Commodities Bumped Up in Eventful September

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

Ebbing trade friction calms markets, but slowing growth a bigger threat

The **BMO Capital Markets Commodity Price Index** jumped 3.1% in September, buoyed by the mid-month Saudi oil attack and the shift in favour of lower interest rates by the Fed and ECB. The index is primed for a correction in October as energy and metals prices have retreated in recent weeks amid growing global growth concerns, despite some positive news on the U.S./China trade front.

The **Oil & Gas Index** in September reversed most of the previous month's loss, climbing 4.3% amid increases in both crude oil and natural gas prices. The rise in oil occurred during the first three weeks of the month, responding to some easing in trade tensions between the U.S. and China and the attack on Saudi Arabia's oil infrastructure. However, oil prices retreated during the final ten days of September on signs of a faster-than-expected recovery in Saudi productive capacity, as well as widespread weakness in manufacturing globally. This has resulted in a ratcheting down of expectations of global oil demand.

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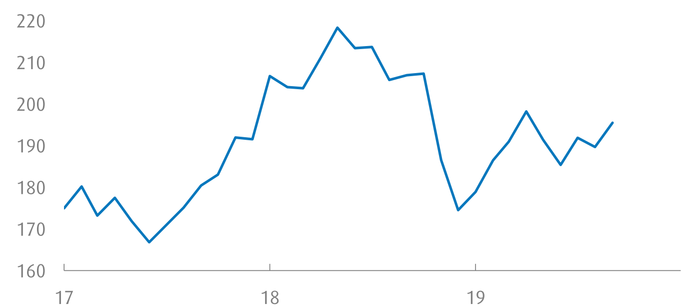
The **Metals & Minerals Index** picked up its fourth consecutive increase in September, rising 1.8% to its highest level since October 2013. All components contributed positively to the result, but nickel remained in the spotlight, posting a third straight double-digit gain. Solid underlying investment and infrastructure trends in China should offset some of the pressure on metals prices from the global manufacturing slowdown.

The **Forest Product Index** surged 8.7% in September, with lumber doing all the heavy lifting. Further supply curtailments and signs of optimism on the U.S. housing front lifted average SPF prices to US$373/mbf in the month, though prices pulled back through mid-October. OSB prices remained relatively steady as oversupplied markets shrugged off a modest uptick in demand.

The **Agriculture Index** edged down 0.5% in September for a third straight monthly decline. Of index constituents, only wheat prices advanced during the month, posting a modest 0.8% gain, while all other components lost ground. The largest declines were in the livestock space, where hogs sold off 9.2% and cattle prices lost 4.7%, though both declines were broadly in line with seasonal norms as consumers shut down their grills and headed indoors for the winter.

BMO Capital Markets Commodity Price Index

(2003 = 100)
All Commodities Index



Source: BMO Economics

	Sep. Level (2003=100)	% Change from Mth. Ago	% Change from Yr. Ago
All Commodities	195.5	3.1	-5.5
Oil & Gas	165.5	4.3	-18.7
Metals & Minerals	283.3	1.8	15.9
Forest Products	128.8	8.7	-13.2
Agriculture	135.5	-0.5	-7.3

Source: BMO Economics

Commodity Focus: Crops

Trade Hostilities and Elevated Stockpiles Weighing

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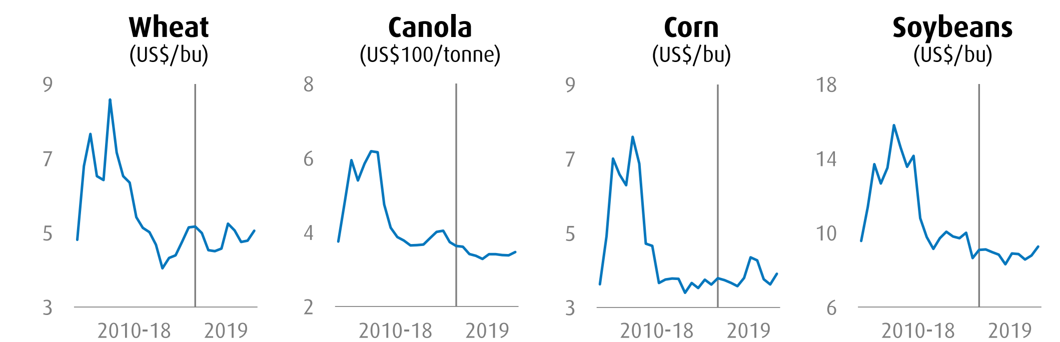
Benchmark crop prices remain weak following an improbable string of large global harvests (*Chart 1*). Between 2013 and 2018, broadly supportive growing conditions across much of the world, together with the continued adoption of impressive yield-enhancing technologies, drove global stockpiles of wheat, corn, and soybeans to all-time highs. This year, global yields of most major crops appear to have taken a step back, reflecting more challenging weather in a number of key growing regions, including North America (*Chart 2*). But yields remain relatively sturdy in absolute terms and demand conditions have become less supportive, given the slower pace of global economic growth, the impact of African Swine Fever (ASF) on feed demand, and continued trade frictions involving China, which have stranded key crop products in North America.

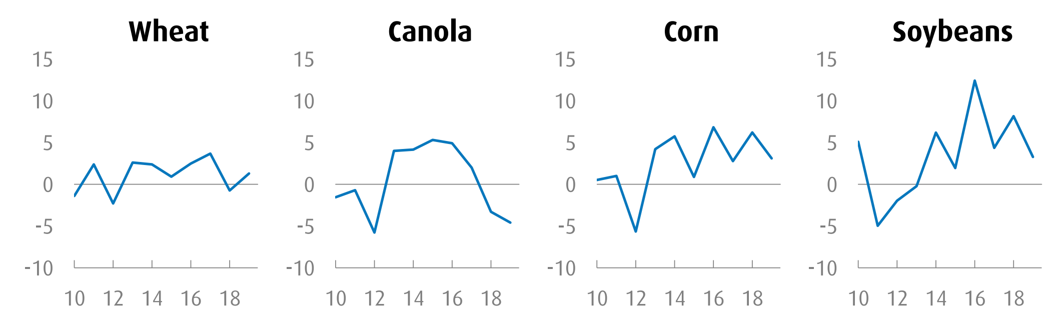
Chart 1
Crop Prices



Notes: 2010-18 presented as half-year averages; 2019 presented as monthly averages; October 2019 is month-to-date.
Sources: BMO Economics, Haver Analytics

Chart 2
Global Crop Yields

(% deviation from trend)



Notes: marketing years (for example, 18 indicates the 2018/19 marketing year); estimates for 2019/20.
Sources: BMO Economics, U.S. Department of Agriculture

Wheat prices have moved somewhat higher during the fall thanks to early winter weather in the Northern U.S. Plains and the Prairie Provinces, which complicated the harvest and will likely weigh on the quality of the overall crop. Challenging harvest conditions proved especially problematic after rain delayed the planting season in some areas, leaving a larger share of the crop vulnerable to an early freeze. Even so, wheat prices have gained little over 2019 as a whole, as greater acreage has helped to prop up world production and global wheat yields likely edged somewhat higher this year, despite growing challenges in Australia and parts of the Black Sea region. The U.S. Department of Agriculture currently estimates that global wheat carry-out stocks will reach another record this year and that the stocks-to-use ratio will be little-changed near recent highs, even though consumption has continued to trend higher. With stockpiles elevated and the global economy softening, it is expected that any near-term recovery in wheat markets will be relatively staid, but prices should trend at least modestly higher ahead, as some farmers are unable to turn a profit at current levels. Overall, wheat prices are expected to average US$4.90 per bushel in 2019, little-changed from 2018, before increasing to $5.40 in 2020—still a relatively low level by historical standards.

Canola prices started the year in rough shape and have lost additional ground amid escalating trade hostilities with China. Last year, China applied substantial retaliatory tariffs to U.S. soybeans, which weighed heavily on oilseed prices in general, and this year the country instituted a blanket ban on imports of Canadian canola, ostensibly due to contamination concerns. Although the market impact of the ban has been softened by lower acreage and likely weaker yields in Canada this year, canola prices (in US $ terms) still plumbed decade-lows in May. At this stage, a major improvement in pricing will likely require a breakthrough in trade relations with China, but prices should still trend somewhat higher ahead as producers transition into other crops. And, with China's purchases of North American oilseeds as low as they are, it has little ability to further disrupt the market. Assuming limited progress on the trade front, canola prices are expected to average US$344 per metric tonne in 2019, down from $389 in 2018, before partially recovering to $370 in 2020 as farmers divert acreage to other crops.

Corn and soybeans—the most intensively-grown field crops in North America, though not components of BMO's Commodity Price Index—remain oversupplied despite more challenging growing conditions this year. Within North America, trade hostilities remain a major headwind, especially in the soybean space, as China has historically purchased nearly one-third of the U.S. crop. Although China has agreed to increase agricultural purchases from the United States as part of the so-called "mini trade deal" announced this month, the details of the agreement remain uncertain and it seems unlikely that China will significantly ease pressure on the U.S. agriculture sector without a meaningful withdrawal of U.S. tariffs. The emergence and spread of ASF has also eliminated around 20% of China's hog herd, which has substantially reduced the country's feed requirements and increased its ability to forego U.S. product. From a global perspective, oversupply will likely be compounded by producers in South America, who have been quick to capitalize on the trade war by increasing farm acreage and investing in export infrastructure geared toward trade with China. All of this points to a sluggish recovery ahead.

Energy, Materials and Agriculture

		Crude Oil (US$/bbl)	Natural Gas Henry Hub (US$/mmbtu)	Natural Gas AECO (US$/mmbtu)	Lumber (US$/mbf)	Wheat (US$/bushel)	Canola (US$/tonne)	Cattle (US$/cwt)	Hogs (US$/cwt)
	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	1.69	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	56.86	2.60	1.17	352	4.85	343	114.93	71.48
2018	Oct	70.76	3.28	1.03	323	5.11	378	113.36	61.13
	Nov	57.00	4.09	1.43	337	5.05	361	116.04	57.61
	Dec	48.95	4.04	1.23	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	2.44	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	1.02	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
	m-t-d Oct	53.14	2.29	1.27	349	4.97	346	107.86	62.30
Forecast	2019 avg.	56.00 ↓	2.60 ↓	1.25 ↑	354 ↑	4.90	344 ↓	114.00 ↑	69.50 ↓
	2020 avg.	55.00	2.80	2.80 ↑	355 ↑	5.40	370 ↓	116.00	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	2.73	0.82	1.17	6.19	1370	15.92
2018	Oct	2.82	0.92	1.21	5.59	1215	14.58
	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
	m-t-d Oct	2.57	0.78	1.07	8.03	1497	17.58
Forecast	2019 avg.	2.73 ↓	0.81 ↓	1.15	6.60 ↓	1400	16.35 ↓
	2020 avg.	2.95 ↓	0.89	1.10	8.10 ↑	1500	18.50

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↑ *and* ↓ *indicate annual forecast changes from last month*

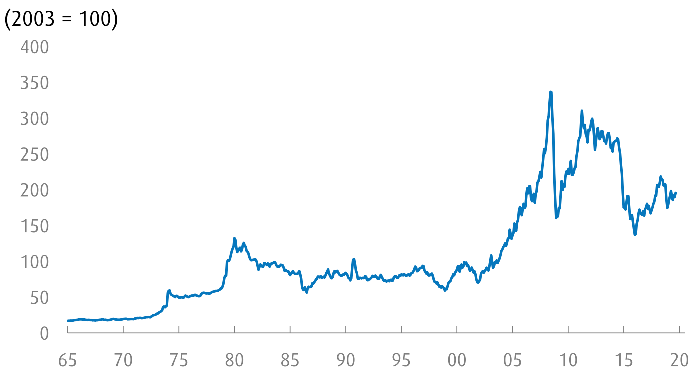
Commodity Indices and Forecasts (US$-terms : 2003 = 100)

			All Commodities	Oil & Gas	Metals & Minerals	Forest Products	Agricultural Products	All Commodities (C$-terms)
	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**		**189.9**	**162.9**	**269.1**	**122.4**	**140.4**	**180.0**
	2020		**196.8**	**160.6**	**292.9**	**123.6**	**151.9**	**184.6**
	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
Forecast		**Q4**	**190.0**	**154.3**	**284.7**	**123.3**	**142.0**	**179.7**
	2020	**Q1**	**194.7**	**157.9**	**292.1**	**123.3**	**147.4**	**184.1**
		Q2	**197.5**	**160.5**	**294.7**	**123.5**	**154.5**	**185.7**
	2018	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
	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

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

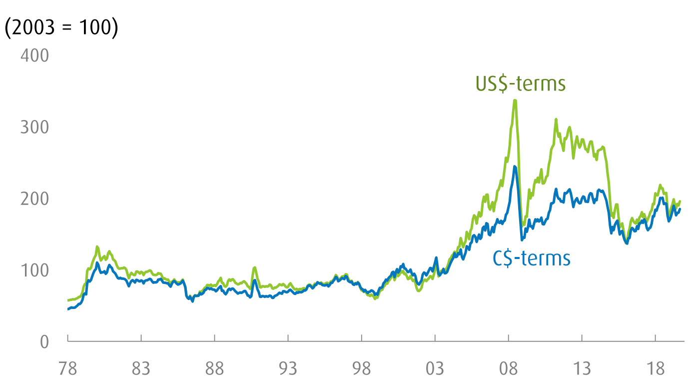


Source: BMO Economics

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.

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