

US & Canadian Monetary Policy & Capital Markets

- There is a fairly high bar for easing that requires a lot to go wrong;
- The Fed is forecast to hike once more by early next year;
- The BoC is forecast to hike late in 2019, then again in 2020;
- The Fed's risk padding matters way more than the fundamentals;
- The drivers of yield curves have been reassessed;
- Still-high binary risks to the rates outlook are expected to improve;
- Curve inversion expected to give way to mild steepening;
- But we've still lowered longer yield forecasts.

While we've long been forecasting flatter sovereign debt curves that have arisen this year, a major catalyst so far in 2019 has unexpectedly been falling longer term bond yields with some portions of the Treasury and Canada curves unexpectedly inverting (ie: higher short-term than longer-term yields). Why has this been happening? Does it matter as a signal regarding the outlook? And where to from here?

Because of the significance of bond market movements and the Fed's changed approach to balance sheet management, they will be addressed first before returning to the 2019–20 outlook for the policy rates set by the Federal Reserve (one more hike in 2020Q1) and the Bank of Canada (one hike in 2019Q4 and another in 2020Q2). This structure and flow to the arguments that follow also reflects what we think will be quite some distance before resuming any policy hikes and the uncertainty that brackets conventional rate forecasts at this juncture. The more pressing matters are expectations for reversing curve inversion and a modest projected rise in longer term bond yields. What follows informs our yield curve forecasts shown in charts 1 and 2 and the table on page 11.

The broad over-arching theme is that the Fed's abrupt policy change that started in January and culminated in its March FOMC meeting—and the impact upon Canadian markets—is more driven by a **much greater emphasis upon padding risk management exercises than a fundamentally soured view on the economy**. It is plausible that the Fed over-reacted to a temporary soft patch, temporary market instability in late 2018, and nearly worst-case scenarios for how geopolitical risks may unfold. It was also motivated by frank admission that there is enormous uncertainty over where neutral rates sit and what the optimal level of the Fed's balance sheet and bank reserves may be. Markets may have misinterpreted this 'patient' risk management posture as indicative of a bias toward cutting short-term policy rates as a next step. To cut rates requires a much more negative shock to markets and the economy than we anticipate. Cutting rates at this point would seem to be an absurdly unwise frittering away of precious bullets that may be needed to counter potential future problems.

CONTACTS

Derek Holt, VP & Head of Capital Markets Economics
 416.863.7707
 Scotiabank Economics
derek.holt@scotiabank.com

Chart 1

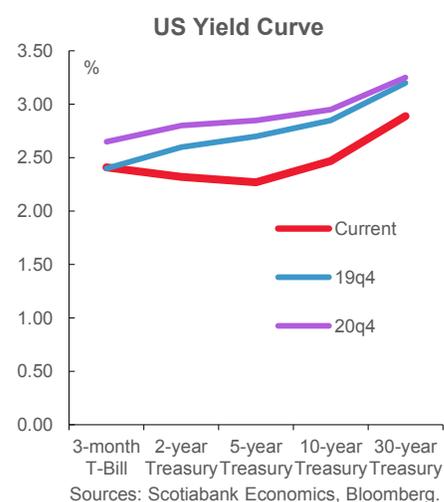
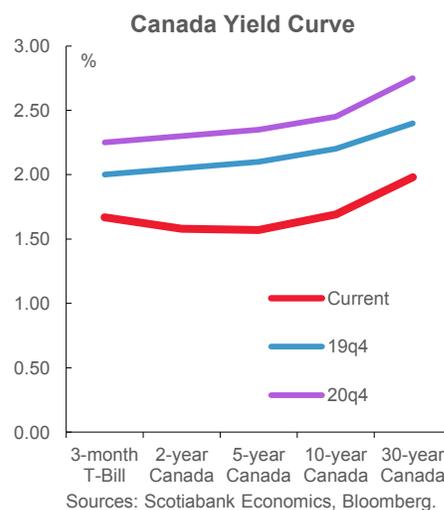


Chart 2



If one accepts this view, then by corollary the Fed's QE-era tools have already substantially eased financial conditions and some of this easing may ultimately have to be taken back rather than compounded easing. The present rates complex may be ill-positioned for this development over time. This is conditioned by our house views on how the economy evolves from here and our cautiously optimistic stance toward geopolitical risks such as Brexit, trade tensions and US fiscal policy applied to the recently invoked debt ceiling. Unstable politics threatens the world economy, but our base case remains generally constructive.

DRIVERS OF YIELD CURVES AND THEIR OUTLOOK

Why is the US Treasury curve inverting? While there remains a solid safe haven argument given ongoing US-China trade talks and ongoing Brexit uncertainty that could still go in either direction of risks as we publish, the curve is a doubtful recession signal and this will be returned to in a moment. Instead, **the curve needs to be interpreted with great care given several distortions and influencing factors beyond just expectations for the economy's performance.** Some of those factors are highlighted below. In general, however, a lower neutral rate environment than in past cycles is going to make yield curve inversions more likely without necessarily portending bad times ahead.

1. Federal Reserve Demand for Treasuries

The Federal Reserve is now setting a course to be a much bigger source of demand for Treasuries than previously guided and only a part of this policy shift began to be anticipated starting in January with the rest occurring in the aftermath of the March FOMC meeting.

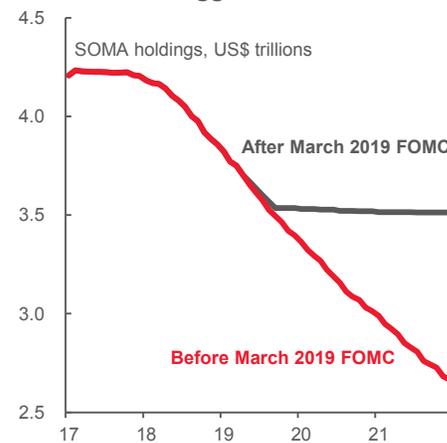
The March FOMC meeting was a seminal shift in balance sheet policy that requires some numbers to be crunched in order to showcase the magnitude of the shift. Before doing so, here are highlights of what they did:

- the maximum amount of Treasuries that are allowed to mature and fall off the balance sheet was tapered to US\$15 billion per month from twice that amount previously and starting in May;
- the Treasury reinvestment caps—or more appropriately redemption caps—would then be eliminated in favour of full reinvestment after the end of September;
- up to US\$20 billion of MBS principal will be rolled over into Treasuries per month on a weighted average maturity basis starting in October;
- any MBS amounts over US\$20 billion per month will get reinvested into MBS but the amounts are expected to remain under this ceiling over much of the forecast period.

Charts 3 and 4 vividly illustrate the impact of this shift. Under the plan before the March FOMC, the System Open Market Account (SOMA) portfolio would have continued to decline from US\$3.73 trillion now toward US\$2.7 trillion in Treasuries, agencies, MBS, TIPS and FRNs at the end of 2021 through the combined effects of Treasury and MBS roll-offs and maturing other securities. The Treasuries-only component would have plunged from US\$2 trillion now to about US\$1.5 trillion by the end of 2021 just as issuance would be rising. Under the changes introduced in March,

Chart 3

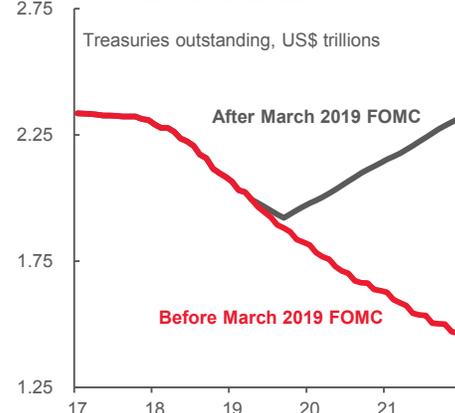
A Much Bigger Balance Sheet



Sources: Scotiabank Economics, FRB New York.

Chart 4

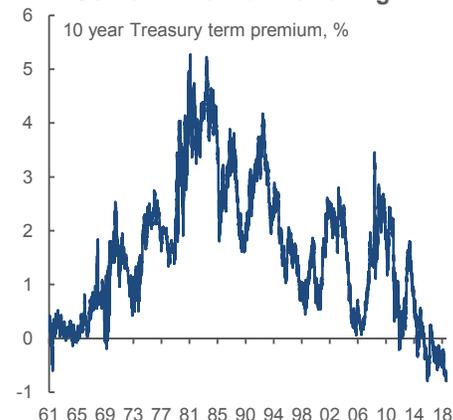
The Fed Will Buy A Lot More Treasuries



Sources: Scotiabank Economics, FRB New York.

Chart 5

US Term Premium is Falling



Sources: Scotiabank Economics, New York Federal Reserve.

the SOMA that holds these assets will instead flat line at about US\$3.5 trillion from October 2019 onward and the composition will shift more toward *rising* holdings of Treasuries as the other components decline over time.

Overall, by the end of 2021, the SOMA portfolio will be over US\$850 billion bigger than previously guided and this will be entirely due to rising holdings of Treasuries compared to plans before March. **Basically, the Fed added US\$850 billion in extra demand for Treasuries through to the end of 2021** while assuming stable policy thereafter adds even more to longer run Fed demand for Treasuries.

The effects are vividly portrayed by the Treasury term premium. Against the long-held notion that the Fed's shrinking portfolio of Treasury securities could turn the negative term premium positive, it has continued to decline with the decline intensifying recently in the wake of the Fed's policy shifts (chart 5). The unwinding of the Treasury term premium that was expected as the Fed shrank its QE-era holdings of Treasuries is now on indefinite postponement which leads us to revise lower our bond yield projections. This has been a major reason for why the Treasury curve has flattened with portions at times modestly inverting. **In short, the flattened and at times inverted yield curve is significantly the Fed's own doing.**

The effects of Fed policy shifts on bond markets may not be over yet. There remain important matters to decide upon and implement. One possibility is whether the FOMC opts to **'twist' the Treasury curve**. This would entail reinvesting some portion of maturing Treasury proceeds into Treasury bills and thereby shortening the duration of the Fed's Treasury holdings within the SOMA account. If this were to happen, it may assist in steepening the Treasury yield curve. FOMC officials like Boston Fed President Rosengren and Philly Fed President Harker have recently indicated support for such action.

Further, while the decision to pad reserves may lessen this argument, it's also still possible that the Fed discusses rolling-out a **standing repo facility** designed to offer funds toward the purpose of controlling short-term market rates around the interest on excess reserves rate and its spread to fed funds given past pressures (chart 6). This would build upon efforts to contain potential upward pressure upon money market rates as excess reserves decline. Recall that the minutes to the December FOMC meeting indicated **there was a discussion about how to keep the effective fed funds rate within the FOMC's target range as reserves are drained** from the system beyond utilizing IOER cuts relative to the upper limit including adding new counterparties to the Open Market Desk's operations. On managing potential upward pressure upon money market rates as excess reserves decline, 'several' participants flagged using IOER technical adjustments, 'some' advocated slowing the pace of decline in reserves using standard open market operations, or ending portfolio redemptions at relatively high reserves.

Within that same set of minutes, **'several' FOMC participants were concerned that slowing redemptions "could be misinterpreted as a signal about the stance of monetary policy."** This is precisely what may have happened as markets moved toward pricing rate cuts and curve inversions and the fact that FOMC participants were concerned about this possibility may indicate they think markets have now gotten ahead of themselves.

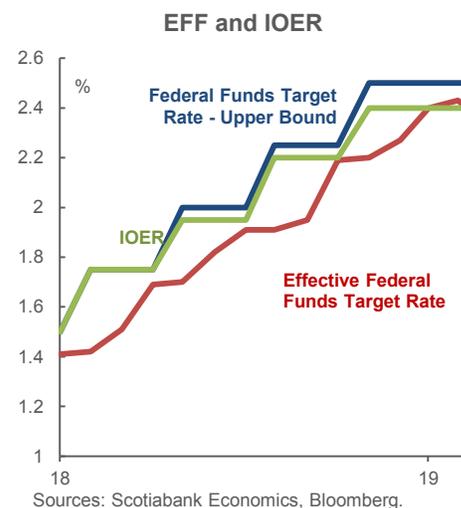
2. Federal Reserve Policy Rate Guidance

The March FOMC meeting also eliminated two hikes from the Fed's so-called 'dot plot' for 2019 and retained one hike in its projection for 2020 while leaving the long-run neutral rate estimate unchanged at 2.75% after lowering this estimate in December. While markets are underpricing Fed funds and a rate cut is unlikely, the Fed's shift in guidance further tamped down the curve particularly across nearer term yields. A 'patient', 'watching,' 'waiting' and 'flexible' bias was communicated in the face of geopolitical risks that markets immediately interpreted to be a signal toward a rate cut bias that we feel is premature.

3. The Federal Reserve's "Reflection Problem"

Fed communications have been anything but impressive since last Fall. Recall that just a few months ago, Chair Powell was stating that the Fed was "a long way" from a neutral policy rate and the Fed's balance sheet policy was on "auto-pilot" with no tinkering expected. Now it says no hikes this year, maybe one next year and the balance sheet unwinding will be halted with

Chart 6



demand for Treasuries to resume rising. All that in the space of just a few months! The Fed would have known all along last year even as it hiked in December before abruptly shifting course that risks such as Brexit, US-China trade talks and the debt ceiling loomed into 2019. Or at least it should have.

Markets are debating whether this sudden shift on both policy levers indicates a) whether the Fed knows something dark and foreboding about the outlook that no one else does, b) whether the Fed has simply decided to adopt a full-on risk management approach in the face of uncertainties by padding policy rates and the balance sheet until it has more clarity, or c) whether the Fed fouled up including the possibility of becoming more deeply politicized (e.g. Trump's incessantly self-serving Fed bashing, Moore's and Cain's potential nominations, etc.). Shades of each are plausible.

This is about more than just petty scorekeeping. **The Fed's own erratic actions may have shaken confidence in favour of attracting a high premium in Treasury prices.** Its policy shifts have been one part a reaction to stock market developments late last year while also leading market turbulence. The famous illustration of this bi-directional interdependence of market and Fed actions was famously explained by the late US economist Paul Samuelson when he likened the circularity of market outcomes and central bank actions as akin to a monkey seeing its reflection in the mirror for the first time, reacting as if it is unaware it is its own reflection! A recent note [here](#) explored this "reflection problem" further in the era of forward guidance.

4. Scarcity

The US public debt ceiling became binding at about US\$22.03 trillion at the start of the month. While eventually the Treasury market may get concerned about debt ceiling politics if it raises risks to honouring US debt obligations and debt ratings, that risk is likely pushed at least well into summer given Treasury's flexibility to manage within the debt ceiling for a time including drawing down its excess cash holdings at the Fed which it has already started doing (chart 7).

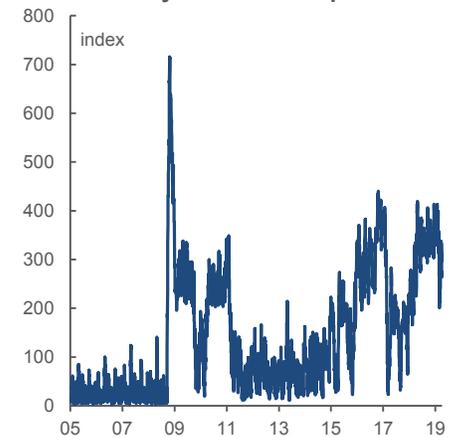
In the interim period, **while US debt is hardly scarce per se, the flat-lined stock of public debt may be adding a premium to Treasury prices.** On its own, this supply argument is an insufficient explanation. Through reducing its excess cash holdings at the Federal Reserve and through employment of extraordinary measures, the US Treasury can manage the US government's obligations until late Summer at most before markets get concerned about default risk. Default risk could perversely spawn greater safe haven demand for Treasuries which is what has happened previously to reward the country with the dysfunctional government. Achieving a funding agreement and raising the debt ceiling would bring forth the opposite effect through renewed supply and would, all else equal, drive yields higher. **The risks are two-tailed going forward, but probably more heavily skewed toward the settlement scenario in favour of a steeper curve on renewed supply pressures.**

5. Carry

The ECB's fresh round of Targeted Longer-Term Refinancing Operations (TLTROs III) that was announced on March 7th, will be started in September 2019 and end in March 2021 with two year maturities may be influencing carry arguments. An anticipatory effect upon liquidity combined with pushed out guidance for an ECB rate hike "at least through the end of 2019" has been followed by rallying bunds with the 10 year German yield falling to around zero and at times slightly negative perhaps also driven by Brexit and risks to Eurozone cohesion. The knock-on effects probably flattened the US Treasury curve by making Treasury yields relatively more attractive to bunds. Ergo, **as the ECB's actions lowered EGB yields, the ripple effect extended across the rather large pond.** With ECB action priced in, this effect on Treasury yields may be maturing pending further Brexit and other developments.

Chart 7

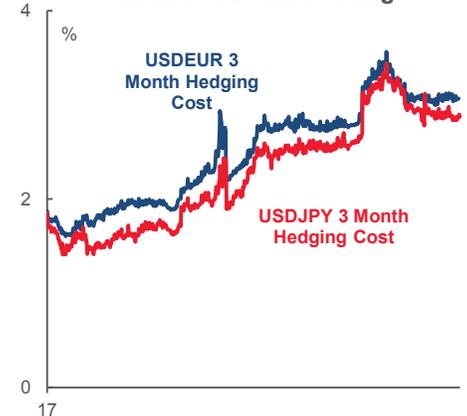
Treasury's Cash Stockpile



Sources: Scotiabank Economics, Bloomberg.

Chart 8

FX Markets Demand A Premium For Dollar Holdings



Sources: Scotiabank Economics, Bloomberg.

6. FX Hedging costs

What reinforces the prior point is that FX hedging costs have diminished somewhat this year and partly as a repeat of the common rise in Q4 and then decline each Q1 perhaps as year-end dollar demand subsides within a different regulatory environment that constrains arbitrage activity against seasonal demands. As FX hedging costs have reduced, demand for Treasuries out of yen and euro became relatively more attractive for those investors that do hedge currency risks. See chart 8. If the seasonality to past movements is at a point of settling down, then this effect may be maturing.

7. Inflation expectations

The decline in longer-term bond yields has not been driven by declining market-based measures of inflation expectations. It remains the case that the undershooting of such expectations in December through early January has significantly reversed higher in terms of the Fed's more preferred measure—the 5y5y inflation swap gauge (chart 9). **In itself, this weighs against the theory that the curve is signalling deepened recession and disinflation/deflation worries.**

WHY THE FED GOT SPOOKED INTO ACTION

While the Fed may have over-reacted to developments late last year into this year, there nevertheless remains a partial case for its abrupt changes to balance sheet policy. **It is important to understand that this case is heavily rooted in uncertainty over how large its balance sheet should be in a more normalized state and concern over the market effects as opposed to, say, a policy shift that is purely driven by concerns over the state of the economy going forward.**

At the heart of the matter is the junction between the Fed's uncertainty over the optimal level of reserves in the banking system and changed regulations governing liquidity and capital management in the banking sector. As the Fed shrinks its portfolio of holdings within the SOMA portfolio, the concomitant accounting entry is a decline in excess bank reserves held at the Fed. This carries market effects I'll return to after addressing the issue of optimal reserves.

Chair Powell has guided that the optimal level of reserves in the system is uncertain but that US\$1 trillion plus a buffer is a "reasonable starting point." It is important to acknowledge that there is so much guesswork involved when estimating optimal reserves that padding guesstimates and not risking going too low is the order of the day; the Fed significantly relies upon surveys of US primary dealers including our answers for estimates of the optimal size of reserves. Chart 10 depicts the drawdown of reserves that banks hold at the Fed and the shrinking size of the Fed's System Open Market Account (SOMA) through which they directed purchases of Treasuries, agencies and mortgage bonds during QE1–3. A continuation of the recent pace of unwinding before the policy changes in March could have risked bringing reserves down toward the US\$1 trillion level and hence back to 2010 levels into early 2020. **This removal of liquidity could be too rapid from the standpoint of the proper functioning of markets.** Stopping the unwinding of the balance sheet by this September is consistent with achieving Powell's guidance toward padding US\$1 trillion or more in reserves.

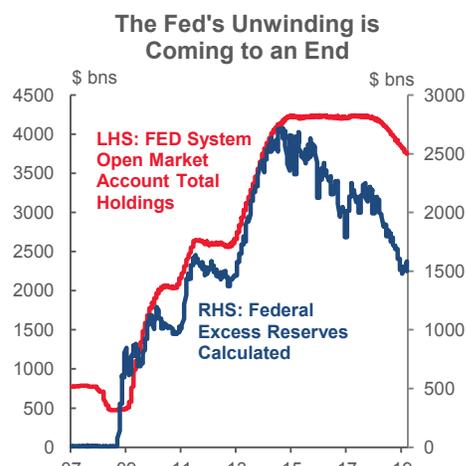
This action should not be taken as a negative signal toward the outlook so much as it is an indication that the Fed is highly uncertain about the optimal level of reserves and wishes to err on the side of overestimating them from a risk management standpoint. Shrinking the balance sheet by reinvesting less out of coupon and maturing flows from Treasuries and MBS drains reserves from the banking system. Draining reserves runs against the need for banks to hold high-quality liquid assets including through but not limited to the impact of the Liquidity Coverage Ratio (LCR). **Draining reserves too far and too fast risks negative effects upon markets by motivating banks to substitute holdings away from other less liquid**

Chart 9



Source: Scotiabank Economics, Bloomberg.

Chart 10



Sources: Scotiabank Economics, Bloomberg.

assets in order to maintain required liquid holdings, or to sell other assets to buy Treasuries that are also favoured by the LCR. Hence the cross-asset class implications that highlight the interconnectedness of regulatory change with unwinding unconventional stimulus and how the effects can distort market appetite toward safe havens. **This mechanism can be destabilizing to markets and spark greater disturbances in short-term rates markets** even if the effects of unwinding the balance sheet are not showing up in a reversal of the Treasury term premium. For a good discussion of how the Fed views related topics see the recent speech by Vice Chair Quarles [here](#).

All of this is not to say that markets have not had legitimate other worries (Brexit, trade, debt ceiling, etc.). Rather, had markets not misinterpreted Fed signals stemming from changes to balance sheet management, then Fed rate cuts might not have been priced and the Treasury curve might not be flirting with inversions.

EVALUATING YIELD CURVES AS HARBINGERS OF RECESSION

The discussion so far suggests that several idiosyncratic factors and policy adjustments have dominated the drivers of the yield curve of late. If so, that may lessen concern that the bond market is telling us something bad about the economic outlook. Again, recall Samuelson's 'reflection problem' in this regard as it remains entirely plausible that central banks *caused* a good portion of bond market developments.

Nevertheless, to cover the bases, **we have to consider the track record of bond markets in forecasting economic downturns** as a next step to inform our broader macro views.

United States

Charts 11 and 12 demonstrate the evidence. The literature generally tends to indicate that the probability of recession is best indicated by the spread between the 90 day bill yield and the 10 year Treasury yield (chart 11). Greater history is available from Robert Shiller back to a few years before my son thinks I was born! This is shown in chart 12.

The first referenced chart 11 lines up the 10s90s slope with two definitions of recession. One definition of recession is the NBER method and the other is the technical definition of back-to-back declines in quarterly GDP. We see that the Treasury curve usually inverts ahead of US recessions but can sometimes shed false signals. For example, it inverted back in 1966 but no recession ensued by either definition. The curve inverted very slightly in September 1998 but recession didn't unfold by the NBER measure until early 2001. The curve came close to inverting a few years before that and, again, no recession.

History buffs may wish to go back even further. Shiller's proxy for shorter term yields is impure for our purposes as it also includes a credit spread, but it's the best very long term data set to my knowledge and it helps to inform perspectives on the length of inversion versus length of economic downturns. By this measure, **the curve has been inverted for 75 out of 148 years since the start of the historical data set in 1871. Since 1950, the curve has been inverted 21 out of 68 years or about one-third of the time.** So clearly the frequency of recessions before the post-WWI period distorts things, but either way, the slope spends much more time inverted than the US economy spends in recession. Since 1871 when the chart starts, the US has been in recession for over 39 years cumulatively; since 1950, just under 8 years cumulatively.

Chart 11

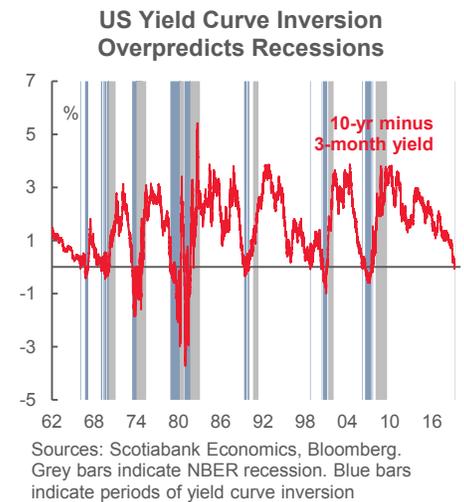


Chart 12

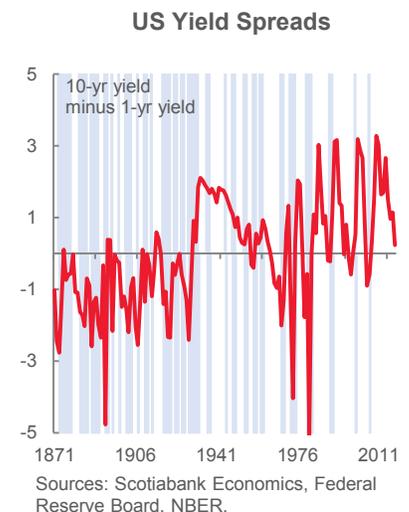
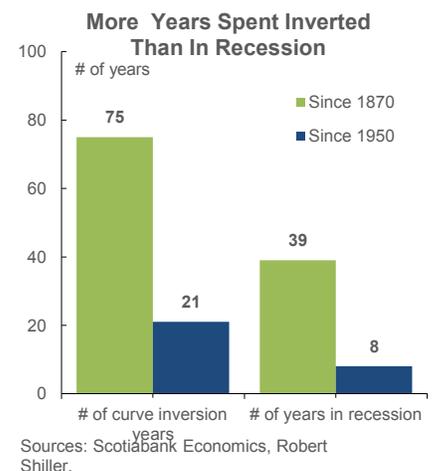


Chart 13



The curve has been inverted almost twice as long as the US has been in recession since 1871 and over 2½ times since 1950 (see chart 13). Granted, obviously it was a different bond market in oh so many ways that far back and that complicates comparisons over time; today's bond market is also exceptionally different from the past given overt central bank manipulation and that alone goes some distance toward invalidating comparisons between then and now.

Canada

How useful is Canada's yield curve as a predictor of recessions? Not very is the bottom line. The curves are worse predictors of the Canadian business cycle than the US curves. Charts 14–17 show different measures of the yield curve's slope and different measures of recession. One measure of recession is the technical definition of back-to-back quarterly declines in GDP and the other measure is the CD Howe's Canadian version of a more comprehensive definition along the lines of the NBER's approach to dating cycles in the US. The first two charts show shorter history using the 90s10s and 2s10s slopes comparable to charts frequently used in the US. The second set of two charts show longer history with longer time series using the spread between the 10 year and over yield minus the 1–3 year average yield as well as the spread between the 90s and 10+ yields. The conclusions are as follows.

90s10s: There have been at least two and possibly three false positives when the spread between 90s and 10s inverted but no recession ensued. 1986 and 2000 were examples, and so was possibly late 2006 through early 2007 when the curve inverted quite a while ahead of Canada's brief recession. An accurate signal was sent when the curve inverted and the early 1990s recession ensued. 2015 was a false negative when the curve didn't invert and one definition of recession was hit but not the other.

2s10s: There were again three false positives when this curve inverted but no recession ensued (1986, Sept 1998, 2000). Accurate signals were sent into the early 1990s recession and the Global Financial Crisis although that time was so far in advance that its usefulness was less clear. A false negative was registered when the curve didn't invert and one definition of recession was hit in 2015.

Longer term histories are provided in the charts using alternative measures of the yield curve's slope such as the 10 year and over yield minus the yield on 1–3 year bonds and the spread between the 10 year and over Canada bond yield minus the 90 day bill yield. There were several other false signals in the 1960s when the curve either inverted or came very close to doing so. One measure inverted ahead of the 1974 recession and the other did not.

In addition to considering sovereign yield curves, **charts 18–21 evaluate corporate bond curves** using daily data on yields by maturity and risk rating in the US and

Chart 14

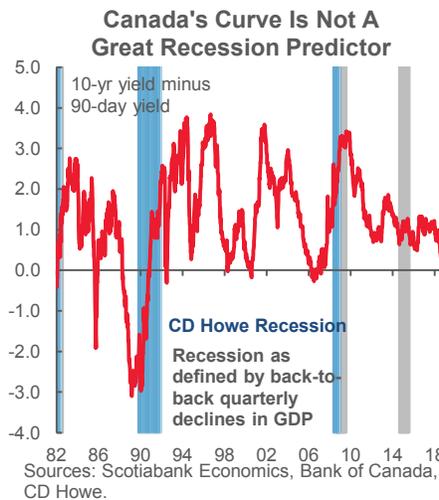


Chart 15

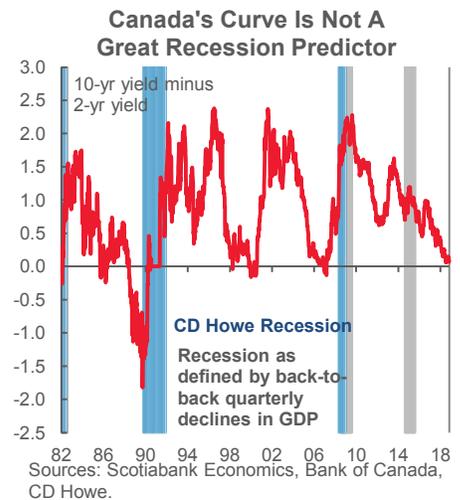


Chart 16

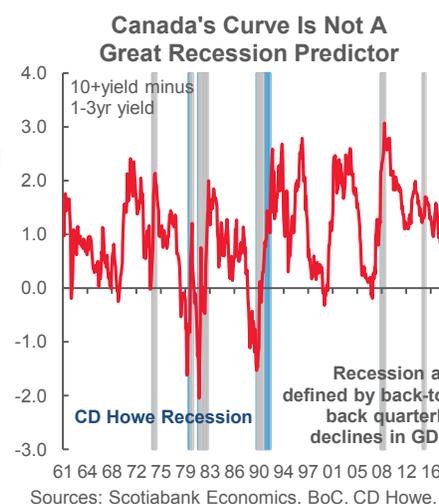
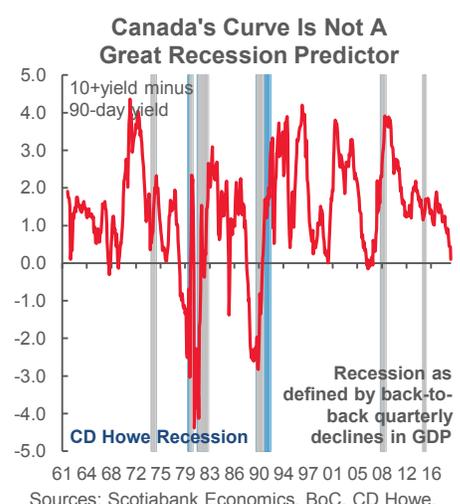


Chart 17



Canadian markets. Chart 18 shows that the US corporate bond yield curve is flat to slightly upward sloping for the highest rated credits that are relatively closer to being government substitutes. There remains significant spread pick-up across maturities for other ratings. No risk rating curve is inverted. **This matters since lenders need positive spread pick-up to facilitate attractive lending conditions for longer term purposes and in turn that matters to the economy.** Chart 19 displays the 90s10s maturity spreads by risk rating in the US and how this corporate corollary to the best sovereign predictor of recessions remains positively sloped.

Charts 20 and 21 present the evidence for Canada. A distinction is that **the Canadian rating spread is more positive across all maturities and risk ratings including shorter dated maturities than is the case in the US.**

Other work done by Scotia's Nikita Peravalov ([here](#)) has indicated that the Canadian yield curve can be improved as a recession indicator by adding to a model the US yield curve slope and a confidence measure. This still yields a low probability of recession and even at that may be overstated for the reasons given here regarding the policy distortions to both countries' curves.

FEDERAL RESERVE—NOT NECESSARILY DONE

While present risks likely dampen most forecasters' conviction, we continue to prefer to argue that the Federal Reserve remains just shy of its neutral policy rate

(2.75%) and could well return to fine-tuning the end of its hike cycle. In fact, we forecast one more hike and bracket this highest probability outcome by equal weights attached to two or none but lean particularly hard against a cutting scenario with the information presently available. The possibility of overshooting the neutral policy rate is driven by having eased financial conditions as explained thus far and by the expectation that the US economy will emerge from a not terribly 'soft' soft patch.

For now, the consensus of economists has abruptly revised its near-term forecasts for growth by tamping down Q1 expectations perhaps too far and punting a rebound into Q2 (chart 22). Such downward revisions were likely due to unanticipated idiosyncratic shocks like the government shutdown and periods of harsher-than-usual weather, but also due to pulled-forward demand due to stimulus that was applied earlier last year. This pulled forward effect should soon be maturing. Consensus did likewise with US core PCE inflation forecasts (chart 23). **Our house view calls for a rebound in growth including the consumer sector over the duration of this year into next and at a rate equal to or at times exceeding the economy's noninflationary potential growth rate.** The result would be to push the US economy further into excess aggregate demand when it is already running at the largest excess demand conditions since the early 2000s.

Chart 18

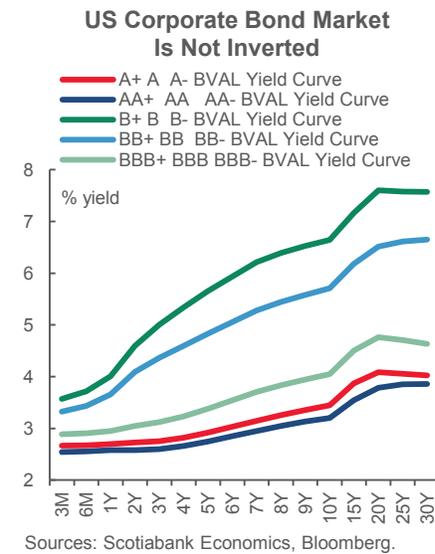


Chart 19

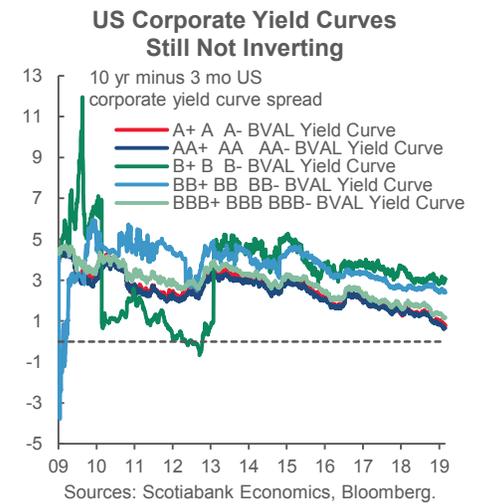


Chart 20

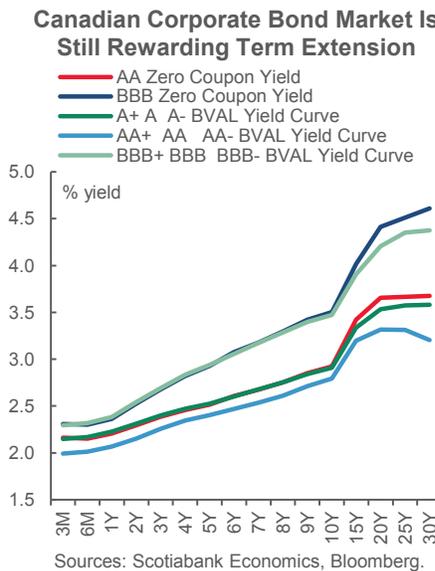
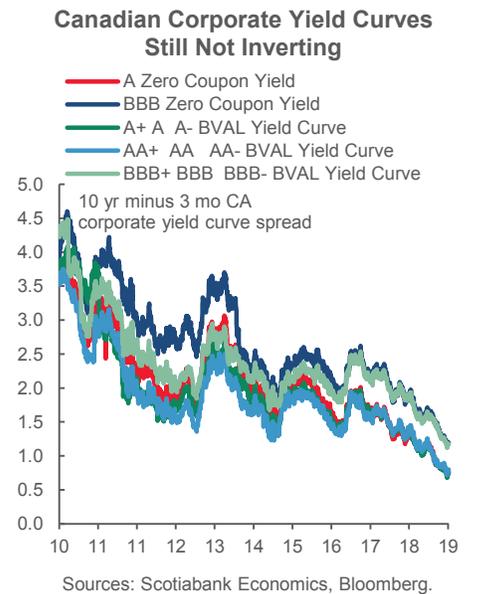


Chart 21



The Fed's desire to witness higher inflation readings to inform a renewed tightening bias may yet be fulfilled. Even with a flatter than historical Phillips curve, the lagging effects of the relatively recent move into excess demand conditions (chart 24) could combine with recent evidence of a topping USD and its disinflationary effects (chart 25) as well as firm wage growth to drive a gentle rise in core inflation.

To return to tightening policy, however, requires continued improvement in market tone that analysts' expectations for resumed earnings growth after a soft Q1 may assist (chart 26). It also requires further traction toward settling major geopolitical risks such as Brexit, US-China trade negotiations, US-European trade negotiations, and US fiscal policy developments around the debt ceiling on top of a more stable US administration than witnessed to date. As a Presidential election year beckons, we assume that a focus on getting re-elected will translate to calmer policy amidst the rhetoric. **Instead of bashing the Fed and putting forth questionable candidates for the BoG, the best thing the Trump administration could do for the economy is get its fiscal policy and trade houses in order.**

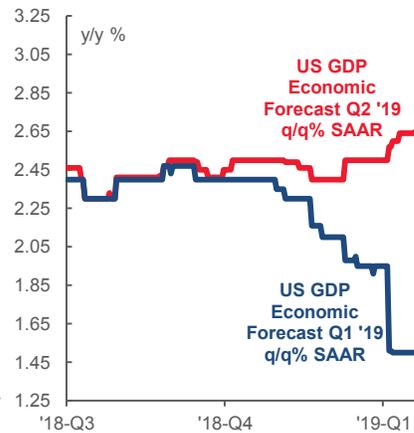
A common assertion is that the Fed has never really paused a hike cycle with patient language only to resume hiking later on. This is not quite true. The so-called 'taper tantrum' in 2013 was one such example when the Fed announced that it would be tapering bond purchases under the QE3 program only to witness upheaval in the bond market. To the surprise of markets, the Fed postponed the decision to taper purchases in September of that year (an off-consensus call that Scotia Economics correctly made) during another destabilizing government shutdown. The Fed ultimately did return from hitting pause on its plans by reducing purchases at the December meeting. **Within well inside of a year, a hawkish stance that was pummeled back by dovish developments returned to hawkish action and may well offer a parallel to today.** In any event, even if such a recent parallel to a tighten-pause-tighten period did not exist, it's insufficient to argue against resumed hiking going forward just because of the past. **It may well be just another of a litany of things to happen this cycle without precedence and I've lost count of how many of those we're up to now!**

BANK OF CANADA—INTERRUPTED, NOT ABANDONED HIKES

We continue to forecast one rate hike toward year-end and perhaps one more in 2020. This would still leave the policy rate toward or below the Bank of Canada's estimated range for the neutral policy rate. See Nikita Perevalov's piece [here](#) that lays out our house estimate of 'neutral' as we await the BoC's own update to its estimated range.

Chart 22

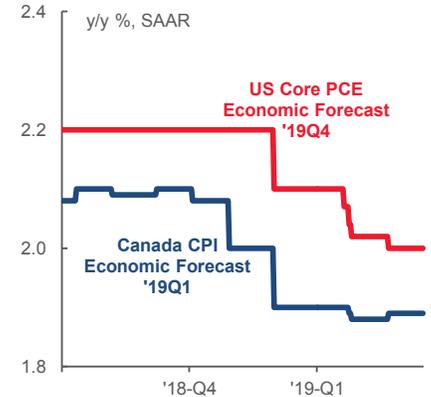
Q1 US Softness Punted Into Q2



Sources: Scotiabank Economics, Bloomberg.

Chart 23

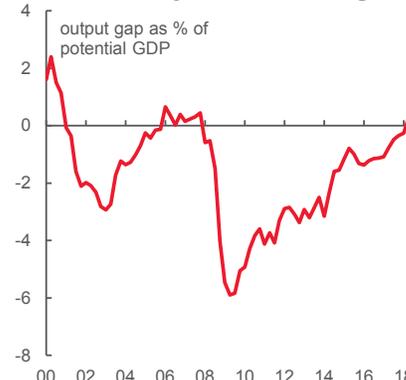
Consensus Backed Off US Core PCE Forecasts



Sources: Scotiabank Economics, Bloomberg.

Chart 24

US Excess Demand is Running at a Nearly Two-Decade High



Sources: Scotiabank Economics, Congressional Budget Office.

Chart 25

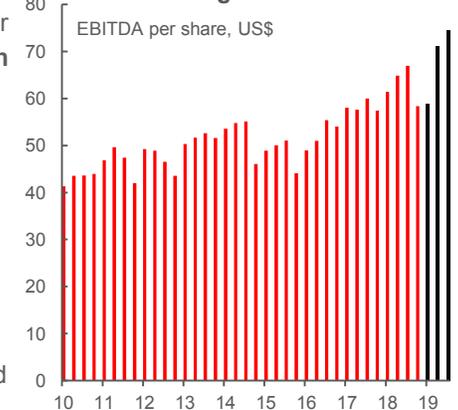
USD Strength Is Depressing Import Prices



Source: Scotiabank Economics, Bureau of Labour Statistics, Federal Reserve.

Chart 26

Analysts Upbeat Toward An S&P Earnings Rebound



Sources: Scotiabank Economics, Bloomberg.

Many of the arguments presented thus far also inform our Bank of Canada views and therefore merit only a brief mention before returning to the role played by a fundamentals framework. For one thing, the Canadian sovereign debt curve is less useful than even the distorted US curve at predicting recessions. The corporate yield curve is more positively upward sloping than in the US. Canada has imported the bond market easing that the Fed has driven in addition to the effects of a more neutral sounding Bank of Canada than was the case at the start of the year. The BoC is as mindful toward geopolitical risks such as trade tensions, Brexit, US debt ceiling risks and potential trade conflict in the global auto sector as any other central bank and this is counselling near-term caution that can only be informed by the passage of unpredictable events that could turn out either favourably or not.

If there is a domestic case for easing, then markets likely view it as coming through moderate slippage in core inflation (chart 27) in the context of larger than previously estimated economic slack (chart 28). The greater slack derives from lowered GDP revisions over recent years and idiosyncratic factors that have weighed upon domestic growth of late.

This did indeed motivate the BoC to cut in 2015, but, dare we say it, this time may be truly different. **Conditions are unlike 2015 when there was a deeper and longer-lived correction in oil and other commodity prices.** The plunge in domestic oil prices due to transportation bottlenecks, inadequate pipeline capacity, lags in bringing rail transportation options to market and disruptions from last Fall's problems at US refineries has since reversed in favour of a very tight discount to WTI. This has lifted Canada's terms of trade—the ratio of export to import prices—by contrast to the more sustained plunge in the terms of trade from 2014-onward (chart 29). The implication is avoidance of the sustained drag effect on domestic incomes that would otherwise result from sustainably lower commodity prices.

Going forward, charts 27 and 28 also depict our forecasts for a return to closing off spare capacity in the economy and a return to 2% core inflation as the operational guide to the BoC's 2% headline target toward the end of this year or early next. **Around that time frame, we anticipate that having closed capacity and "returned home" as Governor Poloz puts it will require converging the policy rate toward neutral.**

Chart 27

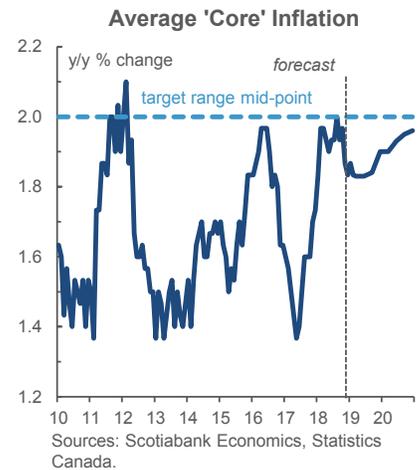


Chart 28

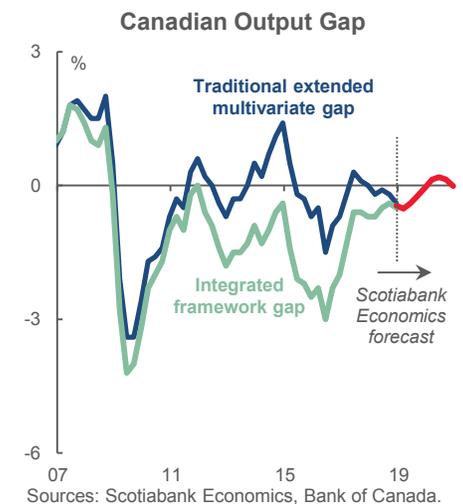


Chart 29



Chart 30

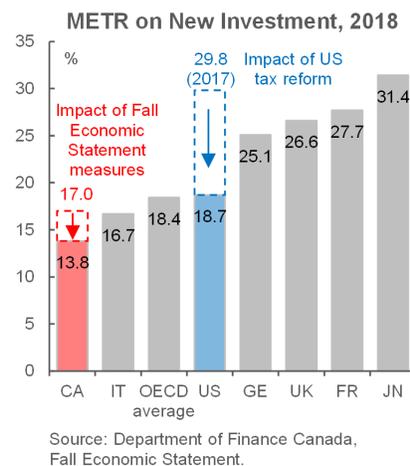


Chart 31



Buttressing the argument in favour of renewed hikes once slack is absorbed from a transitory soft patch are the facts that the BoC faces a weak dollar by contrast to the Fed and a policy rate 75bps lower than the Fed's and hence more stimulative relative to neutral rate estimates. Strong job growth should assist the household sector outlook while strong tax incentives could lift business investment (chart 30). Materially higher immigration helps housing with overall balanced conditions in the nationwide resale market (chart 31). Having signed several trade agreements in recent years is also positive for growth subject to CUSMA implementation risk.

Table 1
Scotiabank Economics' Canada-US Yield Curve Forecast

	2018		2019			2020			
	(end of quarter, %)								
Canada	Q4	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
BoC Overnight Target Rate	1.75	1.75	1.75	1.75	2.00	2.00	2.25	2.25	2.25
Prime Rate	3.95	3.95	3.95	3.95	4.20	4.20	4.45	4.45	4.45
3-month T-bill	1.65	1.67	1.75	1.80	2.00	2.05	2.25	2.25	2.25
2-year Canada	1.86	1.55	1.70	1.80	2.05	2.10	2.30	2.30	2.30
5-year Canada	1.89	1.52	1.75	1.90	2.10	2.20	2.35	2.35	2.35
10-year Canada	1.97	1.62	1.80	2.00	2.20	2.35	2.45	2.45	2.45
30-year Canada	2.18	1.89	2.10	2.20	2.40	2.50	2.75	2.75	2.75
United States	Q4	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Fed Funds Target Rate	2.50	2.50	2.50	2.50	2.50	2.75	2.75	2.75	2.75
Prime Rate	5.50	5.50	5.50	5.50	5.50	5.75	5.75	5.75	5.75
3-month T-bill	2.36	2.39	2.40	2.40	2.40	2.65	2.65	2.65	2.65
2-year Treasury	2.49	2.26	2.45	2.50	2.60	2.80	2.80	2.80	2.80
5-year Treasury	2.51	2.23	2.50	2.60	2.70	2.85	2.85	2.85	2.85
10-year Treasury	2.68	2.41	2.65	2.75	2.85	2.95	2.95	2.95	2.95
30-year Treasury	3.01	2.82	3.00	3.10	3.20	3.25	3.25	3.25	3.25

Sources: Scotiabank Economics, Bloomberg.

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