<u>Transcript</u>

Hi, this is Beata Caranci with an economic update.

So I'm going to start with a bird's eye view of the global backdrop, where the hits keep on coming.

We are again looking at downgrades to the global economy and this time it's not related to cover risk except in the case of China.

There's lots of talk about on US developments. The number one question being asked is whether a recession is inevitable and the 10 and two years spread would say yes, but every other indicator that historically has a decent track record hasn't yet sent a signal, and I'll walk you through that lens gate.

And then lastly a deep dive on Canada, which is not only proving to be the fastest growing G7 economy, but it's really leaving everyone in its dust. How do we square that with the weakening housing and job market?

I thought this might be the easiest way to capture a snapshot of the evolution risks.

Many European countries appear to be on the edge of a recession under the weight of high inflation and energy crisis and deteriorating sentiment.

Place in the UK on this list is a no brainer who's going to argue at the Bank of England's own prediction that the economy will be in a protracted period of weak growth due to soaring energy prices and the Brexit adjustment.

Germany and Italy also make the list with some hard data supporting that view.

A reliable recession indicator known as the Purchasing Managers Index is already in contraction territory for both countries.

Germany now has the added challenge of low water levels in the Rhine River disrupting shipping lanes and production, and some estimates place the knock-on impact from that as high as half a percentage point off growth.

As for the overarching theme of countries on this list, they reflect high energy dependency with Russia. On the watch list is the US. Not because just the yield curve inversion, but because the consumer spending profile has slowed down well ahead of schedule relative to our forecasts, about four to six months in advance.

Sky high inflation and recession talk may be causing an earlier calibration of household budgets. And then finally we have lagging the cycle or even leading on the growth side in Canada makes this list.

But ultimately, if the US tips into recession, I think Canada would follow with a lag given it faces the same shock from inflation, interest rates in sentiment.

This graph speaks to the earlier point that European countries with more exposure to Russian energy supplies have economic indicators pointing to contraction.

In 2020, Germany relied on Russian natural gas for 66% of its supply, and Italy had a share of about 42%.

More recent reports suggest Germany is now at 40%, but that still leaves a long way to go and is in part related to Russia strategically cutting pipelines deliveries.

In contrast, Spain and France have PMI in expansion territory.

However, the ability to sustain this degree of outperformance is questionable given the economic linkages between regions.

In the case of Spain, just under 60% of its exports are tied to the EU, so the way to think of this graph is in how it's portraying the likely sequencing of events across countries rather than an ability to outright sustain divergence.

As for how the energy shock is impacting Europe relative to North America, TTF is the benchmark natural gas measure within Europe versus Henry Hub for North America. And clearly the shocks are not within the same scale, let alone the economic weight, especially when you consider that US and Canada are also net producers.

The other area of concern is food supply, with wheat being a manifestation of that concern. Although domestic food price inflation remains high around the world, wheat prices have fallen and eventually this will make its way through consumer price metrics.

However, with long lags and items like cereal products, at least for now, the risk premium associated with shortages has subsided on two factors.

One Russia has stepped up their exports of wheat to largely fill the gap, and two there has been some confidence gained with the agreement struck with the UN in which Turkey will mediate shipments within the Black Sea from Ukraine.

Now, both of these conditions still in bed, high risk stakes, but a path forward has at least been carved, even if it ends up proving temporarily. At the end of the day, even as food costs further subside in Europe, the energy crisis there places more pressure on inflation relative to Canada and the US, and you can see the relative contribution in these gold bars.

And wheat prices in Europe are still about 6 times higher than what we see in North America, so we can expect Europe inflation to roll over at a slower rate relative to North America, perhaps lagging up to four to six months or another way to think of it is that higher interest rate policies in North America will help slow domestic demand, which gets captured in the core rate of inflation.

But for Europe, central banks can't do much about the supply side shock, so the demand side may need to collapse even more to reduce the overall price pressures.

When all the pieces of European risks are put together, it manifests in the deterioration in financial indicators.

These two indexes capture credit default swaps across various industries, and the level is suggestive of high recessionary risks.

We can't say the same about the US, at least not yet. However, we are concerned about those behaviors of consumers in the context of a strong job market.

So let's start with the head fake on spending momentum that kicked off the year.

There's a lot going on in this graph, I'm going to walk you through step by step. The top bar is the growth in consumer spending reported by the Statistical agency for Q1.

It was strong at just over 3% and within any quarter it's the final month that matters most in forecasting the next period because it informs of the degree of strength or weakness on the handoff.

So that Q1 3% reported figure led to a projection of similar strength for Q2 before the pass through of interest rates and inflation dominated to create a softer Q3 projection.

GDP metrics go through two stages of revisions by statistical agencies and unfortunately revisions cleaved away much of the initial reported strength which you see here and then that fed into our other projections. When the actual Q2 consumer spending data came out, our projection lined up which is good, but the composition wasn't what we were expecting, and that led to heavier downgrades in the second-half of the year from consumer spending.

So in effect, there was a cascade of negative revisions and compositional shifts in spending that revealed a much softer consumer underbelly.

Now we knew households will lose their appetite for purchasing goods after a pandemic buying frenzy, which is the yellow line, but the surprise in the second quarter was a lack of momentum for discretionary services, which is the green line.

This captures areas that were restrained during the pandemic and where there should be significant pent-up demand, like travel and recreation services.

But the recovery stalled here too, so it looks like American consumers have already blinked in the face of inflation and interest rates and deteriorating confidence.

The correlate growth patterns in consumer spending averaged only 1.4% in the first half of this year, which wasn't expected to occur until the second half of the year.

Part of the story is manifested with the graph on the left. The conservative spending behaviors are occurring alongside a faster erosion and excess saving, so less than a year ago we estimated American households had excess savings up around 2.6 trillion at the end of 2021.

Today, consumers have spent around 6% of this aligning to our most aggressive estimates at the time. But those estimates were based on consumer spending growth profiles that had a 3 handle in front of them and not the one handle that we see today.

So in terms of where it's occurring, this is the graph on the right.

It looks at excess savings by income levels. The decline reflects a faster burn rate by lower income families who spent roughly 10% of their pandemic nest egg, about twice as much as higher income families.

The bottom 50% of American households now account for only a quarter of all excess savings, which is down from about 1/3.

And it's probably no coincidence that the New York Federal Reserve's report on household credit showed an uptick in delinquency rates. That is largely driven by borrowers in the lower income areas. So on the one hand, these graphs are telling us that spending is slowing with more financial strain absorbed by lower income households. But also the higher income households don't look to be deploying their excess savings as a counter influence on the economy.

Now this could be a good news bad news story. There's still a lot of excess savings by income cohorts to cushion against the inflation shock, and this is one of the key arguments for those in the soft landing camp.

But there has to be a willingness to deploy it and the inflation, shock needs to subside to restore confidence and spending power.

To provide some balance to the discussion, I wanted to raise some data anomalies. As you're aware, GDP contracted in the first half of the year, it would have printed positive if not for sizable drags coming from net exports in the first quarter and an inventory swing in the second quarter. And to give an idea of magnitude GDP contracted by .9% in Q2 but inventories dragged it down by a full 2 percentage points.

Now these two segments of the economy embed volatility and measurement challenges in the best of times. Let alone during a period that is plagued with pandemic related volatility and measurement challenges.

So I'd like to raise the prospect that the negative print in the first half of the year may be overstating the degree of weakness in the economy.

The line in green is gross domestic income. It measures the economy via the other side of the ledger.

Every expenditure lands somewhere in the economy as income, over history GDI has been proven to not suffer from the same degree of measurement error as GDP.

And the current divergent between these two measures is the largest that we've seen in the history of the data that goes back to the 1940s. Economists often reconcile the difference by just taking a simple average between the two, which would still show a softening in economic momentum but certainly not the degree of weakness that's being reflected by GDP.

And this might partly explain how we can have a job market that's so strong and can diverge from the economic metrics.

Unfortunately, the combination of the weak GDP data and the slowdown in consumer spending is fueling more negative media headlines.

This mails me why we're seeing more conservative spending behavior. I noted in last year last quarter's presentation the influence of negative bias can create on a vicious cycle.

Back then I pointed out the abundance of negative headlines related to recession talk.

Now the focus is casting a negative light on the job market because it's say at odds with the economic performance.

Of course, companies are more likely to announce job cuts during earnings calls or corporate announcements than amplify their natural state of hiring. And the irony is that this is occurring as actual job creation keeps beating market expectations.

How do we reconcile this?

Well, first past recovery cycles show that American firms are tentative to hire in the first year of recovery, but by year two they make up the gap.

In contrast, Canadian firms show the opposite pattern. They're very quick out of the gate and then they slow down. Both of these behaviors remained historically consistent, even though the pandemic itself has been such an anomalous experience?

2nd I have my suspicions that the data may be overstating the strength of jobs by reflecting the delay in including new businesses into the payroll sample.

New business formation surge earlier in the pandemic and it takes time for the BLS to include them in their sample process.

This creates an unavoidable lag in capturing jobs generated by those new businesses.

So some of the strengthened jobs we're seeing this year may actually reflect jobs that occurred last year under these new businesses and the survey is catching up.

There's also a higher incidence of multiple job holders, and this too can marginally bias up payrolls because people are getting counted twice at different employers.

So over the past six months there's been about 1/2 million more people with multiple jobs relative to the end of last year.

But even with all these possible upward biases, if the July tally was cut in half, it would still have been a fantastic report. So I don't want to leave the impression that the job creation is masking a negative trend because it's not.

What we're really saying is, hey, GDP is likely overstating the weakness.

The job market is probably overstating the string and we're likely to meet somewhere in between these two and have greater consistency than perhaps what's being conveyed in the data at this very moment.

This slide reinforces the point that there's still fundamental strength in the job market, even if it's overstated.

These bars show the layoff rate by industries during the prior expansion period.

The aggregate data across the US shows layoffs are at a record low, but to make sure that this isn't a reflection of only a handful of industries we took the data across the industries and the dots show that every industry is below its average during the prior economic expansion.

And the arrows I just drop in capture the direction that layoff rates are moving.

So when at record lows is generally only one Direction that makes sense, which is to rise. But it still looks like we're in a process of normalization, and we're not seeing broad layoffs as would be suggested by some of those media headlines.

And just to reinforce this point, this is the share of industries that are still in hiring mode at 93%.

When the number of industries that are hiring slips to about 70 to 75%, it typically has been a good predictor of a recession within the next three to six months.

Like other indicators, it can be prone to false signals and so you don't just look at this indicator. It's important that we back it up and looking for signals based on other indicators that would support or deny it.

So on that note, what are the other signals saying one of the most reliable is a yield curve spread with a near perfect record.

Today the 10 and two-year spread is deeply negative at roughly 40 basis points, and while the three month hasn't yet sent the same signal, it's likely to do so after the next one or two rate hikes depending on the size.

However, this is a recession signal with a really long lead time or potentially long lead time of up to two years and a lot could happen in that time.

Just like in 2019 when the Fed reverse course and cut interest rates in response to softening economic indicators, we never got to play out that cycle because of the pandemic, but a recession ultimately requires a significant deterioration in employment.

And in this cycle, the starting point on jobs is more than double the entry point that we've seen ahead of other recessions, suggesting that if we are headed to a recession it's likely going to be a slow burn.

It's also possible that what we are experiencing is in fact a soft landing which feels a bit like balancing on the head of a pin.

For instance, returning to the weak consumer spending discussion the third quarter is already showing a bit of an acceleration back above 2%.

And we may just have to get used to these slim margins of growth, which in turn is why recession odds are elevated at 50%.

So really, the next six months are likely going to be very telling on which way the economy turns.

To not over rely on financial market indicators, we dusted off an economic risk index we created several years ago to help inform of turning points and perform.

This index is a catchall of data spanning production, labor market, and consumer patterns, and the zero line captures the historical average for each indicator.

So when you're at a -1 standard deviation, the index corresponds with the recession, but you don't want to wait to that point because it would be old news. So really, the red flag goes up once we hit 1/2 point below zero.

It is prone to false signals like in 2016 and 2017. That period corresponded with weakness in the production side of the economy, whereas housing employment in the consumer side held steady.

Which speaks to a second point that we're not just looking at the aggregate index for clues. It's important to know what the drivers are, because deterioration on the consumer side carries more risks.

So once that signal threshold is crossed at that half point deviation below trim that gives another 3 to 6 months window before a recession materialize.

As you can see, the index is deteriorating quickly, but it's still in positive territory.

If a recession is looming, this indicator isn't signaling it yet, making it more of a guess on timing.

I'd like to dig into the Housing market component for a bit.

The indicator that's most weighing down that economic risk index is housing permits for detached homes.

This graph on the left is showing how demand is retreating from the resale market, but this is modest in comparison to the building of new homes for single families where sales are down 30% since the start of the year, average prices are down 12 $\frac{1}{2}$ % as demand retreats from more expensive properties.

So, for example, new homes priced at 750,000 or more they used to make up 15% of all sales back in April and already they're down to 5% of sales. Although that figure is actually more in line with historical trends.

In contrast, prices for existing homes have shown extraordinary resilience, which leads me to this graph on the right showing the massive divergent and supply conditions between these two markets.

This doesn't mean that the existing market is shielded from price pressure, it just explains why the dynamics are more delayed relative to the performance of sales and speaks to the direction of risks.

And with that here's a snapshot of how prices are forming in the US resale market.

This should trend down in the months ahead aside from falling sales, Redfin has reported that the share of home listings with price drops has increased to $7 \frac{1}{2}$ %, and that's the highest since they tracked the data in 2015. The usual pattern is somewhere between 2 and 5%, but pulling the lens back a bit this price pattern does not raise concerns about systemic risks.

It still looks like a recalibration is fully expected on home prices, and the surprise has really been the ongoing resilience, particularly when compared with Canada.

I've dropped in the MLS price metric for Canada on single family homes.

I thought this discussion might help clear up any confusion from reading various media headlines.

Home prices are very difficult to compare even within a country because of the different metrics, let alone when you get to comparing metrics between countries.

The US metric looks surprisingly sturdy because it's a median price metric, which is less reactive to compositional shifts in sales, and we don't have an equivalent metric for Canada. But the best approximation is probably the MLS metric which measures home characteristics and has reduced sensitivity to compositional shifts in demand.

However, the metric that tends to get the most attention in the media and the one that we forecast is the average measure which captures significant volatility and has collapsed due to demand shifting away from higher priced homes similar to what we're seeing in the US. But it's getting masked in the US measure through that median estimate. So when we talk about Canadian home prices falling roughly 20% from the peak, it's this measure. That's the reference point.

And it still leaves prices up relative to pre pandemic levels. However, we have to keep in mind that most Canadian markets have affordability metrics that are worse than what you see in the US, and so the Canadian market should underperform on the price side relative to what you see in the US.

So now is a good time to transition to the Canadian outlook. Although Canadian housing demand hasn't been as resilient as the US, the economy certainly has outperformed in the first half of the year.

Many factors are at play, including a consumer that's less sensitive to inflation and rate dynamics.

A government sector that is contributing to GDP and even a business investment cycle that's finally responding after significant underperformance last year.

Canada also hasn't experienced the same degree of inventory swings of the US, and that's in part tide to the consumer cycle.

During the pandemic American consumers spent a much higher rates on durable items such as electronics relative to Canadians, and so that unwinding or substitution away from these purchases is weighing more on the US consumer profile than what we see in Canada.

So all these elements in combination, consumers, businesses and government produces the domestic demand profile that's showing more resilience in Canada.

Differences in the slope of the lines is what matters here.

Now the graph on the right shows it would be difficult for Canada to sustain a longer term divergences with the US, particularly with an economic backdrop that looks very similar on the inflation and interest rates.

So we do anticipate greater convergence by the end of this year and through 2023, which is why the previous slide showed a significant step down in the correlate patterns of GDP growth that produce an annual average of 1.2% next year versus 3.5% this year.

And we are getting hints that consumer momentum is already slowing.

This data is TD credit card and debit data, which is actually more comprehensive than the retail sales data we get from Statistics Canada, because for one it's more timely and two, it's a broader set of expenditures.

And it's capturing our gradual cooling and spending patterns through July.

Since this is nominal data it's overstating the resilience because prices are inflated and hence balances are higher. An example would be gasoline spending, which is up 60% since February but when you adjust for prices is actually flat.

So, when we inflation adjust the data we can see there's a clear widening in the gap that has emerged to the nominal series and the slowing momentum is in fact reinforced.

A key difference in spending by Canadians relative to Americans is that the areas with pent up demand due to pandemic constraints are still trending upwards in Canada.

So we've defined these as high contact areas and that includes travel, transportation, recreation, entertainment.

Consumers are making choices by scaling back other areas of spending.

And I suspect it's a matter of time before those patterns start to look a little bit more American, like as that pent up demand is satiated in the face of those higher prices and interest rate.

And keep in mind Canadians are also more heavily indebted and devote a larger share of their income to debt service costs, which will ultimately lead less room for discretionary spending, which I'll now turn to next.

Housing as a share of GDP is roughly 2 times the size in Canada relative to the US.

So this graph is measuring residential investment, which includes everything from building new homes to renovation activity to sales Commission, and we also include an estimation of consumption from wealth effects.

By extension, the drop in home sales and prices and construction should produce larger spending and negative wealth effects in Canada relative to the US.

And with that, we estimate that the pullback in housing could shave as much as 60 basis points from overall US GDP growth, whereas the estimate for Canada is larger at 90 to 120 basis points.

Turning to unemployment risks the June and July data produced 74,073 thousand job losses, which wasn't in line with consensus and has raised some concerns that cracks have formed in the foundation. At this point I'm not concerned and what we're seeing for a few reasons.

First, as an employment rate shows, job market is simply too tight and there was nowhere to go from here but up. The only way to back pressure off wages and consumer prices to back pressure off the job market.

Second, Canada, as I mentioned earlier, has a reverse cycle to the US. Job growth was so strong out of the gate that productivity growth was nonexistent. Canada had seven consecutive quarters of a contraction in productivity, and that's just not sustainable, and we're now due for a reverse to come through real GDP.

And the second quarter is tracking 4% for Canada. This should finally produce a win in productivity growth.

Third, the industry baked down supports a narrative of recalibration rather than retreat. Many sectors that had outside job gains during the pandemic are now doing some giveback, so an example of this. The public sector posted a massive 108,000 jobs in May. It was the second largest monthly gain in the history of the series. June and July data has only partially reverse that gain and I suspect more needs to occur here relative to pre pandemic period. Public sector employment is up nearly 10% while the private sector is up only 2 $\frac{1}{2}$ %.

So returning to the point of a tight labor market, the participation rate among 25 to 54 year old is at a record high.

So there's a natural restraint in place to shift labor to productivity gains just because of that topping out of those levels.

I'm sure your eye is focused on the drop of the 55 year olds from the labor market. Part of that is demographics, meaning the participation rates steadily drops as people push into higher age cohorts as they go from 55 to 65, and so forth.

However, there has been a big exit from the labor force from the 55 to 59 age cohort among both men and women. But a little bit more skewed to women and a recent bank Canada survey indicated that 75% of those aged 55 to 70 would not return to the workforce under any conditions.

So we should presume this drop in participation has a fair bit of staying power, further reinforcing the point that tight labor market conditions.

You need to cool off and you need to have that rotation away towards back productivity gains and investment.

So I don't think the Bank of Canada is going to be put off by the recent labor market dynamics.

It does give them some breathing room to adjust interest rates in a smaller increment of say 50 basis points in September as opposed to the 100 basis points they did in July.

However, inflation has to cooperate. Well, it really didn't do as much as we would have hoped.

Headline inflation did come down on gasoline prices, but the core metrics were sticky, which makes sense because it's a highly lag communicators.

So the graph you're looking at shows that most of the inflation pressures on the upside have come from a group that we've categorized as having stronger supply or international drivers. These include food and fuel, even for ensuring clothing due to their import supply link, particularly via the US. The domestic demand category is focused on exactly that domestic driver, so restaurants rent, childcare, personal care, health care, things of that nature.

So there are two messages from this graph.

The bank account is raising rates, but ultimately it needs the global economy to cooperate on a synchronized slowdown, which in fact is now happening and is alleviating pressure on input and commodity prices.

But even with this, the green part of the graph shows that there's still a lot of homegrown inflation, and that the direction remains.

Well, maybe not as upwards as it used to be but certainly elevated and sticky history shows that even when externally driven, inflation starts to turn downwards like we're seeing the momentum coming from the spill over into wages, and services can still take upwards of a year to pass through to other prices.

And that's why we think markets might be getting a little bit ahead of themselves in pricing in rate cuts for 2023.

Even with the weekend economy, although the Fed and the Bank of Canada need convincing evidence that inflation has peaked in order to stop raising interest rates, cutting interest rates will require an even higher bar.

Regarding rate hikes for this year. While the exact endpoint is ambiguous, given the crosswinds hitting the economy, but it's reasonable to assume a policy rate will land somewhere in the 325 to 375 range over the next six months.

But what nobody is really talking about and is the ultimate challenge for central banks is that they have yet to communicate how they're going to define the stopping point in rates. Both central banks have trained the markets to focus on near term data through both their communication and their actions.

They are now approaching a period where they'll need to stop raising interest rates despite inflation remaining high because it's very lagging backward looking and interest rate changes do influence risk, consumer and business behaviors with long lags.

So if the language doesn't start to pivot in the next couple of months while still succeeding in anchoring inflation expectations, I would certainly raise the odds of a recession above 50%.

So not a happy note to end the presentation, but I'll leave it there and thanks for your time.