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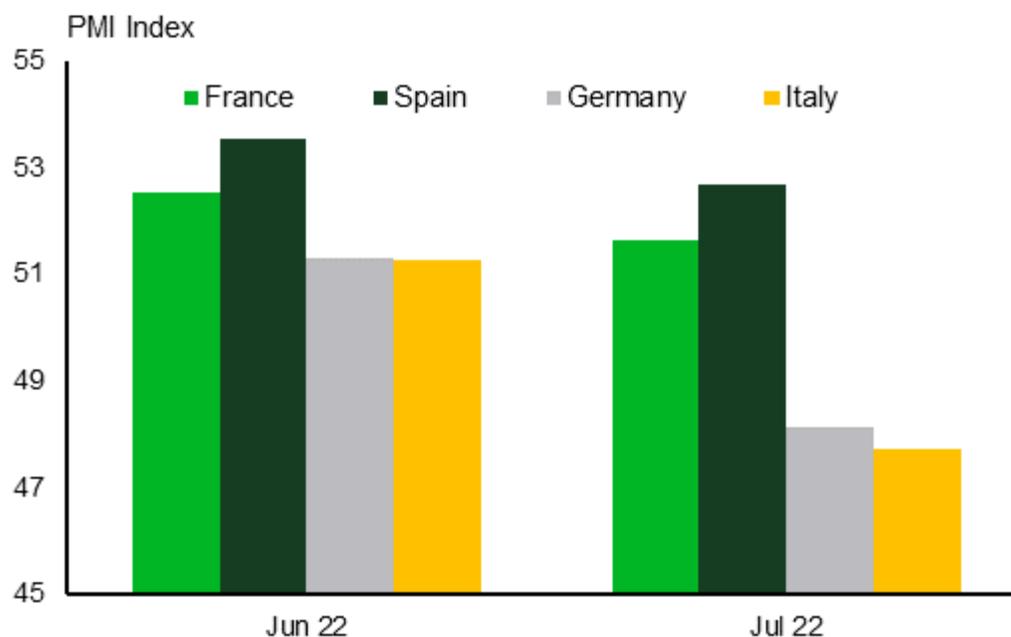
Addressing Issues Impacting the Economic and Financial Outlook

Date Published: August 17, 2022

So much for the dog days of summer! With lots of events and client questions, we pulled together the most asked questions on how the outlook and risks are evolving. We begin by addressing the biggest current worry – the risk of a recession. We then turn to questions on the resiliency of consumers, if inflation will ever come down, and when will the window open for central banks to back off on rate hikes. We also explored questions on the impact of the Russian war on inflation and recent moves in commodity prices. And no Q&A is complete without addressing how housing markets are evolving against supersized rate hikes.

Questions and Answers

- Q1. Is the global economy nearing recession?
- Q2. What are the odds of a recession?
- Q3. Does the U.S. technical recession over-emphasize the weakness?
- Q4. Are there cracks emerging in the Canadian economy?
- Q5. How resilient can the consumer remain?
- Q6. How are global commodities responding to the deceleration in global growth?
- Q7. How much is the Russian war impacting inflation?
- Q8. What are the risks that inflation will stay elevated?
- Q9. When will the central bank start to back off on hikes?
- Q10. How are housing markets evolving within this crossfire?
- Q11. Car prices still offer sticker shock, how is the outlook evolving?

Chart 1: Growth in Euro Area is Diverging

Note: >50 Indicates Economic Expansion. Source: S&P Global, TD Economics.

Q1. Is the global economy nearing recession?

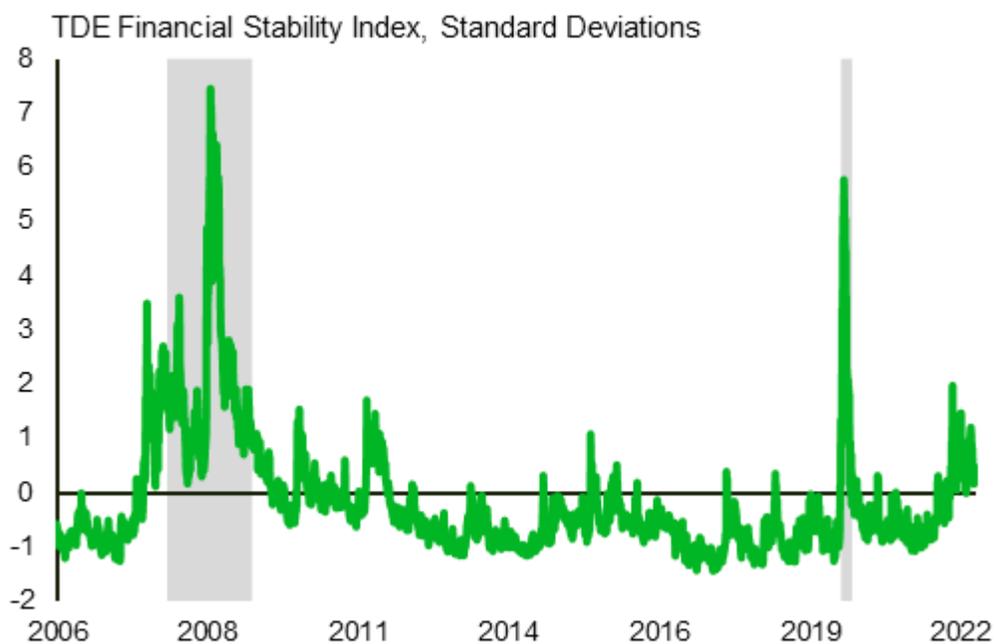
- The global economic outlook continues to deteriorate as the hits just keep on coming. Relative to our June forecast, forecast revisions are occurring to the downside. Covid-related virus risks are not at the heart of these revisions, except for China which remains committed to strict quarantine protocols.
- Much of Europe appears to be on the precipice of recession under the weight of high inflation, an energy crisis and deteriorating sentiment. Of the majors, the purchasing managers' index for Germany and Italy are already in contraction territory (Chart 1). Meanwhile, it's hard to argue with the Bank of England's own prediction that the economy will move into a protracted period of malaise on the dual shocks from soaring energy prices and the adjustment from Brexit.
- Globally, inflation continues to linger at elevated levels. Although the U.S. cut an early path on this front, the core price measures

within Canada and Europe have now also moved higher to narrow the gap. Sky high price growth is eroding real incomes across most advanced economies, leaving less for discretionary purchases.

- Although there is a synching up of negative pressures building on the global outlook, countries are not cut from the same cloth. The scale of the drag varies. The outright recession prospect within Europe is not mirrored in the U.S. or Canada. Of these two, Canada demonstrates significant growth-outperformance relative to other G7 nations. The U.S. economy has shown a pull-forward in slowing consumer spending patterns that were not expected to materialize until the second half of the year. This leads to a tension in the forecast on whether this is simply the markings of a “soft landing” or whether this slowdown will deepen and represent the early markings of capitulation.
- China’s economic slowdown is of a different nature. Political commitment to "zero COVID" means the stop-and-start economy will persist in an unpredictable nature of which regions and businesses will be next on the list, let alone the uncertain time period. This limits the effectiveness of government stimulus measures to boost the economy, while also experiencing the ongoing slowdown in the property sector. This keeps the Chinese economy on track to post growth at roughly 3.5% this year, although the reported figures may turn out to be a percentage point higher.

Q2. What are the odds of a recession?

- When Bloomberg surveyed economists in August, the median probability estimate that the U.S. was headed for recession within the next 12 months came in at a whopping 49%. This is consistent with our view noted in June that both Canada and the U.S. are in “coin toss” territory next year. Within a typical steady expansion period, these odds would be sitting within the 15-25% territory.

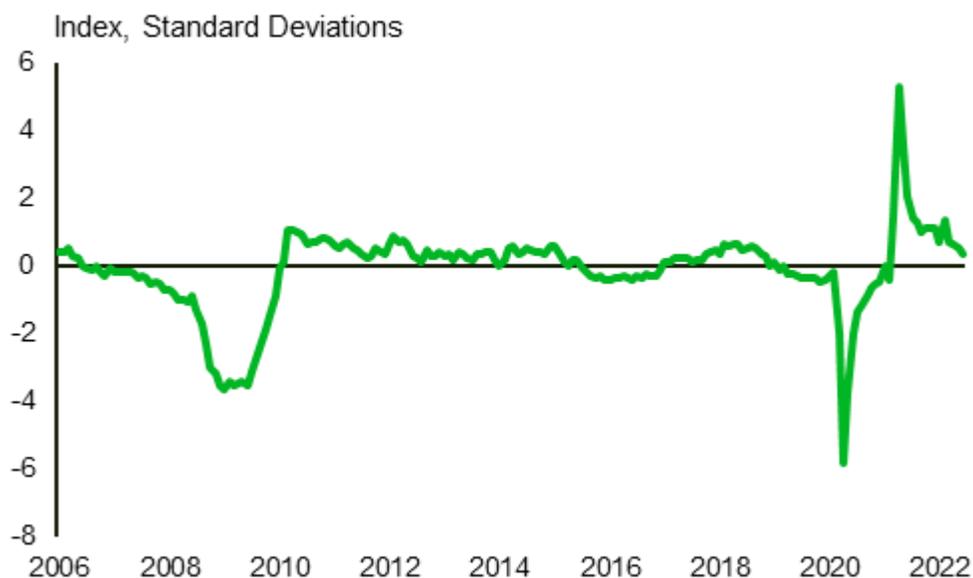
Chart 2: Financial Stress Has Begun to Subside

Source: Wall Street Journal, TD Economics. Last observation: August 5, 2022.

- Economic and financial indicators do not offer a definitive conclusion, keeping the debate alive with divergent views. Even among those in agreement of a recession, the timing remains a debate. Among the many indicators that make most recession watch-lists, only the spread between the 10-year and 2-year Treasury yields has sent up the red flag. It has moved decisively into negative territory. Fed Chair Powell has stated that this spread is distorted by Quantitative Tightening (QT), making it a less reliable indicator despite its pristine history in predicting recessions within a two-year timeframe. However, we argue that it's hard to dismiss a negative spread this deep at -40 basis points. Even in the absence of QT, the spread would likely be negative.
- Outside of this indicator, however, most others are not yet predicting a recession, or clues to its timing. The forward-looking ISM indicators are holding in expansion territory ($50+$). In fact, the services ISM even improved in July. The manufacturing ISM traditionally must be sustained within a $42-47$ range to foreshadow

a recession. Other indicators such as industrial production and hours worked also don't yet provide any clues. The same is true with our TD Financial Stress Index (Chart 2) and our TD Economic Index (Chart 3). Both of these capture a broad set of risk metrics.

Chart 3: TDE Leading Indicator Slowing But Still in Expansive Territory



Source: TD Economics.

- Of course, the strongest defense against the recession claim are the employment metrics. The U.S. economy added more than 3.2M jobs through the first seven months of the year. Outside of the pandemic, that pace of job creation hasn't been seen since the mid-1970s. Moreover, labor demand remains incredibly strong, with June data showing there are still more than 1.8 job openings for every unemployed individual.
- If we put aside the data for a moment and just reflect on the task ahead for central banks, there will be no way to cool inflation sufficiently towards its 2% target without a corresponding rise in unemployment. The only question is how much that latter must move. Our baseline forecast from June embedded a 0.7 percentage

point rise in the unemployment rate for the U.S. and 0.9 percentage points for Canada. So regardless of whether this cycle subsequently proves to be a soft landing, it will still not feel good.

- It's possible that it's just a matter of time before these measures turn. It's also possible that this is how a soft landing will feel, a bit like balancing on the head of a pin. Regardless, recession risks are elevated at 50% odds, and the next six months will likely indicate which way the economy will tip.
- For Canada, unlike its neighbor to the south, the economy is still expanding well above its running speed. However, this is one case where it would be very difficult for Canada to withstand the same forces that are acting on the U.S. via the rapid ascent of interest rates and inflation.
- Just like its American counterpart, the Canadian spread on 10-year/2-year government yields is deeply negative at around -50 basis points. Unlike its American counterpart, the Canada 10-year/3-month yield spread has also moved negative following the Bank of Canada's surprise 100 basis point rate hike. This combination does not bode well for recession odds.

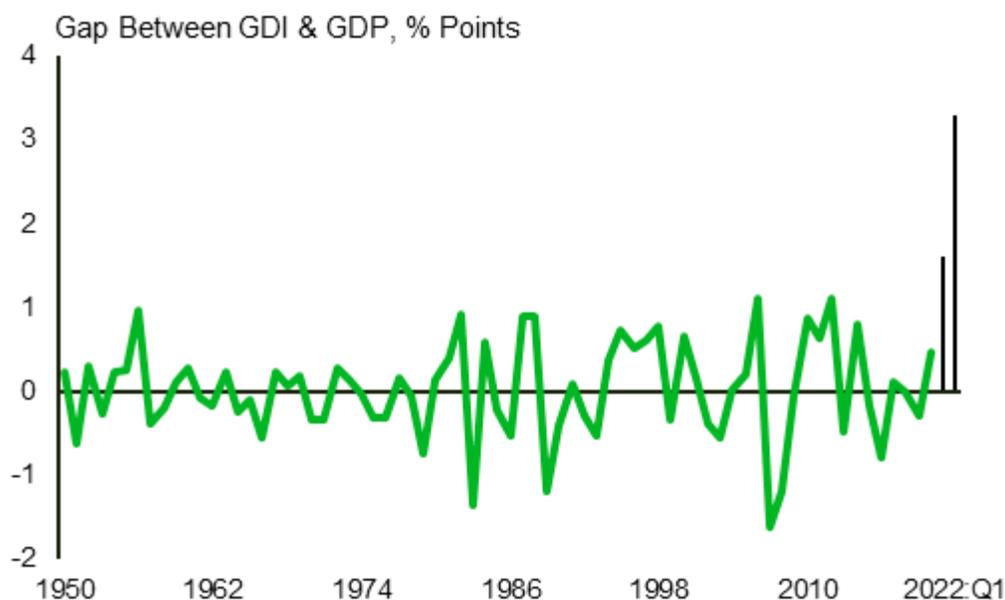
Q3. Does the U.S. technical recession over-emphasize the weakness?

- With two consecutive quarters of contraction in the U.S. economy, many are wondering if the world's largest economy has already slipped into recession. The economy has met a (narrow) definition of a recession, but not the one that matters.
- The definitive call of when the U.S. enters and exits recessions is made by the National Economic Research Bureau's (NBER) Business Cycle Dating Committee. The committee considers a much broader dashboard of variables to determine recessions, with an emphasis on industrial production, income (less transfers) and employment. This

group of indicators provides a broader assessment on how diffused economic hardships have become in the economy. The first half of the year did not measure up.

- So are there signaling issues from GDP? For starters, the pandemic has created many data distortions in the past two years, and the measurement of GDP is not immune. Both Q1 and Q2 GDP would have printed positive if not for sizeable drags stemming from net exports (subtracting -3.2pp in Q1) and inventories (subtracting -2pp in Q2). These two segments of the economy naturally embed volatility and measurement challenges, even in the best of times.

Chart 4: The Gap Between GDP & GDI Has Widened by Unprecedented Margin



Source: Bureau of Economic Analysis, TD Economics.

- The likelihood that some forces of measurement error are at play is captured by the growing differences between GDP and GDI (Gross Domestic Income). The latter measures activity from the income side of the ledger and has historically been subject to smaller revisions. The divergence between the two measures has become the

biggest in history (Chart 4). Something is amiss from a GDP accounting perspective.

- The narrative that the U.S. economy is slowing remains intact regardless of the measure, but the speed of decline within GDP is not supported by the GDI measure. Splitting the difference on these two measures gives a better gauge of the likely path.

Q4. Are there cracks emerging in the Canadian economy?

- Canada's economy has been comparatively strong relative to peers, but the impact of higher interest rates and negative sentiment are making their presence known. The most obvious impact has been in real estate and residential investment. The near 15% peak-to-trough decline in house prices has grabbed international attention, let alone moved domestic buyers and sellers to the sidelines. Our June forecast already embedded caution on residential investment with a 12% peak-to-trough decline over 6 quarters. However, the negative incentives and headwinds continue to build against the economics of new projects, including the Bank of Canada's surprise 100 basis point hike in July. We will again be shaving our residential investment forecast for new construction and renovation activity.
- The Canadian labour market also bears close watching. Since total employment hit a peak in May, 74k positions were shed in two months. Also of note was the 124k drop in the number of people in the labour force. Although two poor data reports don't make a trend, the softening is consistent with our view of weaker overall economic growth through the second half of this year. The good news is that the labour market is starting from a strong base. Total employment is still 2.2% above the pre-pandemic level, employers are still actively searching for workers, and wages are increasing.

Chart 5: Hiring Still Holding Firm in Western Canada



Source: Statistics Canada, TD Economics.

- And, just like suspected data quirks in the U.S. GDP data, Canada’s labour market also captures some anomalies. The public sector hired a massive 108K employees in May. This was the second largest gain in the history of the series, corresponding mainly with three provinces: Ontario, Quebec and Alberta. Anomalous gains are usually followed with some give-back in the proceeding months, and that’s exactly what happened in July. The 33K decline in national jobs captured a 51K drop in public-sector positions, cleaving back half of the advance made in May.
- Regionally, the bulk of the softness in hiring has been concentrated within the two heavy weights: Ontario and Quebec. That’s an abrupt shift following a strong performance in the first half of the year for those provinces (Chart 5). However, developments are consistent with our forecast for slower momentum as the year rolls forward. The pace of hiring is also cooling rapidly in the Atlantic Region. In contrast, B.C. demonstrates more resilience, while firms in the

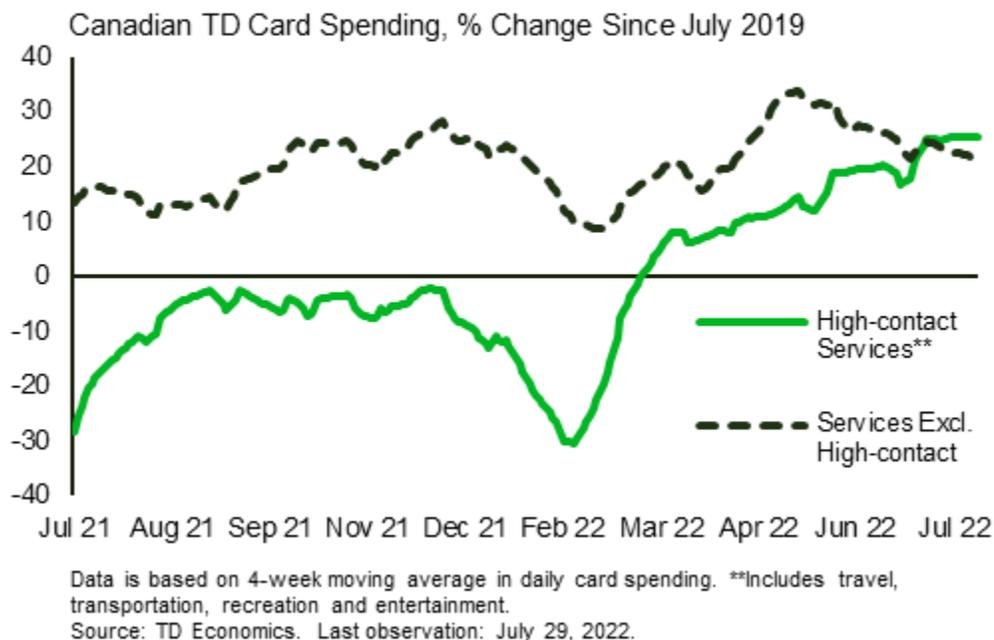
Prairies are still expanding payrolls at a decent clip, in line with our call for economic outperformance in the region this year.

Q5. How resilient can the consumer remain?

- After seeing significant improvement in their balance sheets during the pandemic, households on both sides of the border are confronted with a trifecta of headwinds. First, spending power is eroded with inflation running at a multi-decade high. Second, higher interest rates are pushing up debt servicing costs and leaving less money for discretionary spending. Third, wealth has been eroding, initially on the back of equity market declines, and now also on falling home prices in Canada.
- Americans have been temporarily spared from this last shoe to drop, but we expect home prices to fall in the coming quarters due to similar headwinds.

American consumers were first to blink. Consumer spending has averaged only 1.8% in the first half of the year – a pattern that is about four-to-six months ahead of schedule. In the second half of the year, we estimate something in the range of 0.6-1.0% will prevail.

Chart 6: Consumers Still Spending on Experiences at the Expense of Other Categories



- The persistence in slower momentum was corroborated by the June PCE spending report. Households are losing their appetite for goods purchases after a pandemic buying frenzy. However, the element of surprise is that a similar pattern is starting to show up for discretionary services expenditures – namely transportation and recreation services. These sectors were expected to have a longer spending life due to pent-up demand, but sky-high inflation has already forced households to economize on all fronts.
- High-frequency data also points to easing consumer demand in Canada. TD debit and credit cards data shows spending levelling off in June and July after strong gains in the initial re-opening months. Spending on services continued to be supported by demand for high-contact services and experiences (such as travel, transportation, recreation, and entertainment) which continued to trend higher in July. However, spending on services excluding high-contact services has been trending lower (Chart 6).

- In the U.S. more conservative spending behaviors by consumers have occurred alongside a dip into "excess" savings, as more evidence that biting inflation is taking a toll. Less than a year ago, we estimated American households had excess savings of around \$2.6 trillion by the end of 2021. To date, consumers have spent almost 6% of this, aligning to our most aggressive estimates at the time. At this clip, consumers are at risk of running through a third of the cushion by the end of next year.

Chart 7: Unlike Americans, Canadians Haven't Been Dipping Into Their Pandemic Savings

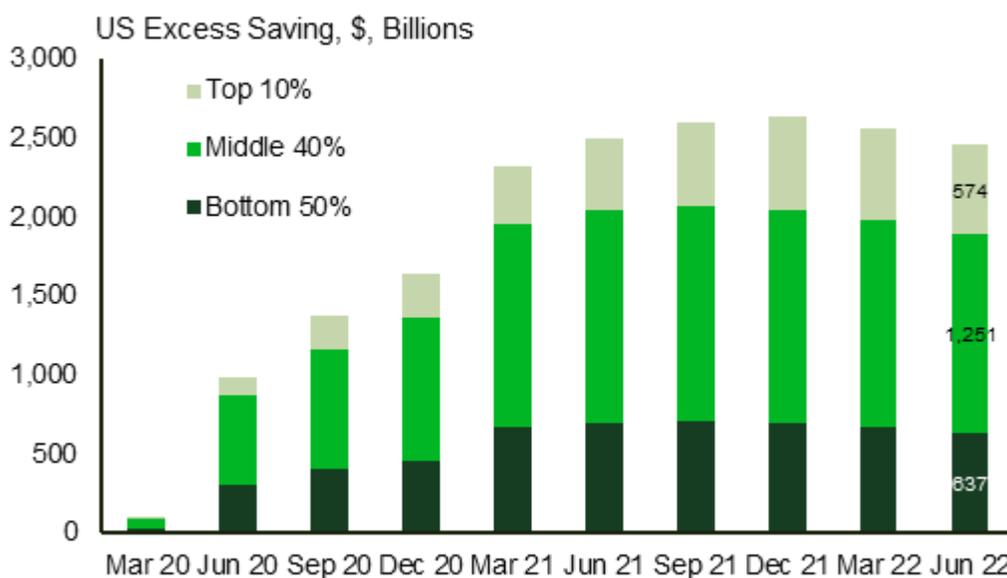


Source: Bureau of Economic Analysis, StatCan, TD Economics.

- Canada is bucking the trend of its southern neighbour, for the most part. Lengthier pandemic-related restrictions extended the consumer spending normalization cycle. And, a much stronger job market performance has meant that Canadians have not yet dipped into their savings (Chart 7). Canada's household savings rate has so far remained above its pre-pandemic trend, another departure relative to its American counterpart. This suggests that Canadian consumers can display more resilience even in the face of higher prices at this stage in the cycle, relative to its American counterpart.

- However, that’s the bird’s eye view. Digging into the data reveals that lower-income households on both sides of the border are being adversely affected by the rapid rise in prices for necessities. According to the New York Fed’s report on U.S. household credit, the recent uptick in aggregate delinquency rates is largely driven by borrowers in lower-income areas. Likewise, the recent decline in excess saving reflects a faster burn rate by lower income families who spent roughly 10% of their pandemic nest egg – twice as much as higher income families. The bottom 50% of American households now account for only a quarter of all excess saving, down from almost one third in 2020 (Chart 8).

Chart 8: Lower Income Families Have Less Power to Support Spending



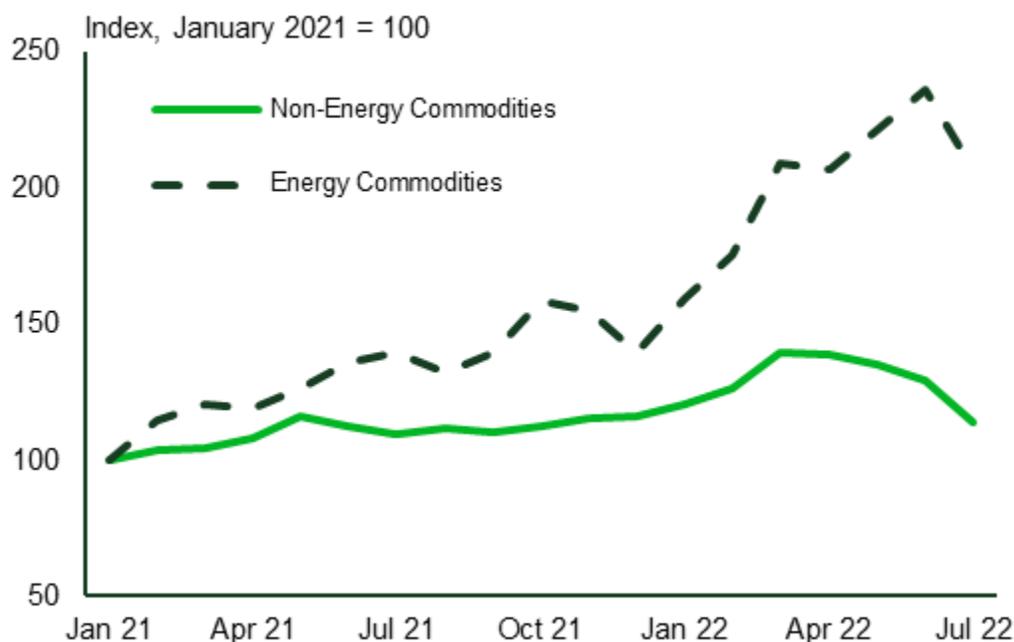
Source: Realtimeequality, Opportunity Insights, Cesus Bureau, Bureau of Economics Analysis, TD Economics.

- In Canada, consumer insolvencies are on the rise, rising 20% year-over-year in June. Historically, households filing for insolvency tend to be overwhelmingly renters, and thus more financially vulnerable. While increasing from a low level, rising consumer insolvencies suggest that financial pressure has intensified for lower income households amid surging rent, food and transportation costs.

- Canadian households are also more heavily indebted and devote a larger share of their income to debt-servicing costs, leaving less room for discretionary spending. As debt servicing costs rise and employment gains slow, Canadian households may feel more squeezed to accommodate increased debt payments and may need to reduce their consumption further. Real estate wealth also accounts for a much larger share of household wealth in Canada. The drop in home prices can, therefore, produce a larger negative wealth effect in Canada than in the U.S.

Q6. How are global commodities responding to the deceleration in global growth?

Chart 9: Commodity Price Indexes Diverging



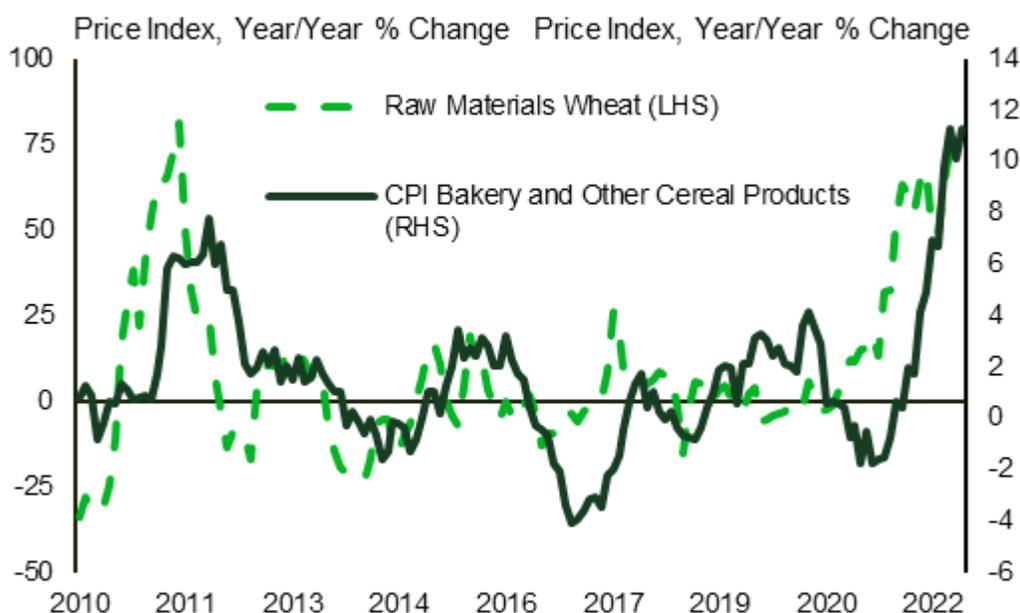
Source: Statistics Canada, TD Economics.

- Commodity prices have come off the peak (Chart 9) with both energy and non-energy commodity prices responding to slowing global demand for inputs amid mounting recession fears.
- Moving forward, as global demand continues to soften, oil prices have more room to the downside, particularly if a formal recession

materializes in broader Europe and the U.S. This could push prices back into a US\$70-75 range in 2023.

- The supply-side shock to natural gas markets may buck this trend due to the nature of pressure from continuing issues with Russian gas deliveries to Europe. Strong import demand from Europe supports firmer prices into 2023.
- The global food crisis remains top-of-mind with competing influences. Droughts in crop-producing countries will keep a floor under crop prices and relief is likely to be limited in 2023. Farmers will likely continue to face higher input costs. Nitrogen fertilizer is produced using natural gas, while diesel fuel is needed for transportation and farm equipment operation. The combination of headwinds risk reducing next year's crop yields.

Chart 10: Canadian Price Indexes



Source: Statistics Canada, TD Economics. Last observation: July 2022.

- More specifically, a 35% drop in wheat prices from record levels earlier this year should provide relief to food inflation pressures in the months ahead. However, Chart 10 highlights the long lags at

which market prices for wheat move down the pipeline. In the Canadian context, food is 15% of the CPI basket in Canada, but only around 1.5% of the basket is made up of bakery and cereal products, which directly links to inflation. Wheat is also an input into animal feed, so slower price growth could indirectly help lower meat prices that account for 2.1% of the Canadian CPI basket. The moral of the story is that the direction of input price pressures is positive, but there could be long lags before the consumers see the benefits at the grocery store.

Q7. How much is the Russian war impacting inflation?

- The Russian invasion of Ukraine was a significant game-changer on inflation, with long lasting effects. In both the U.S. and Canada, gasoline prices increased by more than 50% at their peak since the onset of the war. The recent reprieve on gasoline prices still leaves them up 19% and 21% relative to pre-war levels in the U.S. and Canada, respectively. To put this into perspective, should gas prices hang near current levels through the remainder of the year, the average driver will spend an additional \$875 (\$1,120 CAD) this year to fill up their vehicle compared to 2021. For the average two car household, this is a meaningful hit.
- But it is not just prices at the pump that consumers are feeling. The cost of utilities is also being directly impacted. The price of natural gas and other home heating fuels in Canada are up 26% and 73% year-on-year (y/y), respectively. Natural gas prices have risen even more in the U.S. – currently up over 37% y/y. With the price of energy sky-high, there has been tremendous pass through to other products on transporting and storage costs. Nowhere has this been more evident than in the price of food, which is up 8.8% y/y in Canada and an even stronger 10.9% y/y in the U.S. While the recent reprieve in gasoline prices will put downward pressure on food

prices, the history indicates that it can take several months to make its presence known. And this time around, the lag could be even longer given the ongoing fertilizer shortages, which are also a byproduct of the war.

- Outside of food and energy, there are also secondary effects, or indirect passthrough, on both goods and services prices as a result of the commodity shock. Just where those increases land is harder to disentangle – particularly considering ongoing supply-chain disruptions. However, a paper published by the Cleveland Federal Reserve estimated that the impact to goods prices has historically been muted compared to services during commodity price shocks. This is largely because the price increases passed on to consumers are dramatically decreased over the chain of production, with the bulk of the price shock absorbed by those at the beginning of the supply chain. The same can't be said for services that have a commodity dependence. When fuel prices jump, airlines and other transportation services quickly pass some of the costs on through either increased ticket prices or explicit fuel surcharges. The same goes for delivery services and even restaurants. And we're seeing those dynamics play out today. Airfares are up 28% y/y in the U.S., while food "away from home" is up 7.6%. Indeed, not all of this is related to higher commodity prices. Labor constraints and strong demand are also playing a role. The bottom line is that even as commodity price pressures subside, the transmission to service prices can be slow due to their “sticky” nature.
- There is no disputing the profound impact that the Russian-Ukraine war has had on inflation. At 8.1% y/y in Canada and 8.5% y/y in the U.S., headline inflation on both sides of the border is at four-decade high. Price pressures on food and energy alone account for over half of that increase – not to mention the indirect price pressures on other goods and services as a result of the commodity shock. To give

some context, the early-1980s is the next “most recent” time when food and energy had such a sizeable contribution to overall inflation.

Q8. What are the risks that inflation will stay elevated?

- The longer inflation stays at the current rate, the greater the risk that it remains elevated. When prices on items like food and fuel rise, consumers feel the impact as the cost-of-living shock reduces buying power. To offset this, people, and collective bargaining, will demand higher wages so that their incomes can keep pace with rising prices. For businesses, which are already dealing with higher input costs, rising labour costs place additional pressure on profit margins. This cycle of passing on higher product prices gets harder to break the longer it persists, leaning into the much-feared economic risk of a wage-price spiral.
- We have also seen this historically. In Canada, the food and fuel price shocks of the 1970s and 1980s caused a run-up in the price of both durable and non-durable goods. Over time, higher prices ended up reducing demand for these products and caused a peak and subsequent deceleration in goods inflation. But the damage was already done. Workers in all industries started to receive higher wages (note: unionization was higher at the time) as an offset and this bled through to the service sector, where inflation continued to accelerate well after the drop in goods inflation.
- What really changed the high inflation dynamic was central bank efforts to break the wage-price cycle. By raising interest rates, they reduced demand to a degree that inflation expectations were re-set. We are seeing central banks do the same thing now. By hiking rates so aggressively, they are trying to reduce demand to such an extent that inflation comes back down. Learning from history, they need to

do this quickly so that expectations for future inflation don't solidify at higher levels.

Q9. When will the central bank start to back off on hikes?

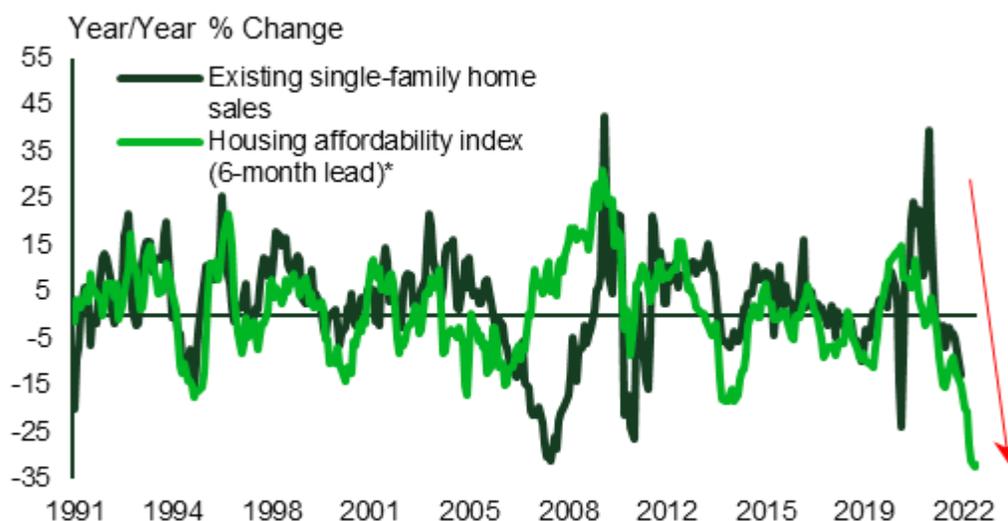
- The Fed and the BoC need convincing evidence that inflation has peaked and headed back towards the target rate of 2%. Many factors are now lining up to support this outcome, including a slowdown in global demand and the recent back-track in oil, wheat, and other commodities. In fact, July CPI data in the U.S. offered a sigh of relief. The fall in gasoline prices caused the headline to pull back to 8.5% y/y after crossing the 9% threshold in the prior month. The trend is our friend, but as detailed in Questions 6-8, the dynamics to get back to the 2% target will likely be slow.
- The first point allows central banks breathing room to not continue full tilt with outsized rate hikes in the 75-100 basis point range, but the second point still means they must maintain hawkish rhetoric and move rates above their estimate of the neutral range (i.e., above 3%) to maintain credibility.
- We think financial markets are too optimistic that the central bank will be in a position to cut rates in 2023. A deceleration in inflation doesn't mean low inflation. The central bank will likely stay on the sidelines to ensure inflation doesn't reverse course and undermine the hard-fought progress. For instance, in 1976, U.S. CPI declined to 4.9% from its 1974 peak of 12.3%. For the Fed, this wasn't mission accomplished. Over the next four years, inflation proceeded to increase once again, reaching a new high of 14.8% in 1980. The Fed will want to avoid repeating history. We estimate that the policy rate will reach 3.25% this year and stay there through 2023.
- However, the exact end-point is very ambiguous given the cross winds hitting the economy. It's reasonable to assume the fed funds

rate will land somewhere in the 3.25% to 4.00% range over the next six months.

- A similar argument can be made for the Bank of Canada. The labour market dynamics have wobbled in recent months, but this is a necessary function of recalibration. Meanwhile, the inflation dynamics are little different relative to the U.S., and perhaps warrant even more caution due to stronger underlying economic momentum and household savings positions relative to their U.S. counterparts, particularly when compounded by more supportive Canadian government measures.

Q10. How are housing markets evolving within this crossfire?

Chart 11: Drop in Affordability Points to a Further Decline in Home Sales, Weakness in Prices



Note: *30-year mortgage; 20% down payment; seasonally adjusted median single-family home price; 25% qualifying income. Last six data points are estimated using recent mortgage rate data, and near-term forecasts for home price and income growth.
Source: NAR, BLS, TD Economics.

- The negative impact of the sharp increase in mortgage rates in the first half of 2022 is still reverberating across the U.S. housing market. Activity has continued to come in broadly in line with our expectations. Existing home sales are down more than 20% from the start of the year. The sharp deterioration in housing affordability

points to an extension of this trend – a theme supported by a host of leading and high-frequency indicators (Chart 11). Prices are next in line to see some retrenchment. The median seasonally adjusted home price fell mildly in June (the first decline in eighteen months), marking a turning point in momentum.

- The new single-family home market shows even more weakness compared to the existing home market, with sales down a sharper 30% from the start of the year and prices pulling back noticeably. The new home market is much smaller and more volatile than the existing family home market, but still offers a precursor of the balance of risks on what's to come. The new home market is well into buyer's territory, with an elevated months' supply of inventory (9.3 in June), supporting a further pullback in prices (Chart 12). Builders are responding to these trends by easing off the accelerator. However, construction activity in the multifamily segment, whose product is heavily geared toward the rental market, continues to hold up well so far. Still, some early and modest signs of softness in the rental market serve as a reminder that beyond the near-term, the multifamily sector too may not be immune to broad housing market dynamics.

Chart 12: Broader Housing Market Still in Seller's Territory; New SF Market in Buyer's Territory



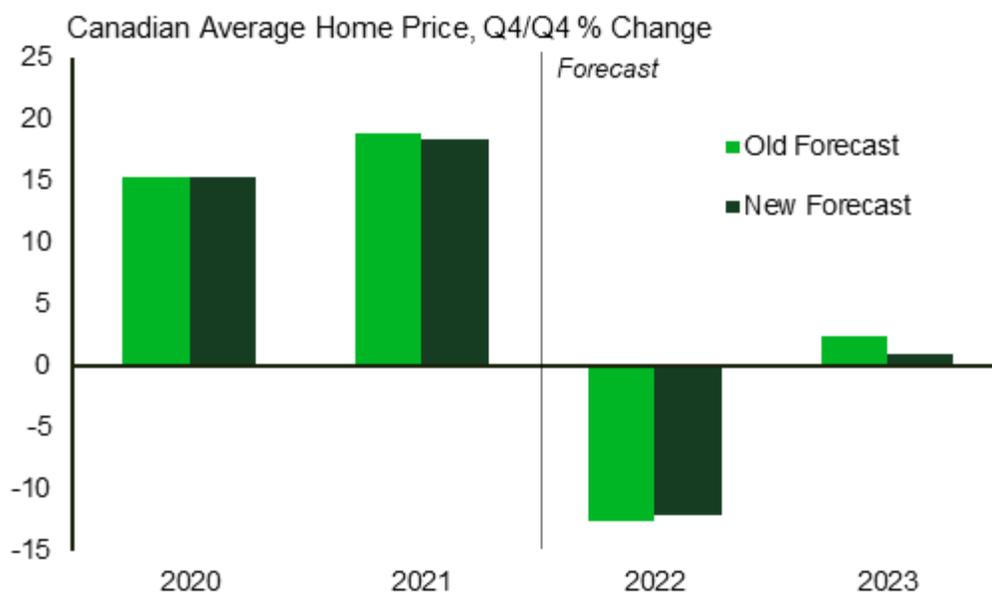
Source: NAR, Census Bureau, TD Economics.

- U.S. mortgage rates have lost some steam, falling by 80 basis points since late-June to around 5% recently. This move could give a temporary lift to housing demand in the near-term. However, factoring in a 5% mortgage rate into the affordability metric for August (vs. an average of 5.4% for the month prior) does little to improve it, leaving it still near the lowest levels since 2006. What's more, we don't anticipate any major further respite on the rate front over the near-term, meaning that low affordability is likely to remain a key challenge to higher housing activity for some time.
- We expect home sales to continue trekking lower through the first half of next year. Sales weakness is expected to push prices into negative territory in the coming months. That said, regional markets that saw the largest deterioration in affordability over the pandemic and those with a previously strong investor presence, are likely to experience a more pronounced retrenchment in prices. The housing market should begin to find firmer ground in the second half of 2023

and early 2024 – alongside an anticipated mild downtrend in mortgage rates.

- For Canada, our June projection proved accurate for Q2 growth in Canadian home sales and prices, as they retrenched by 19.6% and 8.7% on a quarter-on-quarter basis, respectively. There’s little reason to alter our go-forward view, but July’s numbers implied some (marginal) downside risk to our prior forecast for third quarter growth in home prices. Last month, home sales tumbled 7% m/m in Toronto, while average prices dropped about 3% m/m. Meanwhile, soft performances were also recorded in Vancouver and Calgary.

Chart 13: Economic Weakness to Weigh More Heavily Home Prices Next Year



Source: CREA, TD Economics.

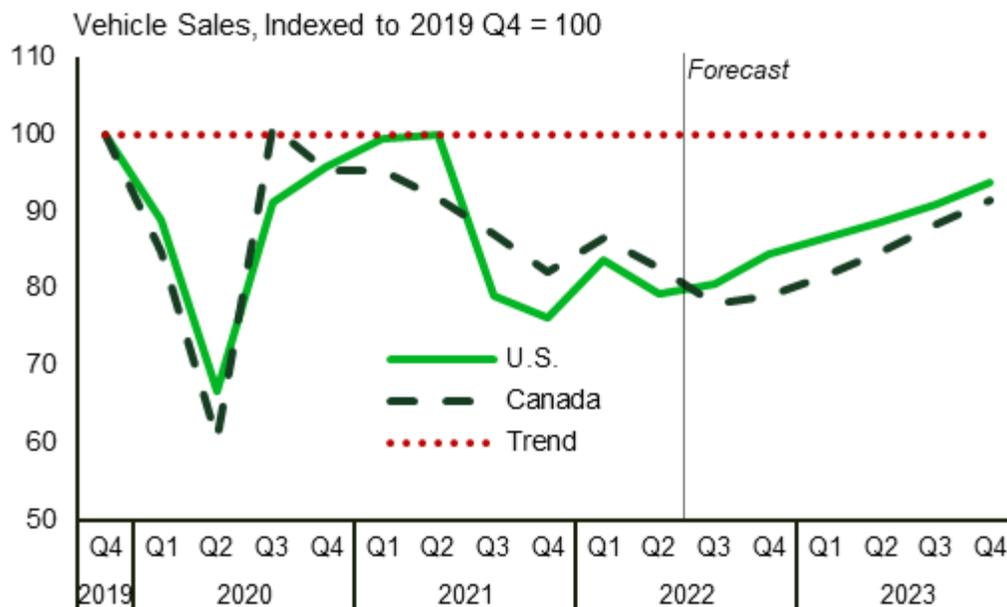
- Beyond the very near-term, there are competing forces shaping our view. On the one hand, global economic weakness probably means that 5-year bond yields (which underpin fixed mortgage rates) are not going to climb as much as previously thought through the end of this year, regardless of any tweaking in our forecast path of central bank policy rates. However, the stronger global slowdown should

correspond with a potentially greater slowdown in Canadian economic growth than previously expected, or at least in the timing of it. When weighing the two, we think the latter factor will hold more sway and we have marginally downgraded our forecasts for Canadian home sales and prices, particularly in 2023 (Chart 13). From 2022Q1 – 2023Q1, we expect Canadian average home prices to decline by 19%, which is in line with our June view. However, housing activity through much of next year should be somewhat more subdued compared to what we were thinking a few months ago. We are retaining the view that home prices will claw back only a portion of pandemic-era gains, making the downturn more of a recalibration, versus something more severe.

Q11. Car prices still offer sticker shock, how is the outlook evolving?

- North American auto production has improved through the first half of this year. Year-to-date production levels are tracking 7.4 million units – up 8.5% compared to year-ago levels – as the global semiconductor shortage is showing some signs of easing. Before sounding too optimistic, production remains over 14% below pre-pandemic levels. At this point, it is unlikely that monthly production gets back to 2019 levels until the second half of next year.
- Sales on both sides of the border remain constrained by the lack of inventory. U.S. July sales rose to 13.4 million (annualized) units, which is up from its May 2022 low of 12.8 million. But, this is well off what underlying fundamentals would suggest – closer to 17 million. In Canada, things have felt even worse. Sales have steadily trended lower through the first seven months of the year – reaching 1.4 million units in July. Excluding the pandemic, we would have to go all the way back to late-2008 to find another time when monthly sales were this weak.

Chart 14: U.S. & Canada Vehicle Sales to Remain Below Trend



Source: Statistics Canada, Ward's Automotive, TD Economics.

- While the modest boost to North American production has led to new vehicle inventory reaching a nadir earlier this year, there is still a long way to go before returning to a more "balanced" market. Current estimates suggest that U.S. new vehicle inventory levels are sitting at 1.2 million units or 28 days' supply. This is an improvement from the March low of just under 1 million units, but still more than 60% below 2019 levels. Unfortunately, vehicle inventory data isn't readily available for Canada but given the similar moves in the sales trajectory through the semiconductor shortage (Chart 14), it's safe to assume the Canadian market is experiencing similar shortages. With production unlikely to normalize until sometime in the second half of 2023, the market will likely remain undersupplied through mid-2024. This could help to keep a floor under prices even in a weakening overall demand environment, however affordability will be a key determinant should recession dynamics unfold.

- As of July, new vehicle prices for Canada and the U.S. were up 17% and 12%, respectively, on a year-ago basis. Layering on the interest rate shock has led to a significant deterioration in consumer affordability. Making matters worse, the current demand-supply mismatch has led to a significant reduction in dealership incentives. JD Power estimates that the average incentive spend was just under \$900 in the U.S. in July – over 50% below year-ago levels. The combination of forces has pushed the average monthly finance payment to just over \$700 per-month in the U.S. and \$820 (CAD) in Canada!
- With sales on both sides of the border having remained below their respective measures of trend over the last several years – considerable pent-up demand has accumulated. However, the erosion in affordability, combined with the weakening economic outlook, will likely lead some buyers to delay their purchase, or potentially forgo it altogether. This is reflected in the downgrade to our sales outlook. U.S. sales are now expected to average just 13.8 million units this year (previously 15 million) before moving up to 15.2 million (previously 16 million) in 2023. Similar for Canada, sales are expected to reach just 1.5 million (previously 1.6 million) and inch only modestly higher to 1.6 million (previously 1.8 million) in 2023.

END