

US & Canadian Monetary Policy & Capital Markets

Inflation—or rather the apparent lack thereof and whether or not soft readings are transitory—is at the crux of the debates over the future course of US, Canadian and indeed global monetary policy direction. Both the Federal Reserve and Bank of Canada guide with considerable conviction that low and falling inflation rates are driven by transitory factors that will revert higher and align with 2% inflation objectives into 2018.

Our house forecast is more cautious than central bank guidance on balance. We project fewer hikes by the Federal Reserve than the median projection provided by FOMC officials. We also expect a hiking cycle in Canada to go only a little further over 2017–18 than to simply unwind rate cuts that were taken out as insurance against downside risks back in 2015.

BANK OF CANADA—HIKING WITH INFLATION UNDERSHOOTING?

Our forecast is for three 25bps rate increases with one hike per quarter starting in July and then hikes in October and 2018Q1. This would reverse the insurance taken out through two rate cuts in 2015 that were designed to counter downside risks following the collapse in commodity prices that began in mid-2014. It would tentatively add one more hike to reversing the earlier downside insurance to a) account for the fact that spare capacity is largely shut by the traditional output gap measure and b) to take out monetary policy insurance against upside risks to the economy in the wake of a persistently stronger-than-anticipated economy. A pure modelling approach would predict 100bps of hikes by next summer but we have shaved this somewhat through imposed judgement.

Why hike? Go [here](#) for a further explanation of our call and [here](#) for a note on why the currency poses no obstacle to raising rates around present or slightly richer values. These arguments are buttressed by the following points.

1. The BoC said it would hike—and fairly soon at that—in language that was presumably carefully chosen to be a cue to markets. Senior Deputy Governor Wilkins said in her June 12th speech that the BoC “will be assessing whether all of the considerable monetary policy stimulus presently in place is still required” and “As we work toward our interest rate decision on 12 July, we will be focusing on the data and talking to many people like you to get a better sense of what is happening on the ground.” Governor Poloz and his deputies have said that the oil shock is behind the nation and that the rate cuts of 2015 have done their work, which is taken as language signalling a need to end emergency levels of monetary policy stimulus. When given the chance to rein in the market reaction to their words, Governor Poloz passed on three separate occasions which implies that they got the reaction they intended.
2. Growth is running at a rate well above what the BoC estimates to be the economy’s noninflationary speed limit of about 1½%. It was 4.2% in Q3, 2.7% in Q4 and 3.7% in Q1 with ‘17Q2 tracking around 2½%. It has become rather difficult to keep dismissing transitory upsides to growth.
3. As a consequence, the conventional output gap has been closed off and suggests that inflation will rise into 2018 given the lagged relationship (chart 1).

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Chart 1

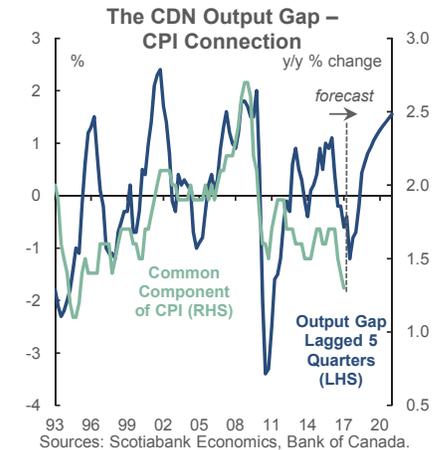


Chart 2

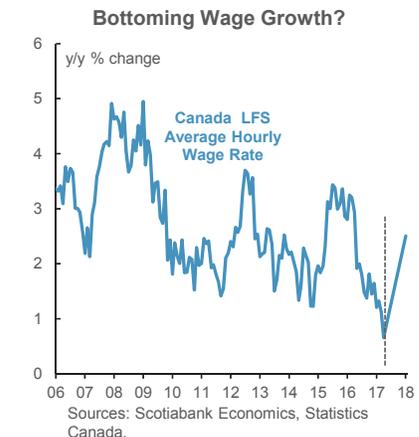


Chart 3



- Job growth has been running at a torrid pace. Since last July, Canada has created about 400,000 jobs in seasonally adjusted and annualized terms. Not since 1979 have over 400,000 jobs been created in a single year. The unemployment rate has dropped to 6.6%. Tightening labour markets, waning effects of the collapse in commodity prices and large minimum wage hikes in Ontario and Alberta should propel wage growth into 2018 (chart 2).
- Canada is not importing the shock to bond yields driven by US fiscal policy developments that the BoC acknowledged earlier in the year; indeed, the opposite has rung true as sovereign borrowing costs have fallen and eased financial conditions.
- Trade policy risks are being continuously pushed out in time. A US border tax seems unlikely, and so does a tearing up of NAFTA. Monetary policy has to assume at this point that trade policy risk will exist for years and beyond the unlikely US desire for negotiations to be completed by this Fall, and then act accordingly with information at the time.
- With consumer spending continuing to grow at a fairly rapid pace and investment perhaps joining the picture, there are limits to which one can ignore persistent upsides while waiting for greater traction on exports.

Why not hike? That too is a lengthy list and if not for altered BoC guidance it would be a fairly simple tale to tell against monetary tightening. Core inflation is subdued and continues to decline (chart 3) which extends the inability of the BoC to get inflation up to its 2% target to six consecutive years and counting. Wage growth may be bottoming but is still very low (non-existent in real terms). There also remain question marks over the durability of growth drivers. Record highs across most housing and consumer variables counsels caution to not roll over the engines of growth.

Fundamentally, the case for going slowly comes back to why core inflation is tracking lower. The output gap framework relied upon by the Bank of Canada has over-predicted core inflation over recent quarters and performed worse than average (chart 4). Each dot in that chart represents coordinates for the size of the estimated output gap and core inflation in a particular quarter dating back to the early 1990s; the blue dots highlight the recent quarterly experiences with the lowest being this year's. That output gaps don't explain it all in terms of inflation modelling is highlighted by the fact that Canada is registering a 22-year low in core inflation. That's despite closing off spare capacity and having much less spare capacity a year or two ago than existed in the depths of the 2009 recession when core inflation was persistently higher.

We therefore broaden the explanatory modelling tools. An augmented Phillips curve estimated in the Scotiabank Global Macroeconomic Model outperforms a standard Phillips curve estimation of the output gap–inflation relationship with the comparison shown in chart 5. The model adds unit labour costs, oil prices and food prices to the estimation that includes an output gap variable and the real effective exchange rate in order to account for more influences upon inflation than just spare capacity and exchange rate arguments. The model predicts that core inflation will initially stabilize around 1.2–1.3% before gradually rising to about 1.8% by the end of 2018 (chart 6). That would be progress toward the BoC's inflation mandate but continue to fall short of it over our forecast horizon.

Chart 4

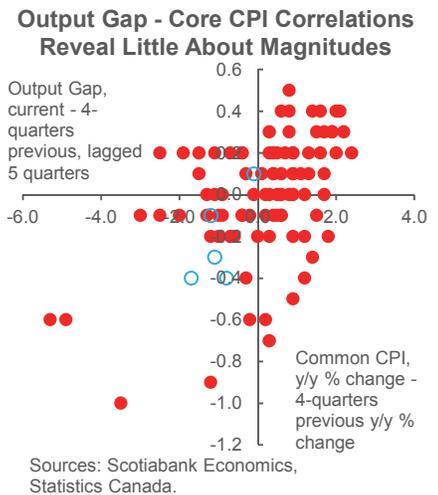


Chart 5

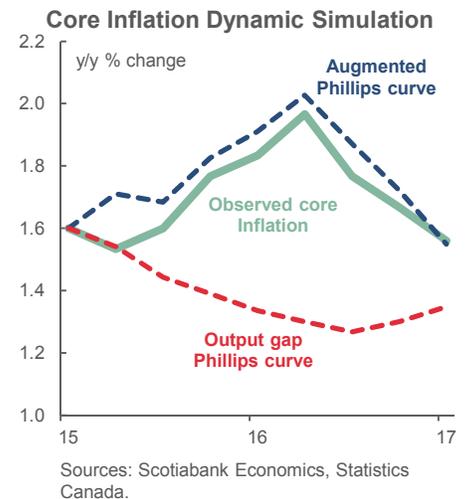
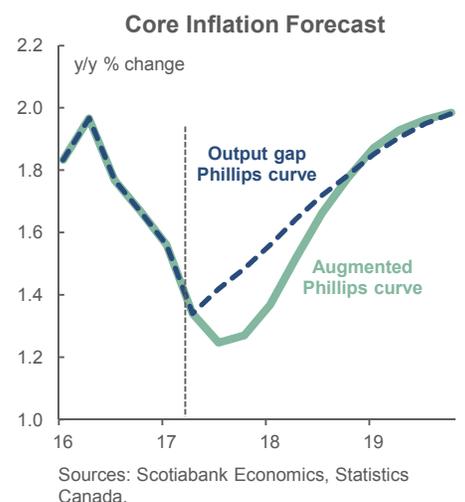


Chart 6



Because of the uncertainty surrounding inflation modelling, the persistent undershooting of the BoC's 2% target, and an augmented approach that considers other factors beyond spare capacity pressures (like grocery store "wars"), we err on the side of a very limited amount of policy tightening followed by a prolonged assessment of the after-effects.

FEDERAL RESERVE — A SLOWER EXIT PATH

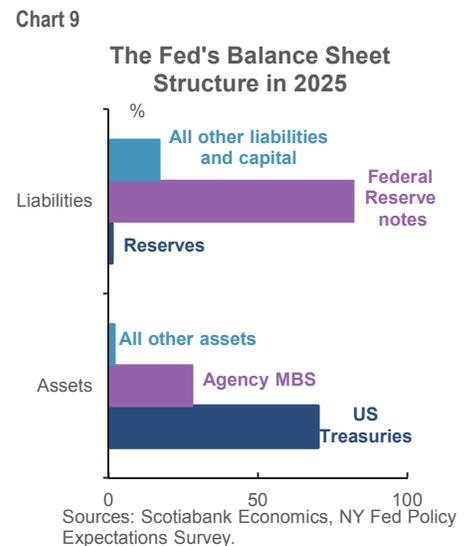
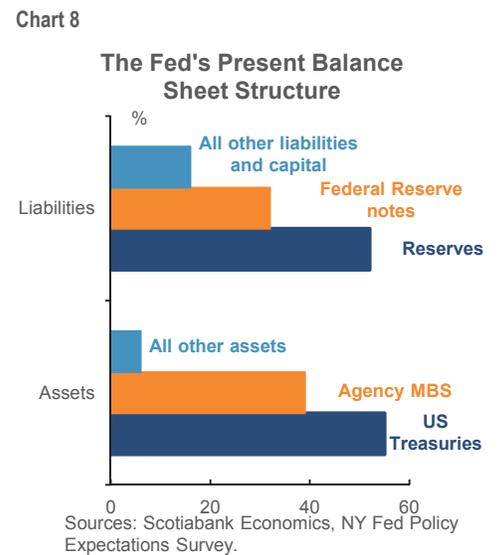
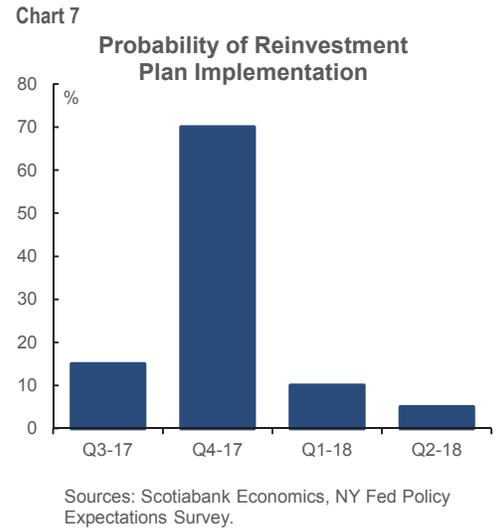
We project one more rate rise this year in December followed by two more in 2018. Our steady state assumptions for markets and growth assume that it will take until 2019 or later to achieve an estimated 2.75% nominal neutral policy rate (or "R-star") compared to the FOMC's average long-run policy rate forecast that has declined by 125bps over the past five years. That implies a cumulative 150bps of additional rate hikes spread over the next 2.5 years or longer. The FOMC is assumed to switch to rate targets from ranges once it has raised the fed funds target ceiling to 2% as the target becomes somewhat easier to enforce with further distance from the zero bound.

Unconventional policy is expected to migrate toward implementing the pre-announced initial reinvestment caps at US\$6 billion for Treasuries each month and \$4 billion for mortgage backed securities each month. Above these amounts, the Federal Reserve will continue to reinvest any securities as they roll over. The FOMC has pre-announced that these targets will be raised in quarterly increments to \$30 billion for Treasuries and \$20 billion for MBS over a one year period. We assume implementation of this plan by the December 2017 meeting (chart 7) after which a steady amount of securities will roll off the balance sheet.

While the Fed has provided minimal guidance on the long-run target for the size of the balance sheet, we forecast it to shrink to about US\$2.5 trillion (from US\$4.5 trillion at present) by 2025. By that point, we expect full balance sheet normalization to be engaged, with Fed notes outstanding (or currency in circulation) accounting for the lion's share of the liability side compared to the greater role played by bank reserves held with the Fed at present (charts 8, 9). It is assumed that currency in circulation will rise by a similar pace to nominal GDP but payments innovation may lean toward slower growth in notes issued by the Fed. Also, by that time, we expect Treasuries to become the more dominant instrument on the asset side of the balance sheet compared to the greater mixture between Treasuries and MBS at present.

The steady state set of market and growth assumptions for the next several years required to fully restore the balance sheet to more normal conditions is likely unrealistic. Instead, there is the potential for a return of a future round of quantitative easing in the context of what is already a maturing eight-year-old expansion and hence the third longest on record. The Fed guides against this—as is to be expected—but classic late cycle signs already include elevated stock markets, low unemployment and high confidence. This is why we judge risks to our balance sheet forecast to be more skewed toward a larger balance sheet than a smaller one in addition to the need for currency in circulation to rise with long-run economic growth.

Long before we get to that point, however, there is the question of the appropriateness of continuing along a tightening path in the face of uncertainty over low core inflation readings. The Fed is likely looking through a soft-patch on inflation partly because it believes the effects to be transitory but also because it believes



that heading off inflationary forces is less damaging than putting the genie back in the bottle if it falls behind. Because we're more cautious toward US inflation dynamics and the durability of stock market gains in anticipation of fiscal stimulus, we've erred on the side of a slope shift in the pace of rate hikes from 75bps in the past seven months to 75bps over the next eighteen.

Indeed, reasons for cautioning against purely looking through soft inflation include a) the transitory factors operating to the downside of late may not be so transitory (chart 10); b) there are also potentially transitory upsides to core inflation measures as shown in chart 11; and c) the lion's share of the CPI basket is exhibiting extraordinarily little pressure in either direction which is also shown in chart 11.

Nevertheless, we believe that a Phillips curve explanation of inflation through spare capacity and unemployment arguments will reassert itself in favour of gentle upward pressure upon inflation into 2018. As the US shuts spare capacity, downside risk to inflation readings should transition the other way.

YIELD CURVES

We expect to remain in a low bond yield environment throughout our forecast horizon. Mild upward pressure continues to be expected with a cumulative 75bps higher US 10 year Treasury yield projected by the end of 2018 and with 10 year Canada yields trading a half point beneath that.

Indeed, the narrowing of the negative Canadian rate differential to the US is among the more significant bond market moves of late. From about 90bps beneath US 10s, the negative spread differential in Canadian 10s has been cut almost in half. We project this rate differential to remain intact over our forecast horizon. One argument for preserving a rate differential is rooted in relatively less risk of supply pressures in Canada than the US debate over potentially easier Senate rules for deficit financed US stimulus. One argument for a narrower negative differential than previously is that vulnerable risk assets could spark a disproportionate flow into Treasuries relative to Canadas.

Ultimately we assume that higher term premia and upward pressure upon the whole term structure of interest rates in both countries will be partly driven by balance sheet unwinding at the Federal Reserve. Nevertheless, the limit to this upward pressure is likely to be the so-called R-star equilibrium rate of interest that is estimated to be 2½–3% in both countries. An ongoing carry trade out of European and Japanese debt and rising structural factors in support of demand for fixed income instruments should also moderate the magnitude of upward pressure upon the yield curves over time.

For our rate forecasts, please see the next page.

Chart 10

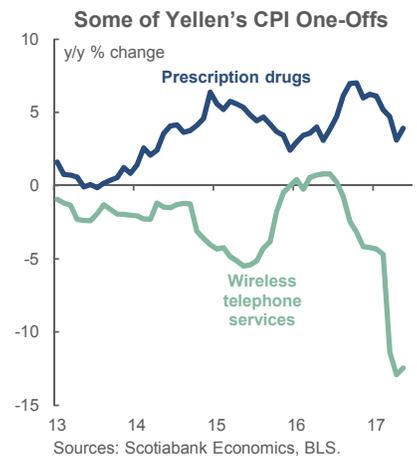


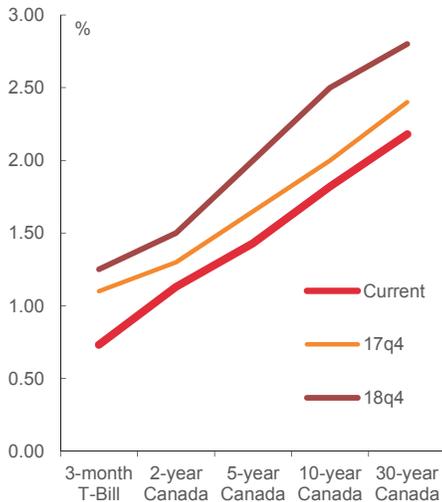
Chart 11

US Core CPI Is About Much More Than Phones And Drugs



Chart 12

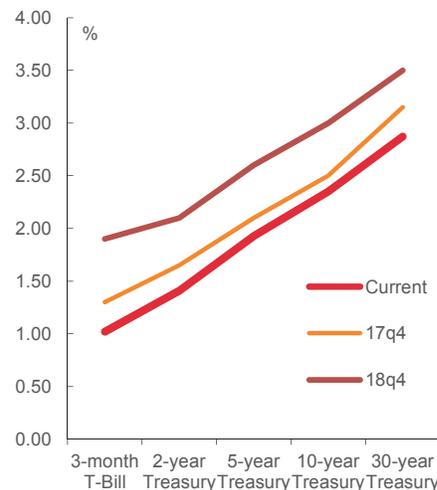
Canada Yield Curve



Sources: Scotiabank Economics, Bloomberg.

Chart 13

US Yield Curve



Sources: Scotiabank Economics, Bloomberg.

Table 1 — Scotiabank Economics' Canada-US Yield Curve Forecast

| | 2016 | | | | 2017 (end of quarter, %) | | | | 2018 | | | |
|---------------------------|------|------|------|------|-----------------------------|------|------|------|------|------|------|------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3f | Q4f | Q1f | Q2f | Q3f | Q4f |
| Canada | | | | | | | | | | | | |
| BoC Overnight Target Rate | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.75 | 1.00 | 1.25 | 1.25 | 1.25 | 1.25 |
| Prime Rate | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.95 | 3.20 | 3.45 | 3.45 | 3.45 | 3.45 |
| 3-month T-bill | 0.45 | 0.49 | 0.53 | 0.46 | 0.55 | 0.71 | 0.90 | 1.10 | 1.30 | 1.30 | 1.25 | 1.25 |
| 2-year Canada | 0.54 | 0.52 | 0.52 | 0.75 | 0.75 | 1.10 | 1.20 | 1.30 | 1.35 | 1.40 | 1.45 | 1.50 |
| 5-year Canada | 0.68 | 0.57 | 0.62 | 1.11 | 1.12 | 1.39 | 1.50 | 1.65 | 1.75 | 1.85 | 1.90 | 2.00 |
| 10-year Canada | 1.23 | 1.06 | 1.00 | 1.72 | 1.63 | 1.76 | 1.85 | 2.00 | 2.10 | 2.25 | 2.40 | 2.50 |
| 30-year Canada | 2.00 | 1.72 | 1.66 | 2.31 | 2.30 | 2.15 | 2.20 | 2.40 | 2.50 | 2.60 | 2.70 | 2.80 |
| United States | | | | | | | | | | | | |
| Fed Funds Target Rate | 0.50 | 0.50 | 0.50 | 0.75 | 1.00 | 1.25 | 1.25 | 1.50 | 1.50 | 1.75 | 1.75 | 2.00 |
| Prime Rate | 3.50 | 3.50 | 3.50 | 3.75 | 4.00 | 4.25 | 4.25 | 4.50 | 4.50 | 4.75 | 4.75 | 5.00 |
| 3-month T-bill | 0.20 | 0.26 | 0.27 | 0.50 | 0.75 | 1.01 | 1.05 | 1.30 | 1.30 | 1.55 | 1.70 | 1.90 |
| 2-year Treasury | 0.72 | 0.58 | 0.76 | 1.19 | 1.25 | 1.38 | 1.50 | 1.65 | 1.75 | 1.85 | 1.95 | 2.10 |
| 5-year Treasury | 1.20 | 1.00 | 1.15 | 1.93 | 1.92 | 1.89 | 1.95 | 2.10 | 2.25 | 2.40 | 2.55 | 2.60 |
| 10-year Treasury | 1.77 | 1.47 | 1.59 | 2.44 | 2.39 | 2.30 | 2.35 | 2.50 | 2.70 | 2.90 | 2.95 | 3.00 |
| 30-year Treasury | 2.61 | 2.28 | 2.31 | 3.07 | 3.01 | 2.83 | 2.90 | 3.15 | 3.35 | 3.40 | 3.45 | 3.50 |

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