

# April 2020 Financial Markets Update

A Complete Wrap-Up Across FX, Interest Rates, and Energy Commodities

**ATB**

*listens in*

# Table of Contents

---

## Highlights

- *Mark Johnson reviews the historic policy initiatives by the Bank of Canada*
- *Chris Fricke and Mark Engelking take us through the FX landscape*
- *JP Dore discusses the physical realities facing oil markets amid unprecedented demand destruction*
- *In the chart pack we review Global PMI's, S&P 500 PE Ratios, as well as US oil storage and how far away we are from "tank-tops"*

Central Bank Overview	3
Canadian Dollar	8
USD Index & G10 FX	10
WTI Crude Oil	12
Chartpack	16

# Central Bank Overview

*Mark Johnson, Director Interest Rate Sales*

What a difference a month makes.

March 2020 was probably the most eventful month in financial markets in my memory. Which is long and jaded. We got rate cuts, explosive currency volatility, commodities tumbling further, equities in record decline and additional unconventional monetary policy measures that were historic in nature. I am referring to the first ever “QE” program in Canada along with measures to insure that credit and liquidity flow to businesses - measures that now see the Bank of Canada in that grey area between monetary and fiscal policy that so many other central banks have existed in for some time. The Bank of Canada has been very active in efforts to help our economy and financial system cope. There is a lot to digest here, but the summary is that it has been operating in the market to improve liquidity and calm credit stress during this time.

1. They started by purchasing - on a regular and advertised basis - a wide range of securities from the banks such as mortgage bonds, corporate bonds, GoC bonds and shorter dated securities via regular Repo and Buy Back auctions. This has helped provide liquidity to the banks and allows them leeway to purchase securities from their customers and even just leave deposits on their accounts at the BoC - freeing up cash in the business community.

2. They then went further and announced an intention to purchase at least \$5 billion of government bonds per week - until no longer required. This is QE in all but name. What the BoC have called this newborn is the Large Scale Asset Purchase program (LSAP.) There does not appear to be an attempt for these asset purchases to be “sterilized” by a deposit (liability) on the BoC balance sheet from the government.

So this is expanding the balance sheet by injecting cash into the coffers of the banks et al. And that is essentially QE. They join their G7 colleagues in doing this. This is a first for the BoC. Given that the BoC is unlikely to halt these measures prematurely, we can safely assume 6 months of such actions. This brings the program to C\$130 billion minimum.

3. The BoC is also purchasing provincially issued securities to provide cash flow for the various efforts by the provincial governments to support their respective economies. This has been very welcome.

4. The BoC is offering to purchase \$15-\$20 billion of 1 month BA’s weekly in order to create demand in that market and clear inventory on the banks’ books - and thus reduce shorter end rates.

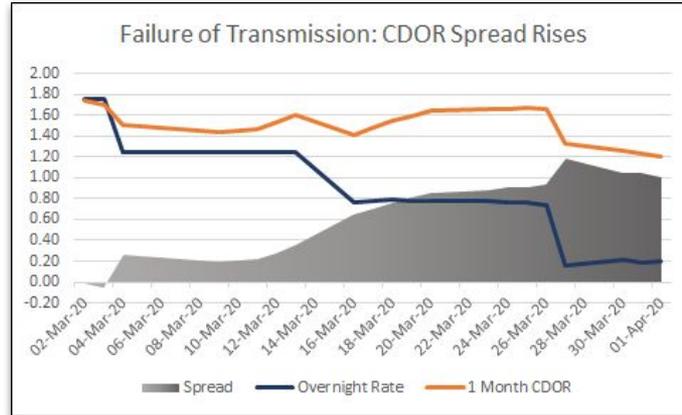
# Central Bank Overview

Mark Johnson, Director Interest Rate Sales

Also, relevant to term funding, through the CMHC, the Government will purchase C\$150 billion of insured mortgages from the banks (3 times the original announcement) to free up both capital and buying power moving forward.

Despite the aggressiveness of these measures, we continue to see signs that there is strain in the system. Credit is available - but to many at elevated prices. Cash appears to be getting hoarded - and there is the distinct possibility that the leverage that we have all talked about in the last 5 years (it has slowly built as the national economy has inflated) means that the assets side of the balance sheet may not be funded by the liabilities side. Look at the chart below. It shows the level of 1 month cdor (which from a cost-of-funds to business perspective, is arguably the most important rate on the whole curve) in relation to the overnight rate set by the Bank of Canada.

## CDOR Hasn't Declined With The Overnight Rate



Source: Bloomberg, ATB Financial Markets

This shows the transmission mechanism is not working yet. **The low funding rate for Bay Street is not yet getting transmitted to Main Street.** That spread, in "normal" times, is usually around 20 bps. One can see that it has exploded. Not only has the overnight rate been cut 3 times aggressively to 0.25% - but CDOR has not reacted in unison as liquidity between the financial institutions has been trapped - with the need to keep physical cash on the books (or liquid assets at least) all-consuming in these times.

That is where the BoC BA auctions come in. They may be the most important program in the short run. Sure, LSAP and additional measures that would turn LSAP in to "QE" (see below) are helpful in the long run and they keep longer term rates down to reduce the cost of capital and ensure that credit

# Central Bank Overview

*Mark Johnson, Director Interest Rate Sales*

is available by underpinning the bond markets, but where businesses can get cash in the short run - that is the maker and the breaker in the immediate future. With the BoC buying \$15-\$20bln 1 month BAs per week indefinitely, after 2 weeks they already own just under 50% of the outstanding BAs in the system. That is a lot of money that they are leaving with the FIs. Presumably this will, at some point, satisfy their need and funding rates can fall to more normal levels. The way 1 month CDOR has behaved since the first auction 10 days ago is encouraging - but it is merely a start. We would expect 1 month CDOR to fall into the 55-65 bps range over time. This is still elevated on a historical basis - but may be the new normal. The market sees that happening in July. We should all hope that it is a good deal quicker than that. If banks do have ample cash on hand to handle their main street obligations, when the flow of corporate BA renewing issuance hits the street, we should see rates fall.

The BoC meets this month (on April 15th), but they have already done their work. Three large cuts in March, bringing the overnight rate to 0.25%, have pushed their benchmark to an historic low. However, we see this rate cut as the last. The Bank of Canada has made it pretty clear that it sees zero rates as counterproductive. They see the 0.25% policy setting as what they call "Effective Lower Bound" or ELB. Both they and the Federal Reserve have observed how zero-to-negative rates by the ECB have punished banks and only added to the financial stress that they are under (they should be paid something for keeping liquidity on their books, after all, shouldn't they? This crisis is bad enough without the banks actively discouraged from keeping some cash on hand.) We may well be here for some time. But we are highly unlikely to move lower.

What does this mean for longer end rates? Well, rates are now very close to their lows - and remember, when the market was rallying bonds at the beginning of March on the prospect of lower BoC rates it did not anticipate the spike in CDOR which effectively holds back the rally to some extent (after all, lending longer term at a lower rate than you can fund short term is generally not a good idea.) The market is pricing that the yield-increasing impact of distressed credit is being counterbalanced by the extensive central bank measures to buy securities and keep liquidity for them flowing. Plus, with the market thinking that those shorter rates will gradually "normalize" in the coming weeks, we are seeing longer term rates falling. We would expect the yield curve to flatten more (from 2-10 years) - especially if the Bank of Canada affects YCC at 5 years (see below.). Beyond that, it is unclear what the impact of the new increased supply of GoC bonds will be. All in all, rates can fall a little further - but not much.

# Central Bank Overview

*Mark Johnson, Director Interest Rate Sales*

During March, in Canada we have seen possibly (pound-for-pound) the strongest response to COVID of any nation to date. We had immediate and unanimous recognition -not denial- of the threat at an “early” stage (remember - I’m talking relatively here). We have aggressive guidance on social distancing and “early” closures of schools and non-essential services and businesses (relative again). We have a fiscal response that - on size and target - is comparable to some of the best that we have seen (UK best for target, US best for size) and we have a central bank that has gone zero bound, is active in clearing funding stress and adding liquidity in ways and size that it has never done before.

In April we might need, and will likely see further measures to mitigate/control the economic fallout of COVID-19. Maybe April is too soon to expect more, but it feels likely.

I will not comment on fiscal measures increasing as this is not a political situation update. But, suffice it to say, the government has significant room to expand spending relative to its peers. Our deficits as a percentage of GDP are manageable. Here, we will focus on monetary policy. And more can be done over time on the monetary policy front;

1. More of the same - A lot more. The BoCs balance sheet is also a fraction of most of its peers on a GDP basis - so they can do this a lot more - for a whole lot longer.

2. They can provide forward guidance on rates. They did this after 2008 and it amounts to a guarantee to keep rates constant for a specific length of time.

In theory this encourages capital expenditure by solidifying the math on the returns. In 2008 this was useful in the absence of QE. Now that we have LSAP, it may be less impactful, but still helpful. In 2008 we laughably thought that keeping rates low and pumping cash into the global economy may be inflationary and we appreciated the guarantee that rates would not sky-rocket as a result. What were we thinking? So, again, it is different now (assuming you, like I, are not looking at the collapse of aggregate demand in the economy on an apocalyptic scale and thinking “inflation, now that’s gonna be a problem...”)

3. Credit Easing - the BoC could expand LSAP for corporate debt as well as MBS and GoC bonds. This would effectively back stop private sector credit and reduce credit spreads in bonds.

# Central Bank Overview

*Mark Johnson, Director Interest Rate Sales*

4. They could actually target parts of the curve and certain yields in their LSAP - which Carolyn Wilkins basically suggested would then mean that they were then doing actual textbook QE and not just LSAP. Their target would likely be around the 5 year part of the curve and would be referred to as Yield Curve Control, or YCC. We see this as very likely in the coming months.

5. They could introduce "funding for lending" programs for the banks. These provide liquidity to the banks on the express condition that they be lent onwards to businesses. Also likely.

March represented a month of action. Action to introduce solutions to the economic carnage of COVID-19. Debating whether these were unnecessarily delayed due to political malaise in the west is for another forum.

Here, we shall merely say that, in 3 weeks, we have seen the swiftest action by Federal and Provincial governments, plus the Bank of Canada, that we have ever seen. Now, as we enter April, we will have to give those measures time to be implemented and to have their impact. On the surface, with all but essential services locked down, we have nothing but time. This is misleading. We do not have much time before the effects are irreversible (and I am talking the goal of merely a hockey-stick recovery- not the ridiculously optimistic V shaped one that some are predicting), so logistics and guidance needs to be in place quickly if the rescue package is to save at an optimal rate.

I hope April's monthly recap is of an optimistic and defiant tone.

# Canadian Dollar

*Chris Fricke MBA, Director FX Sales*

With an approximate 1.3320 - 1.4670 range, March proved to be the most volatile month for USDCAD since the peak of market uncertainty during the Global Financial Crisis in October, 2008. (Range then, approximately 1.0550 - 1.3020). Daily ranges themselves have also ballooned; whereas it was common to see approximate half cent ranges in much of 2019, in March intraday ranges often exceeded 2 cents, and in the case of our March 18th session, nearly reached a full 5 cents. On the back of this, 1-month vol's have spiked from the recent record lows in the upper 3's to the mid 18's, their highest level since mid-2010.

With the underlying volatility has come a shift in drivers of USDCAD. Whereas in past "calm waters" one could confidently look at a combination of the S&P 500, WTI, and 2-year Canada/US yield differentials to trade USDCAD, we are now witnessing a USD vs. all theme, meaning,

as goes the DXY, so goes USDCAD regardless of what is transpiring elsewhere. My opinion is that until we see lowered volatility, and with it a return to the risk trade, that we will continue to come in and out of our current vs. historical drivers. Stay nimble.

## Canadian Dollar Volatility Surges



Source: Bloomberg, ATB Financial Markets

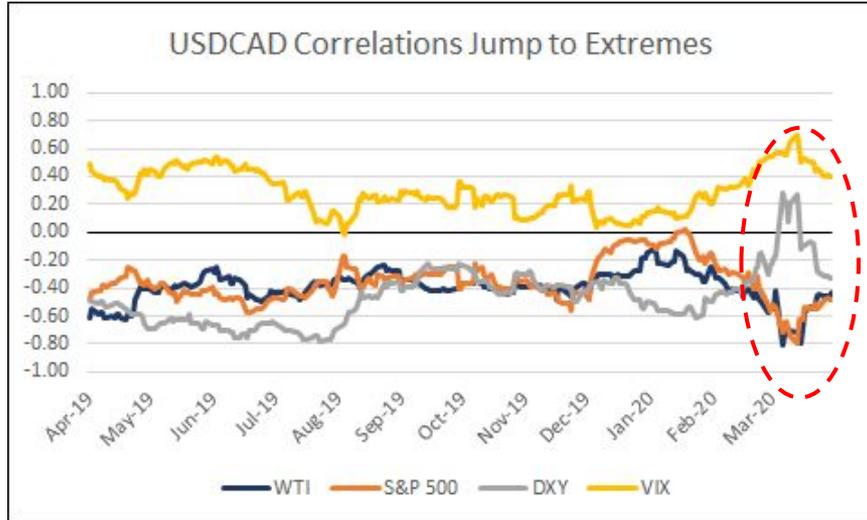
From here, it seems reasonable to suspect a rough 1.40 - 1.45 range for the short-term depending upon price action in those drivers. (Case in point, the near 2 cent sell-off on April 2nd on rumours of OPEC+ production cuts being in the works.)

If things turn even worse on Covid-19, look for moves to stretch higher. A break of our early 2016 highs near 1.4690 should open up a move towards 1.5000, where I would suspect longer term players would be happy to go long CAD, thus slowing things from worsening any further. If Covid-19 stabilizes, look for our trading band to slowly shift lower to something more near a 1.37 - 1.42 range. While, if we see a dramatic improvement on the economic recovery front, including energy and equity markets, look for a return to the mid to low 1.30's.

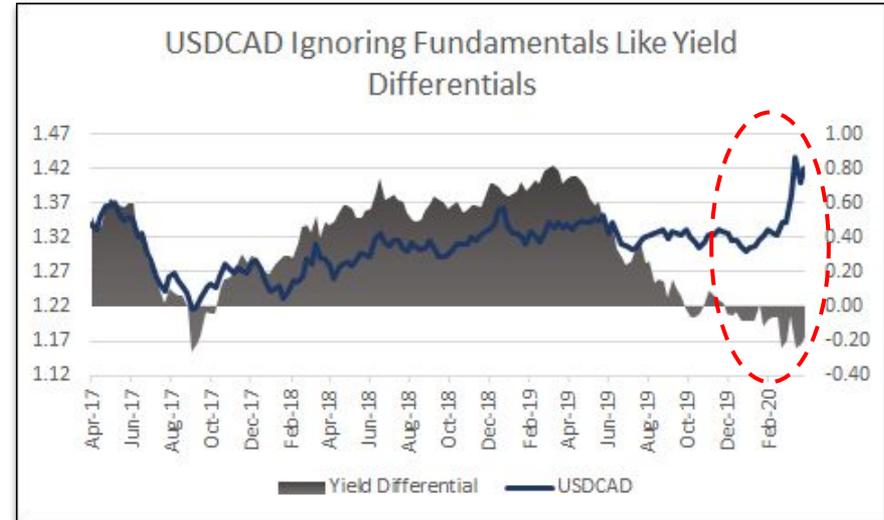
One final note, we were proponents of low vol hedging strategies in the past (eg. Participating Forwards) for a variety of reasons. Depending upon your risk horizon and clarity in operations, strategies that take advantage of existing high volatility look very appealing now. Please call the desk for further discussion.

# Canadian Dollar

Chris Fricke MBA, Director FX Sales



Source: Bloomberg, ATB Financial Markets



- Relative to recent ranges, the Loonie's correlations with other assets went haywire during the heightened volatility this past month (left hand chart).
- Correlations to WTI, S&P 500, and the USD Index all surged to extreme levels (left) as the market scrambled for US Dollars and essentially sold everything else...leading to fundamental drivers, like the diminishing yield advantage that the USD has over CAD, to be ignored once again (right hand chart).
- During risk-off, its Greenbacks above all else...

# USD Index and G10 FX

Mark Engelking CFA, Director FX Trading

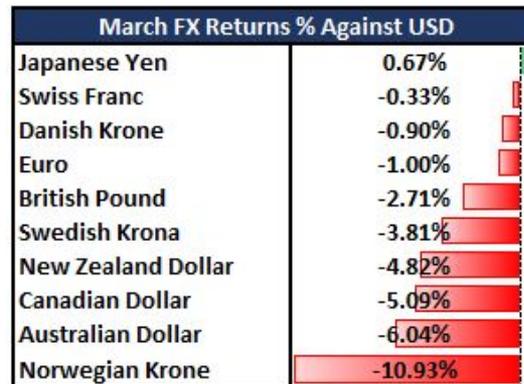
The month that seemed like it would never end is over and I will do my best to pick up the pieces in the G10 recap. Those who read this note are well aware of the conditions that got us into this mess so I will not dwell on them but instead try to focus on where we go from here. March was a brutal month for risk assets led by a massive equity sell-off and a flight to safety. The Swiss Franc and Japanese Yen made slight gains against the USD while higher beta currencies, especially the commodity ones, were sold off hard. NOK lost almost 10% in March while the Loonie gave back 5%. Last month we mentioned that the DXY Index should bounce hard off the trendline higher and that is exactly what we saw.

Central Banks have thrown everything and the kitchen sink at this thing but we have only seen things recently stabilize somewhat with more details on fiscal stimulus coming from various nations. After all, cheap money helps but it does not keep businesses open and people employed. I still maintain that the countries that perform the best out of this will be the ones that are able to do massive testing and isolate cases quickly, helping regular people get back to work and the economy on track.

The world is ripe for some bleak March/April numbers but with such pessimism priced in data prints that are not as bad as anticipated may provide a boost to those currencies. If Chinese data starts to rebound my gut feeling is we will see the Antipodeans retrace some of their March losses.

There will be a time to jump on the long CAD or NOK trains but I do not think it is quite yet given the struggles of depressed crude prices, I prefer to play AUD and NZD. Overall, I would expect the month of April to see some gains against the USD as the DXY resolves its overbought nature and effective isolation and social distancing gets some people back to work by the end of the month (we hope). If rumors of a second outbreak in China are true we could get USD strength as Asia sells off once again.

## **FX Markets Saw a Rush to the Greenback all Month...**



Source: Bloomberg, ATB Financial Markets

# USD Index and G10 FX

Mark Engelking CFA, Director FX Trading

- The US dollar index had an absolute torrent trading range for March: 9% from top to bottom
- What is very interesting to note, is that despite the 'risk-off' rush to the USD mid-month and spike above 102, momentum indicators (sub-chart) are actually showing bearish divergence...
- ...RSI couldn't make a new high on the move higher (circles) and now sits at 51 heading into Q2
- This is a potentially bearish technical development that could foretell of *broad* USD weakness to come given the amount of QE in the system from the Fed...



Source: Bloomberg, ATB Financial Markets

# WTI Crude Oil

*JP Dore, Markets Analyst*

Oil prices have surged higher as we enter April on the back of a constant flow of headlines that, when coupled with the stark physical realities facing crude, are leading to incredibly volatile markets. As we went to press, President Trump tweeted that he “expects and hopes” that Saudi and Russia will be cutting supply by 10m bpd and perhaps by a lot more. WTI surged 35% while WCS rose as much as 70% through the trading session. But will the gains last? Let’s take a quick step back to see what the implications may be for prices going forward.

Energy commodities are fickle compared to other industrial commodities. Steel, re-bar, and aluminum can all be stacked on a parking lot until such time as you need more. With energy, the whole value chain has a unique problem: From upstream to midstream, to downstream, energy commodities must live within available energy infrastructure until they are consumed. It is a basic point, but it is fundamental to the issues we are facing right now:

If you can’t use it, it has to be put in storage. And right now we can’t use as much oil as we normally would which means that we will eventually start to run out of storage space.

This dynamic is what is driving massive dislocations across different crude grades - those crudes that are produced close to storage and shipping points are faring much better than those that are not. Brent oil is outperforming other crudes as it is delivered and priced next to the ocean where it can go directly into tanks or onto ships. That proximity to shipping and storage is slightly less convenient for WTI and thus it trades at a discount to Brent. Discounts widen further as proximity to storage alternatives decreases. Western Canadian Select (WCS) is one of the most challenged crudes: It’s delivery point sits behind miles of pipeline and is effectively landlocked and thus when demand craters and supply surges, WCS prices fall precipitously and can even go negative. In such a scenario, as pipelines, refiners, and storage capacity become overwhelmed, producers will have no choice but to first try and pay traders to take oil off their hands, or eventually accept defeat and shut-in production so the infrastructure can re-balance itself.

(This already happened in March when Wyoming Asphalt Sour Crude traded at *-US\$0.19/bbl*). Producers will try and hang on as long as possible before shutting in production in order to maintain the structural integrity of reservoirs. For SAGD wells that produce heavy oil, a certain temperature and pressure have to be achieved to ensure effective permeability - thus shutting-in may lead to irreversible damage and lower recoverable volumes in the future. For mining operations it is a bit easier and thus we have already seen some large producers announce cuts with a total of about 100k bpd already offline since the price crash. The current dynamic of surging global supply amid an estimated 15-30% drop in daily oil demand due to Covid-19 isolation measures means that physical infrastructure may be maxed out in a matter of weeks...

# WTI Crude Oil

*JP Dore, Markets Analyst*

For context, during the Saudi price war of 2014-2016, US storage increased from 350 million barrels, to 530 million barrels over the course of about 24 months (chart next page). At present, base case estimates are that global oil demand will decline by an average of 15 million bpd until the end of May (which is optimistic), that implies upto 900 million barrels will have to find a home over the course of the next 8 weeks: The infrastructure to handle that type of volume simply does not exist and thus the timeline for solving this problem should be measured in a matter of weeks, not months. So, what can we do about it? 1) Is a coordinated OPEC+ supply cut with the US possible, and 2) Would it prove sustainable?

Let's assume we can arrive at a cut of 2 million bpd from Saudi and the US, 1 million bpd from Russia, Iraq, UAE, and Canada, and another 2 million bpd in total across non-core OPEC and Mexico.

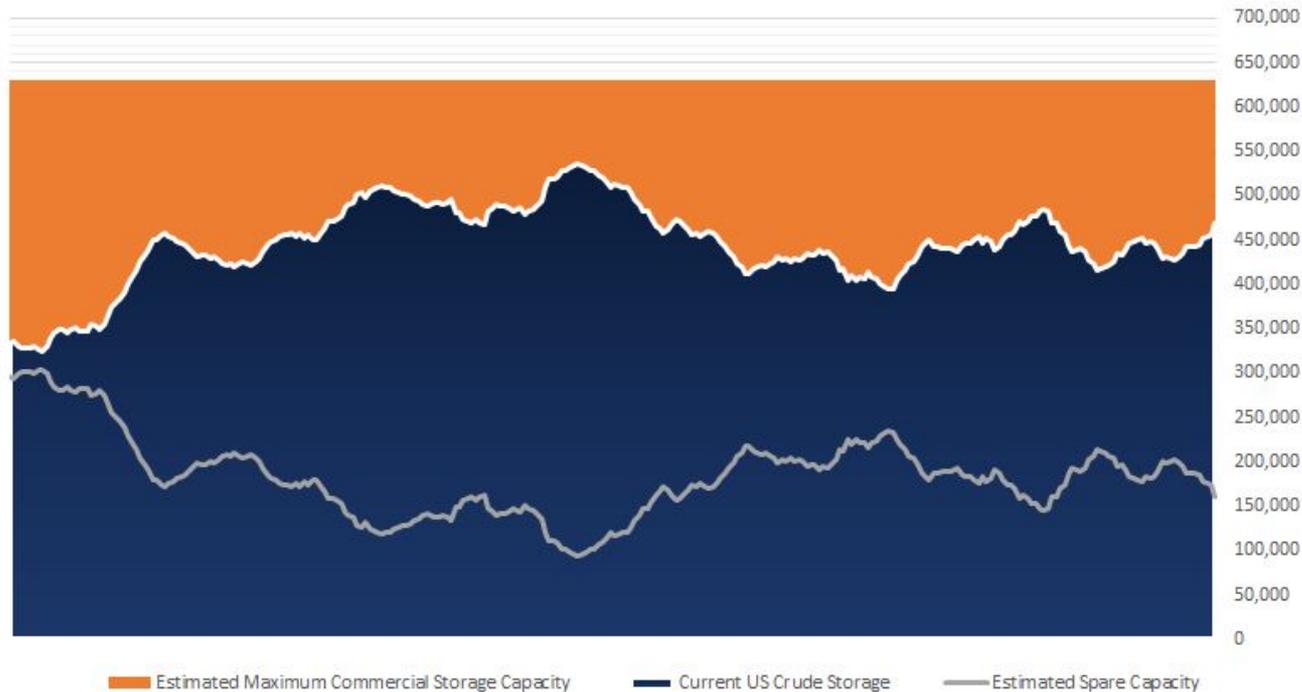
That would get us to a total cut of 10 million bpd spread across a newly formed global OPEC alliance. That in itself seems like an extremely high bar: First, why would Saudi once again step up and cut production this early in the game without having achieved the main purpose of starting the price war to begin with - hurting US shale and winning back market share. Secondly, coordinated supply cuts of this magnitude would be incredibly difficult to enforce across the various domestic regulatory bodies: How would the Alberta Energy Regulator coordinate with the Texas Railroad Commission? Which will create delays of implementation and compliance, thus delaying near term effectiveness. That means to me that such cuts, if agreed to, would be unable to be implemented at the well head in a meaningful way until mid-May or early-June, which would imply that the physical constraints we currently have will only continue. In this light, the price action we saw today is likely to prove unsustainable.

The jump in prices that occurred on these rumours of a supply cut means that current production levels have no reason to be adjusted, and thus the logistical problem that we highlighted earlier will continue to be magnified over the course of the next few weeks: pipelines, refiners, and distribution networks are all going to be pushed to the breaking point given the base case of a 15 million bpd decrease in global demand. Prices will inevitably need to decline further below cash production costs as a result, at which point production shut-ins will have to accelerate - especially across landlocked crudes like WCS, Midland, and Bakken - thereby allowing the logistical infrastructure to rebalance.

The fickle reality of physical energy markets amid this massive hit to demand means that the most sustainable solution will be the most painful one in the near term.

# US Oil Storage: How Much is Left?

Estimated US Crude Storage Availability Ex. SPR (kbbbls)



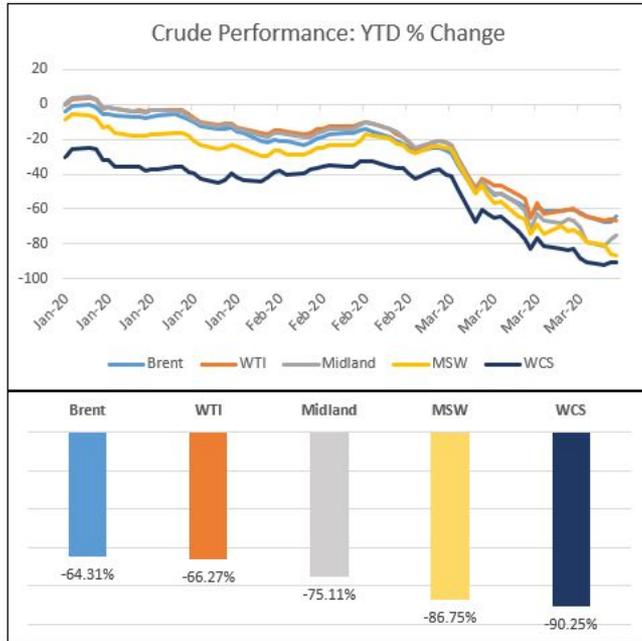
Source: Bloomberg, ATB Financial Markets Estimates, EIA

## Houston. We Have a Problem

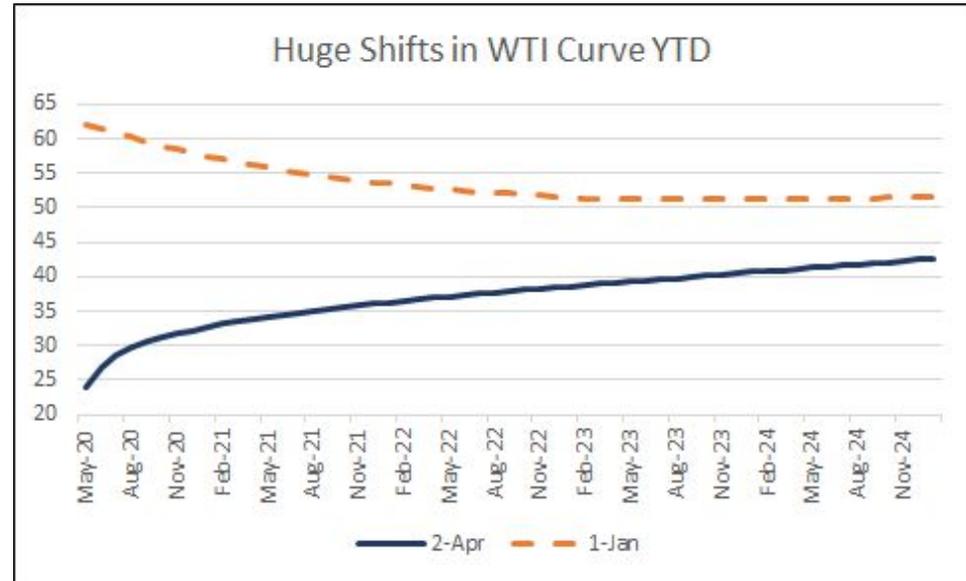
- The US has c. 630 million bbls of commercial storage capacity (orange) with about 470 million bbls currently stored (blue)
- That leaves around 170 million bbls of spare capacity (grey)
- Isolation measures are estimated to strip out 15% of daily oil demand, which in the US amounts to 3 million barrels per day...
- ...implying that the US will be at 'tank tops' in 56 days

# WTI Crude Oil

JP Dore, Markets Analyst



Source: Bloomberg, ATB Financial Markets



- Left:** Inland crudes like WCS, MSW in Canada and Midland in the US, have underperformed global benchmarks, with seaborne grades like Brent holding up the best
- Right:** The crippling moves in front month price has pushed forward curves into deep contango, with an average of -US\$1.19/bbl of contango per month for the rest of 2020.

# CHARTPACK

**ATB**

*listens on*

# Monthly and YTD Returns

Cross Asset			
	Last	1MΔ	YTDΔ
<b>Crude</b>			
WTI	\$20.29 ↓	-54.65%	-66.74%
Brent	\$22.74 ↓	-54.99%	-65.55%
WCS	\$3.90 ↓	-87.46%	-89.89%
MSW	\$7.65 ↓	-81.83%	-86.05%
Syncrude	\$8.90 ↓	-80.70%	-85.12%
C5	\$8.90 ↓	-80.76%	-85.89%
LLS	\$14.48 ↓	-69.68%	-77.66%
Midland	\$13.98 ↓	-69.78%	-77.36%
<b>Gas</b>			
Henry Hub	1.653 ↓	-2.08%	-24.62%
AECO C\$	1.646 ↑	17.57%	-4.80%
AECO Basis	-0.545 ↑	5.71%	-25.29%
AECO Cal20	1.719 ↑	10.74%	-4.14%
Sumas Basis	-0.265 ↑	45.70%	11.07%
Dawn Basis	-0.145 ↓	-22.88%	-98.63%
Chi. Basis	-0.172 ↓	-14.67%	-56.36%
Waha Basis	-1.298 ↑	32.99%	27.57%
<b>NGL's</b>			
GC Jet Fuel	\$ 67.65 ↓	-50.66%	-65.00%
GC Diesel	\$ 93.03 ↓	-34.87%	-52.05%
NY RBOB	\$ 41.15 ↓	-70.41%	-75.83%
Conway Propan	\$ 0.27 ↓	-17.65%	-35.11%
Mt. Bel Propane	\$ 29.00 ↓	-27.04%	-29.70%
<b>Equity</b>			
Dow	21917.16 ↓	-13.74%	-23.20%
SPX	2584.59 ↓	-12.51%	-20.00%
NDX	7813.499 ↓	-7.66%	-10.53%
TSX	13378.75 ↓	-17.74%	-21.59%
TSX Energy	60.12 ↓	-47.76%	-58.81%
S&P500 Energy	412.72 ↓	-35.84%	-51.25%
SHCOMP	2750.296 ↓	-4.51%	-9.83%
DAX	9935.84 ↓	-16.44%	-25.01%

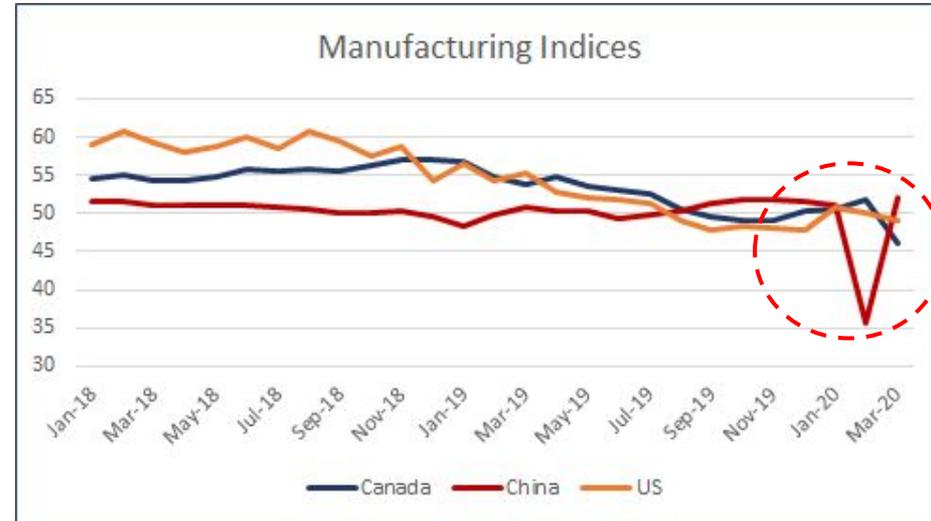
G10 FX			
	Last	1MΔ	YTDΔ
<b>FX</b>			
EUR	1.1027 ↓	-0.95%	-1.65%
JPY	107.53 ↑	0.73%	0.99%
GBP	1.2409 ↓	-2.71%	-6.40%
CAD	1.4028 ↓	-4.99%	-7.40%
AUD	0.6146 ↓	-5.98%	-12.46%
NZD	0.5967 ↓	-4.70%	-11.47%
CHF	0.9624 ↓	-0.32%	0.44%
DKK	6.7695 ↓	-0.84%	-1.57%
NOK	10.4152 ↓	-10.79%	-15.65%
SEK	9.9086 ↓	-3.73%	-5.47%

- Except for government bonds, losses have been endemic both this month and year to date
- Energy commodities have seen the greatest declines across crude and refined products, as Natural Gas prices performed relatively well (thought still down 25% YTD...)
- In FX, CAD has been a mid performer with a 5% monthly loss and a total decline of 7.4% YTD - the move lower in crude prices and historic push in QE from the Bank of Canada helped to encourage traders to sell the Loonie indiscriminately all month...

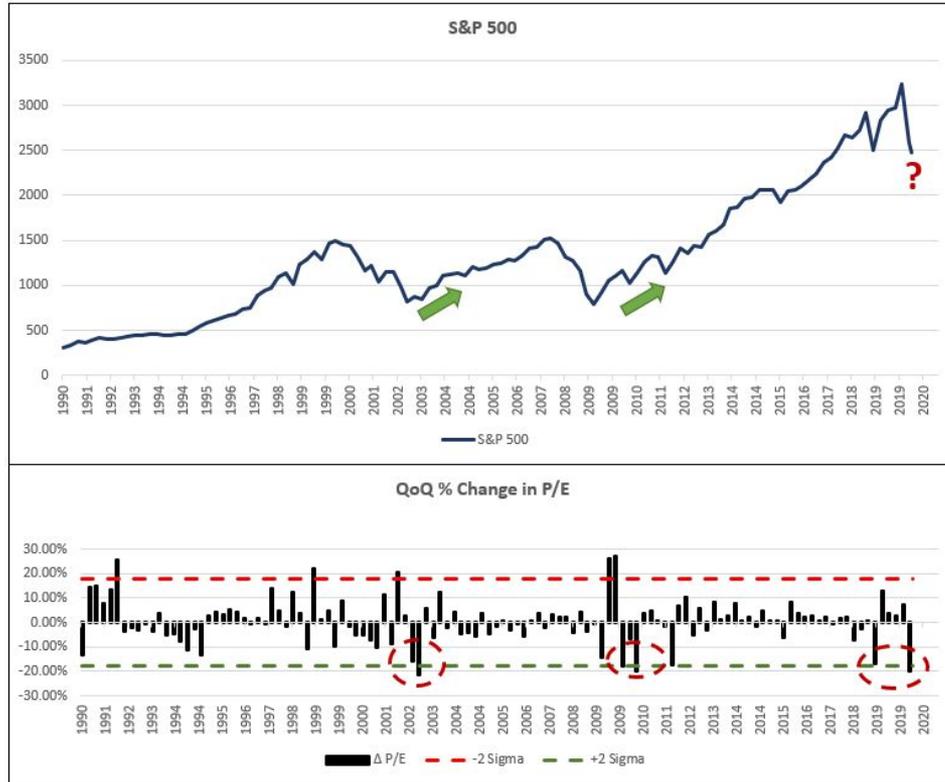
# Global PMI Data

PMI Heat Map	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Canada	54.6	55	54.3	54.4	54.7	55.9	55.6	55.7	55.5	56.2	57.1	56.9	56.8	54.8	53.9	54.9	53.6	53	52.6	50.5	49.7	49.1	49.2	50.4	50.6	51.8	46.1
China	51.5	51.6	51	51.1	51.1	51	50.8	50.6	50	50.1	50.2	49.7	48.3	49.9	50.8	50.2	50.2	49.4	49.9	50.4	51.4	51.7	51.8	51.5	51.1	35.7	52
US	59.1	60.7	59.3	57.9	58.7	60	58.4	60.8	59.5	57.5	58.8	54.3	56.6	54.2	55.3	52.8	52.1	51.7	51.2	49.1	47.8	48.3	48.1	47.8	50.9	50.1	49.1

- Readings of global economic activity are represented here by Purchasing Managers Indices (PMI) from Canada, China, and the US
- Readings above 50 indicate an overall expansion of activity, below 50 would indicate an outright contraction
- China reported a massive drop in activity for February along with a very impressive rebound in March...
- March data for Canada and the US didn't fully capture the full extent of isolation measures - hopefully that will be confined to April data with a similar rebound in May to that seen this month in China...
- However, we note that in developed economies it is the consumer that is more important, and that activity may take longer to comeback with full force



# P/E Ratio: Cheap, or New Reality?

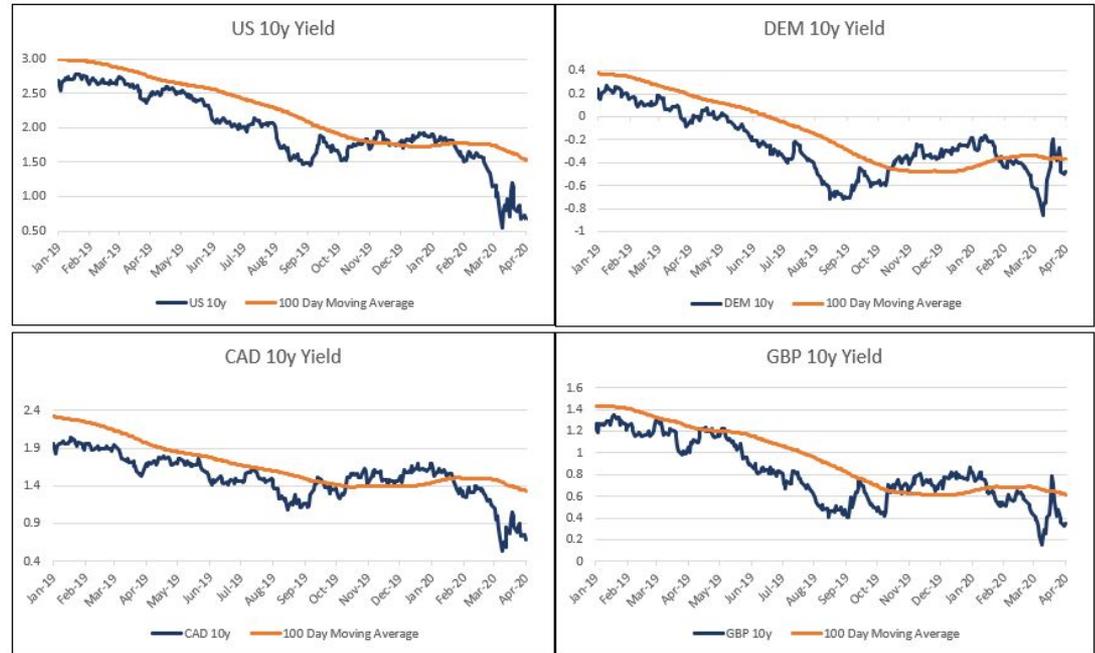


Source: Bloomberg, ATB Financial Markets

- The S&P 500 was down as much as 33% from its February peak
- But does that mean stocks are now cheap...afterall, hasn't the outlook for earnings changed due to Covid-19?
- We take a look at the percentage changes in the S&P 500 Price to Earnings Ratio from 1990-2020
- On the bottom chart, we track % changes in P/E on a quarterly basis along with +/-2 Standard Deviations (sigma)
- ***There have only been 5 other times when the the P/E ratio has declined by -2 sigmas in a quarter since 1990: 2002, 2009, 2010, and 2018***
- In each of those instances we saw significant rallies in stocks over the subsequent medium/long term (and significant volatility in the near term...)
- So, is the market on sale? It would appear to be the case: but you may have to sift through the bargain bins to find the real deals, and some deals may take some time to be fully appreciated.....

# Developed Market 10 Year Yields

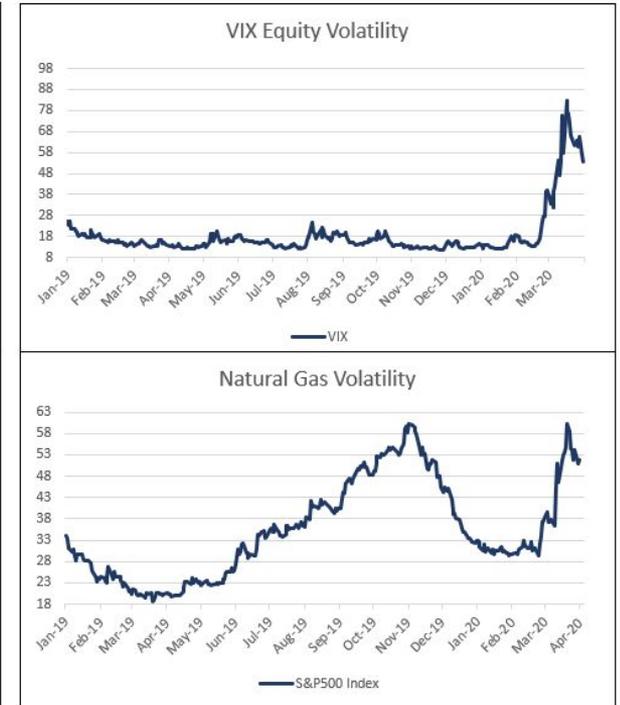
- Developed market 10 year bond yields really moved lower this month
- Major Central Bank's effectively cut rates in unison to the zero lower bound with most also launching considerable quantitative easing programs
- In Canada, the BoC is buying bonds for the first time ever - even the Financial Crisis of 2008/9 didn't ignite this type of action
- While, the Fed announced 'unlimited QE' in an effort to do as much as possible, as early as possible, in order to avoid a depression like meltdown
- Will it be enough? Well, no one is going to book a cruise right now just because rates are lower....but the wheels of the financial system are greased and ready once the recovery takes hold...



Source: Bloomberg, AIB Financial Markets

# Volatility Spikes to Record Levels

- Volatility readings spiked across assets this month
- Oil vol in particular soared to record levels above 200% at one point!
- The main reason for higher vol seen in energy commodities is due to the fact that oil and natural gas *must* be stored within existing energy infrastructure, or consumed...you can't stack it like it on a parking lot like re-bar...
- As oil supply increases, demand decreases, and storage capacity is stretched to the max, volatility should peak - have we seen peak vol in oil markets? I am not so sure - we could see vol well above 200% if prices have to go negative as storage space dries up in the coming weeks

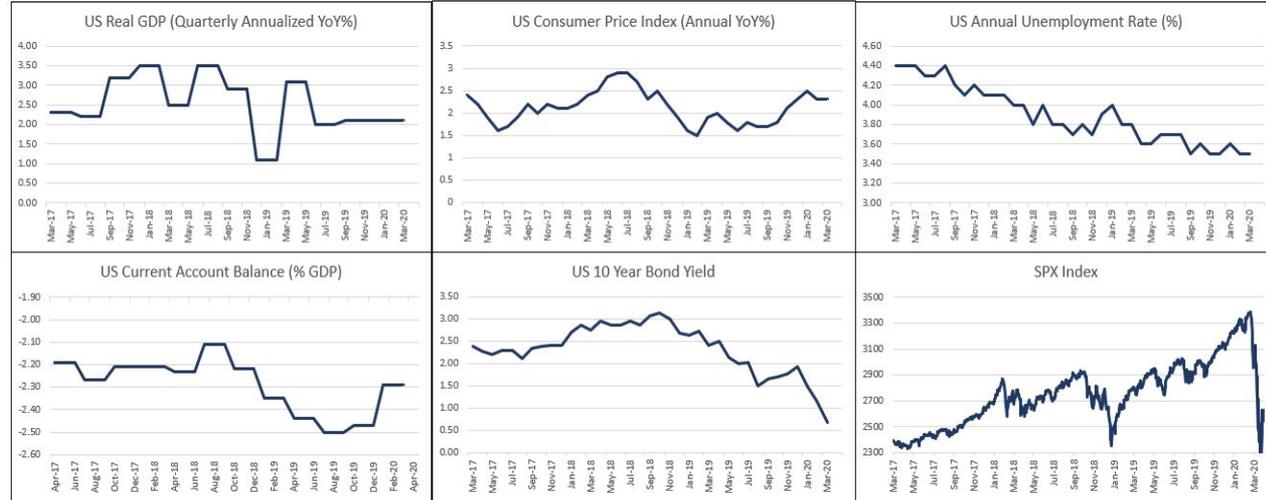


Source: Bloomberg, ATB Financial Markets

# US Country Snapshot

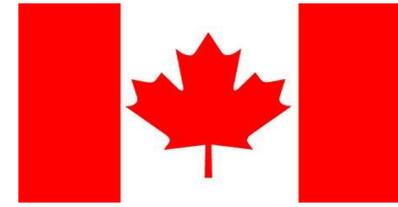


Indicator	Last
Real GDP (Annual YoY%)	2.10
Consumer Price Index (Annual YoY%)	2.30
Annual Unemployment Rate (%)	3.50
Current Account Balance (% GDP)	-2.29
10 Year Bond Yield %	0.67

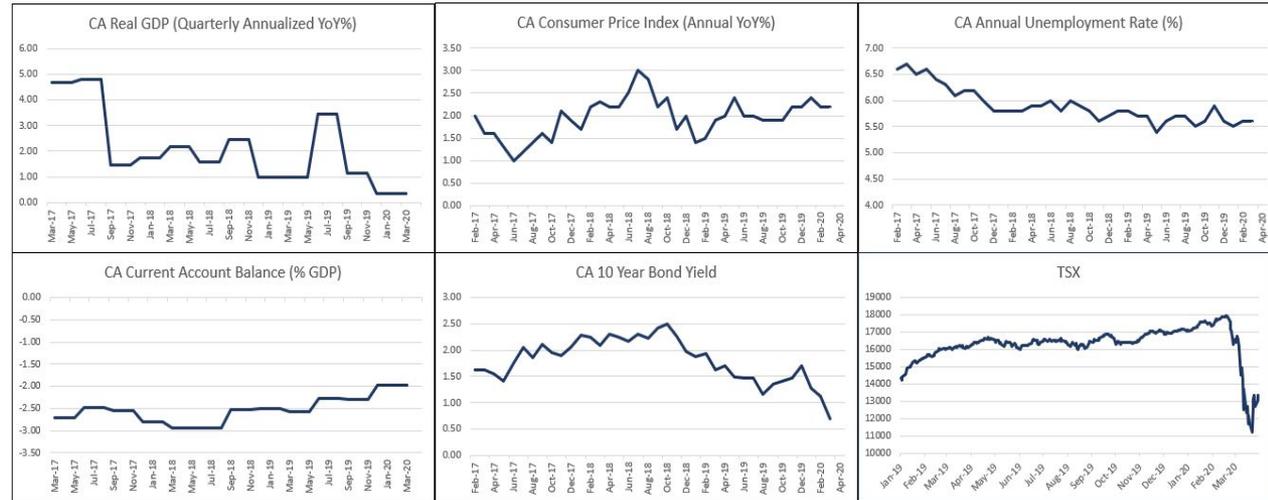


Source: Bloomberg, ATB Financial Markets

# Canada Country Snapshot



Indicator	Last
Real GDP (Annual YoY%)	0.34
Consumer Price Index (Annual YoY%)	2.20
Annual Unemployment Rate (%)	5.60
Current Account Balance (% GDP)	-1.97
10 Year Bond Yield %	0.69

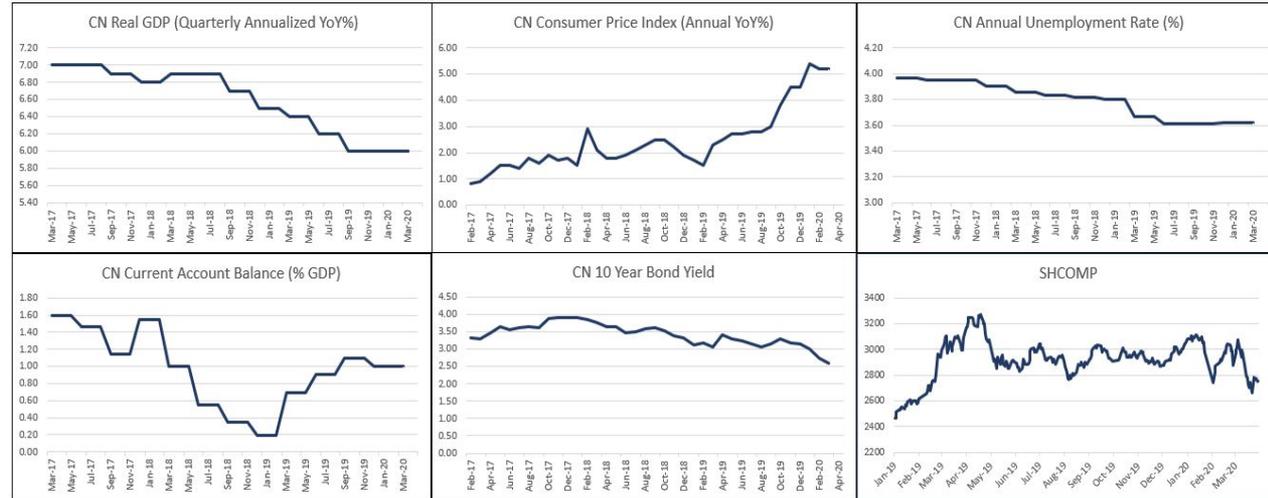


Source: Bloomberg, ATB Financial Markets

# China Country Snapshot

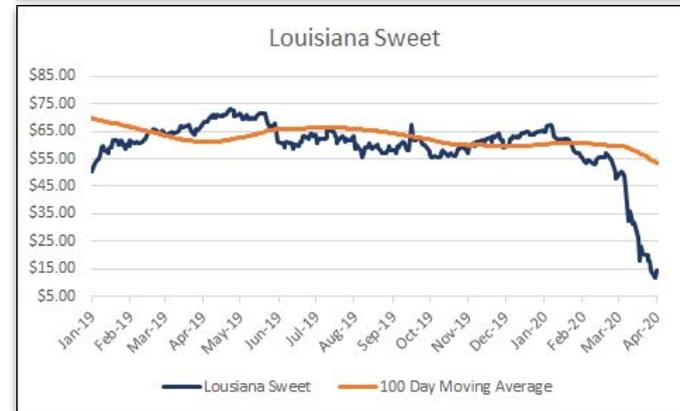
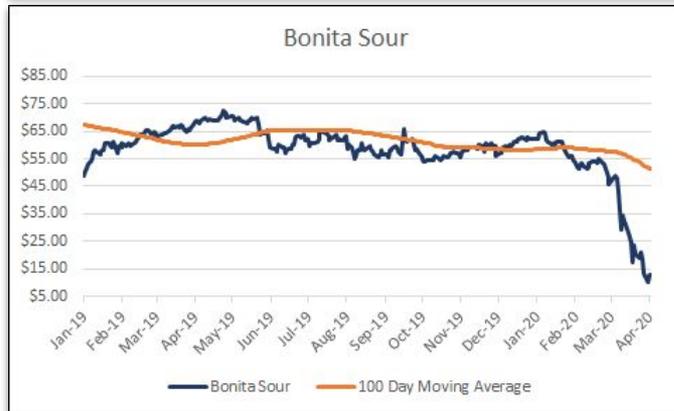
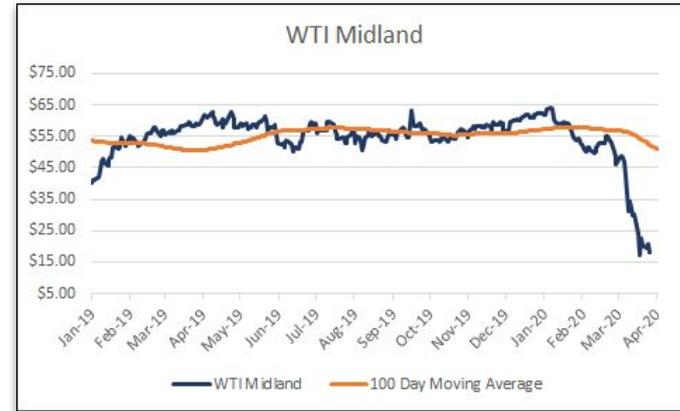
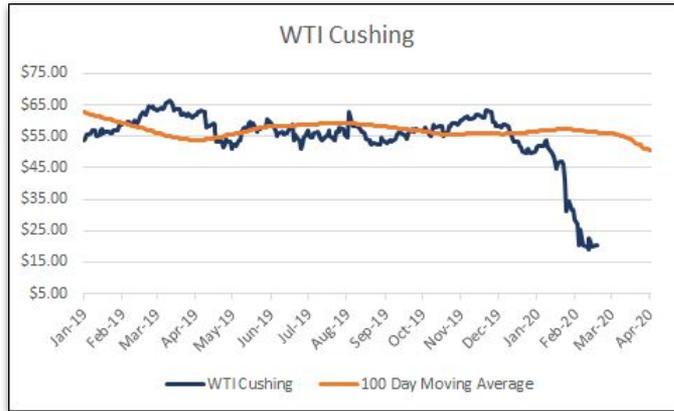


Indicator	Last
Real GDP (Annual YoY%)	6.00
Consumer Price Index (Annual YoY%)	5.20
Annual Unemployment Rate (%)	3.62
Current Account Balance (% GDP)	1.00
10 Year Bond Yield %	2.59

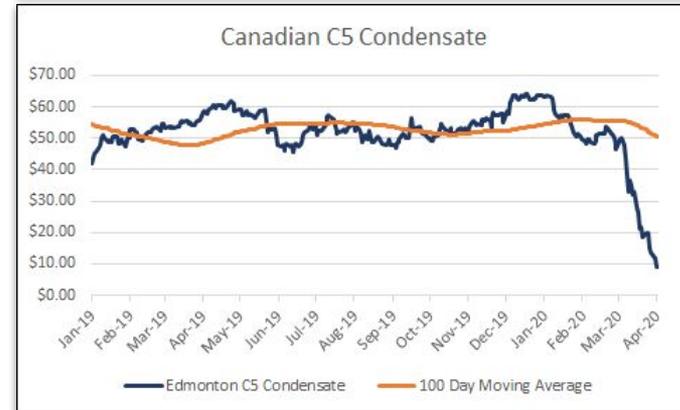
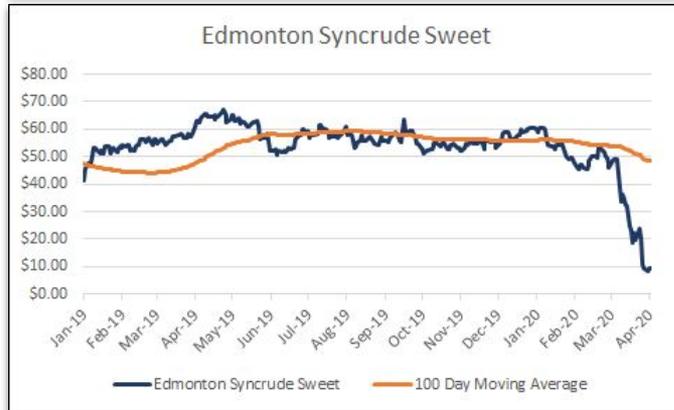
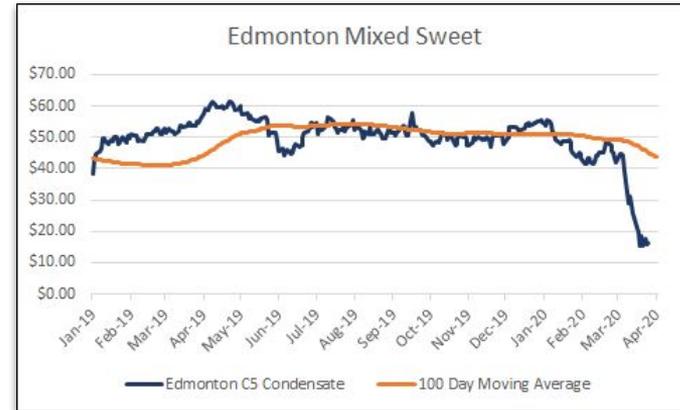
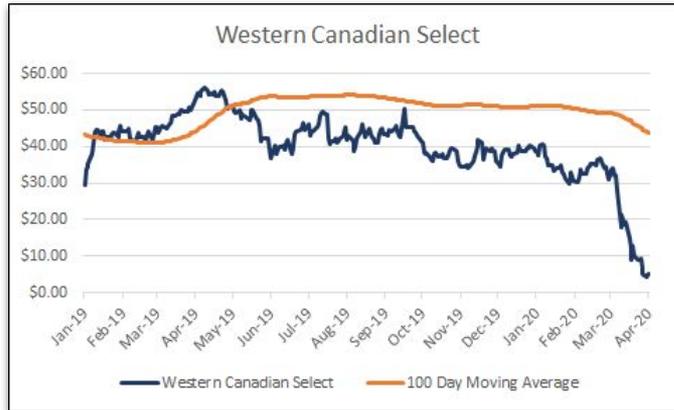


Source: Bloomberg, ATB Financial Markets

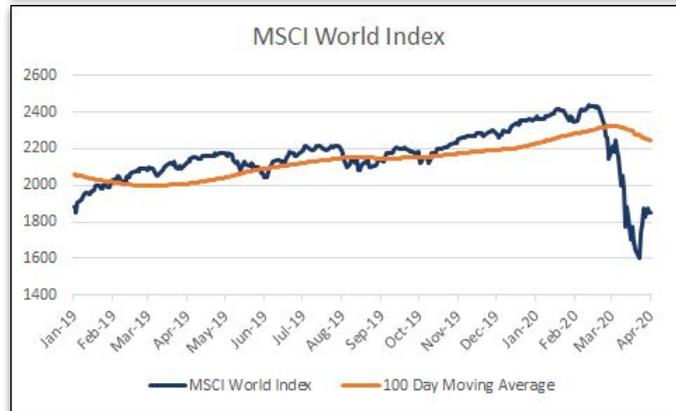
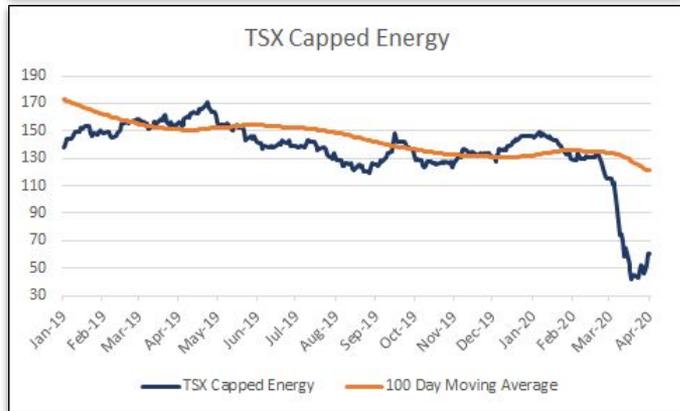
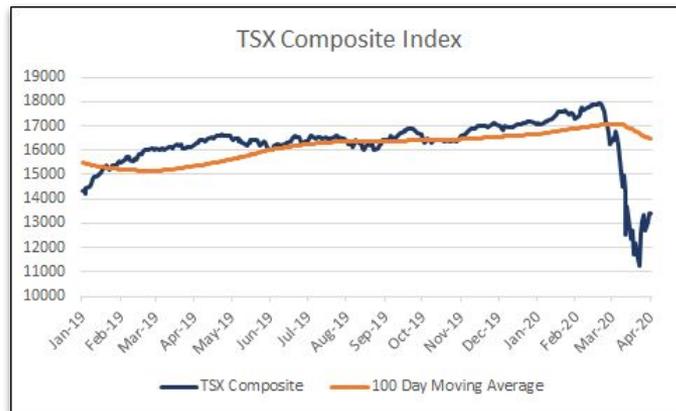
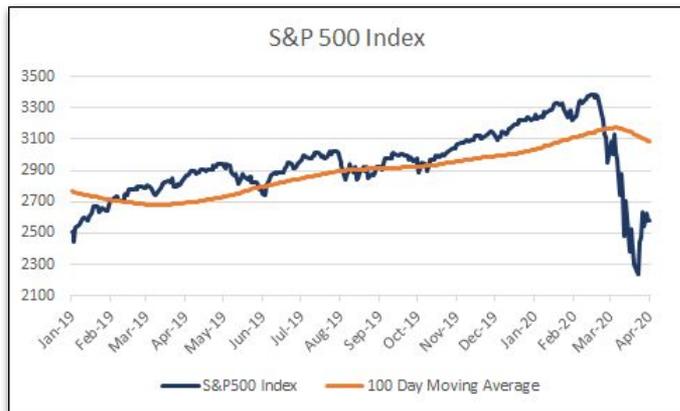
# US Crude Prices (\$/bbl)



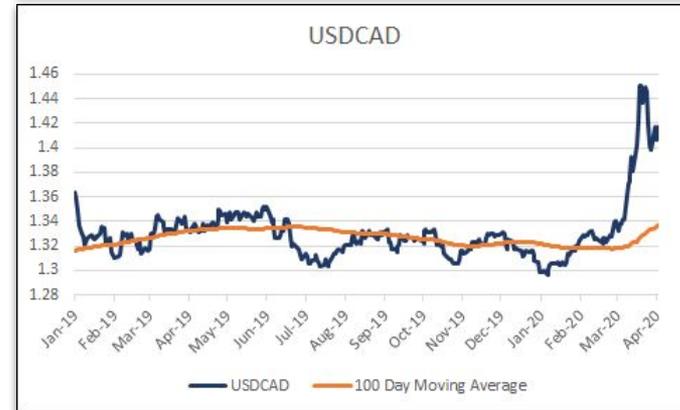
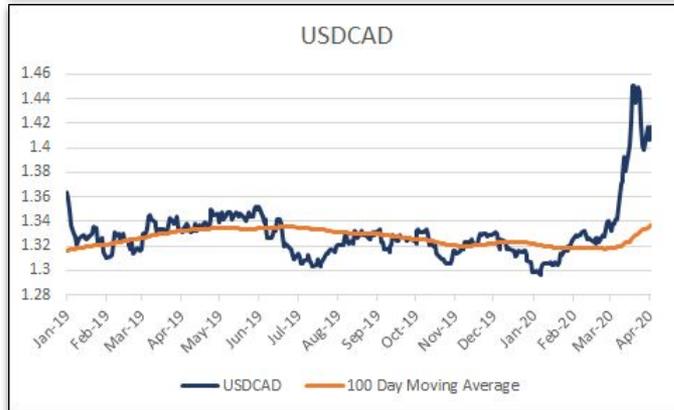
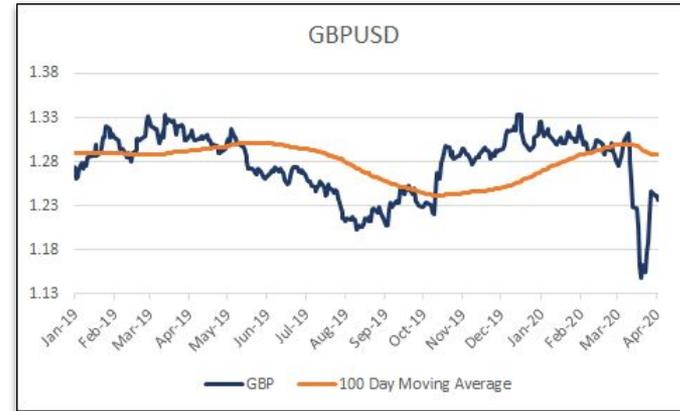
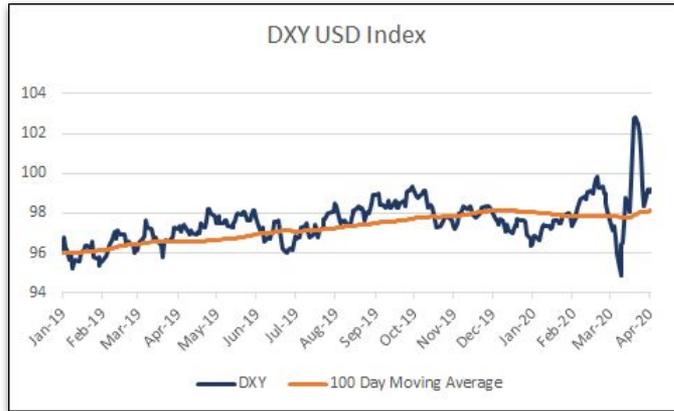
# Canadian Crude Prices (\$/bbl)



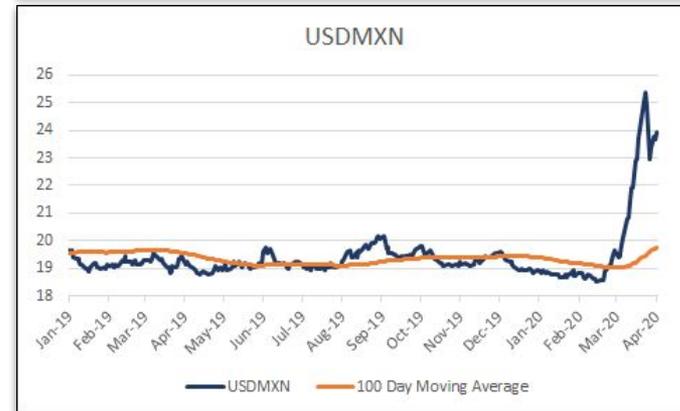
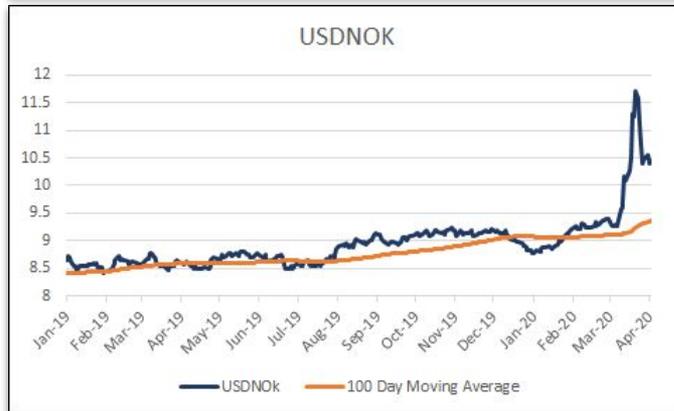
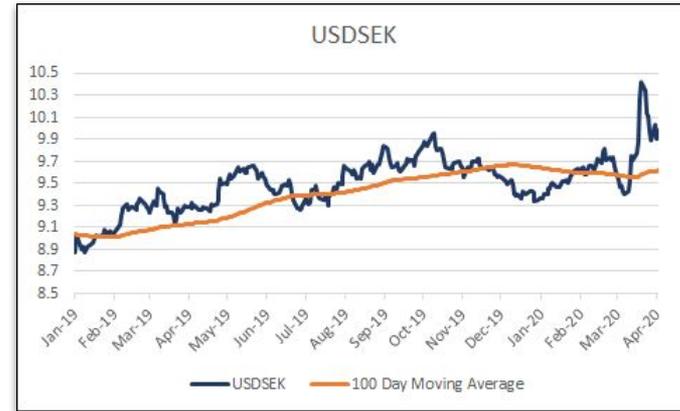
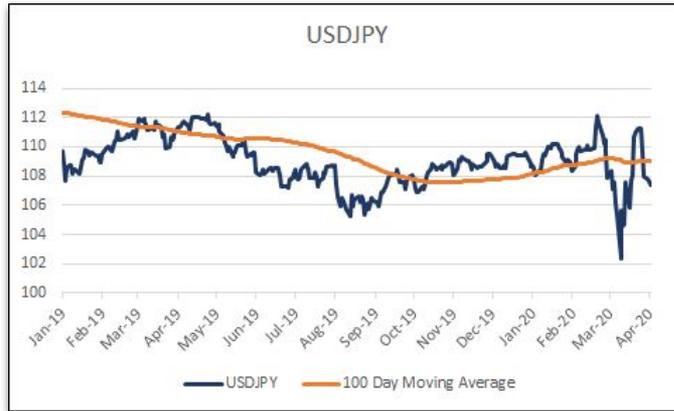
# Equity: S&P 500, TSX, MSCI



# Global FX - DXY, GBP, EUR, CAD

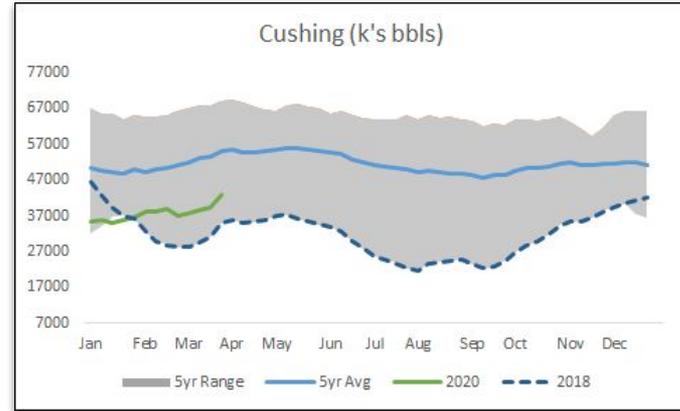
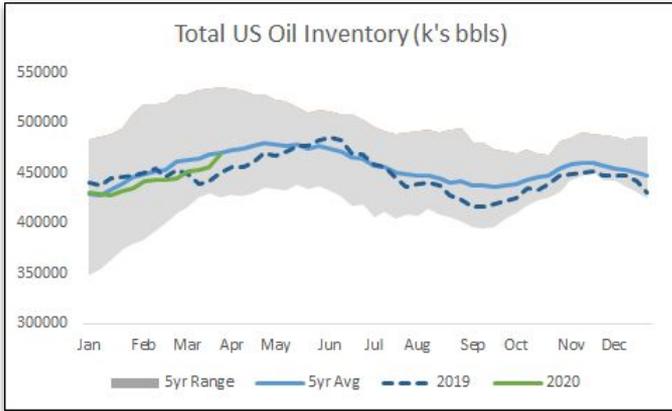


# Global FX - JPY, SEK, NOK, MXN

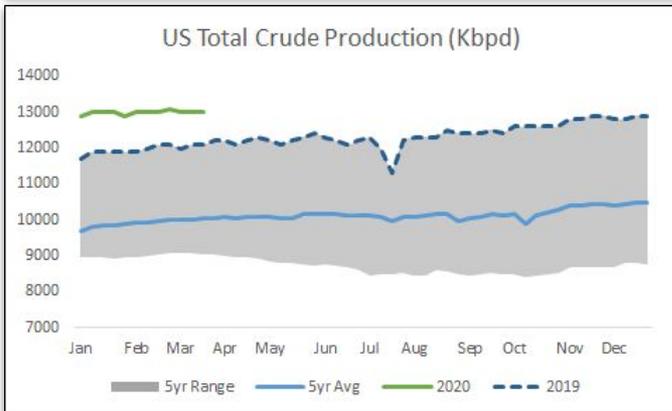


# Oil Storage and Production Charts

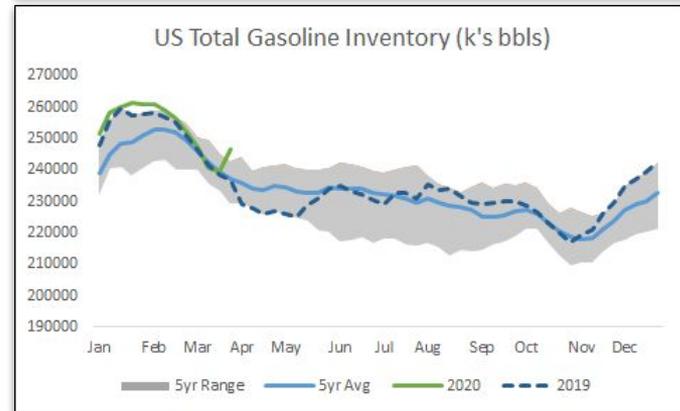
This week's 13.8 mmbbl increase is the largest since 1994



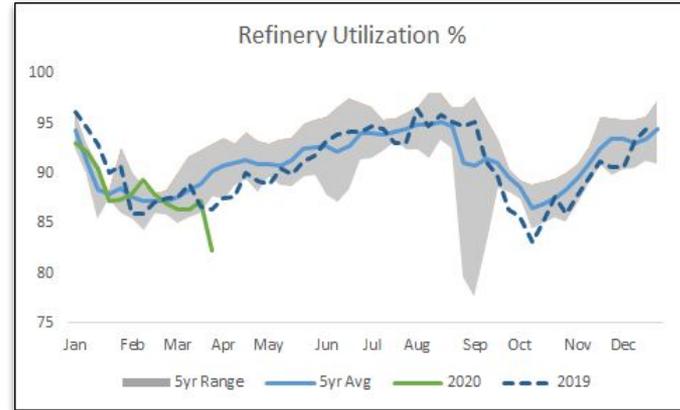
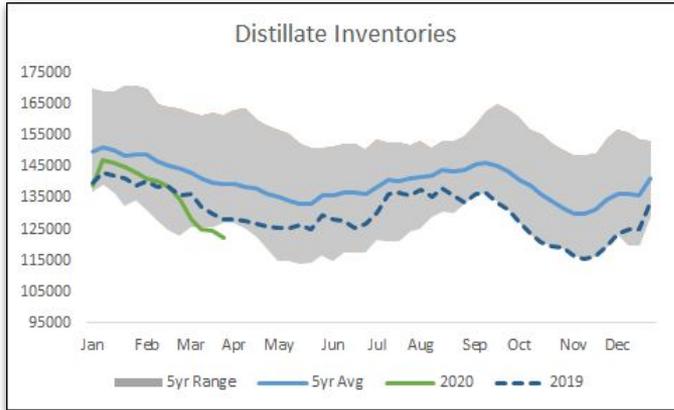
Production likely has to fall to re-balance the physical market...



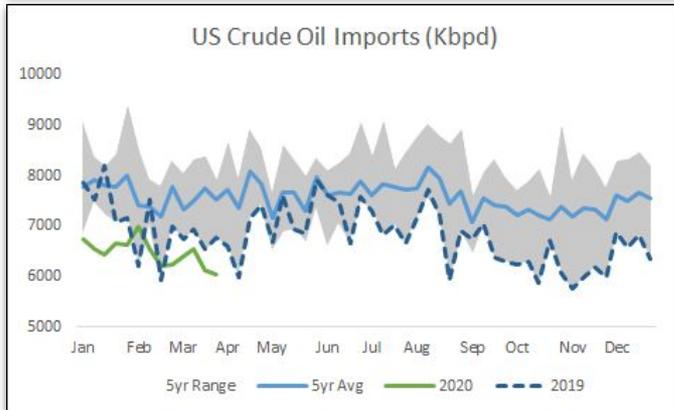
Gasoline demand drying up due to shelter-in-place



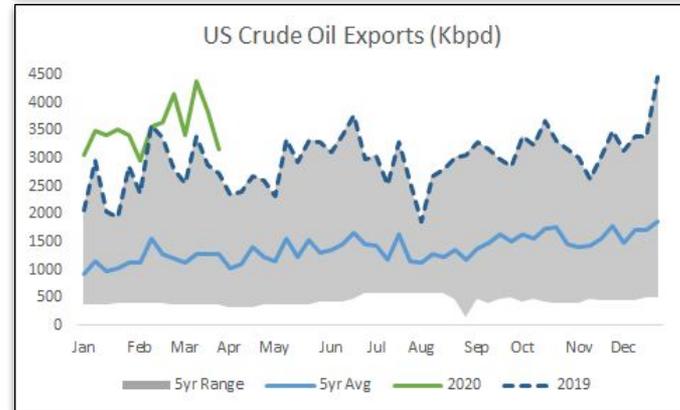
# US Oil Exports, Imports, Refining



Refinery Runs cut on lower gasoline demand



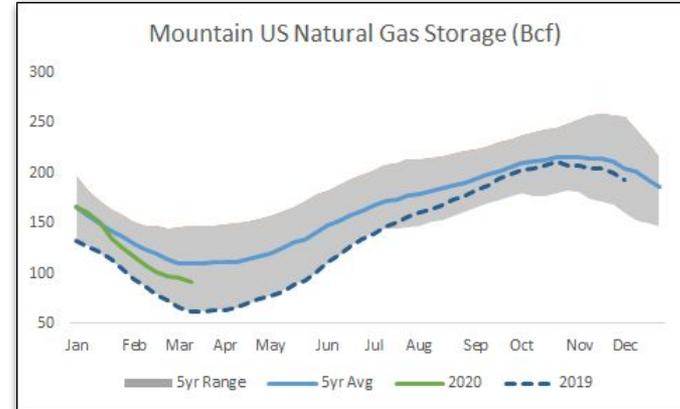
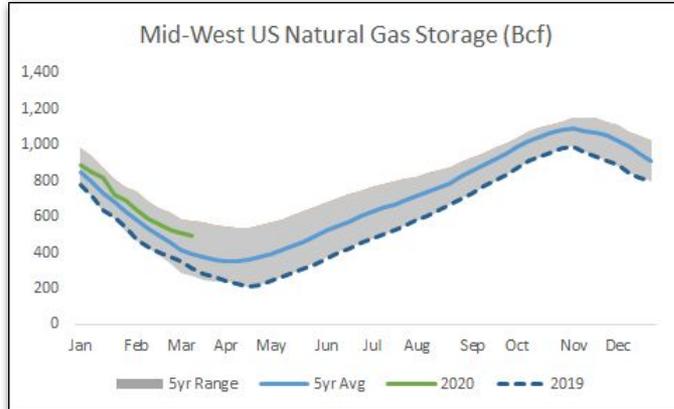
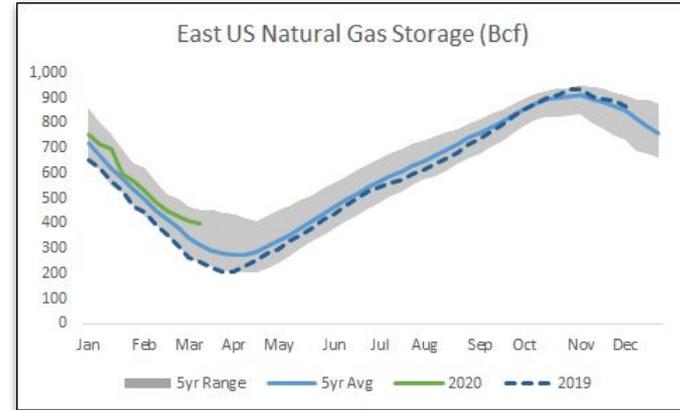
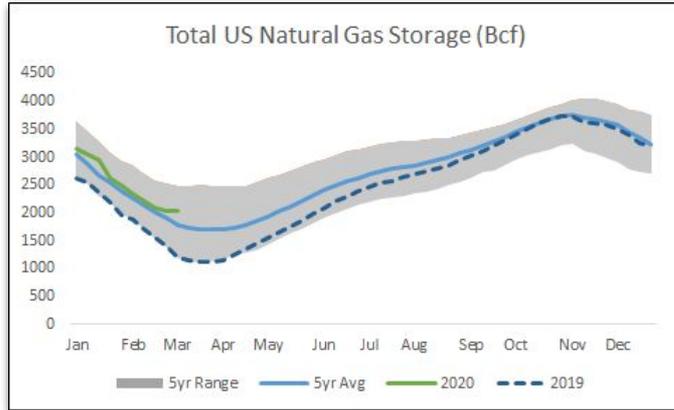
Imports at multi-year lows



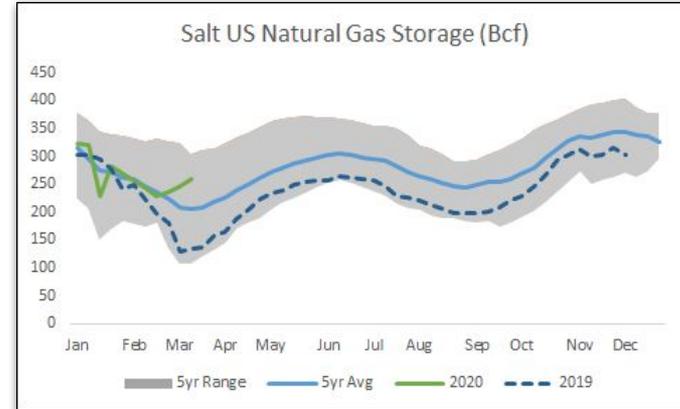
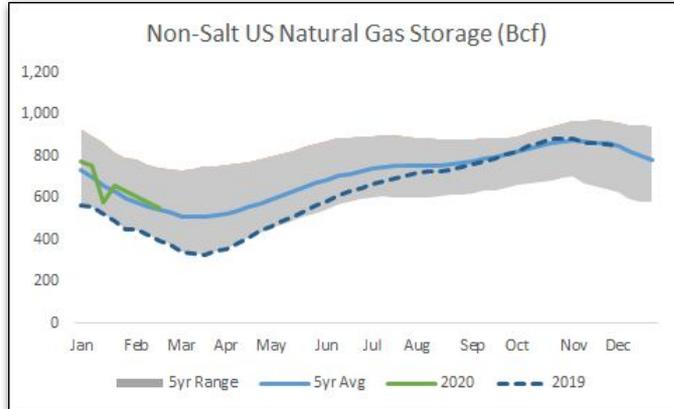
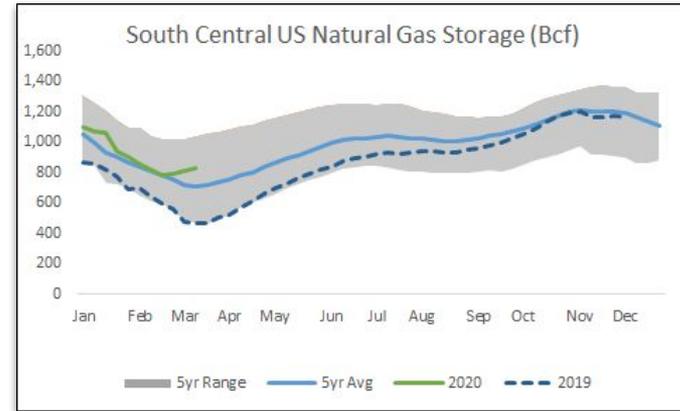
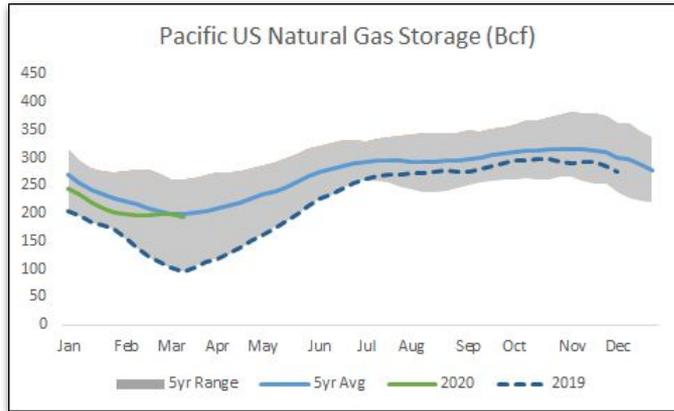
US Exports declining rapidly



# Natural Gas Storage Charts



# Natural Gas Storage Charts



# Looking to hedge your risk?



*Talk to us...we're here to listen.*

# Financial Markets Contacts

**Rob Laird**  
**Managing Director**  
**(403) 974-3582**  
**[rlaird@atb.com](mailto:rlaird@atb.com)**

CALGARY  
Suite 600, 585 – 8<sup>th</sup> Avenue SW  
Calgary, Alberta, T2P 1G1

Janek Guminski, CFA  
Sr. Director, FX  
(403) 974-3580  
[jguminski@atb.com](mailto:jguminski@atb.com)

Shane Hawryluk  
Global Head, Commodities  
(403) 974-3582  
[shawryluk@atb.com](mailto:shawryluk@atb.com)

Mark Johnson, MBA  
Director, Interest Rates  
(403) 974-3582  
[mjohnson@atb.com](mailto:mjohnson@atb.com)

Mark Engelking, CFA  
Director, FX Trading  
(403) 974-3583  
[mengelking@atb.com](mailto:mengelking@atb.com)

Chris Fricke, MBA  
Director, FX  
(403) 974-3580  
[cfricke@atb.com](mailto:cfricke@atb.com)

CJ Hilling, MBA  
Associate Director, FX &  
Commodities  
(403) 974-3582  
[chilling@atb.com](mailto:chilling@atb.com)

Mike Gee, MBA  
Associate Director, ATB FX  
(403) 974-3580  
[mgee2@atb.com](mailto:mgee2@atb.com)

Bennet Cheung, CFA  
Director, FX Trading  
(403) 974-3583  
[bcheung@atb.com](mailto:bcheung@atb.com)

Cynthia Chan  
Associate Director, FX  
(780) 392-7070  
[cchan@atb.com](mailto:cchan@atb.com)

JP Dore  
Analyst, Financial Markets Group  
(403) 974-3582  
[jdore@atb.com](mailto:jdore@atb.com)

**ATB**

*listens*

**We can transform banking**

*Reimagine it* **MAKE BANKING**

**WORK FOR PEOPLE**

**Because we carry the outrageous belief that banking can change**

PEOPLE'S LIVES FOR THE BETTER

**Make their time richer**

*their aspirations closer*

**THEIR HAPPINESS DEEPER**

HOW WILL **?** By doing things other

WE DO THIS **•** banks wouldn't do

*By being ever loyal relentlessly*

*to our customers inventive*

and steadfastly genuine in our pursuit

**of Albertans' greater good**

BY USING BANKING TO CREATE HAPPINESS

**WHY HAPPINESS?**

*Because good things happen when*

*happiness becomes your purpose*

*that's* **ATB**

*why*

*will always*

**BE MORE**

**than a bank**