

Gold Medal Performance by Commodities in January

Softer dollar and robust global growth provide ideal conditions, but headwinds in the forecast

The **BMO Capital Markets Commodity Price Index** made a strong comeback in January, bouncing 7.5% to its highest level since November 2014. The positive performance extended across the commodity spectrum, backed by a weaker U.S. dollar (thanks Secretary Mnuchin), firming global demand and frigid North American temperatures which fueled a double-digit gain in the oil & gas segment. Prices have taken a step back in February, knocked by the recent equity market correction and fading support from the dollar, and additional moderation is likely in store.

The **Oil & Gas Index** rose a whopping 11% in January. West Texas Intermediate (WTI) rallied on temporary global supply concerns due to civil unrest in Iran and on notable reductions in U.S. inventories. WTI reached an intra-month daily high of a little above US\$66/barrel near the end of January, but subsequently weakened on signs of a ramping up of shale oil production. Natural gas spiked in early January as below-normal temperatures spurred heating demand, but subsequently fell sharply through mid-February on expectations of strengthening output, despite inventories being well below their five-year average.

The **Metals & Minerals Index** surged 5.1% to a 40-month high in January with contributions from every index component. Supply-side factors supported the gains in certain markets, but the main impetus came from bullish trading sentiment and renewed weakness in the U.S. dollar. Base metals prices had recoiled by mid-February, though some still appear stretched relative to fundamentals. Gold prices remain lofty but will likely take a hit, as recent signs of rising inflation raise interest rate expectations.

The **Forest Products Index** enjoyed a sturdy 3.8% gain to start the year, boosted by a show-stopping performance in the lumber segment. Spruce-Pine-Fir prices leapt US\$36 to average \$493/mbf, reaching an all-time high of \$510 by month-end. Oriented Strand Board gained US\$18 to average \$319/msf, with prices reaching \$340 in the final week. An eventual pull-back is expected, but prices remained firm through mid-February.

The **Agriculture Index** started the year on a positive note with a 3.4% advance in January and all four components in the green. In the livestock segment, hog prices posted a better-than-seasonal 8.1% increase on surprisingly solid demand, which has kept prices buoyant despite a growing North American herd. In the crop segment, wheat prices jumped a hefty 5.3% but remain weak in absolute terms amid widespread oversupply.

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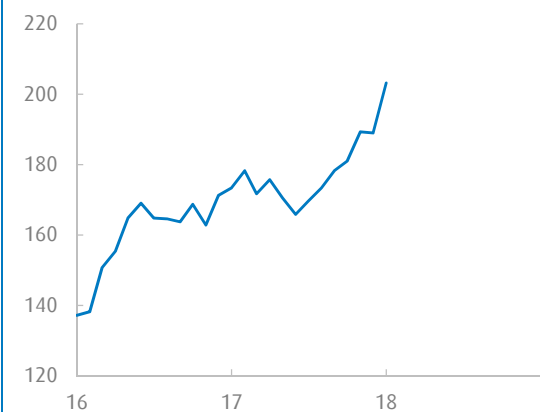
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**BMO CAPITAL MARKETS
COMMODITY PRICE INDEX
(2003 = 100)**

All Commodities Index



	Jan. Level (2003=100)	% Change from Mth. Ago	% Change from Yr. Ago
All Commodities	203.2	7.5	17.2
Oil & Gas	187.3	11.0	20.9
Metals & Minerals	271.2	5.1	14.0
Forest Products	160.0	3.8	21.9
Agriculture	140.2	3.4	2.7



Commodity Focus: Livestock

Rising supply likely to outstrip demand

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Benchmark U.S. livestock prices are little-changed over the past year and have remained meaningfully above the lows plumbed in late 2016, to the relief of producers everywhere (*Chart 1*). After adjusting for seasonality, cattle prices have risen nearly 20% from their nadir, while hog prices have bounced back more than 50%. But whereas the collapse in 2016 was caused by aggressive herd expansion and rising supply, today's stronger marketing environment has resulted from a dramatic upswing in demand—a development that has important implications for the outlook.

The U.S. food industry as a whole is currently in the midst of an impressive surge in demand, with real consumer food spending up a towering 7.0% over the past 24 months—an exceptional outcome for an industry where demand is driven mainly by population growth (*Chart 2*). And, while the jump in demand has been driven in part by lower food prices, overall food budgets are also expanding at the fastest pace in six years and real food spending actually accelerated during the second half of 2017 despite food prices turning higher. Strengthening trade has provided an additional lift. Since bottoming in late 2015, net exports of beef have risen by the equivalent of 4.2% of domestic production, while net exports of pork have increased by 2.8% of production. Overall demand conditions have rarely been so strong.

Needless to say, the impact of stronger demand on livestock prices has been warmly welcomed. However, the surge in demand, together with today's exceptionally low feed costs, is also spurring a continued expansion of the U.S. livestock herd—a run-up that now risks being overdone. Indeed, the U.S. livestock herd has now expanded for four straight years, with the cattle herd outpacing population growth by more than twofold over that period and the hog herd outpacing population by nearly fourfold (*Chart 3*). Overseas producers have also been ramping up production, particularly in China, where livestock and meat processing operations are being modernized and up-scaled. All of this raises the risk of overcapacity, especially with domestic demand growth more-or-less guaranteed to slow from today's torrid pace. Trade, for its part, has already become less supportive, as net exports effectively flat-lined in the second half of 2017. Ongoing NAFTA negotiations represent an additional wildcard, particularly for hog prices, as Mexico is a major buyer of U.S. pork. In apparent recognition of these factors, year-ahead hog futures are priced at a 10% discount to front-month contracts, while year-ahead cattle futures are discounted 7%.

With supply likely to soon outstrip demand, hog prices are expected to lose ground over 2018 and average US\$71/cwt during

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

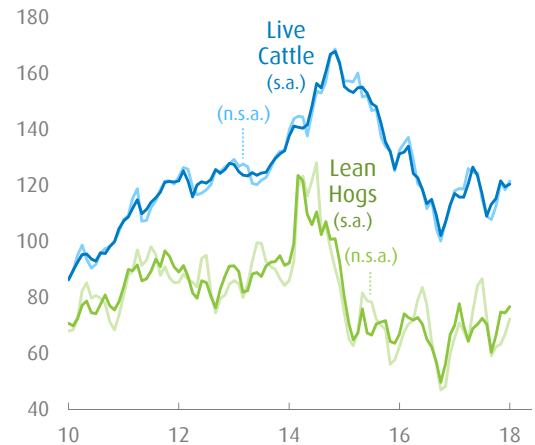


CHART 2: U.S. CONSUMER FOOD SPENDING
(y/y % chng)

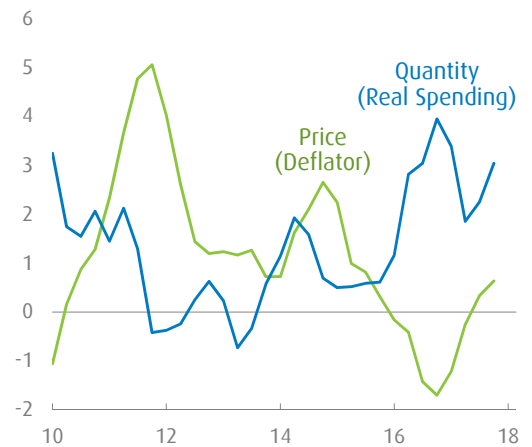
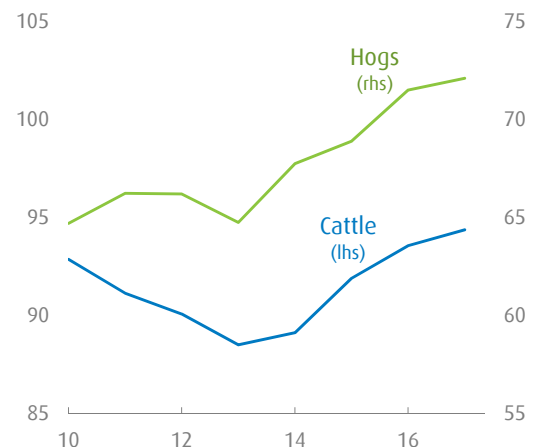


CHART 3: U.S. CATTLE AND HOG HERD
Head Count (mlns)



the year as a whole—slightly higher than the average of \$70 in 2017, but only due to the stronger starting point. Sliding hog prices should prompt greater breeding restraint this year, setting the stage for a modest recovery to \$73 in 2019. In the cattle space, prices are expected to decline from an average of US\$118/cwt in 2017 to \$116 in 2018 as supply continues to expand. Given the cattle segment's lengthier animal development cycle and USDA projections of continued herd expansion this year, prices are expected to ease further to \$115 in 2019. Crucially, both segments are vulnerable to a faster-than-expected upturn in crop prices from today's bumper crop-induced lows. A sharp increase in crop prices would erode demand by lifting consumer food prices, while putting upward pressure on feed costs at a time when interest and energy costs are already rising. This would almost certainly push producers into herd reduction mode, compounding the near-term pressure on livestock prices as breeding animals are sold for slaughter.

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	938	540
	2017	50.91	2.99	2.01	401	938	540
	y-t-d 2018	63.23	3.57	2.68	496	938	540
2017	February	53.46	2.85	1.92	375	938	540
	March	49.48	2.88	1.90	359	938	540
	April	51.08	3.10	2.09	407	938	540
	May	48.51	3.15	2.14	388	938	540
	June	45.19	2.98	1.87	368	938	540
	July	46.61	2.98	2.05	403	938	540
	August	48.05	2.90	1.53	395	938	540
	September	49.83	2.98	1.68	419	938	540
	October	51.60	2.88	1.99	446	938	540
	November	56.66	3.01	2.34	484	938	540
	December	57.93	2.82	2.45	457	938	540
2018	January	63.66	3.88	2.84	493	938	540
	m-t-d February	62.23	2.79	2.05	510	n.a.	n.a.
Forecast	2018 Avg.	58.00 ↑	3.00 ↓	2.25 ↓	420 ↑	940	540
	2019 Avg.	60.00	3.20	2.55	360	940	530

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	3.19	1.00	1.57	5.90	1332	17.04
2017						
February	2.69	0.84	1.29	4.82	1233	17.88
March	2.64	0.86	1.26	4.64	1231	17.61
April	2.58	0.88	1.19	4.38	1267	18.08
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
m-t-d February	3.15	0.99	1.59	6.04	1331	16.69
Forecast						
2018 Avg.	2.95	0.95	1.40	4.90 ↑	1280	17.35 ↓
2019 Avg.	3.15	0.98	1.36	5.00	1295	18.00

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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	4.39	396	122.97	72.83
2017	February	4.37	396	118.85	70.83
	March	4.27	382	118.66	67.92
	April	4.20	377	125.99	64.21
	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
	m-t-d February	4.53	398	126.32	74.16
Forecast	2018 Avg.	4.60	405	116.00 ↑	71.00
	2019 Avg.	5.10	415	115.00	73.00

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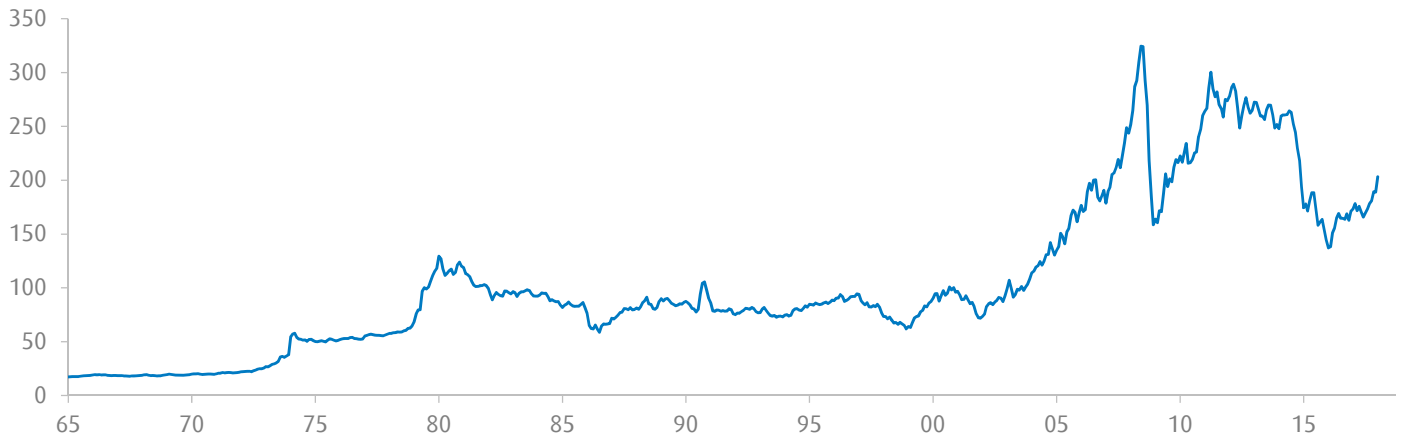
Commodity Indices and Forecasts

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	262.8	283.0	300.6	139.4	200.1	193.1
	2014	246.3	271.4	272.2	138.8	170.0	193.9
	2015	169.7	142.5	245.2	125.6	151.3	154.4
	2016	159.3	126.9	239.0	130.3	135.9	150.5
	2017	176.3	149.6	250.0	147.0	139.8	163.4
Forecast	2018	189.9	169.5	259.7	149.0	144.9	165.1
	2019	194.8	175.5	268.1	138.9	153.6	165.0
Quarterly							
2016	Q2	163.1	132.3	239.5	131.2	145.4	150.1
	Q3	164.4	132.4	247.9	133.7	128.7	153.1
	Q4	167.6	144.9	236.7	132.2	130.5	159.7
2017	Q1	174.5	152.2	243.3	137.4	138.0	164.7
	Q2	170.7	142.3	244.4	144.4	139.2	164.0
	Q3	173.8	141.8	252.9	149.1	143.8	155.7
	Q4	186.4	161.9	259.6	157.0	138.0	169.1
Forecast 2018	Q1	197.9	179.0	266.9	159.8	141.4	174.3
	Q2	185.9	162.5	256.0	151.6	147.8	162.1
	Q3	185.1	163.8	255.2	144.5	144.1	160.2
Monthly							
2017	Jan	173.4	154.9	237.8	131.2	136.5	163.6
	Feb	178.3	156.4	246.6	141.4	140.7	166.7
	Mar	171.7	145.3	245.5	139.5	136.9	163.9
	Apr	175.7	150.3	247.5	147.2	136.0	168.5
	May	170.5	143.2	242.3	144.4	138.7	165.8
	Jun	165.9	133.5	243.4	141.5	143.0	157.7
	Jul	169.6	137.5	243.1	148.0	154.1	153.9
	Aug	173.4	141.3	254.6	147.6	138.4	156.2
	Sep	178.3	146.5	260.9	151.8	138.8	156.9
	Oct	181.0	151.2	259.5	156.5	139.1	162.4
	Nov	189.3	165.7	261.1	160.2	139.2	172.5
	Dec	189.0	168.8	258.1	154.2	135.6	172.2
2018	Jan	203.2	187.3	271.2	160.0	140.2	180.6

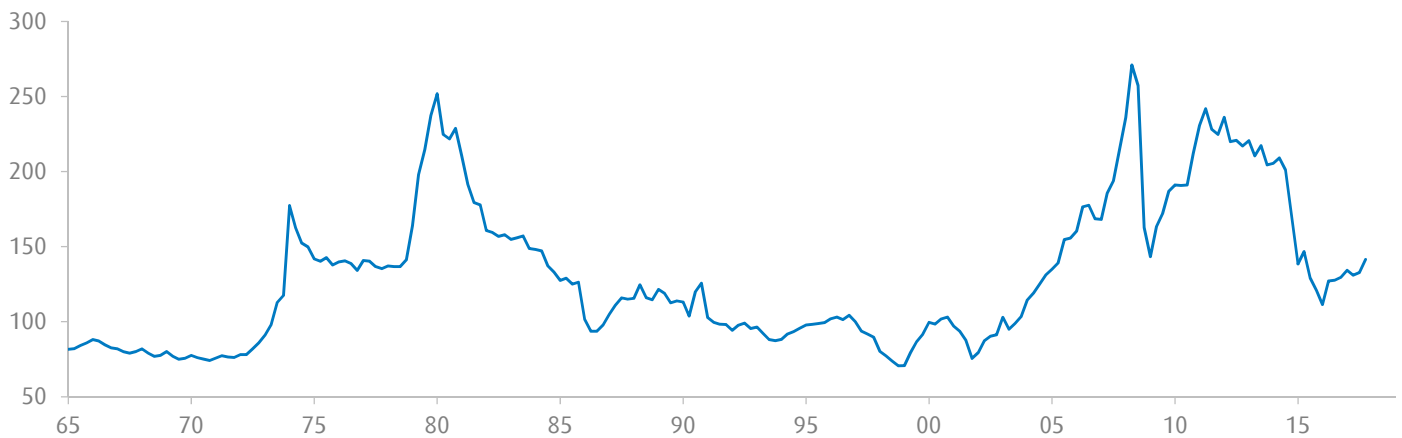
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Historical Charts: All-Commodity Index

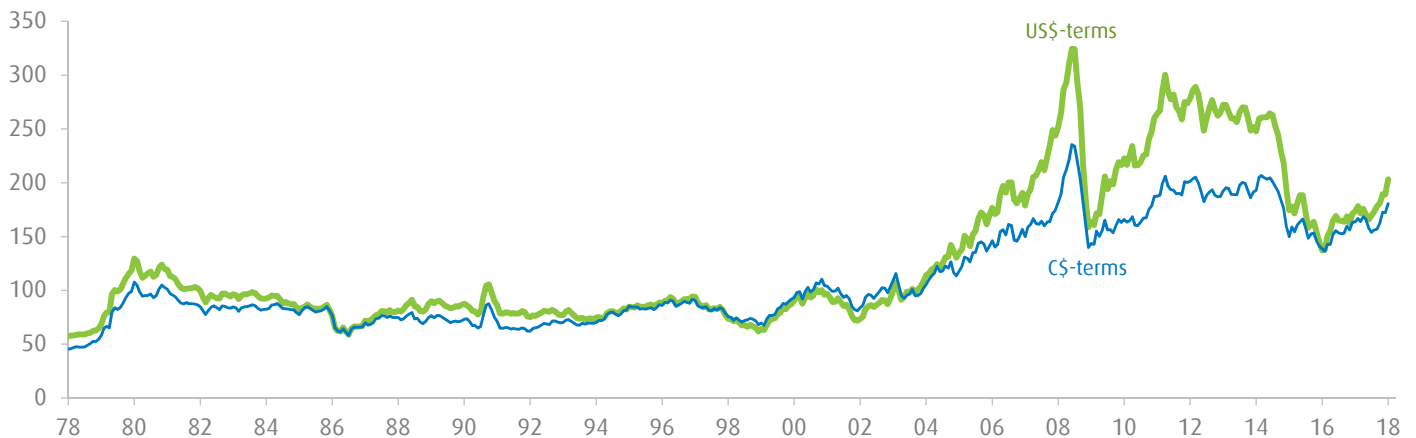
Nominal US\$-Terms (2003 = 100)



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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