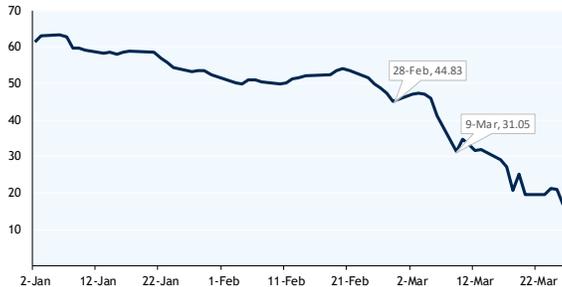


WTI Prices fall below \$20 per barrel

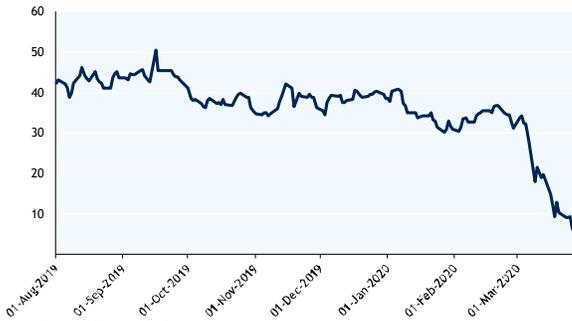
Daily WTI Prices (Jan 2nd-Mar 26th, 2020)



Source: US Department of Energy, RBC Economics Research

Western Canadian Select Prices tumble 87.6% from January peak

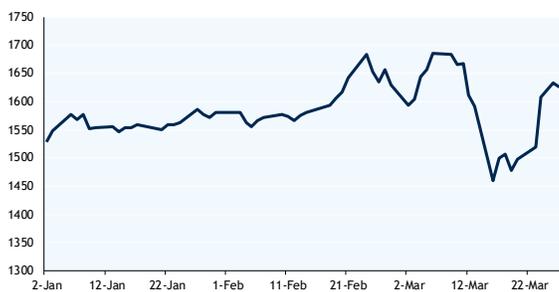
\$/US/bbl



Source: RBC Economics Research

Despite near-term volatility, markets remain gold positive

Gold: Engelhard Industrial bullion price, \$/troy ounce: Jan 2nd-27 March, 2020



Source: RBC Economics Research

RBC's commodity price index is a Fisher chain-weighted index of spot or transaction prices of 24 of the top exported Canadian-produced commodities. The weight of each commodity in the overall index and various sub-indices is determined by its share of exports and is updated annually in February.

COMMODITY PRICE MONITOR: MARCH UPDATE

March 31, 2020

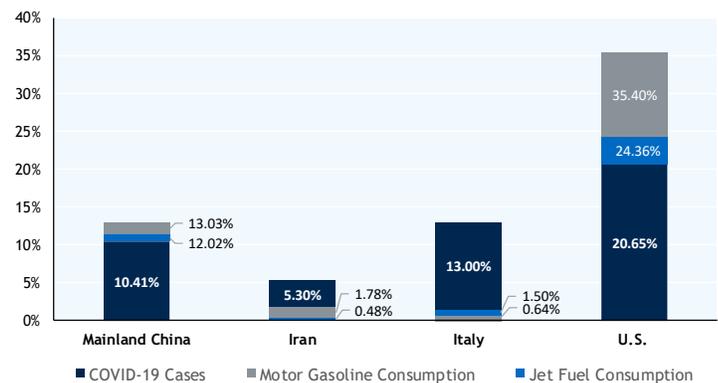
March 2020: A month of many 'firsts'

The month of March marked the transition of COVID-19 from a disruption concentrated in China to a widespread global phenomenon. March has proven to be a month of persistent volatility as social distancing disrupts economic activity across the globe and investors realize the uncomfortable truth that what is necessary to address a global pandemic will hit the global economy in an unprecedented way. Commodity prices have plummeted in March, coinciding with the S&P500 falling over 600 points (24%) since January. Coincidentally, crude prices have faced a two-sided disruption.

- Crude prices (WTI) fell 38.7% in March.** As of March 30, prices were down 67% from the last day of February. A standoff among OPEC strongholds held global oil producers hostage. The timing could not be worse. The Russian and Saudi stalemate has occurred simultaneously with demand destruction caused by the COVID-19 outbreak. When Russia did not agree to Saudi Arabia's proposed additional 1.5 mb/d supply cut, Saudi Arabia slashed crude prices sending global oil prices plummeting.¹ Recently, WTI has fallen below \$20 /barrel and Western Canadian Select prices fell more than 87% since January. According to RBC Capital Markets, traffic congestion in major U.S. cities has fallen 82% due to social distancing.² Depressed demand for refined products has resulted in widespread price declines. Daily natural gas prices were down 6.3% on average in March.
- Gold prices have not proven immune to widespread market volatility.** When stocks tumbled on March 16th, so too did gold, falling 8% from the day prior. According to RBC Capital Markets, investors likely turned to gold to fulfil margin calls and cover their losses in other areas.³ Overall, the outlook for gold maintains positive as it is widely considered a safe haven in times of economic uncertainty. Average daily gold prices are down just 0.5% in March relative to February.

Share of Global COVID-19 Cases & Petroleum Consumption

Share of Global COVID-19 cases (as of March 30th) & Consumption of Petroleum & other liquids (as of 2017)



Source: Johns Hopkins University, EIA, RBC Economics Research



RBC commodity price index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

Index excluding energy product prices

January 1994 = 100, Monthly Average



Source: RBC Economics Research

Energy products sub-index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

February Commodity Price Slides Foreshadow March Volatility

The RBC Commodity Price Index tumbled 5.8 % in February on the back of substantial losses in energy. In February, COVID-19 was still largely a story of market disruption in China. The closure of China's industrial hubs spurred global supply chain spillovers, but at this point, COVID-19 was by-and-large a China story. On February 28th, markets plummeted as investors became wary that the virus's impact would be far-reaching. The events of February 28th served as the antecedent to widespread volatilities in March.

- The energy products sub-index nose-dived, down 12.1% February.** This was the worst monthly decline we have seen since Q4 2018 and price deterioration only worsens in March. WTI fell markedly during the last week in February, down 9.0% relative to the previous week. Crude prices fell 12.1% in February relative to the month prior, with natural gas dropping 5.4% (29.0% y/y). In February, falling demand for natural gas due to COVID-19 was concentrated exclusively in China, whose demand for natural gas accounts for less than 30% of that of the U.S..⁴
- The agricultural products sub-index fell 1.8% in February.** Weaknesses were exhibited across all grains as shipment slowed. Lean hog prices fell 9.3%. Before the trade war, China accounted for 21% of Canadian farm, fishing, and intermediate food product exports. Over the past year, this export share has subsequently fallen to about 13%. With declining product prices (near-term canola futures fell 3.6% in February), the fallout from COVID-19 could hit Canadian farmers when they are already hurting.
- The forest products sub-index surged 5.7% in February** as lumber prices climbed 9.1% from January. U.S. housing starts appeared to outweigh slowing demand from China at the beginning of the year, as US housing starts were strong in January and only slightly lower in February. Pulp prices grew 1.0% and newsprint fell 1.3%.
- The non-precious metals & minerals sub-index slid 4.9% in February** on the back of broad-based declines. Copper prices fell 6.0% as Chinese inventories mounted when industry ground to a halt. According to RBC Capital Markets, if China were to lose a month of copper consumption, this would amount to 4% of global annual copper consumption.⁵ At the same time, iron ore shipments at Chinese ports fell.⁶ Iron ore prices were down a whopping 8.4% in February. China accounted for roughly 17% of Canadian metal ore exports last year, so the impact of these declines are not immaterial to Canadian and global markets.
- The precious metals sub-index mounted 2.3% in February.** On February 28th, gold prices saw their most substantial daily decline since April 2013 as investors cashed out to cover their losses in other areas.⁷ Gold's price slump appeared to be a temporary side effect of a widespread price dive rather than reflective of a broader change in investor attitudes towards the commodity, according to RBC Capital Markets.⁸ Gold is still widely regarded as a safe-haven asset in times of economic uncertainty. Despite these moves at the end of February, gold prices were up 2.4% from January (21.08% y/y). Silver prices fell a subdued 0.5% relative to the month prior.



RBC commodity price sub-indices

Agricultural products sub-index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

Forest products sub-index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

Non-precious metals & minerals sub-index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

Precious metals sub-index

January 1994 = 100, Monthly Average



Source: RBC Economics Research

	Period averages								
	2017	2018	2019	Q2-19	Q3-19	Q4-19	Dec-19	Jan-20	Feb-20
Indices									
RBC commodity price index	171.3	199.6	230.2	215.4	212.5	214.6	218.9	215.5	203.1
<i>Month-over-month/quarter-over-quarter % change</i>				2.1	-1.3	1.0	1.3	-1.5	-5.8
<i>Year-over-year % change</i>	-4.7	16.5	15.3	-10.8	-9.4	0.3	9.5	6.4	-4.5
RBC commodity price index ex. energy	155.0	175.3	190.2	179.0	185.5	187.4	188.4	184.9	189.6
<i>Month-over-month/quarter-over-quarter % change</i>				-0.9	3.6	1.0	0.1	-1.9	2.6
<i>Year-over-year % change</i>	-1.0	13.1	8.6	-12.2	-0.9	7.9	9.6	6.0	2.6
Sub-indices									
Agricultural products	117.0	128.5	127.5	120.7	119.3	124.0	124.9	126.1	123.9
<i>Month-over-month/quarter-over-quarter % change</i>				-3.3	-1.2	4.0	-1.1	1.0	-1.8
<i>Year-over-year % change</i>	-6.7	9.8	-0.8	-10.0	-3.0	2.5	4.1	3.1	-2.0
Energy products	172.9	206.1	255.1	232.8	217.4	219.2	226.7	218.1	194.1
<i>Month-over-month/quarter-over-quarter % change</i>				5.0	-6.6	0.9	2.4	-3.8	-11.0
<i>Year-over-year % change</i>	-9.6	19.2	23.8	-11.0	-19.5	-9.0	8.2	2.9	-12.0
Forest products	111.1	136.1	165.7	131.1	137.2	141.6	143.8	143.8	152.0
<i>Month-over-month/quarter-over-quarter % change</i>				-5.9	4.6	3.2	0.6	0.0	5.7
<i>Year-over-year % change</i>	4.3	22.5	21.8	-31.7	-19.2	6.9	10.9	8.7	3.0
Non-precious metals & minerals	172.1	193.9	205.6	207.3	208.5	204.6	204.2	202.2	192.2
<i>Month-over-month/quarter-over-quarter % change</i>				3.3	0.6	-1.9	0.1	-1.0	-4.9
<i>Year-over-year % change</i>	-8.0	12.7	6.0	-2.6	4.4	3.9	5.7	4.8	-4.7
Precious metals	316.7	318.6	318.7	326.9	368.5	370.6	369.8	389.9	398.7
<i>Month-over-month/quarter-over-quarter % change</i>				0.1	12.7	0.6	0.5	5.4	2.3
<i>Year-over-year % change</i>	7.8	0.6	0.0	-0.5	21.0	20.5	18.2	20.4	20.6



Commodity prices trends

Agricultural products

Barley

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Canola

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Corn

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Wheat

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Potatoes

US\$ per 100 pounds



Source: Haver Analytics, RBC Economics Research

Live cattle

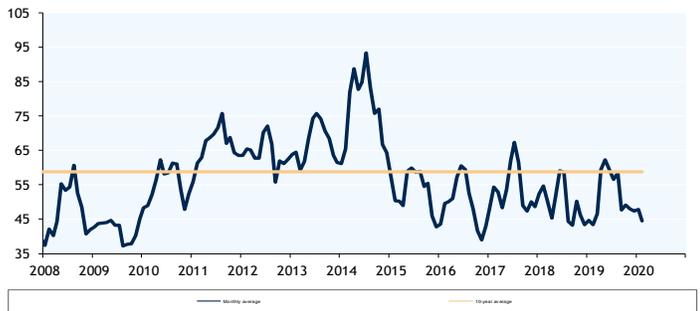
US\$ per 100



Source: Haver Analytics, RBC Economics Research

Live hogs

US\$ per 100



Source: Haver Analytics, RBC Economics Research

Salmon

US\$ per kilogram



Source: INSEE, RBC Economics Research



Commodity price trends

Energy products

Coal

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Forest products

Lumber

US\$ per 1,000 board feet



Source: Haver Analytics, RBC Economics Research

Crude oil (WTI)

US\$ per barrel



Source: Haver Analytics, RBC Economics Research

Newsprint

US\$ per tonne



Source: Bloomberg, RBC Economics Research

Natural gas

US\$ per million British thermal units



Source: Haver Analytics, RBC Economics Research

Pulp

US\$ per tonne



Source: INSEE, RBC Economics Research

Precious metals

Gold

US\$ per troy ounce



Source: Haver Analytics, RBC Economics Research

Silver

US\$ per troy ounce



Source: Haver Analytics, RBC Economics Research



Commodity price trends

Non-precious metals & minerals

Aluminum

US\$ per pound



Source: Haver Analytics, RBC Economics Research

Copper

US\$ per pound



Source: Haver Analytics, RBC Economics Research

Iron ore

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Lead

US\$ per pound



Source: Haver Analytics, RBC Economics Research

Nickel

US\$ per pound



Source: Haver Analytics, RBC Economics Research

Potash

US\$ per tonne



Source: Haver Analytics, RBC Economics Research

Uranium

US\$ per pound



Source: Haver Analytics, RBC Economics Research

Zinc

US\$ per pound



Source: Haver Analytics, RBC Economics Research



Commodity price trends

Period averages

	2017	2018	2019	Q2-19	Q3-19	Q4-19	Dec-19	Jan-20	Feb-20
Agricultural products									
Barley (US \$/tonne)	97.6	125.9	128.1	145.0	133.0	114.8	114.8	114.8	114.8
<i>Year-over-year % change</i>	-6.0	28.9	1.7	10.8	5.6	-3.9	-3.9	-3.9	-3.9
Canola (US \$/tonne)	366.0	393.2	388.6	335.5	339.0	347.4	350.3	359.4	345.2
<i>Year-over-year % change</i>	-1.3	7.4	-1.2	-18.0	-11.0	-5.1	-1.9	-0.8	-5.0
Corn (US \$/tonne)	154.5	164.4	170.1	175.9	170.1	166.8	167.0	171.8	168.7
<i>Year-over-year % change</i>	-2.9	6.4	3.4	1.5	7.7	2.5	-0.3	3.0	-0.5
Wheat (US \$/tonne)	262.8	261.2	242.2	233.7	225.5	249.1	9126.5	9087.7	8900.1
<i>Year-over-year % change</i>	18.4	-0.6	-7.3	-14.8	-8.3	-1.2	-0.2	-2.0	-8.3
Potatoes (US \$/cwt)*	10.5	10.6	12.4	11.6	13.7	11.3	13.9	14.3	14.4
<i>Year-over-year % change</i>	0.2	0.6	16.4	0.9	27.9	-1.8	48.3	44.7	34.1
Live cattle (US \$/cwt)	120.2	115.8	116.1	119.7	108.7	120.6	118.0	122.0	118.7
<i>Year-over-year % change</i>	0.1	-3.7	0.3	2.3	-0.6	3.0	0.9	0.8	-3.5
Live hogs (US \$/cwt)	53.6	49.9	51.9	60.4	54.3	60.3	47.3	47.8	44.6
<i>Year-over-year % change</i>	8.0	-6.9	4.0	16.2	11.4	16.0	9.0	7.2	2.8
Salmon (US \$/kg)**	58.2	63.9	58.9	63.5	59.8	56.6	57.6	56.7	61.8
<i>Year-over-year % change</i>	31.8	9.8	-7.7	4.0	0.1	-6.8	-2.9	-5.5	0.7
Energy									
Coal (US \$/tonne)	88.5	107.0	77.9	80.5	67.9	67.5	66.2	69.7	67.6
<i>Year-over-year % change</i>	33.9	20.9	-27.2	-22.9	-42.0	-34.9	-34.7	-29.3	-29.1
Crude Oil (US \$/barrel)	50.9	64.9	57.0	59.8	56.4	57.0	59.9	57.5	50.5
<i>Year-over-year % change</i>	17.9	27.6	-12.2	-12.1	-19.2	-3.6	20.9	12.0	-8.0
Natural Gas (US \$/mmbtu)	2.96	3.14	2.57	2.56	2.38	2.40	2.22	2.02	1.91
<i>Year-over-year % change</i>	18.8	6.1	-18.3	-10.3	-18.7	-36.9	-45.0	-35.0	-29.0
Forest products									
Lumber (US \$/1000 board ft)	400.9	480.4	343.7	332.6	340.0	332.0	385.4	390.0	390.8
<i>Year-over-year % change</i>	31.4	19.8	-28.5	-44.5	-29.5	1.6	14.3	21.8	16.8
Newsprint (US \$/tonne)	539.4	550.3	612.6	596.4	610.5	604.3	594.2	582.0	582.0
<i>Year-over-year % change</i>	1.0	2.0	11.3	-2.4	-3.4	-3.9	-7.4	0.9	-1.2
Pulp (US \$/tonne)	802.1	882.0	1167.0	1151.6	1163.1	1146.5	1142.6	1142.6	1154.1
<i>Year-over-year % change</i>	-6.4	10.0	32.3	-0.6	-5.2	-6.2	-5.4	-3.2	0.5

Source: Haver Analytics, Bloomberg, RBC Economics Research; * latest potato price based on percent change in BLS PPI index

**Salmon prices changed to INSEE data



Commodity price trends

	Period averages								
	2017	2018	2019	Q2-19	Q3-19	Q4-19	Dec-19	Jan-20	Feb-20
Non-precious metals & minerals									
Aluminum (US \$/lb)	0.89	0.96	0.81	0.81	0.80	0.79	0.80	0.80	0.76
Year-over-year % change	22.7	7.2	-15.1	-20.7	-14.3	-11.1	-8.3	-4.0	-9.3
Copper (US \$/lb)	2.80	2.96	2.72	2.77	2.63	2.67	2.75	2.74	2.58
Year-over-year % change	26.8	5.8	-8.0	-11.1	-5.0	-4.7	-0.5	2.0	-9.4
Iron Ore (US \$/tonne)	71.8	69.8	93.8	100.9	102.1	88.7	92.7	95.8	87.7
Year-over-year % change	22.8	-2.8	34.5	53.8	53.1	23.3	34.0	25.7	-0.6
Lead (US \$/lb)	1.05	1.02	0.91	0.86	0.92	0.92	0.86	0.87	0.85
Year-over-year % change	23.9	-3.2	-11.0	-21.0	-3.5	3.8	-3.4	-3.5	-9.2
Nickel (US \$/lb)	4.72	5.95	6.32	5.56	7.05	7.01	6.26	6.15	5.78
Year-over-year % change	8.4	26.0	6.2	-15.3	17.1	34.2	27.4	18.3	0.7
Zinc (US \$/lb)	1.31	1.33	1.15	1.25	1.06	1.08	1.03	1.07	0.96
Year-over-year % change	38.3	0.9	-12.9	-11.2	-7.4	-9.2	-13.4	-7.9	-21.6
Potash (US \$/tonne)	218.2	215.5	255.5	265.5	265.5	265.5	265.5	245.0	245.0
Year-over-year % change	-16.2	-1.3	18.6	23.2	23.2	23.2	23.2	13.7	13.7
Uranium (US \$/lb)	22.1	24.5	25.9	25.0	25.3	25.2	25.6	24.6	24.7
Year-over-year % change	-16.6	11.1	5.6	13.6	-0.9	-11.3	-10.9	-14.2	-13.8
Precious metals									
Gold (US \$/ounce)	1257.8	1268.6	1394.2	1308.4	1473.5	1482.7	1479.7	1560.7	1598.0
Year-over-year % change	0.6	0.9	9.9	0.1	21.5	20.8	18.3	20.8	21.1
Silver (US \$/ounce)	17.1	15.7	16.2	14.9	17.0	17.3	17.2	18.0	17.9
Year-over-year % change	-0.7	-7.9	3.3	-9.9	13.4	19.0	16.2	14.9	13.1

Source: Haver Analytics, Bloomberg, RBC Economics Research

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7. RBC Capital Markets, *Gold Strategy: Replay Trading*, March 12, 2020.
8. Ibid.

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