to sit 8.7% below its January high (and lower than its year-ago level for the first time in 13 months). Losses extended across all components (save uranium), with most remaining under pressure through early September as trade fears failed to dissipate. Among base metals, zinc continues to suffer the worst from the ongoing sell-off. In the precious metals space, silver has underperformed gold and is currently flirting with early-2016 lows.

The **Forest Products Index** was chopped 16.7% in August as the nosedive in lumber prices continued. Spruce-Pine-Fir prices slumped 17.0%, spurred by the clearing of the summer supply crunch and accelerated by wholesalers unloading high-cost inventory accumulated at the height of the boom. However, prices settled by month-end, due in part to some overshooting as well as growing fears over the possible spillover effects of wildfires in B.C. Oriented Strand Board prices dropped 14.1%, as seasonal factors wore off and some logistical logjams cleared.

The **Agriculture Index** gained 3.0% in August on a thoroughly mixed performance. The headline gain was driven mainly by the heavily-weighted wheat component, which surged 6.1% during the month as a whole on deteriorating growing conditions in Europe, before retreating rapidly toward the end of the month. At the other end of the spectrum, hog prices posted a second-straight monthly plunge, dropping 24.9% on seasonal weakness (the bulk of the decline), rising supply, and agricultural tariffs put in place by U.S. trading partners.

Aaron Goertzen (Agriculture)

416-359-8229

aaron.goertzen@bmo.com

Sarah Howcroft (Metals & Minerals, Editor)

416-359-8458

sarah.howcroft@bmo.com

Alexandros Koustas (Forest Products)

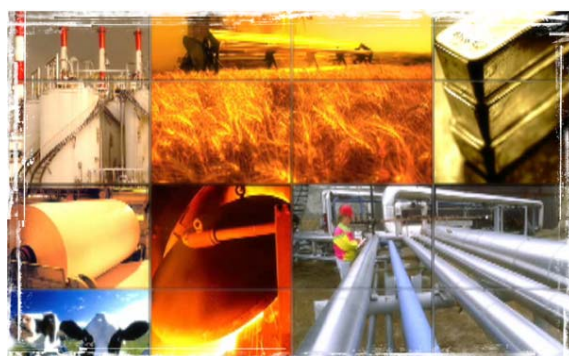
416-359-4624

alexandros.koustas@bmo.com

Earl Sweet (Oil & Gas)

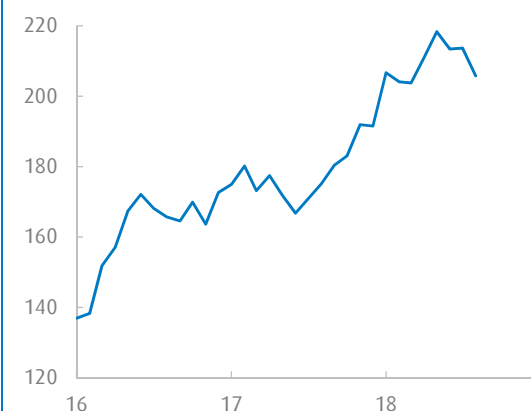
416-359-4407

earl.sweet@bmo.com



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

All Commodities Index



	Aug. Level (2003=100)	% Change from Mth. Ago	Yr. Ago
All Commodities	205.8	-3.7	17.5
Oil & Gas	197.3	-3.9	39.6
Metals & Minerals	246.7	-2.3	-3.1
Forest Products	165.6	-16.7	13.4
Agriculture	151.6	3.0	9.6



Commodity Focus: Wood Products

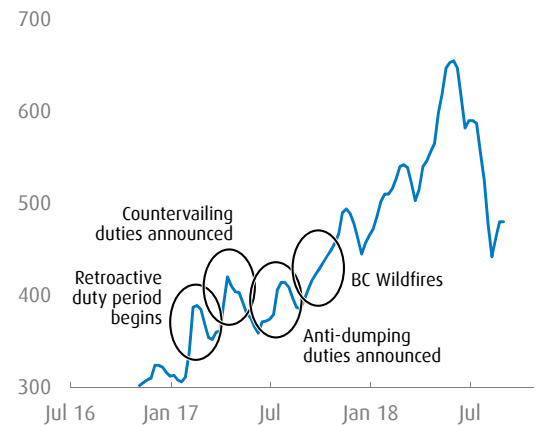
Markets steadying after a turbulent summer

Alex Koustas • alexandros.koustas@bmo.com • 416-359-4624

For observers and participants in wood product markets, 2018 is already going down as one of the most memorable years on record. Framing lumber prices have experienced volatility of historic proportions, with 17 double-digit weekly price moves through August, just four shy of the record set at the peak of the housing boom in 2004, with almost four months to spare. Our May update concluded that “market conditions for both lumber and Oriented Strand Board should begin to normalize after the busy summer building season”, and indeed they did, but at a pace few could have envisioned. After rocketing up 39% between December and May, prices of western Spruce-Pine-Fir framing lumber plummeted 26% in the ensuing three months (Chart 1), flattening the futures curve as contract settlement prices once projected for September 2019 came to fruition a year ahead of schedule. It appears as if the market has settled somewhat, although wildfires in British Columbia and a potential sawmill workers strike in the province have re-ignited concerns of lumber shortages, adding some lift to pricing as of late. Looking through the noise, our principal thesis for wood products continues to hold: **framing lumber prices are poised to return to equilibrium of around US\$400/mbf (the pre-tariff equilibrium price + the 20% duty), while increased Oriented Strand Board (OSB) production – coming online after months of delay – will see prices soften to a range around US\$300/msf.**

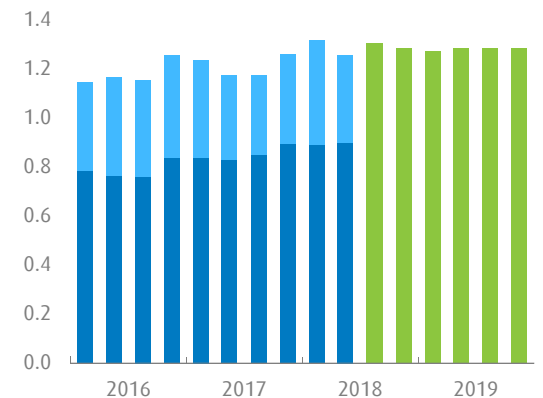
Generally speaking, the correction in wood product prices had long been expected. OSB production increases were well telegraphed, logistical logjams were transitory, while a supply squeeze in framing lumber was always destined to clear after the summer. However, the violence of the price adjustment in framing lumber was certainly greater than anticipated. Digging deeper, it's evident that wholesalers, who had relented and bought at the top of the market, rushed to rid themselves of expensive inventory as prices began to ebb, accelerating the price re-adjustment by several months. These same agents have trickled back into the market in recent weeks as prices seemingly overshot, grabbing supply at a discount and contributing to the stabilization in prices. Although OSB prices have tumbled roughly 20% since their summer peak, the magnitude and the velocity of the decline was more in line with expectations. While supply is still being hampered by logistical bottlenecks, demand has tapered after the summer building rush and new production has come online.

CHART 1: THE EVOLUTION OF A CYCLE
Lumber (Western Mill) Price SPF 2x4 (US\$/mbf)



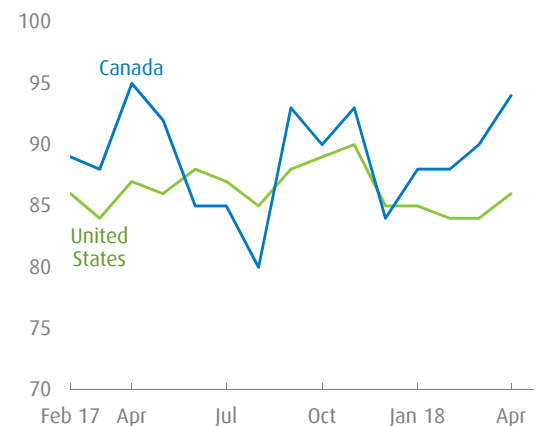
Source: Random Lengths

CHART 2: U.S. HOUSING STARTS
(mlns of units : s.a.a.r.)



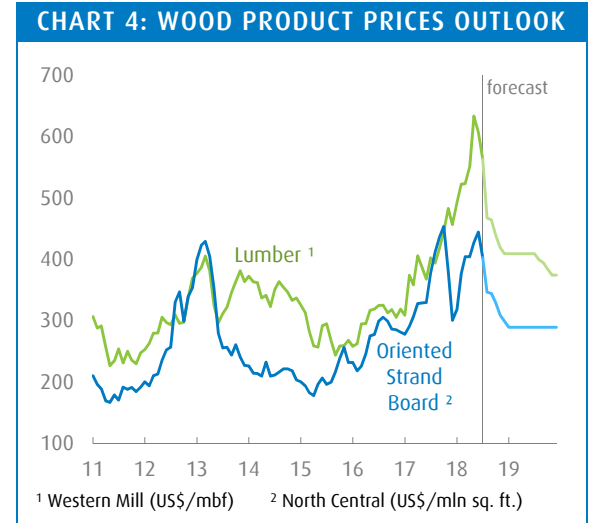
Legend: Singles, Multis, Forecast
Sources: U.S. Census Bureau, BMO Economics

CHART 3: SAWMILL CAPACITY UTILIZATION
(percent)



Source: Western Wood Products Association

The reprieve in wood product prices will be welcome relief to homebuilders, who have come under increasing pressure from labour shortages and rising input costs. Nevertheless, prices remain high by historical levels, even when measured on an inflation-adjusted basis, and ongoing lumber tariffs will continue to place a considerable premium on prices relative to their previous equilibrium. Underpinning the tariff premium are tight market conditions, which are expected to persist amid robust demand for lumber products. Although consumer spending has ebbed from its rollicking second-quarter pace, growth will remain firm through the remainder of the year, powering spending on renovations and furniture, while housing starts look poised to break out of a summer funk and return to a 1.3 million annualized rate (Chart 2). The story is similar in Canada, where housing starts are expected to continue to outperform demographic trends.



On the supply side, while wildfires in British Columbia affected a greater area than last year, there were fewer disruptions to communities and sawmills. B.C. Wildfire Service chief fire information officer Kevin Skrepnek has stated that it is “probably safe to say the worst is over”, signalling that the impacts on supply will be much less distortionary than in 2017. However, Canadian supply was already constrained by structural factors - production is down 1% from 2017 - and the wildfires will only pile further pressure on output in the near term. In the U.S., production has progressed as expected, advancing at over 5% year-to-date, displacing Canadian exports in the process (down 11% to the U.S.). Notwithstanding the growth in U.S. supply, Canadian shipments still command a considerable 27% share of the American lumber market, well above recent historical levels. **As such, we expect the lumber tariff price premium to persist through 2018 and 2019, contingent on strong housing and consumer activity, with prices getting some support from dollar softening through H2:2019 (Chart 4).**

OSB prices will benefit from similar demand-side factors, though home construction is of greater importance as an end-use. A rotation in the construction mix in favour of single-family units is a major positive as these units employ three times the amount of OSB. **Prices will see some pressure from added capacity, but the planned 12% increase in output will take several months to unfold given current production start-up curves. Demand has advanced at a hearty 7% pace so far this year, limiting the window for a significant demand/supply gap to form.**

Energy and Materials

		Crude Oil	Natural Gas		Lumber
		(WTI)	(Henry Hub)	(Alta. Empress)	
		US\$/bbl	US\$/mmbtu		US\$/mbf
2005		56.46	8.81	7.51	347
2006		66.10	6.74	5.92	290
2007		72.36	6.98	6.32	245
2008		99.57	8.86	8.09	215
2009		61.69	3.95	3.46	177
2010		79.43	4.39	3.59	255
2011		95.08	4.00	3.28	255
2012		94.20	2.75	2.19	299
2013		97.93	3.73	2.98	356
2014		93.26	4.39	4.56	349
2015		48.69	2.63	2.33	277
2016		43.21	2.52	1.68	305
2017		50.91	2.99	2.01	401
y-t-d 2018		66.53	2.95	2.02	546
2017	September	49.83	2.98	1.68	419
	October	51.60	2.88	1.99	446
	November	56.66	3.01	2.34	484
	December	57.93	2.82	2.45	457
2018	January	63.66	3.88	2.84	493
	February	62.21	2.67	1.77	523
	March	62.76	2.69	1.81	524
	April	66.26	2.80	1.83	552
	May	69.99	2.80	1.79	634
	June	67.33	2.97	1.90	609
	July	70.97	2.83	2.06	564
	August	67.99	2.96	2.28	468
	m-t-d September	68.53	2.96	n.a.	n.a.
Forecast	2018 Avg.	67.50 ↑	2.95	2.05	509 ↑
	2019 Avg.	65.00	3.10	2.45	400

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	
	2005	1.67	0.86	0.63	6.69	445	7.31
	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
	y-t-d 2018	3.04	0.98	1.39	6.24	1290	16.25
2017	September	2.99	0.95	1.41	5.09	1317	17.46
	October	3.08	0.97	1.48	5.13	1281	16.94
	November	3.10	0.95	1.47	5.44	1283	17.02
	December	3.08	0.94	1.45	5.17	1266	16.16
2018	January	3.21	1.00	1.56	5.84	1333	17.19
	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
	m-t-d September	2.67	0.93	1.11	5.65	1199	14.27
Forecast	2018 Avg.	3.00 ↓	0.99	1.35 ↓	6.15	1280 ↓	16.10 ↓
	2019 Avg.	3.20	1.00	1.35 ↓	5.90	1300	17.50

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Agriculture

		Wheat US\$/bushel	Canola US\$/tonne	Cattle	Hogs US\$/cwt
	2005	3.19	224	87.34	68.58
	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
	y-t-d 2018	4.89	398	113.95	67.99
2017	September	4.37	399	107.80	59.14
	October	4.35	398	112.56	62.39
	November	4.22	403	121.21	63.23
	December	4.11	390	118.46	66.83
2018	January	4.32	395	121.53	72.26
	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
	m-t-d September	4.92	377	109.45	53.42
Forecast	2018 Avg.	5.00	395	113.00	63.00 ↓
	2019 Avg.	5.20	415	118.00	68.00

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Commodity Indices and Forecasts²

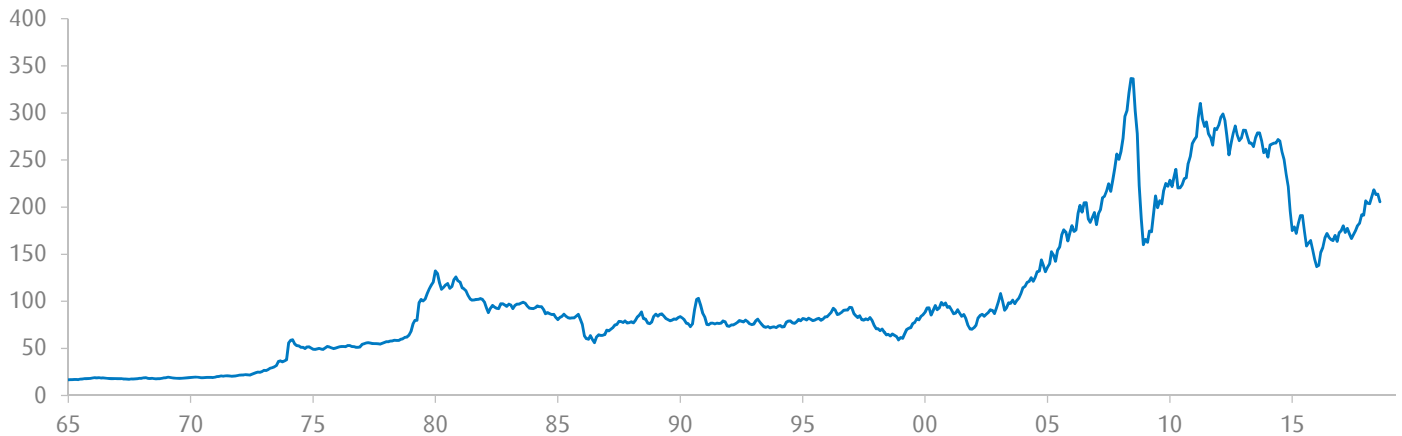
US\$-terms : 2003 = 100		All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities C\$-terms	
Annual								
	2009	196.3	182.0	267.1	64.3	145.2	159.1	
	2010	234.6	232.7	291.1	92.0	163.4	172.5	
	2011	283.7	275.6	364.8	90.1	205.3	200.3	
	2012	279.7	270.2	353.8	108.4	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	
Forecast	2018	209.8	195.9	260.8	179.4	148.5	192.5	
	2019	206.8	189.3	269.0	141.2	155.2	186.2	
Quarterly								
	2016	Q4	168.7	144.9	236.0	114.2	130.5	160.7
	2017	Q1	176.1	152.2	242.7	124.9	138.0	166.2
		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	204.9	183.3	268.2	180.9	144.2	184.6
		Q2	214.3	196.7	266.9	210.7	150.1	197.2
Forecast	2018	Q3	208.6	201.1	247.7	176.3	149.3	194.4
		Q4	211.6	202.7	260.3	149.7	150.3	193.7
	2019	Q1	212.8	200.6	268.2	144.3	153.2	193.0
Monthly								
	2017	Aug	175.1	141.3	254.5	146.1	138.4	157.7
		Sep	180.4	146.5	260.9	154.9	138.8	158.7
		Oct	183.0	151.2	258.8	164.5	139.1	164.3
		Nov	191.9	165.7	260.5	172.2	139.2	174.9
		Dec	191.5	168.8	257.2	159.7	135.6	174.5
	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	268.5	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	252.6	198.8	147.1	200.4
		Aug	205.8	197.3	246.7	165.6	151.6	191.6

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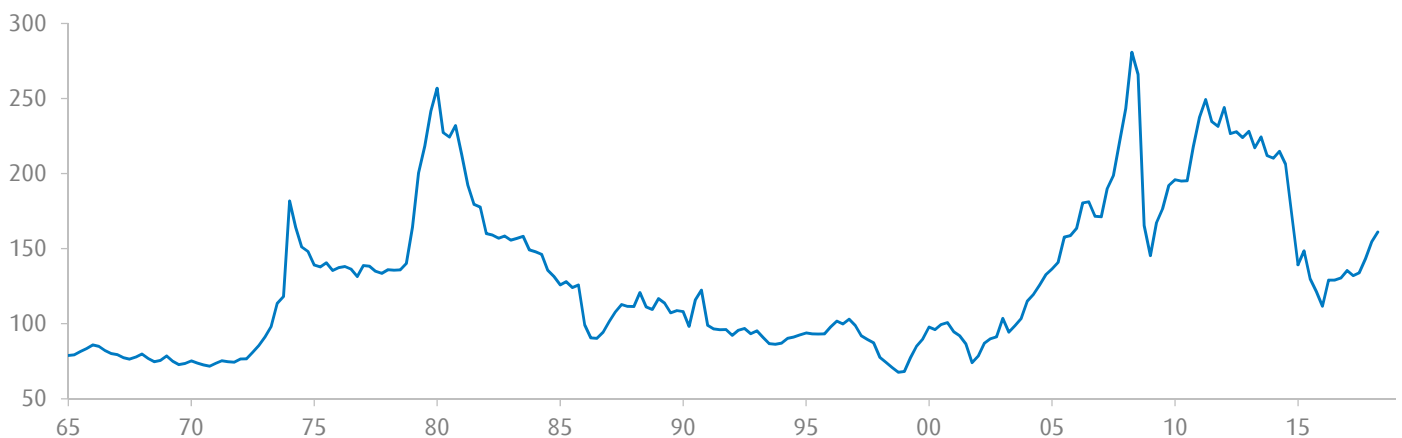
² Due to data availability issues, the following series have been removed from the Forest Products and All Commodities Indices: newsprint, market pulp, supercalendered paper.

Historical Charts: All-Commodity Index

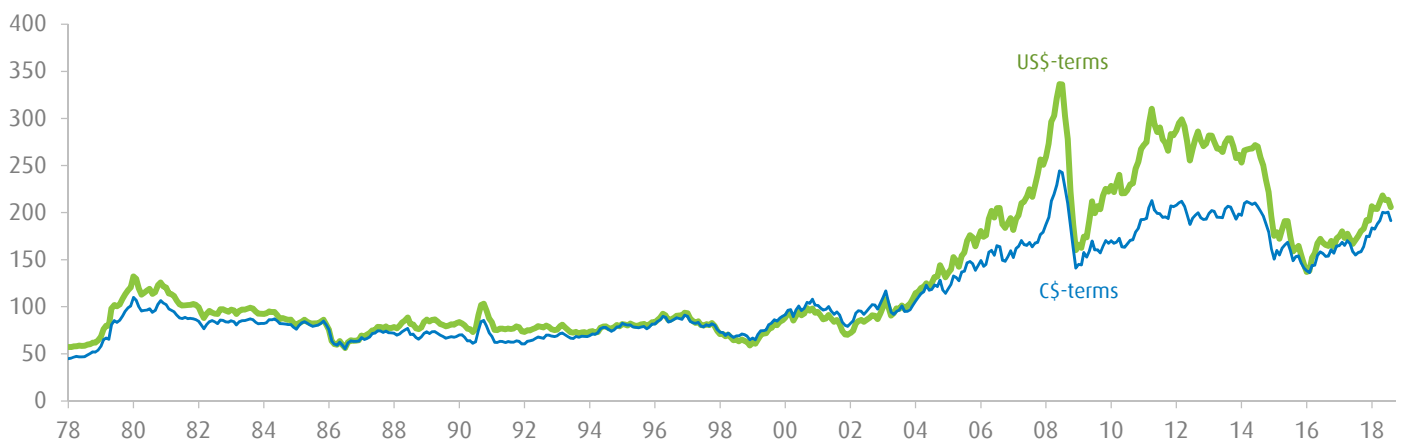
Nominal US\$-Terms (2003 = 100)



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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