Focus

Feature Article

Permanent Scars

Our Thoughts

BMO Capital Markets
We're here to help.™

BMO Capital Markets Economics
economics.bmo.com

In the Air Tonight... Still

Douglas Porter, CFA,
Chief Economist
douglas.porter@bmo.com

A **significant upswing in virus cases** in Europe, the U.S., and Canada, as well as associated new restrictions in many jurisdictions, rumbled loudly in the background this week. Also weighing on sentiment were some **setbacks on the vaccine front** and the dawning realization that the **stimulus cavalry** is, in fact, **not riding to the rescue** before the U.S. election. Yet, amid all the bad news on the building second wave—and there's a lot of it—was an underlying drumbeat of **better news on the global economy**. It can be easy to miss, because the starting point for activity was so awful after the early-year shutdowns. But the recovery has been consistently better than generally expected for most major economies, and that remains the case... at least up to this point.

Financial markets haven't missed the economic message; in fact, they presaged the comeback with the spirited recovery in the spring. And while there were some wobbles this week on the factors noted above, the fact is that **equities** are almost back at record highs, **commodity prices** are hanging in there, and **bond yields** are stuck in a narrow range. All of this amid a disconcertingly rapid run-up in case counts in recent weeks, and the obvious risks to the recovery. Some of the market resilience is owing to evidence that the economic backdrop has improved more than expected. Here are some examples that emerged this week:

- **Global Economy:** The IMF released its latest semi-annual outlook this week, and in its words, the situation is *"less dire"* than its June review. To be fair, it would be tough to be more negative than the IMF was around mid-year. Still, the upgrades to global growth and most major economies are welcome amid renewed virus concerns. Overall, it bumped the estimate for 2020 by almost a percentage point to a drop of 4.4% (from -5.2%), which is still south of our call (-4.0%). And next year it looks for a hearty 5.2% rebound (we're at +5.5%). One caveat on the upgraded IMF outlook is that emerging markets outside of China, notably India, have been marked down. That reflects a tough experience with the virus, and a heavy reliance on tourism or remittance receipts.
- **China** may have been the first to grapple with COVID, but it's also been the first to recover. September trade data reveal that the economy has more-than-recouped earlier losses, with exports vaulting almost 10% y/y and imports kicking into gear as spending finally revives. A solid 7% y/y gain in auto sales last month confirms the latter. Next week brings the first peek at Q3 GDP, and it should be solid (a bit above +5% y/y). Bluntly, the shift in global spending from services to goods, and the specific goods that people are buying, have proven to be a big win for China's factories. Note that the yuan has moved through 6.7/US$, its strongest level in more than two years and up 5% y/y.
- **U.S**. consumers are still spending even in the face of rising virus cases (again) and a lack of new stimulus. September retail sales handily topped expectations with a 1.9% m/m jump, and are now up more than 5% from a year ago. For all of Q3, sales roared ahead at a 66% annualized pace. The firm activity even late in the quarter pretty much runs precisely counter to what many were expecting, given the drying up of extra unemployment benefits. But, as we opined last week, households overall can deal with a (temporary) lull in income support until after the election, thanks to

the massive savings buffer built up earlier this year. This is not to downplay the clear signs of a more recent broad cooldown, as highlighted by a rise in initial jobless claims. However, note that small business sentiment rose to a pandemic high last month and the Philly Fed manufacturing index jumped in early October, suggesting activity is still grinding forward.

- **Japan:** After lagging the rest of the world on the growth tables for decades, Japan is faring relatively well in this deeply challenging year. Both the IMF and our call peg Japan as the "second-least-hard-hit G7 economy" this year, with an expected GDP drop of around 5%. (The U.S. is likely to fare "best" with a drop of 4%, which at the very least raises some doubt over the mantra about there being no trade-off between the economy and health concerns.) Among the G7, Japan has had the mildest experience with the virus, a strong fiscal response, and also is a modest winner from the shift from services to goods.
- **Europe** now has more new virus cases per capita than the U.S., and is seeing a wave of renewed restrictions. The pain has spread even to Germany, which has fared better than most, with Chancellor Merkel indicating (unnervingly) that her main goal was now to avoid an economic meltdown similar to Q2. Even limited lockdowns threaten to further clip an EU economy that was already facing one of the deepest downturns in the world this year, with each of France, Italy and the U.K. looking down the barrel of 10% GDP declines. Loaded on top of the shutdowns, the latter is also now facing the growing risk of a no-deal Brexit as the countdown clock rapidly approaches midnight (Dec 31).
- **Canada:** Almost immediately after our publishing cut-off time last week (of course), Ontario announced major new restrictions amid a sustained rise in new virus cases. Along with earlier moves by Quebec, this could clip October GDP by 0.3%-to-0.4%, potentially stalling the recovery for a spell. True, this hit is in a different league from the cumulative 18% plunge in activity during the March/April closures. But, with case counts rising broadly, this may not be the last word on restrictions, and near-term risks look skewed to the downside. Still, the economic pain can remain manageable as long as schools, stores and factories remain open. And, it's clear from sales in big-ticket items like houses and autos, that consumers have learned how to operate amid distancing measures. In fact, housing has rebounded to such an extent that concerns have shifted to things being too hot for comfort, with sales at a record high last month and the market at record tightness by some measures. For the overall economy, the latest consensus has firmed slightly to a 5.8% GDP drop this year and a 4.9% rebound next year. We are a bit stronger on both at -5.6% and 6.0%. While the second wave gives us serious pause on that relative optimism, there is one thing that gives us comfort—the **ongoing and massive fiscal support** in Canada. The IMF now reckons that among the biggest 15 economies, Canada has had the most forceful fiscal stimulus to-date (with the U.S., Japan and Australia in hot pursuit). Even so, the IMF still looks for the Canadian economy to drop 7.1% this year (and rebound 5.2% next). That's notably weaker than consensus, leaving room for another upgrade later on, we believe, even with the concerning virus developments.

The title of this week's effort naturally refers to the classic **Phil Collins** song from almost 40 years ago, which has somehow managed to make the news a few times this year and has found a new fan base. The dark lyrics work quite well for this troubled year and, in particular, amid the ongoing battle over (the lack of) new stimulus in Washington:

- *And I've been waiting for this moment for all my life*
- *Well, if you told me you were drowning, I would not lend a hand*
- *So you can wipe off that grin, I know where you've been; It's all been a pack of lies*
- *But I know the reason why you keep your silence up, no, you don't fool me; Well, the hurt doesn't show, but the pain still grows*
- *And I can feel it coming in the air tonight... Well, I've been waiting for this moment for all my life*

This past week, things took a new twist, as said Mr. Collins asked the Trump campaign to cease and desist using the song at events. Well, since that one isn't available, there's always another hit from the same era, also from the U.K., which has somehow become weirdly appropriate after all... **The Police's** "*Don't Stand So Close to Me*".

U.S. Economy: Mixed Data Mingled with Heightened Risks

Michael Gregory, CFA,
Deputy Chief Economist
michael.gregory@bmo.com

The week's data highlighted a strong start to the recovery alongside rising risks to its robustness. **Total retail sales** rose 1.9% in September, more than doubling expectations, further emphasizing the 'V'-shaped recovery in consumer spending on goods. After plummeting 17.5% in the three months ending April, sales excluding food services surged 29.0% in the five months ending September to sit 8.2% above year-ago levels. This contour was crafted by the massive amount of government support for household incomes (tax rebates, higher and broader unemployment benefits) along with some diversion of outlays from spending on services. Despite some of this support fading in August (the weekly UI top-up reduced from $600 to $300), it was offset by the drawing down of some of the saved income support. Even after the remaining $300 top-up is stopped, the same should hold for October retail sales.

Industrial production dropped 0.6% in September, close to expectations except for the wrong sign. Despite the setback, and thanks to strong summer results, industrial output still expanded 40% a.r. in Q3 after contracting 43% in Q2. Although September's setback implies momentum at the start of the fourth quarter might not be as strong as initially assumed, the start of October's regional factory reports countered the suggestion. On an ISM-adjusted basis, the Philadelphia Fed index soared to 61.5 from 57.3 in September (matching a 32-year high) and the Empire State metric remained at 52.5.

Meanwhile, the **second wave of COVID-19** is rolling across the country. The seven-day average of new daily infections was closing in on 53,000 on October 15 (according to Johns Hopkins University), up from the post-first-wave low under 35,000 on September 11. The two-stage first wave crested with the case rate topping 66,000 on July 22. While the trends in hospitalization and death rates aren't rising commensurately, the virus continues to spread. Among the 50 states and the District of Columbia, 28 states have higher case rates (>15 per 100k population) that are elevated or going up (according to the New York Times). Among the 23 jurisdictions with lower case rates (<15 per 100k), 16 are going up and only seven are staying low.

A mounting second wave poses **two risks** to the recovery. **First**, more states could pause or reverse the reopening of their economies. Again, according to the New York Times, as of October 15, 20 states are still reopening or have paused or reversed their plans since their initial lockdowns were lifted. **Second**, business and consumer confidence could falter, along with related outlays. Fortunately, the NFIB Small Business Optimism Index hit 104.0 in September, back to its pre-pandemic range. Plans to increase employment, make capital outlays and increase inventories matched or topped their highs of the year, with the latter at a record high (back to 1973). The double-whammy of a U.S./China trade war and a pandemic appears to have convinced businesses that it's better to have more inventories of production inputs and goods to sell on hand. However, on the consumer side, the preliminary University of Michigan consumer sentiment index was 81.2 in October. Although up from 80.4 in September, it's hovering more than 20 points below its pre-pandemic perch.

Persistent joblessness is another risk to the recovery. Initial claims for regular state unemployment insurance benefits rose 53k to 889k for October 10, now at the top of the 845k-to-900k range of the past eight weeks. Continuing claims dropped 1.2 mln to 10 mln for October 3, so more unemployed workers are still getting jobs than other workers are losing theirs, but some of this decline reflects regular state benefits expiring, with these folks moving to the federally-funded Pandemic Emergency Unemployment Compensation program (designed for this purpose). At the end of September, there were 2.8 mln (nsa) in the PEUC program, a pandemic high. Indeed, including those in the Pandemic Unemployment Assistance program (for those not eligible for state benefits), there are 14.0 mln (nsa) currently poised to lose their federally-funded UI benefits at year end unless Congress extends them. Will Congress extend them before the election, during the lame-duck confab, in the new session, or not at all? Meanwhile, the pace of job gains looks to slow anyway with improvements in the jobless rate harder to achieve. Risks to the robustness of the recovery indeed.

Bank of Canada Starts to Unwind Crisis Measures

Benjamin Reitzes,
Canadian Rates & Macro Strategist
benjamin.reitzes@bmo.com

On Thursday, the Bank of Canada announced it is terminating some of the market support programs put in place at the height of the crisis in March. The Bankers' Acceptance Purchase Facility (BAPF) and Canada Mortgage Bond Purchase Program (CMBP) are both being discontinued with the final operations coming the week of October 26. In addition, the term repo operations are being cut to every other week (from weekly) and eligible collateral are being tightened as well to include only C$ securities issued/guaranteed by the Government of Canada, Canadian provinces and those eligible for the Standing Liquidity Facility. Own-name covered bonds, own-name Term ABS and own-name ABCP will no longer be eligible.

The BAPF has had zero take up since May, leaving no market impact. Similarly the term repo operations have seen very limited usage, so there should be no impact here either.

The initial market reaction in CMBs on the back of the move was for spreads to widen 2-to-3 bps, though they ended the day 1.5 bps wider. We view the move as an overreaction to the announcement, as the program was buying very few bonds on a weekly basis. The initial program was announced as up to $500mm/week in purchases, but we haven't been anywhere near that pace since June. Indeed, the program has been routinely buying under $200mm/week (and a number of times under $100mm) since July. Monthly purchases since have been under $500mm since August, which hardly registers in this ~$250 bln market.

The announcement comes as a bit of surprise as there was no hint of this coming, and so the knee-jerk reaction can be forgiven. The program hasn't seen significant use in recent months so the termination makes some sense. In addition, the housing market is absolutely on fire, so it's not as if it needs any more support. The post-announcement spread widening doesn't seem consistent with the marginal market impact the BoC was having. Taking it one step further, this begs the question of whether a similar fate awaits the Provincial Bond Purchase Program. Given the different dynamics, that seems unlikely. The provincial program is supporting the fiscal stance of the provinces which hasn't really changed. Indeed, if COVID restrictions are tightened further the fiscal picture could worsen, so the BoC likely wants to keep its options open here. If anything, the Bank could just choose to slow the purchases a bit rather than end the program. The provincial program has an already announced end date of May 6, 2021. We suspect the BoC will stick to that schedule given the ongoing macro and fiscal uncertainty.

Brexit: It Ain't Over till It's Over

Jennifer Lee,
Senior Economist
jennifer.lee@bmo.com

The **EU Summit** wrapped up with both sides not budging from their corners. Commentary from the various leaders was fairly consistent… they're 100% united in their desire for a deal, but it won't happen at any cost, so they're ready for no deal. But the throwing of the ball into the U.K.'s court clearly ruffled feathers in Britain. Telling the U.K. that it needs to "*make the necessary moves" came as a "surprise*" to British negotiator David Frost, who expressed his "*disappointment*" that the EU wasn't working "*intensively*" to a future partnership. So, it was no surprise to hear PM Boris Johnson's reaction. He told the British people to "*get ready for a no-deal style exit in January*" but not to worry. They will "*prosper mightily*".

It has been over four years since the referendum and a post-transition trading arrangement remains far off. Talks will supposedly continue for two more weeks, and EU officials will make their way to London this weekend, suggesting there is a will to compromise. But, there won't be a warm reception… PM Johnson's spokesperson told the EU's Michel Barnier not to bother coming unless all of the issues will be discussed. Tempers are running high but it is still in the best interests of both sides to arrive at an agreement. And it is possible to do that and save face. In fact, PM Johnson is doing so by calling for an Australia-style deal, which sounds better than saying that there is no deal. Australia does not have a formal comprehensive free trade agreement with the EU, but has been engaged in talks to have one since 2018. In that event, British exports and imports will be subject to WTO tariffs and new regulations, which will come as a shock to a system that has been accustomed to freely flowing trade across Europe.

There is still hope, as long as the talks continue. It is well understood that a hard Brexit will be an unwanted slam to Europe, coming at a time when countries are attempting to control the second wave. And these controls threaten to cut the recovery from the first wave short. In the U.K., PM Johnson has the new 3 tier local restrictions plan (though he is facing a tall challenge in getting local officials on board); in France, curfews in nine cities will restrict movement; in Germany, restaurants and bars will close between 11 pm - 6 am; they'll be closed outright in Catalonia; there's a national state of emergency in Portugal; and Northern Ireland just started a 4-week lockdown. The list goes on.

It ain't over till it's over.

Natural Gas Outlook: On the Road to Recovery

Art Woo,
Senior Economist
art.woo@bmo.com

The prospects for natural gas have improved, especially compared to the depressed prices witnessed over the past year. The increased optimism over natural gas is reflected in the futures market, which suggests that Henry Hub—North America's benchmark price—could be significantly higher in 2021. Of course, a futures price is not a forecast, so higher futures prices may not necessarily translate into higher actual Henry Hub spot prices. The futures market is currently indicating that a producer could theoretically sell all of its natural gas production in 2021 at around US$3/mmbtu. In contrast, Henry Hub has averaged $1.80 over the past month.

The optimism is largely based on two key developments. First, U.S. natural gas production is expected to decline significantly due to weaker associated gas production from lower shale oil output. The U.S. Energy Information Administration forecasts output to contract 3.8% to 94.4 bcf/d in 2021 (vs an estimate of -1.9% in 2020). Second, U.S. exports of LNG are expected to accelerate on the back of the recent surge in benchmark prices in Europe (Title Transfer Facility–TTF) and Asia (Japan-Korea-Marker–JKM). TTF is now trading close to EUR14.00/MWh (up ~165% since the beginning of August), while JKM is hovering just over US$5.00/mmbtu (up ~90% in the same period). Both have reached levels that make them attractive for U.S. producers to export to these markets, when accounting for liquefaction and shipping costs. In contrast, natural gas prices in the spring had sunk to levels that compelled many buyers to cancel LNG contracts and opt to a pay a penalty, rather than take delivery.

These two factors, coupled with the typical seasonal pick-up in natural gas consumption during the winter, are expected to lead to a drawdown in inventories and a tighter market. Consequently, we revised up our forecast for Henry Hub to US$2.50/mmbtu in 2021 (previously $2.25), compared to an estimate of $1.95 for the whole of 2020. Meantime, the price of AECO—Western Canada's natural gas benchmark—should be able to piggyback on higher Henry Hub in the coming quarters. As a result, we are projecting AECO to average US$1.75/mmbtu in 2021, up from $1.60 in 2020.

Recap

Priscilla Thiagamoorthy,
Economist
priscilla.thiagamoorthy@
bmo.com

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

Canada

- BoC to end some market support measures
- WHO warns of second wave
- Housing hot in September

Good News

BMO Business Activity Index +2.6% (Aug.); +1.7% (Sep. P)

Existing Home Sales +45.6% y/y (Sep.)

MLS Home Prices +10.3% y/y (Sep.)

Global Investors bought a net $15.5 bln of Canadian securities (Aug.)

Bad News

Manufacturing Sales Volumes -2.2% (Aug.)

Manufacturing New Orders -3.4% (Aug.)

New Motor Vehicle Sales -7.8% y/y (Aug.)

United States

- President Trump calls for "*big*" stimulus as hopes dwindle ahead of election
- Stocks climb on strong consumer

Good News

Retail Sales +1.9% (Sep.)

Consumer Prices +0.2%; **Producer Prices** +0.4% (Sep.)

NFIB Small Business Sentiment Index +3.8 pts to 104.0 (Sep.)

Philly Fed Index +4.2 pts to 61.5; **Empire State Manufacturing** steady at 52.5 (Oct.) —ISM-adjusted

U of M Consumer Sentiment +0.8 pts to 81.2 (Oct. P)

Bad News

Industrial Production -0.6% (Sep.)—and **Capacity Utilization** -0.5 ppts to 71.5%

Initial Claims +53k to 898k (Oct. 10 week)

Japan

- PM Suga looking for more stimulus?

Good News

Core Machine Orders +0.2% (Aug.)

Bank Lending Ex-Trusts +6.2% y/y (Sep.)

Tertiary Industry Index +0.8% (Aug.)

Bad News

Machine Tool Orders -15.0% y/y (Sep. P)

Industrial Production revised lower to +1.0% (Aug.)

Europe

- Europe tightens COVID rules amid rising cases
- U.K./EU trade talks end with no progress

Good News

Euro Area—Trade Surplus widened to €21.9 bln (Aug.)

Italy—Industrial Orders +15.1% (Aug.)

U.K.—Average Weekly Earnings (Ex. Bonus) +0.8% y/y (3 mths to Aug.)

Bad News

Euro Area—Industrial Production slowed to +0.7% (Aug.)

Germany—ZEW Survey -21.3 pts to 56.1 (Oct.)

U.K.—Employment -153,000 (3 mths to Aug.)

U.K.—Jobless Rate +0.4 ppts to 4.5% (3 mths to Aug.)

U.K.—Jobless Claims +28,100 (Sep.)

Other

- IMF upgrades GDP outlook… but warns of significant risks
- RBA Gov. Lowe signals more easing

Good News

China—Exports +9.9% y/y; **Imports** +13.2% y/y (Sep.)

China—Aggregate Yuan Financing climbed to 3.5 trln (Sep.)—and **New Yuan Financing** 1.9 trln

China—M2 Money Supply +10.9% y/y (Sep.)

China—Foreign Direct Investment +25.1% y/y (Sep.)

Australia—Westpac Consumer Confidence +11.9% (Oct.)

Bad News

China—Consumer Prices +1.7% y/y; **Producer Prices** -2.1% y/y (Sep.)

Australia—Employment -29,500 (Sep.)—and **Jobless Rate** +0.1 ppts 6.9%

Permanent Scars

Sal Guatieri,
Senior Economist
sal.guatieri@bmo.com

Erik Johnson,
Economist
erik.johnson@bmo.com

Jobless rates are now climbing down the mountain in the U.S. and Canada, but descending, they say, is the riskiest part of the trip. And a big crevice is the **large number of permanent layoffs**, which risks slowing the decline in joblessness, curbing consumer spending, and straining household finances. Permanent job losses will also increase the economy's vulnerability to future shocks, such as another wave of the coronavirus, while placing added stress on fiscal finances.

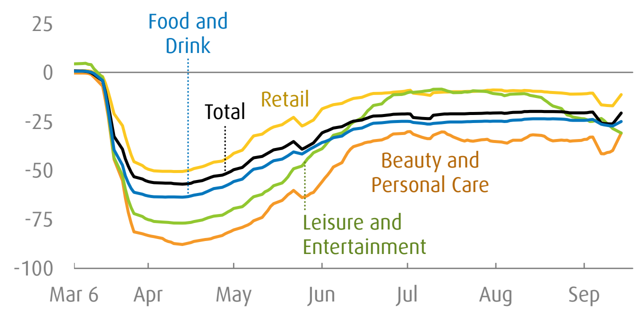
Although U.S. businesses have rehired half (52%) of the 22 million workers let go during the shutdowns, **employment is still down 7.0% from February,** worse than at the nadir of the Great Recession. Nearly 13 million people are still without work, almost double the pre-pandemic level. The majority of job losses are in food services, accommodation and entertainment, where many businesses are still closed (*Chart 1*). But no sector has been spared, with manufacturing, construction and business services also registering large job losses.

The easy phase of the recovery—the recalling of millions of workers on temporary layoff—is behind us. The next phase will be tougher, as tens of thousands of businesses have closed (according to Yelp) and many others face muted demand and continued restrictions. Consequently, **permanent layoffs have risen by 2.5 million since February** (*Chart 2*). (A permanent layoff is one that is deemed not temporary by the laid-off worker, with no expectation of recall.) Although the total (3.8 million) is less than the record-high set in the Great Recession (6.8 million), the recent run-up has been faster. It took all of 2008 for permanent layoffs to rise as much as in the past seven months. Permanent job losses spiked by more than half a million in June, and, after steadying in July, surged again in August, as rising virus cases depressed demand and delayed reopening plans for some businesses, resulting in a second round of layoffs. Though slowing in September, permanent unemployment could spike again amid recent layoff announcements in the airline and other industries and with infections rising in some colder parts of the country as activity shifts indoors.

Chart 1
Permanent Losses in Hard-hit Industries

United States — 2020
(% chng vs. Jan. 2020 : 7-day m.a. : as of Sep. 14, 2020)

Hourly Employees Working

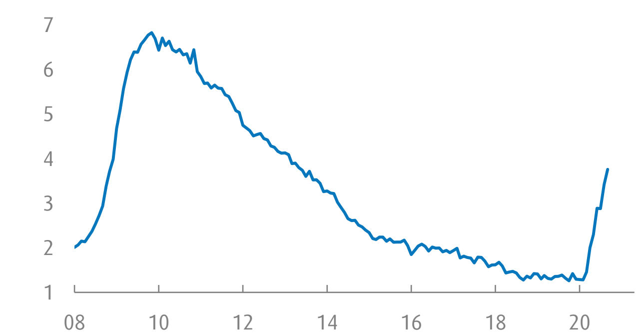


Sources: BMO Economics, Haver Analytics

Chart 2
Half as Bad as 2009 is Still Bad

United States (mlns : s.a.)

Unemployed: Permanent Job Losses



Sources: BMO Economics, Haver Analytics

Most workers facing permanent layoff won't stay unemployed forever, but **many will remain jobless for extended periods.** The number of persons out of a job for more than six months has risen by 1.3 million since February. Meantime, support for millions of UI claimants could end without another fiscal relief bill, including the $300 weekly federal top-up payment, and, after December 31, the 13-weeks of extended payments under a special emergency program.

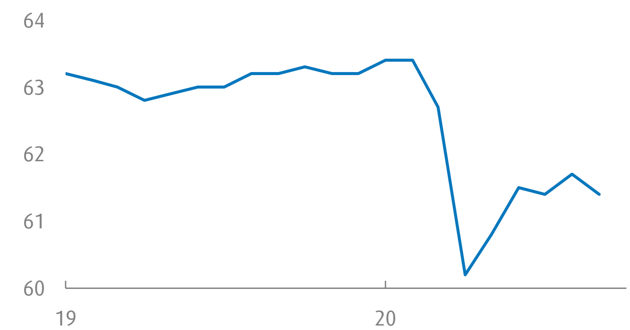
While the U.S. jobless rate fell quickly from a post-war peak of 14.7% in April to 7.9% in September, the decline was greased by a stalling participation rate (*Chart 3*). Permanent layoffs account for 30% of total unemployment, well above February's 22% though less than 2009's 45% peak. Unless this group can quickly find a job (or stop looking for one), **the decline in the jobless rate will slow, leaving it above pre-pandemic levels**. Adding the 2.4 million increase in permanent unemployment to the 5.8 million total unemployed in February would suggest a "structural" jobless rate of 5.2% versus 3.5% before the virus. That's at least a percentage point above the Fed's view of the rate that can be sustained in the long run, all but ensuring many years of near-zero policy rates.

Chart 3

Only "Part" Way There

United States (% : s.a.)

Labour Force Participation Rate



Sources: BMO Economics, Haver Analytics

North of the border, **Canada's labour market has progressed faster than the U.S.'s**, as the nation avoided a summer resurgence in the virus. By September, Canada had regained three-quarters (76%) of the initial 3.0 million job losses, paring the damage to -3.7% or about half the U.S. hit. However, reclaiming the remaining 720,000 lost jobs will be a tougher grind given new restrictions to contain a recent flare-up in infections. Unemployment, though falling to 1.8 million in September from a record-high 2.6 million in May, remains 1.1 million above pre-virus levels.

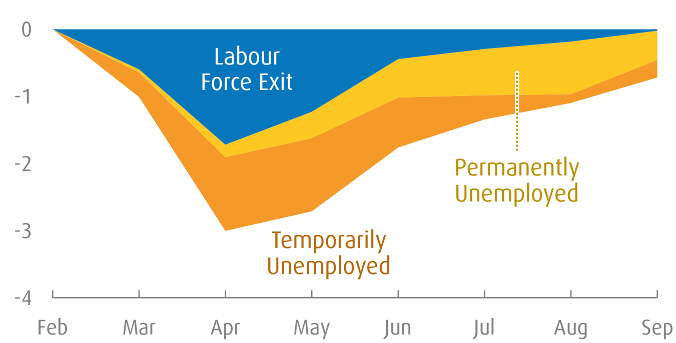
Canada's **rapid jobs recovery reflects the large number of layoffs that were temporary**, with the increase since February peaking at 1.1 million in April (seasonally adjusted) compared with just 85,900 in the Great Recession (*Chart 4*). But **permanent layoffs were also substantial**, with the increase since February cresting at 781,900 in August (seasonally adjusted), almost twice the run-up (407,100) in the last recession. While this is a proportionately larger rise than in the U.S., it has shrank to 435,300 in September, as most of the job gains last month came from the ranks of workers on permanent layoff. But this **recent progress is now at risk**, as rising COVID-19 infections have led to new restrictions and will likely reduce demand for consumable services in several major cities, including Toronto, Montreal, and Ottawa.

Chart 4

Temporary to Permanent

Canada — 2020 (mlns : February 2020 = 0 : s.a.)

Contributions to COVID-19 Employment Loss



Sources: BMO Economics, Statistics Canada

As the pandemic stretches into its eighth month, the **rising duration of joblessness is concerning** (*Chart 5*). The number of unemployed out of work for 27 weeks or more rose to 297,100 in September from 178,100 in February, and looks to surpass the level of the last recession.

In September, permanent layoffs accounted for 26% of the total unemployed (not seasonally adjusted) in Canada. While that's in line with 2019's average, the situation could worsen given the upturn in virus cases. If the increase in permanent unemployment held steady, then "structural" unemployment in Canada could rise to almost 1.6 million, or a 7.7% rate versus 5.6% in February. This would further tie the Bank of Canada's hands in keeping rates lower for longer.

The Bottom Line: To the extent that large numbers of permanent layoffs reflect business failures, ongoing restrictions on economic activity, and weaker demand, a repeat of the "jobless recovery" of the last recession is a distinct possibility. Added pressure could stem from the increased use of automation as the consumable services sector tries to cope with the pandemic. Many unemployed workers in hard-hit industries will need to learn new skills and find jobs elsewhere. The most vulnerable workers are at risk of leaving the workforce for extended periods, damaging the economy's short- and long-run prospects. Governments may need to target support programs to help these workers adjust to the new environment.

Chart 5
Stuck on the Sidelines

Canada (000s : s.a.)
Unemployed 27 Weeks or More

Sources: BMO Economics, Haver Analytics

Economic Forecast Summary for October 16, 2020

	2020				2021				Annual		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
CANADA											
Real GDP (q/q % chng : a.r.)	-8.2	-38.7	46.0	3.9	7.7	5.3	4.0	3.2	1.7	-5.6	6.0
Consumer Price Index (y/y % chng)	1.8	0.0	0.4	0.3	0.6	1.9	1.6	1.7	1.9	0.6	1.4
Unemployment Rate (percent)	6.3	13.0	10.0	8.5	8.0	7.6	7.4	7.0	5.7	9.5	7.5
Housing Starts (000s : a.r.)	209	191	239	210	210	206	202	202	209	212	205
Current Account Balance ($blns : a.r.)	-52.9	-34.5	-32.9	-31.9	-33.5	-33.7	-33.7	-35.1	-47.0	-38.0	-34.0
Interest Rates (average for the quarter : %)											
Overnight Rate	1.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	0.50	0.25
3-month Treasury Bill	1.29	0.22	0.16	0.10 ↓	0.10 ↓	0.10 ↓	0.10 ↓	0.10 ↓	1.65	0.45	0.10 ↓
10-year Bond	1.20	0.59	0.55	0.60	0.70 ↑	0.75 ↑	0.80	0.85	1.59	0.75	0.75
Canada-U.S. Interest Rate Spreads (average for the quarter : bps)											
90-day	16	8	5	1 ↓	1 ↓	1 ↓	1 ↓	1 ↓	-45	7 ↓	1 ↓
10-year	-18	-10	-10	-16 ↑	-16 ↑	-15 ↑	-14 ↑	-14 ↑	-56	-13 ↑	-15 ↑
UNITED STATES											
Real GDP (q/q % chng : a.r.)	-5.0	-31.4	30.0	1.5	4.9	4.6	4.2	3.2	2.2	-4.0	4.0
Consumer Price Index (y/y % chng)	2.1	0.4	1.3	1.2	1.4	2.7	2.0 ↓	2.0	1.8	1.2	2.0
Unemployment Rate (percent)	3.8	13.0	8.8	7.7	7.3	6.9	6.4	6.0	3.7	8.3	6.7
Housing Starts (mlns : a.r.)	1.48	1.08	1.43	1.33	1.30	1.31	1.31	1.32	1.30	1.33	1.31
Current Account Balance ($blns : a.r.)	-446	-682	-736	-737	-754	-760	-771	-776	-480	-650	-765
Interest Rates (average for the quarter : %)											
Fed Funds Target Rate	1.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2.13	0.38	0.13
3-month Treasury Bill	1.13	0.14	0.11	0.10	0.10	0.10	0.10	0.10	2.10	0.35	0.10
10-year Note	1.38	0.69	0.65	0.75 ↓	0.85	0.90	0.95	1.00	2.14	0.85 ↓	0.90
EXCHANGE RATES (average for the quarter)											
US¢/C$	74.4	72.2	75.1	75.7	75.9	76.2	76.5	76.8	75.4	74.4	76.4
C$/US$	1.34	1.39	1.33	1.32	1.32	1.31	1.31	1.30	1.33	1.35	1.31
¥/US$	109	108	106	105	105	106	106	107	109	107	106
US$/Euro	1.10	1.10	1.17	1.18 ↓	1.19 ↓	1.20	1.21	1.22	1.12	1.14	1.20 ↓
US$/£	1.28	1.24	1.29	1.29	1.30	1.31	1.32	1.33	1.28	1.28	1.31

Blocked areas mark BMO Capital Markets forecasts; up and down arrows (↑↓) indicate forecast changes; spreads may differ due to rounding

Canada

Benjamin Reitzes,
Canadian Rates & Macro Strategist
benjamin.reitzes@bmo.com

BoC Business Outlook Survey and Survey of Consumer Expectations (Q3)

Monday, 10:30 am

The Bank of Canada's summer **Business Outlook Survey** (BOS), likely compiled from around mid-August to mid/early-September, is expected to rebound from the second largest deterioration on record in Q2. Unsurprisingly, the weakness was broad-based last quarter, leaving the BOS indicator at the third-lowest level on record. While we're expecting a broad improvement, the various measures of sentiment will likely remain well below pre-pandemic levels.

The Bank's **Consumer Expectations Survey** will be out at the same time, and should rebound as well. The bounce-back in employment and massive government support should help buoy consumer sentiment.

Following Q2's across-the-board weakness, things should look somewhat brighter this time around. The sectors that have fully reopened are on the mend and business is picking up, though sectors that remain restricted (e.g. travel, tourism, dining) aren't likely to be meaningfully more upbeat than a few months ago. Look for sales expectations to perk up, potentially moving back into positive territory (though still short of pre-pandemic levels). Some improvement is expected in investment intentions as well, though probably not as much, while employment looks to stay subdued. Credit conditions should be one positive as interest rates are at or near-record lows, though non-price conditions likely provided some negative offset.

Capacity pressures plunged to a decade low in Q2, as demand cratered amid the pandemic-driven lockdowns. We should see some reversal of that move, but GDP remains well below early 2020 levels, suggesting that there is still ample excess capacity. Indeed, we don't expect GDP to return to 2019Q4 levels until the second half of 2021, suggesting there will be disinflationary slack for at least the next couple of years. The outlook for input and output price inflation has the potential to throw a curve ball. A general rebound in commodity prices could push input price expectations up, while output prices also face additional costs to operate under COVID restrictions, so we could see some strength despite the huge amount of slack in the economy. Even so, broader inflation expectations look to stay very subdued, with likely only a slight increase from the prior quarter. Overall, the tone of the survey is expected to improve from the exceptional weakness in Q2, but reinforce that there remains a long way to go in this recovery.

Consumer Price Index

Wednesday, 8:30 am

Sep. (e)	**-0.2% (+0.1% sa)**	**+0.4% y/y**
Aug.	-0.1%	+0.1% y/y

Core CPI Measures (Aug.)

CPI Core - Trim	+1.7%
CPI Core - Median	+1.9%
CPI Core - Common	+1.5%

Canadian consumer prices look to fall modestly in September, due in large part to seasonal weakness. However, prices aren't expected to fall as much as last year, as travel prices didn't see the usual July seasonal surge (which usually unwinds in September). Even so, softer food and energy prices along with an ongoing plunge in mortgage interest costs will weigh on the CPI. On the positive side, home prices are climbing, clothing looks to see at least part of its seasonal strength, and university tuition climbed about 1.7% y/y. Given the weaker print a year ago, our call for a 0.2% m/m drop in prices will lift headline inflation three ticks to +0.4% y/y.

The average of the Bank of Canada's three **core CPI** measures has printed 1.6% or 1.7% for five straight months and September is likely to continue that trend. Price pressures remain muted with a wide output gap and a number of industries struggling with COVID restrictions. With no sign of that changing anytime soon, look for underlying inflation to remain below target for some time.

Retail Sales
Wednesday, 8:30 am

		Ex. Autos
Aug. (e)	**+1.1%**	**+1.5%**
July	+0.6%	-0.4%

Retail sales likely continued to lead the economic recovery in August, as ongoing restrictions on the services sector prompt more spending on goods. COVID fears dampened notably in August, probably pushing a few shoppers back to physical stores and slowing the growth in e-commerce. According to StatsCan's preliminary estimate, retail sales rose 1.1% in August, which would leave sales up 2.3% from February levels. This comes despite auto dealers reporting a drop in sales (that reversed in September). The flash estimate for September will be eyed closely, and could benefit from back-to-school/back-to-work spending.

United States

Michael Gregory, CFA,
Deputy Chief Economist
michael.gregory@bmo.com

Housing Starts
Tuesday, 8:30 am

Sep. (e)	**1.50 mln a.r. (+6.0%)**
Consensus	1.45 mln a.r. (+2.5%)
Aug.	1.42 mln a.r. (-5.1%)

Building Permits

Sep. (e)	**1.52 mln a.r. (+3.0%)** [c]
Aug.	1.48 mln a.r. (-0.5%)

[c] = consensus

Existing Home Sales
Thursday, 10:00 am

Sep. (e)	**6.21 mln a.r. (+3.5%)**
Consensus	*6.20 mln a.r. (+3.3%)*
Aug.	6.00 mln a.r. (+2.4%)

The pandemic is prodding housing demand, aided by record low mortgage rates, with a preference for bigger abodes (thank you WFH), and those in less-densely populated dwellings (single- over multi-family units) and areas (the suburban, exurban and rural over the urban). In August, **existing home sales** hit the six million mark for the first time since December 2006, and they look to build on this in September (we reckon up 3.5% to 6.21 mln with net upside risk). Existing sales are measured at the time of closing, not contract signing, and pending sales (those waiting to close) were up 8.8% in August. On top of this, mortgage applications for purchases jumped 3.8% in September (some of this will be for new home financing). The next major milestone for existing home sales will be December 2006's 6.42 mln mark, which will probably be surpassed before the end of the year.

The increasing housing demand is hoovering up available supply. Seasonally-adjusted existing homes for sale ran at record-low levels in July and August (as far back as 1982 for single-family units). This, in turn, is stoking activity in the new home segment. The NAHB Housing Market Index hit a record high in September (the survey started in 1985), as new (single-family) home sales hit the one million mark for the first time since November 2006. In August, single-family housing starts posted their fourth consecutive increase and we look for a fifth advance in September, up 2.6% to 1.05 mln, which will be the highest in more than 13 years. Total **housing starts** should rise 6.0% to 1.50 mln in September, benefiting from a rebound in the volatile multi-family segment; they plummeted almost 23% in August to pull down total starts despite the strong single-family segment.

Beige Book
Wednesday, 2:00 pm

The Fed's **Beige Book**, the survey of regional economic conditions prepared for the November 4-5 FOMC meeting, will include information available on or before October 12 (and well after the prior report's August 24 cutoff). For more than the past month, the trend in new COVID-19 cases has been on the rise, leading many jurisdictions to pause or reverse their reopening plans. Apart from the amplified business restrictions, the second wave's damper on business and consumer confidence, along with associated outlays, are likely slowing economic growth in most regions. The prior Beige Book's headline assessment that *"economic activity increased among most Districts, but gains were generally modest and activity remained well below levels prior to the COVID-19 pandemic"* will likely be softened despite upbeat dispatches from the housing fronts. The prior report concluded that *"continued uncertainty and volatility related to the pandemic, and its negative effect on consumer and business activity, was a theme echoed across the country."* That echo is going to sound louder this time.

China

Jennifer Lee,
Senior Economist
jennifer.lee@bmo.com

Real GDP
Monday

Q3 (e)	**+3.3%**	**+5.5% y/y**
Q2	+11.5%	+3.2% y/y

After historic declines in the first half of the year, the world is ready for that highly-anticipated economic rebound. **China** is one of the first out of the gate with its Q3 **GDP** results. Consensus looks for a 5.5% y/y gain, and about 2% for all of 2020. Although that would be the slowest annual increase in at least four decades, it is a rare source of growth, particularly with global GDP expected to plunge 4%. What will be worthier of a closer look are the monthly data. We've already seen September trade activity, credit growth and car sales... they're picking up, signalling a firm handoff to Q4. Industrial production is expected to increase for the sixth consecutive month, but retail sales will be the number to watch. August sales encouragingly rose from year-earlier levels for the first time this year. If the latest upturn holds up, and it should, based on strong import growth and robust auto sales in September, consumer spending could be a powerful growth driver heading into the final quarter.

Financial Markets Update for October 16, 2020

		Oct 16 [1]	Oct 9	Week Ago	4 Weeks Ago	Dec 31, 2019
					(basis point change)	
Canadian Money Market	Call Money	0.25	0.25	0	0	-150
	Prime Rate	2.45	2.45	0	0	-150
U.S. Money Market	Fed Funds (effective)	0.25	0.25	0	0	-150
	Prime Rate	3.25	3.25	0	0	-150
3-Month Rates	Canada	0.10	0.09	1	-5	-156
	United States	0.10	0.09	0	2	-145
	Japan	-0.09	-0.14	5	3	2
	Eurozone	-0.51	-0.51	0	-1	-13
	United Kingdom	0.05	0.05	0	-1	-75
	Australia	0.08	0.08	0	-1	-83
2-Year Bonds	Canada	0.23	0.26	-3	-3	-146
	United States	0.14	0.16	-1	0	-143
10-Year Bonds	Canada	0.57	0.63	-5	-1	-113
	United States	0.74	0.78	-3	5	-118
	Japan	0.03	0.03	0	2	5
	Germany	-0.63	-0.53	-10	-14	-44
	United Kingdom	0.17	0.28	-11	-1	-64
	Australia	0.72	0.85	-13	-17	-65
Risk Indicators	VIX	26.3	25.0	1.3 pts	0.4 pts	12.5 pts
	TED Spread	12	13	-1	-2	-24
	Inv. Grade CDS Spread [2]	57	54	3	-14	12
	High Yield CDS Spread [2]	376	366	10	28	96
					(percent change)	
Currencies	US¢/C$	75.78	76.21	-0.6	0.1	-1.6
	C$/US$	1.320	1.312	—	—	—
	¥/US$	105.42	105.62	-0.2	0.8	-2.9
	US$/€	1.1720	1.1826	-0.9	-1.0	4.5
	US$/£	1.293	1.304	-0.8	0.1	-2.5
	US¢/A$	70.83	72.40	-2.2	-2.8	0.9
Commodities	CRB Futures Index	151.49	151.74	-0.2	0.0	-18.5
	Oil (generic contract)	40.69	40.60	0.2	-1.0	-33.4
	Natural Gas (generic contract)	2.78	2.74	1.4	35.7	27.0
	Gold (spot price)	1,902.26	1,930.40	-1.5	-2.5	25.4
Equities	S&P/TSX Composite	16,544	16,563	-0.1	2.1	-3.0
	S&P 500	3,510	3,477	1.0	5.7	8.7
	Nasdaq	11,780	11,580	1.7	9.1	31.3
	Dow Jones Industrial	28,772	28,587	0.6	4.0	0.8
	Nikkei	23,411	23,620	-0.9	0.2	-1.0
	Frankfurt DAX	12,934	13,051	-0.9	-1.4	-2.4
	London FT100	5,921	6,017	-1.6	-1.4	-21.5
	France CAC40	4,948	4,947	0.0	-0.6	-17.2
	S&P ASX 200	6,177	6,102	1.2	5.3	-7.6

[1] = as of 11:00 am *[2] = One day delay*

	Monday October 19	Tuesday October 20	Wednesday October 21	Thursday October 22	Friday October 23
Japan	**Trade Surplus** **Sep. '20 (e) ¥975.6 bln** Sep. '19 ¥248.6 bln	**Machine Tool Orders** **Sep. F (e) -15.0% y/y** Aug. -23.2% y/y		**Department Store Sales** **Sep.** Aug. -22.0% y/y	CPI / Core CPI **Sep. (e) unch y/y -0.4% y/y** Aug. +0.2% y/y -0.4% y/y **CPI Ex. Fresh Food & Energy** **Sep. (e) -0.1% y/y** Aug. -0.1% y/y **Manufacturing PMI** **Oct. P** Sep. 47.7 **Services PMI** **Oct. P** Sep. 46.9 **Composite PMI** **Oct. P** Sep. 46.6
Euro Area			EURO AREA ECB Strategy Review	EURO AREA **Consumer Confidence** **Oct. A (e) -15.0** Sep. -13.9 GERMANY **GfK Consumer Confidence** **Nov. (e) -3.0** Oct. -1.6 FRANCE **Business Confidence** **Oct. (e) 92** Sep. 92	EURO AREA **Manufacturing PMI** **Oct. P (e) 53.0** Sep. 53.7 **Services PMI** **Oct. P (e) 47.0** Sep. 48.0 **Composite PMI** **Oct. P (e) 49.5** Sep. 50.4
U.K.			**Consumer Price Index** **Sep. (e) +0.4% +0.6% y/y** Aug. -0.4% +0.2% y/y **Core CPI** **Sep. (e) +1.3% y/y** Aug. +0.9% y/y **Producer Price Index (Output)** **Sep. (e) unch -0.9% y/y** Aug. unch -0.9% y/y		**GfK Consumer Confidence** **Oct. (e) -28** Sep. -25 **Retail Sales (incl. Fuel)** **Sep. (e) +0.4% +3.7% y/y** Aug. +0.8% +2.8% y/y **Manufacturing PMI** **Oct. P (e) 53.1** Sep. 54.1 **Services PMI** **Oct. P (e) 53.4** Sep. 56.1 **Composite PMI** **Oct. P (e) 53.8** Sep. 56.5
Other	CHINA **Real GDP** **Q3 (e) +3.3% +5.5% y/y** Q2 +11.5% +3.2% y/y **Industrial Production** **Sep. (e) +5.8% y/y** Aug. +5.6% y/y **Retail Sales** **Sep. (e) +1.8% y/y** Aug. +0.5% y/y **Fixed Asset Investment (YTD)** **Sep. (e) +0.9% y/y** Aug. -0.3% y/y	AUSTRALIA RBA Minutes from Oct. 6 meeting			

D = date approximate

Upcoming Policy Meetings | Bank of England: Nov. 5, Dec. 17, Feb. 4 | European Central Bank: Oct. 29, Dec. 10, Jan. 21

Canada

Monday October 19

- **8:30 am** **Wholesale Trade**
  - **Aug. (e)** **+0.1%**
  - July +4.3%
- **10:30 am** **BoC Business Outlook Survey and Survey of Consumer Expectations (Q3)**
- Noon 10-year bond auction $5.0 bln
- BoC Buyback: 10-year sector

Tuesday October 20

- 10:30 am 3-, 6- & 12-month bill auction $10.0 bln (new cash -$10.0 bln)
- BoC Buyback: Under 2-year sector

Wednesday October 21

- **8:30 am** **Consumer Price Index**
  - **Sep. (e)** **-0.2%** **+0.4% y/y** **(+0.1% sa)**
  - Aug. -0.1% +0.1% y/y
- **8:30 am** **CPI Core (% y/y)**

	Trim	Median	Common
Sep.			
Aug.	+1.7%	+1.9%	+1.5%

- **8:30 am** **Retail Sales** **Ex. Autos**
  - **Aug. (e)** **+1.1%** **+1.5%**
  - July +0.6% -0.4%
- **8:30 am** **New Housing Price Index**[D]
  - **Sep. (e)** **+0.4%** **+2.4% y/y**
  - Aug. +0.5% +2.1% y/y
- Noon 5-year bond auction $5.0 bln
- BoC Buyback: 5-year sector

Thursday October 22

- Noon 2-year bond auction $7.0 bln
- 3- & 30-year bond auction announcements
- BoC Buyback: 2-year sector

Friday October 23

- BoC Buyback: 30-year sector

Saturday October 24

- **British Columbia Election**

United States

Monday October 19

- **10:00 am** **NAHB Housing Market Index**
  - **Oct. (e)** **83** [c]
  - Sep. 83
- **8:00 am** **Fed Chair Powell on a webcast panel on cross-border payments and digital currencies for the IMF annual meeting**
- Fed Speakers: New York's Williams (9:00 am); Vice Chair Clarida (11:45 am); Atlanta's Bostic (2:20 pm); Philadelphia's Harker (3:00 pm)
- 11:30 am 13- & 26-week bill auctions $105 bln

Tuesday October 20

- **8:30 am** **Housing Starts**
  - **Sep. (e)** **1.50 mln a.r. (+6.0%)**
  - *Consensus* *1.45 mln a.r. (+2.5%)*
  - Aug. 1.42 mln a.r. (-5.1%)
- **8:30 am** **Building Permits**
  - **Sep. (e)** **1.52 mln a.r. (+3.0%)** [c]
  - Aug. 1.48 mln a.r. (-0.5%)
- Fed Speakers: New York's Williams (9:00 am); Governor Quarles (10:50 am); Chicago's Evans (1:00 pm)
- 11:00 am 4- & 8-week bill auction announcements
- 11:30 am 119-day CMB $30 bln
- 11:30 am 42-day CMB $30 bln

Wednesday October 21

- **7:00 am** **MBA Mortgage Apps**
  - **Oct. 16**
  - Oct. 9 -0.7%
- **2:00 pm** **Beige Book**
- Fed Speakers: Governor Brainard (8:50 am); Cleveland's Mester (10:00 am)
- 1:00 pm 20[R]-year bond auction $22 bln

Thursday October 22

- **8:30 am** **Initial Claims**
  - **Oct. 17 (e)** **860k (-38k)**
  - *Consensus* *848k (-50k)*
  - Oct. 10 898k (+53k)
- **8:30 am** **Continuing Claims**
  - **Oct. 10**
  - Oct. 3 10,018k (-1,165k)
- **10:00 am** **Existing Home Sales**
  - **Sep. (e)** **6.21 mln a.r. (+3.5%)**
  - *Consensus* *6.20 mln a.r. (+3.3%)*
  - Aug. 6.00 mln a.r. (+2.4%)
- **10:00 am** **Leading Indicator**
  - **Sep. (e)** **+0.8%** [c]
  - Aug. +1.2%
- **11:00 am** **Kansas City Fed Manufacturing Activity**
  - **Oct. (e)** **11**
  - Sep. 11
- **9:00 pm** **Presidential Debate in Nashville, TN**
- Fed Speakers: Richmond's Barkin and San Francisco's Daly (1:10 pm); Dallas' Kaplan (6:00 pm)
- 11:00 am 13- & 26-week bill, 2-, 5- & 7-year note, 2-year FRN auction announcements
- 11:30 am 4- & 8-week bill auctions
- 1:00 pm 5-year TIPS auction $17 bln

Friday October 23

- **9:45 am** **Markit PMIs (Oct. P)**

[C] = consensus [D] = date approximate [R] = reopening

Upcoming Policy Meetings | Bank of Canada: Oct. 28, Dec. 9, Jan. 20 | FOMC: Nov. 4-5, Dec. 15-16, Jan. 26-27

General Disclosures

"BMO Capital Markets" is a trade name used by the BMO Investment Banking Group, which includes the wholesale arm of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Limited in the U.K., Bank of Montreal Europe Plc in Ireland and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Limited, Bank of Montreal Europe Plc and BMO Capital Markets Corp are affiliates. BMO does not represent that this document may be lawfully distributed, or that any financial products may be lawfully offered or dealt with, in compliance with any regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder. This document is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Their contents have not been reviewed by any regulatory authority. Bank of Montreal or its subsidiaries ("BMO Financial Group") has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This document is not to be construed as an offer to sell, a solicitation for or an offer to buy, any products or services referenced herein (including, without limitation, any commodities, securities or other financial instruments), nor shall such Information be considered as investment advice or as a recommendation to enter into any transaction. Each investor should consider obtaining independent advice before making any financial decisions. This document is provided for general information only and does not take into account any investor's particular needs, financial status or investment objectives. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

Dissemination of Economic Publications

Our publications are disseminated via email and may also be available via our web site https://economics.bmo.com. Please contact your BMO Financial Group Representative for more information.

Additional Matters

This report is directed only at entities or persons in jurisdictions or countries where access to and use of the information is not contrary to local laws or regulations. Its contents have not been reviewed by any regulatory authority. BMO Capital Markets does not represent that this report may be lawfully distributed or that any financial products may be lawfully offered or dealt with, in compliance with regulatory requirements in other jurisdictions, or pursuant to an exemption available thereunder.

To Australian residents: BMO Capital Markets Limited is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and is regulated by the UK Financial Conduct Authority under UK laws, which differ from Australian laws. This document is only intended for wholesale clients (as defined in the Corporations Act 2001) and Eligible Counterparties or Professional Clients (as defined in Annex II to MiFID II).

To Canadian Residents: BMO Nesbitt Burns Inc. furnishes this report to Canadian residents and accepts responsibility for the contents herein subject to the terms set out above. Any Canadian person wishing to effect transactions in any of the securities included in this report should do so through BMO Nesbitt Burns Inc.

To U.K./E.U. Residents: In the UK, Bank of Montreal London Branch is authorised and regulated by the Prudential Regulation Authority and the Financial Conduct Authority ("FCA") and BMO Capital Markets Limited is authorised and regulated by the FCA. The contents hereof are intended solely for clients which satisfy the criteria for classification as either a "professional client" or an "eligible counterparty", each as defined in Directive 2014/65/EU ("MiFID II"). Any U.K. person wishing to effect transactions in any security discussed herein should do so through Bank of Montreal, London Branch or BMO Capital Markets Limited; any person in the E.U. wishing to effect transactions in any security discussed herein should do so through BMO Capital Markets Limited. In the UK this document is published by BMO Capital Markets Limited which is authorised and regulated by the Financial Conduct Authority. The contents hereof are intended solely for the use of, and may only be issued or passed on to, (I) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (II) high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons together referred to as "relevant persons"). The contents hereof are not intended for the use of and may not be issued or passed on to retail clients.In an E.U. Member State this document is issued and distributed by Bank of Montreal Europe plc which is authorised and regulated in Ireland and operates in the E.U. on a passported basis. This document is only intended for Eligible Counterparties or Professional Clients, as defined in Annex II to "Markets in Financial Instruments Directive" 2014/65/EU ("MiFID II").

To Hong Kong Residents: This document is issued and distributed in Hong Kong by Bank of Montreal ("BMO"). BMO is an authorized institution under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong) and a registered institution with the Securities and Futures Commission (CE No. AAK809) under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong). This material has not been reviewed or approved by any regulatory authority in Hong Kong. Accordingly the material must not be issued, circulated or distributed in Hong Kong other than (1) except for "structured products" as defined in the Securities and Futures Ordinance, in circumstances which do not constitute it as a "Prospectus" as defined in the Companies Ordinance or which do not constitute an offer to the public within the meaning of that Ordinance, or (2) to Professional investors as defined in the Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules made thereunder. Unless permitted by the securities laws of Hong Kong, no person may issue in Hong Kong, or have in its possession for issue in Hong Kong this material or any other advertisement, invitation or document relating to the products other than to a professional investor as defined the Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules.

To Korean Residents: This material is not provided to make a recommendation for specific Korean residents to enter into a contract for trading financial investment instruments, for investment advising, for discretionary investment, or for a trust, nor does it constitute advertisement of any financial business or financial investment instruments towards Korean residents. The material is not provided as advice on the value of financial investment instruments or any investment decision for specific Korean residents. The provision of the material does not constitute engaging in the foreign exchange business or foreign exchange brokerage business regulated under the Foreign Exchange Transactions Act of Korea.

To PRC Residents: This material does not constitute an offer to sell or the solicitation of an offer to buy any financial products in the People's Republic of China (excluding Hong Kong, Macau and Taiwan, the "PRC"). BMO and its affiliates do not represent that this material may be lawfully distributed, or that any financial products may be lawfully offered, in compliance with any applicable registration or other requirements in the PRC, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. This material may not be distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations.

Singapore Residents: This document has not been registered as a prospectus with the Monetary Authority of Singapore and the material does not constitute an offer or sale, solicitation or invitation for subscription or purchase of any shares or financial products in Singapore. Accordingly, BMO and its affiliates do not represent that this document and any other materials produced in connection therewith may lawfully be circulated or distributed, whether directly or indirectly, to persons in Singapore. This document and the material do not and are not intended to constitute the provision of financial advisory services, whether directly or indirectly, to persons in Singapore. This document and any information contained in this report shall not be disclosed to any other person. If you are not an accredited investor, please disregard this report. BMO Singapore Branch does not accept legal responsibility for the contents of the report. In Asia, Bank of Montreal is licensed to conduct banking and financial services in Hong Kong and Singapore. Certain products and services referred to in this document are designed specifically for certain categories of investors in a number of different countries and regions. Such products and services would only be offered to these investors in those countries and regions in accordance with applicable laws and regulations. The Information is directed only at persons in jurisdictions where access to and use of such information is lawful.

To Thai Residents: The contents hereof are intended solely for the use of persons qualified as Institutional Investors according to Notification of the Securities and Exchange Commission No. GorKor. 11/2547 Re: Characteristics of Advice which are not deemed as Conducting Derivatives Advisory Services dated 23 January 2004 (as amended). BMO and its affiliates do not represent that the material may be lawfully distributed, or that any financial products may be lawfully offered, in compliance with any regulatory requirements in Thailand, or pursuant to an exemption available under any applicable laws and regulations.

To U.S. Residents: BMO Capital Markets Corp. furnishes this report to U.S. residents and accepts responsibility for the contents herein, except to the extent that it refers to securities of Bank of Montreal.

These documents are provided to you on the express understanding that they must be held in complete confidence and not republished, retransmitted, distributed, disclosed, or otherwise made available, in whole or in part, directly or indirectly, in hard or soft copy, through any means, to any person, except with the prior written consent of BMO Capital Markets.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

BMO Financial Group (NYSE, TSX: BMO) is an integrated financial services provider offering a range of retail banking, wealth management, and investment and corporate banking products. BMO serves Canadian retail clients through BMO Bank of Montreal and BMO Nesbitt Burns. In the United States, personal and commercial banking clients are served by BMO Harris Bank N.A., (Member FDIC). Investment and corporate banking services are provided in Canada and the US through BMO Capital Markets.

BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Europe p.l.c, and Bank of Montreal (China) Co. Ltd, the institutional broker dealer business of BMO Capital Markets Corp. (Member FINRA and SIPC) and the agency broker dealer business of Clearpool Execution Services, LLC (Member FINRA and SIPC) in the U.S., and the institutional broker dealer businesses of BMO Nesbitt Burns Inc. (Member Investment Industry Regulatory Organization of Canada and Member Canadian Investor Protection Fund) in Canada and Asia, Bank of Montreal Europe p.l.c. (authorised and regulated by the Central Bank of Ireland) in Europe and BMO Capital Markets Limited (authorised and regulated by the Financial Conduct Authority) in the UK and Australia.

A member of BMO Financial Group