US & Canadian Monetary Policy & Capital Markets

Scotiabank Economics has brought forward the timing of the next rate hikes by the Bank of Canada and Federal Reserve to this month and March respectively. Both countries' yield curves are forecast to further bear flatten on additional front-end policy tightening and limits to a bond market sell-off (charts 1 & 2, table 1).

BANK OF CANADA—TRUST, BUT VERIFY

We forecast three increases in the Bank of Canada's overnight lending rate this year followed by three more hikes in 2019 at which point the terminal, neutral policy rate of 2.5% will be achieved well below our estimate of a traditional 'Taylor rule' approach. This policy rate view suggests that the Canada 2 year yield will rise to just over 2½% over this period.

Our forecast for continued monetary policy tightening by the BoC is rooted in cyclical considerations that position Canada at an advanced stage of global monetary policy dynamics. Governor Poloz has said he was going to let the economy run hot but a) it arguably is now and b) we took the remark to inform a 'cautious' profile rather than as a barrier to near-term hikes. That said, we are cognizant of the risks to NAFTA and global trading relationships but accept the argument that this risk could overhang the Canadian economy for months, quarters or years and that there is a limit to how long monetary policy can be put on hold as the economy faces accelerating wage and price pressures amid capacity constraints. Trusting a base case outlook to be verified by data dependence is a prudent balancing approach to managing policy risks. It is conceivable that falling behind building wage and price pressures is a bigger risk to Canada than NAFTA uncertainty.

Indeed, very strong hiring, a recent surge of capital goods imports and resilient business attitudes with a hawkish tinge (here) run counter to any impression that the Canadian economy is already paying a price for NAFTA uncertainty or that it is being offset by domestic economic strengths. When NAFTA negotiations skidded into the ditch from October onward, business attitudes only strengthened (chart 3). Obviously this risk could heat up at a moment's notice and drive easier monetary policy than forecast, but until we know otherwise, we place a premium upon the following evidence as drivers of our policy rate view.

- The output gap is shut and Canada risks slipping into excess aggregate demand by the average of the BoC's two main measures (chart 4).
- Industrial capacity utilization is running at a ten year high of 85% and eight points above the US. Many industries are at cycle peaks. This buttresses evidence from output gaps and leaves companies with the choice to expand capacity or gently raise prices — or probably both.
- Core CPI has been trending higher from 1.3% y/y at the low point in May to 1.7% now using the average of the BoC's three measures (chart 5). There has been more inflation traction in Canada than in the US.

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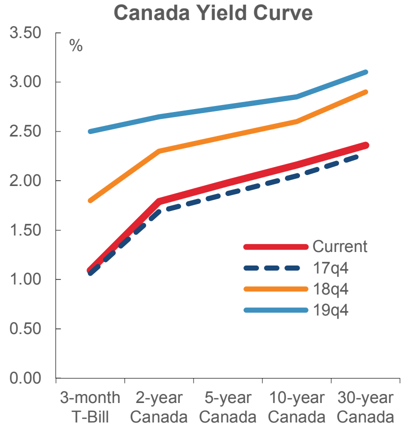
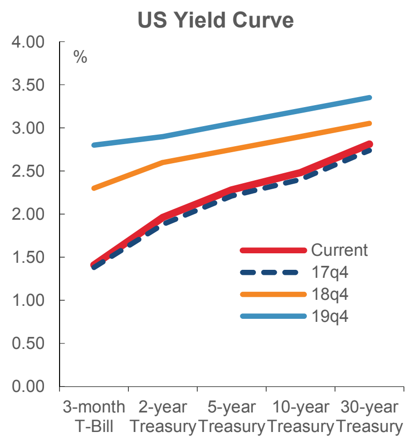
Chart 1



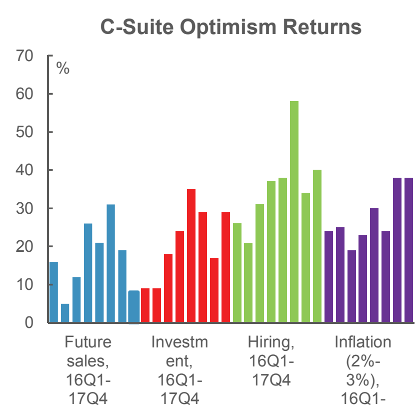
Source: Scotiabank Economics.

Chart 2



Sources: Scotiabank Economics, Bloomberg.

Chart 3



Sources: Scotiabank Economics, Bank of Canada.

- Scotiabank's René Lalonde's model for core inflation projects a return to the 2% mid-point of the 1–3% inflation target range in early 2019 while incorporating our policy outlook. In that context, it is conceivable that monetary policy actions that operate with a 12–18 month lagged influence are already behind the curve, but not egregiously so. Further, there are idiosyncratic influences upon inflation that have been unique to Canada and that are lifting, including electricity price cuts and auto prices.

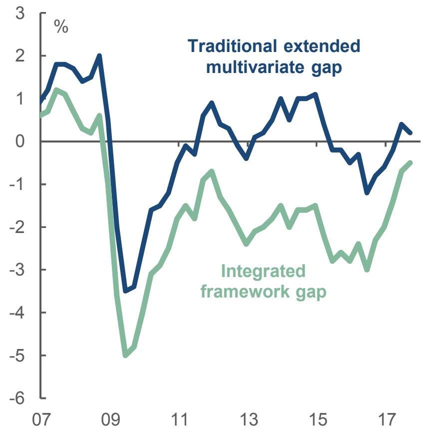
- Wage pressures are building. The BoC's preferred measure for permanent employees has risen from a low of 0.5% y/y in April to 2.9% now and is soon headed to the 3.5–4% range (chart 6).

- Tremendous job gains, a sharp rise in hours worked and rising wages mean that personal disposable income growth is strong and we expect about 4% quarterly annualized growth over 2018.

- A brief respite in Q3 of last year caused some concern that consumers were retrenching after three quarters of 8% annualized gains in retail sales volumes. Early evidence on Q4 indicates the return to about 4% growth in retail volumes as income gains take over from child benefit payments to drive consumption. If about 60% of the economy that is represented by consumer spending is holding up well then that is a significant offset to other risks.

Chart 4

Canadian Spare Capacity is Gone



Sources: Scotiabank Economics, Bank of Canada.

Chart 5

Average 'Core' Inflation

Sources: Scotiabank Economics, Statistics Canada.

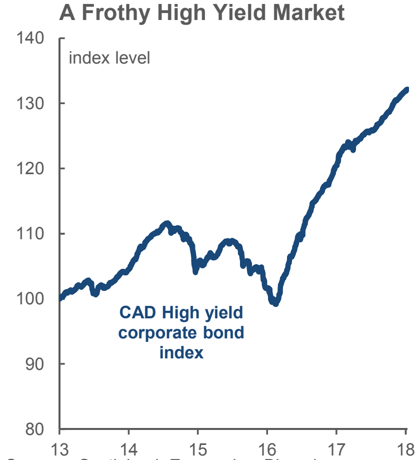
Chart 6

Believe It Or Not, Wage Gains Are Returning

Sources: Scotiabank Economics, Statistics Canada.

Chart 7

A Frothy High Yield Market



Sources: Scotiabank Economics, Bloomberg.

- Commodity prices continue to recover, though unevenly, and that benefits national income with positive implications for corporate profits, fiscal revenues and household incomes. In USD terms that guide many resource firms in Canada, WTI and Brent crude prices are 20–25% higher than a year ago. East coast projects sell at Brent and the discount to WTI on Western Canada Select should compress when Keystone becomes fully operational around decade's end. Gold is up 11% y/y and base metals ranging from aluminum to nickel, zinc and copper are up by about 25%. Agricultural commodities are not experiencing much price appreciation in grains but North American livestock prices are materially firmer.

- Most of the rise in the currency to date is explained by solid fundamentals and higher commodity prices. At the margin, the currency's appreciation to the 1.25 USDCAD range imposes little incremental tightening on the economy at a time when financial conditions need to tighten by more. The entire point to tightening monetary policy and its influences upon rates and the currency is to cool growth to a more sustainable pace in the context of material and rising capacity pressures.

- Financial stability considerations indicate room for tightening policy. House prices are more resilient than some feared and credit growth remains solid. Spreads between mortgage bonds and Government of Canada bond yields are tight as are provincial government bond spreads while the high yield market has strongly recovered from the commodity shock and returned to elevated heights (chart 7).

Sundry risks overhang the outlook for the Bank of Canada but we judge those risks either as reason to tread carefully in terms of monetary policy signals (eg. the impact of B20 OSFI mortgage stress testing guidelines) or as patient debates (e.g. NAFTA) or as risks that have thus far not materialized despite perennial fears (eg. a large negative imported bond market shock). On balance, risks to the outlook will inform future steps but we're comfortable with our current assessment to advise continued policy tightening.

FEDERAL RESERVE—PLENTY LEFT IN THE TANK FOR RATE HIKES

We forecast three rate hikes by the Federal Reserve this year and two more next year at which point a terminal neutral rate of 2.75%% will be reached. This is consistent with our belief that the real neutral policy rate lies under 1%.

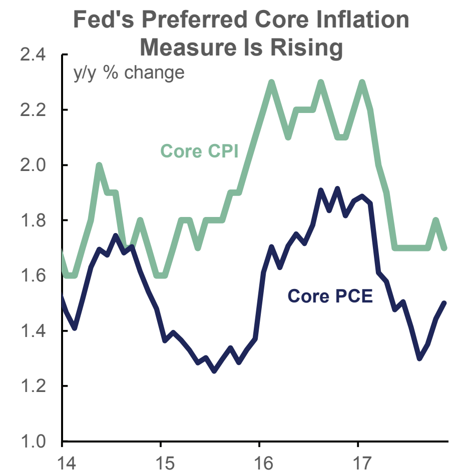
The downside surprise to inflation in 2017 is already turning around and shaking off USD and idiosyncratic influences. There is nascent evidence that the Fed's preferred measure of core PCE inflation is rising from its low point (chart 8). That is not evident in core CPI but the Fed prefers core PCE inflation for good reasons. One is that it dynamically adjusts for changes in consumer behaviour as spending patterns change compared to the fixed weights used in CPI. Another is because PCE captures important components more completely. An example is medical care costs. This matters more and more over time, with medical care spending now accounting for a record high 17% of consumer spending as medical care prices firm slightly.

Diminishing spare capacity leans toward further gradual inflationary pressures. Measures of the US output gap have generally shut (chart 9). Inflation behaves stubbornly and with variable lags in both directions at turning points but the elimination of slack points to one argument in favour of firming price pressures.

A further argument involves the currency's role. This speech by former Vice Chairman Stanley Fischer about two years ago is still instructive to how the Fed generally views the dollar's influence. Fischer stated that Fed models estimate that for every 10% trade-weighted appreciation in the dollar, core PCE inflation is reduced by 0.5% in the two quarters following the dollar's move and the four-quarter effect is to reduce core PCE inflation by about 0.3%. From the Spring of 2016 until the end of that year following the US election results, the broad dollar index had risen by almost 10% and therefore this factor could have easily explained most of the deceleration in core PCE inflation from 1.9% y/y in late 2016 to 1.3% y/y this past August. Since late 2016, however, the broad dollar index has depreciated by over 8% (chart 10). If core PCE inflation responds symmetrically to USD softness, then core PCE inflation could soon rise closer to the Fed's 2% target.

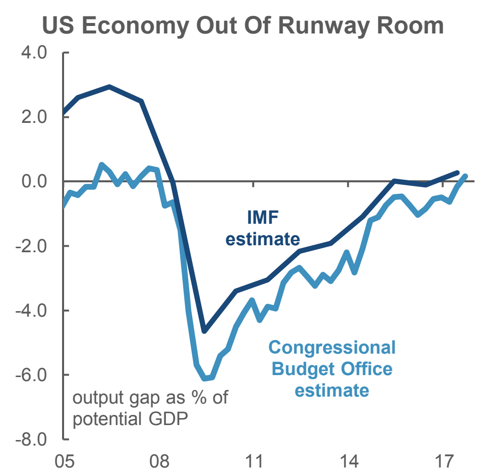
But should the Fed not hike or do so with great trepidation due to late cycle considerations? On this, we advise being careful toward selective use of the evidence. Before turning to this, note the haughty assumption behind some forecasters' beliefs in that they warn of recession risk but foresee the Fed hiking into it which assumes the forecaster is infinitely smarter than the Fed! On the cycle evidence some variables indicate late cycle pressures, like consumer confidence, the unemployment rate and stock market valuations. History, however, shows that factors like low unemployment rates can persist for long periods without signalling imminent recession risks.

Chart 8



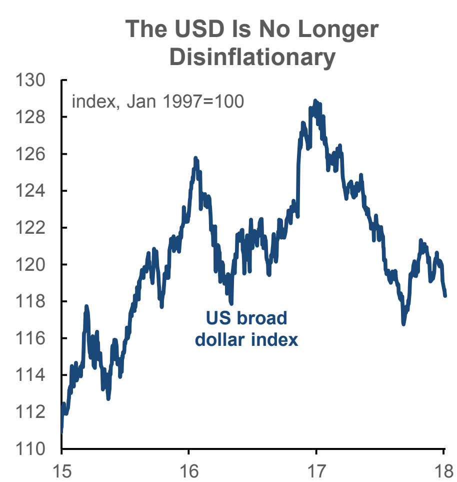
Sources: Scotiabank Economics, Bloomberg.

Chart 9



Source: Scotiabank Economics, CBO, IMF.

Chart 10



Sources: Scotiabank Economics, US Federal Reserve.

Furthermore, financial market indicators are mixed. The slope of the yield curve (chart 11) was comparably flat in the US through much of the 1990s without preceding imminent recession over the decade and even so at times in the 1980s and it took a few years before the signal was followed by the GFC. The NY Fed's probability of recession model based upon the slope of the curve (here) indicates a low 11% chance of recession. In any event, when curve slope works as a sign of impending recession, the evidence is usually showing up through a greater variety of readings than at present.

Other indicators, however, suggest mid- if not early-cycle influences. For instance, the household debt service burden is not showing any signs of classic late cycle pressure and lies toward the bottom end of the past four decades (chart 12). It's usually when consumers are over-extended that recessions spring up. The absence of household leverage and its effects upon stretched debt payments is in part a function of regulatory policy and the aftermath of the crisis but it still has room to move higher and higher borrowing costs will gently do so.

Also consider that the output gap is shut, but not yet tripping into material excess aggregate demand as it often has at late stages of past cycles. Fairly tepid real wage and price pressures add to evidence against impending recession risk. Tighter monetary policy is needed to head off overheating risks, but said risks are modest at this juncture.

Then consider corporate balance sheets. This piece by the Federal Reserve incorporates the Fed's 'dot plot' guidance on future rate hikes into projections for corporate interest coverage and concludes they would have a minimal effect upon a starting position of strength that belies past cycle-cycle pressures. The corporate debt-to-equity ratio is fairly low but can be misleading and sensitive to valuation effects which is one reason to prefer interest coverage in addition to its predictive powers applied to financial distress. On that note, recall the US corporate debt:equity ratio was comparably low just before the crisis and banks were thought to be well capitalized. Interest coverage is a more reliable gauge of stress and shock risk. By comparison, coverage was already waning 2–3 years before the global financial crisis when profit growth began to turn south and there are no such signs of that at this point especially after smoothing through a well understood transitory near-term shock owing to tax reforms before future earnings seasons benefit.

Unconventional balance sheet management policy by the Federal Reserve is expected to remain on auto-pilot this year. The plan has been well telegraphed since July and moves toward allowing US$50 billion per month to roll off the balance sheet by October subject to each months' available securities for reinvestment (chart 13).

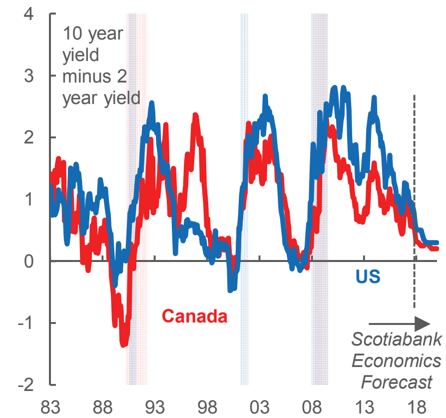
FLATTER, BUT NOT INVERTED CURVES

The 2s10s curves are expected to further bear flatten in Canada and the US but not invert over our 2018–19 forecast horizon (see charts 1, 2 and table 1 again). We do not anticipate a recession and wouldn't view curve inversion in today's policy repressed market as a clear-cut recession signal anyway.

[1] Implied earnings growth (G) = ((R * P/E) - (DY * P/E)) / ((P/E + (DY * P/E)) where R is the required return, P/E is the price-earnings ratio, DY is the dividend yield.

Chart 11

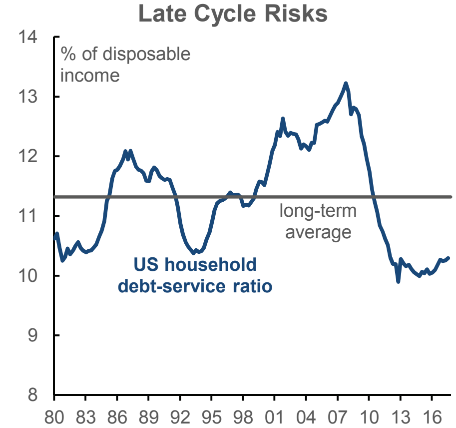
Further Flattening Forecast



Sources: Scotiabank Economics, NBER, Economic Cycle Research Institute, Bloomberg, BoC.

Chart 12

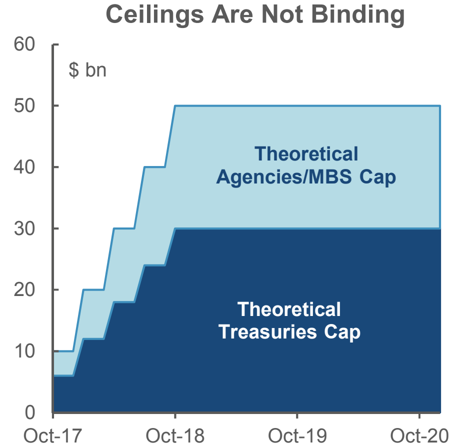
US Households Not Flashing Late Cycle Risks



Sources: Scotiabank Economics, Bloomberg, Federal Reserve.

Chart 13

The Fed's Reinvestment Ceilings Are Not Binding



Sources: Scotiabank Economics, US Federal Reserve Board.

While we apply modelling efforts as a guide to the forecasting parameters, many of the complex multitude of influences upon the bond market are outside of the scope of modelling efforts and an obvious challenge to even the most experienced investors. Our contribution to the debate is to highlight the major considerations overhanging bond market forecasts as discussed below. We caution that the high uncertainty around their net influences upon a bond yield forecast should have clients making use of wide brackets in scenario analysis rather than hanging upon point estimates in time. On net, I think our broad curve views lean toward being fairly aggressive in both countries in the nearer term.

1. **Inflation:** Market-based measures are generally in line with a stable longer run inflation rate of around 2% (chart 14). More of our forecast rise in US PCE inflation and Canadian CPI inflation is expected to influence short-term policy rates rather than longer term nominal bond yields. The inflation trading market is braced for higher expected inflation readings but is sensitive to upside and downside risks, but real implied yields are depressed for other reasons.

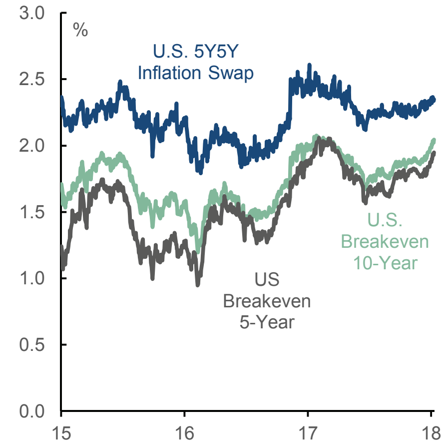
2. **Risk aversion:** It is prudent to continue to caution against historically elevated stock market valuations (chart 15), but not to do so stridently. Even absent a stock market correction, portfolio rebalancing may continue to support sovereign debt instruments and retain appetite for safe-haven assets within diversified portfolios. Deriving an implied earnings growth rate from equity valuation methods such as a modified Gordon model[1] or price-to-book calculations is complicated by the fact that not all of the necessary ingredients are observable; indeed key inputs like required return must be estimated which in turn introduces uncertainty toward today's equity risk premium. It is therefore difficult to determine with full conviction that equities are over-valued and, even if so, to what degree. For instance, if the required return is abnormally low then the hurdle for satisfactory earnings growth may be commensurately low.

3. **Policy rate influences upon global carry:** The central banks in Anglo-American economies are forecast to remain in tightening mode, particularly in the US and Canada. The outlook for other major central banks' policy rates is comparatively sanguine (chart 16). Zero or negative policy rates are generally expected to hold at the ECB and BoJ. Informing this view is that Japan is expected to make little headway on its 2% inflation target, Governor Kuroda will be reappointed to another term, and there is the risk of policy easing to prepare for an expected sales tax increase next year. Also informing this view is that if Euro strength continues to restrain 'supercore' inflation readings around 1% y/y then we don't rule out prolonged stimulus measures in altered format to account for limits to ECB bond buying and figure President Draghi has plenty of tools to employ if needed. By corollary, this assumption of little policy rate risk outside of Anglo-American economies limits the potential for a rise in term premia in JGBs and EGBs. By further corollary, this may limit the extent to which other sovereign bond markets can sell off, including Treasuries, without inducing arbitrage through currency hedged carry trades.

4. **Unwinding quantitative easing:** Reports of the death of global central bank bond buying and shrinking balance sheets are highly premature. Only the Fed's balance sheet is projected to dwindle over our forecast horizon and this is information that is already known to the market through the Fed's well communicated reinvestment

Chart 14

2% US Inflation Is Already Priced



Source: Scotiabank Economics, Bloomberg.

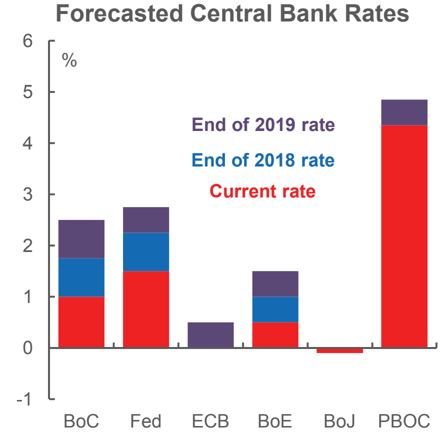
Chart 15

Over-Valued US Stock Market

Sources: Scotiabank Economics, Robert Shiller.

Chart 16

Forecasted Central Bank Rates



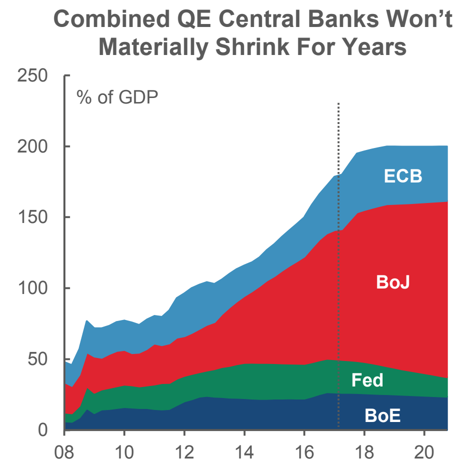
Sources: Scotiabank Economics, BoC, Fed, ECB, BoC, BoJ, CSIC.

plans (chart 17). The BoJ's reduced buying is often misinterpreted as a signal of waning policy resolve without controlling for the substitution toward an 'around 0%" nominal 10 year JGB yield target that introduces a credible threat against short sellers. I don't see that target changing at all, and not materially if at all. The ECB's buying has been reduced to the €30 billion per month pace this year until at least next September. Limits to further bond buying posed by the capital key and various limits to altering it probably mean incremental buying is coming to a close later this year or soon thereafter. A prolonged period of balance sheet reinvestment is then likely as the ECB probably follows the Fed's playbook of reducing reinvestment and then eliminating it only when policy rate normalization is well underway through a series of rate hikes. We don't expect this reinvestment change to occur until late decade at the earliest.

5. **The global saving–investment imbalance:** The imbalances that drove a glut of global savings have been cited as a factor behind low bond yields over the pre- and post-crisis era (like here). In the lead-up to the crisis, the current account surpluses of emerging markets resulted in exporting hoarded capital to countries like the US and played a major role in the excesses of US financial markets at the time, including China's buying of what turned out to be low quality mortgage instruments. Insofar as the US Treasury market's connection with the rest of the world is concerned today, said imbalances stopped improving in the immediate aftermath of the crisis and have since worsened. To fund a US current account deficit that is at its widest of the post-crisis era (chart 18), the US remains dependent upon large capital account inflows from the rest of the world. More of that inflow today, however, is derived from large capital account surpluses of other advanced economies—notably the Euro-area and particularly Germany, plus Japan. This effect should reinforce the carry trade's appetite for US financial instruments including Treasuries. A key risk, however, is that if the US turns more protectionist against China despite the decline of China's current account surpluses from 10% of its economy a decade ago to 1% today, then by corollary any damage to China's trade position translates into lower net foreign currency receipts and hence less to invest abroad including in US Treasuries. There is, however, a limit to this logic in that any selling by China would impair the value of its own US$1.25 trillion worth of Treasury holdings that have risen by about US$140 billion over the past year. Canada also has relatively wide current account deficits versus pre-crisis surpluses. Also note that the sum total of the past decade's realignment of global savings has parked over US$11 trillion in global foreign exchange reserves which is more than five times the Fed's SOMA Treasury holdings and about 70% higher than at the end of 2008. This stockpiled saving lends great market power to the nations where such savings are concentrated including China, Japan, about ten others with reserves in excess of US$200 billion and other countries with smaller balances.

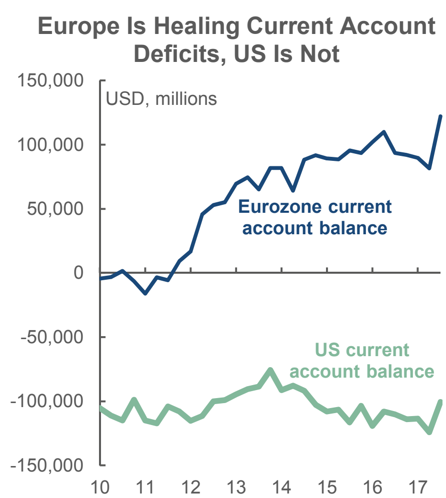
6. **Neutral policy rates:** Our estimates of the long-run potential growth rates of major advanced economies that tend to have the largest debt issuance markets has not materially changed over recent forecast updates. What we see in the US by way of tax reforms, for instance, does little to nothing positive to long-run growth. Somewhat by extension, our estimates for neutral policy rates also have not materially changed. We think both the US and Canadian neutral policy rates lie somewhere in the +/- 2.5% range. Neutral policy rate estimates plus term premia assumptions anchor the curve's pricing of potential future Fed rate policy actions.

Chart 17



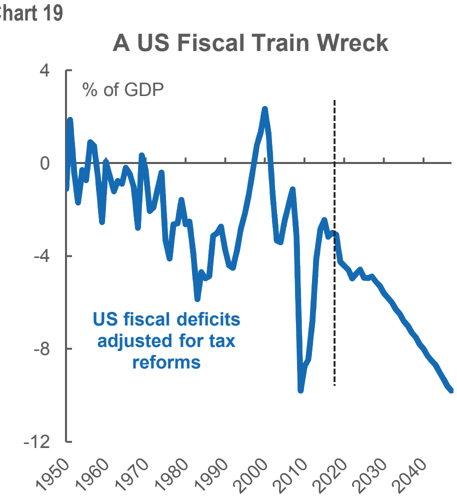
Sources: Scotiabank Economics, Haver Analytics, IMF.

Chart 18



Sources: Scotiabank Economics, BEA, ECB.

Chart 19



Sources: Scotiabank Economics, CBO.

7. **Fiscal policy:** The US was already on a path toward high and rising fiscal deficits before the introduction of limited tax reforms. Unfunded social security obligations and health care expenditures were a major part of the concern. Adding an extra US$1.5 trillion to cumulative deficits over the next decade further erodes the deficit outlook to what is shown in chart 19. The impact of deficits on bond yields is controversial and uncertain. For instance, the large deficits of the post-crisis era had little to no effect on bond yields because of other influences like safe-haven appetite and central bank policies. Most economists still subscribe to a long-run positive effect of deficits on bond yields but the estimates are all over the map. Two pre-crisis studies of the effects before other influences came to light (here and here) posited that every one percentage point rise in the deficit to GDP ratio could, over time, raise longer term bond yields by 20–60bps. If the deficit projections remain generally intact as the long-run influence of other considerations such as central bank policies abate, then the future may bring to light a very negative bond market outlook given the magnitude of the forecast deterioration in US deficits.

8. **Term premium:** Research (here) suggests US 10 year Treasury yields are about 1% lower than where they would be otherwise in the absence of the Fed's balance sheet expansion and controlling for other influences. We don't expect this term premium to be suddenly restored as the Federal Reserve eliminates reinvestment and allows its balance sheet to begin to contract later next year and rely upon many of the other points provided in this section to inform this bias.

9. **Cycle maturity:** By April, this will be the second longest expansion on record. By early next year, continued growth would make the current cycle the longest in US history. Uncertainty over whether recession lurks is likely to retain appetites for safehavens like sovereign debt of mature economies. We think this risk is nevertheless often exaggerated. Not all major variables are suggesting late cycle risks. For instance, US household debt payments as a share of income sit at their lowest in three and a half decades and nominal wage growth looks mid-cycle at best to us. In that context, aided by wealth effects and limited albeit regressive tax reforms, US consumers could well have plenty left in the tank to drive future spending growth.

10. **Pensions and life cos:** It's not all about central banks. In fact pensions were a significant source of buying over 2017H2 partly to rebalance portfolios amid equity gains. Private and public pensions own over US$2¼ trillion worth of Treasuries and our belief is that a rise in US 10s to the 3% mark would bring forward aggressive buying to lock in returns for servicing pensioners.

Table 1

Scotiabank Economics' Canada-US Yield Curve Forecast

	2017	2018				2019			
		(end of quarter, %)							
Canada	**Q4**	**Q1f**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**Q4f**
BoC Overnight Target Rate	1.00	1.25	1.50	1.50	1.75	2.00	2.25	2.25	2.50
Prime Rate	3.20	3.45	3.70	3.70	3.95	4.20	4.45	4.45	4.70
3-month T-bill	1.06	1.30	1.55	1.55	1.80	2.05	2.30	2.30	2.50
2-year Canada	1.69	1.90	2.05	2.20	2.30	2.40	2.50	2.55	2.65
5-year Canada	1.87	2.05	2.15	2.30	2.45	2.55	2.60	2.65	2.75
10-year Canada	2.05	2.20	2.30	2.45	2.60	2.65	2.70	2.75	2.85
30-year Canada	2.27	2.35	2.50	2.75	2.90	3.00	3.10	3.15	3.10
United States	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**Q4f**
Fed Funds Target Rate	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.50	2.75
Prime Rate	4.50	4.75	4.75	5.00	5.25	5.25	5.50	5.50	5.75
3-month T-bill	1.38	1.80	1.80	2.05	2.30	2.30	2.55	2.60	2.80
2-year Treasury	1.88	2.20	2.30	2.50	2.60	2.70	2.75	2.85	2.90
5-year Treasury	2.21	2.50	2.60	2.70	2.75	2.85	2.90	3.00	3.05
10-year Treasury	2.40	2.70	2.80	2.85	2.90	3.00	3.05	3.15	3.20
30-year Treasury	2.74	2.85	2.95	3.00	3.05	3.15	3.20	3.30	3.35

Sources: Scotiabank Economics, Bloomberg.