

Spring Breathes Fresh Air into Commodity Markets

Oil leads index to new three-year high; but dog days of summer may be looming on the horizon

The **BMO Capital Markets Commodity Price Index** rebounded 3.4% in April on broad-based gains extending across every sub-sector. We are anticipating another meaty rise in May as supportive oil market and inflationary dynamics are for now outweighing downward pressure from the recent pick-up in U.S. yields and the greenback and signs that global growth is shifting to a lower gear.

The **Oil & Gas Index** surged 5.5% in April to a level almost 30% above that of a year earlier and appears to have extended that gain into May. West Texas Intermediate rose to a monthly average of US\$66.26/barrel after remaining steady near the mid-\$62 mark the previous three months. The uptrend continued through mid-May, with WTI climbing above US\$71. While fundamentals – good global demand and normalizing inventories – are lifting prices, supply fears stemming from the re-imposition of U.S. sanctions on Iran, general Middle East unrest, and collapsing output in Venezuela were also strongly price supportive.

The **Metals & Minerals Index** rose 1.3% in April, nearly recouping the prior month's loss. The biggest gain was in the aluminum market, where the threat of U.S. tariffs/sanctions on foreign suppliers triggered a sharp, though temporary, spike in prices. Zinc prices fell for a second straight month on signs that earlier supply-driven exuberance has begun to fade. Aside from zinc, base metals prices generally remained firm through the first half of May. In contrast, gold briefly slid below US\$1310/oz for the first time in 2018, mirroring the recent ascent of the U.S. dollar.

The **Forest Products Index** surged 2.9% in April, as supply shortages continued to wreak havoc on buyers ahead of the busy summer season. Logistical bottlenecks persisted, driving Spruce-Pine-Fur prices further into record territory, up US\$28 to an average of \$552/mbf, with no signs of abating through May. Anti-dumping duties of up to 22% on Canadian paper grades announced in March saw price hikes carry into April, with manufacturers of both Newsprint and Supercalendered paper passing the added costs on to buyers.

The **Agriculture Index** edged up 0.9% in April thanks to an uptick in canola, which advanced 3.4% despite an ongoing shortage of rail distribution capacity in Western Canada. Wheat was unchanged on a monthly average basis, but jumped to a nine-month high at the end of April amid rising concern about the winter wheat crop in drought-stricken Kansas. Although the index has now posted four straight gains and is primed for another in May, it remains below last year's high-water mark and far from historical norms.

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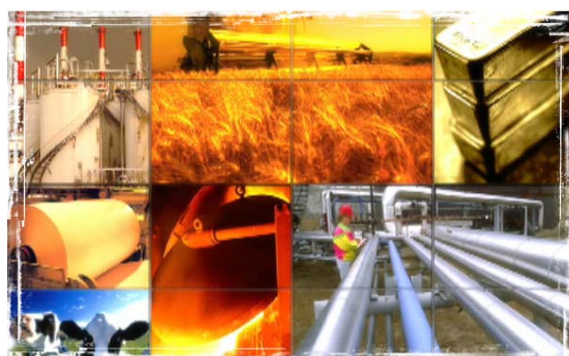
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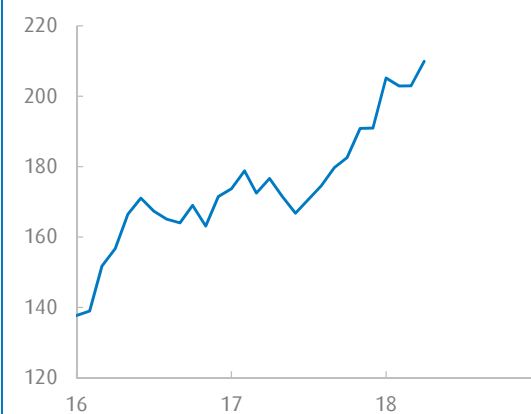
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BMO CAPITAL MARKETS COMMODITY PRICE INDEX (2003 = 100)

All Commodities Index



	Apr. Level (2003=100)	% Change from Mth. Ago	% Change from Yr. Ago
All Commodities	209.9	3.4	18.8
Oil & Gas	192.1	5.5	27.8
Metals & Minerals	268.5	1.3	8.7
Forest Products	194.4	2.9	25.0
Agriculture	148.2	0.9	9.0



Commodity Focus: Wood Products

Supply-side constraints pushing pricing through the roof

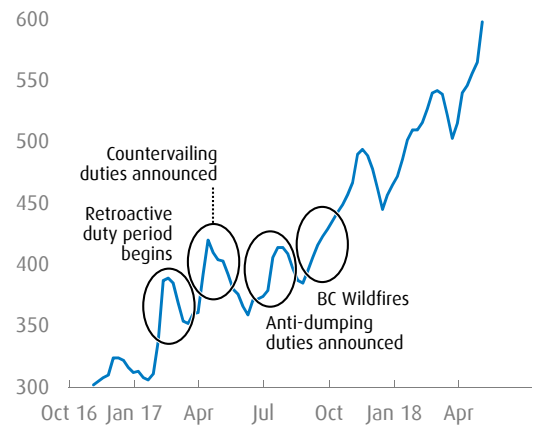
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To say that wood product markets are in the midst of one of the most wild and interesting cycles in modern history is no exaggeration. Structural, cyclical and transitory factors have all provided kindling to fire lumber prices to record levels, up 50% in just the past year. Never shy to bouts of volatility, the Oriented Strand Board (OSB) market has embarked on its second turbulent ride this cycle, one that currently has prices floating 23% above year-ago levels. Combined, these factors have propelled our broader forest products index (which includes several paper grades) to record levels. Predicting exactly when the current rally will end is rather futile given the fickle nature of wood product markets. **Nevertheless we believe that market conditions for both lumber and OSB should begin to normalize after the busy summer building season.**

Lumber markets have rightly garnered significant attention over the past year, serving as the harbinger for the U.S. Administration's combative zero-sum approach to global trade. Insofar as lumber markets provided a warning to other sectors and trading partners of the Administration's determination in this regard, they have also produced a scathing indictment of this brand of protectionism. To wit, since the retroactive start date of lumber duties in February of last year, prices have spiralled nearly 80% from an average of US\$310/mbf in January 2017 to \$552 last month, bludgeoning U.S. homebuilders, manufacturers and consumers alike. Granted, while the duties alone are not fully responsible for this surge, they undeniably mark the inflection point at which prices began their exponential rise (*Chart 1*), so consider this our **first structural factor**.

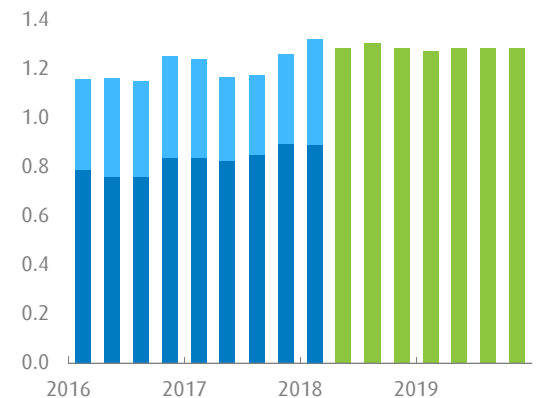
Now, it wasn't supposed to work out this way. In theory, the duties were to be borne by Canadian suppliers, discouraging shipments to the U.S. as margins eroded, allowing for U.S. production to make up the shortfall. However, as we've long stated, this represented a gross miscalculation of prevailing market conditions on the part of the American authorities. Enter our **second structural factor**: decreasing supply of Western Canadian lumber. Recent revisions to several major timber supply areas have resulted in a 10% decrease in the annual allowable cut in British Columbia. Given the reviews are conducted every ten years, this now marks the new market normal; further reductions are possible given other major regions are set for review over the next two years. This structural component came to a head in July when wild fires squeezed B.C. production, causing an upward surge in pricing. Buyers believed the effect would be

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



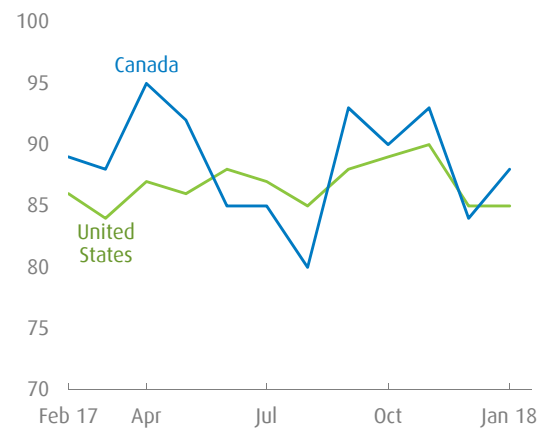
Source: Random Lengths

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



Sources: U.S. Census Bureau, BMO Economics

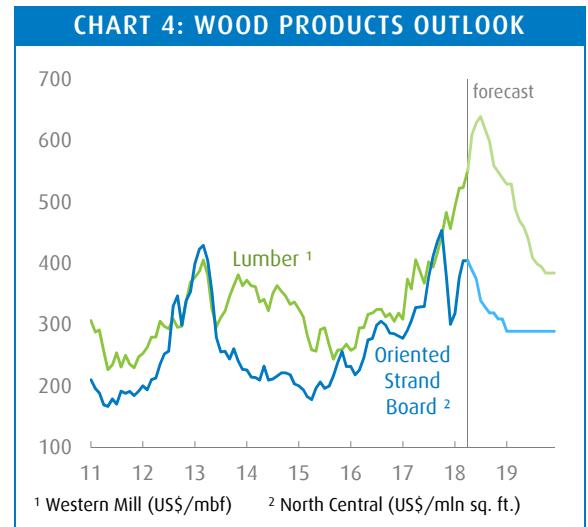
CHART 3: SAWMILL CAPACITY UTILIZATION
(percent)



Source: Western Wood Products Association

transitory, with prices returning below US\$400/mbf as a tariff holiday was set to begin in August, but they were caught wrong-footed when the rebound in B.C. supply fell well below expectations. Prices haven't sniffed the \$400-mark since. Simply put, although U.S. production did increase 4.0% in 2017, output will need to increase by at least another 4.0% to make up for the shortfall in 2018, a scenario unlikely to play out until the final months of the year.

While these structural factors form the bedrock of the current lumber rally, a number of **transitory factors** are responsible for the spike in pricing for both OSB and lumber since the turn of the year. First, poor winter weather conditions caused unscheduled stoppages at mills, starving buyers who had waited on the sidelines in hopes of a downturn in pricing. Second, the spring has been a nightmare for logistics. Canadian railways are operating above capacity, leaving mills unable to fulfill orders, an issue that has been exacerbated by the continental shortage in the trucking industry. Even wholesalers are struggling for inventory at this point, leaving buyers grasping for supply ahead of the summer building season. As a result, price resistance in the market has all but eroded. This has extended what should have been a brief post-Hurricane rally in OSB markets by several months (*Chart 4*). Inventories were left threadbare as the planned opening of five new mills portended a buyer's market this year. Unfortunately, two of the five openings have been delayed which, combined with the aforementioned weather-related shutdowns, resulted in a 3.1% decline in North American OSB production in Q1. While the combination of transitory factors is likely to subside, it is unlikely that shortages will be fully addressed ahead of the peak summer season.



Last, the constructive cyclical factors identified in our past update remain firmly in place. Homebuilding is robust in Canada, trending well above a 200,000 unit pace, while U.S. starts are grinding higher, now cruising in line with household formation at around a 1.2 million unit pace (*Chart 2*). Importantly, the gains in the U.S. are being driven by single-family homes, which require three times as much wood compared to multifamily structures on a per-unit basis. This is particularly important for the OSB market, which is far more dependent on homebuilding activity. One growing concern is the issue of home affordability, with some fearing that rising prices and interest rates could threaten to derail the U.S. housing recovery. However, our baseline forecasts for home prices and interest rates wouldn't see mortgage servicing costs as a share personal disposable income rising above average levels until the spring of 2020. In Canada, strong demographic trends should continue to underpin solid building activity, while new macro-prudential measures appear to be having the intended cooling effect on pricing.

Overall, **we expect the OSB market to return to balance by the end of the year** as planned capacity eventually comes online. Pricing should remain healthy at around US\$300/msf after transitory factors subside, supported by solid cyclical factors. **Lumber prices are another matter, as the combination of tariffs and supply constraints will inflate pricing for some time.** Although we expect the current supply shortage to be addressed, removing the considerable froth recently formed in the market, our forecast still calls for prices to remain above US\$400/mbf well into 2019.

Energy and Materials

		Crude Oil	Natural Gas		Lumber	Pulp	Newsprint
		(WTI)	(Henry Hub)	(Alta. Empress)			
		US\$/bbl	US\$/mmbtu		US\$/mbf	US\$/tonne	
	2005	56.46	8.81	7.51	347	631	594
	2006	66.10	6.74	5.92	290	713	654
	2007	72.36	6.98	6.32	245	816	588
	2008	99.57	8.86	8.09	215	844	666
	2009	61.69	3.95	3.46	177	707	589
	2010	79.43	4.39	3.59	255	926	583
	2011	95.08	4.00	3.28	255	968	623
	2012	94.20	2.75	2.19	299	862	619
	2013	97.93	3.73	2.98	356	895	601
	2014	93.26	4.39	4.56	349	965	571
	2015	48.69	2.63	2.33	277	946	542
	2016	43.21	2.52	1.68	305	980	561
	2017	50.91	2.99	2.01	401	1103	584
	y-t-d 2018	64.34	2.99	2.03	532	1251	650
2017	May	48.51	3.15	2.14	388	1100	575
	June	45.19	2.98	1.87	368	1100	575
	July	46.61	2.98	2.05	403	1100	575
	August	48.05	2.90	1.53	395	1100	575
	September	49.83	2.98	1.68	419	1130	575
	October	51.60	2.88	1.99	446	1160	605
	November	56.66	3.01	2.34	484	1160	605
	December	57.93	2.82	2.45	457	1215	620
2018	January	63.66	3.88	2.84	493	1215	635
	February	62.21	2.67	1.77	523	1240	635
	March	62.76	2.69	1.81	524	1270	655
	April	66.26	2.80	1.83	552	1280	675
	m-t-d May	69.59	2.75	1.78	609	n.a.	n.a.
Forecast	2018 Avg.	67.00 ↑	3.00	2.15 ↓	570 ↑	1216 ↑	677 ↑
	2019 Avg.	65.00 ↑	3.10	2.45	440 ↑	1100	660 ↑

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	3.14	0.99	1.51	6.11	1330	16.71
2017						
May	2.54	0.87	1.17	4.15	1245	16.76
June	2.59	0.86	1.17	4.05	1261	16.96
July	2.71	0.86	1.26	4.30	1235	16.16
August	2.94	0.92	1.35	4.92	1282	16.90
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
m-t-d May	3.09	1.05	1.39	6.28	1312	16.43
Forecast						
2018 Avg.	3.05 ↑	0.98	1.40	5.55 ↑	1310	16.75
2019 Avg.	3.15	0.98	1.36	5.25	1300	17.75

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Agriculture

	Wheat	Canola	Cattle	Hogs
	US\$/bushel	US\$/tonne		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	4.65	404	119.93	67.16
2017				
May	4.30	382	124.69	75.12
June	4.54	385	124.42	84.08
July	5.04	419	115.15	86.65
August	4.29	398	108.94	72.50
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
m-t-d May	5.19	411	106.18	66.39
Forecast				
2018 Avg.	4.90 ↑	405	115.00	67.00
2019 Avg.	5.20 ↑	415	115.00	73.00

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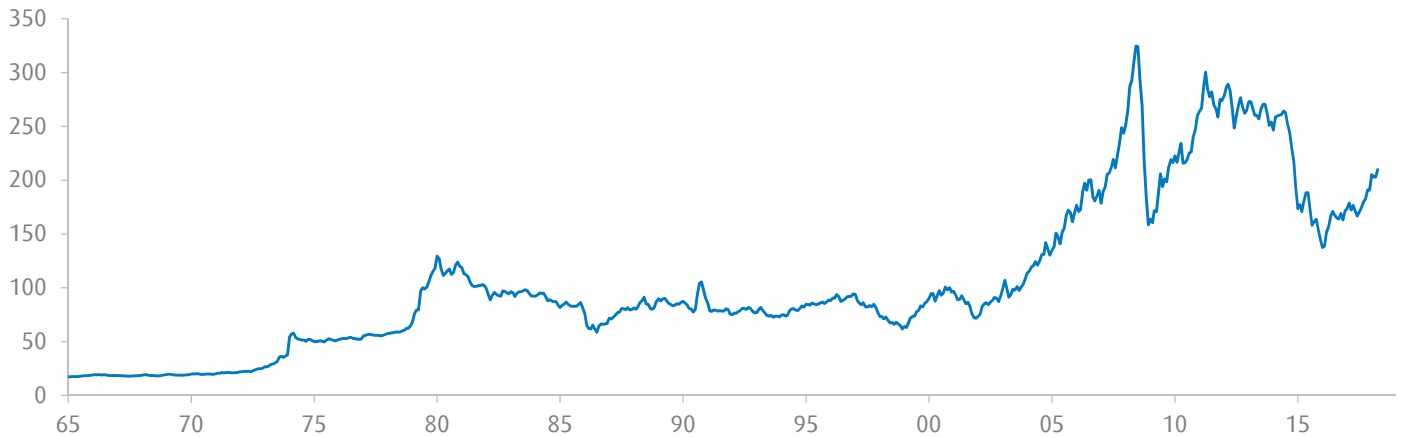
Commodity Indices and Forecasts

US\$-terms : 2003 = 100		All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities C\$-terms	
Annual								
	2009	191.8	182.0	267.1	97.1	145.2	155.5	
	2010	229.1	232.7	291.0	122.3	163.4	168.4	
	2011	275.5	275.6	364.8	125.6	205.3	194.5	
	2012	271.0	270.3	353.8	128.1	216.9	193.3	
	2013	263.7	283.0	304.1	139.4	200.1	193.8	
	2014	245.8	271.4	270.5	138.8	170.0	193.5	
	2015	169.6	142.5	244.8	125.6	151.3	154.3	
	2016	160.2	126.9	241.1	133.0	135.9	151.4	
	2017	177.4	149.6	249.4	156.8	139.8	164.4	
Forecast	2018	210.0	194.6	264.9	192.0	149.0	189.2	
	2019	205.3	189.3	269.1	163.5	155.0	180.8	
Quarterly								
2016	Q3	165.5	132.4	250.1	137.6	128.7	154.1	
	Q4	167.9	144.9	236.0	135.9	130.5	159.9	
2017	Q1	175.0	152.2	242.7	142.9	138.0	165.2	
	Q2	171.6	142.3	243.6	153.4	139.2	164.9	
	Q3	175.0	141.8	252.6	159.1	143.8	156.7	
	Q4	188.1	161.9	258.8	171.9	138.0	170.6	
2018	Q1	203.7	183.3	268.2	184.1	144.2	183.6	
	Q2	214.8	200.2	267.2	200.7	152.0	194.8	
	Q3	212.6	200.2	261.2	198.4	149.6	191.5	
	Q4	208.8	194.9	263.2	184.7	150.1	186.7	
	Forecast							
Monthly								
2017	Apr	176.6	150.3	247.0	155.5	136.0	169.4	
	May	171.5	143.2	241.5	153.8	138.7	166.8	
	Jun	166.8	133.5	242.3	150.9	143.0	158.6	
	Jul	170.6	137.5	242.3	157.4	154.1	154.8	
	Aug	174.5	141.3	254.5	157.0	138.4	157.2	
	Sep	179.7	146.5	260.9	163.0	138.8	158.1	
	Oct	182.5	151.2	258.8	170.3	139.1	163.8	
	Nov	190.8	165.7	260.4	174.0	139.2	174.0	
	Dec	190.9	168.8	257.2	171.4	135.6	174.0	
	2018	Jan	205.2	187.3	270.2	177.9	140.2	182.3
		Feb	202.9	180.5	269.5	185.5	145.5	181.4
		Mar	203.0	182.0	264.9	189.0	146.8	187.0
Apr		209.9	192.1	268.5	194.4	148.2	190.7	

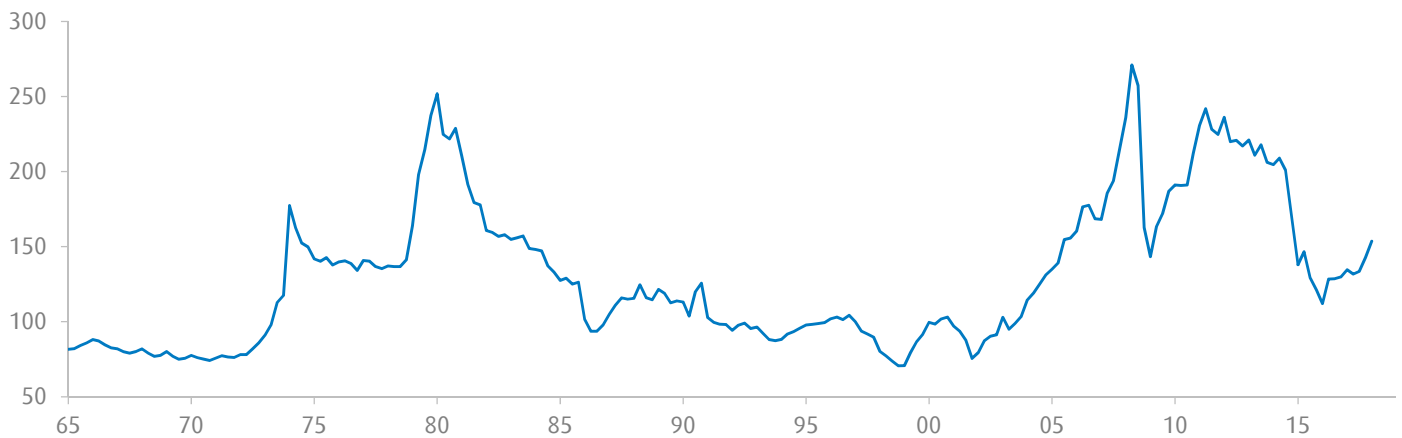
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Historical Charts: All-Commodity Index

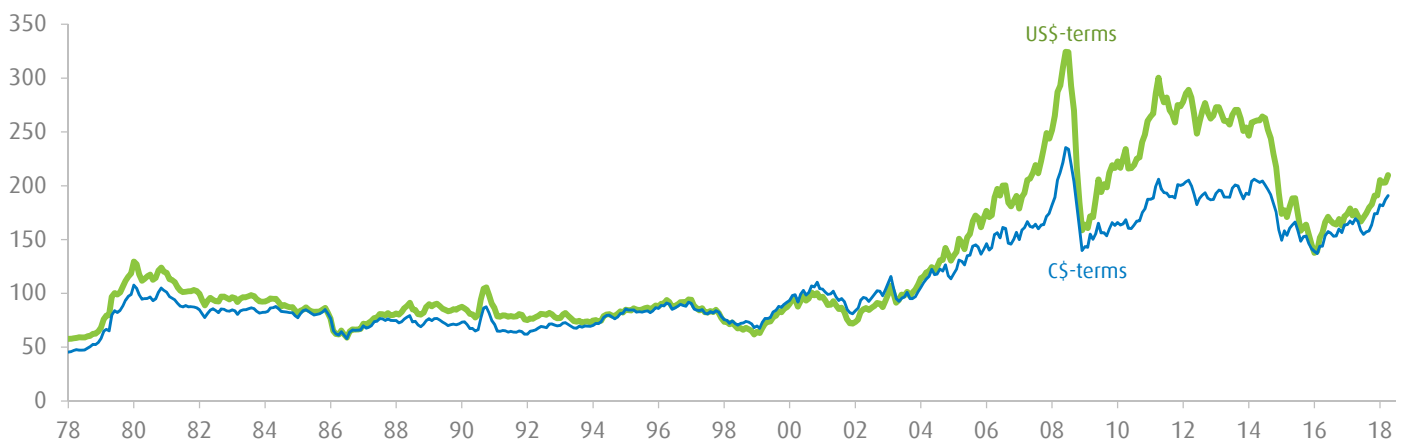
Nominal US\$-Terms (2003 = 100)



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 19 commodities key to Canadian exports. Weights are each commodity's average share of the total value of exports of the 19 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	27.8	100.0	Forest Products	12.6	100.0
Gold	9.9	35.5	Newsprint	1.4	11.5
Silver	1.3	4.6	Market Pulp	3.8	30.5
Aluminum	5.9	21.4	Supercalendered Paper	1.2	9.8
Copper	2.2	7.8	Lumber	5.1	40.6
Nickel	3.0	10.8	OSB	1.0	7.6
Zinc	0.8	3.0			
Uranium	1.2	4.4	Agricultural Products	8.5	100.0
Potash	3.5	12.7	Wheat	4.2	49.5
			Canola	3.1	36.6
Oil and Gas	51.1	100.0	Hogs	0.3	3.0
Crude Oil	44.5	87.2	Beef Cattle	0.9	10.9
Canadian Natural Gas	6.5	12.8			
			All Commodities	100.0	

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

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