

White House Announces Intention to Drive Iranian Oil Exports to Zero

- The United States surprised oil markets on Monday, April 22 when it announced its intention to drive Iranian oil exports to zero, nixing the possibility that Washington would extend waivers exempting certain importers from sanctions enforcement as previously assumed.
- This is an unambiguously bullish development for the oil market, magnifying the potential loss of Iranian crude to as much as 1.3 MMbpd; however, many factors remain that may stymie the White House's efforts to zero out Iran's exports and OPEC currently holds enough spare capacity to theoretically offset a total loss of Iranian crude.
- Alberta's newly elected UCP government is expected to pursue a broadly similar curtailment policy path and lift production levels through the summer, though logistical hiccups and oil-by-rail challenges remain.

WAIVERLESS: COMPLETE ELIMINATION OF IRANIAN EXPORTS LEAVES OIL MARKET TIGHT, BUT TENTATIVELY BALANCED

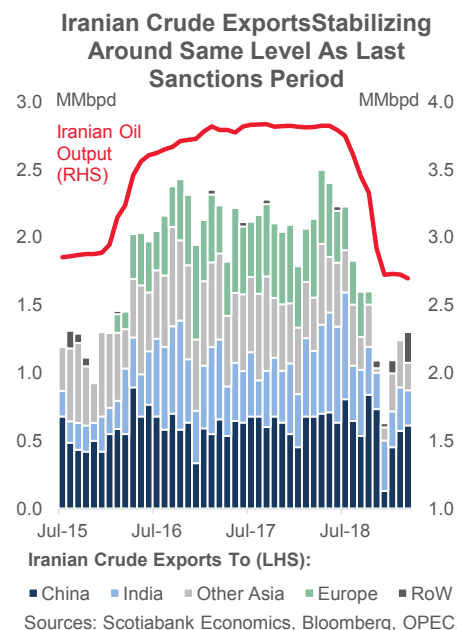
On Monday April 22, US Secretary of State Mike Pompeo announced Washington's intention to let import waivers expire and drive Iranian oil exports to zero, doubling down on the Trump Administration's "maximum pressure" campaign against Tehran. Sanctions have already nearly halved Iranian exports from an average of 2.2 MMbpd in the year preceding their re-imposition to 1.3 MMbpd as of March (chart 1). We believe that the market was anticipating a roughly 20–25% (0.2–0.3 MMbpd) reduction in export levels as incremental pressure was added, but an export dead-stop would mean losing five times that volume. It remains to be seen if the White House will stay the course on its latest bout of hawkish rhetoric, having flip-flopped on this issue only six months ago and tanking the oil market in the process. Zeroing out Iranian exports would also require the cooperation of China and India, which account for two-thirds of current Iranian sales and have historically failed to completely comply with US sanctions. Assuming the complete collapse of Iranian exports, the US has claimed to have the backing of Saudi Arabia and the UAE to fill in for any lost Iranian barrels but skepticism toward Washington's ability to stay the course and the ongoing OPEC+ agreement to cut production levels complicates any side deals to raise output. At this stage, we expect Iranian exports to initially fall to around 0.5–0.6 MMbpd through the summer from nearer 1.3 MMbpd today, with immediate production offsets available—mostly from Saudi Arabia—to cover about three-quarters of that loss. From that initial hit, further declines will depend on how fervently the US pursues sanctions enforcement, with OPEC+ anticipated to adjust production levels in late-June to accommodate for Washington's altered foreign policy. Accordingly, we are maintaining our WTI oil price forecast at around \$60/bbl for 2019/20, though near-to-medium-term risks are increasingly tilted to the upside.

The first and most volatile factor to consider is the resolve of the Trump Administration in pursuing a zero-tolerance Iranian export policy in the face of rising oil prices. Only six months ago the White House reneged on its

CONTACTS

Rory Johnston, Commodity Economist
416.862.3908
Scotiabank Economics
rory.johnston@scotiabank.com

Chart 1



Scotiabank Commodity Price Index

March 2019	(% change)		
	MM	Y/Y	YTD
All Commodity*	0.8	-1.7	-3.2
Industrials	1.5	0.3	-2.3
Oil & Gas	4.3	8.8	3.0
Metal & Minerals	1.7	-1.5	-5.0
Forest Products	-3.6	-9.5	-6.1
Agriculture	-2.3	-10.5	-7.1
January 2007 = 100			
2019			
	Mar	Feb	YTD avg.
All Commodity	117.7	116.8	115.7
Industrials	116.0	114.3	113.4
Oil & Gas	97.0	93.0	93.0
Metal & Minerals	126.2	124.1	123.6
Forest Products	146.5	151.9	148.0
Agriculture	127.6	130.6	128.4

* Weights: Oil & Gas (39.9%), Metal & Minerals (30.1%), Forest Products (14.7%), Agriculture (15.3%); Full technical note on page 7.

hawkish rhetoric at the last minute, issuing import waivers after months of publicly building toward a zero export goal because of an acute political aversion to high crude prices. The flip-flop caught oil markets flat-footed and the efforts taken by OPEC+ to preempt Iranian losses ended up glutting spot market balances. Following this surprise reversal, market participants as well as OPEC's membership are likely to view any renewed bluster from Washington skeptically and price or supply responses are only expected once we begin to see concrete signs of collapsing Iranian shipments. Indeed, the abruptness of the decision to cancel waivers is notable and comes after prior signals from the State Department that waivers would be extended.

Oil prices are about \$10/bbl lower today (chart 2) than when the White House last faced the prospect of tightening pressure on Iran, and would be in line with a recent hawkish press by Washington that included designating Iran's Revolutionary Guard as a terrorist organization. However, fully following through on the goal of zero Iranian exports would almost certainly have an acute impact on crude prices, if only for a short period as logistics are sorted out over the coming months. That the White House is tightening supply just as we enter the summer driving season, a typical high-point for gasoline demand, further amplifies potential price movements, and additional supply risks in Venezuela and Libya could make for an extremely tight market.

If the White House remains firm in its effort to drive Iranian exports to zero the question of compliance falls first to current importers of Iran's oil. Asia accounts for the lion's share of Iran's post-sanctions crude sales, with China and India accounting for two-thirds of total shipments. Both China and India have only partially complied with sanctions efforts in the past, and while some reductions are likely it would be a break from history to see them zeroed out entirely. Beijing has protested the US decision to eliminate waivers and maintains that China's trading relationship with Iran, in which it serves as the largest external purchaser of Iranian crude, is lawful. India, too, has a history of using moments like this to purchase Iranian crude in rupee instead of US dollars. Whether violations would occur out in the open or through a variety of clandestine activities remains to be seen. (Ship-to-ship transfers meant to disguise Iranian sales have occurred before.) Iranian exports hit a low of just more than 0.6 MMbpd in December, immediately after sanctions were initially expected to bite, with the confusion around waivers likely contributing to the falloff. The stickiness of certain customers even through uncertainty of initial sanctions logistics could indicate a rough floor, which would limit losses to around 0.6–0.7 MMbpd instead of 1.3 MMbpd.

It falls to the rest of OPEC to fill in for any lost Iranian barrels and avoid a disruptive price spike—with Saudi Arabia and the UAE explicitly cited in Secretary Pompeo's announcement. While spare capacity exists within OPEC+'s membership—Saudi Arabia alone has cut production by more than 1 MMbpd since November—politics within the cartel and the larger producer alliance, including the ongoing cut agreement, complicate the ability of any individual members to cooperate in side deals with Washington (chart 3). Some support is likely from Saudi Arabia, which is currently producing 400–500 kbpd below its allotment under the OPEC+ deal and thus can fill in without violating the agreement. (Though we were likely to get much of that increase absent Iranian losses given seasonal factors related to crude and gas power burn through the summer.) Further action is unlikely however, both because OPEC+ members remain skeptical of US sanctions threats following a high-impact November flip-flop and because the market will have far more information when the group meets in late-June to reassess the necessity of ongoing production curtailment.

The decision to end import waivers is unambiguously bullish for the oil market, but the range of possible offsets—from US oil price aversion to importer defiance to OPEC fill-in—mean that the direct price impact is expected to be negligible for the year. A heavier call on the rest of OPEC means thinner spare capacity and risks to other supplies remain plentiful, from Libya to Venezuela to Alberta. Mounting tension

Chart 2

Crude Benchmarks and Pump Prices Back to Highest Level Since White House's November Iran Flip-Flop

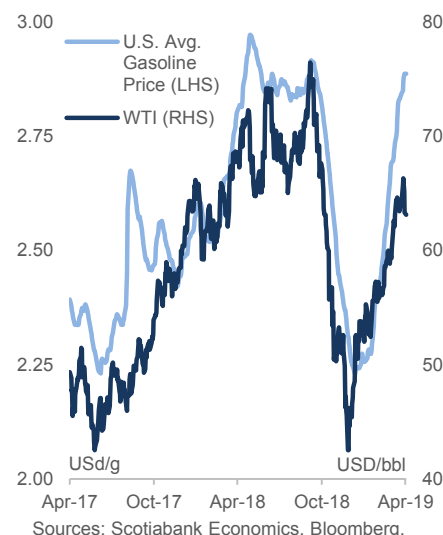
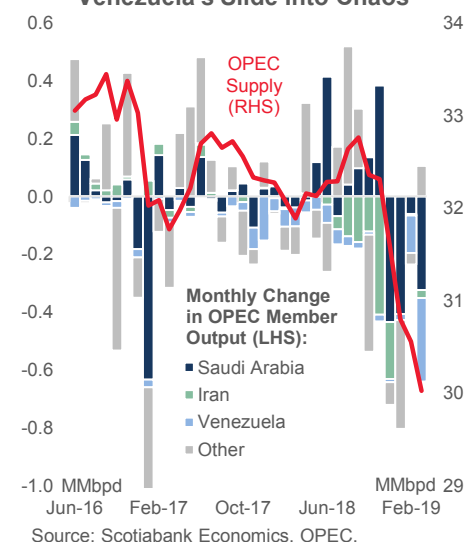


Chart 3

OPEC Production Plunges On Saudi Cuts, Iranian Sanctions, and Venezuela's Slide Into Chaos



between Washington and Tehran also heightens the mother of all oil market tail risks in the Strait of Hormuz, which Iran has already threatened to close if the US cuts off market access entirely. While the likelihood of Tehran blockading the Strait is slim and Iran has threatened similar actions before without follow-through, one in five barrels produced globally passes the chokepoint so it remains the definitive low probability, high impact risk.

NEW ALBERTA GOVERNMENT, SAME OIL SECTOR CHALLENGES

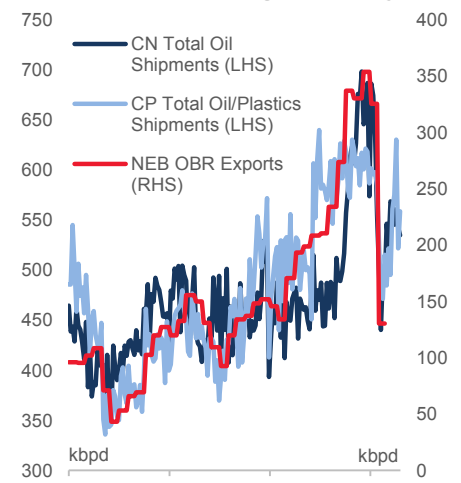
Far from the shores of Iran's beleaguered industry, April brought yet more change to Canada's oil patch with the election of a new provincial government in Alberta, another Keystone XL delay, and confirmation from the NEB that oil-by-rail export volumes collapsed as anticipated in February (chart 4). Jason Kenney led Alberta's United Conservative Party (UCP) to an electoral victory on April 16th, claiming 54.9% of the popular vote and 63 of 87 seats in the province's legislature. Kenney has been a vocal proponent of Alberta's energy sector and has vowed to aid industry by cutting back on red tape, repealing the carbon tax instituted by Rachel Notley's NDP government in favour of a large emitter levy, and fervently pushing a pro-pipeline message in Ottawa and around the world. The UCP leader also opposed to the NDP's plan to purchase oil-by-rail capacity, though supported the production curtailment plan with some caveats around implementation.

We expect the new Alberta government to pursue the same general supply curtailment strategy, gradually lifting production caps through the summer months. Alberta's oil production curtailment policy has succeeded in tightening provincial crude balances as well as the discounts borne by Canadian barrels, but logistical challenges continue to hamper the effective draining of excess inventories. The decreased call on takeaway capacity out of Western Canada depressed the differential to a level that made shipping crude by rail unprofitable and oil-by-rail shipments, unsurprisingly, collapsed by nearly two-thirds from all-time highs in December (chart 4). Those oil-by-rail volumes need to climb quickly through the rest of 2019 for Western Canada to effectively clear maximum, uncurtailed production levels, which means differentials need to rise to a level that attracts railcars back into service and spurs investment in even more capacity.

Fine-tuning production balances in an attempt to achieve not-too-hot-not-too-cold differentials is slow, finicky work, which is why it is generally ill-advised outside of exceptional circumstances like today's acute egress deficit. The current process of lifting production levels by roughly 25 kbpd per month is expected to press WCS differentials toward the \$20/bbl level required to incentivize needed rail, but there is a risk that discounts blow out above those levels if the market is tightened too quickly for rail to sop up the additional crude. While Kenney has opposed Notley's plans for a 120 kbpd government-operated oil-by-rail service, currently depressed private sector rail activity could complicate any decision to abandon the policy—even if contract terms are flexible enough to facilitate such a move—and we continue to expect the programme to continue rolling forward as planned.

Chart 4

Latest NEB Estimates Confirm Canadian Oil-by-Rail Exports Collapsed Through February

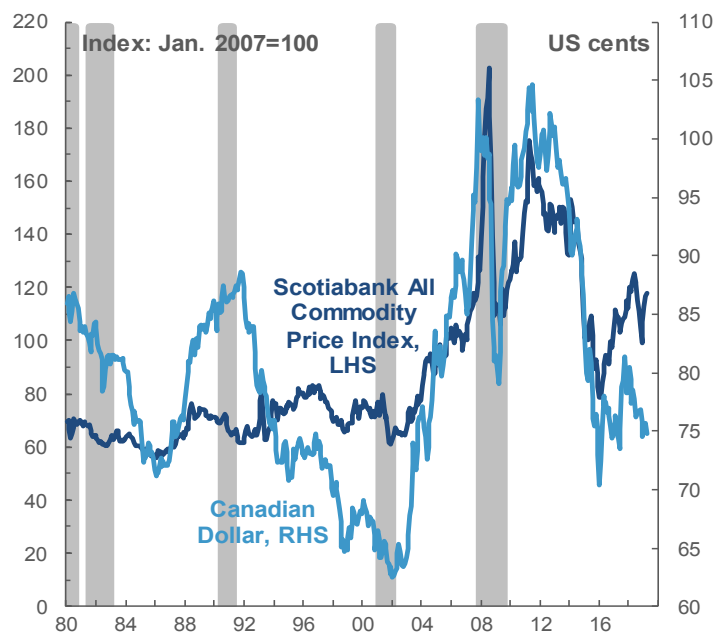
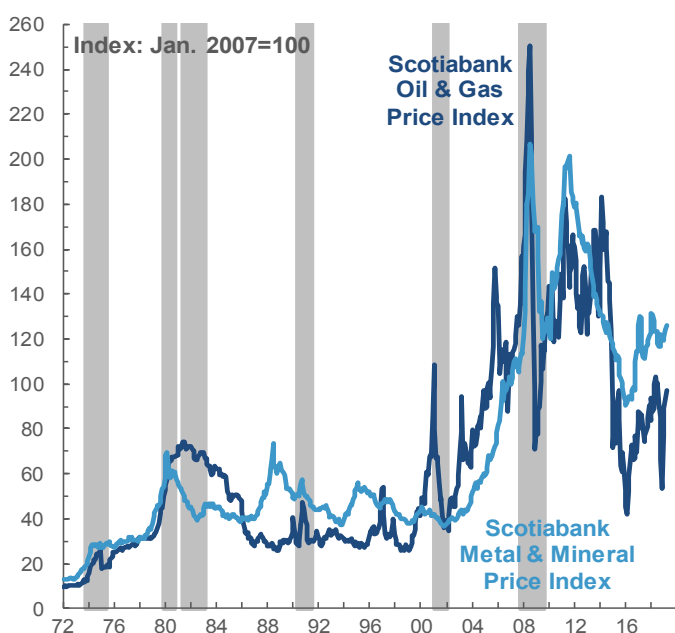
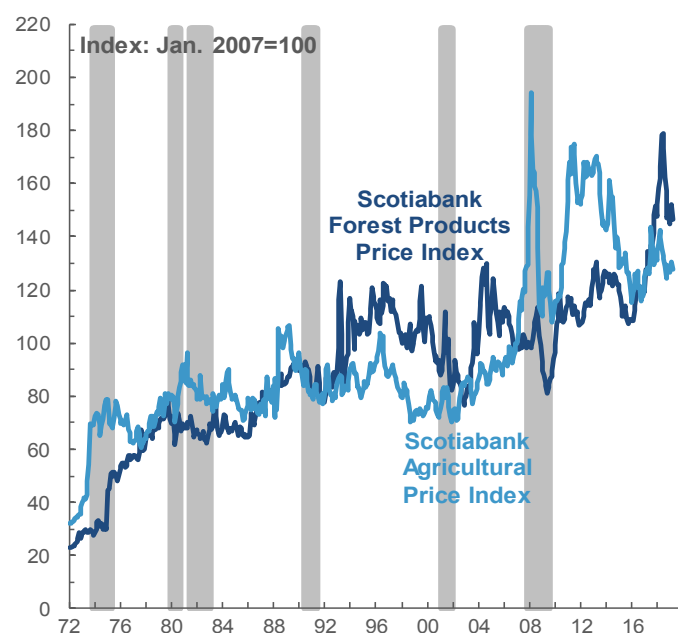


Source: Scotiabank Economics, NEB, CN, CP.

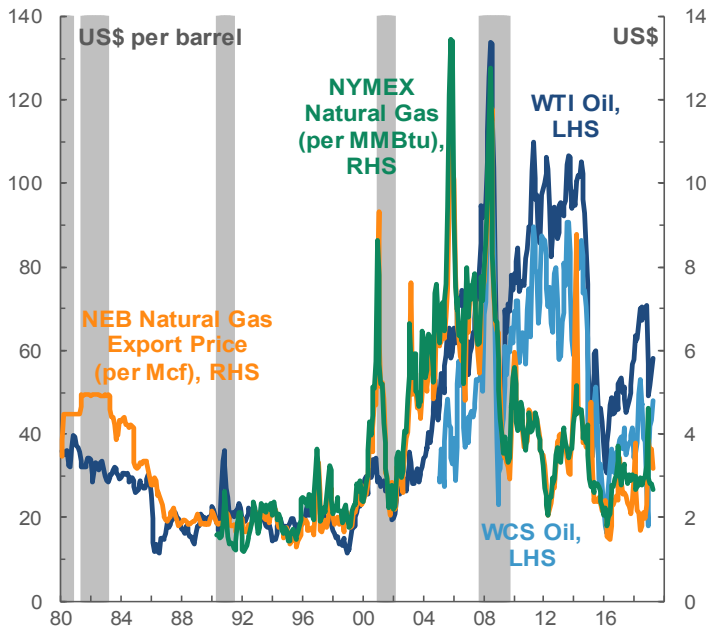
Price Outlook		2000–2017			2018	2019ytd	2019F	2020F
		Low	Period Avg.	High				
Oil & Gas								
Crude Oils								
West Texas Intermediate	USD/bbl	17.45	62.05	145.29	64.90	56.95	59	61
North Sea Brent Blend	USD/bbl	17.68	64.93	146.08	71.69	65.54	67	68
WCS - WTI Discount*	USD/bbl	-42.50	-16.43	-5.50	-26.29	-10.22	-15	-21
Natural Gas								
Nymex Henry Hub	USD/MMBtu	1.64	4.83	15.38	3.07	2.81	2.90	2.80
Metals & Minerals								
Base Metals								
Copper	USD/lb	0.60	2.38	4.60	2.96	2.84	3.00	3.20
Nickel	USD/lb	2.00	7.12	24.58	5.95	5.66	5.75	6.00
Zinc	USD/lb	0.33	0.84	2.10	1.33	1.25	1.25	1.20
Aluminium	USD/lb	0.56	0.87	1.49	0.96	0.84	0.90	0.90
Bulk Commodities								
Iron Ore	USD/t	27	108	302	70	86	77	70
Metallurgical Coal	USD/t	39	131	330	208	204	185	160
Precious Metals								
Gold	USD/toz	256	890	1,895	1,268	1,301	1,300	1,300

* 2008-17 average.

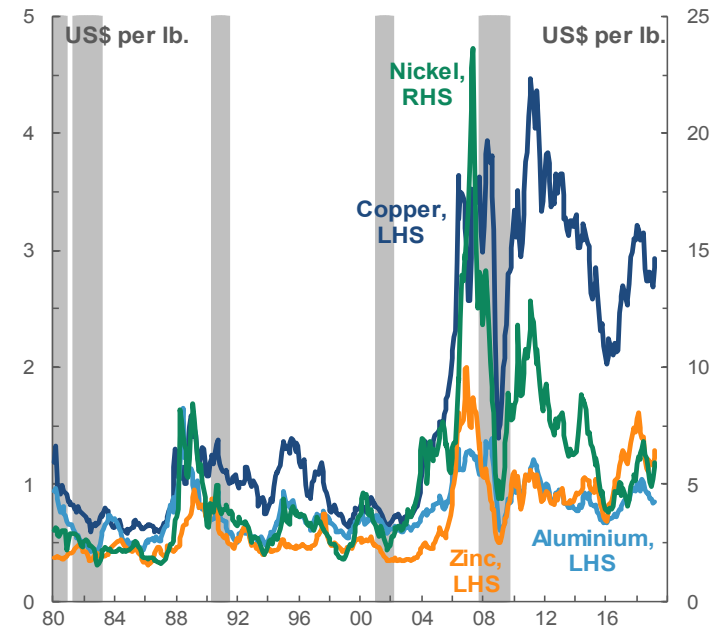
Scotiabank All Commodity Price Index

Canadian Dollar vs. Commodity Prices

Scotiabank Oil & Gas and Metal & Mineral Indices

Scotiabank Forest Products & Agricultural Indices


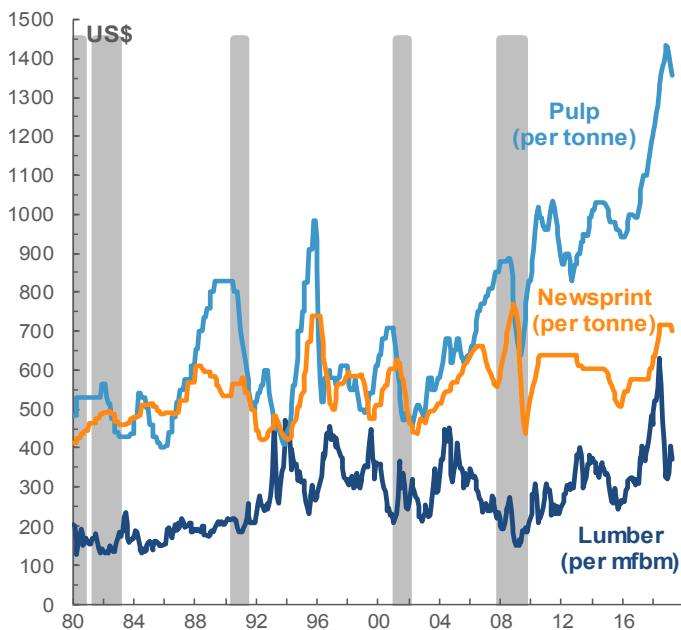
Oil & Gas Prices



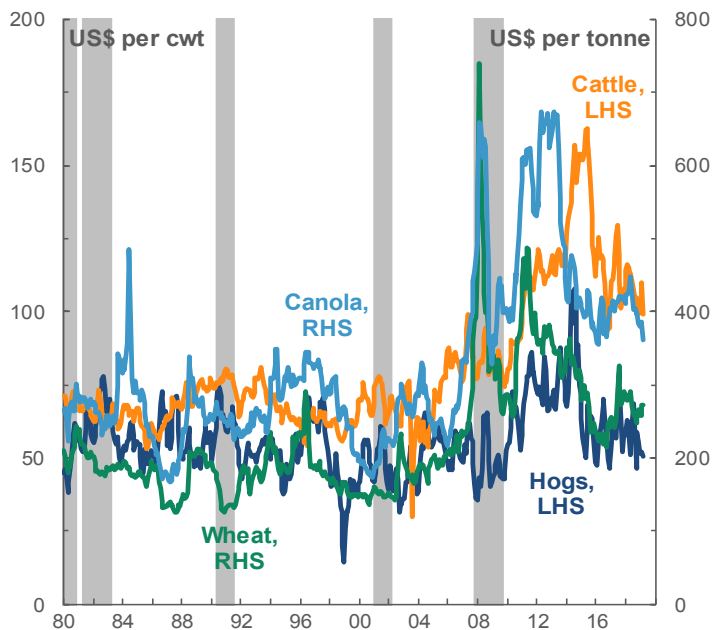
Metals Prices



Forest Products Prices



Agricultural Prices



Technical Note
Scotiabank Commodity Price Index — Principal Canadian Exports
January 2007 = 100

This Index has been designed to track the spot or transactions prices paid in U.S. dollars for key Canadian commodities and resource-based manufactured goods in export markets. The weight of each component is based upon its net export value in 2010. Prior to January 2007, the weight of each component was based on its export value in 1995-97, except for crude oil & refined petroleum products, uncoated freesheet paper and linerboard, where net exports were used. Canada imports a significant quantity of these products, and use of their export value alone would have overstated the importance in Canada's trade performance.

The following prices are included:

OIL & GAS

Crude Oil & Refined Petroleum Products (US\$ per bbl) MSW light sweet crude oil at Edmonton (previously Edmonton Par crude) and Western Canadian Select heavy oil at Hardisty, Alberta; price differentials off WTI near-by futures from Bloomberg.

Natural Gas (US\$ per mcf) Average export price quoted by the National Energy Board.

Natural Gas Liquids (NGLs – Propane, Butane, Ethane & Pentanes-Plus) (US\$ per bbl), Propane at Edmonton & Sarnia.

METALS & MINERALS

Copper & Products (US\$ per lb) LME official cash settlement price for grade A copper.

Zinc (US\$ per lb) LME SHG cash settlement: prior to Sept 1990, U.S. producers' price for high-grade zinc delivered.

Lead (US\$ per lb) LME official cash settlement price; prior to Jan. 1991, U.S. producers' price for common grade delivered.

Aluminium & Products (US\$ per lb) since 1979, LME official cash settlement price.

Nickel (US\$ per lb) since 1980, LME official cash settlement price.

Gold (US\$ per oz) 'LBMA Gold Price PM' as of March 20, 2015.

Potash (US\$ per tonne) Standard potassium chloride, spot price, FOB Vancouver.

Sulphur (US\$ per tonne) Solid, spot price, FOB Vancouver.

Metallurgical Coal (US\$ per tonne) Contract price for premium-grade hard coking coal, FOB Vancouver.

Iron Ore (US cents per dmtu) Spot price fines 62% Fe, CFR Qingdao, China; prior to Jan 2011, term-contract price for concentrates 66% Fe from Labrador/Quebec to Northern Europe (FOB Sept-Iles).

Uranium (US\$ per lb) U₃O₈ near-by-futures from Bloomberg.

Molybdenum (US\$ per lb) since March 1992, MW dealer oxide.

Cobalt (US\$ per lb) MW dealer price.

FOREST PRODUCTS

Lumber & Wood Products, Western Spruce-Pine-Fir 2x4 No.2 & Btr (US\$ per mfbm) FOB mill.

Oriented Strandboard (US\$ per thousand sq. ft.), U.S. North Central region, 7/16 inch.

Pulp, Bleached Northern Softwood Kraft (US\$ per tonne) Transactions price, delivery USA.

Newsprint (US\$ per tonne) Average transactions price, 48.8 gsm, delivery Eastern USA.

Groundwood Specialty Papers (US\$ per ton) Supercalendered-A paper, 35 lb., delivery USA.

Linerboard (US\$ per ton), delivery Eastern USA with zone discounts.

AGRICULTURE

Wheat & Flour (US\$ per tonne), DNS No 1 14% protein Duluth, Minn; prior to April 2011 No.1 CWRS, 13.5% protein at St. Lawrence.

Barley (US\$ per tonne), since Dec.1994, No.1 at Lethbridge, Alberta.

Canola & Oilseeds (US\$ per tonne) No.1 Canada, in store Vancouver.

Cattle & Beef (US\$ per cwt) Steers over 1,051 pounds at Toronto; from Jan 1993, Ontario average.

Hogs & Pork (US\$ per cwt) 100 Index Hogs at Toronto; from Jan 1993, Ontario average.

Fish & Seafood (US\$ per lb) West Coast silver coho salmon; Atlantic lobster prices; prior to 1986 cod fillets & blocks.

**Scotiabank Commodity Price Index —
Components And Weights**

Index Components	Net Export Value In 2010 (millions of dollars)	Index Weight (per cent)
OIL & GAS INDEX	46,537	39.90
Crude Oil & Refined Products	33,231	28.49
Natural Gas & LNG	11,741	10.07
NGLs	1,565	1.34
METAL & MINERAL INDEX	35,109	30.10
Copper	3,160	2.71
Zinc	1,255	1.08
Lead	579	0.50
Aluminium	6,045	5.18
Nickel	4,246	3.64
Gold	4,678	4.01
Coal	4,757	4.08
Iron Ore	3,346	2.87
Potash	5,161	4.42
Sulphur	457	0.39
Uranium	891	0.76
Cobalt	288	0.25
Molybdenum	246	0.21
FOREST PRODUCTS INDEX	17,081	14.66
Lumber & Wood Products	4,673	4.01
OSB	812	0.70
Pulp	6,818	5.85
Newsprint	2,734	2.34
Groundwood Spec. Papers	1,971	1.69
Linerboard	87	0.07
AGRICULTURAL INDEX	17,901	15.35
Wheat & Flour	4,693	4.02
Barley & Feedgrains	1,088	0.93
Canola & Oilseeds	5,398	4.63
Cattle & Beef	1,640	1.41
Hogs & Pork	2,378	2.04
Fish & Seafood	2,704	2.32
TOTAL INDEX	116,643	100.00

This report has been prepared by Scotiabank Economics as a resource for the clients of Scotiabank. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither Scotiabank nor any of its officers, directors, partners, employees or affiliates accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

These reports are provided to you for informational purposes only. This report is not, and is not constructed as, an offer to sell or solicitation of any offer to buy any financial instrument, nor shall this report be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The information contained in this report is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a "call to action" or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. Scotiabank may engage in transactions in a manner inconsistent with the views discussed this report and may have positions, or be in the process of acquiring or disposing of positions, referred to in this report.

Scotiabank, its affiliates and any of their respective officers, directors and employees may from time to time take positions in currencies, act as managers, co-managers or underwriters of a public offering or act as principals or agents, deal in, own or act as market makers or advisors, brokers or commercial and/or investment bankers in relation to securities or related derivatives. As a result of these actions, Scotiabank may receive remuneration. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. Officers, directors and employees of Scotiabank and its affiliates may serve as directors of corporations.

Any securities discussed in this report may not be suitable for all investors. Scotiabank recommends that investors independently evaluate any issuer and security discussed in this report, and consult with any advisors they deem necessary prior to making any investment.

This report and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced without the prior express written consent of Scotiabank.

™ Trademark of The Bank of Nova Scotia. Used under license, where applicable.

Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including, Scotiabanc Inc.; Citadel Hill Advisors L.L.C.; The Bank of Nova Scotia Trust Company of New York; Scotiabank Europe plc; Scotiabank (Ireland) Limited; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank group and authorized users of the Scotiabank mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia is authorised by the UK Prudential Regulation Authority and is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority.

Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.