Global Views

October 16, 2015

Weekly commentary on economic and financial market developments

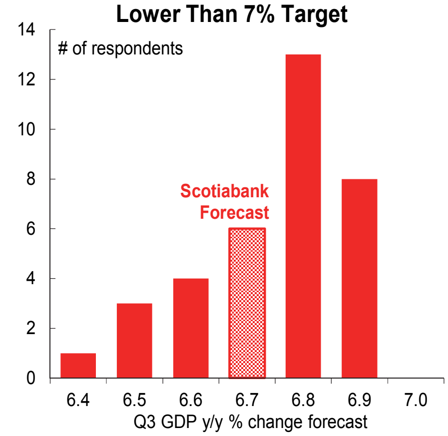
Economics

Please see the Global Forecast Update, September 30, 2015, for our latest economic, interest and exchange rate and commodity price forecasts and the Foreign Exchange Outlook, October 2015, for more detailed currency forecasts and commentary.

Forecasts & Data

This Week's Featured Chart

Chinese GDP Forecasts; Lower Than 7% Target



Source: Scotiabank Economics, Bloomberg.

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Good Luck!

- **Please see our full indicator, central bank, auction and event calendars on pp. A3-A8.**

Canada — A Tough Week To Trade Canada

There will be so much packed into next week both on the global and domestic calendars that determining sustained market reactions to any specific domestic event will be difficult. The domestic influences will include the election, a Bank of Canada meeting, and significant data risk.

Next Week's Risk Dashboard

- China's Q3 GDP
- ECB meeting
- European PMIs
- Canada's election
- Bank of Canada
- US earnings
- CDN CPI, retail sales
- US housing readings
- Fed speak
- South Korea's Q3 GDP
- Swiss election
- Carney & UK retail sales

Canada starts the week headed off to the polls in Monday's Federal election. The results will start to become available as soon as polls shut at 9:30pmET in Ontario and Quebec and 10pmET in British Columbia. **Looking for an election effect to trade? Don't hold your breath for several reasons.**

1. It will be tough to distinguish an election effect from other developments that crowd the date. China's Q3 GDP print may be more influential than local politics when it gets released into the Asian market open on Monday ahead of that evening's Canadian election results. So might be the Bank of Canada's policy statement, MPR and forecasts on Wednesday. Canada also releases CPI later in the week, and an added focus will be upon the ECB meeting on Thursday followed by PMI growth signals the next day.

2. Polls have incorrectly called many global, Canadian and provincial elections, so the outcome remains uncertain to us. Vote splitting, turn-out on voting day, and strategic voting are among the reasons not to translate polls that measure the share of the popular vote into seat outcomes in a first-past-the-post system.

3. It's hardly impossible that Canada may face a protracted period of uncertainty in various minority government scenarios.

4. Historically, there is little to no credible evidence that markets react to federal elections or do so in ways that are anticipated. Attempts to point to such effects typically don't control for other factors like the ones cited above — or like the global crisis and its impact on stocks.

5. Of course, a clear distinction this time around concerns the differences in party platforms along the lines of surplus/deficit projections, funding requirements, the mixture of taxation and spending policies, resource sector policies like carbon taxes, and trade agreements. This is juxtaposed against the backdrop of an economy that was weak over the first half of this year but that we feel is gradually on the mend now.

6. Nevertheless, as Moody's recently put it, "A minority government of any party could have difficulty in implementing its platform." Thus, hasty market judgements may be unlikely.

7. Over time, adjustments to fiscal, monetary, and regulatory policies and the interplay between them will drive domestic influences upon Canadian markets in addition to global effects.

8. Moody's has already weighed in with a comment that the election is "unlikely to change Federal creditworthiness." Thus they are signalling no immediate ratings implications regardless of the outcome, although global bond markets have been little influenced by rating agencies over the years.

Wednesday's Bank of Canada meeting will also bring out a fresh round of forecasts in the full Monetary Policy Report as well as a press conference held by Governor Poloz and his Senior Deputy Governor Carolyn Wilkins. A summary of our key expectations includes the following:

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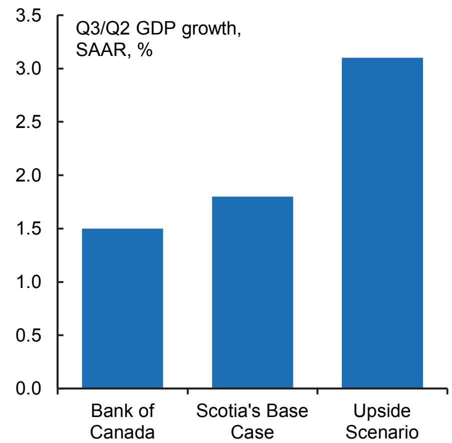
- **No policy rate change.** Consensus is nearly unanimous on this count, and the option index swap market is priced for a rate hold. Governor Poloz is generally loath to provide forward rate guidance and retains flexibility to alter the BoC's policy stance as meeting-by-meeting circumstances evolve.

- **A possible upgrade to near-term GDP growth projections.** With two-thirds of the current quarter's monthly trade figures in the bag, merchandise export volumes are tracking about 10% higher at an annualized rate and import volumes are relatively flatter. If that sticks and service sector exports continue to be relatively stable from month to month, then with all else equal across other components, this would mean Q3 GDP growth tracking of around 3% or double the BoC's July forecast (chart 1).

Chart 1

Canadian GDP Sensitivities To Trade



Source: Scotiabank Economics.

In keeping with the greater balance exhibited in the September statement, I would expect the BoC to remain cautious in several key ways while signalling somewhat greater encouragement. Recall the highlights from the September statement:

- "While the overall export picture is still uncertain, the latest data confirm that exchange rate-sensitive exports are regaining momentum." This has moderated but remains true of the recent trend.

- "Risks to the outlook for inflation remain within the zone for which the current stance of monetary policy is appropriate."

- It will be interesting to get an updated assessment of how the BoC views international risks. In September, it flagged "increasing uncertainty about growth prospects for China" which has probably not lessened, but "a firm recovery in the United States" which may be more uncertain now.

Retail sales and CPI may also factor into the market tone for the Canadian dollar and rates on Thursday and Friday, respectively. A drop in gasoline prices, a high base effect stemming from prior gains, and little change in vehicle sales point to a soft print for retail sales. That said, we always have low conviction into the report because so little of it is observable in advance. As for CPI, a drop in gasoline prices will be a contributing factor to possibly further downside from the prior month's 1.3% y/y reading, but core prices could well remain more resilient and that will be the greater focal point. By early next year, both headline and core CPI inflation are likely to be around the BoC's 2% inflation target.

Earnings releases may incrementally impact certain market sectors on top of macro influences. Thirteen firms listed on the TSX release earnings including names such as CP, Rogers, Shaw, Thomson Reuters, and some resource plays. Also note a 10 year auction occurs on Thursday.

Asia — No More "Man-Made" Than Anyone Else's

China's economy may dominate global market considerations from the start of the week onward. The country releases Q3 GDP growth into the Asian market open on Monday. Obviously markets trade on it, but the aftermath will bring out the usual cacophony of critics who say the figures are not to be trusted. Frankly, I figure that every country's GDP figures are best interpreted with a pile of salt. Witness the evolution of US quarterly growth prints from the initial to fully revised estimates that can deviate several percentage points from one another.

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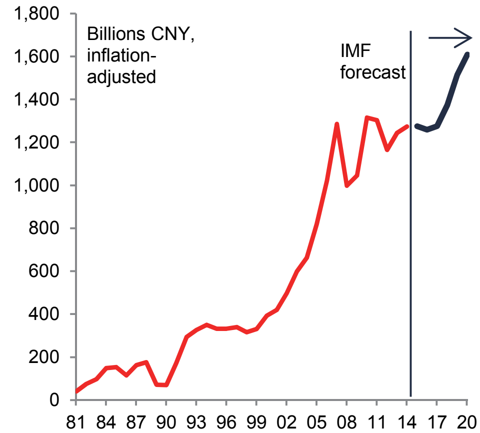
Regardless, **consensus thinks China's Q3 growth print slowed to 6.8% y/y** from 7% in each of the first two quarters of this year. The highest estimate is 6.9% and the lowest is 6.4% at the time of writing. Recall that ahead of the 7% print for Q2, consensus had also incorrectly thought growth slowed to 6.8%.

Chart 2

Level Change In Chinese GDP



Source: Scotiabank Economics, Bloomberg, IMF

Chart 2 offers a different way of looking at the China-slowing thesis. Yes growth has slowed over the years in percentage terms. But applying slowing percentages to a much bigger economy over time yields what we've shown in the chart: the year-ago level difference in inflation adjusted GDP is still rising at a rapid pace. That much larger economies grow slower than much smaller economies is a telltale sign of economic development. Viewed through the lens of chart 2, China's economy is not really slowing at all. Contrast that to the US economy, however, where percentage growth rates and year-ago level changes in real GDP have both slowed.

The minority view that China is already in recession by contrast to what the GDP growth figures suggest weights outdated metrics that are not necessarily any better than GDP. When he was Party Secretary in Liaoning Province, current Chinese Premier Li Keqiang — an economist by training — remarked to US Ambassador Clark Randt that GDP is "man-made" and "for reference only." He went on to state that when tracking developments in Liaoning he preferred using electricity consumption, rail cargo volumes and aggregate financing (go here for the transcript). It is important to make several qualifying points that cast doubt on Premier Li's remarks.

- First, Premier Li delivered his remarks on March 15th 2007. A great deal has happened since then including the fact that back then manufacturing was still almost 50% of China's economy and more important than services; today services are more important and account for about half the economy; Premier Li's metrics do not do well at measuring the service sector.

- Second, Premier Li was speaking from the vantage point of the most industrial province in China where heavy and light industry dominate this region in the northeast on the Yellow Sea and at the top of the Korean Peninsula. Services are under represented in this region.

- Third, Premier Li did not advise how to weight these readings into one composite measure. Many have tried and they all merit even greater suspicion than GDP. For instance, the Bloomberg "Keqiang index" recorded growth of 27% y/y by late 2009 after the prior year's slow down to 2.4% growth and is presently registering just 3% growth. A large economy like China's does not swing so abruptly.

China also releases retail sales and industrial production on Monday, and then property prices on Thursday.

A companion report, of sorts, is **South Korea's estimate for Q3 GDP growth** that arrives later in the week. One theory is that South Korea's slowing trajectory from about 4% y/y growth in early 2014 to about half that pace today is a truer reflection of what is going on in China's economy than Chinese GDP itself and by virtue of the economic ties between the two countries. A counter argument is that South Korea has been influenced by its own array of unique shocks such as the Middle East Respiratory Syndrome (MERS) crisis that gripped the country. A further slow down in South Korea would indirectly add to China concerns. Bloomberg's consensus is not expecting this and anticipates that the South Korean economy expanded by 2.3% y/y in Q3 but with most estimates in the 2-2.5% range.

Japanese trade figures for September and RBA minutes to the October 5th meeting round out the releases.

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United States — Focus On Earnings

Domestic influences on the US market tone will be largely confined to a heavy week for earnings releases.

No fewer than 119 companies listed on the S&P release earnings over the next week. Some of the key names will include Morgan Stanley, IBM, BoNYM, Yahoo, Boeing, Coca-Cola, GM, eBay, Dow, Eli Lilly, 3M, McDonald's, Capital One, Microsoft, Amazon.com, AT&T, P&G and State Street.

Data risk will be small and confined to housing indicators with housing starts (Tuesday) and existing home sales (Thursday) ahead. Homes newly placed under construction are trending around the highest level since 2007 but remain a far cry from the 2005-06 peak of the cycle. There is a similar story to be told in the resale market, although resale volumes recently retreated from a high point. It's not clear how to read underlying momentum in housing markets at this point given wicked volatility in weekly mortgage purchase applications; after a massive surge two weeks ago, applications plunged to their lowest since March. This was probably driven by new mortgage disclosure rules that brought forward application processing in anticipation of the changes, only to watch applications plunge thereafter and leaving the two-week trend that smoothes out such influences roughly unchanged. We'll need more application tallies before drawing any further inferences.

Three Fed speakers, and probably Richard Fisher, will take to the stage. Not that it will help much since top **Fed officials are delivering widely disparate assessments of Fed hike prospects this year.** Governor Powell speaks at a conference on bond market liquidity and on Tuesday. He has not expressed an opinion on lift-off timing following the September FOMC or nonfarm payrolls report. His colleagues within the upper ranks have been unusually divided of late. Governor Tarullo — for whom regulatory policy is a specialty in keeping with his background as a lawyer — just remarked that "Right now, my expectation is, given where I think the economy would go, I wouldn't expect it would be appropriate to raise rates. I want to hasten to add that this is an outlook that changes based on developments in the economy." Governor Brainard — an economist by training more known for monetary policy views — remarked "Risk management considerations counsel a stance of waiting to see if the risks to the outlook diminish." This pits both Governors against Chair Yellen, Vice Chair Fischer, and NY Fed President Dudley (who speaks at the same conference as Powell) given that each of them appear to be standing by guidance for a rate hike before year-end. The call is not simple nor something to be trivialized with just a few data points in the way. The Fed will monitor some key domestic data into year-end (like jobs, inflation prints, and GDP), watch market developments, and be mindful toward international developments before reaching a decision. At the moment, we characterize our forecast for a hike in December as accompanied by fairly soft conviction that trades off uncertainty against forecast noise and volatility.

Europe — ECB Growing More Concerned About Weak Inflation?

Europe could well impact the global market tone next week and mostly toward the end of the week when the European Central Bank meets on Thursday and then growth sentiment readings hit the tapes the next day.

The focus in the ECB meeting is going to be on a richer inflation dialogue that picks up where it left off at the meeting on September 3rd. Recall that the minutes to that meeting emphasized downside risks to inflation and growth: "inflation was now expected to pick up more slowly than previously expected...and there were downside risks to the September 2015 ECB staff projections for inflation." At that meeting there was cautious optimism that core inflation was more resilient than headline: *"underlying inflation, was rising over the projection horizon and had largely developed in line with earlier expectations"* and that *"compared with the turn of the year, the risk of broad-based deflation pressures was low and had decreased".*

The issue at hand is whether ECB officials are now growing more uneasy about this latter argument. Core inflation across the Eurozone slipped a touch further to 0.9% y/y in the September estimate. More recently, the Euro softened quite a bit in the wake of remarks by ECB Governing Council member Ewald

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Nowotny who remarked that “One has to say that we’re clearly missing our target. The main fault for this is the dramatic fall in the price of oil and raw materials. One has to say that these are elements the central bank cannot influence, but also core inflation rates are clearly below our target.” As our Paris-based inflation strategist and ECB-watcher Frédéric Prêtet notes, Nowotny is known to be a dove and therefore this dents the surprise factor somewhat. Nevertheless, M. Prêtet also notes that Nowotny’s focus on core inflation is significant as it carries on the dialogue from the ECB meeting on September 3rd and ahead of next week’s meeting.

Was the slowdown in Germany’s purchasing managers’ index for the manufacturing sector in September a flash in the pan for a volatile reading and hence a temporary softening from what had been the strongest reading in seventeen months, or a harbinger of worse things to come? Friday’s PMI readings for European economies will help to inform market perspectives on near-term Eurozone growth risks.

Swiss voters go the polls on Sunday in that country’s parliamentary elections. The most contentious issue is immigration and this has given rise to the anti-immigration Swiss People’s Party’s improved standing in the polls at 28% support. In that sense, this could be a bellwether gauge of electoral risks across other parts of Europe. In some respects, Switzerland’s grappling with immigration issues should be put in context. With a population of about 8.1 million as at the end of 2014, September’s rate of immigration — if annualized over the course of the full year — would grow the country’s population by 0.4% y/y. The country’s annual population growth, however, is only about double that rate. For a profile of Switzerland’s foreign-born population go here.

An address by Bank of England Governor Mark Carney on Tuesday and UK retail sales for the month of September on Thursday could be influential to gilts and pound sterling. Carney speaks at a hearing of the Treasury Committee on the so-called “Bank of England Bill” which is aimed at increasing transparency and accountability at the central bank. The BoE will fall under the oversight of the National Audit Office and cut the number of Monetary Policy Committee meetings to eight from twelve. Retail sales growth is expected to accelerate.

Italian industrial orders and retail sales for the month of August will marginally inform Q3 GDP growth tracking. Bloomberg’s consensus thinks the economy grew by 1% y/y in Q3.

CHINA MACRO COMMENT

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Headline Chinese Import Data Is Overstating Domestic Weakness

- **Chinese import data is being skewed by price effects and are thus overstating the drop in domestic demand.**

This week's release of China's September trade data appeared very weak: exports improved slightly to -3.7% y/y but imports collapsed to -20% y/y. The release prompted renewed global growth concerns as the steep decline in imports was taken to imply even weaker than expected domestic demand in China. However, while it's clear that Chinese trade activity is decelerating, we would caution that **the expression of Chinese imports in *value terms* overstates this weakness.**

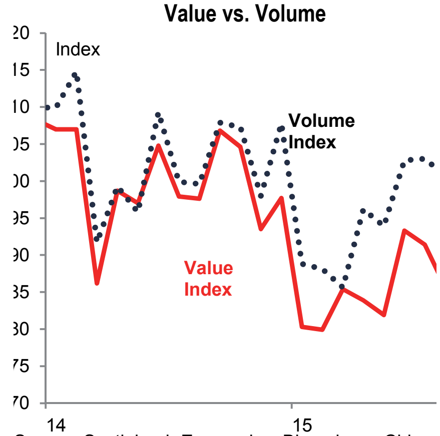
Unlike many globally relevant economies, China does not release headline total import, export or trade surplus data in real terms — they are only released in nominal terms. That makes it more difficult to parcel out the effect of falling prices and/or currency changes from the decline in the volume of trade, the latter of which would be a better indicator of underlying demand. We do, however, have access to two key pieces of information:

First, the China Customs General Administration does release aggregate import volume and value ***indices***, with a lag to headline trade figures of about one month (chart 1). From 2012-2014, the value and volume indices tracked each other almost perfectly. However, beginning in 2015, volumes began decoupling from the value index. By June, Chinese import volumes were rising on a y/y basis while the value of imports was still declining. We've made the point before (see here, p. 11) that **commodities demand was more robust than implied by values**, but the total volume index implies that demand for *aggregate* imports in China is more stable than values suggest.

Second, we also have access to the individual value of and volume of key import components, with some components released immediately and some released with a longer lag. In particular, we can gauge the m/m change in key *commodity* values and volumes, the most important being crude oil and iron ore (chart 2 and 3). Again, the volume and value of these key commodities tends to track fairly closely until end 2014 when Brent Oil and Iron Ore prices began declining. As of September, China's volume imports of crude oil were up +8.8% YTD y/y, whereas the value of crude oil had fallen by -41% YTD y/y. Iron ore imports exhibit a similar trend with volumes flat YTD y/y, but the value down -42% YTD y/y. **The implication is that commodity-exporting countries, like Australia, may be hurting more from the drop in commodity prices than they are from lost Chinese demand.**

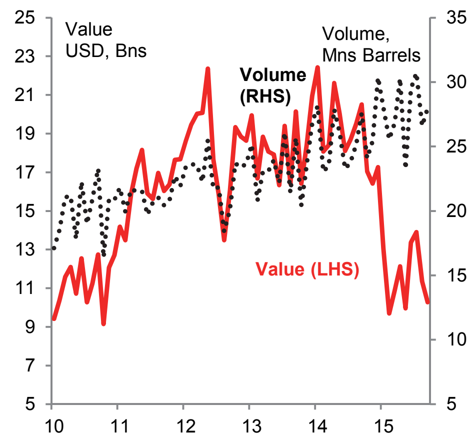
Also note that, because there is a large spread between real and nominal imports but virtually no spread between real and nominal *exports* (both are down about 15% YTD y/y), our expectation is that China's *real* trade surplus is more muted than the nominal USD value implies. For most intents and purposes, it is the nominal surplus that is more relevant, namely when it comes to offsetting capital outflows. However, our expectation is that it may be overstating China's external position this year.

Chart 1: Chinese Import Indices: Value vs. Volume



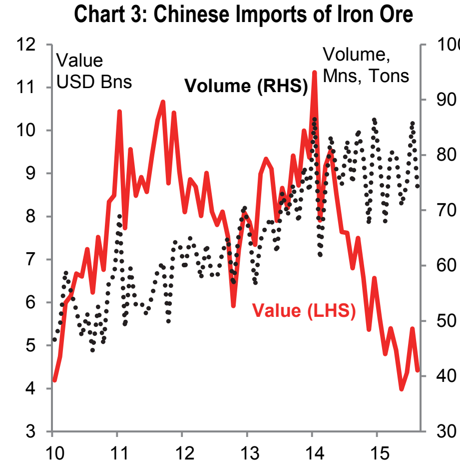
Source: Scotiabank Economics, Bloomberg, China Customs General Administration

Chart 2: Chinese Imports of Crude Oil



Source: Scotiabank Economics, Bloomberg

Chart 3: Chinese Imports of Iron Ore



Source: Scotiabank Economics, Bloomberg

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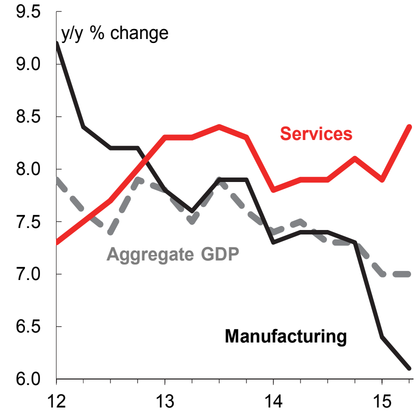
China Slowdown — Shifting Regional Trade Patterns

- **The shift in China's economic make-up coupled with slower growth momentum has material effects on its largest trading partners in the region.**

The Chinese economy will continue to be pressured by an industrial sector that suffers from substantial overcapacity. In contrast, the service sector is proving more resilient and increasing its contribution to economic growth. The service sector is now expanding faster than the manufacturing sector (8.3% y/y vs. 6.1% in Q2). This shift will have varying effects across the Asia-Pacific region amid slowing Chinese momentum.

Chart 1

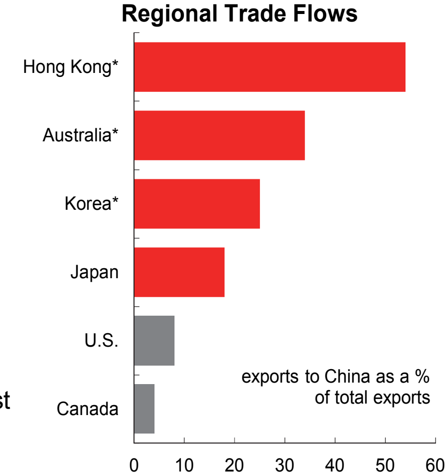
China's Real GDP Services Lead, Manufacturing Lags



Source: Bloomberg, Scotiabank Economics.

China is **Australia's** largest trading partner, representing 23% of all Australian imports and exports, and while weak commodity demand is a drag on growth, services exports are picking up sharply to help offset the decline. However, economic growth in Australia dipped to 2% y/y in the second quarter of this year, the slowest pace since 2013, owing to declines in export and mining activity. Decelerating growth and reduced government investment in China has pared demand for iron ore and coal, commodities that account for around a third of Australia's exports. Education and travel exports generated over A$30bn last year — growing 14% and 9% year-to-date respectively — and are well positioned to gain further alongside a rapidly expanding Chinese middle class. In 2014, Chinese students represented over 30% of international enrolments, double the amount from a decade ago, while tourist arrivals from China increased 18% y/y to over a million, with expenditures totaling A$6.7bn. The service sector currently accounts for around 65% of Australian output, and will likely gain a greater share as trade flows shift away from the resource sector.

Chart 2 China Dominates Regional Trade Flows



* Largest share.
Source: Bloomberg, Scotiabank Economics

In addition to the adverse effects brought on by slowing Chinese growth, exporters in **Taiwan, Korea, and Japan** face challenges related to increased competition from domestic producers in China. As Chinese producers continue to move up the value chain on the back of steady technological advancement, exporters in each of these countries will continue to face competition from lower-cost Chinese substitutes. In Japan, over one-fifth of total exports consist of electrical machinery and auto parts, both of which experienced declines amounting to roughly 9% and 15% year-to-date, respectively. Similarly, Korean exports of electrical machinery make up almost a quarter of total exports and have experienced a gain of 1% year-to-date, slowing significantly over the past two years. Exports that are higher up the value chain, such as electronic integrated circuits, posted less of a slowdown, recording gains of 5.4% year-to-date. A similar story is true for Taiwan.

Among China's major trading partners, **Hong Kong** is most directly exposed to a slowdown in Chinese imports. Accordingly, the country's external sector will feel the impact of China's weaker performance. Nevertheless, services make up over 90% of domestic exports (total exports minus re-exports), with travel (37.2%), transport (29.8%), and financial services (15.7%) accounting for the bulk of Hong Kong's trade activity. Travel exports have experienced consistent double-digit annual gains on the back of an increased number of tourists from China, while a pick-up in financial services exports will likely materialize as China's capital account gradually opens and financial integration with Hong Kong continues to deepen.

The advancement of trade deals, such as the Trans-Pacific Partnership, will provide an opportunity for countries in the Asia-Pacific region to further integrate into global supply chains and diversify their export markets for both goods and services, serving as a buffer against further Chinese deceleration.

AUTOS

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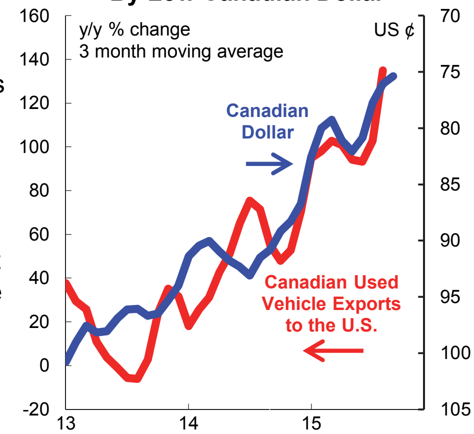
Used Car Prices Gain Momentum Across North America

- **Surging exports buoy demand in Canada.**

Used car prices in Canada and the United States began to soften a year ago alongside a rising supply of vehicles coming off-lease, but the decline has proven to be short-lived. Prices have resumed their upward trajectory in both countries, as sales of pre-owned vehicles have outperformed the advance in new car and light truck purchases due to improving affordability. In Canada, used car demand and prices are also being buoyed by surging exports to the United States due to the sharp depreciation of the Canadian dollar.

Chart 1

Used Vehicle Exports Buoyed By Low Canadian Dollar



Source: Statistics Canada, Scotiabank Economics.

Even with used car prices rising year-over-year in recent months, vehicle affordability is at the highest level on record in Canada, and remains close to the 2008 peak in the United States. We estimate that a typical Canadian family now has to work only 8.1 weeks to purchase a used vehicle, compared with an average of 9.5 weeks over the past decade and more than 13 weeks at the turn of the millennium.

Surveys of traffic at new and used vehicle dealerships offer the most timely insight into the pre-owned market, even though these distribution channels account for only two-thirds of overall sales — the remainder consisting mostly of private sales. According to these surveys, sales of pre-owned models have posted a double-digit gain in Canada this year — the best performance in nearly a decade — with the advance accelerating to more than 20% y/y in recent months. Sales at used vehicle dealerships in Quebec and British Columbia are leading the way, soaring in excess of 30% y/y during the summer. As a result, we estimate that full-year Canadian purchases of pre-owned models will exceed the previous record of 3 million units set in 2011. The trend is similar in the United States, with used vehicle sales on track to approach the peak of 44 million units set in 2005.

Many of the vehicles sold at Canadian automobile dealerships are not remaining in Canada, but are exported to the United States and other nations. Data from Statistics Canada indicate that exports of used vehicles to the U.S. began to soar once the currency fell below the 90 cents(US) threshold. Volumes continue to accelerate, with exports doubling through the first half of 2015 and surging 155% y/y in July/August as the Canadian dollar approached 76 cents(US) — the lowest level in more than a decade. Exports destined to the United States totalled nearly 23,000 units through August, up from cumulative cross-border shipments of 19,400 for the three years ending in 2012, and a full-year total of 15,600 for all of 2014. Interestingly, while the United States has accounted for virtually all of the growth in Canadian used vehicle exports this year, cross-border shipments are geographically diversified, with other jurisdictions representing nearly double the volume destined to the United States. As a result, used vehicle exports (excluding pickup trucks) are on target to approach 100,000 units this year, up from an average of 69,000 per annum since 2010. Historically, shipments to Africa and the Middle East have loomed large. Prior to the latest export surge to the United States, Nigeria was the largest market for pre-owned Canadian vehicles.

The increase in cross-border shipments has been broad-based, with exports climbing in every province this year. However, Ontario dominates exports to the United States. According to trade data from Statistics Canada, more than 80% of all pre-owned models shipped from Canada to the United States cross the 49th parallel at the Ontario border. This likely reflects the proximity of major U.S. cities to Canada's largest province. However, it is striking that the flow of used vehicles from Ontario to the United States represents nearly two and a half times the province's share of the Canadian vehicle fleet. British Columbia is the second-largest source of vehicles destined to the United States, even though its vehicle fleet is much smaller than that of Quebec or the Prairies.

U.S. MONETARY POLICY

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Is U.S. Monetary Policy Already Too Tight?

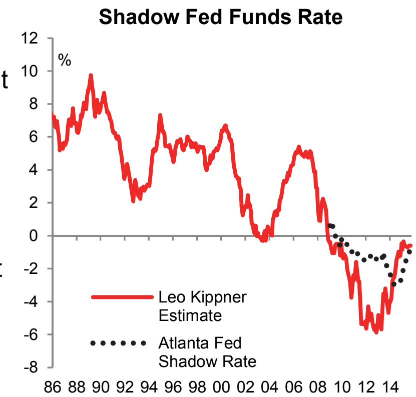
- **The so-called 'shadow' fed funds rate has already increased by a lot.**

The Fed has already hiked by at least a couple of hundred basis points and you didn't even get the memo.

Well not exactly, but now that your attention has been secured, the issue of translating changes in unconventional monetary policy into the equivalent amount of hikes to the main conventional policy variable which is the Federal Reserve's target fed funds rate is intriguing.

It's called the **shadow Fed funds rate** and while the concept has been around for a few years now, it's not exactly in the mainstream of policy discussions. A forum where it might have been an ideal chance to mention this concept would have been a recent dialogue at the Brookings Institution between John Taylor — architect of the Taylor Rule — and NY Fed President William Dudley — on the appropriate framework for setting interest rates, but it wasn't. It has been referenced by other Fed officials over time such as St. Louis Fed President James Bullard. It is the cumulative brain child of several economists including the father of modern derivatives pricing Fischer Black whose enormous contributions were cut short by his death at 57. Black devised an approach to calculating a shadow nominal yield curve when short rates are at the lower zero bound. This work was built upon by an economist at the RBNZ named Leo Krippner, and later at the Atlanta Federal Reserve that updates its shadow rate estimate monthly. **The aim is to use forward rates across the term structure to infer the equivalent amount of Fed rate hikes to ending QE and through changes in forward guidance among other unconventional tools** that have lessened in importance since the depths of the crisis. In essence, **the shadow rate attempts to distil into one transparent measure the stance of combined conventional and unconventional monetary policies.**

Chart 1



Source: Scotiabank Economics, Federal Reserve Bank of Atalnta, RBNZ

The accompanying chart depicts the two estimates for said shadow rate. Exploring the reasons for why they differ is beyond the scope of this article. Instead we summarize some key takeaways:

1. Prior to the crisis there was no difference between the shadow rate and conventional Fed funds target rate because unconventional policy was not in use.

2. The conventional target rate may have nevertheless signalled overly tight monetary policy leading into the crisis against the fairly widespread — albeit exaggerated at a minimum — opinion in the markets that the Greenspan Fed caused the crisis through overly lax monetary policy. This interpretation could lend support to fans of secular stagnation who are of the view that it was long in the works before the crisis.

3. Both measures suggest that monetary policy in the US has sharply tightened over recent years. Krippner's measure suggests this has been the case for about the past three years and the shadow rate has risen by about 500bps, whereas the Atlanta Fed's measure suggests this has been the case for about the past year and their shadow rate has risen by about 200bps.

4. If true, then there should be a very different debate on US monetary policy than when to raise the nominal fed funds target rate. This tightened stance may explain USD strength since the middle of last year.

5. There are many cautions surrounding this alternative policy measure not least of which is that it ignores spillover effects from global monetary policy measures. **Treat it as input, not gospel.**

More information is available here including links to other resources that provide different estimates. One of these is to Bullard's presentation on the topic in 2012 (here) though it is important to put his slides in the 2012 context.

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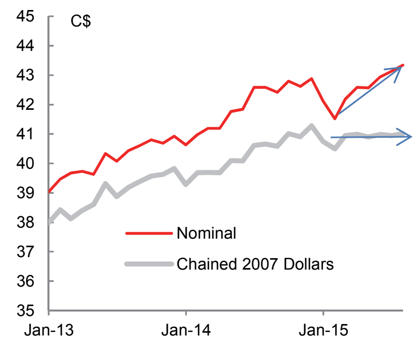
Key Data Preview

CANADA

CPI figures for September should show a modestly negative seasonally unadjusted print on headline for September of -0.1% m/m as energy prices fell quite dramatically in September. Figures from Bloomberg showed a 7.2% m/m print on retail gasoline prices, which averaged C$1.05/litre in September down from C$1.13/litre in August. Seasonally unadjusted food prices also tend to fall in September (-0.8% m/m on average over the past four years), so headline CPI has a number of factors that should keep it low. Seasonally unadjusted core CPI, however, is another matter as clothing and footwear prices, which are extremely seasonal, tend to rise by large amounts in September. In fact, the month-on-month changes have averaged close to 3% m/m over the past four Septembers. Recreation, reading, and education prices also tend to rise in September, albeit by more modest amounts on the order of a few tenths of a percentage point. On net, we're looking for core CPI to rise 0.3% m/m leaving it at 2.2% y/y with some upside potential.

We usually have low conviction when forecasting **retail sales** given a paucity of advance indicators. A solid 0.5% m/m gain in July, little change in vehicle sales during August, and lower gasoline prices suggest a soft retail sales print. That said, it's worth pointing out that while we have decent coincident indicators for sales at auto dealers (auto sales) and sales at gasoline stations (gasoline prices), these both omit important pieces of the picture. Auto sales omit auto prices as well as sales of auto parts and services other than new cars and can therefore often be highly misleading with respect to what actually happens to the dollar value of sales at auto dealers, while just using gasoline prices to forecast sales at service stations omits what might have happened to the volume of gasoline sales, and revenues from services and convenience stores embedded within stations. Base effects also point to a likelihood of some softening of retail sales as the past three months have seen retail sales grow at a solid nominal pace of +1.8% (7.5% annualized). Of course there is the added issue that we have no tracking abilities for the majority of the overall report. The big question mark pertains to retail sales volumes, which have essentially been flat over the same period (see chart).

Canada Retail Sales



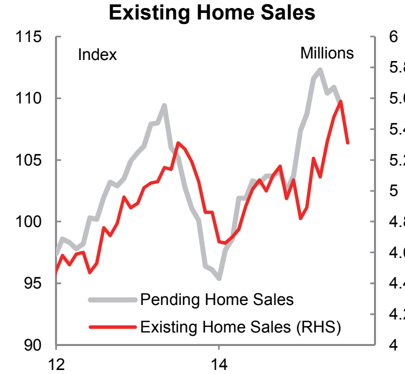
Source: Scotiabank Economics, Statistics Canada

UNITED STATES

Housing starts likely increased in September, and we're anticipating a modest increase in starts to 1.175m annualized after starts experienced two months of slippage in July and August, albeit from very high levels in June, when starts hit a new post-crisis high of 1.21m at an annualized rate. One reason that we are bullish on the short- and medium-term housing construction outlook is the level of permits being issued. Permit issuance surged in June, and picked up again in August after slipping a bit in July. The large quantity of permits in the system implies that builders are gearing up for more sales, and consumers are buying as indicated by the 552k annualized pace of new home sales in August.

Existing home sales should also pick up some speed in September, and we're anticipating a 5.35m annualized print. Mortgage purchase applications were solid throughout the summer, with the mortgage purchase application index up by 4.7% q/q in Q3 vs Q2 against a backdrop of improving employment and rising wages. If there is a reason for the outlook not to be altogether rosy, it is that pending home sales have been slipping modestly since May, although the index remains elevated by recent standards (see chart).

Pending Home Sales & Existing Home Sales



Source: Bloomberg, Scotiabank Economics

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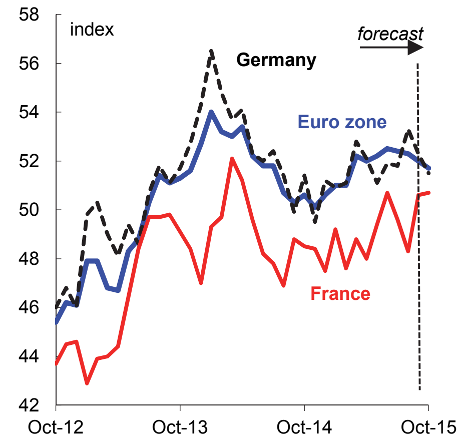
EUROPE

On October 23rd, preliminary PMI data for October will be released in the euro zone, Germany, and France. The euro zone composite PMI is expected to edge slightly lower to 53.4 in October from 53.6 in September on the back of a decline in the manufacturing PMI, which is forecast to come in at 51.7 from 52.0 in the prior month. This largely reflects the sharp drop in the German manufacturing PMI from 52.3 to 51.5, with sentiment dampened by the Volkswagen crisis. Some offset, however, will likely come from gains in France and Italy, where manufacturers should continue to benefit from the lower euro.

European Manufacturing PMIs

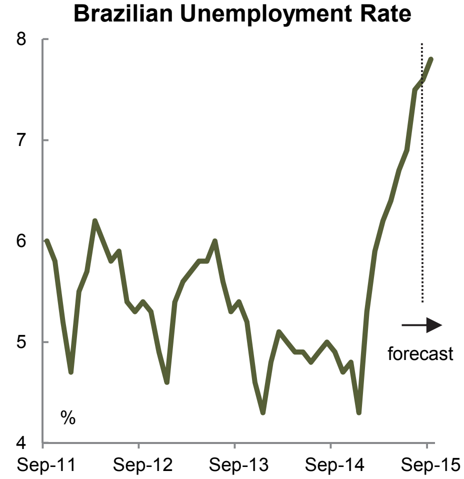


Source: Scotiabank Economics, Markit.

LATIN AMERICA

Brazilian unemployment figures for the month of September will be released on October 22nd. We expect the jobless rate to reflect further deterioration in Brazilian employment opportunities, likely coming in around 7.8%, up from 7.6% in August and a recent low of 4.3% in December 2014. August's 7.6% unemployment rate was the highest since early 2010. The labour force participation rate has remained relatively unchanged and continues to hover around 56%. Long-term unemployment (1-2 years) ticked down slightly in August to 12.5% of the total unemployed from 12.8% in July, but remains elevated year-over-year (11.2% in August 2014). More concerning, however, is the 7 to 11 month unemployed figures, which ticked up to 13% from 10% in July and may spell future increases in the long-term unemployment portion over the coming months.

Brazilian Unemployment Rate

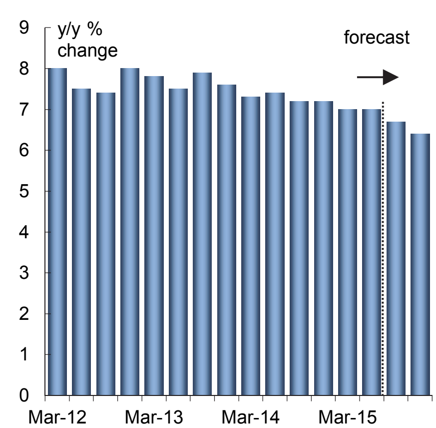


Source: Scotiabank Economics, Bloomberg.

ASIA

China will release third quarter GDP data on October 18th (EST). Our activity proxy for China's economic momentum indicates that real GDP expanded by 6.7% y/y — slightly short of the official target of "around 7%" for 2015 — continuing its gradual deceleration trend; real GDP grew by 7.0% y/y in the first half of 2015. China's industrial activity continues to slow and contribute less to economic expansion, while the economy is becoming more services-oriented. Indeed, the industrial sector (41.6% of the economy) grew by 6.2% y/y in the first half of 2015, significantly slower than the services sector (50.4% of the economy) momentum of 8.2% y/y. We estimate that Chinese real GDP growth will average 6.8% this year and decelerate further to 6.4% in 2016.

China Real GDP Growth



Source: Bloomberg, Scotiabank Economics.

Key Indicators for the week of October 19 – 23

North America

Country	Date	Time	Indicator	Period	BNS	Consensus	Latest
US	10/19	10:00	NAHB Housing Market Index	Oct	--	62.0	62.0
CA	10/20	08:30	Wholesale Trade (m/m)	Aug	--	--	0.0
US	10/20	08:30	Building Permits (000s a.r.)	Sep	--	1169	1170
US	10/20	08:30	Housing Starts (000s a.r.)	Sep	1175	1147	1126
US	10/20	08:30	Housing Starts (m/m)	Sep	--	1.9	-3.0
US	10/21	07:00	MBA Mortgage Applications (w/w)	OCT 16	--	--	-27.6
MX	10/21	09:00	Retail Sales (INEGI) (y/y)	Aug	--	4.8	5.8
CA	10/21	10:00	**BoC Interest Rate Announcement (%)**	**Oct 21**	**0.50**	**0.50**	**0.50**
CA	10/22	08:30	Retail Sales (m/m)	Aug	0.3	--	0.5
CA	10/22	08:30	Retail Sales ex. Autos (m/m)	Aug	0.0	--	0.0
US	10/22	08:30	Initial Jobless Claims (000s)	OCT 17	275	265	255
US	10/22	08:30	Continuing Claims (000s)	OCT 10	2395	2190	2158
MX	10/22	09:00	Bi-Weekly Core CPI (% change)	Oct 15	--	0.2	0.1
MX	10/22	09:00	Bi-Weekly CPI (% change)	Oct 15	--	0.5	0.0
US	10/22	10:00	Existing Home Sales (mn a.r.)	Sep	5.4	5.4	5.3
US	10/22	10:00	Existing Home Sales (m/m)	Sep	--	0.9	-4.8
US	10/22	10:00	Leading Indicators (m/m)	Sep	--	0.0	0.1
CA	10/23	08:30	CPI, All items (m/m)	Sep	-0.1	--	0.0
CA	10/23	08:30	CPI, All items (y/y)	Sep	1.1	--	1.3
CA	10/23	08:30	Core X8 CPI (m/m)	Sep	0.3	--	0.2
CA	10/23	08:30	Core X8 CPI (y/y)	Sep	2.2	--	2.1
CA	10/23	08:30	CPI, All items (index)	Sep	--	--	127.3
CA	10/23	08:30	CPI SA, All items (m/m)	Sep	--	--	0.0
CA	10/23	08:30	Core CPI SA, All items (m/m)	Sep	--	--	0.1
MX	10/23	09:00	Unemployment Rate (%)	Sep	--	4.7	4.7

Europe

Country	Date	Time	Indicator	Period	BNS	Consensus	Latest
GE	10/20	02:00	Producer Prices (m/m)	Sep	--	-0.2	-0.5
EC	10/20	04:00	Current Account (€ bn)	Aug	--	--	22.6
IT	10/20	04:30	Current Account (€ mn)	Aug	--	--	6647.3
UK	10/21	04:30	PSNB ex. Interventions (£ bn)	Sep	--	10.1	12.1
UK	10/21	04:30	Public Finances (PSNCR) (£ bn)	Sep	--	--	-0.2
UK	10/21	04:30	Public Sector Net Borrowing (£ bn)	Sep	--	9.6	11.3
TU	10/21	07:00	**Benchmark Repo Rate (%)**	**Oct 21**	**7.50**	**7.50**	**7.50**
UK	10/22	04:30	Retail Sales ex. Auto Fuel (m/m)	Sep	--	0.4	0.1
UK	10/22	04:30	Retail Sales with Auto Fuel (m/m)	Sep	--	0.4	0.2
EC	10/22	07:45	**ECB Main Refinancing Rate (%)**	**Oct 22**	**0.05**	**0.05**	**0.05**
EC	10/22	10:00	Consumer Confidence	Oct A	-7.2	-7.4	-7.1
FR	10/23	03:00	Manufacturing PMI	Oct P	--	50.2	50.6
FR	10/23	03:00	Services PMI	Oct P	--	51.7	51.9
SP	10/23	03:00	Unemployment Rate (%)	3Q	--	21.9	22.4
GE	10/23	03:30	Manufacturing PMI	Oct P	51.5	51.7	52.3
GE	10/23	03:30	Services PMI	Oct P	53.9	53.9	54.1
EC	10/23	04:00	Composite PMI	Oct P	53.4	53.4	53.6
EC	10/23	04:00	Manufacturing PMI	Oct P	51.7	51.7	52.0
EC	10/23	04:00	Services PMI	Oct P	53.5	53.5	53.7

Forecasts at time of publication.
Source: Bloomberg, Scotiabank Economics.

Key Indicators for the week of October 19 – 23

Asia Pacific

Country	Date	Time	Indicator	Period	BNS	Consensus	Latest
CH	10/18	22:00	Fixed Asset Investment YTD (y/y)	Sep	--	10.8	10.9
CH	10/18	22:00	Industrial Production (y/y)	Sep	--	6.0	6.1
CH	10/18	22:00	Real GDP (y/y)	3Q	6.7	6.8	7.0
CH	10/18	22:00	Retail Sales (y/y)	Sep	--	10.8	10.8
HK	OCT 18-19		Composite Interest Rate (%)	Sep	--	--	0.26
PH	OCT 18-19		Balance of Payments (US$ mn)	Sep	--	--	-450.0
HK	10/19	04:30	Unemployment Rate (%)	Sep	--	3.3	3.3
SK	10/19	17:00	PPI (y/y)	Sep	--	--	-4.4
JN	10/20	01:30	Nationwide Department Store Sales (y/y)	Sep	--	--	2.7
JN	10/20	02:00	Machine Tool Orders (y/y)	Sep F	--	--	-19.1
TA	10/20	04:00	Export Orders (y/y)	Sep	--	--	-8.3
AU	10/20	19:00	Conference Board Leading Index (%)	Aug	--	--	0.3
JN	10/20	19:50	Merchandise Trade Balance (¥ bn)	Sep	--	87.0	-569.4
JN	10/20	19:50	Adjusted Merchandise Trade Balance (¥ bn)	Sep	--	-63.4	-358.8
JN	10/20	19:50	Merchandise Trade Exports (y/y)	Sep	--	3.6	3.1
JN	10/20	19:50	Merchandise Trade Imports (y/y)	Sep	--	-11.7	-3.1
JN	10/21	00:30	All Industry Activity Index (m/m)	Aug	--	-0.2	0.2
JN	10/21	01:00	Supermarket Sales (y/y)	Sep	--	--	2.0
NZ	10/21	17:00	ANZ Job Ads (m/m)	Sep	--	--	-1.7
TA	10/21	20:30	Unemployment Rate (%)	Sep	--	--	3.7
MA	OCT 21-22		Foreign Reserves (US$ bn)	Oct 15	--	--	93.3
HK	10/22	04:30	CPI (y/y)	Sep	1.4	2.4	2.4
SK	10/22	19:00	GDP (y/y)	3Q P	2.5	2.0	2.2
JN	10/22	21:35	Markit/JMMA Manufacturing PMI	Oct P	--	50.5	51.0
JN	10/23	01:00	Coincident Index CI	Aug F	--	--	112.5
JN	10/23	01:00	Leading Index CI	Aug F	--	--	103.5
JN	10/23	01:00	New Composite Leading Economic Index	Aug F	--	--	103.5
SI	10/23	01:00	CPI (y/y)	Sep	-0.7	-0.7	-0.8
TA	10/23	04:00	Commercial Sales (y/y)	Sep	--	-4.0	-2.9
TA	10/23	04:00	Industrial Production (y/y)	Sep	--	-4.8	-5.5
MA	10/23		CPI (y/y)	Sep	--	2.9	3.1

Latin America

Country	Date	Time	Indicator	Period	BNS	Consensus	Latest
CO	10/20	17:00	Trade Balance (US$ mn)	Aug	--	-1440.0	-1757.7
BZ	10/21		**SELIC Target Rate (%)**	**Oct 21**	**14.25**	**14.25**	**14.25**
BZ	10/22	07:00	Unemployment Rate (%)	Sep	7.8	7.8	7.6
BZ	10/23	08:30	Current Account (US$ mn)	Sep	--	-1959	-2487

Forecasts at time of publication.
Source: Bloomberg, Scotiabank Economics.

Global Auctions for the week of October 19 – 23

North America

Country	Date	Time	Event
US	10/19	11:30	U.S. to Sell USD26 Bln 3-Month Bills
US	10/19	11:30	U.S. to Sell USD26 Bln 6-Month Bills
CA	10/20	10:30	Canada to Sell CAD1.8 Bln 182-Day Bills
CA	10/20	10:30	Canada to Sell CAD4.65 Bln 98-Day Bills
CA	10/20	10:30	Canada to Sell CAD1.8 Bln 364-Day Bills
US	10/20	11:30	U.S. to Sell 4-Week Bills
CA	10/22	12:00	Canada to Sell CAD2.5 Bln 1.5% 2026 Bonds
US	10/22	13:00	U.S. to Sell USD7 Bln 30-Year TIPS

Europe

Country	Date	Time	Event
NO	10/19	05:05	Norway to Sell NOK4 Bln 147-Day Bills
BE	10/19	05:30	Belgium to Sell 4.25% 2022 Bonds
BE	10/19	05:30	Belgium to Sell 0.8% 2025 Bonds
BE	10/19	05:30	Belgium to Sell 3.75% 2045 Bonds
NE	10/19	05:30	Netherlands to Sell Up to EUR2 Bln 70-Day Bills
NE	10/19	05:30	Netherlands to Sell Up to EUR2 Bln 162-Day Bills
BE	10/19	06:00	Belgium Bond Auction
FR	10/19	08:50	France to Sell Up to EUR3.8 Bln 84-Day Bills
FR	10/19	08:50	France to Sell Up to EUR1.8 Bln 147-Day Bills
FR	10/19	08:50	France to Sell Up to EUR2 Bln 357-Day Bills
SP	10/20	04:30	Spain to Sell Bills
EC	10/20	05:10	ECB Main Refinancing Operation Result
SZ	10/20	05:15	Switzerland to Sell 91-Day Bills
EC	10/20	06:30	ESM to Sell Up to EUR2.5 Bln 182-Day Bills
DE	10/21	04:30	Denmark to Sell Bonds
SW	10/21	05:03	Sweden to Sell SEK10 Bln 89-Day Bills
GE	10/21	05:30	Germany to Sell EUR4 Bln 0% 2017 Bonds
PO	10/21	05:30	Portugal to Sell 91-Day Bills
PO	10/21	05:30	Portugal to Sell 336-Day Bills
SW	10/22	05:03	Sweden to Sell SEK500 Mln 4% I/L 2020 Bonds
SW	10/22	05:03	Sweden to Sell SEK500 Mln 1% I/L 2025 Bonds
IC	10/23	06:00	Iceland to Sell Bonds
UK	10/23	06:00	U.K. to Sell GBP250 Mln 28-Day Bills
UK	10/23	06:00	U.K. to Sell GBP2 Bln 91-Day Bills
UK	10/23	06:00	U.K. to Sell GBP2 Bln 182-Day Bills

Source: Bloomberg, Scotiabank Economics.

Global Auctions for the week of October 19 – 23

Asia Pacific

Country	Date	Time	Event
CH	10/18	23:00	China To Sell CNY26 Bln 30-Yr Bonds
CH	10/19	21:20	Gansu to Sell CNY930 Mln 3-Yr General Bonds
CH	10/19	21:20	Gansu to Sell CNY700 Mln 5-Yr General Bonds
CH	10/19	21:20	Gansu to Sell CNY770 Mln 7-Yr General Bonds
CH	10/19	21:20	Gansu to Sell CNY1 Bln 10-Yr General Bonds
CH	10/19	22:00	China Development Bank To Sell CNY34 BLN 10-Yr Bonds
CH	10/19	22:20	Gansu to Sell CNY1 Bln 10-Yr Special Bonds
CH	10/19	22:20	Gansu to Sell CNY1 Bln 5-Yr Special Bonds
JN	10/19	23:45	Japan to Sell 20-Year Bonds
CH	10/20	01:10	Jiangxi to Sell CNY13.45 Bln 5-Yr General Bonds
CH	10/20	01:20	Jiangxi to Sell CNY13.45 Bln 10-Yr General Bonds
CH	10/20	01:30	Jiangxi to Sell CNY13.45 Bln 7-Yr General Bonds
CH	10/20	01:30	Jiangxi to Sell CNY4.48554 Bln 3-Yr General Bonds
CH	10/20	02:30	Jiangxi to Sell CNY750 Mln 10-Yr Special Bonds
CH	10/20	02:30	Jiangxi to Sell CNY750 Mln 7-Yr Special Bonds
CH	10/20	02:30	Jiangxi to Sell CNY750 Mln 5-Yr Special Bonds
CH	10/20	02:30	Jiangxi to Sell CNY750 Mln 3-Yr Special Bonds
CH	10/20	03:30	Jiangxi to Sell CNY150 Mln 3-Yr Special Bonds
CH	10/20	03:30	Jiangxi to Sell CNY150 Mln 5-Yr Special Bonds
CH	10/20	03:30	Jiangxi to Sell CNY150 Mln 7-Yr Special Bonds
CH	10/20	03:30	Jiangxi to Sell CNY150 Mln 10-Yr Special Bonds
AU	10/20	20:00	Australia Plans to Sell AUD900 Mln 4.25% 2026 Bonds
CH	10/20	22:35	China To Sell CNY28 Bln 7-Yr Bonds
CH	10/20	23:00	China to Sell 7-Year Bonds
AU	10/21	19:30	Australia Plans to Sell AUD500 Mln 126-Day Bills
NZ	10/21	21:05	New Zealand Plans to Sell NZD200 Mln 3% 2020 Bonds
JN	10/21	23:35	Japan to Sell 3-Month Bills
JN	10/21	23:45	Japan to Sell 2-Year Bonds
AU	10/22	20:00	Australia Plans to Sell AUD800 Mln 2.75% 2019 Bonds
CH	10/22	21:20	Shanghai to Sell CNY500 Mln 5-Yr General Bonds
CH	10/22	21:20	Shanghai to Sell CNY7.86 Bln 7-Yr General Bonds
CH	10/22	21:20	Shanghai to Sell CNY7.86 Bln 10-Yr General Bonds
CH	10/22	22:30	Shanghai to Sell CNY3.15 Bln 3-Yr Special Bonds
CH	10/22	22:30	Shanghai to Sell CNY4.75 Bln 5-Yr Special Bonds

Latin America

Country	Date	Time	Event
BZ	10/22	10:00	Brazil to Sell Bills LTN - 04/01/2016
BZ	10/22	10:00	Brazil to Sell Bills LTN - 07/01/2019
BZ	10/22	10:00	Brazil to Sell Bills LTN - 10/01/2017

Source: Bloomberg, Scotiabank Economics.

Events for the week of October 19 – 23

North America

Country	Date	Time	Event
US	10/19	10:00	Fed's Brainard Speaks on Cutting Regulatory Red Tape
US	10/19	12:00	Fed's Lacker Speaks on Education in Richmond
US	10/19	12:00	Fed's Lacker Speaks on Early Childhood Education in Richmond
CA	10/19		Canada Federal Election 2015
US	10/20	09:00	Fed's Dudley, Powell Speak at Market Conference in New York
CA	10/21	10:00	**Bank of Canada Rate Decision**
CA	10/21	10:00	Bank of Canada Releases Monetary Policy Report
US	10/21	13:30	Fed's Powell Moderates Panel on Markey Liquidity in New York
CA	10/23	11:45	Energy Minister Chiarelli Speaks at Economic Club of Canada

Europe

Country	Date	Time	Event
GE	10/18		Merkel Meets Turkish Leaders in Istanbul for Refugee Talks
AS	10/19	11:00	ECB's Nowotny in Vienna panel discussion
EC	10/20	03:00	EU's Hill Speaks at Capital Markets Conference in Brussels
UK	10/20	05:00	BOE's Bailey Speaks at Treasury Committee, London
UK	10/20	06:00	BOE's Carney Speaks at Treasury Committee, London
TU	10/21	07:00	**Benchmark Repurchase Rate**
TU	10/21	07:00	Overnight Lending Rate
TU	10/21	07:00	Overnight Borrowing Rate
EC	10/22	04:00	ECB Publishes Monthly Report
EC	10/22	07:45	**ECB Main Refinancing Rate**
EC	10/22	07:45	ECB Deposit Facility Rate
EC	10/22	07:45	ECB Marginal Lending Facility
EC	10/23		ECB Survey of Professional Forecasters
IT	10/23		Italy Sovereign Debt Rating Published by Fitch
SP	10/23		Spain Sovereign Debt Rating Published by Fitch
NO	10/23		Norway Sovereign Debt to Be Rated by S&P
GE	10/23		Germany Sovereign Debt May Be Published by Moody's

Asia Pacific

Country	Date	Time	Event
HK	OCT 18-19		Composite Interest Rate
AU	10/19	20:30	RBA October Meeting Minutes
CH	OCT 20-23		Chinese President Xi Jinping Pays State Visit to U.K.
AU	10/21	18:45	RBA's Edey Speech at Conference in Sydney

Latin America

Country	Date	Time	Event
BZ	OCT 19-20		Brazilian President Dilma Roussef Visits Finland
BZ	10/21		**Selic Rate**

Source: Bloomberg, Scotiabank Economics.

Global Central Bank Watch

North America

Rate	Current Rate	Next Meeting	Scotia's Forecasts	Consensus Forecasts
Bank of Canada – Overnight Target Rate	0.50	October 21, 2015	0.50	0.50
Federal Reserve – Federal Funds Target Rate	0.25	October 28, 2015	0.25	0.25
Banco de México – Overnight Rate	3.00	October 29, 2015	3.00	--

It is a big week for **Canada,** starting with the Federal Election on Monday to be followed by a Bank of Canada rate decision and Monetary Policy Report (MPR) on Wednesday. Consensus and markets are not expecting a policy rate change at this coming meeting, but the content of both the BoC's statement and MPR have plenty of market-moving potential. Thursday's August retail sales and Friday's September CPI report are also some of the more important pieces of economic data we get in Canada and will help inform the BoC's views. The only material **U.S.** data next week is housing-sector related with housing starts and building permits (Tuesday) and existing home sales (Thursday). Fedspeak is front-loaded into the beginning of the week with Richmond Fed President Lacker on Monday and NY Fed President Dudley on Tuesday.

Europe

Rate	Current Rate	Next Meeting	Scotia's Forecasts	Consensus Forecasts
European Central Bank – Refinancing Rate	0.05	October 22, 2015	0.05	0.05
Bank of England – Bank Rate	0.50	November 5, 2015	0.50	0.50
Swiss National Bank – Libor Target Rate	-0.75	December 10, 2015	-0.75	--
Central Bank of Russia – One-Week Auction Rate	11.00	October 30, 2015	11.00	--
Central Bank of the Republic of Turkey – 1 Wk Repo Rate	7.50	October 21, 2015	7.50	7.50
Sweden Riksbank – Repo Rate	-0.35	October 28, 2015	-0.35	--
Norges Bank – Deposit Rate	0.75	November 5, 2015	0.75	--

Monetary policymakers at **the European Central Bank (ECB)** will meet for a scheduled policy meeting on Thursday, October 22nd. The ECB is expected to keep its key refinancing rate unchanged at 0.05%. However, with lower oil prices and past currency gains leading to renewed deflationary pressures, markets will be paying close attention to any clues on whether the ECB will expand or extend its quantitative easing program. We expect monetary policymakers at **the Central Bank of the Republic of Turkey (CBRT)** to keep interest rates unchanged at its next meeting on October 21st. The CBRT will likely maintain a cautious monetary policy stance over the near term, given prospects of monetary policy tightening in the US as well as the country's elevated inflation and political challenges amid the looming general election on November 1st.

Asia Pacific

Rate	Current Rate	Next Meeting	Scotia's Forecasts	Consensus Forecasts
Reserve Bank of Australia – Cash Target Rate	2.00	November 2, 2015	2.00	2.00
Reserve Bank of New Zealand – Cash Rate	2.75	October 28, 2015	2.50	2.75
People's Bank of China – Lending Rate	4.60	TBA	--	--
Reserve Bank of India – Repo Rate	6.75	December 1, 2015	6.75	--
Bank of Korea – Bank Rate	1.50	November 12, 2015	1.50	--
Bank of Thailand – Repo Rate	1.50	November 4, 2015	1.50	--
Bank Indonesia – Reference Interest Rate	7.50	November 17, 2015	7.50	--

Latin America

Rate	Current Rate	Next Meeting	Scotia's Forecasts	Consensus Forecasts
Banco Central do Brasil – Selic Rate	14.25	October 21, 2015	14.25	14.25
Banco Central de Chile – Overnight Rate	3.25	November 12, 2015	3.25	--
Banco de la República de Colombia – Lending Rate	4.75	October 30, 2015	4.75	5.00
Banco Central de Reserva del Perú – Reference Rate	3.50	November 12, 2015	3.50	--

We expect the **Banco Central do Brasil** to keep its benchmark SELIC Target Rate steady at 14.25% when monetary authorities meet on October 21st. Inflation seems to have begun to stabilize, coming in at 9.49% y/y in September from 9.53% in August and 9.56% in July. While this remains well above the central bank's 2.5-6.5% target range, it is a promising sign that this year's inflationary spell is beginning to turn a corner.

Africa

Rate	Current Rate	Next Meeting	Scotia's Forecasts	Consensus Forecasts
South African Reserve Bank – Repo Rate	6.00	November 19, 2015	6.00	--

Forecasts at time of publication.
Source: Bloomberg, Scotiabank Economics.

Economic Statistics

North America

Canada	2014	15Q1	15Q2	Latest	
Real GDP (annual rates)	2.4	-0.8	-0.5		
Current Acc. Bal. (C$B, ar)	-41.5	-72.6	-69.6		
Merch. Trade Bal. (C$B, ar)	5.0	-29.3	-27.1	-30.4	(Aug)
Industrial Production	2.5	-1.8	-1.5	-0.4	(Aug)
Housing Starts (000s)	189	175	193	231	(Sep)
Employment	0.6	0.6	0.9	0.9	(Sep)
Unemployment Rate (%)	6.9	6.7	6.8	7.1	(Sep)
Retail Sales	4.6	2.4	1.9	1.8	(Jul)
Auto Sales (000s)	1850	1807	1872	1938	(Aug)
CPI	1.9	1.1	0.9	1.3	(Aug)
IPPI	2.5	-1.8	-1.5	0.4	(Aug)
Pre-tax Corp. Profits	8.8	-9.6	-11.4		

United States	2014	15Q1	15Q2	Latest	
Real GDP (annual rates)	2.4	0.6	3.9		
Current Acc. Bal. (US$B, ar)	-390	-473	-439		
Merch. Trade Bal. (US$B, ar)	-741	-769	-753	-815	(Aug)
Industrial Production	3.7	3.4	1.6	0.2	(Sep)
Housing Starts (millions)	1.00	0.98	1.16	1.13	(Aug)
Employment	1.9	2.3	2.2	1.9	(Sep)
Unemployment Rate (%)	6.2	5.6	5.4	5.1	(Sep)
Retail Sales	3.5	1.8	1.0	1.7	(Sep)
Auto Sales (millions)	16.4	16.7	17.1	18.1	(Sep)
CPI	1.6	-0.1	0.0	0.0	(Sep)
PPI	1.9	-3.2	-3.3	-4.2	(Sep)
Pre-tax Corp. Profits	2.1	6.7	7.5		

Mexico	2014	15Q1	15Q2	Latest	
Real GDP	2.1	2.6	2.2		
Current Acc. Bal. (US$B, ar)	-25.0	-34.3	-31.9		
Merch. Trade Bal. (US$B, ar)	-2.8	-8.8	-7.4	-33.4	(Aug)
Industrial Production	1.9	1.5	0.5	1.0	(Aug)
CPI	4.0	3.1	2.9	2.5	(Sep)

Europe

Euro Zone	2014	15Q1	15Q2	Latest	
Real GDP	0.9	1.0	1.2		
Current Acc. Bal. (US$B, ar)	320	242	297	446	(Jul)
Merch. Trade Bal. (US$B, ar)	334.4	296.0	381.5	450.9	(Jul)
Industrial Production	0.7	1.6	1.3	0.9	(Aug)
Unemployment Rate (%)	11.6	11.2	11.1	11.0	(Aug)
CPI	0.4	-0.3	0.2	-0.1	(Sep)

Germany	2014	15Q1	15Q2	Latest	
Real GDP	1.6	1.1	1.6		
Current Acc. Bal. (US$B, ar)	215.4	271.8	275.5	164.5	(Aug)
Merch. Trade Bal. (US$B, ar)	287.5	261.8	289.2	203.2	(Aug)
Industrial Production	1.5	0.2	1.5	2.5	(Aug)
Unemployment Rate (%)	6.7	6.5	6.4	6.4	(Sep)
CPI	0.9	0.0	0.5	0.0	(Sep)

France	2014	15Q1	15Q2	Latest	
Real GDP	0.2	0.9	1.1		
Current Acc. Bal. (US$B, ar)	-26.2	-3.1	-1.1	-29.7	(Aug)
Merch. Trade Bal. (US$B, ar)	-43.2	-42.9	-34.6	-32.0	(Aug)
Industrial Production	-1.3	1.4	1.2	1.6	(Aug)
Unemployment Rate (%)	10.3	10.4	10.4	10.8	(Aug)
CPI	0.5	-0.2	0.2	0.0	(Sep)

United Kingdom	2014	15Q1	15Q2	Latest	
Real GDP	2.9	2.7	2.4		
Current Acc. Bal. (US$B, ar)	-92.9	-96.0	-67.1		
Merch. Trade Bal. (US$B, ar)	-203.4	-206.2	-160.9	-208.8	(Aug)
Industrial Production	1.4	0.8	1.2	1.9	(Aug)
Unemployment Rate (%)	6.2	5.5	5.6	5.4	(Jul)
CPI	1.5	0.1	0.0	-0.1	(Sep)

Italy	2014	15Q1	15Q2	Latest	
Real GDP	-0.4	0.1	0.6		
Current Acc. Bal. (US$B, ar)	31.5	4.2	26.8	79.8	(Jul)
Merch. Trade Bal. (US$B, ar)	56.7	34.5	47.1	24.7	(Aug)
Industrial Production	-0.5	-0.4	0.7	1.0	(Aug)
CPI	0.2	-0.4	0.0	0.0	(Sep)

Russia	2014	15Q1	15Q2	Latest	
Real GDP	0.6	-2.2	-4.6		
Current Acc. Bal. (US$B, ar)	47.0	28.7	15.8		
Merch. Trade Bal. (US$B, ar)	15.8	14.8	14.3	8.7	(Aug)
Industrial Production	-1.6	-0.4	-4.9	-3.7	(Sep)
CPI	7.8	16.2	15.8	15.7	(Sep)

All data expressed as year-over-year % change unless otherwise noted.

Source: Bloomberg, IHS Global, Scotiabank Economics.

Economic Statistics

Asia Pacific

Australia	2014	15Q1	15Q2	Latest	
Real GDP	2.7	2.5	2.0		
Current Acc. Bal. (US$B, ar)	-44.2	-42.0	-46.8		
Merch. Trade Bal. (US$B, ar)	12.2	2.3	-14.6	0.1	(Aug)
Industrial Production	4.6	3.1	1.2		
Unemployment Rate (%)	6.1	6.2	6.1	6.2	(Sep)
CPI	2.5	1.3	1.5		

Japan	2014	15Q1	15Q2	Latest	
Real GDP	-0.1	-0.8	0.9		
Current Acc. Bal. (US$B, ar)	25.0	148.3	124.0	161.0	(Aug)
Merch. Trade Bal. (US$B, ar)	-121.9	-31.2	-25.3	-34.9	(Aug)
Industrial Production	2.1	-2.2	-0.5	-0.4	(Aug)
Unemployment Rate (%)	3.6	3.5	3.3	3.4	(Aug)
CPI	2.7	2.3	0.5	0.2	(Aug)

South Korea	2014	15Q1	15Q2	Latest	
Real GDP	3.3	2.5	2.2		
Current Acc. Bal. (US$B, ar)	89.2	93.8	115.5	101.5	(Aug)
Merch. Trade Bal. (US$B, ar)	47.2	86.4	98.1	107.0	(Sep)
Industrial Production	0.5	-1.6	-1.9	0.4	(Aug)
CPI	1.3	0.6	0.5	0.6	(Sep)

China	2014	15Q1	15Q2	Latest	
Real GDP	7.3	7.8	7.5		
Current Acc. Bal. (US$B, ar)	219.7				
Merch. Trade Bal. (US$B, ar)	382.5	494.9	560.6	724.1	(Sep)
Industrial Production	7.9	5.6	6.8	6.1	(Aug)
CPI	1.5	1.4	1.4	1.6	(Sep)

Thailand	2014	15Q1	15Q2	Latest	
Real GDP	0.9	3.0	2.8		
Current Acc. Bal. (US$B, ar)	13.4	8.3	6.2		
Merch. Trade Bal. (US$B, ar)	2.0	2.5	2.6	2.9	(Aug)
Industrial Production	-4.6	0.0	-7.7	-7.9	(Aug)
CPI	1.9	-0.5	-1.1	-1.1	(Sep)

India	2014	15Q1	15Q2	Latest	
Real GDP	7.0	6.1	7.1		
Current Acc. Bal. (US$B, ar)	-27.5	-1.3	-6.2		
Merch. Trade Bal. (US$B, ar)	-11.7	-9.0	-10.7	-10.5	(Sep)
Industrial Production	1.8	3.3	3.3	6.4	(Aug)
WPI	3.8	-1.8	-2.3	-4.5	(Sep)

Indonesia	2014	15Q1	15Q2	Latest	
Real GDP	5.0	4.7	4.7		
Current Acc. Bal. (US$B, ar)	-27.5	-4.1	-4.5		
Merch. Trade Bal. (US$B, ar)	-0.2	0.8	0.7	1.0	(Sep)
Industrial Production	4.8	5.1	5.5	4.4	(Aug)
CPI	6.4	6.5	7.1	6.8	(Sep)

Latin America

Brazil	2014	15Q1	15Q2	Latest	
Real GDP	0.1	-1.6	-2.6		
Current Acc. Bal. (US$B, ar)	-104.3	-101.6	-51.3		
Merch. Trade Bal. (US$B, ar)	-4.0	-22.2	31.1	35.3	(Sep)
Industrial Production	-3.0	-5.9	-6.5	-9.7	(Aug)
CPI	6.3	7.7	8.5	9.5	(Sep)

Chile	2014	15Q1	15Q2	Latest	
Real GDP	1.9	2.5	1.9		
Current Acc. Bal. (US$B, ar)	-5.9	4.9	3.0		
Merch. Trade Bal. (US$B, ar)	6.7	10.3	11.6	-1.0	(Sep)
Industrial Production	0.4	0.6	0.1	-5.2	(Aug)
CPI	4.4	4.4	4.2	4.6	(Sep)

Peru	2014	15Q1	15Q2	Latest	
Real GDP	2.4	1.8	3.0		
Current Acc. Bal. (US$B, ar)	-8.0	-2.5	-1.6		
Merch. Trade Bal. (US$B, ar)	-0.1	-0.3	-0.3	-0.2	(Aug)
Unemployment Rate (%)	6.0	6.8	6.9	6.4	(Sep)
CPI	3.2	3.0	3.3	3.9	(Sep)

Colombia	2014	15Q1	15Q2	Latest	
Real GDP	4.6	2.8	3.0		
Current Acc. Bal. (US$B, ar)	-19.6	-5.1	-4.3		
Merch. Trade Bal. (US$B, ar)	-0.5	-1.4	-0.9	-1.8	(Jul)
Industrial Production	1.5	-1.7	-1.5	0.3	(Jul)
CPI	2.9	4.2	4.5	5.4	(Sep)

All data expressed as year-over-year % change unless otherwise noted.

Source: Bloomberg, IHS Global, Scotiabank Economics.

Financial Statistics

Interest Rates (%, end of period)

Canada	15Q2	15Q3	Oct/09	Oct/16*	United States	15Q2	15Q3	Oct/09	Oct/16*
BoC Overnight Rate	0.75	0.50	0.50	0.50	Fed Funds Target Rate	0.25	0.25	0.25	0.25
3-mo. T-bill	0.58	0.44	0.41	0.41	3-mo. T-bill	0.01	-0.02	0.00	-0.01
10-yr Gov't Bond	1.68	1.43	1.52	1.47	10-yr Gov't Bond	2.35	2.04	2.09	2.03
30-yr Gov't Bond	2.30	2.20	2.31	2.26	30-yr Gov't Bond	3.12	2.85	2.92	2.87
Prime	2.85	2.70	2.70	2.70	Prime	3.25	3.25	3.25	3.25
FX Reserves (US$B)	76.3		77.7	(Aug)	FX Reserves (US$B)	109.3		109.9	(Aug)
Germany					**France**				
3-mo. Interbank	-0.04	-0.06	-0.08	-0.05	3-mo. T-bill	-0.18	-0.20	-0.20	-0.20
10-yr Gov't Bond	0.76	0.59	0.62	0.55	10-yr Gov't Bond	1.20	0.99	0.99	0.92
FX Reserves (US$B)	60.9		59.3	(Aug)	FX Reserves (US$B)	49.9		46.9	(Aug)
Euro Zone					**United Kingdom**				
Refinancing Rate	0.05	0.05	0.05	0.05	Repo Rate	0.50	0.50	0.50	0.50
Overnight Rate	-0.06	-0.12	-0.14	-0.14	3-mo. T-bill	0.48	0.49	0.50	0.48
FX Reserves (US$B)	330.3		322.7	(Aug)	10-yr Gov't Bond	2.02	1.76	1.86	1.81
					FX Reserves (US$B)	110.7		117.1	(Aug)
Japan					**Australia**				
Discount Rate	0.30	0.30	0.30	0.30	Cash Rate	2.00	2.00	2.00	2.00
3-mo. Libor	0.04	0.02	0.02	0.02	10-yr Gov't Bond	3.01	2.61	2.71	2.60
10-yr Gov't Bond	0.47	0.36	0.32	0.32	FX Reserves (US$B)	48.7		47.9	(Aug)
FX Reserves (US$B)	1214.1		1216.2	(Aug)					

Exchange Rates (end of period)

USDCAD	1.25	1.33	1.29	1.29	¥/US$	122.50	119.88	120.27	119.60
CADUSD	0.80	0.75	0.77	0.77	US¢/Australian$	0.77	0.70	0.73	0.73
GBPUSD	1.571	1.513	1.532	1.544	Chinese Yuan/US$	6.20	6.36	6.35	6.35
EURUSD	1.115	1.118	1.136	1.136	South Korean Won/US$	1115	1185	1144	1129
JPYEUR	0.73	0.75	0.73	0.74	Mexican Peso/US$	15.739	16.918	16.432	16.377
USDCHF	0.94	0.97	0.96	0.95	Brazilian Real/US$	3.103	3.948	3.763	3.844

Equity Markets (index, end of period)

United States (DJIA)	17620	16285	17084	17202	U.K. (FT100)	6521	6062	6416	6378
United States (S&P500)	2063	1920	2015	2027	Germany (Dax)	10945	9660	10097	10104
Canada (S&P/TSX)	14553	13307	13964	13889	France (CAC40)	4790	4455	4701	4703
Mexico (IPC)	45054	42633	44376	44214	Japan (Nikkei)	20236	17388	18439	18292
Brazil (Bovespa)	53081	45059	49338	46888	Hong Kong (Hang Seng)	26250	20846	22459	23067
Italy (BCI)	1238	1179	1236	1229	South Korea (Composite)	2074	1963	2020	2030

Commodity Prices (end of period)

Pulp (US$/tonne)	980	960	960	960	Copper (US$/lb)	2.60	2.31	2.41	2.39
Newsprint (US$/tonne)	540	510	510	510	Zinc (US$/lb)	0.90	0.75	0.83	0.81
Lumber (US$/mfbm)	300	242	250	262	Gold (US$/oz)	1171.00	1114.00	1151.55	1180.85
WTI Oil (US$/bbl)	59.47	45.09	49.63	46.61	Silver (US$/oz)	15.70	14.65	15.99	16.04
Natural Gas (US$/mmbtu)	2.83	2.52	2.50	2.43	CRB (index)	227.17	193.76	202.69	198.45

* Latest observation taken at time of writing.
Source: Bloomberg, Scotiabank Economics.

Scotiabank Economics

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