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Fighting the Fed… and the BoC

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Inflation fears dominated the market narrative for the first ten months of the year, powering global yields dramatically higher, flinging the U.S. dollar forward, and pounding equity valuations. Yet, as we rapidly approach the end of 2022, the market is engaged in an aggressive counter-trend move almost across the board. Commodities turned first, with broad price measures peaking all the way back in early June, and oil prices now bouncing around their lowest level of the year. Then each of the dollar, yields, and stocks turned the corner in October. While today's moderate high-side surprise in the PPI has at least temporarily stalled the move, the bigger picture is that since the autumn extremes:

- The trade-weighted U.S. dollar is down 7%
- Ten-year Treasury yields are down more than 70 bps (and 5-year GoCs have plunged more than 80 bps)
- U.S. retail gasoline prices are down 34% (since June), and
- Broad stock indices are up 11%.

The late-year reversal reinforces the point that financial markets have handled a suite of challenging events with remarkable resilience. The re-pricing to a significantly higher interest rate reality has been painful for most portfolios, yet still quite orderly, with no obvious stress fractures. **But this generally resilient market performance ironically makes the Fed's job that much more challenging.** A step down to a 50 bp rate hike is all but locked in for next week's FOMC meeting (after a string of four consecutive 75 bp hikes), and we look for two more 25 bp moves in the first two meetings of 2023. The **risk** to this call is that **the Fed may need to do even more**, to more forcefully soften overall financial conditions and ensure that underlying inflation is squashed.

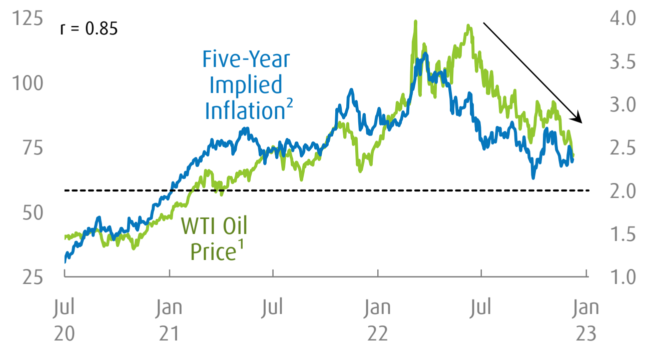
Our broad macro view can be summarized as a little more downbeat than the consensus on growth, but more concerned about the persistence of core inflation in 2023. For example, the latest consensus (survey conducted just this week) expects U.S. GDP growth of 0.2% next year, while we are at 0.0%; and average CPI inflation of 4.1%, while we are at 4.8%. It's a broadly similar picture for the core PCE deflator, where the consensus looks for a cooldown to 3.7% next year, while we are at 4.2%. Sidebar: The consensus call on growth and inflation have been largely unchanged in the past three months, after a stream of downward revisions to growth and upward revisions to inflation in the prior six months.

One important development that could swing our forecast more in line with the average call is the **ongoing slide in oil prices**. It is quite telling that crude slid roughly 10% this week to around US$72 in the wake of a wave of cross currents. In short order, oil had to digest the OPEC+ meeting (production was held steady), the EU's $60 price cap on Russian oil, China's baby reopening steps, and a Keystone pipeline spill. Likely overriding those fundamental factors has been the macro backdrop, with markets pricing in a deeper global slowdown in 2023. With oil and U.S. gasoline prices now probing their lowest level of the year, this clearly takes the edge off headline inflation and inflation expectations, and will also provide some immediate relief for consumers.

The University of Michigan's latest survey found that consumer short-term expectations of inflation are easing somewhat (one-year at 4.6%), although the five-year view is holding steady at 3.0%.

Crude Reckoning

(as of December 9, 2022, 11:00 am)



[1] (lhs : US$/bbl); [2] 5-year nominal Treasuries minus 5-year TIPS (rhs : ppts)
Sources: BMO Economics, Haver Analytics, Bloomberg

Just ahead of the FOMC meeting, the **U.S. November CPI report** will provide an ample appetizer on Tuesday. Expectations for the figure are toggling around a non-descript headline rise of 0.3%, which would clip the annual inflation rate to roughly 7.3%; the risk is for a slightly meatier core result of 0.4%, which would only shave the annual pace a tick to 6.2%. Given a mild high-side surprise on the PPI, markets would likely readily digest this outcome, and move on to the Fed the next day. However, the past two years have certainly taught us to **never take the CPI for granted**. With high-side surprises the norm since early 2021, it would be an important development if the U.S. managed a second consecutive low-end result. Suffice it to say, we doubt that will be the case, especially for core.

Canada's calendar is lighter next week after the showpiece **Bank of Canada decision** this past Wednesday. The semi-aggressive 50 bp hike reasserted the Bank's position as the world's top hiker in 2022 (at least until the Fed weighs in next week), with a cumulative 400 bps of rate increases and a top overnight rate of 4.25% (tied with the RBNZ). But market reaction was muted to the minor surprise on the rate hike size due to a **mild message**—after months of flatly stating that rates needed to rise further, the Bank said they would now debate *whether* that was still the case. We continue to expect that the answer will be "yes" one more time, with a 25 bp hike anticipated for January, to a terminal rate of 4.50%.

Arguably, the Bank has an even bigger challenge on its hands with recent financial market moves. While equities slipped this week, the TSX is still down by little more than 5% YTD. Even with some recovery in recent weeks, the Canadian dollar is still down 7% y/y, keeping pressure on import costs. But, most importantly, the bond market is absolutely fighting the BoC, with long-term issues rallying furiously in the past two months. While there is intense focus on the deep yield curve inversion in Treasuries, the GoC market is even more extreme. To pick but one example, the overnight rate is now a towering 140 bps above the 10-year yield. That gap is at a 30-year extreme and has almost never been wider than 50 bps in that period.

Essentially, the market is assuming that the Bank will be slashing rates by the second half of next year as—presumably—inflation melts away. This is where **we distinctly deviate from the consensus and the markets**. Similar to the U.S. outlook, our call on Canada for 2023 can be characterized as a wee bit lower on real GDP (consensus is now 0.4%, we are 0.0%) and higher on inflation (consensus is for average CPI of 3.8%, we are 4.6%). Our call would leave no leeway for rate reductions in 2023.

The reason why this divergence in views is so important is that if the Bank is indeed cutting rates by the second half of 2023, this could help resuscitate the housing market in relatively short order. Next week's national housing data for November are expected to show a near-40% y/y drop in existing sales and a 4% y/y decline in prices on the

MLS HPI metric. But, if anything, the market's fundamentals may show stabilization amid a pullback in listings. Both potential sellers and heavily indebted owners are likely holding on, waiting for rates to ultimately recede. And the steep drop in the key five-year GoC yield from the late-October peak of 3.86% to 3.05% now will simply feed that narrative. In a word, that pullback in yields just means that the Bank will need to keep short-term rates higher for longer as a counterweight. **You can fight the BoC, or the Fed, but you can't win.**

Fed Policy Rates: Raising Slower, Far from Lower

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After four consecutive 75 bp rate hikes, **the FOMC is expected to rein in the tightening tempo to 50 bps** on December 14. This will lift the target range for the fed funds rate to 4¼%-to-4½%, the highest in 15 years—before QE and ZIRP were familiar acronyms—and the quickest cumulative rate hike since the Fed began targeting fed funds in the 1980s.

In a November 30 speech, Chair Powell said: *"The time for moderating the pace of rate increases may come as soon as the December meeting"*. After being heralded in the past three press conferences, this strong policy signal stoked a big rally in both stocks and bonds on the day as markets were all too willing to crimp the rate hike timetable running from 'moderating' to 'stopping' and eventually 'reversing'. However, Powell also said that *"the timing of that moderation is far less significant than the questions of how much further we will need to raise rates to control inflation, and the length of time it will be necessary to hold policy at a restrictive level"*, echoing the caveat first mentioned in his earlier-in-the-month press conference. We suspect Powell will over-emphasize this caveat in the upcoming presser, and it could even make its way, in some form, into the policy statement.

Powell noted that because *"monetary policy affects the economy and inflation with uncertain lags, and the full effects of our rapid tightening so far are yet to be felt… it makes sense to moderate the pace of our rate increases as we approach the level of restraint that will be sufficient to bring inflation down"*. The language suggests that **the FOMC is contemplating more than just one moderated move**. We expect a further reining-in of the tightening tempo to 25 bps at the next meeting (February 1), which will probably be hinted at in the upcoming press conference.

The tightening campaign is becoming more tentative and data-dependent, as the FOMC susses out the elusive level of policy rates that will turn out to be "*sufficiently restrictive*" (a description first mentioned in November's policy statement) and then determines how long to keep rates at elevated levels. Economic and inflation performance, both on the ground and presumed soon to be there, will guide the policy path. But we'll get an inkling of what that might look like from the **Summary of Economic Projections (SEP)**.

In September's SEP, the median calls among the 19 end-of-the-year projections of the fed funds rate were 4.375% for this year, 4.625% for next year, along with 3.875% and 2.875% for 2024 and 2025, respectively. The 2022 call will be bang on; although, three months ago, nine participants pencilled in a lower figure with one higher. The 2023 call represented a tri-modal distribution with six projections each at 4.375%, 4.625% and 4.875%. And, there were no members of the over-5.00% club. We expect this to change, with the **median rising to 4.875%** (which is also our forecast) and **at least a few '5 handles'** among the group. The net risk is that the new median sports one too.

In the outyears (2024 and 2025), the median calls remained above the longer-run (neutral) level of 2.50%, and the underlying ranges of the projections remained relatively wide. Specifically, for 2024, the range ran from 2.625% to 4.625%. While we're not anticipating a change in this median, the net risk is that it too rises another notch. In any event, we reckon more individual projections than before will be following a 'higher for longer' theme.

Over the 2022 to 2024 interval, we expect the median forecasts to again reflect sustained below-potential real GDP growth (1.8%), jobless rates above the natural rate (4.0%) and inflation running above the 2.0% target for both total and core PCE. September's SEP had 0.2%, 1.2% and 1.7%, respectively, for growth (Q4/Q4), along with 3.8% and pair of 4.4%s for Q4 unemployment rates. It had 5.4%, 2.8% and 2.3%, respectively, for headline inflation (Q4/Q4) along with 4.5%, 3.1% and 2.3% for core. Any changes to next year will be the ones to focus on the most, in calibrating the risks around how high policy rates might have to rise and how long they might have to linger at elevated levels to restore price stability. Reflecting a higher policy rate profile, we're expecting to see slower growth and higher joblessness. But we're also expecting to see more stubborn inflation indicating that the **net risks for policy rates rest decidedly on the upside**.

Waging War on Inflation

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The U.S. inflation news has taken a welcome turn for the better. **Oil prices** have been the biggest wildcard for the outlook and they're moving in the right direction: down. Regular gasoline now costs the same as at the start of the year and a third less than the record high ($5.02 a gallon) set this summer. In addition, the bursting of the housing bubble has taken pressure off **rents**, which will slowly dampen the two shelter components that comprise almost a third of the CPI. But **food costs** remain a concern and are at the mercy of the weather and war, with wholesale food prices up a sizzling 15.5% y/y in November.

After oil, perhaps the best news is that an inflation mainstay, **wage growth,** appears to be cresting. Big downward revisions have cast **hourly compensation** in a less intense light, rising a moderate 3.2% annualized in Q3 and cutting the yearly rate to a less alarming 4.0%. Alongside a belated upturn in productivity, **unit labour costs** rose a pedestrian 2.4% annualized in Q3, after averaging 7.6% in H1. Unfortunately, compensation looks to pick up in Q4 given firm **average hourly earnings**, which were up 5.1% y/y in November.

The above wage measures don't control for compositional effects; for this, we need to turn to two other metrics. The venerable **employment cost index** popped 5.1% annualized in Q3 (and 5.0% y/y), juiced by the biggest increase in the public sector since 1989. By contrast, employment costs in the private sector simmered down to a 4.3% rate, the lowest in five quarters, though still up 5.2% in the past year. Meantime, the Atlanta Fed's **Wage Growth Tracker** for November continued to track north of 6% y/y, though it's off record highs in the summer. The **Indeed Wage Tracker,** which is based on job postings and captures trends for new hires, is also still growing strongly at 6.5% y/y, but it has decelerated sharply from a peak of 9% in March.

Like inflation itself, **wage growth has topped out** and might be climbing down the mountain, though the slope of the descent remains uncertain. We know from history that **a tight job market will fan wages** until worker shortages abate. On this front, the prognosis is concerning. While the downshift in labour demand helps, **the supply side isn't cooperating**. Due to retirements and health fears, the **participation rate** is still more than a percentage point below pre-pandemic levels, denoting a loss of over three million potential workers. Consequently, the **labour force** has shrunk by 102,000—despite a 5 million increase in the adult population. In the same 33-month period before the pandemic, the workforce expanded by 4.5 million. The number of adults **not in the labour force** has climbed by 5.2 million since February 2020 and continues to rise, after increasing just 346,000 in the same period before the pandemic. Data on labour force status flows suggest that more job leavers are dropping out of the workforce rather than looking for another job. And don't count on an influx of recent retirees. A Fed paper (*"The Great Retirement Boom": The Pandemic-Era Surge in Retirements and Implications for Future Labor Force Participation*) estimates that an additional 2 million people retired likely in response to the pandemic, and expects relatively few to return to the workforce as many were already 65 and older when leaving.

The net result is that since the start of the pandemic the supply of workers (the labour force) has contracted while the demand for workers (employment plus job vacancies) has soared—by either 4.2 million according to the payroll survey or 2.8 million based on the household report. Sawing off the difference suggests an **excess demand for workers of around 3½ million or about 2% of the workforce**. It's this shortage that will likely keep the wage flame burning bright until the jobless rate rises meaningfully, likely by more than a percentage point.

The **upshot** is that, while cresting wage growth lowers the chance of a wage-price spiral, future declines could be stubbornly slow, limiting progress toward price stability.

Bank of Canada Delivers

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The Bank of Canada hiked rates 50 bps this week, bringing policy rates up to 4.25%, the highest since early 2008. Sentiment was split heading into the meeting, with a slight majority of forecasters calling for 50 bps, while the market leaned toward 25 bps. We believe the Bank made the right call opting for the larger move as the risks to inflation remain skewed to the upside.

The policy statement highlighted the better-than-expected Q3 GDP growth, the fact that the economy continues to operate in excess demand, and the tight labour market. However, there was also some caution, mentioning the Q3 drop in consumption and softening housing activity due to higher rates. And, the Bank is still anticipating the economy will stall into year-end and through mid-2023. The former comments drove the 50 bp move, while the latter comments drove **a shift in forward guidance**. From March through October, the policy statement clearly laid out *"that the policy interest rate will need to rise further"*. That phrase was replaced with: *"Governing Council will be considering whether the policy interest rate needs to rise further"*. Simply, the Bank will be deciding policy on a meeting-by-meeting basis depending on how the data evolve.

The inflation data will likely be the primary driver of BoC policy, with GDP and labour market metrics playing a complementary role. We get two more inflation prints before the next policy meeting in late January, along with one jobs report and monthly GDP. Our early read on November CPI is for a soft print, which increases the odds of a BoC pause at the January policy meeting, but we'll also need to see December inflation data and risks have been consistently to the upside. For now, we continue to look for another 25 bp rate hike in Q1, with the timing driven by the CPI report.

Key Takeaway: The Bank of Canada has rates where they want them for now assuming inflation continues to trend lower. However, the door remains wide open to further hikes in the event price pressures intensify or even if core inflation doesn't slow. We'll likely have a good idea on whether inflation is confidently in a slowing trend or stickier than expected by the spring. At that point, the Bank can either pause more definitively or keep pushing rates higher.

ECB and BoE Tightening, China Easing

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As the year draws to an end, central banks find themselves at different stages of their cycles. There's the **BoJ**, which hasn't budged from its highly accommodative stance since the days of the pandemic. The **Federal Reserve** believes it is time to start "*moderating the pace of rate hikes*". The **BoC** is "*considering whether the policy interest rate needs to rise further*". The **RBA** swung from a series of 50 bp hikes to 25 bp moves over the past three meetings. Then there is the **RBNZ**, which stepped up the pace with a record 75 bp jump last month, and signalled that it will do more and "*sooner than previously indicated*".

The **ECB** and the **BoE** will make their final policy announcements for 2022 on December 15 and they should both land on the hawkish end of the spectrum. Unfortunately, the decision for both central banks will not be clear-cut as darker days for their economies lie ahead. The U.K. already suffered through one quarter of negative growth (Q3); and although the Euro Area's downturn may not be as deep as originally imagined, a GDP contraction is likely in Q4.

It is a tough call, but we see the **ECB** raising the three key interest rates by 50 bps, a step down from the two consecutive 75 bp rate hikes but bringing the refi rate to 2.50%, the marginal lending facility to 2.75%, and the deposit facility to 2.00%, all 14-year highs. The discussion, however, should not be described as one between hawks and doves; rather, it is between those who are hawkish, and those who are even more hawkish. Recall that the last rate hike was supported by a "*very large majority*". The entire Governing Council agrees that near-record high inflation is their primary problem, but they disagree on how aggressive rate hikes need to be. Over the last couple of weeks, most central bankers have been talking up a 50 bp move. Sure Austria's Holzmann has yet to see "*signs of core inflation reducing*" and the Netherland's Knot calls fears of overtightening "*a joke*". What is very interesting is that the Bundesbank's Nagel is open to a smaller increase, and says "*even 50 bps is a strong rate move*". The others have either openly backed a 50 bp hike, or remained vague about what constitutes a large increase. With core inflation stuck at a record-high 5%, and headline inflation finally sliding from unprecedented heights, there are good arguments to be made from both sides. Unhelpfully, the latest ECB's monthly survey showed inflation expectations rising over the next 12 months. (More unhelpfully, the ECB staff is threatening to go on strike over the latest salary reviews.) So, expect hawkish commentary to accompany a 50 bp hike, which will be made at the same time as the EU energy ministers summit.

The **BoE** is also expected to raise rates, but at least it won't be "*flying blind*" as it was during the last meeting six weeks ago. Recall that November's 75 bp hike to 3% was a dovish one, backed by seven members of the MPC, while the remaining two were in favour of smaller hikes (25 and 50). It now knows that Chancellor Hunt's big spending cuts won't begin for two years, which is being seen as stimulative and prompting further rate hikes. There was also confirmation that the economy contracted in Q3 and in September, inflation soared to 41-year highs of 11.1%, and wage growth accelerated. And that is where the uncertainty lies. Although the BoE's forecast for a prolonged recession (one lasting a record eight quarters) is expected to lower inflation, it needs to address still-high inflation expectations and any potential second-round effects (strike action isn't helping). Complicating matters will be the latest CPI and employment reports, due to be released a day or two before the announcement, which may wield some influence. All in, we look for a 50 bp hike, with a nod to another increase at the next meeting in February, when it will be armed with updated economic growth and CPI projections.

There were some big developments in **China** this week that proved to the world that the **official zero-COVID policy is finally thawing**. There had been some tweaks here and there over the past four weeks (remember the denied reports of a "Reopening Committee" being formed?) but the 'blank paper' protests seemed to have had an impact, as well as the steady stream of weaker economic data (example: imports nosedived 10.6% y/y in October). According to the Politburo, there will be a "*push for overall improvement in the economy*" and monetary policy will be "*targeted and forceful*".

But before the economy can get moving again, the COVID restrictions must be relaxed. The **National Health Commission** released 10 new measures that are meant to make life a little easier and less confusing, including less frequent mass testing, and lifting lockdowns if there haven't been any new cases for five days. But it is not all-clear yet. There are worries of new outbreaks in rural areas during the upcoming Lunar New Year celebrations, and that the 85 million seniors will refuse another round of vaccinations. Baby steps.

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

	Good News	Bad News
Canada ▪ BoC hikes 50 bps to 4.25% amid still-high inflation expectations… ▪ Future moves are data-dependent	**Merchandise Trade Surplus** widened to $1.2 bln (Oct.) **Ivey PMI** +1.3 pts to 51.4 (Nov.) **Province of Quebec** is projecting a $2.0 bln deficit (FY22/23)—better than expected	**Building Permits** -1.4% (Oct.) **Capacity Utilization** -0.2 ppts to 82.6% (Q3)
United States ▪ Economy still showing some strength	**ISM Services PMI** +2.1 pts to 56.5 (Nov.) **Nonfarm Productivity** revised up to +0.8% a.r. (Q3)—and **ULC** revised down to +2.4% a.r. **Factory Orders** +1.0% (Oct.) **Consumer Credit** +$27.1 bln (Oct.) **U of M Consumer Sentiment** +2.3 pts to 59.1 (Dec. P)—and year-ahead inflation expectations edge down	**Producer Prices** +0.3% m/m (Nov.)—above expected **Household Net Worth** fell by $392 bln (Q3) **Goods & Services Trade Deficit** widened to $78.2 bln (Oct.) **Global Supply Chain Pressure Index** climbed to 1.20 (Nov.) **Initial Claims** +4k to 230k (Dec. 3 week)
China ▪ COVID restrictions continue to ease	**Consumer Prices** slowed to +1.6% y/y (Nov.)—but food prices accelerated **Producer Prices** -1.3% y/y (Nov.) **Foreign Reserves** edged up slightly to $3.11 trln (Nov.)	**Exports** -8.7% y/y; **Imports -**10.6% y/y (Nov.) **Caixin Services PMI** -1.7 pts to 46.7 (Nov.)
Japan ▪ Q3 capital spending holds up despite weak economy	**Household Spending** +1.2% y/y (Oct.) **Bank Lending Ex. Trusts** +3.0% y/y (Nov.)	**Current Account** swung to a ¥64.1 bln deficit (Oct.) **Real GDP** revised up to -0.2% q/q (Q3) —still a contraction
Europe ▪ ECB's monthly survey shows inflation expectations rising	**Euro Area—Real GDP** revised up to +0.3% q/q (Q3) **Germany—Factory Orders** +0.8% (Oct.) **France—Trade Deficit** narrowed to €12.2 bln (Oct.)	**Euro Area—Retail Sales** -1.8% (Oct.) **Germany—Industrial Production** -0.1% (Oct.) **Italy—Retail Sales** -0.4% (Oct.) **U.K.—Construction PMI** -2.8 pts to 50.4 (Nov.)
Other ▪ RBA hikes 25 bps to a decade-high 3.10% ▪ Central Bank of Brazil on hold; RBI hikes 35 bps to 6.25%		**Australia—Real GDP** softened to +0.6% q/q (Q3) **Australia—Trade Surplus** narrowed to A$12.2 bln (Oct.)

Housing Outlook: Testing the Foundation

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The Canadian housing market is firmly in correction mode, and the adjustment will likely continue through 2023. Despite much debate in academic and media circles about the causes of the recent housing boom, our strong view through the pandemic was that **underlying demographic and supply-side fundamentals gave way to excessive froth, fuelled by too-low for too-long mortgage rates and investor expectations of never-ending price increases**. The sharpest monetary policy tightening in a generation has broken market psychology, and the froth is getting cleaned up.

Our baseline forecasts for housing in 2023 are shown in *Chart 1*. Sales volumes are expected to bottom in the spring as the market more actively clears; downward price discovery will continue through the year; and, the supply pipeline might actually get pulled back despite an ongoing push from policymakers.

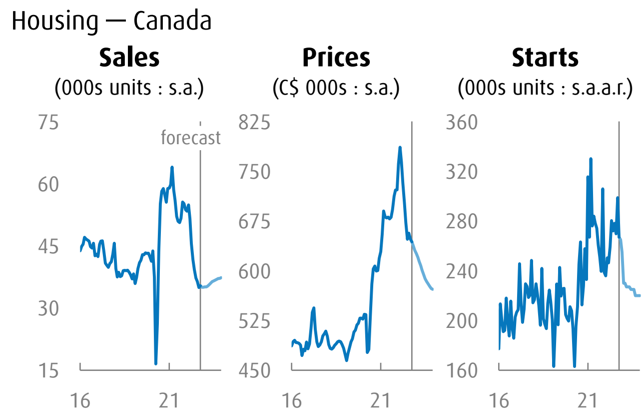
Mortgage Rates: The New, Old Normal

The Bank of Canada is most likely near the end of its tightening cycle, and mortgage rates will thus peak early in the year, barring an even more stubborn-than-expected inflation backdrop (*Chart 2*). The current interest rate outlook suggests that variable mortgage rates should top out at around 6% early next year. Five-year fixed rates might have already peaked with the yield curve now deeply inverted, and those mortgage rates could grind back down below 5% through the first half of 2023. **As we near the peak for rates, the key question is when they will come back down**—for the BoC, that's likely a 2024 story. Even then, it doesn't mean we'll go back to levels that fuelled the market. Neutral rates might now be higher than those of the past decade, and market expectations should move accordingly.

Sales: Market Will Eventualy Clear

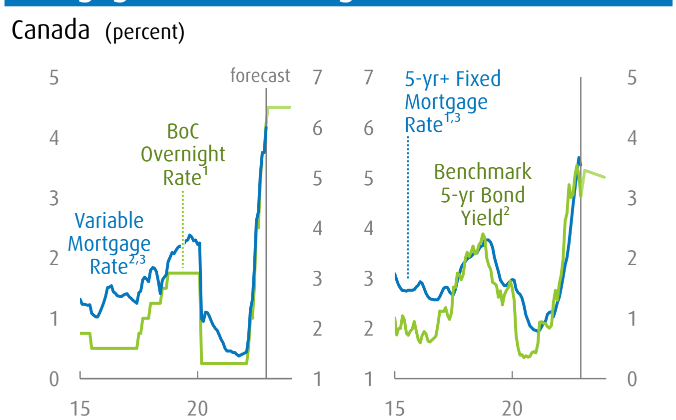
Sales volumes are expected to bottom in the spring, as more listings actually close. New listings flow has been relatively normal, but many sellers have opted to decline offers at current prices. That should gradually change as the reality of market conditions sets in, allowing **more sales volume at lower prices**. Canadian resale volumes are expected to fall 13% for all of 2023, reflecting late-2022 weakness, but ending the year at a run rate closer to pre-COVID norms. The rebound should be tempered by the incredible amount of demand that was already pulled forward in recent years. In fact, there were roughly three years of sales activity compressed into the period between the start of 2020 and the spring of 2022 (*Chart 3*).

Chart 1
Housing Outlook in a Nutshell



Sources: BMO Economics, Haver Analytics

Chart 2
Mortgage Rates Peaking?



Sources: BMO Economics, Haver Analytics *[1] (lhs); [2] (rhs); [3] uninsured mortgages*

Supply: Dare to Dream

Policymakers are putting a full-court press on the supply side of the market, with the federal goal of doubling the rate of construction over the next decade met by provincial measures, such as Ontario's *More Homes Built Faster Act.* We continue to believe that these **government supply targets are unrealistic**. First, the industry has already been building all-out, with the number of homes under construction hitting a record high this year, both in absolute and per-capita terms. Job vacancies in construction have hit record highs, and the unemployment rate hit a record low. While completions have lagged, that's partly a function of more multi-unit activity that comes with longer lead times (*Chart 4*). Meantime, market conditions have deteriorated sharply and many investors sitting on presale contracts could have trouble closing or assigning. As such, presale demand has all but dried up, and market conditions—not government policy—ultimately determine supply. So, it might disappoint many to see new housing starts actually fall in 2023. Further along, a wave of completions should take some pressure off rents.

Prices: Onward and Downward

Our longstanding view is that **the benchmark Canadian home price will fall 20%-to-25% peak-to-trough this cycle.** With prices already 10% off their high, we could be halfway there in terms of depth, but the bottoming process could be drawn out right through 2023. Local conditions vary greatly, and some regions have already cracked the 20% threshold, while some look to hold firm. Consider three straightforward ways to judge housing valuations:

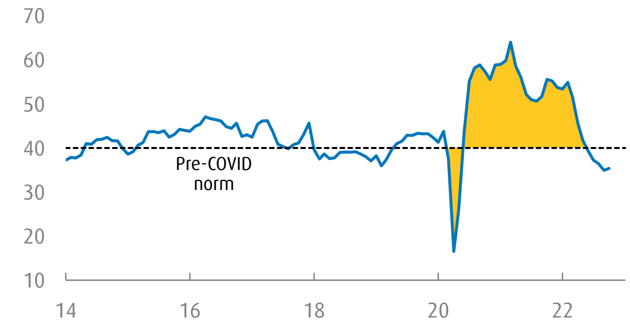
Affordability

When mortgage rates jump from 1.5% to 5%, maintaining affordability while holding income, downpayment size and amortization length constant would require a 25% cut in the price of the house. *Chart 5* shows affordability over time, accounting for incomes, mortgage rates and house price changes. The froth in 2021 was obvious, and the path back toward a more reasonable affordability environment is underway. Using our baseline forecasts, this affordability model only approaches the upper end of the pre-COVID range by the end of 2023. In this context, an even deeper or more drawn out correction is possible, especially if mortgage rates don't back off.

Chart 3
The Hangover

Canada (000s of units)

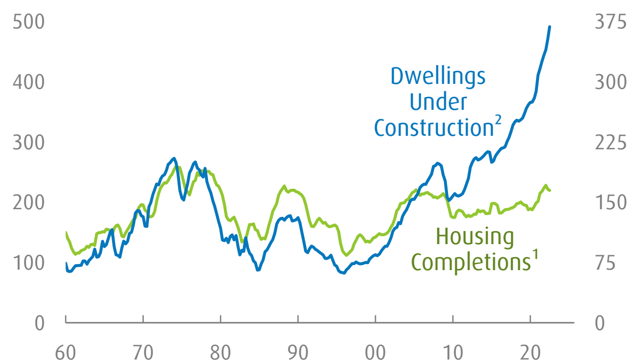
Residential Sales



Sources: BMO Economics, Haver Analytics

Chart 4
Supply Ambitions

Canada (000s of units)

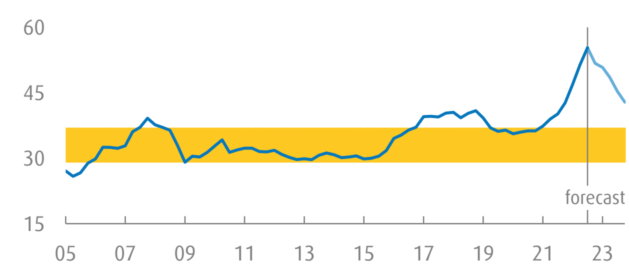


Sources: BMO Economics, Haver Analytics [1] *(lhs : n.s.a. : 4-qtr m.s.);* [2] *(rhs : s.a.)*

Chart 5
Canadian Housing Valuation

Canada (percent)

Mortgage Payment as % of Household Income[1]



[1] *assumes benchmark home prices; 10% down payment; 25-year amortization; personal disposable income per labour force member; and market share weighted mortgage rate; forecast is based on BMO Economics assumptions*

Sources: BMO Economics, Haver Analytics

Inflation-adjusted price trends

Real home prices in Canada have historically grown about 3% per year dating back to the early 1980s (*Chart 6*). In the recent episode, even as inflation accelerated to multi-decade highs, real home prices surged by more than a third in the span of two years, opening the widest deviation from its long-run trend in at least 40 years. Fundamentally, housing is a good inflation hedge, so persistent pressure, along with rising building, labour and overall development costs could help put a floor under the resale market, and have already contributed to closing much of this gap.

The regional story is also key, and the most froth accumulated in the suburbs and exurbs of Toronto. While Toronto prices rose 41% above trend, Ontario markets outside Toronto ran ahead by more than 70%, and they will continue to see the most challenging conditions. Some regions, however, barely looked frothy at all. Calgary is a good example where, after five years of declining prices leading into the pandemic, the market had just caught up to its long-term baseline. Other markets like Vancouver, Montreal and Atlantic Canada were frothy, but not to the extent of Ontario or the GTA.

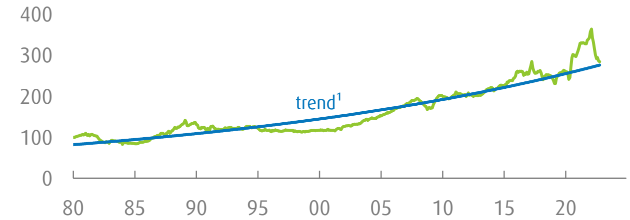
Cap rates

With expectations of price growth now deflated, cash flow is king again for investors, but the economics don't make sense at current prices and interest rates. Setting aside the highly speculative presale/assignment market, longer-term investors too are watching valuations reset to reflect higher interest rates—this is evident across a wide range of asset classes, not just Canadian real estate. Using Toronto as an example, residential cap rates (think rental condos or multifamily properties) have historically traded roughly 1.5-to-3.5 ppts above 10-year GoC yields. But, this year's massive backup in bond yields has all but vapourized any meaningful spread, which ordinarily accounts for the fact that real estate is risky, subject to vacancy and landlord-tenant laws, and highly illiquid.

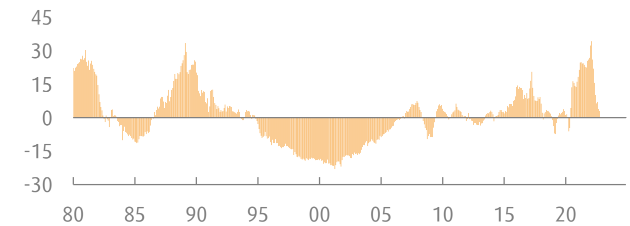
If history is any guide, cap rates that shrunk to around 3.5% at the market peak would likely need to reset to around 5% based on our current interest rate outlook. That would be roughly equivalent to a 25%-to-30% price cut, all else equal (*Chart 7*). Strong rent growth assumptions could temper the adjustment somewhat if built into investors' models.

Chart 6
Cleaning Up the Froth

Real Home Price — Canada
(Jan 1980 = 100)



(% deviation from trend)



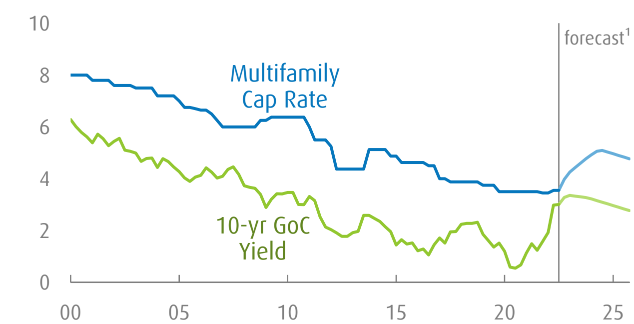
Peak Deviation by Region (%)

BC	AB	SK	MB	ON	GTA	Exurbs[2]	Cottage[3]	QC	Atlantic
21.4	-5.0	-3.4	12.3	55.4	41.2	76.3	63.6	32.6	34.7

[1] Exponential growth trend since 1980; [2] Barrie, Guelph, Hamilton, Kitchener-Waterloo, London, Niagara, Orillia, St. Catharines, Windsor; [3] Bancroft, Kawarthas, Muskoka-Haliburton, South Georgian Bay.
Sources: BMO Economics, CREA, Statistics Canada

Chart 7
Investors' Assessment

Toronto (percent)



[1] Cap rate forecast is an illustration based on the spread vs. 10-yr GoCs returning to pre-COVID norms; BMO Economics does not explicitly forecast cap rates
Sources: BMO Economics, Haver Analytics

Longer-Term Prospects

BMO Economics has been a long-term Canadian housing bull, with gains over the past decade deeply rooted in demographic fundamentals. The **millennial cohort** has been the biggest driver of housing demand, with population growth in the 24-34 age group running at the strongest pace since the late-1980s in recent years. This cohort is a good representation of incremental housing demand, as these are prime household formation years.

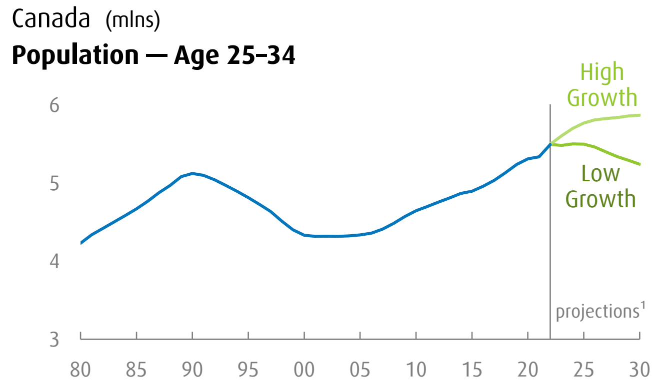
Today, the peak millennial is 32 years old, so housing demand driven by this demographic wave is set to crest in the next few years. To the extent that substantial demand was pulled forward during the pandemic, that timeline might have been sped up.

That said, aggressive **immigration targets** are expected to continue adding to demand in the coming years (*Chart 8*). In StatCan's low-growth population projection, this age cohort would indeed contract in the coming years. But, in the high-growth projection (where the immigration rate is set to be more consistent with new federal targets), this cohort continues to expand, although the growth rate does slow by around 2025. To put it another way, aggressive immigration targets could serve to forestall what would otherwise be a coming demographic lull for housing demand in Canada. This is an important distinction when compared to the deep and prolonged 1990s downturn, which saw population growth in this key cohort collapse. *Table 1* breaks down past and expected growth in this cohort by region.

Meantime, the tailwind of declining **interest rates** is likely tapped out, and suppressed borrowing costs of the past decade could be resetting to higher neutral levels. **The simultaneous combination of peak demographic demand and historically-low interest rates that we saw in recent years was an extraordinarily bullish combination that is going to be very hard to repeat**.

Chart 8

Demographic Support?



[1] growth scenarios based on Statistics Canada estimates
Sources: BMO Economics, Haver Analytics

Table 1

Population Growth — Age 25-34

(% chng : a.r.)

	BC	AB	SK	MB	ON	QC	ATL
1980-90	1.9	2.1	1.5	1.5	2.7	1.3	1.1
1990-00	-0.1	-1.2	-2.9	-2.1	-1.3	-2.8	-2.5
2000-10	0.5	3.0	1.3	0.4	0.3	0.9	-1.3
2010-22	2.0	0.7	0.9	1.8	2.1	0.4	0.9
2022-32 StatCan Projections							
Low	-0.6	0.9	0.2	-0.2	-0.5	-1.1	-0.7
High	0.9	2.1	1.4	1.0	0.8	-0.2	0.1

Sources: BMO Economics, Haver Analytics

Key Takeaways

- Downward price discovery will continue through 2023 as the market absorbs higher, albeit peaking, mortgage rates. Near-term variable rate cuts are unlikely.
- Regional performance will vary. Alberta is best positioned, while Southwestern Ontario (Toronto exurbs) will continue to struggle most.
- The rabid speculative appetite is gone, to be replaced by fundamental cash-flow driven investment.
- Government supply targets will prove next to impossible to hit.
- Peak domestic demographic demand is near, but high immigration targets will stave off a 1990s-like bust.
- Price growth coming out of this cycle will be much more subdued, if not stagnant in some markets.

Economic Forecast Summary for December 9, 2022

	2022				2023				Annual		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
CANADA											
Real GDP (q/q % chng : a.r.)	2.8	3.2	2.9	0.6	-1.5	-1.8	0.0	1.5	5.0	3.5	0.0
Consumer Price Index (y/y % chng)	5.8	7.5	7.2	7.0	6.2	4.4	4.3	3.6	3.4	6.8	4.6
Unemployment Rate (percent)	5.8	5.1	5.2	5.1	5.5	6.0	6.4	6.5	7.4	5.3	6.1
Housing Starts (000s : a.r.)	244	271	282	262	229	226	223	220	277	265	225
Current Account Balance ($blns : a.r.)	3.7	10.6	-44.4	-40.0 ↑	-36.4 ↑	-36.4 ↑	-38.6 ↑	-40.6 ↑	-6.7	-17.5 ↑	-38.0 ↑
Interest Rates	(average for the quarter : %)										
Overnight Rate	0.33	1.17	2.75	3.92	4.50	4.50	4.50	4.50	0.25	2.04	4.50
3-month Treasury Bill	0.39	1.43	2.91	3.95 ↓	4.30 ↓	4.30 ↓	4.30 ↓	4.30 ↓	0.11	2.15 ↓	4.30 ↓
10-year Bond	1.92	2.98	3.01	3.10 ↓	3.20 ↓	3.30 ↓	3.25 ↓	3.25	1.36	2.75 ↓	3.25 ↓
Canada-U.S. Interest Rate Spreads	(average for the quarter : bps)										
90-day	9	33	16	-27 ↓	-44 ↓	-50 ↓	-50 ↓	-50 ↓	7	8 ↓	-48 ↓
10-year	-2	5	-10	-68 ↓	-69 ↓	-64 ↓	-60 ↓	-55 ↓	-8	-19 ↓	-62 ↓
UNITED STATES											
Real GDP (q/q % chng : a.r.)	-1.6	-0.6	2.9	1.5	-1.2	-2.0	0.0	0.5	5.9	2.0	0.0
Consumer Price Index (y/y % chng)	8.0	8.6	8.3	7.4 ↓	6.4 ↓	4.9 ↑	4.2	3.8 ↑	4.7	8.1	4.8
Unemployment Rate (percent)	3.8	3.6	3.5	3.7	4.2	4.8	5.0	5.1	5.4	3.7	4.8
Housing Starts (mlns : a.r.)	1.72	1.65	1.46	1.42	1.38	1.35	1.34	1.37	1.61	1.56	1.36
Current Account Balance ($trlns : a.r.)	-1.13	-1.00	-0.87	-0.95	-0.96	-0.98	-0.99	-1.00	-0.85	-0.99	-0.98
Interest Rates	(average for the quarter : %)										
Fed Funds Target Rate	0.21	0.96	2.63	3.79	4.63	4.88	4.88	4.88	0.13	1.90	4.81
3-month Treasury Bill	0.30	1.10	2.75	4.25 ↑	4.70	4.80	4.80	4.80	0.05	2.10	4.80
10-year Note	1.94	2.93	3.10	3.80 ↓	3.90 ↓	3.95 ↑	3.85	3.80 ↑	1.44	2.95 ↓	3.85 ↓
EXCHANGE RATES	(average for the quarter)										
US¢/C$	79.0	78.4	76.6	73.8	74.3	74.7	75.0	75.4	79.8	76.9	74.8
C$/US$	1.27	1.28	1.31	1.35	1.35	1.34	1.33	1.33	1.25	1.30	1.34
¥/US$	116	130	138	142	134	133	132	130	110	131	132
US$/Euro	1.12	1.06	1.01	1.02	1.06	1.07	1.08	1.10	1.18	1.05	1.08
US$/£	1.34	1.26	1.18	1.18	1.24 ↑	1.25 ↑	1.26 ↑	1.27 ↑	1.38	1.24	1.25 ↑

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

Canada

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Economist
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National Balance Sheet and Financial Flow Accounts (Q3)
Monday, 8:30 am

Household disposable income growth slowed in Q3, but still outpaced the increase in credit as mortgage loan growth decelerated amid aggressive rate hikes by the Bank of Canada. This likely caused the **household debt-to-income ratio** to edge down on a non-seasonally adjusted basis, but the seasonally adjusted ratio is expected to be on either side of unchanged. This follows a two percentage point increase in the adjusted ratio in the second quarter. An ongoing correction in the housing market will weigh on the value of household assets and is expected to push up the debt-to-asset ratio for the second straight quarter. Looking ahead, we expect mortgage demand to stay soft in the coming quarters as rate hikes continue to weigh, further slowing growth in household debt.

Existing Home Sales
Thursday, 9:00 am (expected)

	Existing Home Sales	Average Prices
Nov. (e)	**-39.0% y/y**	**-11.5% y/y**
Oct.	-36.0% y/y	-9.9% y/y

	MLS Home Price Index
Nov. (e)	**-4.0% y/y**
Oct.	-0.8% y/y

Canada's **housing market** continued to slow in November, with the largest declines in activity concentrated in B.C. and Ontario. Nationally, we look for sales to fall 39% below year-ago levels. We expect a 11.5% y/y drop in average prices and a 4% y/y decline in the quality-adjusted MLS HPI after the latter posted its first negative print since 2019 in October. We anticipate the ongoing housing correction will continue into next year as higher rates make their way through the economy.

United States

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Consumer Prices
Tuesday, 8:30 am

Nov. (e)	**+0.3%**	**+7.3% y/y**
Consensus	*+0.3%*	*+7.3% y/y*
Oct.	+0.4%	+7.7% y/y

Ex. Food & Energy

Nov. (e)	**+0.4%**	**+6.2% y/y**
Consensus	*+0.3%*	*+6.1% y/y*
Oct.	+0.3%	+6.3% y/y

The total **CPI likely increased 0.3% in November**, pulling down the annual change by four-tenths to 7.3%. Helping dampen the headline, average gasoline prices fell more than 3% in the month, offsetting a probable repeated 0.6% jump in food costs. Although the latter is still elevated, it may have finally broken below the 0.7%-to-1.1% range (where 14 of 16 months resided through September). Meanwhile, the **core CPI likely increased 0.4%**, pulling down the annual change by a tenth to 6.2%. After October's 0.3% core increase, a rebound to 'only' 0.4% is welcome news. The past three 0.3% prints (September 2021, March 2022 and July 2022) were all followed by moves in the 0.5%-to-0.7% range.

Shelter costs continue to pressure core inflation, but its pressuring days are numbered given the lagged influence of market prices. Tenant rents rose in the 0.7%-to-0.8% range for the past five months (0.7% in October) with the annual change (7.5%) not yet peaking. However, the evidence of sharply slowing, flat or even falling market rents is becoming widespread. For example, Zillow's Observed Rent Index dropped 0.4% in November (n.s.a.), pulling down the annual change to the low-8% range which is less than half February's peak (17.2% y/y). Meanwhile, owners' equivalent rent rose in the 0.6%-to-0.8% range for the past six months (0.6% in October), also with an un-peaked annual change (6.9%). The other lagging influencer here is home prices, which have already rolled over. For example, the S&P CoreLogic Case-Shiller Home Price Index dropped in each of the latest three months, pulling down the annual change to the precipice of single digits for the first time in 22 months (the peak was 20.8% in March).

Elsewhere, **used vehicle market prices** slipped 0.3% in November (according to Manheim), pointing to a fifth consecutive drop in the CPI measure. However, average **new vehicle transaction prices** rose 0.6% in November (according to JD Power), which, along with an ebbing seasonal impact of discounting, points to some acceleration in October's 0.4% result. **Medical insurance premiums** should post another large decline, although maybe not as large as October's record 4.0% drop. BLS methodology spreads out the latest yearly change in insurers' net premium income (reportedly down about 38%) over the coming 12 months.

Meanwhile, upward pressure on the CPI, generally, and services prices, specifically, continues to come from wage gains. Some of the major wage measures are still growing around the 5%-to-6% range, with the latest, average hourly earnings, accelerating in November. Despite the continued cooling of core goods inflation (prices were flat or falling in the past two months) and even looking past soon-to-be ebbing rent pressures, it's this **worrying wage-service price spiral that clouds the prospects for a rapid restoration of price stability**.

FOMC Policy Announcement and Summary of Economic Projections

Wednesday, 2:00 pm
Press briefing at 2:30 pm

See Michael Gregory's Thought on page 4.

Retail Sales

Thursday, 8:30 am

		Ex. Autos
Nov. (e)	**-0.1%**	**+0.1%**
Consensus	*-0.1%*	*+0.2%*
Oct.	+1.3%	+1.3%

	Ex. Autos/Gas
Nov. (e)	**+0.3%**
Consensus	*unch*
Oct.	+0.9%

Retail sales are expected to edge down 0.1% in November after a 1.3% gain in the prior month. Auto sales fell partly due to seasonal factors, while receipts at the pump also dropped amid a decline in fuel prices. Excluding autos and gas, growth likely slowed. Compared to a year ago, sales are still significantly up as a robust job market and rising wages continue to support consumers, though much of the increase reflects higher prices.

Industrial Production

Thursday, 9:15 am

	Industrial Production	Capacity Utilization
Nov. (e)	**-0.1%**	**79.7%**
Consensus	*+0.1%*	*79.8%*
Oct.	-0.1%	79.9%

Industrial production is expected to decline 0.1% in November, matching the prior month's drop. Manufacturing—the biggest component—likely halted a four-month winning streak amid declining new orders. Meantime, mining looks to contract again on lower crude output, while choppy utilities could extend declines to a fourth straight month. Capacity utilization looks to fall a couple of ticks to 79.7%. Though industrial output has remained a bright spot within a dimming economic outlook, momentum is now stalling amid fading demand.

Central Banks

BoE Monetary Policy Announcement

Thursday, 7:00 am ET

See Jennifer Lee's Thought on page 7.

ECB Monetary Policy Announcement

Thursday, 8:15 am ET
Press conference at 8:45 am ET

Financial Markets Update for December 9, 2022

		Dec 9 [1]	Dec 2	Week Ago	4 Weeks Ago	Dec 31, 2021
					(basis point change)	
Canadian Money Market	Call Money	4.25	3.75	50	50	400
	Prime Rate	6.45	5.95	50	50	400
U.S. Money Market	Fed Funds (effective)	4.00	4.00	0	0	375
	Prime Rate	7.00	7.00	0	0	375
3-Month Rates	Canada	4.09	4.01	8	21	393
	United States	4.23	4.25	-1	8	420
	Japan	-0.17	-0.17	0	-4	-4
	United Kingdom	3.64	3.68	-4	17	337
	Australia	3.13	3.06	7	10	306
2-Year Bonds	Canada	3.83	3.76	7	0	288
	United States	4.28	4.27	1	-5	355
10-Year Bonds	Canada	2.85	2.78	7	-30	142
	United States	3.54	3.49	5	-27	203
	Japan	0.25	0.25	0	1	18
	Germany	1.92	1.85	7	-24	210
	United Kingdom	3.16	3.15	1	-19	219
	Australia	3.30	3.39	-10	-36	163
Risk Indicators	VIX	22.5	19.1	3.5 pts	0.0 pts	5.3 pts
	Inv. Grade CDS Spread [2]	82	78	4	-1	32
	High Yield CDS Spread [2]	489	466	23	3	196
					(percent change)	
Currencies	US¢/C$	73.35	74.25	-1.2	-2.6	-7.3
	C$/US$	1.363	1.347	—	—	—
	¥/US$	136.60	134.31	1.7	-1.6	18.7
	US$/€	1.0538	1.0535	0.0	1.8	-7.3
	US$/£	1.229	1.228	0.1	3.9	-9.2
	US¢/A$	67.93	67.90	0.0	1.3	-6.5
Commodities	CRB Futures Index	266.40	276.69	-3.7	-6.8	14.6
	Oil (generic contract)	72.18	79.98	-9.8	-18.9	-4.0
	Natural Gas (generic contract)	6.37	6.28	1.4	8.3	70.7
	Gold (spot price)	1,796.18	1,797.63	-0.1	1.4	-1.8
Equities	S&P/TSX Composite	20,031	20,486	-2.2	-0.4	-5.6
	S&P 500	3,958	4,072	-2.8	-0.9	-17.0
	Nasdaq	11,122	11,462	-3.0	-1.8	-28.9
	Dow Jones Industrial	33,785	34,430	-1.9	0.1	-7.0
	Nikkei	27,901	27,778	0.4	-1.3	-3.1
	Frankfurt DAX	14,338	14,529	-1.3	0.8	-9.7
	London FT100	7,469	7,556	-1.2	2.1	1.1
	France CAC40	6,655	6,742	-1.3	0.9	-7.0
	S&P ASX 200	7,213	7,301	-1.2	0.8	-3.1

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

Global Calendar — December 12–December 16

Monday December 12

CHINA

	Agg. Yuan Financing	New Loans[D]
Nov. (e)	**2.1 trln**	**1.4 trln**
Oct.	0.9 trln	0.6 trln

M2 Money Supply[D]
Nov. (e) **+11.7% y/y**
Oct. +11.8% y/y

JAPAN

Machine Tool Orders
Nov. P
Oct. -5.5% y/y

UNITED KINGDOM

Rightmove House Prices
Dec.
Nov. -1.1% +7.2% y/y

Monthly Real GDP		3m/3m
Oct. (e)	**+0.4%**	**-0.4%**
Sep.	-0.6%	-0.3%

Services Index		3m/3m
Oct. (e)	**+0.5%**	**-0.1%**
Sep.	-0.8%	unch

Industrial Production
Oct. (e) **-0.1%** **-2.6% y/y**
Sep. +0.2% -3.1% y/y

Manufacturing Production
Oct. (e) **-0.1%** **-5.3% y/y**
Sep. unch -5.8% y/y

Trade Deficit
Oct. (e) **£15.3 bln**
Sep. £15.7 bln

Tuesday December 13

GERMANY

Consumer Price Index
Nov. F (e) **unch** **+11.3% y/y**
Oct. +1.1% +11.6% y/y

ZEW Survey—Expectations
Dec. (e) **-26.4**
Nov. -36.7

ITALY

Industrial Production
Oct.
Sep. -1.8% -0.5% y/y

UNITED KINGDOM

Payrolls
Nov. (e) **+40,000**
Oct. +74,000

Employment (3m/3m)		Jobless Rate
Oct. (e)	**-17,000**	**3.7%**
Sep.	-52,000	3.6%

Avg. Wkly Earnings ex. Bonus (3m/3m)
Oct. (e) **+5.9% y/y**
Sep. +5.7% y/y

AUSTRALIA

Westpac Consumer Confidence
Dec.
Nov. -6.9%

NAB Business Confidence
Nov.
Oct. 0

Wednesday December 14

JAPAN

Core Machine Orders
Oct. (e) **+2.1%** **+1.2% y/y**
Sep. -4.6% +2.9% y/y

Tankan Large Mfg. Index
Q4 (e) **7**
Q3 8

Industrial Production
Oct. F (e) **-2.6%** **+3.7% y/y**
Sep. -1.7% +9.6% y/y

EURO AREA

Industrial Production
Oct. (e) **-1.5%** **+3.5% y/y**
Sep. +0.9% +4.9% y/y

UNITED KINGDOM

Consumer Price Index
Nov. (e) **+0.6%** **+10.9% y/y**
Oct. +2.0% +11.1% y/y

Core CPI
Nov. (e) **+6.6% y/y**
Oct. +6.5% y/y

Thursday December 15

CHINA

Industrial Production
Nov. (e) **+3.7% y/y**
Oct. +5.0% y/y

Retail Sales
Nov. (e) **-3.9% y/y**
Oct. -0.5% y/y

Fixed Assets Investment
Nov. (e) **+5.6% y/y**
Oct. +5.8% y/y

JAPAN

Trade Balance
Nov. '22 (e) **-¥1.7 trln**
Nov. '21 +¥1.0 trln

EURO AREA

ECB Monetary Policy Meeting

FRANCE

Consumer Price Index
Nov. F (e) **+0.5%** **+7.1% y/y**
Oct. +1.2% +7.1% y/y

Business Confidence
Dec. (e) **101**
Nov. 102

UNITED KINGDOM

7:00 am ET BoE Monetary Policy Announcement and Minutes

AUSTRALIA

Employment
Nov. (e) **+17,000**
Oct. +32,200

Jobless Rate
Nov. (e) **3.4%**
Oct. 3.4%

NEW ZEALAND

Real GDP
Q3 (e) **+0.9%** **+5.4% y/y**
Q2 +1.7% +0.4% y/y

MEXICO

Bank of Mexico Monetary Policy Meeting

Friday December 16

JAPAN

Manufacturing PMI
Dec. P
Nov. 49.0

Services PMI
Dec. P
Nov. 50.3

EURO AREA

Manufacturing PMI
Dec. P (e) **47.1**
Nov. 47.1

Services PMI
Dec. P (e) **48.5**
Nov. 48.5

Trade Deficit
Oct.
Sep. €37.7 bln

	CPI	Core CPI
Nov. F (e)	**+10.0% y/y**	**+5.0% y/y**
Oct.	+10.6% y/y	+5.0% y/y

ITALY

Consumer Price Index
Nov. F (e) **+0.6%** **+12.5% y/y**
Oct. +3.8% +12.6% y/y

UNITED KINGDOM

GfK Consumer Confidence
Dec. (e) **-43**
Nov. -44

Retail Sales (incl. Fuel)
Nov. (e) **+0.3%** **-5.6% y/y**
Oct. +0.6% -6.1% y/y

Manufacturing PMI
Dec. P (e) **46.5**
Nov. 46.5

Services PMI
Dec. P (e) **48.5**
Nov. 48.8

[D] = date approximate

Upcoming Policy Meetings | Bank of England: Feb. 2, Mar. 23, May 11 | European Central Bank: Feb. 2, Mar. 16, May 4

Canada

Monday December 12

8:30 am — **National Balance Sheet and Financial Flow Accounts (Q3)**

3:25 pm — **BoC Gov. Macklem holds a fireside chat in Vancouver at the Business Council of British Columbia**

Tuesday December 13

8:30 am	**New Motor Vehicle Sales**	
Oct. (e)	**-5.0% y/y**	
Sep.	-4.6% y/y	

11:15 am — Cash management bond buybacks $0.5 bln

Wednesday December 14

8:30 am	**Construction Investment**	
Oct.		
Sep.	-0.6%	+15.2% y/y
8:30 am	**Mfg. Sales**	**Mfg. New Orders**
Oct. (e)	**+2.0%**	**+2.3%**
Consensus	*+1.9%*	*n.a.*
Sep.	unch	+0.1%

Thursday December 15

8:15 am	**Housing Starts**	
Nov. (e)	**260,000 a.r. (-2.6%)**	
Consensus	*255,000 a.r. (-4.5%)*	
Oct.	267,055 a.r. (-10.6%)	
9:00 am	**Existing Home Sales[D]**	**Average Prices**
Nov. (e)	**-39.0% y/y**	**-11.5% y/y**
Oct.	-36.0% y/y	-9.9% y/y
9:00 am	**MLS Home Price Index[D]**	
Nov. (e)	**-4.0% y/y**	
Oct.	-0.8% y/y	

Noon — 2-year bond auction $3.5 bln

10-year bond auction announcement

Friday December 16

8:30 am	**Wholesale Trade**	
Oct. (e)	**+1.3%**	
Sep.	+0.1%	
8:30 am	**New Housing Price Index**	
Nov. (e)	**-0.3%**	**+4.0% y/y**
Oct.	-0.2%	+5.1% y/y
8:30 am	**Int'l Securities Transactions Inflows**	**Outflows**
Oct.		
Sep.	-$22.3 bln	$9.6 bln

United States

Monday December 12

2:00 pm	**Budget Balance**	
Nov. '22 (e)	**-$248.0 bln[C]**	
Nov. '21	-$191.3 bln	

Fed Speaker: Atlanta's Bostic (noon)

11:30 am — 26-week bill auction $45 bln

11:30 am — 3-year note auction $40 bln

1:00 pm — 13-week bill auction $54 bln

1:00 pm — 10[R]-year note auction $32 bln

Tuesday December 13

6:00 am	**NFIB Small Business Economic Trends Survey**	
Nov. (e)	**90.7[C]**	
Oct.	91.3	
8:30 am	**Consumer Prices**	
Nov. (e)	**+0.3%**	**+7.3% y/y**
Consensus	*+0.3%*	*+7.3% y/y*
Oct.	+0.4%	+7.7% y/y
8:30 am	**CPI ex. Food & Energy**	
Nov. (e)	**+0.4%**	**+6.2% y/y**
Consensus	*+0.3%*	*+6.1% y/y*
Oct.	+0.3%	+6.3% y/y

FOMC Meeting begins

11:00 am — 4-, 8- & 17-week bill auction announcements

1:00 pm — 30[R]-year bond auction $18 bln

Wednesday December 14

7:00 am	**MBA Mortgage Apps**	
Dec. 9		
Dec. 2	-1.9%	
8:30 am	**Import Prices**	
Nov. (e)	**-0.9%**	**+2.6% y/y**
Consensus	*-0.5%*	*+3.0% y/y*
Oct.	-0.2%	+4.2% y/y

2:00 pm — **FOMC Announcement and Summary of Economic Projections**

2:30 pm — **Fed Chair Powell's Press Briefing**

11:30 am — 17-week bill auction

Thursday December 15

8:30 am	**Initial Claims**	
Dec. 10 (e)	**234k (+4k)[C]**	
Dec. 3	230k (+4k)	
8:30 am	**Continuing Claims**	
Dec. 3		
Nov. 26	1,671k (+62k)	
8:30 am	**Retail Sales**	**Ex. Autos**
Nov. (e)	**-0.1%**	**+0.1%**
Consensus	*-0.1%*	*+0.2%*
Oct.	+1.3%	+1.3%
8:30 am	**Retail Sales ex. Autos/Gas**	
Nov. (e)	**+0.3%**	
Consensus	*unch*	
Oct.	+0.9%	
8:30 am	**Philadelphia Fed Index**	
Dec. (e)	**-10.0[C]**	
Nov.	-19.4	
8:30 am	**Empire State Mfg. Survey**	
Dec. (e)	**-1.0[C]**	
Nov.	4.5	
9:15 am	**Industrial Production**	**Capacity Utilization**
Nov. (e)	**-0.1%**	**79.7%**
Consensus	*+0.1%*	*79.8%*
Oct.	-0.1%	79.9%
10:00 am	**Business Inventories**	
Oct. F (e)	**+0.4%[C]**	
Oct. P	+0.3%	
Sep.	+0.2%	
4:00 pm	**Net TIC Flows Total**	**Long Term**
Oct.		
Sep.	$30.9 bln	$118.0 bln

11:00 am — 13- & 26-week bill, 20[R]-year bond, 5[R]-year TIPS auction announcements

11:30 am — 4- & 8-week bill auctions

Friday December 16

9:45 am — **S&P Global PMIs (Dec. P)**

Continuing resolution to fund federal government expires at midnight, risking partial shutdown

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

Upcoming Policy Meetings | Bank of Canada: Jan. 25, Mar. 8, Apr. 12 | FOMC: Jan. 31-Feb. 1, Mar. 21-22, May 2-3

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