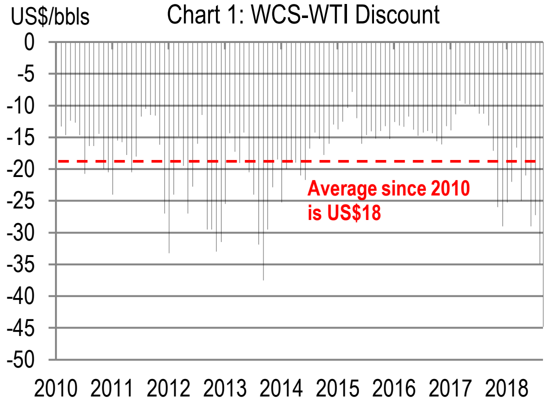
Laurentian Bank Securities
ECONOMIC RESEARCH AND STRATEGY

Making sense of the recent decline in Canadian oil prices and its fiscal impact on Alberta's budget

The steepest Canadian oil discount on record has been making headlines, notably weighing down on Alberta's credit spreads. Combined with increasing oil sands production, the late August Trans Mountain pipeline legal setback will lengthen the period during which Canadian oil will be sold at a sizeable discount to WTI. This being said, last week's situation, leading to a record-high discount of US$50 per barrel of Western Canadian Select (WSC), is unlikely to persist as it was mainly due to a combination of temporary factors.

Chart 1: WCS-WTI Discount

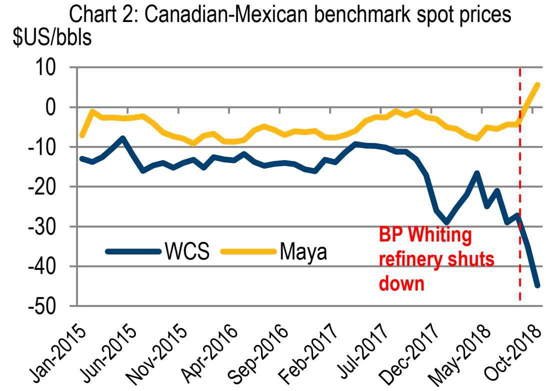


Source: Bloomberg Finance L.P.

First, to put things in perspective, large swings in the Canadian discount are common (see chart 1). With an average WCS-WTI discount of US$18 since the beginning of 2010, the spread's monthly standard deviation is US$7 per barrel; relatively high. Daily prices even exhibit more extreme variations.

Second, in our view, current transportation constraints and the delay in the construction of the Trans Mountain pipeline were already incorporated in Canadian oil prices before the severe decline observed in October. To substantiate this view, we compare two crude blends of the same quality: the Mayan crude benchmark, a Latin American standard priced out of Mexico, and the WCS. Since the beginning of 2015, the WCS-Maya spread was fairly constant and relatively small. In fact, over this period, the US$8 average spread reflects the additional costs Canadian companies incur to bring Canadian oil to markets. However, as transport capacity constraints began to intensify in late 2017, the WCS-Maya discount began to increase. It reached record levels in late September and October as BP's Whiting refinery in Indiana, the largest buyer of Canadian heavy oil in the U.S. at 250K bbls/day, temporary shutdown for maintenance (see chart 2). However, the refinery should re-open in November and lessen the WCS discount. Second, the new Sturgeon refinery near Edmonton, which is expected to add 80K barrels per day of heavy crude refining capacity, has not yet reached its full capacity, but is expected to do so before the end of the year.

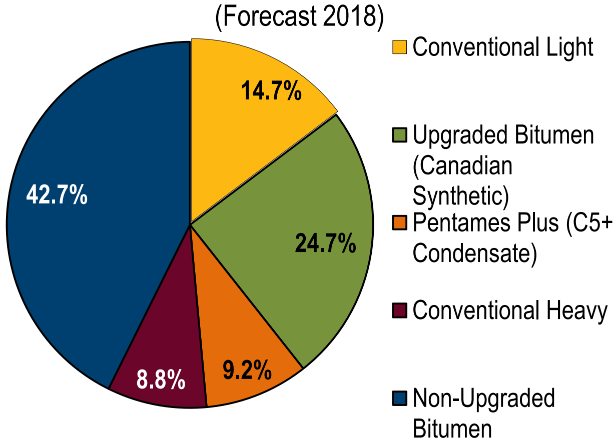
Chart 2: Canadian-Mexican benchmark spot prices



Source: Bloomberg Finance L.P.

Third, it is important to stress that Western Canadian conventional heavy and non-upgraded bitumen "only" make up a little over half of the total production of the region estimated at 4.3M bbls/day for 2018. And likely more than half of this heavy oil and bitumen production is not traded at the current WSC spot price. Therefore, a significant share of Western crude production is still sold at prices higher than that suggested by the current WTI-WSC discount. For example, conventional light crude and upgraded bitumen (a form of non-conventional light crude) make up around 40% of Western Canadian production (see chart 3).[1] Those crude streams were also heavily discounted following the news of BP's Whiting refinery shutdown but their benchmark prices is trading at a discount to WTI which is about half of that on the WSC (see chart 4). The same hold for Synthetic Crude which represents almost one fourth of total production out of Western Canada. Lastly, Alberta's condensate, making up 9% of production, has experienced a less severe price decline, mostly related to oversupply in U.S. refineries and as a result of lower demand for diluent. Usually priced at par with WTI, it is now trading at less than a $10 discount.

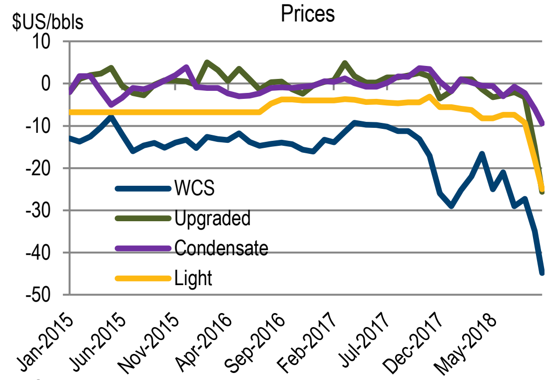
Chart 3: Western Canada Crude Oil Production (Forecast 2018)



Source: National Energy Board.

Worth repeating, not all crude is sold on the market at the near-term futures contract or spot prices. Buyers of crude oil frequently enter into long-term contracts for oil that guarantee a certain price; likely to be higher than the current (and lower) spot price. In turn, producers and buyers also enter into hedging contracts to protect themselves from extreme fluctuations, insuring a relative stability for their future revenues or expenses. Although contracts and hedges offer only protection for a limited time period, we believe it is unlikely that the current record discounts will persist.

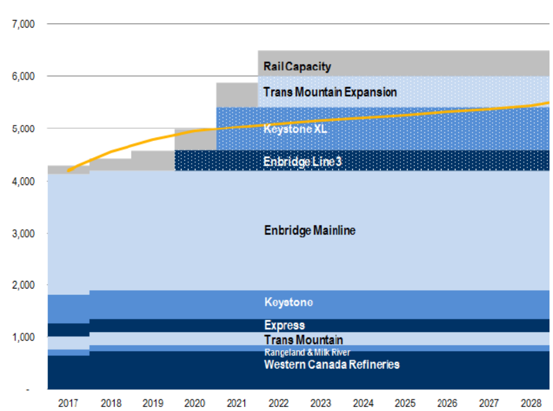
Chart 4: Discount On Benchmark Canadian Crude Prices



Source: Bloomberg Finance L.P.

<u>In summary</u>, transportation constraints will continue to weigh on WCS, but the coming back online of U.S. refining capacity and the Edmonton Sturgeon refinery operating at full capacity in the near future should alleviate pressure on all Canadian benchmarks, including the light, upgraded synthetic and condensate streams. Before year-end, we expect the WCS-WTI spread to trade between $US20 and $US30. This will continue until transport capacity meets supply. At this point, the spread could return to historical level. Based on information provided by the Canadian Association of Petroleum Producers (CAPP), this should not happen before 2020, when the inversion of Enbridge Line 3 is completed and rail transportation capacity has expended (see chart 5).

Chart 5: Western Canada Production and Egress Forecast



Source: CAPP and LBS Equity Research.

[1] Western Canadian production is concentrated in Alberta (88% of production).

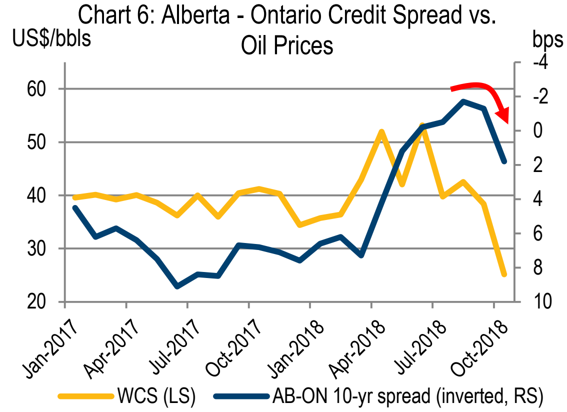
On the fiscal side, the conservative assumption made by the Alberta Ministry of Finance for the WTI, the WCS-WTI spread and the Canadian dollar will help the Province to go through this difficult period without any major fiscal incident. Indeed, the [1st quarterly update] released in late August assumes a US$24 WCS-WTI discount for the entire fiscal year 2018-19. The spread was much smaller between April and August, about US$19 per barrel. Thus, the Canadian oil discount could average US$30 for the remaining of FY 2018-19 without generating a deterioration of the Province's budgetary balance and higher-than-expected borrowing requirements. If we take the worst case scenario that a US$50 record-high discount per barrel will persist until year-end, according to our calculations, the deficit for FY 2018-19 would further worsen by about $3B (Alberta's fiscal sensitivities to WTI, the WCS-WTI spread and the Canadian dollar can be found here). Such a deterioration added to the $7.8B deficit estimate included in the August *quarterly update* would imply a $10.8B shortfall, moderately worse than the $8.8B deficit originally penciled in the 2018 March Budget.

Let us look now beyond FY 2018-19. The WCS discount assumed by the Province is US$21 per barrel for FY 2019-20 and US$22.30 per barrel for FY 2020-21. While the WCS-WTI spread could turn out to be larger, it is likely to be fully offset by a softer Canadian dollar (assumption of 80 US cents for FY 2019-20 and 2020-21 in the 2018 budget) and stronger-than-expected WTI crude oil prices (assumed at US$60/bbl for FY 2019-20 and US$63/bbl for FY 2020-21 in the 2018 budget).

Finally, from a **credit perspective**, Alberta's 10-Year benchmark spread relative to Ontario deteriorated by 3.1 basis points (6 versus Canada) since the last business day of September, reflecting concerns about the fiscal impact of lower oil prices (see chart 6). However, with oil spreads expected to narrow somewhat in the near-to-medium term, so should Alberta's spreads.

Bottom Line: The wide gap between WTI and WCS may slightly deteriorate the Province's budgetary balance in FY 2018-19 but is unlikely to become a major game changer in the longer term. Thus, recent concerns about Alberta's debt, and thus the underperformance of its credit spreads, could turn out to be overblown.

Chart 6: Alberta - Ontario Credit Spread vs. Oil Prices



Source: Bloomberg Finance L.P. and LBS Econ. Res. and Strategy.

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