

Scotiabank Commodity Price Index

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Scotiabank's Commodity Price Index Edges Down In February

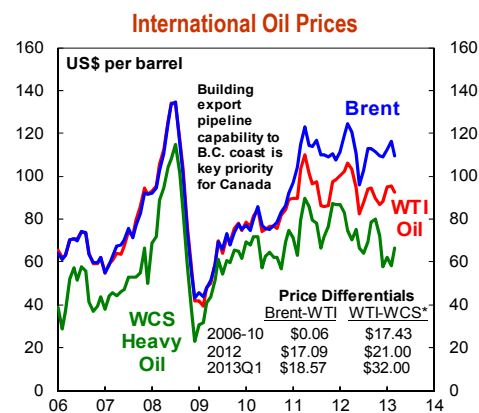
- **Rising U.S. oil & NGL production backs out imports in 2012 — mostly 'light' crude oil from West and North Africa; Canadian oil exports to the United States continued to climb.**
- **Ottawa strengthens tanker regulations for Canadian coastal operations, preparing for stepped-up 'overseas' oil exports by Canada.**
- **Chinese smelter cutbacks tighten refined zinc supplies; strong prices expected mid-decade.**

After strengthening in early 2013, Scotiabank's Commodity Price Index inched down again by 0.9% m/m in February. Commodity prices generally moved higher in the opening weeks of February, but eased back after China's Lunar New Year holiday, alongside mixed economic indicators from China and another bout of 'risk aversion' related to financial developments in Cyprus. The All Items Index remains 17.2% below the April 2011 near-term peak, just prior to the advent of concern over excessive Eurozone 'sovereign' debt and the negative fallout on global trade.

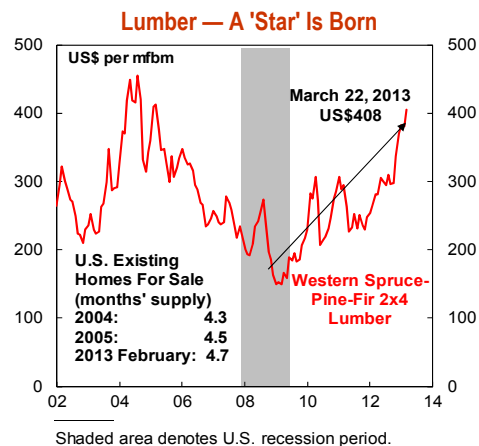
After rebounding in January, the Oil & Gas Index led the decline (-3.0% m/m). While international oil prices strengthened, with Brent averaging US\$116 per barrel and WTI oil US\$95, the discount on Western Canadian Select heavy oil (WCS) widened from an already high US\$32.84 per barrel to an enormous US\$36.94 off WTI, pulling WCS prices lower from US\$62 to US\$58.38 in February. The discount on the Edmonton par price for 'light' conventional oil also increased to US\$8. However, discounts on both heavy and light oil have recently narrowed, as U.S. refineries returned from seasonal maintenance (on WCS to a still high US\$26.23 in March and US\$23.07 in April). 'Light, sweet synthetic crude' from Syncrude Canada and Suncor Energy is usually priced at a premium to WTI.

The 'opportunity cost' to the Canadian economy of these wide price discounts off WTI around the turn of the year was enormous — caused largely by inadequate pipeline export capacity at a time of record Canadian oil production and an over-reliance on one key export market — U.S. Midwest refineries. Canada's oil output rose to an all-time high of 4.1 mb/d in December alongside record synthetic crude oil production of 1 mb/d, stepped up 'light, tight' oil from Alberta's Cardium & Viking formations and the return from maintenance of offshore Newfoundland production.

The remarkable rejuvenation of U.S. domestic oil supply — largely from the North Dakota Bakken and liquids-rich shales in Texas (e.g. Eagle Ford) — in an environment of declining U.S. petroleum consumption



* TMX / Shorcan Energy Brokers. Data to March 2013.



Shaded area denotes U.S. recession period.

Scotiabank Economics

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also points to increased U.S. self-sufficiency in coming years — another argument in favour of diversifying Canadian oil exports to China and the Pacific Rim. U.S. petroleum consumption has been edging down since 2005 — dropping 1.5% in each of 2011 and 2012 — while oil & NGL production advanced by 4.6% and 13%. The net result, the United States has been able to back out 731,000 b/d of net oil imports in the past two years — mostly from West and North Africa. **Oil export volumes from Canada have yet to be impacted and were still rising in 2012**, aided by stepped-up rail shipments and unusual transportation solutions. Lower U.S. imports were centred in ‘light’ oil from Nigeria, Angola and Libya — likely replaced by less expensive ‘light’ Bakken crude, railed to U.S. Northeast refineries around Philadelphia. Militant activity & force majeure have impacted the reliability of Nigerian and Libyan crude.

The **Metal & Mineral Index** also edged lower in February (-0.5% m/m). **Spot prices for potash at the Port of Vancouver** eased from US\$424 per tonne in January to US\$410 in February — likely a bottom. After deferring orders in late 2012, shipments to Brazil and Southeast Asia are likely picking up again, following new contracts signed at lower prices by Canpotex and BPC with China in late 2012 at US\$400 per tonne cfr, and then India at a slightly higher US\$427 cfr. However, potash application will be late this year in the United States and granular sales are being hurt by poor weather in Europe.

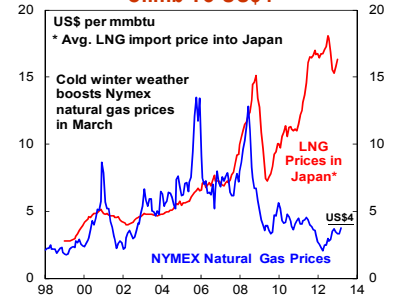
Gold prices (London PM Fix) also lost ground, slipping from US\$1,671 per ounce in January to US\$1,628 in February and currently stand at US\$1,603. **Gold has been consolidating around the US\$1,600 mark — checked by shifting investor interest to U.S. equities** (particularly stocks in the Dow Jones Industrial Average — up 10.8% YTD) and recognition that the Fed does not need to further step-up its ‘quantitative easing’ to kick start the U.S. economy. However, ongoing Eurozone financial strains (Cyprus) and central bank buying continue to underpin prices.

The **Forest Product Index** edged up further in February (+0.3% m/m) and has climbed 18.3% yr/yr. **OSB prices surged to US\$416 per thousand sq. ft. in the bellwether U.S. North Central region** and **NBSK pulp prices** rose to US\$900 per tonne (+US\$10), more than offsetting slightly lower lumber prices at US\$381 per mfbm and a decline in **Eastern U.S. newsprint prices** to US\$610 per tonne (-US\$15). China’s pulp demand has strengthened recently, propelled in part by ongoing urbanization and 10% per annum expected growth in tissue consumption. **In March, Western Spruce-Pine-Fir 2x4 lumber prices resumed their climb, rising to a stellar US\$408 mid-month (+45% yr/yr) and OSB advanced to US\$430 (+100% yr/yr).** Current lumber prices yield a 25-30% profit margin over average mill breakeven costs (including depreciation) in the B.C. Interior; **the OSB profit margin is even greater at 54%**. U.S. housing starts increased to 917,000 units annualized in February compared with 718,000 a year earlier and will climb to 1.2 million units in 2014 (possibly more). Existing home sales are at their highest since the tax-credit period of November 2009, while an 11.6% yr/yr jump in existing home prices will lift home equity and have a powerful impact on consumer confidence. A multiple-year recovery in both wood product prices and equity valuations is expected for forest products companies across Canada.

The **Agricultural Index** also increased 1.9% m/m to a level 8.7% above a year ago. **Canola prices at the Port of Vancouver touched a new record high of US\$674 per tonne** — just surpassing the previous record of April 2012, though prices have lost ground in March. Concerns over delayed spring planting of grain & oilseed crops across Western Canada and the United States due to cold temperatures and greater-than-normal snow cover are underpinning prices. The Agri-Food sector has recently been a strong contributor to Canada’s merchandise trade performance, generating a surplus of \$14.7 bn in January.

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Nymex Natural Gas Prices Climb To US\$4



Strong Zinc Prices Expected Mid-Decade



China Stocks Nickel Pig Iron



U.S. Oil Market Profile

Rising U.S. domestic oil & NGL supplies allow U.S. net oil imports to decline in 2011-12 — mostly from West & North Africa (Nigeria, Angola and Algeria).

	2010	2011	2012
Petroleum Consumption	19.148	18.835 (-1.6%)	18.555 (-1.5%)
Production			
Crude Oil	5.512	5.673	6.474
NGLs	2.001	2.183	2.399
Total Liquids	7.513	7.856 (+0.343 in 2011)	8.873 (+1.017 in 2012)
Net Crude Oil Imports From Selected Countries:			
Total	9.163	8.921	8.432
Canada	1.930	2.178	2.348
Mexico	1.140	1.102	0.972
Saudi Arabia	1.080	1.186	1.356
Nigeria	0.986	0.767	0.405
Venezuela	0.912	0.868	0.906
Iraq	0.414	0.459	0.474
Angola	0.380	0.335	0.221
Colombia	0.338	0.397	0.401
Algeria	0.325	0.178	0.120
Overall Persian Gulf	1.691	1.849	2.136

The U.S. Gulf has emerged as a significant exporter of refined products.
Source: U.S. Energy Information Administration, data to December 2012.

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Measures to Strengthen Canada's Tanker Safety System

Preparing for increased exports of oil — as well as LNG — from Canada's coastal waters, Ottawa has unveiled first steps in preparing a 'world-class tanker safety system' — to be in place prior to operation of any major new energy export facilities. A 'Tanker Safety Expert Panel' was appointed to review Canada's existing system. In addition, eight new regulations/initiatives were announced to bolster safety, including 1) the inspection of all foreign tankers on their first visit to Canada and, annually thereafter, to ensure they comply with Canadian regulations, especially on double hulls (as already practiced by Transport Canada); under International Maritime Organization rules, full phase-in worldwide of double-hull requirements for all tankers will be in place by the end of 2014; there are few single-hull tankers plying international waters today; 2) a 'Canadian Coast Guard Incident Command System' will be established to allow more effective response to an incident; 3) more ports will be designated for traffic control measures, starting with Kitimat (the potential location of energy terminals); and 4) increased scientific research on the impact of a spill of diluted bitumen or other non-conventional energy products, such as LNG, on the marine environment.

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February 2013	Growth Trends	(per cent change)	(Compound Annual Growth Rates)				
			Weights	One Month	One Year	Three Months	One Year
All Commodity Price Index	100.0	-0.9	-10.1	-6.2	-6.9	-0.7	
Industrials	84.7	-1.5	-16.4	-10.4	-9.8	-0.2	
Oil & Gas	39.9	-3.0	-30.6	-30.7	-16.1	-4.8	
Metal & Minerals	30.1	-0.5	-5.8	5.4	-10.8	4.1	
Forest Products	14.7	0.3	3.8	25.9	18.3	5.5	
Agriculture	15.3	1.9	25.9	16.6	8.7	-2.7	

Index: January 2007 = 100

	2013		2012		
	Feb	Jan	Dec	Nov	Feb
All Commodity Price Index	145.2	146.5	140.6	147.6	156.1
Industrials	140.8	143.0	136.3	144.8	156.1
Oil & Gas	130.2	134.2	121.6	142.7	155.1
Metal & Minerals	161.3	162.1	161.6	159.2	180.8
Forest Products	127.8	127.4	124.6	120.7	108.0
Agriculture	169.5	166.2	164.3	163.1	155.9

Re-designed Scotiabank Commodity Price Index: Net export weights in 2010, data re-estimated back through 2007, January 2007=100. The Canadian Wheat Board's asking export price for CWRS No. 1 13.5% protein wheat del St. Lawrence has been replaced with Dark Northern Spring Wheat, 14% protein, del Duluth, Minnesota from April 2011 (Minneapolis Grain Exchange).

Oil & Gas

Brent oil prices (the key international benchmark) advanced from US\$112.32 per barrel in January to US\$116.07 in February, but have fallen back to US\$109.52 to date in March alongside renewed jitters over the outlook for global growth. World supply & demand conditions should be roughly balanced in 2013, but not tight, with the 'call' for OPEC oil around 29.9 mb/d compared with actual output of 30.4 mb/d to date. While global petroleum consumption should rise by 1 mb/d (1.1%), non-OPEC supplies could increase by 1.1 mb/d, centred in the United States (0.8 mb/d) and Canada (0.2-0.3 mb/d — held back by a high level of maintenance this spring at oil upgraders). However, 'geopolitical supply risks' remain — recently intensifying in North and West Africa. The diplomatic stalemate on Iran's nuclear program continues. **The net result, Brent oil prices are forecast to average US\$111-112 in 2013 — similar to last year — and WTI oil US\$94-95.**

Turning to natural gas, NYMEX prices have climbed over the US\$4 per mmbtu mark in late March — a significant improvement from a mere US\$2.30 a year ago. U.S. working gas-in-storage has dropped 18% below a year ago — drawn down by quite cold late-season weather in the U.S. Midcontinent and 'well freeze-offs'. This winter has been 15.5% colder-than-normal across the United States, lifting demand for space heating. Natural gas use for U.S. electricity generation also surged by 20.6% last year, with utilities shifting from coal to cheaper natural gas, though generators may shift back towards coal at US\$4 gas. The number of gas-targeted drilling rigs has also dropped by 41% yr/yr, with energy companies shifting focus to oil, though as yet the impact on actual gas production has not been felt. This likely reflects higher 'associated gas' from oil-directed drilling and the tie-in of already drilled gas wells, as pipeline takeaway capacity is added (especially in the prolific Marcellus Basin). A gradual, but moderate recovery in natural gas prices is expected over the next several years.

In a new development, Canadian National Railway and BNSF Railway (the second-largest user of diesel fuel in the United States) are testing the use of LNG to power locomotives. The U.S. Department of Energy is also expected to rule this summer on whether to allow more U.S. LNG exports to non-NAFTA countries (in addition to Cheniere's Sabine Pass project).

Metals & Minerals

After climbing to US\$3.65 in January, **LME copper prices — the 'star' base metal of this cycle — inched up further to US\$3.66 per pound in February**, lifted by optimism over a rebounding Chinese economy. However, physical demand in China failed to pick up noticeably after the New Year holiday in mid-February and prices have fallen back to US\$3.43 — still yielding a

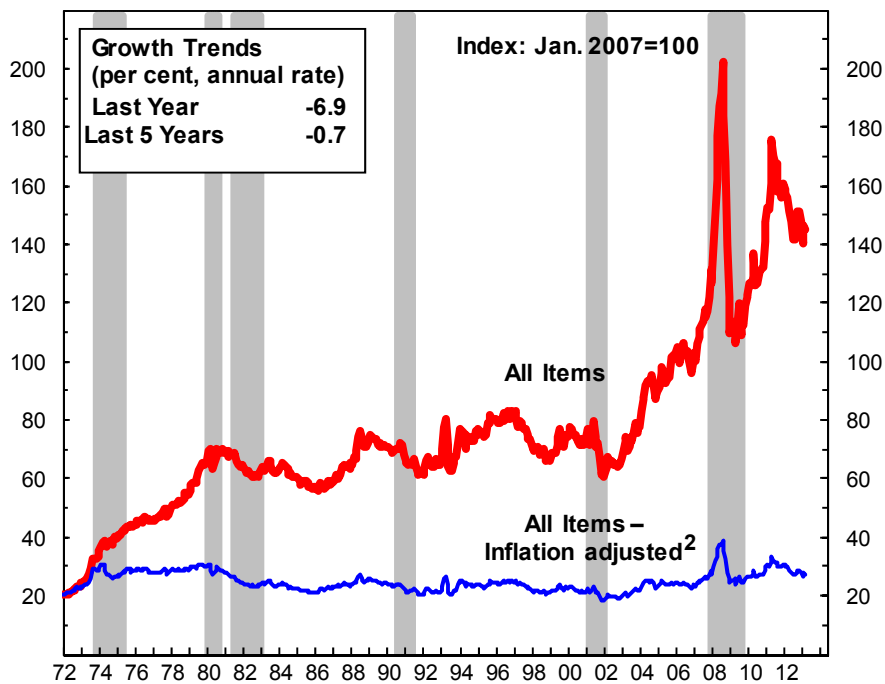
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stellar 38% profit margin. China's industrial production decelerated to 9.9% yr/yr in January/February, after picking up to 10.3% in December, partly due to inventory replenishment across the economy. While remaining quite firm in 2013, copper may move moderately lower in 2014-15, as significant new 'brownfield' and some 'greenfield' mine expansion comes on stream.

In contrast, **LME zinc prices — currently at US\$0.84 per pound (30% profit margin) — could move much higher by mid-decade (say to US\$1.40 by 2015) — boosted by significant mine depletion.** Global supply & demand conditions for refined zinc shifted into a surprising 'deficit' in 2012, as Chinese producers temporarily shut down smelters in view of low treatment charges on domestic and imported 'concentrates', poor profitability and tight credit from Chinese banks. China's smelting sector reduced output by an unprecedented 5.4%, shifting the global zinc 'concentrate' market into a moderate 'surplus'. While this development has bolstered refined zinc prices, miners will be paying moderately higher treatment charges to smelters in 2013.

However, market conditions for both smelted/refined metal and concentrates will likely be in 'deficit' mid-decade alongside significant mine depletion. The following mines will deplete from 2013-16: in Canada: Brunswick & Perseverance in 2013; in Australia: Century in 2016; in Namibia: Skorpion in 2015 and in Eire: Lisheen in 2015.

Scotiabank All Commodity Price Index ¹



1. A trade-weighted U.S. dollar-based index of principal Canadian exports.
 2. Index deflated by U.S. Producer Price Index for Intermediate Goods.
- Shaded areas represent U.S. recession periods.