

BMO CAPITAL MARKETS ECONOMICS

FOCUS

A weekly financial digest

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November 30, 2018

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Canadian GDP Growth Slows in H2

Oil Drops on Supply Fears

GM to Close Oshawa Plant, Among Others

Fed Chair Powell Tilts Less Hawkish

USMCA Signed...

...Focus Shifts to Trump-Xi Trade Talks

Forecast changes:

- **FOMC... 2 rate hikes in 2019 (May, September)
...down from 3**

G20-Questions

Quite often for G20 meetings, the reality simply doesn't come close to living up to the pre-session hype—this one may be different. The confab in Argentina comes at a crucial point for the global economy, with a variety of geopolitical hotspots, trade issues coming to a head, oil prices hanging in the balance, and all against the backdrop of a global economy that is quite clearly losing momentum. Here is a list of arguably the top 20 issues and questions surrounding the global economy at this critical juncture, many of which will be addressed (and even possibly answered) at this weekend's meeting:



- 1) **Will the U.S./China trade battle simmer down, or heat up?** Of all the many moving parts in the global economy and issues heading into the G20, this is the biggest. President Trump has sent—likely purposefully—mixed signals heading into his dinner meeting with President Xi, suggesting that a “deal” is near, but also questioning whether he wants to reach said deal. Best guess is that the rhetoric gets dialled down a notch or two, but this issue returns as a thorn for the market in 2019, as the differences are simply too extreme to be readily resolved. We anticipate additional U.S. tariffs on China, and an even weaker yuan next year.
- 2) **Will USMCA be safely ratified in a timely manner?** Today's early-morning signing session of the USMCA quickly answered one of the top questions for the G20 sessions. But it now turns to the issue of whether a more sceptical U.S. House will pass it in 2019. We suspect it will be passed, but likely with some high drama in the interim.
- 3) **Will the steel and aluminum tariffs be removed any time soon?** Prime Minister Trudeau pointedly raised the issue in his speech at today's signing session, highlighting what an (unnecessary) drag they are on the North American economy.
- 4) **Will OPEC cut production to support oil prices?** The official OPEC meeting isn't until next Thursday, but some have suggested that the real meeting will be on the sidelines of the G20, between Saudi Arabia and Russia. We are assuming that output will be quietly trimmed, and WTI will gradually push back above \$60 next year (from around \$50 today).
- 5) **Will Turkey isolate Saudi Arabia?** Note that after a brutal sell-off in the summer, Turkish markets and the lira have mounted a steady recovery. True, the lira is still down 28% this year, but it's up more than 30% from the August lows.
- 6) **Whither Brexit?** Crunch time has arrived for the long-running Brexit saga. It even drew Mark Carney into the fray this week. (One Conservative Brexiteer calling him a “*failed, second-tier, Canadian politician*”, who “*isn't doing a very good job*”. Which raises the question: “Yes, but how do you *really* feel about him?”). The parliamentary vote is scheduled for Dec. 11, and let's just say that the deal faces long odds. While there are a multitude of scenarios that could play out in coming weeks, the pound is leaning heavily to a hard landing of some sort; it's down more than 11% against the U.S. dollar since its spring high, and looks headed for more pressure ahead.

- 7) **Whither Italy's budget?** Moving past the rhetoric, there were glimpses of optimism on this front, as Italy sounded a slightly less fractious note. One can only hope, given that Italy's jobless rate rose to 10.6% last month amid sub-1% GDP growth over the past year.
- 8) **Will the EU slowdown morph into something bigger?** Beyond the dual distractions of Brexit and Italy, the underlying EU economy has cooled considerably. With Germany itself plagued with trade concerns, and Trump persistently threatening auto tariffs, Euro Area GDP growth braked to just a 0.7% annual rate in Q3. And this week it was reported that both Switzerland and Sweden also saw GDP dip last quarter. The softness is spreading beyond the core Euro Area.
- 9) **Is Japan stuck again?** GDP also dipped in Japan in Q3 and is now up just 0.3% y/y. The persistent threat of U.S. auto tariffs remains a key risk. Meantime, inflation remains among the lowest in the industrialized world.
- 10) **Was India's Q3 slowing a fluke?** In a sign that the cooling of growth truly is a global phenomenon, even the fastest growing major economy saw GDP slow notably last quarter (albeit to a still-hot 7.1% from 8.2%).
- 11) **Will China cool even further?** With Q3 GDP already coming in below expectations at 6.5%, and mounting concerns on the trade front, any downside surprises will raise eyebrows. And the dip in November's manufacturing PMI, smack on the key 50.0 level, won't soothe concerns.
- 12) **Amid this increasingly stormy backdrop, will the Fed soon pause?** As Michael details below, we still expect the Fed to hike again at its Dec. 19 meeting, but the outlook for 2019 has been dialled back for a variety of reasons. While the market pounced on Powell's comment this week that rates are now "*just below*" neutral, this just pushed on the open door of much lower oil prices, a fading housing sector, and weaker financial markets. Bottom line, we now see just two rate hikes next year from the Fed. And, no, this does not reflect any impact from the President's most recent complaints about the Fed: as one wag put it, Trump seems to be suffering from "*irritable Powell syndrome*".
- 13) **What does this mean for the Bank of Canada?** The BoC also has a decision in December (next Wednesday), but few expect a move at that point. The debate is on the early January decision, and we would assert that the Bank needs to see some recovery in oil prices to give it comfort in hiking. Today's soft details behind the 2.0% Q3 GDP advance were not comforting, nor the extremely unfortunate GM news earlier this week.
- 14) **Could the China slowdown weigh on the entire region?** Key G20 members that are likely to be swept into a cooldown include Australia, Korea and Indonesia, just to highlight a few. Note that, with the RBA pretty firmly locked on the sidelines, Canadian short-term interest rates look to remain above those of Australia for some time yet, a very rare occurrence.
- 15) **Will South Korea keep hiking in that environment?** For the first time in a year, the BoK hiked this week, taking its key rate up 25 bps to 1.75% (curiously right in line with Canada).

- 16) **How will the new regime in Brazil fare?** Brazilian financial markets have been a rare source of strength this year, on hopes that the new leader, Bolsonaro, will help spur the budding economic recovery, and possibly even improve U.S. relations. He takes power at the start of 2019.
- 17) **And in Mexico?** AMLO takes power on Dec. 1, and Mexican markets have been a bit on edge, looking beyond the short-lived USMCA bump. The Bank of Mexico has been one of the most aggressive rate-hikers in the world this cycle, hiking rates 500 bps since the Fed got going. A slide in the peso has lifted inflation to nearly 5% y/y, while growth is likely to cool to a Canada-like 2%.
- 18) **Will Russia be chilled again?** The latest border “incident” with Ukraine has renewed the big chill with the West yet again. This comes just as Russian equities were one of the other rare bright spots this year (along with Brazil), although the rouble has been persistently weak.
- 19) **Can Argentina stop the slide?** The host nation of the G20 meeting happens to be the member that has struggled the most recently, with the peso chopped in half this year, the economy in a deep recession (GDP was down 4.2% y/y in Q2), and inflation flaring above 45% y/y.

Bottom Line: A number of key themes that dominated 2018 are reaching a crucial stage, either at the G20 meeting itself, or within a matter of weeks. How they shake out will shape our views on 2019, but it’s increasingly clear that growth is slowing broadly and the risk is for a deeper chill next year.

And, finally, another trans-national issue (albeit a painfully parochial one for those who don’t reside in Toronto) is coming to a head this weekend...

- 20) Will William Nylander sign with the Leafs by 5 pm Saturday? 

Fed Policy: A More Cautious Rate-Hike Cadence Coming

This week’s comments by Fed Chair Powell were a **catalyst for the market to rein-in rate hike expectations for next year** (the OIS segment is currently pricing in just 1.3 moves now). Powell said policy rates “*remain just below the broad range of estimates of the level that would be neutral for the economy*”, which the market interpreted as being decidedly more dovish than his October 3rd comments (“*We may go past neutral. But we’re a long way from neutral at this point, probably*”). Interestingly, both remarks appear consistent with the latest Summary of Economic Projections, with the median forecast achieving the 3% neutral rate by the end of 2019 (which is a long way away in today’s world), and surpassing it slightly in 2020. Meanwhile, the range of neutral rate projections ran from 2.5% to 3.5%, which is just above the current 2.125% target midpoint. So, it’s debatable whether these two sets of remarks reflect an interim fundamental shift in view, but the decision to change our Fed call was not based on these comments.

Instead, this week’s reports on new and pending home sales along with the core PCE price index served as our catalyst. They confirmed two unexpected economic trends—**ebbing core PCE inflation and a much weaker housing sector**.



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Core PCE inflation slipped to 1.8% y/y in October, and is now down from July's recent high of 2.0%. And, if the shorter-term trends are any guide, it could slow further. Core PCE inflation was 1.5% annualized over the past six months and 1.1% over the past three. At this late stage of the business cycle, with real GDP growth running above potential and the economy running at full employment, this ebbing trend suggests that there is still some disinflationary slack lingering in the economy and/or the secular forces of disinflation (e.g., an aging population, technology-enabled disruption) are exerting more pressure than the cyclical forces of inflation. We judge these developments are going to **make the Fed more cautious moving forward**.

Inflation is simply headed in the wrong direction, and the Fed is not only aiming for the 2% target but would prefer to see it running a little bit above. Moreover, the down-drift in inflation is causing an up-lift in real policy rates. Taking everything to two decimal places, the 2.13% target midpoint for the fed funds rate was 11 bps in real terms when core PCE inflation peaked at 2.02% y/y in July (the fastest in more than six years). It now sits at 35 bps, as inflation has fallen to 1.78%. This is nearly equivalent to a quarter-point rate hike in real terms.

Meanwhile, the **housing sector is weakening more than expected**. Rising mortgage rates were anticipated to be a drag on activity, but they appear to be acting more like a brake. Combined new and existing home sales have fallen in six of the past seven months (and October was close to making it seven out of seven as the increase in existing sales just barely beat the decrease in new sales). Recent weakness has been regionally dispersed (not only due to hurricanes) and has occurred amid an increase in homes available for sale (not only due to lack of inventory). Pointedly, the drop in November's NAHB Housing Market Index was the second largest in its 34-year history.

Thirty-year mortgage rates have recently been hovering in the 4.80%-to-4.95% range (pushing an annual change of about 100 bps), but with household debt-to-disposable-income ratios stable at multiyear lows and debt-service ratios probing record lows, it's hard to see why housing has weakened as much as it has in the wake of deteriorating affordability (which is still more attractive than its long-run average). Apart from the lingering psychological and emotional scars from the Great Recession, the hyper-sensitive response could also reflect a larger than anticipated **impact of recent tax changes regarding limitations on mortgage interest and property tax deductibility** (see *Robert Kavcic's Thought on page 7*). Again, we judge these developments are going to make the Fed more cautious moving forward... rate hikes are turning out to be more potent for the housing sector.

Bottom Line: Our new Fed call trims next year's rate hikes from three to two, and expands the intervals between moves. After December 19th, we see rate hikes on May 1st and September 18th (compared to a March-June-December configuration before), with still one hike in 2020. This implies a peak of 3.125% vs. 3.375% before. 

Wounded Bird

Like the economy, the Canadian dollar can't win for trying. The ink was barely dry on the USMCA nine weeks ago when world and domestic oil prices made like Icarus. And, any positive vibes businesses were feeling from the accelerated depreciation allowance were quickly snuffed out by GM's dour news, especially in Ontario. The **loonie covered to below 75 cents US (\$1.33) for the first time since June**, even as expectations of Fed tightening faded almost as fast as for the Bank of Canada. The currency saw little bounce after the official signing of the USMCA by the three leaders on Friday. Its trade-weighted value is no higher today than two years ago, with or without the greenback, and it is even little changed since the end of the recession.

So **what will lift this flightless bird off the ground?** Not a big leap in commodity prices given ample supplies of most crops. Not a material improvement in the country's current account gap given expected slower U.S. growth and the recent dive in oil prices. The trade shortfall, though the smallest in nearly two years due to the earlier bounce in oil prices, remains significant at 1.8% of GDP in Q3. And, not a meaningful improvement in interest-rate spreads, as the Bank of Canada will see any signs of slower U.S. growth as an omen for exports, even if it also tempers the Fed's tightening zeal. The Bank knows that slower exports could well undercut business investment, making Canada's four-legged economic stool even wobblier given already subdued consumer spending and housing markets.

In addition, few analysts expect a further reduction in business taxes, although the Federal Government seems keen on lightening the regulatory climate to support competitiveness. **Competitiveness issues are no doubt partly to blame for the steady net outflow of foreign direct investment from Canada**, now spanning 11 of the past 12 quarters. That's not exactly a vote of confidence in the economy, notably by Canadians. A recent Fraser Institute survey of global energy industry executives found that, for the first time in twelve years, no Canadian region cracked the top ten list of attractive areas to invest in oil and gas projects.

Still, **we haven't (yet) thrown in the towel on the loonie's prospects**. If OPEC and Russia agree to major cutbacks next week; if the new U.S. Congress ratifies the USMCA (likely, but you never know); and, if the U.S. economy remains reasonably healthy despite fizzling fiscal juice (thus keeping the BoC's finger on the normalization button), then the currency should flutter to 78 cents (C\$1.28) by late 2019. Of course, if one of these things doesn't happen, all bets are off. Forget about parity with the big dollar, even reaching purchasing power parity—estimated by Statistics Canada at just below 78 cents based on a comparison of goods prices in the two countries—might be a major struggle.



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BoC Preview: Hiking Path Getting Slick

As winter descends on the country, Canadians put winter tires on their cars and winter boots on their feet in an effort not to slip on icy roads and walkways. The Bank of Canada's seemingly solid hiking path looks similarly slick, but due to the **slide in oil prices** rather than changing seasons. At the October policy meeting, the Bank and Governor Poloz sounded quite hawkish and very upbeat on the outlook with most of the uncertainty surrounding NAFTA put to rest. Much has changed since then as WTI oil prices are down \$20, and WCS is down \$15-to-\$20 from what was assumed in the October MPR. That will **no doubt hit the BoC's growth projection**, though the accelerated depreciation allowance in the Federal Fall Economic Statement should provide some offset.

There have been other troubling developments as well since October. Credit spreads have touched their widest in two years, reflecting increased angst about the outlook. While oil prices appear to be driven more by supply dynamics at the moment, it's possible the drop could be hinting at something more sinister. Emerging market stresses have ebbed a bit, but the risk from a rising US\$ remains. And, the **U.S./China trade war injects significant uncertainty** around the outlook, with Governor Poloz citing it as among the biggest concerns for the Bank.

Despite the shifting backdrop, the growth forecast likely hasn't materially weakened. Indeed, we continue to look for growth of about 2% for 2019. That's decent enough to keep the Bank on a gradual hiking path assuming no further deterioration. Underlying inflation also remains right on target, with no reason to expect a big move in either direction. That's in contrast to headline CPI, which the BoC will likely highlight as expected to fall sharply over the next couple of months due to a big decline in gasoline prices. Meantime, despite some modest improvement, household debt continues to be an important issue for the Bank, but there's nothing particularly new here.

Markets will be looking for any hints of a pause in January, with **odds of a hike currently sitting around 70%**. We look for the BoC to sound more cautious but keep the hiking door wide open, reiterating that *"higher interest rates will be warranted to achieve the inflation target"* since the output gap is closed. However, the soft Q3 GDP details and low oil prices make a January hike far from the sure thing it looked like just about a month ago. Note that while the recent GM plant closure is unfortunate, it should not have a big impact on near-term policy, but rather is partly a reflection of Canada's poor competitiveness and that neutral policy rates may be at the low end of the BoC's range. *B.A.A.R.*

U.S. Housing Dynamics Weakening

U.S. housing market indicators have been flashing weakness in recent months, and this week's declines in new and pending home sales amped up the concerns. Through the first 10 months of the year, pending sales are down a seasonally-adjusted 7%, while new sales have slumped 15%. Aside from the fact that we are later in the cycle and much of the post-crisis pent-up demand is likely exhausted, it looks like **monetary and fiscal policy have each chipped away at two major incentives to buy—affordability and taxes.**



Monetary policy and affordability: Despite the gradual mantra, the Federal Reserve has raised interest rates eight times in the past three years, and 30-year mortgage rates have risen 150 bps from their 2016 lows. That, along with higher prices, has lifted the mortgage payment as a share of family income (median vs. median) almost back to the pre-bubble range seen in the early-2000s. In other words, generationally-favourable affordability is now gone. This is not necessarily a drag, but it's no longer the incentive it once was.

Fiscal policy and taxes: This might be more overlooked, with changes pushed through in the TCJA in late-2017 dampening the incentive for home ownership. The biggest tax reform measures from a housing perspective were a lowered maximum loan size for interest deductibility, to \$750,000 from \$1 million; a capped annual deduction for state and local income and property taxes (at \$10,000); and an increase in the standard deduction (to \$24,000 per household from \$6,400) that will draw many taxfilers away from itemizing. The latter two moves could well be having a significant impact. Consider a median-income household (roughly \$60k) that pays about \$5k in state and local taxes. Previously, the interest payments on their home purchase would likely create a meaningful tax deduction, as itemizing would push them well above the standard level. Now, interest deductions in many cases will be outweighed by simply claiming the standard deduction (in this case, likely on a mortgage up to around \$500k).

As such, the 'value' of paying mortgage interest falls significantly, the after-tax cost of carrying a property goes up (while the incentive to buy versus rent falls), and the price that buyers are willing to pay therefore goes down. Indeed, the Joint Committee on Taxation estimated that the number of filers who itemize will fall from 46.5 million in 2017 to about 18 million in 2018. And, the Cleveland Fed simulated an average 6% price decline as a result, with the biggest impact, as you'd expect, in the upper-middle range of the market. Not coincidentally, the biggest decline in new home sales since the end of 2017 has been in the \$400k-to-\$750k range.

Putting it all together: If Canada's long history of mortgage rule changes is any guide, the tax changes will need time to be digested. Given where we are in the cycle, and how those changes piggyback on higher interest rates, they are likely exacerbating an already softening fundamental backdrop. We suspect that **housing could be a modest drag on growth through 2019**, and that could keep the Fed more cautious than otherwise would be the case.

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Canada

- USMCA signed
- GM to shutter Oshawa plant by end of 2019

United States

- Fed Chair Powell strikes a less hawkish tone... stocks jump
- Auto tariffs threat raised again
- President Trump cancels meeting with President Putin, but still set to meet President Xi at G20 this weekend

Japan

- Economy recovering from Q3 contraction but trade outlook murky

Europe

- U.K. PM May hits the road to sell Brexit deal... separate reports estimating economic hit of a withdrawal hurt her case
- British Parliament to hold Brexit vote on December 11th
- Italy may hint at greater fiscal flexibility after economy contracts for the first time in four years
- Real GDP in Switzerland and Sweden contracts in Q3

Other

- Waiting for Trump/Xi meeting, and Dec 6th OPEC meeting
- South Korea +25 bps to 1.75%

Good News

Current Account Deficit narrowed to \$41.4 bln a.r. (Q3)
Industrial Product Prices +0.2% (Oct.)
Raw Material Prices -2.4% (Oct.)

Real Personal Spending +0.4% (Oct.)
Personal Income +0.5% (Oct.)
Core PCE Deflator +1.8% y/y (Oct.)
Wholesale Inventories +0.7%; **Retail Inventories** +0.9% (Oct. A)
Chicago Fed National Activity Index +0.24 (Oct.)
Chicago PMI +8.0 pts to 66.4 (Nov.)
Pre-Tax Corporate Profits +10.3% y/y (Q3 P)

Retail Sales +1.2% (Oct.)
Industrial Production +2.9% (Oct. P)

Euro Area—Jobless Rate steady at 8.1% (Oct.)
Germany—Unemployment -16,000 (Nov.)—and **Jobless Rate** -0.1 ppts to record low 5.0%
France—Consumer Spending +0.8% (Oct.)
France—Jobless Rate -0.1 ppts to 8.9% (Oct.)

Brazil—Real GDP +0.8% q/q (Q3)

Bad News

Real GDP slowed to +2.0% a.r. (Q3)
Real GDP at Basic Prices -0.1% (Sep.)
SEPH Average Hourly Wages eased to +2.5% y/y (Sep.)

Goods Trade Deficit widened to \$77.2 bln (Oct. A)
New Home Sales -8.9% to 544,000 a.r. (Oct.)
S&P Case-Shiller Home Prices slowed to +5.1% y/y (Sep.)
FHFA House Prices slowed to +6.0% y/y (Sep.)
Pending Home Sales -2.6% (Oct.)
Conference Board's Consumer Confidence Index -2.2 pts to 135.7 (Nov.)
Initial Claims +10k to 234k (Nov. 24 week)

Manufacturing PMI -1.1 pts to 51.8 (Nov. P) —lowest since late 2016
Jobless Rate +0.1 ppts to 2.4% (Oct.)
Consumer Confidence -0.1 pts to 42.9 (Nov.)

Euro Area—Consumer Prices +2.0% y/y (Nov. A)—slower than expected
Euro Area—Economic Confidence -0.2 pts to 109.5 (Nov.)
Euro Area—Private Sector Credit slowed to +3.3% y/y (Oct.)
Germany—Ifo Business Climate -0.9 pts to 102.0 (Nov.); **GfK Consumer Confidence** -0.2 pts to 10.4 (Dec.)
Germany—Retail Sales -0.3% (Oct.)
France—Consumer Confidence -3 pts to 92 (Nov.)
Italy—Real GDP revised lower to -0.1% q/q (Q3)
Italy—Jobless Rate +0.3 ppts to 10.6% (Oct. P)
Italy—Consumer Confidence -1.7 pts to 114.8 (Nov.)
U.K.—GfK Consumer Confidence -3 pts to -13 (Nov.)—an 11-month low

China—Manufacturing PMI -0.2 pts to 50.0; **Non-manufacturing PMI** -0.5 pts to 53.4 (Nov.)
India—Real GDP eased to +7.1% y/y (Q3)

Indications of stronger growth and a move toward price stability are good news for the economy.

Reservations over Reserves Scarcity

Since the turn of the year, the **U.S. federal funds market has encountered recurrent tightening pressure**. Relative to the demand for these overnight loans, the supply of funds appears less abundant than before. For example, the usual sharp fall in the effective fed funds rate (EFFR) at month-end stopped happening after February and, subsequently, the EFFR started trending up within its 25-bp range (*Chart 1*). Indeed, approaching the June FOMC meeting, the EFFR was trading 7.5 bps above the midpoint of the range, meaningfully more than last year’s 3.5-bp norm and hitting multiyear extremes. This meant that the EFFR was only 5 bps, instead of 9 bps, below the interest on excess reserves (IOER), which was positioned at the top of the range.¹

The fed funds rate is still the primary policy interest rate and is expected to trade close to the midpoint. Therefore, on June 13, the FOMC responded to this pressure and lifted the IOER by only 20 bps, as it raised the fed funds target range by 25 bps. Given the 5-bp IOER-EFFR spread, this left the EFFR initially trading 2.5 bps above the midpoint and it eventually settled at 3.5 bps. However, by mid-August, the EFFR again drifted up, revisiting 7.5 bps above the midpoint by late October, where the IOER is now positioned. This is setting up **another mixed rate move on December 19 (fed funds target range +25 bps, IOER +20 bps)**, with the current zero IOER-EFFR spread likely leaving the EFFR 2.5 bps above the midpoint again. We’ll see how long it lasts this time.²

Some analysts argue that the pressure in the fed funds market might be an early indication of “reserves scarcity”—banks’ deposits at the Fed (a.k.a. reserves) becoming more constrained as the Fed reduces its balance sheet. While system-wide reserves could become relatively scarce for a day, owing to, say, calendar or seasonal considerations, it seems improbable that this could occur on a more sustained basis with reserves currently just under \$1.8 trillion. Indeed, apart from technical issues, such as Treasury issuance and corporate profit repatriation (discussed below), **we judge the pressure in the fed funds market is more a reflection of the pricing of reserves rather than a paucity of reserves, along with post-crisis structural change in the fed funds market.**

At month end, the one-day decrease in the demand for fed funds, motivated mostly by “window dressing”, still occurs. But, since the turn of the year, institutions seeking overnight investments no longer have to settle for these temporary lower returns because **higher returns have emerged in other segments of the overnight market. This reflects the increasing issuance of Treasury securities to finance a**



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Chart 1 Fed Funds Market Tightens Up

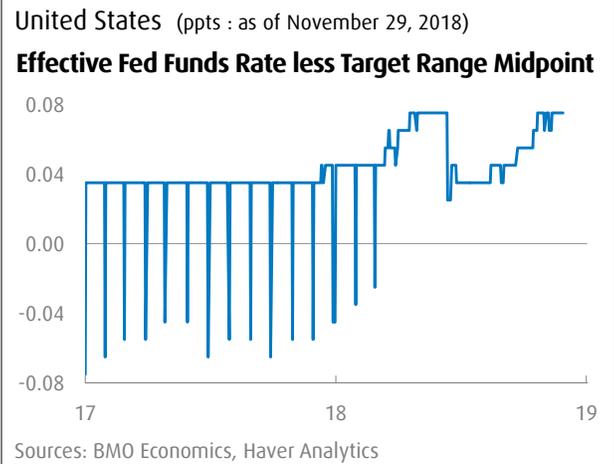
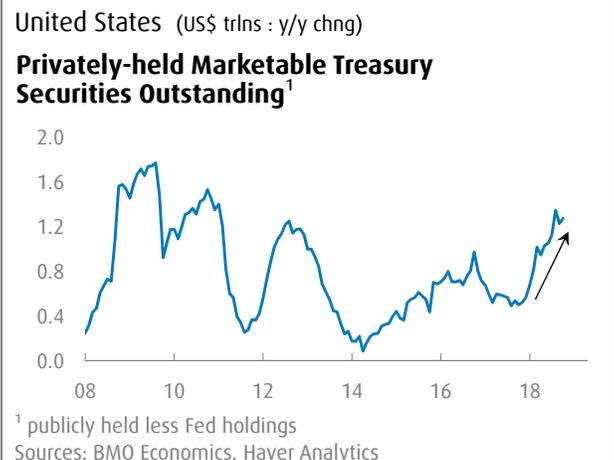


Chart 2 Uncle Sam’s Issuance Ramps Up



¹ Banks’ deposits at the Fed are also known as “reserves”. They are held to help satisfy reserve requirements, facilitate payments and settlements, and act as a store of liquidity. Since reserve requirements are largely satisfied via vault cash, mostly all reserves are “excess reserves”.

² The Minutes from the November 7-8 FOMC meeting showed that the Fed was prepared to adjust the IOER intra-meeting if need be.

ballooning budget deficit, along with maturities previously held by the Fed (*Chart 2*). Specifically, the corresponding increased demand for repo financing raised the level of repo rates relative to the EFFR, thus diverting some investment flows from the fed funds market and pressuring the EFFR. With trillion-dollar deficits persisting indefinitely (FY2019 boasts the largest annual deterioration, at \$177 billion, according to the CBO), and Fed redemptions continuing (peaking above \$270 billion next year), this pressure is going to persist.

Another factor that kicked in this year was the **repatriation of corporate profits** (owing to tax reform). This reduces the demand for the money market instruments that these offshore funds were previously invested in, and applies upward pressure on money market rates among the myriad of instruments and tenors (and it didn't help that T-bill issuance was also ramping up). While some firms were quick to act, others have been waiting for the accounting rules (the 249-page proposed rulebook came out in August and the final rules are expected by mid-2019), but this is likely becoming a fading factor.

Before the financial crisis, from 1984 until late 2008, reserves almost always ran under \$50 billion. Reserves earned zero interest, so each institution kept their deposits at the Fed to a minimum. The Fed adjusted aggregate reserves via open market operations to steer the fed funds rate (which it did with some degree of precision), with domestic banks dominating fed funds borrowing and lending.

Then along came the crisis, with three rounds of large-scale asset purchases “paid for” by creating reserves. **By the end of QE3 (October 2014), reserves had reached \$2.8 trillion** and the fed funds rate was in a 0.00%-to-0.25% target range (*Chart 3*). To prevent fed funds and other overnight interest rates from falling below the range, an overnight reverse repo facility was established, with the rate set (eventually) at the bottom of the 25-bp range. And, to assist further, the Fed began paying interest on excess reserves (IOER), with the rate set (until this June) at the top of the range. **Domestic banks essentially stopped participating in the fed funds market.** With the EFFR settling in under the IOER, lending in this space no longer made sense. Why give up a higher-yielding risk-free deposit at the Fed for a lower-yielding unsecured loan to another bank? And, flush with liquidity, most banks had no need to borrow fed funds.³

The Fed kept its balance sheet essentially unchanged after ending QE; but, by the time it began reducing assets in October 2017, reserves had already declined by more than \$640 billion. Increases in other Fed liabilities drained reserves (*Chart 4*). This reflected continued growth in Federal Reserve notes (currency), greater foreign central bank participation in the Fed's repo program (after the rules were relaxed),

Chart 3
Plenty of Reserves in Reserve

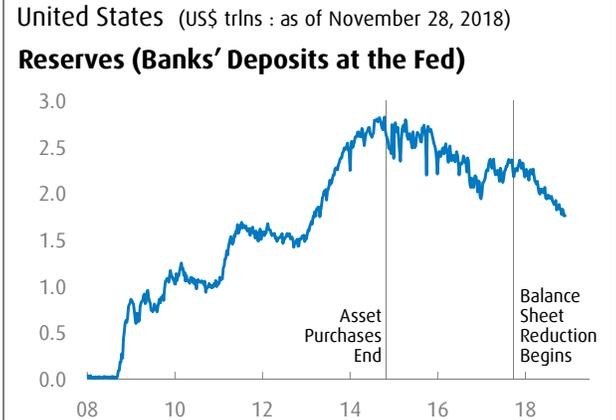
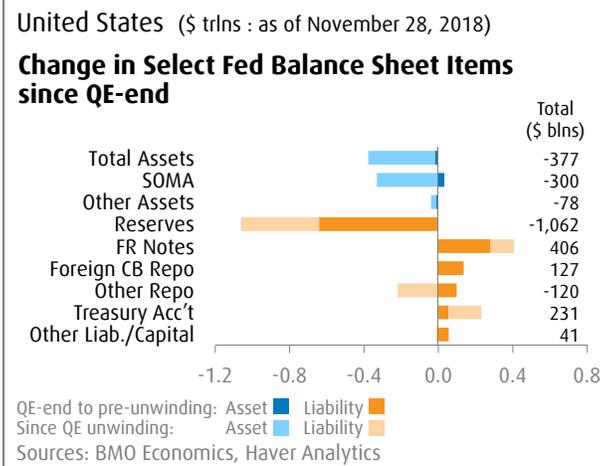


Chart 4
Wielding a Big Balance Sheet



³ Meanwhile, new FDIC insurance fees, which were now based on assets (including cash) instead of deposits, made arbitraging fed funds and IOER prohibitive for retail-deposit-taking institutions. The Federal Home Loan Banks (FHLBs), because they are ineligible to earn IOER on their deposits at the Fed, have an incentive to lend funds in the overnight market at rates below IOER. While some domestic banks still borrow fed funds when they have to, the borrowing has recently been dominated by foreign banks with accounts at the Fed (earning IOER) but not covered by the FDIC (because they don't have retail deposits). These institutions were able to arbitrage fed funds and IOER.

and more cash being held by the U.S. Treasury in its account at the Fed (partly for prudential reasons). Since October 2017, reserves have fallen a further \$420 billion. However, securities in the System Open Market Account (SOMA) decreased about \$330 billion, as currency and Treasury deposits continued to increase. Looking ahead, it's important to keep in mind that **reserves will decrease because Fed assets are falling and/or other Fed liabilities are rising** (Table 1).

Reserves have already dropped more than \$1 trillion from their peak. At some point, reserves will reach their longer-run equilibrium level and scarcity could become a factor. Importantly, fed funds market pressure, per se, given its post-crisis structural change and the current potential to ease said pressure (at least temporarily) by adjusting the IOER, is not the best barometer of reserves scarcity. Better barometers include: when large Fed balance sheet movements, which will be reflected in reserves swings, have a demonstrable impact on the overnight interest rate complex; relatively high volumes of above-IOER overnight borrowing (in both the fed funds and Eurodollar markets); and, more frequent use of daylight overdrafts (intra-day “borrowing” from the Fed to cover payments and settlements) [Potter, 2018(b)].

Although the longer-run demand for reserves is uncertain, it will be well above the pre-crisis norm.⁴ We can garner some insight from the NY Fed’s Survey of Primary Dealers. The median projection (from June 2018) for the average level of reserves during 2025 was \$660 billion, with the middle half of respondents falling into the \$550 billion-to-\$1 trillion range. For the \$660 billion median, it’s unclear whether this is projected to be a constant level or a constant share of GDP. If it is the latter, and given interim nominal economic growth, this would peg the underlying “normal” level at \$530 billion for next year (conveniently close to the 25th percentile projection). The key is that, regardless of what’s static, we could reach the longer-run equilibrium during 2021 H1. This assertion assumes the SOMA moves down according to script and the above-GDP growth pace for currency steadily converges with the economy.⁵

As such, **we could begin to see the barometers indicating rising reserves pressure as early as the end of 2020.** Interestingly, this coincides with when the FOMC is expected to have already lifted the fed funds target range to 3.25%-to-3.50% (according to their latest median projections), which is slightly above the longer-run

**Table 1
Fed’s Balance Sheet: By the Numbers**

(\$ blns : as of November 28, 2018)¹

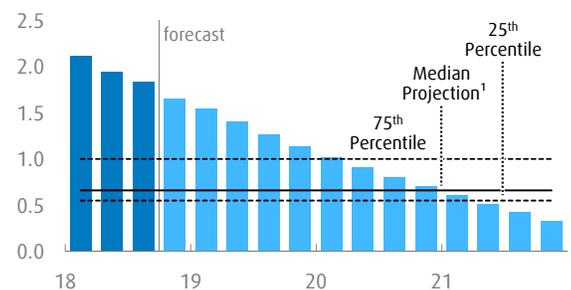
Total assets	4,097	Total liabilities and capital	4,097
Securities held outright	3,909	Federal Reserve notes	1,659
Treasuries	2,253	Reverse repos	227
MBS	1,653	Foreign official & int’l accounts	226
Agencies	2	Other (incl. ON RPP program)	2
All other assets	188	Deposits	2,167
		Depository institutions (reserves)	1,759
		Treasury	332
		Other	76
		All other liabilities (incl. capital)	44

¹ figures might not add up due to rounding
Sources: BMO Economics, Haver Analytics

**Chart 5
Normalization Road**

United States (US\$ trlns)

Reserves (Banks’ Deposits at the Fed)



¹ FRB New York, Survey of Primary Dealers (June 2018), average level of reserves in 2025
Sources: FRB New York; forecasts by BMO Economics

⁴ The demand for reserves is now being driven by a crowd of new factors including “the Liquidity Coverage Ratio (LCR), banks’ internal stress tests of their liquidity adequacy, supervisory expectations related to banks’ ability to monetize their liquidity portfolios during periods of financial stress, and the incorporation of liquidity into resolution planning. Other important factors include increased bank aversion to incurring intraday overdrafts, higher bank investor and creditor expectations for liquidity, and a lower opportunity cost of holding reserves relative to before the crisis” [Potter, 2018 (a)]. Of course, many of these factors reflect an increased demand for liquidity, but reserves are the most liquid asset; they don’t have to be sold or financed (potentially during a period of financial market stress).

⁵ We also assume that Treasury balances and foreign central bank repos remain unchanged at current levels and other repos remain unchanged at zero. All other assets, liabilities and capital are projected to keep pace with GDP.

neutral level (3.00%). While quantitative easing was designed to work after policy rates reached their zero lower bound, the unwinding of QE is working in concert with rate hikes to normalize policy. Indeed, despite the uncertainty over the optimal timing of moves and their terminus, **the Fed likely garners some degree of confidence with respect to rate hikes because the size of the balance sheet is still contributing to financial conditions being more accommodative than they otherwise would be.**

However, this influence should be fading as the Fed has been “growing into” its balance sheet and as the SOMA shrinks. For example, since QE ended, the combination of (permanently) higher currency, Treasury balances and foreign central bank repos has “neutralized” more than \$760 billion of the balance sheet, as the SOMA reduction has “negated” \$300 billion of it. The neutralized and negated influence of the Fed’s balance sheet on financial conditions is mirrored in the reduction in reserves. From this perspective, **should signs of reserves scarcity occur even earlier, this could make the Fed more cautious when raising rates.**

As reserves converge down to their longer-run equilibrium level, **we anticipate additional relative adjustments to the IOER** (in addition to December). Deposits at the Fed beat unsecured lending in terms of risk, and secured lending in terms of liquidity, so IOER should eventually drift down below both fed funds and repo rates with spreads at levels that would make banks indifferent to these three places to park overnight cash. Interestingly, the role of the IOER was to act like puppet strings to help keep overnight rates from falling. At equilibrium, it might now act like horse reins to help keep overnight rates from rising.

Finally, once reserves hit their longer-run equilibrium level, the size of **the Fed’s balance sheet will be normalized, at above \$3.2 trillion or 14% of GDP, which is more than double the pre-crisis norm.** The Fed will then start growing it again, with the pace primarily set by the demand for currency and reserves. And, it will start buying Treasury securities, again, to facilitate this growth and also replace redeeming MBS (the FOMC’s goal is to eventually hold only Treasuries), with a purchase focus probably solely on bills. Currently, the Fed owns none, when the SOMA used to hold an above-market weight (*Chart 6*). Moving to just a market weight would require more than \$500 billion in initial bill purchases.

Bottom line: Despite tightening pressure in the fed funds market, reserves in the banking system are not scarce and should remain adequate for the next couple years. If scarcity started to materialize, the Fed would probably slow the pace of, or stop, balance sheet paring. And, if policy rates are still rising at that time, slow or stop this process too.

References:

[Potter, 2018(a)] Simon Potter, “Confidence in the Implementation of U.S. Monetary Policy Normalization”, Federal Reserve Bank of New York, August 2018 <https://www.newyorkfed.org/newsevents/speeches/2018/pot180803>

[Potter, 2018(b)] Simon Potter, “U.S. Monetary Policy Normalization is Proceeding Smoothly”, Federal Reserve Bank of New York, October 2018 <https://www.newyorkfed.org/newsevents/speeches/2018/pot181026>

Chart 6

Got Bills?

United States (percent)

Treasury Bill Share



Sources: BMO Economics, Haver Analytics

Economic Forecast Summary for November 30, 2018

BMO Capital Markets Economic Research

	2018				2019				Annual		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
CANADA											
Real GDP (q/q % chng : a.r.)	1.7	2.9	2.0	1.8 ↓	2.0	1.8	1.8	1.7	3.0	2.1	2.0
Consumer Price Index (y/y % chng)	2.1	2.3	2.7	2.0	1.6	1.8	1.7	2.1	1.6	2.2	1.8
Unemployment Rate (percent)	5.8	5.9	5.9	5.8	5.7	5.7	5.6	5.6	6.3	5.9	5.6
Housing Starts (000s : a.r.)	225	219	197	201	208	207	204	200	220	210	205
Current Account Balance (\$blns : a.r.)	-69.3	-66.7	-41.4	-54.7 ↓	-57.9 ↓	-58.6 ↓	-59.5 ↓	-59.9 ↓	-60.1	-58.0 ↓	-59.0 ↓
Interest Rates (average for the quarter : %)											
Overnight Rate	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.50	0.71	1.44	2.31
3-month Treasury Bill	1.14	1.21	1.47	1.70 ↑	2.00 ↑	2.20 ↑	2.40 ↑	2.40 ↑	0.69	1.40 ↑	2.25 ↑
10-year Bond	2.24	2.28	2.28	2.40 ↓	2.40 ↓	2.50 ↓	2.60 ↓	2.70 ↓	1.78	2.30	2.55 ↓
Canada-U.S. Interest Rate Spreads (average for the quarter : bps)											
90-day	-44	-66	-61	-68 ↓	-58 ↓	-49 ↑	-42 ↑	-53 ↑	-26	-60 ↓	-50 ↑
10-year	-52	-64	-65	-69 ↓	-67 ↓	-64 ↓	-60 ↓	-57 ↓	-55	-63 ↓	-62 ↓
UNITED STATES											
Real GDP (q/q % chng : a.r.)	2.2	4.2	3.5	2.6	2.4	2.2	2.0	1.9	2.2	2.9	2.5
Consumer Price Index (y/y % chng)	2.3	2.6	2.6	2.2	1.9	2.1	2.1	2.1	2.1	2.4	2.1
Unemployment Rate (percent)	4.1	3.9	3.8	3.7	3.6	3.6	3.5	3.5	4.4	3.9	3.5
Housing Starts (mlns : a.r.)	1.32	1.26	1.22	1.24	1.27	1.28	1.28	1.29	1.21	1.26	1.28
Current Account Balance (\$blns : a.r.)	-487	-406	-530 ↓	-496 ↑	-521 ↓	-533 ↓	-545 ↓	-559 ↓	-449	-480	-540 ↓
Interest Rates (average for the quarter : %)											
Fed Funds Target Rate	1.46	1.71	1.96	2.21	2.38 ↓	2.54 ↓	2.71 ↓	2.88 ↓	1.00	1.83	2.63 ↓
3-month Treasury Bill	1.58	1.87	2.08	2.40 ↑	2.55 ↑	2.70	2.80	2.95 ↑	0.95	2.00 ↑	2.75 ↑
10-year Note	2.76	2.92	2.93	3.10 ↓	3.10 ↓	3.15 ↓	3.20 ↓	3.30 ↓	2.33	2.95	3.20 ↓
EXCHANGE RATES (average for the quarter)											
US\$/C\$	79.1	77.5	76.5	76.3	76.1	76.7	77.3	77.9	77.1	77.3	77.0
C\$/US\$	1.27	1.29	1.31	1.31	1.31	1.30	1.29	1.28	1.30	1.29	1.30
¥/US\$	108	109	112	113	113	112	111	110	112	110	111
US\$/Euro	1.23	1.19	1.16	1.14	1.13	1.11	1.15	1.20	1.13	1.18	1.15
US\$/£	1.39	1.36	1.30	1.28	1.24	1.28	1.33	1.38	1.29	1.33	1.31

Blocked areas represent BMO Capital Markets forecasts

Up and down arrows indicate changes to the forecast ↑↓

Spreads may differ due to rounding

Merchandise Trade Deficit

Thursday, 8:30 am

Oct. (e)	\$1.0 bln
Sep.	\$0.4 bln

Employment

Friday, 8:30 am

Nov. (e)	+0.1% (+15,000)
Oct.	+0.1% (+11,200)

Unemployment Rate

Nov. (e)	5.7%
Oct.	5.8%

Average Hourly Wages

Nov. (e)	+2.0% y/y
Oct.	+2.2% y/y

Manufacturing ISM (PMI)

Monday, 10:00 am

Nov. (e)	57.5
Consensus	57.6
Oct.	57.7

Fed Chair Powell testifies before the Joint Economic Committee

Wednesday, 10:15 am

Beige Book

Wednesday, 2:00 pm

Canada

Oil prices only started to plunge in October, so the trade file is expected to see just a modest impact in this report. Canada's trade deficit looks to more than double to \$1 bln in October. With oil prices plunging further in November, expect a further widening into year-end. Non-energy commodity prices were down in October as well, a fourth straight monthly drop, which will also weigh on exports (and imports to a lesser extent). After a challenging Q3, it doesn't look like Q4 is going to start on a more favourable footing.

The employment roulette wheel managed to print a reasonable gain in October, following four consecutive big moves. Looking beyond the headline volatility, the yearly trend in job growth has slowed consistently through the course of the year. Barring some blowout gains, look for further deceleration in November and December as those months were exceptionally strong last year. As we outlined last month, we've shifted our focus to the monthly percent change (rather than the number of jobs), which we expect to be +0.1%. For those who insist on a job number, it's +15,000. Our call for a decent headline gain should trim the jobless rate a tick to 5.7% (it won't take much to move down as October was 5.75%). Wage growth looks to slow a couple of ticks to 2.0% y/y, amid very difficult year-ago comparables.

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United States

Weakness in a few regional Fed surveys and the Markit PMI suggests that the ISM manufacturing index fell for a third straight month to a seven-month low of 57.5 in November, a setback after vaulting to 14-year highs of 61.3 in August. A recent pullback in new orders indicates some softening in demand, while longer vendor delivery times are causing supply-side issues. The expected level would still flag healthy growth in the sector, though momentum has faded alongside less fiscal stimulus, a strong dollar, tariff trouble and slower global demand.

This will be Jay Powell's first trip to the JEC, testimony that ranks up there with the semi-annual Monetary Policy Report to Congress in terms of importance. Markets will be looking for a repeat of this week's comment about policy rates being "*just below the broad range of estimates of the level that would be neutral for the economy*", which, when combined with the comment about the effect of rate hikes being "*uncertain*" and taking "*a year or more to be fully realized*", pointed to the end of rote rate hikes next year. Although it will be more than two months old, he may be questioned about his October 3rd statement: "*We may go past neutral. But we're a long way from neutral at this point, probably*". Did these two sets of remarks simply describe different aspects of the latest Summary of Economic Projections (full range vs. median, respectively) or did they reflect an interim fundamental shift in view?

The Minutes from the November FOMC meeting said that "*almost all participants expressed the view that another increase in the target range for the federal funds rate was likely to be warranted fairly soon if incoming information on the labor market*

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Non-manufacturing ISM (PMI)

Wednesday, 10:00 am

Nov. (e) 59.0
Consensus 59.1
 Oct. 60.3

and inflation was in line with or stronger than their current expectations”, and the Beige Book will be interpreted within this context. The previous report (as at October 24) talked of “modest to moderate” economic growth across the 12 Fed Districts, and the same language was used to describe wage growth and inflation. Moreover, “employers throughout the country continued to report tight labor markets and difficulties finding qualified workers”.

Mixed regional Fed services-sector surveys and a softer Market PMI services print point to some further slippage in the ISM non-manufacturing index to 59.0 in November. Mind you this is coming off the second highest level on record (61.6) in September and would continue to denote robust activity, led by record oil production. However, a cooling housing market in the face of waning affordability and earlier tax changes that reduce the incentive to write-off mortgage interest are applying a gentle brake on the expansion.

Goods & Services Trade Deficit

Thursday, 8:30 am

Oct. (e) \$54.9 bln
Consensus \$55.0 bln
 Sep. \$54.0 bln

The deficit in goods & services trade likely widened by \$0.9 billion to \$54.9 billion in October, which, apart from February’s \$55.0 billion print, would be the largest shortfall in exactly a decade. The combination of strong domestic demand stoked by fiscal stimulus and a strengthening U.S. dollar that is offsetting the aggregate impact of tariffs is supporting imports. Meanwhile, that same greenback strength is combining with retaliatory tariffs to erode U.S. export competitiveness. Total imports likely rose 0.3% in October, increasing for the sixth consecutive month and a cumulative 4.4%. Total exports probably rounded up to a flat reading (-0.03%), and are (essentially) down in four of the past five months for a net 0.9% gain (note that, in the previous six-month period, total exports were up 6.0%).

Nonfarm Payrolls

Friday, 8:30 am

Nov. (e) +190,000
Consensus +200,000
 Oct. +250,000

Unemployment Rate

Nov. (e) 3.7%
Consensus 3.7%
 Oct. 3.7%

Average Hourly Earnings

Nov. (e)	+0.3%	+3.1% y/y
<i>Consensus</i>	<i>+0.3%</i>	<i>+3.1% y/y</i>
Oct.	+0.2%	+3.1% y/y

Payrolls growth should remain solid at 190,000 in November while throttling back from the surprising 250,000 sprint in October. A jump in seasonal hiring (notably by parcel delivery firms) will help, as will some likely rebound from Hurricane Michael and ongoing recovery efforts from Florence. However, initial claims have hooked up slightly from four-decade lows, flagging some moderation from this year’s average payrolls pace of 212,500. The jobless rate is expected to hold at a near 49-year low of 3.7% given some likely payback from the prior month’s 600,000 surge in household jobs. Average hourly earnings could see some small lift from Amazon’s minimum wage hike. A 0.3% monthly advance would hold the yearly rate at a near nine-year high of 3.1%. However, given moderate productivity growth, that’s still insufficient to fuel inflation.

		Nov 30 ¹	Nov 23	Week Ago	4 Weeks Ago	Dec. 31, 2017
		(basis point change)				
Canadian Money Market	Call Money	1.75	1.75	0	0	75
	Prime Rate	3.95	3.95	0	0	75
U.S. Money Market	Fed Funds (effective)	2.25	2.25	0	0	75
	Prime Rate	5.25	5.25	0	0	75
3-Month Rates	Canada	1.71	1.69	2	-1	65
	United States	2.36	2.40	-3	5	99
	Japan	-0.18	-0.31	13	14	-2
	Eurozone	-0.32	-0.32	0	0	1
	United Kingdom	0.89	0.89	0	7	37
	Australia	1.95	1.94	1	2	17
2-Year Bonds	Canada	2.16	2.23	-7	-19	47
	United States	2.81	2.81	0	-10	92
10-Year Bonds	Canada	2.27	2.34	-7	-26	23
	United States	3.01	3.04	-3	-20	61
	Japan	0.09	0.09	-1	-4	4
	Germany	0.31	0.34	-3	-11	-11
	United Kingdom	1.35	1.38	-3	-15	16
	Australia	2.59	2.65	-6	-10	-4
Risk Indicators	VIX	19.0	21.5	-2.6 pts	-0.6 pts	7.9 pts
	TED Spread	37	29	8	10	5
	Inv. Grade CDS Spread ²	75	80	-5	9	26
	High Yield CDS Spread ²	387	417	-30	22	81
		(percent change)				
Currencies	US¢/C\$	75.08	75.54	-0.6	-1.6	-5.6
	C\$/US\$	1.332	1.324	—	—	—
	¥/US\$	113.60	112.96	0.6	0.4	0.8
	US\$/€	1.1327	1.1337	-0.1	-0.5	-5.6
	US\$/£	1.275	1.281	-0.5	-1.7	-5.7
	US¢/A\$	72.87	72.33	0.7	1.3	-6.7
Commodities	CRB Futures Index	180.39	179.60	0.4	-6.2	-7.0
	Oil (generic contract)	50.19	50.42	-0.5	-20.5	-16.9
	Natural Gas (generic contract)	4.57	4.36	4.9	39.2	54.8
	Gold (spot price)	1,217.76	1,223.19	-0.4	-1.2	-6.5
Equities	S&P/TSX Composite	15,143	15,011	0.9	0.2	-6.6
	S&P 500	2,741	2,633	4.1	0.6	2.5
	Nasdaq	7,299	6,939	5.2	-0.8	5.7
	Dow Jones Industrial	25,342	24,286	4.3	0.3	2.5
	Nikkei	22,351	21,647	3.3	0.5	-1.8
	Frankfurt DAX	11,278	11,193	0.8	-2.1	-12.7
	London FT100	7,003	6,953	0.7	-1.3	-8.9
	France CAC40	5,005	4,947	1.2	-1.9	-5.8
	S&P ASX 200	5,667	5,716	-0.9	-3.1	-6.6

¹ = as of 10:30 am ² = One day delay

Global Calendar December 3 – December 7

	Monday December 3	Tuesday December 4	Wednesday December 5	Thursday December 6	Friday December 7
Japan	Capital Spending Q3 (e) +8.5% y/y Q2 +12.8% y/y Manufacturing PMI Nov. F (e) 51.8 Oct. 52.9		Services PMI Nov. Oct. 52.4 Composite PMI Nov. Oct. 52.5		Household Spending Oct. (e) +1.1% y/y Sep. -1.6% y/y
	EURO AREA Manufacturing PMI Nov. F (e) 51.5 Oct. 52.0	EURO AREA Producer Price Index Oct. (e) +0.5% +4.6% y/y Sep. +0.5% +4.5% y/y	EURO AREA Services PMI Nov. F (e) 53.1 Oct. 53.7 Composite PMI Nov. F (e) 52.4 Oct. 53.1 Retail Sales Oct. (e) +0.2% +1.8% y/y Sep. unch +0.8% y/y	GERMANY Factory Orders Oct. (e) -0.5% -3.2% y/y Sep. +0.3% -2.2% y/y	EURO AREA Real GDP Q3 F (e) +0.2% +1.7% y/y Q3 P +0.2% +1.7% y/y Q2 +0.4% +2.2% y/y GERMANY Industrial Production Oct. (e) +0.3% +2.0% y/y Sep. +0.2% +0.8% y/y CDU Party Leadership Elections (Dec. 7-8)
U.K.	Manufacturing PMI Nov. (e) 51.7 Oct. 51.1	Construction PMI Nov. (e) 52.5 Oct. 53.2 BoE Gov. Carney speaks to Treasury Committee on Brexit	Services PMI Nov. (e) 52.4 Oct. 52.2 Composite PMI Nov. (e) 52.1 Oct. 52.1		FRANCE Trade Deficit Oct. (e) €6.0 bln Sep. €5.7 bln Industrial Production Oct. (e) +0.8% -1.4% y/y Sep. -1.8% -1.1% y/y Manufacturing Production Oct. (e) +0.9% -1.4% y/y Sep. -2.1% -1.0% y/y ITALY Retail Sales Oct. Sep. -0.8% -2.5% y/y Brexit Debate (Sun. Dec. 9)
	CHINA Caixin Manufacturing PMI Nov. (e) 50.1 Oct. 50.1	AUSTRALIA RBA Monetary Policy Meeting	CHINA Caixin Services PMI Nov. (e) 50.8 Oct. 50.8 Caixin Composite PMI Nov. Oct. 50.5 AUSTRALIA Real GDP Q3 (e) +0.6% +3.3% y/y Q2 +0.9% +3.4% y/y INDIA RBI Monetary Policy Meeting	CHINA Foreign Reserves^d Nov. (e) \$3.0 trln Oct. \$3.1 trln AUSTRALIA Trade Surplus Oct. (e) A\$3.0 bln Sep. A\$3.0 bln Retail Sales Oct. (e) +0.3% Sep. +0.2% OPEC OPEC meeting in Vienna	CHINA Trade Surplus^d in USD in CNY Nov. (e) \$36.0 bln n.a. Oct. \$34.0 bln 233.6 bln Foreign Direct Investment^d Nov. Oct. +7.2% y/y

^d = date approximate

North American Calendar December 3 – December 7

	Monday December 3	Tuesday December 4	Wednesday December 5	Thursday December 6	Friday December 7
Canada	9:30 am Markit Manufacturing PMI Nov. Oct. 53.9 Auto Sales^D Nov. Oct. -1.9% y/y Quebec Fiscal Update	8:30 am Labour Productivity Q3 (e) +0.2% Q2 +0.7%	10:00 am BoC Policy Announcement Conference Board Consumer Confidence Index^D Nov. Oct. 119.6	8:30 am Merchandise Trade Deficit Oct. (e) \$1.0 bln Sep. \$0.4 bln 8:35 am BoC Governor Poloz speaks in Toronto 10:00 am Ivey Purchasing Managers Index (s.a.) Nov. Oct. 61.8 2-year bond auction announcement	8:30 am Employment Nov. (e) +0.1% (+15,000) Oct. +0.1% (+11,200) 8:30 am Unemployment Rate Nov. (e) 5.7% Oct. 5.8% 8:30 am Average Hourly Wages Nov. (e) +2.0% y/y Oct. +2.2% y/y
	United States	9:45 am Markit Manufacturing PMI (Nov. F) 10:00 am Manufacturing ISM (PMI) Nov. (e) 57.5 Consensus 57.6 Oct. 57.7 10:00 am Construction Spending Oct. (e) +0.4% Consensus +0.4% Sep. unch Ward's Total Vehicle Sales^D Nov. (e) 17.2 mln a.r. Consensus 17.2 mln a.r. Oct. 17.5 mln a.r. Fed Speakers: Gov. Brainard (10:30 am); Dallas' Kaplan (1:00 pm) 11:00 am 4- & 8-week bill auction announcements 11:30 am 13- & 26-week bill auction \$75 bln	7:00 am MBA Mortgage Apps Nov. 30 Nov. 23 +5.5% 8:15 am ADP National Employment Report Nov. (e) +190,000 Consensus +200,000 Oct. +227,000 8:30 am Productivity Unit Labour Costs Q3 F (e) +2.4% a.r. +1.0% a.r. Consensus +2.3% a.r. +1.1% a.r. Q3 P +2.2% a.r. +1.2% a.r. Q2 +3.0% a.r. -1.0% a.r. 9:45 am Markit Services/Composite PMI (Nov. F) 10:00 am Quarterly Services Survey (Q3 F) 10:00 am Non-manufacturing ISM (PMI) Nov. (e) 59.0 Consensus 59.1 Oct. 60.3 10:15 am Fed Chair Powell testifies before the Joint Economic Committee 2:00 pm Beige Book Fed Speaker: Vice Chair for Supervision Quarles (8:15 pm) 11:00 am 4- & 8-week bill auction announcements 11:30 am 4- & 8-week bill auction 1:00 pm 52-week bill auction \$26 bln	National Day of Mourning for Pres. George H.W. Bush (government and markets closed) Scheduled events may be delayed 7:30 am Challenger Layoff Report Nov. Oct. +153.6% y/y 8:30 am Initial Claims Dec. 1 (e) 225k (-9k) ^c Nov. 24 234k (+10k) 8:30 am Continuing Claims Nov. 24 1,710k (+50k) 8:30 am Goods & Services Trade Deficit Oct. (e) \$54.9 bln Consensus \$55.0 bln Sep. \$54.0 bln 10:00 am Factory Orders Oct. (e) -2.0% Consensus -2.0% Sep. +0.3% 12:00 pm Flow of Funds (Q3) 6:45 pm Fed Chair Powell makes brief welcoming remarks at the Housing Assistance Council's Rural Housing Conference Fed Speaker: Atlanta's Bostic (12:15 pm) 11:00 am 13- & 26-week bill, 3- & 10 ^R -year note, 30 ^R -year bond auction announcements 11:30 am 4- & 8-week bill auction	7:30 am Nonfarm Payrolls Nov. (e) +190,000 Consensus +200,000 Oct. +250,000 8:30 am Unemployment Rate Nov. (e) 3.7% Consensus 3.7% Oct. 3.7% 8:30 am Average Hourly Earnings Nov. (e) +0.3% +3.1% y/y Consensus +0.3% +3.1% y/y Oct. +0.2% +3.1% y/y 10:00 am Wholesale Inventories Oct. F (e) +0.7% Consensus +0.7% Sep. +0.4% 10:00 am University of Michigan Consumer Sentiment Dec. P (e) 97.0 Consensus 97.0 Nov. 97.5 3:00 pm Consumer Credit Oct. (e) +\$15.0 bln Consensus +\$12.8 bln Sep. +\$10.9 bln Fed Speaker: Gov. Brainard (12:15 pm)

^c = consensus ^D = date approximate ^R = reopening

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