Stormy Seas for WTI Crude, Metals Rally Stumbles

- **WTI felt the initial weight of Hurricane Harvey-induced refinery closures along the US Gulf Coast (chart 1), recovering after the storm but still unable to break above the psychologically important $50/bbl level. Hurricane effects are expected to be short-lived but tilted to the bearish side given the larger impacts to feedstock and product demand than crude supply.**

- **Beyond the storms, crude's rebalancing still appears to be advancing gradually; estimates put supply-demand balances in mild deficit over the past half-year and visible commercial petroleum inventories continue to drain, a trend that needs to continue for WTI to break above $50/bbl through the fourth quarter as anticipated in our forecast.**

- **It is still too soon to call time of death on the industrial metals rally that began in June, but prices appear to have turned downward and some like copper are expected to return much of their recent gains over the coming months as Chinese stimulus is withdrawn.**

- **Gold prices have reached their highest level of the year on fading market expectations for US interest rate hikes, a weakening US dollar, and the latest nuclear provocations on the Korean Peninsula; however, we continue to believe that the Fed will hike in December, which is expected to bring gold back toward the $1250/oz level through 2018.**

- **The US dollar remains under pressure, providing a boost to dollar-denominated commodities; we expect USD weakness to continue through the forecast horizon, but a temporary rebound is anticipated in the fourth quarter.**

The Scotiabank Commodity Price Index gained 2.5% m/m in August, with strong industrial index performance (+4.3% m/m) more than making up for the 4.4% fallback in the prices of agricultural commodities.

The US dollar remains under pressure, weighed down by deteriorating market expectation of a Fed hike later this year, President Trump's sliding approval ratings, and a general lack of progress by Republicans on their pro-growth legislative agenda. Sustained dollar weakness provides broad support to dollar-denominated commodities as prices adjust to reflect demand levels in all currencies. We expect the USD to continue weakening through the forecast horizon, but a temporary rebound is expected in the fourth quarter given stretched bearish positioning and our expectation that the US will see interest rates rise in December—counter to current market pricing.

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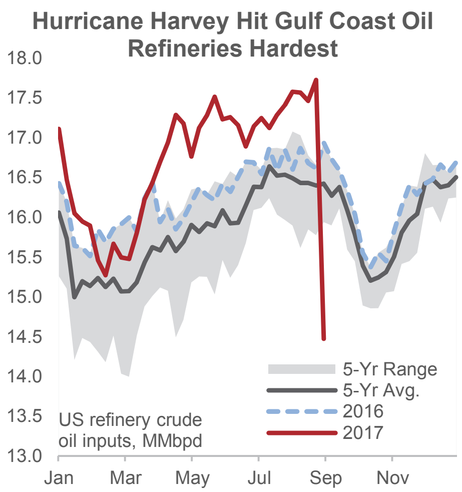
Chart 1



Sources: Scotiabank Economics, EIA.

Table 1

Scotiabank Commodity Price Index

August 2017	M/M	Y/Y	YTD
	(% change)		
All Commodity*	**2.5**	**17.8**	**23.2**
Industrials	**4.3**	**18.9**	**27.4**
Oil & Gas	2.8	19.4	38.0
Metal & Minerals	8.1	22.1	26.9
Forest Products	0.2	12.9	13.6
Agriculture	**-4.4**	**13.2**	**7.5**

January 2007 = 100	2017 Aug	2017 Jul	YTD avg.
All Commodity	**109.1**	**106.4**	**107.9**
Industrials	**103.9**	**99.7**	**103.7**
Oil & Gas	79.4	77.2	81.5
Metal & Minerals	120.3	111.2	119.6
Forest Products	137.2	137.0	131.1
Agriculture	**137.3**	**143.6**	**131.1**

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

OIL & GAS: REBUILDING AFTER THE STORM

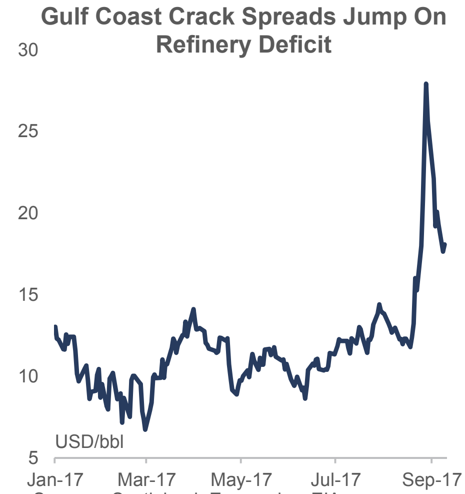
The oil market remains on its gradual rebalancing path but Hurricanes Harvey and Irma are suppressing crude demand through the US Gulf Coast, Florida, and the Caribbean, further pushing off the forecast price recovery. We expect WTI prices to recover to above $50/bbl in the fourth quarter on continued reductions in commercial inventories and a tightening of the WTI-Brent discount that blew out in late-August on hurricane effects.

Hurricane Harvey temporarily shuttered oil-producing assets in the Gulf of Mexico, but heavy rain and the associated flooding proved to be the storm's larger and more lasting impact. At peak, between 4–5 MMbpd or more than one-quarter of US refining capacity was offline (chart 1) against roughly 1 MMbpd of crude production shut in through the Gulf and onshore in the Eagle Ford basin. The larger demand shock depressed crude prices and pushed the forward curve into renewed contango. Refinery closures also pushed up product prices, and crack spreads—the difference between crude and product prices as well as a proxy for refining margins—spiked to reflect the deficit of refining capacity (chart 2). Product prices have eased as refineries return to service and crude prices have recovered. Unfortunately, the easy restarts are mostly behind us and the remaining idled capacity will take longer to restart, likely in the order of weeks or months compared to the mere days it took to get the bulk of shuttered capacity on the restart track. Hurricane Irma will have a more directly bearish effect on crude prices given that the affected region is far lighter on oil production but Florida consumes more gasoline than any other US states beyond California and Texas.

While the storms were a hit to global crude demand, most of the price impact has been felt in the WTI benchmark, which is the primary price quoted by North American media. Current WTI levels are masking a stronger oil market elsewhere in the world given the localized nature of the hurricane effects, and WTI's discount to Brent has blown out to more than $6/bbl from the roughly $2.50/bbl it has averaged year-to-date (chart 3). The WTI-Brent spread is forecast to tighten back to around $3/bbl after refineries return to full operation, which will bring WTI back into our forecast range through the fourth quarter. Brent prices are also expected to end the fourth quarter $2–3/bbl higher as falling inventories continue to confirm estimates that show physical crude balances in deficit over the past six months. While the worst is behind the oil market, the next leg up for crude prices will be choppy given a hesitance to push prices too high for fear of fueling the US shale patch into renewed overdrive.

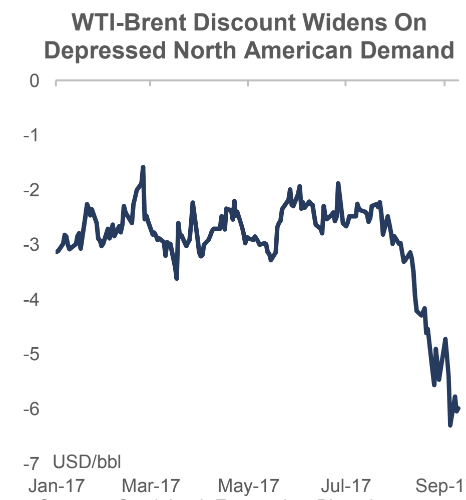
The hurricanes, particularly Harvey, were also notable for which market they failed to panic: natural gas. The muted natural gas price response to Harvey stands in stark contrast to earlier storms like Katrina, which hit the US Gulf Coast in 2005 and pushed gas prices into double-digit territory (chart 4). The US energy renaissance is the primary cause of this newfound resilience to Gulf storms, as the one-third increase in US natural gas production over the past decade was concentrated in the Northeast. Indeed, when Katrina hit in 2005, the Gulf of Mexico accounted for more than 15% of total US gas supply compared to less than 4% today.

Chart 2



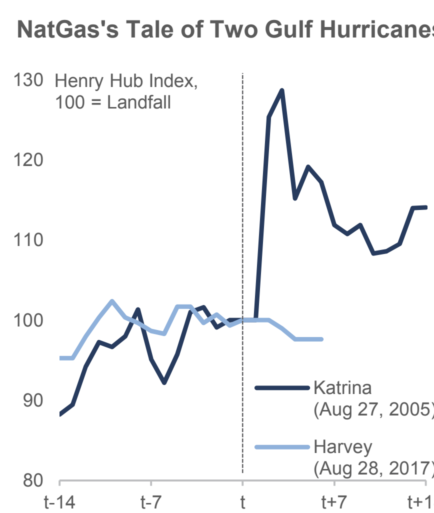
Sources: Scotiabank Economics, EIA.

Chart 3



Sources: Scotiabank Economics, Bloomberg.

Chart 4



Sources: Scotiabank Economics, EIA.

METALS & MINERALS: INDUSTRIALS RALLY COMING TO AN END?

Cracks are beginning to appear in the industrial metals rally, which began in June on a narrative of a broad industrial recovery and Chinese stimulus boosting demand for investment-heavy metals like copper and steel. The rally was expected to be short-lived given the associated surge in bullish speculative positioning and fundamentals that, while not terrible, were far from supportive of such rapid price gains. Base metals moved up together and will likely fall back as a group, with copper, nickel, and zinc down 2–5% week-on-week with only aluminium holding its ground given continued uncertainty regarding Chinese supply policy (chart 5). **While this turn in sentiment will weigh on prices across the industrial metals complex, commodity-specific fundamentals will drive the next leg of commodity price performance following the initial fallback**.

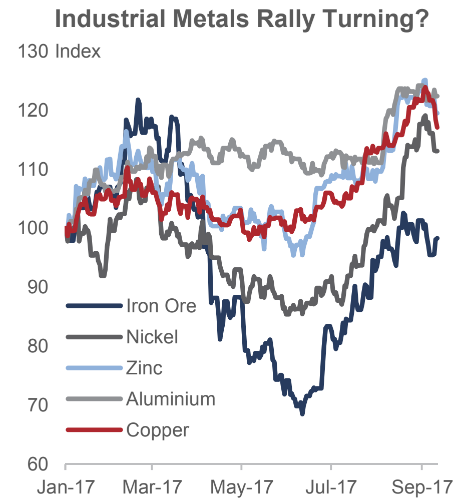
Copper has fallen back slightly from its recent highs, but prices remain unsustainable at this stage in the metal's cycle and are expected to fall roughly 10% from still-elevated current levels to $2.60–2.70/lb in the fourth quarter. The copper market is coming to balance after prolonged surplus supply, but current price momentum would suggest a far tighter market and has been associated with an accumulation of speculative interest to all-time high levels (chart 6). Supply and demand estimates put the market in rough balance (a surplus of 25 kt in the July–June period) and while exchange-listed inventories fell at a relatively rapid pace over the past month, they are still well within the range of the recent saw-tooth pattern and are higher than they were at this point last year. Copper futures also continue to drift deeper into contango, where prices today are less than in the future, a market state that is typically associated with plentiful supply.

Nickel experienced the largest rally among the major base metals, up nearly 40% at its peak from June, but prices are expected to fall back 5% from current levels to $5/lb until high inventories are further depleted. While the slow progress in the expected reversal of Philippine mine closures is keeping the market tighter than previously expected, inventories provide a buffer against any unfulfilled demand and time spreads indicate no immediate strain on prompt supplies.

Aluminium was the only major base metal able to resist sentiment headwinds and risk remains tilted to the upside of our $0.85/lb 2018 forecast given recent moves to extend the timeframe of China's winter capacity cutbacks. While capacity outside China—which was idled due to the low price environment—lies in wait to respond to prices slightly higher than where they stand today, longer cutbacks may accelerate price gains to levels that can incentivize the renewed need for these higher-cost smelters to plug to gap.

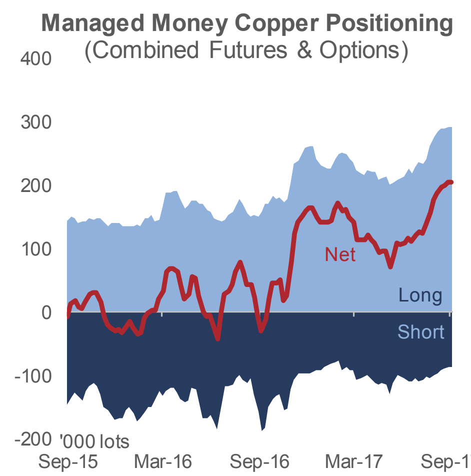
Zinc has pulled back as sentiment turned against the metals complex, but we expect prices to rise 7% from current levels to average $1.50/lb through 2018 to incentivize fresh production onto a supply-starved market. Visible inventories continue to empty and are at their lowest level since early 2009 (chart 7), pushing zinc prices increasingly toward backwardation as prompt metal availability commands a premium.

Chart 5



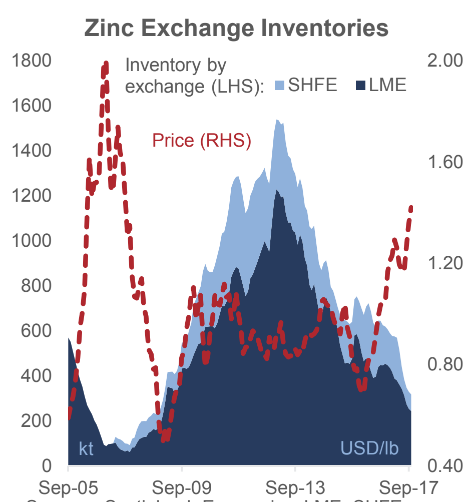
Sources: Scotiabank Economics, LME, Bloomberg.

Chart 6



Sources: Scotiabank Economics, LME, Comex, CFTC.

Chart 7

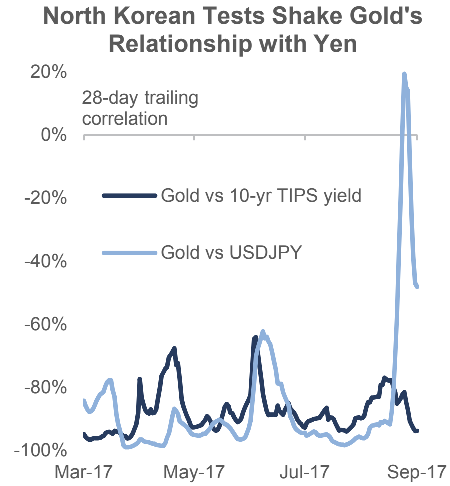


Sources: Scotiabank Economics, LME, SHFE.

Bulk commodities joined the base metals on their rally and are even more intimately tied to the expected slowdown in Chinese industrial throughput in the fourth quarter, with iron ore and hard coking coal expected to fall 30–40% to $50 and $125 per tonne, respectively. Iron ore and coal are forecast to fall to the upper end of their seaborne cost curves after inflated Chinese import demand tapers off following a stimulus pullback and the beginning of the winter shutdown period.

Gold prices reached their highest level of the year and flirted with $1,350/oz on diminished prospects of an interest rate hike from the Federal Reserve, US dollar weakness, as well as a flurry of nuclear developments and missile tests out of North Korea—one launched over the Japanese mainland. Inflation-adjusted interest rate expectations, as expressed in the 10-year TIPS yield, have steadily fallen from a recent high of 64 bps in early July to 33 as of writing, near its lowest level of the year.

Chart 8

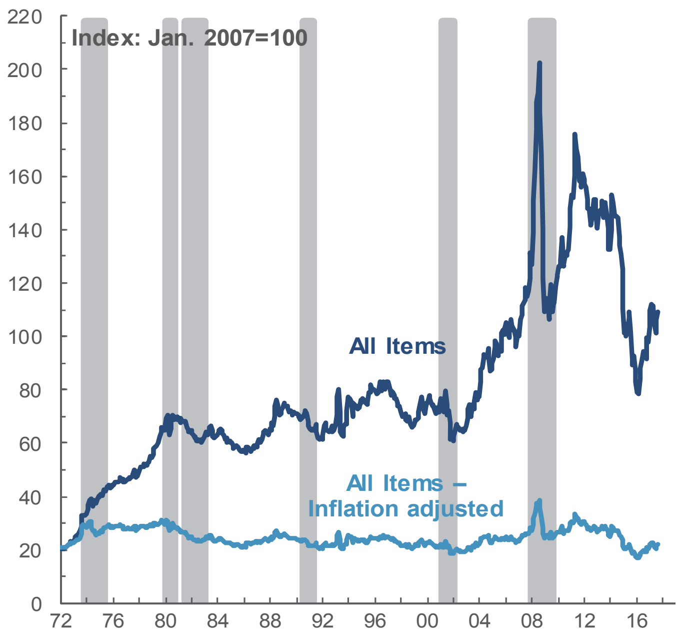


Sources: Scotiabank Economics, Bloomberg.

Gold prices have rallied further than real yields alone would suggest, but that additional premium can be chalked up to safe haven demand as US political drama mounts and fresh North Korean nuclear provocations emerge, the latter of which pushed up trading volume on the Comex gold contract to record-highs. It is further likely that gold's political premium is receiving a boost from a relatively less appealing JPY, another classic haven asset that is looking less secure as a hedge against the North Korean crisis brewing off its northwestern coast (chart 8). **We expect gold prices to fall back toward the $1250/oz level through the fourth quarter on the back of a temporary positioning-driven rebound in the US dollar and a US rate hike that is currently underpriced by the market.**

Price Outlook			2000–2015		2016	2017YTD	2017F	2018F
Oil & Gas		Monthly Avg. Low	Period Avg.	Monthly Avg. High				
Crude Oils								
West Texas Intermediate	USD/bbl	19.40	63.68	134.02	43.47	49.26	51	53
North Sea Brent Blend	USD/bbl	19.06	66.44	134.56	45.13	52.25	53	56
Natural Gas								
Nymex Henry Hub	USD/MMBtu	2.05	5.09	13.46	2.55	3.05	3.10	2.95
Metals & Minerals								
Base Metals								
Copper	USD/lb	0.62	2.35	4.48	2.21	2.68	2.55	2.75
Nickel	USD/lb	2.19	7.45	23.67	4.36	4.52	4.40	5.00
Zinc	USD/lb	0.34	0.80	2.00	0.95	1.25	1.25	1.40
Aluminium	USD/lb	0.58	0.87	1.39	0.73	0.87	0.85	0.85
Bulk Commodities								
Iron Ore	USD/t	12	65	187	58	74	65	60
Metallurgical Coal	USD/t	40	128	330	143	181	185	125
Precious Metals								
Gold	USD/toz	261	842	1,772	1,251	1,247	1,225	1,250

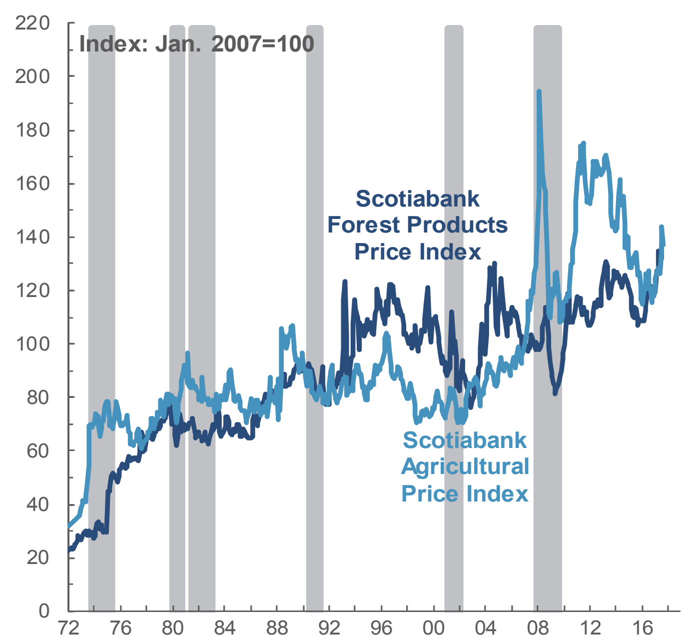
Scotiabank All Commodity Price Index

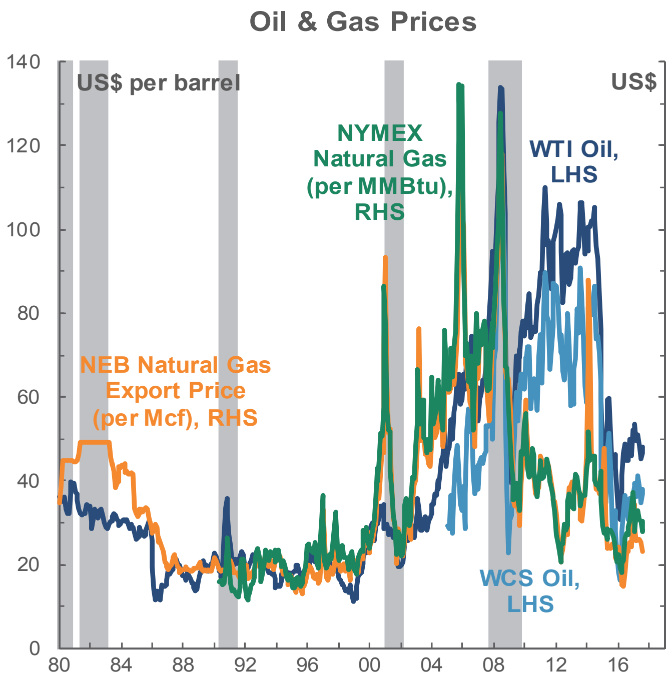


Canadian Dollar vs. Commodity Prices

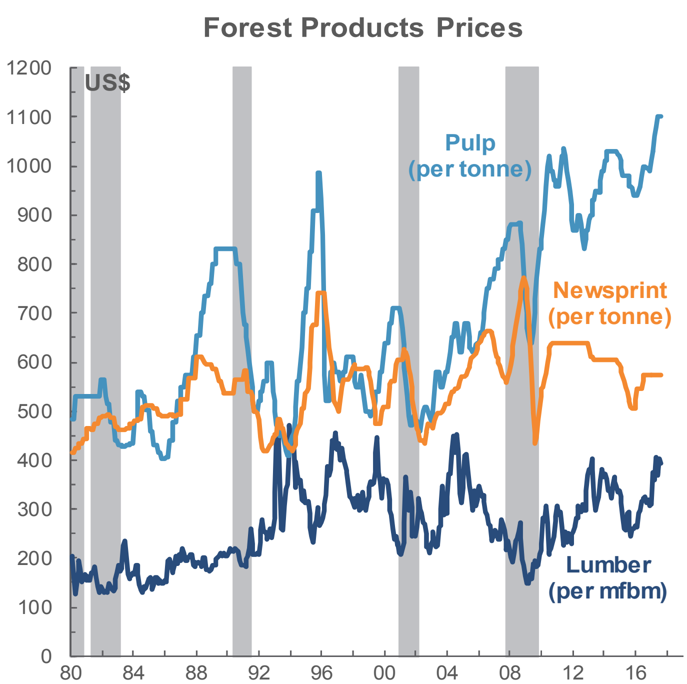
Scotiabank Oil & Gas and Metal & Mineral Indices

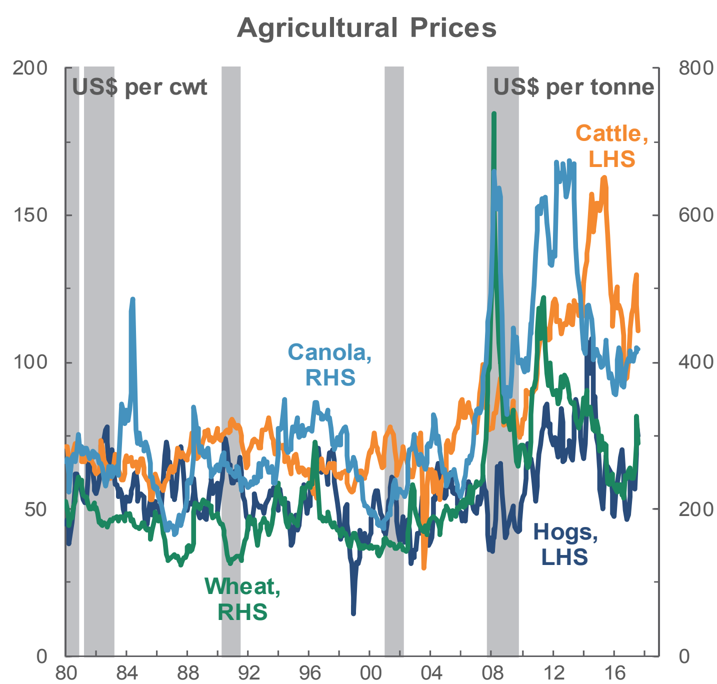
Scotiabank Forest Products & Agricultural Indices




Oil & Gas Prices
US$ per barrel
US$
NYMEX Natural Gas (per MMBtu), RHS
WTI Oil, LHS
NEB Natural Gas Export Price (per Mcf), RHS
WCS Oil, LHS


Metals Prices
US$ per lb.
US$ per lb.
Nickel, RHS
Copper, LHS
Zinc, LHS
Aluminium, LHS


Forest Products Prices
US$
Pulp (per tonne)
Newsprint (per tonne)
Lumber (per mfbm)


Agricultural Prices
US$ per cwt
US$ per tonne
Cattle, LHS
Canola, RHS
Hogs, LHS
Wheat, RHS

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 TMX/Shorcan Energy Brokers.

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) Spot price for U3O8.

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**