US & Canadian Monetary Policy & Capital Markets

- **After a Q1 delay, the Federal Reserve is forecast to hike three more times this year;**
- **The Bank of Canada is also forecast to hike three more times in 2019;**
- **Bond yields are forecast to rise (charts 1, 2);**
- **Assessing the evidence and risks to the interplay between market developments, the economy and monetary policy.**

THE FEDERAL RESERVE—A CASE FOR CONTINUED TIGHTENING

A cumulative three rate hikes are forecast over the duration of this year to a peak fed funds upper limit of 3.25% before the Federal Reserve then moves to the sidelines over the duration of the horizon. At such a point, the Fed is likely to be at or slightly above its neutral policy rate. This is a slower path than the steady pattern of four hikes in each of the past two years. The Fed shifts to the sidelines in 2019Q1 and returns with hikes in Q2 conditioned upon a broad narrative that points to US economic resilience and settling of external risks. As with Fed guidance it is 'patient', 'flexible', 'watching' and 'waiting', so are we, but within limits while closely monitoring an unstable US government and external risks.

The balance sheet is expected to continue to decline at an unchanged pace throughout our forecast horizon. A steady theoretical US$50 billion per month of Treasuries and MBS at a 60/40 split is forecast to roll-off, subject to the available amounts each month. This should set the balance sheet on the path depicted in chart 3 with assets dropping to about US$3 trillion by about mid-2020. Leading up to that point, a more serious debate will probably unfold about the optimal level of the balance sheet for today's economy and given innovations in the payment system and hence where to stop shrinkage. As balance sheet normalization matures, the FOMC may attempt to 'twist' the Treasury curve by shortening the average maturity of holdings in order to have the flexibility to lengthen the maturity of holdings should future economic and market conditions require such a step. The effects of shortening average maturities could be to bull steepen the Treasury curve as a partial effect and as a risk to our slope forecasts over time.

Against the popular contention that the Fed's unwinding balance sheet has sparked recession worries, chart 4 demonstrates what has happened to the 10 year Treasury term premium. While many anticipated a rising term premium as the Fed's balance sheet shrank, **the term premium never really increased** during the period of so far very limited balance sheet reductions. Indeed, it has again declined back toward the lowest levels on record. Equity market volatility continues despite the fact that bond markets have priced out rate hikes and the term premium is shaking off balance sheet shrinkage. That's a tip to the US administration to look elsewhere when assigning blame for market instability—starting with a reflection upon its own trade and fiscal policies.

No further changes to the spread between the interest on excess reserves relative to the upper limit of the fed funds target range are expected. Recall

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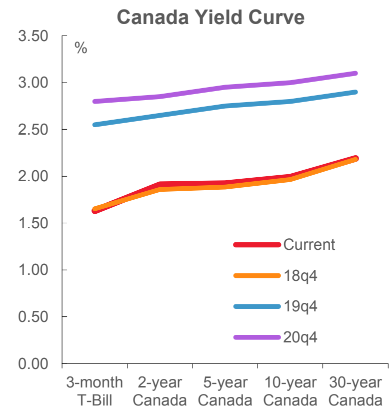
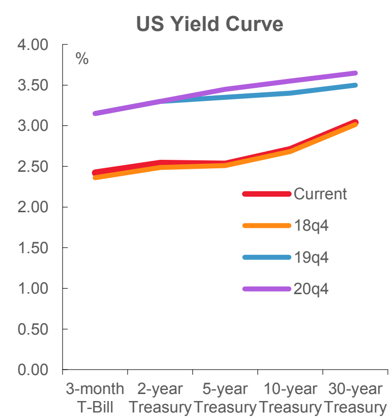
Chart 1



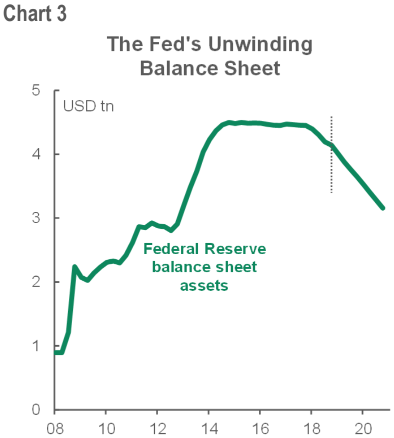
Sources: Scotiabank Economics, Bloomberg.

Chart 2



Sources: Scotiabank Economics, Bloomberg.

Chart 3



Sources: Scotiabank Economics, Haver Analytics.

that it is the IOER that is the de facto policy rate this cycle as interest paid on reserves that banks hold at the Fed is the anchor point for short-term market rates through arbitrage constraints. The FOMC has multiple tools available to address any upward pressure upon market rates relative to the effective fed funds rate as reserves in the banking system diminish—including further relative IOER cuts, traditional open market operations, ending portfolio redemptions at relatively high levels of reserves, and other possible tools that are being explored. No change in IOER-EFF spread, but the flexibility to control short-term market rates is our base case assertion.

Scotiabank Economics' forecast for combined conventional and unconventional policy moves had always been a little more conservative than the FOMC. Recall that prior to December 2018, the FOMC consensus signaled there would be four rate hikes in 2019–20 and then it removed one hike in the December 2018 'dot plot' to now forecast three more hikes until calling it quits. Throughout 2018, we had felt that late cycle, geopolitical and trade policy risks would make it difficult for the FOMC to deliver as aggressively on its proposed rate path and we've consistently argued that the neutral rate lies around 2.75% which is where the FOMC now sees it. A more cautious turn by the Fed now brings Scotia's lower forecast in full alignment with the Fed's revised forecast. **This is important to note in that while we could all be proven wrong as the year unfolds, it leans against the contention that if the Fed has turned more cautious, so perhaps should we.**

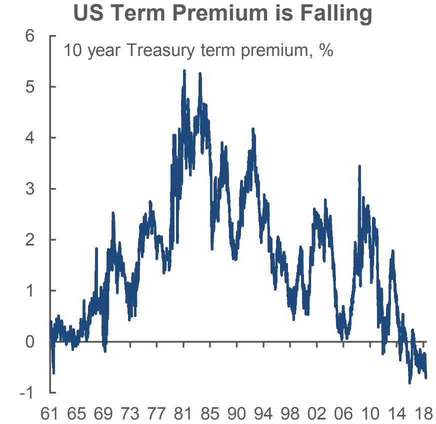
Should we then revise our own forecast lower yet? We are reticent to go any further toward markets that have not only priced out any further rate hikes but that have begun to entertain rate cuts over recent weeks. Either no hikes or rate cuts are difficult to envisage and need a lot to go awfully wrong that at this point we are not prepared to assume. Indeed, the consequence to our forecast is to short the front-end of the US Treasury curve and the full Treasury curve remains moderately over-valued in our view.

The core of the debate centres upon whether monetary policy and financial markets have over-tightened conditions to drive the US toward the point of recession within our forecast horizon. For many reasons, that's difficult to accept.

As one supporting argument, the US economy has transitioned toward **the greatest amount of excess aggregate demand in nearly two decades** (chart 5). The CBO's output gap stood at 1.3% as of 2018Q3 and is likely around 1½% now. Core inflation has risen toward the Fed's 2% target over the past year and at 1.9% has recently only slightly eased.

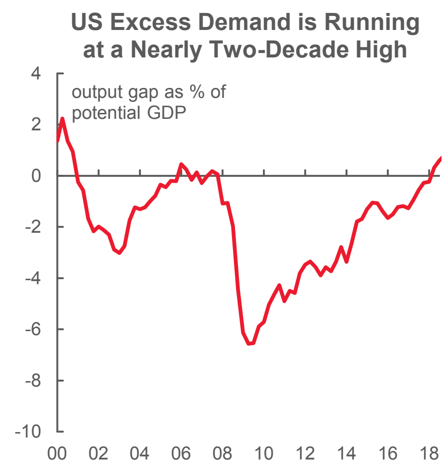
It is important to note that the estimated one percentage point rise in the output gap just since the end of Q1 into material excess demand **should carry lagged positive influences upon price pressures** that should persist over 2019–2020. Also, **wage increases are running at about a nine-year high and should reinforce price pressures through combined augmented Phillips curve and wage Phillips curve approaches.** That assertion should hold even at flatter levels of tightness than historically in the relationship between the unemployment rate and wage growth as well as the relationship between the unemployment rate and price inflation. As commodity price pressures have eased and dragged down headline inflation on first round effects, it is feasible that second round effects could raise core prices excluding food and energy by positively impacting inflation-adjusted wages and household

Chart 4



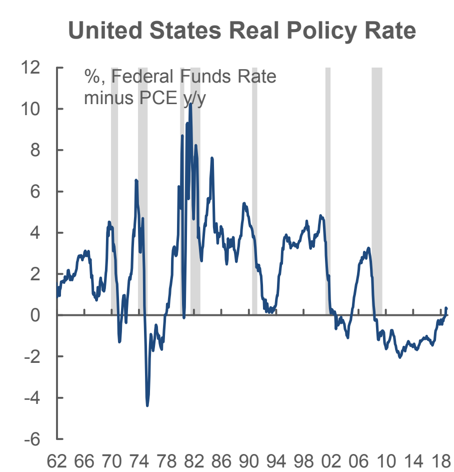
Sources: Scotiabank Economics, New York Federal Reserve.

Chart 5



Sources: Scotiabank Economics, Congressional Budget Office.

Chart 6



Sources: Scotiabank Economics, Federal Reserve, Bureau of Economic Analysis.

budget constraints. And on the dollar's influences, the Fed's research tends to point to disinflationary effects that begin to peter out within six months after appreciation stabilizes. Our house forecast expects a softer USD over this year.

Therefore, we think that output gaps and labour costs will come to reinforce a turn in the disinflationary effects of broad dollar appreciation on the path toward gently higher core inflation. That would require gently greater policy tightening in order to contain upside inflation risks.

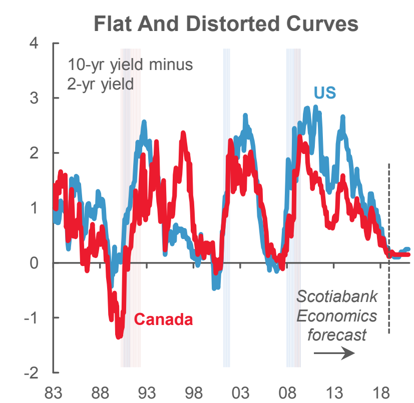
Added inflation risk stems from the potential for turning back the clock on decades of liberalizing the world trade order with negative implications for productivity, the broad supply side of the global economy—and hence ultimately inflation. One-off tariffs offer fleeting influences upon headline inflation and might even sap pricing power on second round effects. But sustained tariff battles and isolationism jeopardize the stability of inflation expectations over time which is why **central bankers warn of the possibility that protectionism returns the world to stagflation** and that the Fed's dual mandate would be conflicted between the risk to unemployment versus the need to preserve stable prices. For now, we're maintaining cautious optimism toward how trade tensions will ultimately settle but warning of the risks given a dishearteningly unstable US administration.

Also note that despite concerns about over-tightening Fed policy, **a recession has never followed as low of an inflation-adjusted fed funds policy rate as we have at present** (chart 6). Using headline PCE inflation, the real fed funds rate presently sits at just +45bps while using core PCE inflation results in a real policy rate of about +35bps. Then shave both estimates by 10bps now versus the past given that IOER is the relevant policy rate this cycle and it rests 10bps below the fed funds upper limit. A recession with a real policy rate of 25–35bps??

It would also be unusual for a recession to follow the current slope of the US Treasury yield curve that itself is distorted by global central bank bond buying programs (chart 7). Ditto for the slope of the corporate bond curve that is steeper than the sovereign curve (chart 8). The NY Fed's model of recession probabilities within one year is based upon the slope of the yield curve and now stands at about 16% (here). While it has been an imperfect model, **today's curve-based probability of recession is the lowest of recessions in decades.**

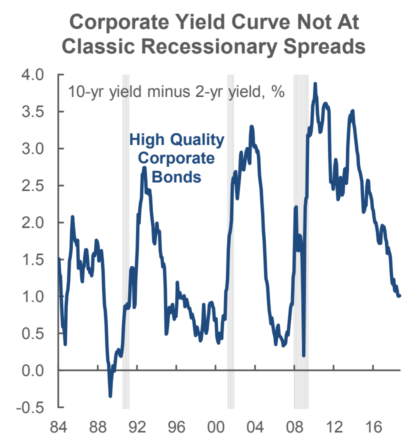
On equity market signals, charts 9 and 10 serve as a reminder of the fact that **equity sell-offs vastly over-predict economic downturns.** Declines to date in the S&P500 of around 12% are not historically followed by recessions. Harsher market declines of over 15% a) over-predict recessions by a wide margin, and b) are usually coincident to recessions by the NBER definitions. It's worth noting that one reason for these observations is that most equities are narrowly held, and when valuations soften this tends to coincide with automatic stabilizers kicking in, such as lower bond yields or gasoline prices that we are now witnessing. Further, the dominant driver of consumption is cash flow that is vastly more important than changes in paper wealth. Strong job gains and rising wage pressures offer cash flow supports.

Chart 7



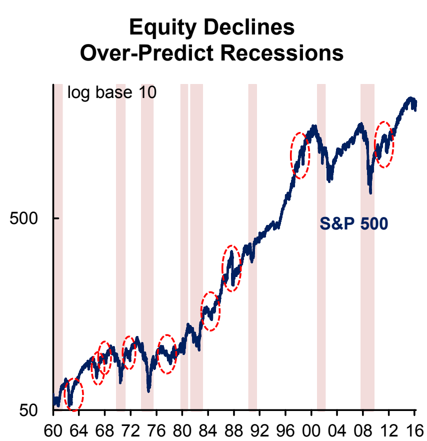
Sources: Scotiabank Economics, Bank of Canada, Federal Reserve Board, NBER, CD Howe Institute.

Chart 8



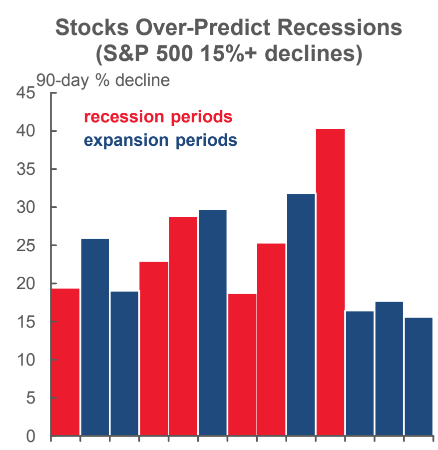
Sources: Scotiabank Economics, US Treasury.

Chart 9



Source: Scotiabank Economics, Bloomberg.
Shaded bars indicate recession periods.

Chart 10



Sources: Scotiabank Economics, Bloomberg.

But does reverse causation hold? In other words, apart from predicting downturns, **will recent equity market weakness *cause* a downturn?** Modelling efforts suggest it may slightly soften growth with more impact if greater risk aversion sustainably arises. [This](#) paper by Fed economists, however, is more doubtful toward a substantially positive wealth effect over recent years and by corollary whether a negative wealth effect could arise in future. It is more likely that reasonably more attractive valuations have been restored to global equities (chart 11).

As for what fundamentals are saying about recession risk, **it would be unusual to get a pronounced recession amidst evidence of very healthy household balance sheets.** Consumer credit flows have been strengthening recently. The saving rate—out of disposable income—has not been depleted with wealth gains being spent; rather, it has held around a steady 6% rate for years now (chart 12). Combined with the lowest share of income going toward debt payments on record (chart 13) and solid income and job growth, the signs of serious challenges that would affect about two-thirds of the economy represented by consumers are scant.

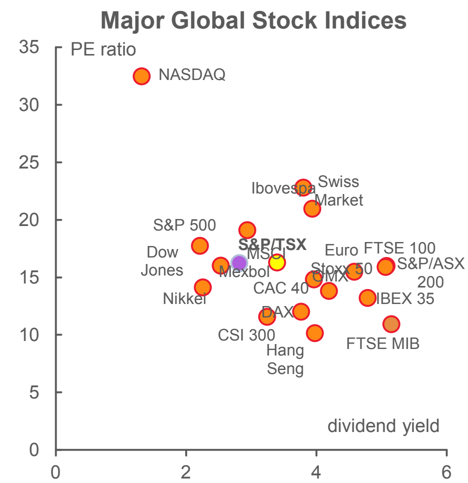
As for corporate credit risk, there is no doubt that it is being re-priced from an overshoot on appetite for risk but our view is that this returns us to more reasonable valuations rather than signaling the end of the expansion. Chart 14 offers one such depiction. In fact, the US high yield index has regained much of the recent sell-off.

While the focus thus far has been squarely upon addressing linkages between financial market developments and transmission mechanisms to the economy and monetary policy alongside evidence of sound US economic fundamentals, I'll end with a discussion on the ECB-like challenges facing the Fed. President Trump may wish to have his growth bias favoured by much easier Fed policy—by contrast to his past criticisms of loose monetary policy before he became President—but the Fed can't be seen to be rewarding the Trump administration's many, varied and costly intransigencies. **A moral hazard problem hangs over monetary policy in that turning more dovish could relax pressure upon the administration to back away from its deeply protectionist bias and volatile ways and the cost this is imposing upon markets.** Instead, staying the course with tightening monetary policy could impose needed discipline upon the unhelpful chaos in the White House and to the long-run benefit of both the US and world economies. At issue is the US equivalent to the downside of Mario Draghi's 'whatever it takes' moment that stabilized markets and made for rock bottom borrowing costs for governments at the high long-run price of forestalling necessary fiscal and regulatory reforms within the Eurozone that could have benefitted long-run growth. Should the Trump administration wish to calm markets, it should instead a) stop threatening the Fed, b) strike a trade deal with China, c) become less isolationist and c) end the government shutdown and related risks heading up to the March 1st debt ceiling deadline.

THE BANK OF CANADA—A TEMPORARILY INTERRUPTED HIKE PATH

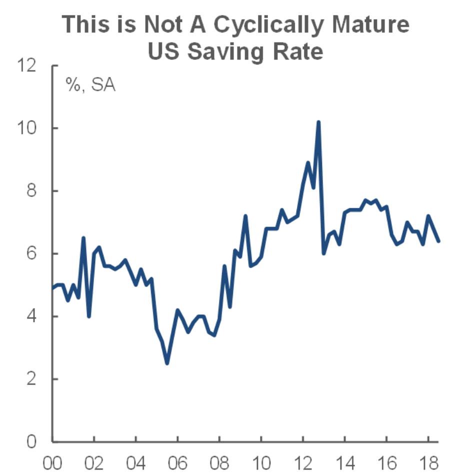
Our forecast for the Bank of Canada is relatively aggressive with three hikes predicted over the duration of this year and possibly one more in 2020 before the central bank calls it quits this cycle. At such a pace, the BoC would be at a neutral rate range into early 2020. The risks to this forecast are skewed toward fewer hikes and/or taking longer to deliver such a pace of tightening rather than a quicker pace. **Our prime forecast objective, however, is to convey to markets that they are potentially**

Chart 11



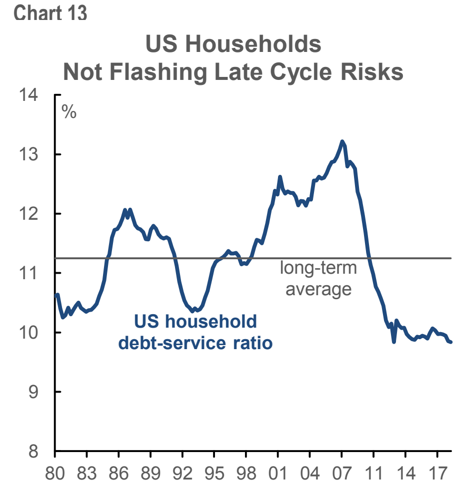
Sources: Scotiabank Economics, Bloomberg.

Chart 12



Sources: Scotiabank Economics, Bureau of Economic Analysis.

Chart 13



Sources: Scotiabank Economics, Bloomberg, Federal Reserve.

ignoring the Bank of Canada's rate hike signals to their peril in that they have removed virtually all prospects of further rate hikes.

Indeed the strong message from the BoC of late has been that rate hikes are interrupted, not abandoned. Please go here for a recap and interpretation of their latest forecasts and communications. We could well see the BoC returning with a hike as soon as the second quarter of this year due in part to Governor Poloz's recent guidance that "the economy will be back to where it was a few months ago within a few months."

Clearly a fair portion of the outlook for the Bank of Canada is dependent upon the matters addressed in the discussion of the outlook for Federal Reserve policy. Several of the arguments already addressed and that pertain to the interplay between financial markets and the economy and monetary policy are portable to the BoC context. Absent a US recession with a confident Federal Reserve able to tighten policy further, the Bank of Canada can by corollary be less concerned about the implications to tightening Canadian monetary policy for the currency and knock-on effects upon export competitiveness and inflation risk.

A key distinction between the central banks, however, is that **the inflation-adjusted cost of borrowing remains negative in Canada** (chart 15 versus chart 6) and the Federal Reserve has been reducing unconventional stimulus on top of raising rates. Easier monetary policy conditions in Canada have relative room to catch up to the Federal Reserve but have not. This has been a reason behind repeated bouts of weakness in the Canadian dollar that has only recently improved partly as domestic oil prices have recovered. **An economy near capacity and with a record low in the unemployment rate is not screaming out for negative real rates.**

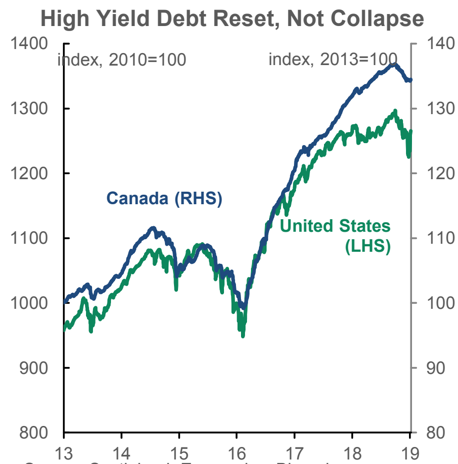
This argument is applicable to the Canadian dollar as well. **The currency remains undervalued** by classic long-run equilibrium models such as purchasing power parity that provide rough guidance toward long-run valuations (chart 16). Canada—unlike the US—is not dealing with a richly valued currency. Instead, a weak currency may put upward pressure upon imported inflation especially if sustained and built upon.

As further evidence of arguably lax financial conditions, **the BoC should take comfort in measures of credit spreads versus seeking shelter from harshly adverse market conditions.** Like the US, the Canadian high yield bond market has only wound back a prior overshoot but remains in rich territory (chart 14 again). Mortgage bond spreads remain relatively narrow (chart 17). Provincial bond spreads have widened but remain at healthy levels that have returned to early 2017 conditions that make for more attractive relative valuations as opposed to evidence of a riskier blow out in spreads (chart 18).

Like the US, the slope of the Canadian bond yield curve is not flashing recession signals (chart 19). The Canadian curve over-predicts downturns and while it remains flat through to the belly, there remain mildly positive 2s10s and 90s10s spreads that themselves are indirectly distorted as a cycle predictor by the imported effects of global central bank bond buying programs.

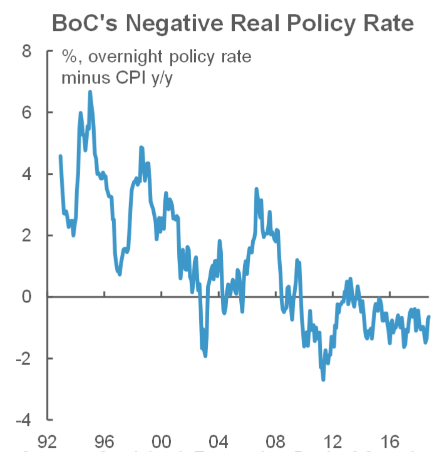
The new information that has temporarily knocked the BoC off tightening plans, however, principally concerns developments in energy markets. The evidence of tightened conditions has been fleeting. The plunge in oil prices and particularly the

Chart 14



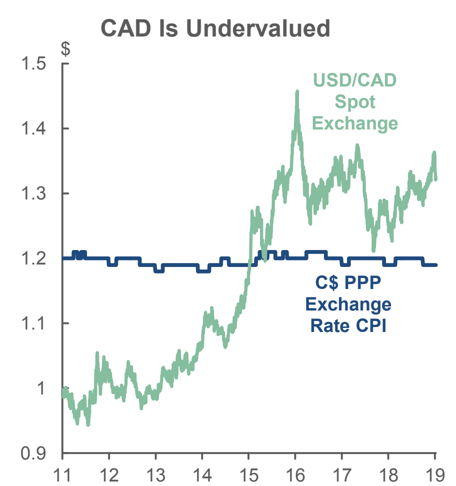
Source: Scotiabank Economics, Bloomberg.

Chart 15



Sources: Scotiabank Economics, Bank of Canada, Statistics Canada.

Chart 16

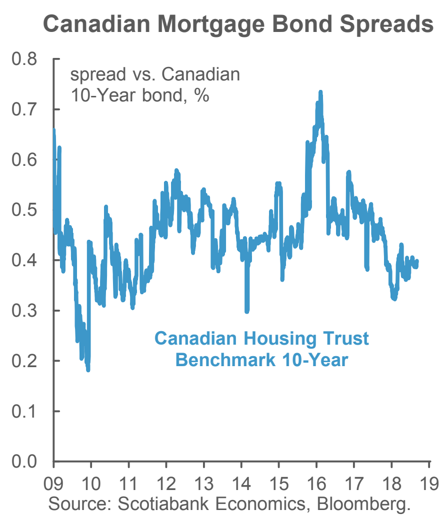


Sources: Scotiabank Economics, Bloomberg.

discount to domestic oil prices caused fear of a return to the conditions in 2014–15 when the BoC ultimately eased in the face of falling commodity prices. The mechanism by which such developments affect the outlook is through selling Canadian commodity exports at lowered prices and suffering an erosion of purchasing power in world markets. The negative hit to the terms of trade—the ratio of export to import prices—results in lowered national income. In turn, that gets distributed through lower profits and household incomes and worsened fiscal balances. In turn, that can rein in activity measures like consumption, housing, and business investment. By corollary, that widens slack and dampens price pressures, thereby inciting relatively looser monetary policy.

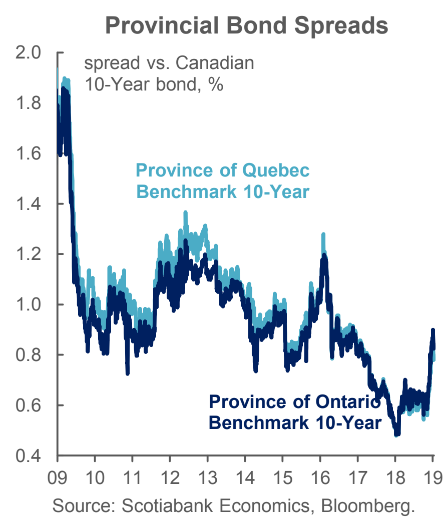
When lower oil prices hit the Canadian economy, Alberta responded through deep mandated production cuts roughly at an 8% clip to start the year. That will drag down activity variables and create a little more near-term slack.

Chart 17



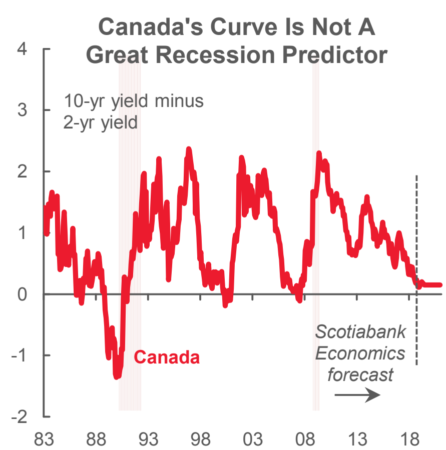
Source: Scotiabank Economics, Bloomberg.

Chart 18



Source: Scotiabank Economics, Bloomberg.

Chart 19



Sources: Scotiabank Economics, Bank of Canada, Federal Reserve Board, NBER, CD Howe Institute.

Chart 20

Sources: Scotiabank Economics, Bloomberg.

This time—dare we say—is nevertheless different to the BoC. For one thing, the drivers have been different, as transportation bottlenecks have struggled with a surge in output as prior projects came on stream. Such bottlenecks are easing. For another, **the correction to Canadian oil prices has already turned around in the other direction.** The discount suffered by Western Canada Select to WTI is shown in chart 20. From its widest point of -US$50 on October 11th, the differential has shut to just -US$8. That's a level of tightness not seen in about four and a half years. The WCS price itself has risen by about US$30 from the November low to the highest level since early September and hence before the meltdown began. This should result in the so-called terms of trade recovering quite rapidly (chart 21). **The BoC is therefore inclined to look through—cautiously and correctly—this correction and not treat it the same as the earlier episode.** We need to deal with the reality of the production cuts and the concomitant slack in the economy, but remain cautiously optimistic that this will be a fleeting effect with GDP growth being quickly restored to higher rates over the duration of the year. The fact that the energy industry is a much smaller influence upon the economy now versus 2014–15 is another consideration and one that is supported by multiple measures. One such measure is that investment in the energy sector has already been running at less than half what it was at the peak (chart 22).

Throughout it all, the non-energy sector of the economy is performing well as evidenced by wages that are rising considerably faster in non-energy provinces.

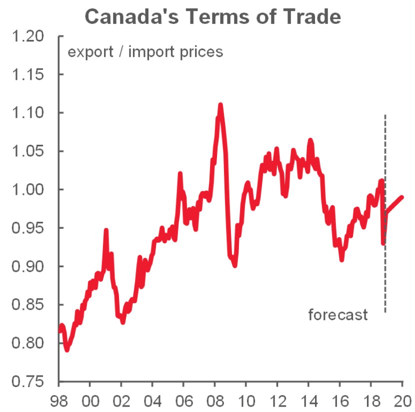
Against this backdrop, while much of the popular coverage of conditions facing the economy dwells on negatives, **there are many important positives.** The CUSMA, CPTPP and CETA trade deals maintain and build upon liberalized trade to the benefit of Canadian industry. Often times the public discussions about risks to the outlook seem to forget that the biggest risk—disrupted trade policy—has been averted in favour of moderate liberalization. This is probably not yet fully reflected in what are nevertheless generally resilient readings for business conditions (chart 23).

Further, over 170,000 jobs have been created in just four months albeit with frustratingly softer wage growth than stateside. Should investment pick up—and it should indeed in response to Federal investment incentives introduced in the October mini-budget—then productivity growth may follow and with that wage gains. With an investment pickup should come traction in export growth as capacity expansion feeds sales abroad. An investment pickup may also prove complementary to job growth. Thus, 2019–20 could unleash a virtuous cycle.

Given such expectations, we're of the view that the imbalances in **the housing market will prove to be manageable in a soft landing scenario.** Inventories and sales-to-listing ratios remain healthier than the problems that plagued markets coming off the 1980s expansion (chart 24). Tightened macroprudential rules by OSFI and some Canadian provinces should have transitory effects with a return to modest growth in housing markets fed by employment gains.

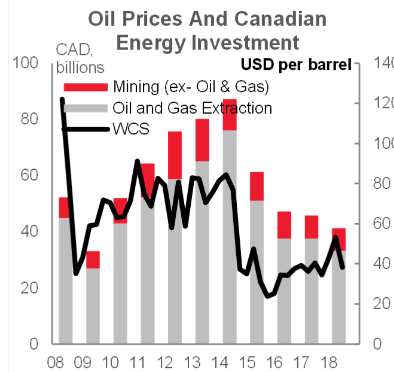
A key concern that could restrain the Bank of Canada is nevertheless the impact of higher borrowing costs upon consumer credit quality and the implications for the broader economy and financial system. The BoC should indeed be cautious, but there is the high risk of being overly so. Consumer bankruptcies remain very well behaved and largely nonresponsive to higher borrowing costs. Indeed, **consumer bankruptcies have never been lower** than they've trended around over the recent past (chart 25). Insolvencies, however, are made up of bankruptcies and proposals. Consumer *proposals* have increased—and are often misinterpreted as bankruptcies—but recall that they are "an offer to creditors to settle debts under conditions other than the existing terms." There can be many varied reasons for proposals, but the fact they are occurring without leading to bankruptcy showcases the relative ability of the Canadian banking system to adapt in a soft landing scenario. Proposals are worked out through a willingness to restructure payments and debt without necessarily forcing the client into bankruptcy and seizing uncertain net asset values minus related costs. One extreme example of the differences in the Canadian system is that strategic defaults generally don't exist in Canada;

Chart 21



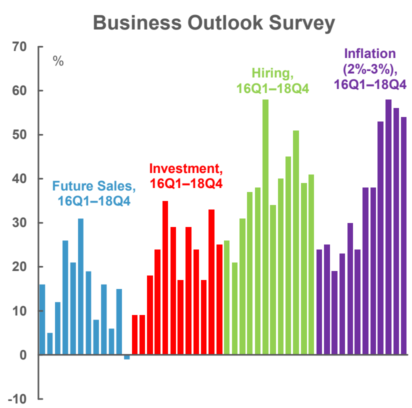
Sources: Scotiabank Economics, Statistics Canada, Bloomberg.

Chart 22



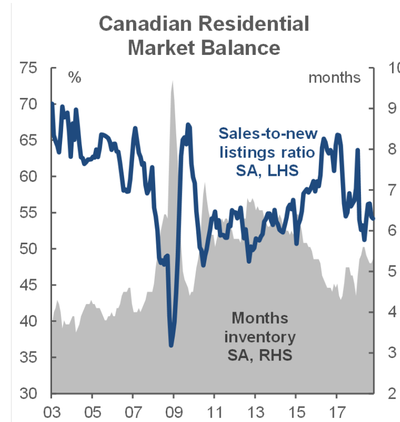
Sources: Scotiabank Economics, Statistics Canada, Bloomberg.
* Preliminary Data. WCS Q4 quarter-to-date avg.

Chart 23



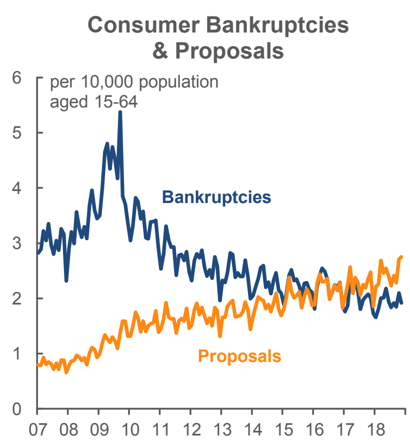
Sources: Scotiabank Economics, Bank of Canada.

Chart 24



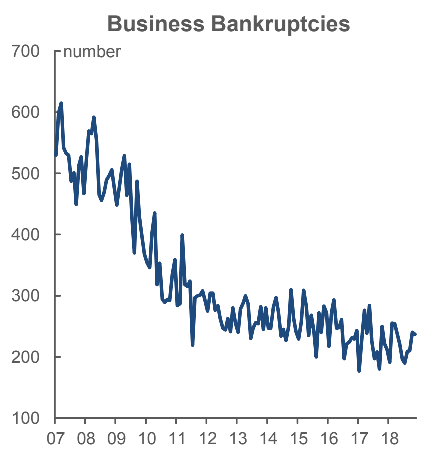
Sources: Scotiabank Economics, CREA.

Chart 25



Sources: Scotiabank Economics, Office of the Superintendent of Bankruptcy.

Chart 26



Sources: Scotiabank Economics, Industry Canada.

walking away with impunity is generally not an option, versus working out one's obligations in a mutually satisfactory way. I've generally found over time that the unique features of the Canadian banking system remain under-appreciated by many but not all foreign fast money accounts.

Also note that business bankruptcies are also very well behaved toward cycle lows but that doesn't get much attention (chart 26)! Business *proposals* have increased in the latest month, but the volatility of the series discounts any single observations with a cautious eye toward the trend.

In all, a solid case can be made for how overall financial conditions are too easy for an economy with Canada's broad characteristics and that the Bank of Canada should be careful but not frozen by concern over the ability of the credit quality cycle to absorb further tightening.

CONCLUSION—MONITORING RISKS, READY TO REVISE IF NECESSARY

Our forecasts for each country's central bank actions will remain sensitive to monitoring major global risks including three developments with at present March timelines. First is our assumption that volatility may increase but a negotiated Brexit settlement will eventually arrive as the currently defined March 29th deadline approaches. That deadline may be extended which could prolong uncertainty but UK politics are too unstable to have a firm read on the risks at this juncture.

Second is that a negotiated settlement will be achieved by the US and China that averts a negative outcome as the 90 day tariff moratorium expires on March 1st. Pain in Chinese fundamentals and US earnings is being inflicted upon both boxers in the ring and into a US Presidential election year we expect pressure to be more acute upon the US administration to settle down policy risks. Years of conflicting ambitions are ahead as superpowers tussle for supremacy but near-term calm may be restored.

Third is that eventually a negotiated outcome will arise that ends the record long US government shutdown, restores funding and ideally raises the debt ceiling in advance of the March 1st deadline or at least well before the point at which the US Treasury depletes high cash balances and exhausts extraordinary powers around a mid-summer timeframe.

Like the Fed and the BoC and others, our own forecasts will be sensitive to these developments. Throughout it all, we expect them to continue to behave as the adults in the room while nevertheless dangerously courting moral hazard as the backstop to unstable global politics particularly centered upon the US.

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	2.00	2.25	2.50	2.75	2.75	2.75	2.75
Prime Rate	3.95	3.95	4.20	4.45	4.70	4.95	4.95	4.95	4.95
3-month T-bill	1.65	1.80	2.05	2.30	2.55	2.80	2.80	2.80	2.80
2-year Canada	1.86	2.00	2.20	2.45	2.65	2.85	2.85	2.85	2.85
5-year Canada	1.89	2.10	2.30	2.55	2.75	2.95	2.95	2.95	2.95
10-year Canada	1.97	2.20	2.35	2.60	2.80	3.00	3.00	3.00	3.00
30-year Canada	2.18	2.35	2.50	2.75	2.90	3.10	3.10	3.10	3.10
United States	**Q4**	**Q1f**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**Q4f**
Fed Funds Target Rate	2.50	2.50	2.75	3.00	3.25	3.25	3.25	3.25	3.25
Prime Rate	5.50	5.50	5.75	6.00	6.25	6.25	6.25	6.25	6.25
3-month T-bill	2.36	2.40	2.65	2.90	3.15	3.15	3.15	3.15	3.15
2-year Treasury	2.49	2.75	2.90	3.10	3.30	3.30	3.30	3.30	3.30
5-year Treasury	2.51	2.80	3.00	3.20	3.35	3.35	3.35	3.40	3.45
10-year Treasury	2.68	2.90	3.10	3.30	3.40	3.45	3.45	3.50	3.55
30-year Treasury	3.01	3.10	3.25	3.50	3.50	3.60	3.60	3.65	3.65

Sources: Scotiabank Economics, Bloomberg.