





Commodities Outlook (Q2 2018)

OIL HEADING HIGHER, GEOPOLITICS TAKE CENTRE STAGE

**Content reproduced from our recently released quarterly Scotiabank's Global Outlook (p. 52-54).

- Commodities are enjoying the tailwinds of strong global economic growth and robust industrial demand for raw materials (chart 1).
- The oil outlook has firmed and WTI crude prices are now expected to average \$65/bbl in 2018 before rising to average \$68/bbl in 2019, a roughly 15% increase relative to our January outlook.
- Base metals are still anticipated to experience the strongest non-oil pricing environment on a combination of strong demand and increasingly tight mine supply.
- Bulk commodities are expected to weaken along with a slowing Chinese construction market, while gold remains range-bound, caught between rising rates and a weakening US dollar.

OIL MARKET OUTLOOK TIGHTER, WTI SEEN ABOVE \$70 IN EARLY 2019

The oil market continues to tighten and WTI crude prices are now expected to average \$65/bbl in 2018 (up from \$57 in our January outlook) and \$68/bbl in 2019 (from \$60/bbl), with Brent maintaining a steady \$5/bbl premium to WTI. We are also now including a forecast for Western Canadian Select (WCS) crude, which is expected to see a wider discount of \$22/bbl and \$20/bbl under WTI in 2018 and 2019, respectively, given takeaway capacity constraints. Global crude balances are only expected to get tighter going forward and we anticipate supply deficits though the end of 2019 (chart 2) on the back of strong global demand and further production restraint from OPEC+, offsetting aggressive US supply growth. It is also important to note that while our near-term crude price forecast has risen by roughly 15%, our long-term price forecast remains unchanged at \$65/bbl WTI; prices are expected to gradually decline after peaking in early 2019 as supply becomes more readily available. Current physical market tightness is complemented by mounting supply-side risks including the potential reversal of the Iranian nuclear deal and sanctions-related instability in Venezuela.

US Shale: Largest Source of Global Supply Growth (By Far) Going Forward

The United States is forecast to remain the single-largest source of global supply growth in 2018–19. Against strong global petroleum demand growth of 1.5–1.7 MMbpd y/y anticipated over the next two years, the US shale patch is expected to ratchet up production by 1.3 MMbpd y/y through 2018-2019, nearrecord growth relative to almost all historical comparisons. This feverish pace of growth will leave little room for other producers to increase supply, but virtually all other producing regions outside of the US, Canada, and OPEC+ are expected to experience flat-to-declining output through the end of our forecast horizon.

US crude output growth has averaged 1.1 MMbpd y/y year-to-date and WTI crude prices in excess of \$60/bbl are expected to stoke further investment—a survey

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Chart 1

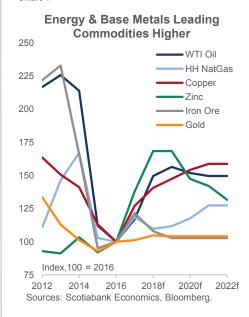


Chart 2





conducted by the Dallas Federal Reserve indicates that most tight oil regions are currently breaking even between \$47-\$55/bbl WTI, well below where we expect prices to average over the coming years. However, the pace of US supply growth will be largely governed by the capacity of supporting industries and not simply the technical capacity of upstream producers. The demand for labour, services such as pressure pumping to complete wells, as well as necessary materials like sand used as proppant have pushed input prices—and thus production costs—higher. While we anticipate moderate cost inflation in the US shale patch, there are also early signs that the US shale patch's "value over volume" and "fit for \$50" strategies have more staying power than many feared, with incremental 2018 cash flow estimates far outpacing anticipated capex growth as cash is routed to reward investors or pay off debt.

The breakneck pace of growth has also strained regional takeaway capacity, which has depressed netbacks for producers and limited the stimulus of higher global crude prices. The most visible instance of this infrastructure strain is the spread between WTI and Brent, which we anticipate to fluctuate between \$2-7/bbl as supply periodically overwhelms lagged pipeline capacity additions between Cushing, OK and the USGC. We also see discounts emerging between WTI (priced at Cushing) and Midland WTI contracts, which better reflect prices realized by producers in the prolific Permian basin (chart 3) and will add another hurdle to further production gains.

OPEC+ To Maintain Supply Discipline, Gradually Ease Output Caps Through '19

The efforts of OPEC+ to accelerate the rebalancing of the global oil market appear largely successful, with OECD commercial petroleum inventories falling rapidly following start of combined production restraint in January 2017. OPEC+ compliance has been impressive by historical comparison and the group is already communicating that they intend to formally extend the agreement—currently scheduled to conclude in December—through at least mid-2019. OECD inventories are now largely in line with the 5-year average level mark first enumerated by OPEC+ as their measure for market balance, with current communication from the group indicating an appetite for further production restrictions other "balanced market" measures have been suggested to adjust for the high-inventory period of 2015–17, including a 7-year average, excluding the latest glut period, or making an explicit link with global demand (i.e. demand days).

We believe that OPEC+ will maintain its current course of supply discipline well beyond 2019 and Riyadh and Moscow have been publicly discussing the possibility of extending formal OPEC+ cooperation for 10-20 years. However, cooperation doesn't necessarily mean maintaining current production caps—we expect that global consumption growth over the next 18 months will outstrip non-OPEC+ output gains and facilitate an easing of OPEC+ supply caps, likely lowering the volume of withheld barrels to 0.9 MMbpd by the end of 2019 from an initial level of 1.8 MMbpd (chart 4).

Canadian Crude Discounts Widen On Insufficient Pipeline Capacity

While global crude benchmarks continue to move higher, the discount borne by Canada's Western Canadian Select (WCS) has widened significantly on the back of insufficient pipeline capacity (chart 5). We expect that demand for takeaway capacity will outstrip supply through end-decade and that the WCS discount will remain wide at \$22/bbl under WTI in 2018 before narrowing slightly to \$20/bbl in 2019.

The challenge facing the Western Canadian oil patch can be visualized as a tug-of-war between steadily rising production and lagged, jerky pipeline additions. Over the coming year we expect see further project ramp-ups (i.e. Fort Hills and Horizon) that will lift Canadian supply by 200-300 kbpd y/y through 2018-19. We anticipate that Line 3 will enter service in the latter

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Chart 3 Oil Spreads Telling Tale of US Pipeline Bottleneck 0 Midland-Cushing WTI WTI-Brent -8 USD/bbl Apr-17 Aug-17 Dec-17 Apr-18

Chart 4

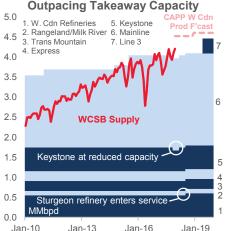
OPEC+ Production Cuts Expected to Ease to Satisfy Global Demand

Sources: Scotiabank Economics, Bloomberg.



Chart 5

Western Canadian Oil Supply





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half of 2019, but that it will require the completion of either the Trans Mountain Expansion (TMX) or Keystone XL pipelines—likely sometime in the early 2020s—before WCS discounts will fall back from their current, artificially high level to the sub-\$15/bbl threshold reflective of adequate pipeline capacity. The latest news that Kinder Morgan is suspending non-essential spending on TMX until the investment climate becomes more certain complicates this longer-term outlook; if TMX is indeed shelved, it puts a lot of pressure on KXL, which would be the only remaining pipeline able to satisfy takeaway demand in the early 2020s. This situation is far from ideal and it continues to be in the national interest that TMX is built on schedule, in time to avert acute takeaway deficits by 2021–22.

METALS & MATERIALS SUPPORTED BY STRONG INDUSTRIAL DEMAND

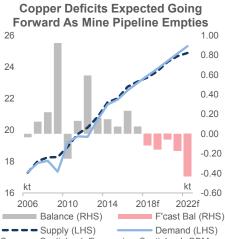
Industrial metals are benefiting from strong industrial tailwinds as factories around the world demand more raw material inputs to satisfy booming economic growth. Within the broadly buoyant metals complex, base metals are expected to experience the strongest fundamental support as advanced manufacturing picks up and mine supply becomes increasingly tight following years of mining industry belt-tightening. Bulk commodities underpinning the world's steel industry are experiencing periodic bouts of strength but are expected to gradually move lower on the back of slowing Chinese steel output and the need to rationalize some higher-cost mine supply (i.e. Chinese iron ore). Finally, precious metals are expected to remain range-bound between the headwinds of rising global rates and the tailwinds of a weakening dollar as well as perceptions of rising market risk.

Copper prices have finally fallen back from their recent peak of \$3.25/lb to around \$3.00/lb, which we have long-viewed as a level better reflecting current market fundamentals. Copper markets are expected to register a supply deficit in 2018 for the first time since 2010; while we believe that the market will require further years of deficits to burn through off-exchange inventories before prices rally further, our outlook sees steady supply shortfalls in each of the next 5 years that grow larger as the mine supply pipeline continues to empty (chart 6). Recently high prices have incentivized additional metal onto global exchanges and pushed inventories to their highest level since late-2013, spooking investors and sending net speculative positions to their lowest level since October 2016, when rising speculative interest first prompted copper to break higher. This rationalization of bullish sentiment was a necessary step before copper prices move sustainably higher over the coming years. Copper prices are forecast to average \$3.10/lb in 2018 and rise to \$3.25 in 2019.

Zinc enjoys the strongest fundamental support within the metals complex and rock-bottom refinery treatment charges of \$19/t as of March 2018 indicate continued and acute concentrate shortages (chart 7). The latest inflows into LME storage sheds have prompted some to question the ongoing zinc scarcity narrative, but we believe that these deliveries represent some of the final off-exchange tonnage and not any true uptick in supply. We expect that zinc prices will average \$1.60/lb through 2018–19 before gradually falling back toward a long-term incentive price of \$1.00/lb as the next wave of mine supply comes online, coaxed onto the market by the strongest zinc price environment since the last supply shortage in 2007.

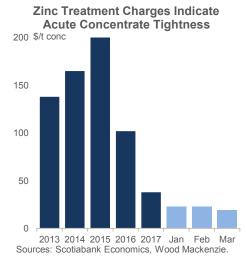
Table 1 Commodities 2000-2016 Annual Average Low Avg. High 2016 2017 2018f 2019f WTI Oil (USD/bbl) 17 63 43 51 65 68 Brent Oil (USD/bbl) 18 66 146 45 55 70 73 WCS - WTI Discount* (USD/bbl) -43 -17 -14 -13 -22 -20 Nymex Natural Gas (USD/mmbtu) 1 64 4 94 15 38 2 55 3 02 2 80 2 85 Copper (USD/lb) 0.60 2.35 4.60 2.21 2.80 3.10 3.25 Zinc (USD/lb) 0.33 0.95 0.81 2.10 1.31 1.60 1.60 Nickel (USD/lb) 2.00 7.26 24.58 4.36 4.72 6.00 6.50 Aluminium (USD/lb) 0.56 0.86 1.49 0.73 0.89 0.95 1.00 Iron Ore (USD/tonne) 17 67 187 58 72 63 60 Metallurgical Coal (USD/tonne) 39 330 114 187 182 160 127 1,895 256 869 1,251 1,257 1,310 1,300 * 2008-16 average. Sources: Scotiabank Economics, Bloomberg

Chart 6



Sources: Scotiabank Economics, Scotiabank GBM, Wood Mackenzie.

Chart 7





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