Monthly Economic Monitor

Economics and Strategy

NATIONAL BANK OF CANADA
FINANCIAL MARKETS

November 2022

Summary

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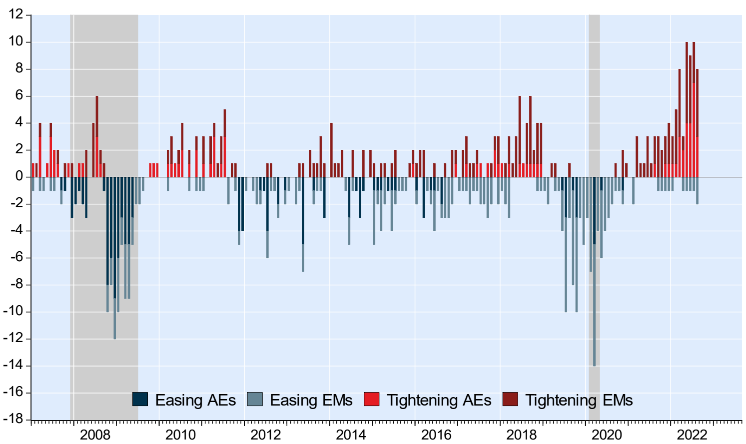
- After a late start, global monetary tightening now seems well under way, with more and more central banks moving policy into restrictive territory to tame inflation. This trend shift encourages hope that prices will eventually stabilize, but its impact on the economy will be no less important, especially since it comes at a time when growth has already slowed in many regions of the world. In the Eurozone, for example, GDP expanded in Q3 at an annual rate of only 0.7%, as the effects of sharply higher energy costs began to be felt via a massive jump of inflation and a corollary drop of real remuneration. Despite a slight improvement on the energy front, we maintain our view that the Eurozone will have entered recession in the last quarter of the year. Elsewhere, our concerns have changed little over the last month. Emerging markets are still feeling the pressure of a strong greenback that is pushing up inflation and making it harder to repay debt denominated in USD. China, meanwhile, continues to feel the economic effects of its zero-Covid policy, under conditions where a weakness of consumption can no longer be fully offset by increased exports. Given recent developments, we are keeping our global growth forecasts virtually unchanged for 2022 (+3.2%) and 2023 (+2.2%). For 2024 we see an expansion of 2.9%.
- The beginning of November was marked in the U.S. by an FOMC meeting that raised the target range of the policy rate from 3.00-3.25% to 3.75%-4.00%. The move was expected, but the same cannot be said of the hawkish tone adopted by Jerome Powell when he met the press after the announcement. The Fed chairman surprised more than one observer by stating that the data released since the previous meeting were consistent with a terminal policy rate higher than the 4.75% flagged in the most recent dot plot. We disagree with this statement, believing instead that signs of an economic slowdown have intensified in recent weeks. We foresee a tough first half of next year, leading to an expansion of only 0.3% over the whole year. With the Fed likely taking its foot off the brakes at some point next year, growth should reaccelerate to 1.4% in 2024.
- In Canada, manoeuvring for the landing of the economy continues. Things are moving in the right direction for the Bank of Canada, suggesting that we are approaching the terminal policy rate of this tightening phase. The labour market shows signs of moderating and inflationary pressures are less acute and omnipresent than earlier this year. However, the haste of the tightening, together with the lag time for transmission of policy-rate moves to the economy, makes it normal for observers to be nervous. Alas, we will know only after the fact whether the Bank went too far. One thing is certain: we can now see a marked slowing in real estate entailing an extremely rapid deflation in that market. To calm inflation, in our view, it will not be necessary to keep interest rates high for long and we accordingly expect the central bank to ease substantially in the second half of next year. Given the monetary tightening, we anticipate anemic growth of 0.7% in 2023, with consumers hit simultaneously by loss of purchasing power, a negative wealth effect and an interest-payment shock.

World: The Euro zone entering recession

After a late start, global monetary tightening now seems well under way. More and more central banks have gone restrictive to tame inflation.

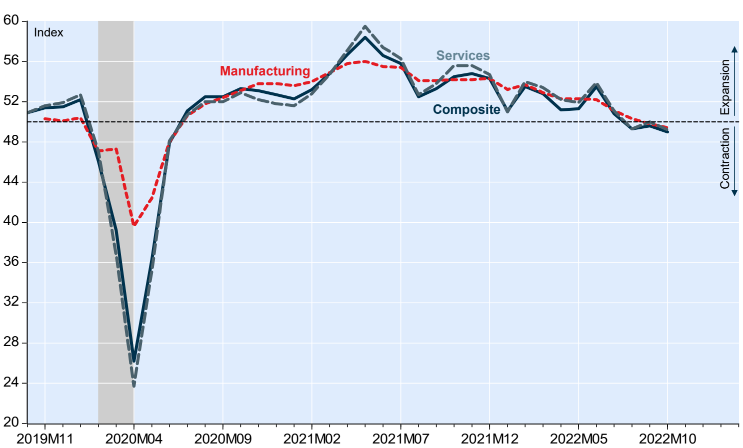
World: Acceleration of monetary tightening …
Number of G20 countries hiking / cutting their policy rates each month



NBF Economics and Strategy (IMF data)

This trend shift encourages hope that prices will eventually stabilize, but its impact on the economy will be no less important, especially since it comes at a time when growth has already slowed in many regions.

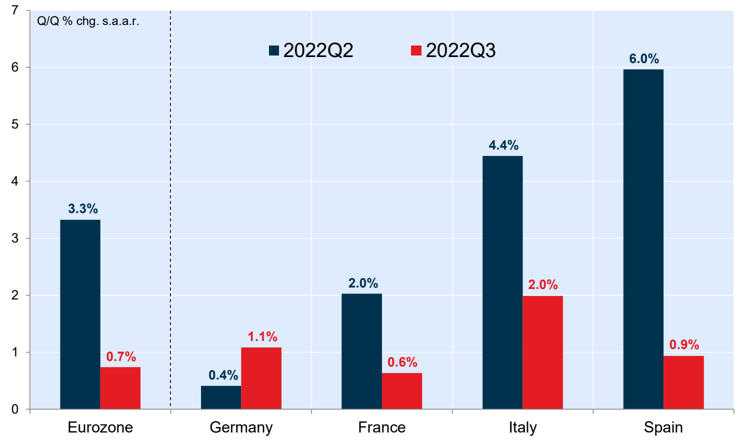
… could exacerbate the slowing of global growth
JPMorgan Global Composite PMI, last observation October 2022



NBF Economics and Strategy (data from Refinitiv)

In the Eurozone, for example, GDP expanded in Q3 at an annual rate of only 0.7%, well below the 3.3% rate of Q2. The slowdown was especially marked in Spain (from 6.0% to 0.9%) and France (from 2.0% to 0.6%), countries where the post-shutdown boost to the tourism and leisure sectors has begun to fade.

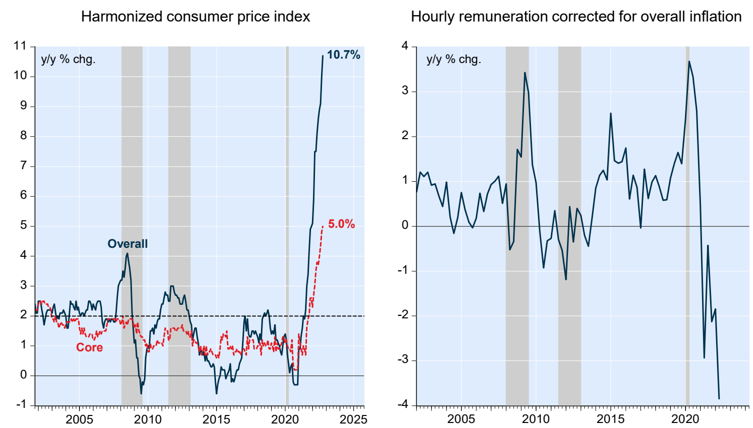
Eurozone: Sharp deceleration of growth in Q3 … the worst is yet to come
Quarterly change in real GDP



NBF Economics and Strategy (data from Refinitiv)

Meanwhile, the explosion of energy costs has been felt across the zone via a massive jump of inflation and a corollary drop of real remuneration.

Eurozone: Erosion of household incomes by inflation



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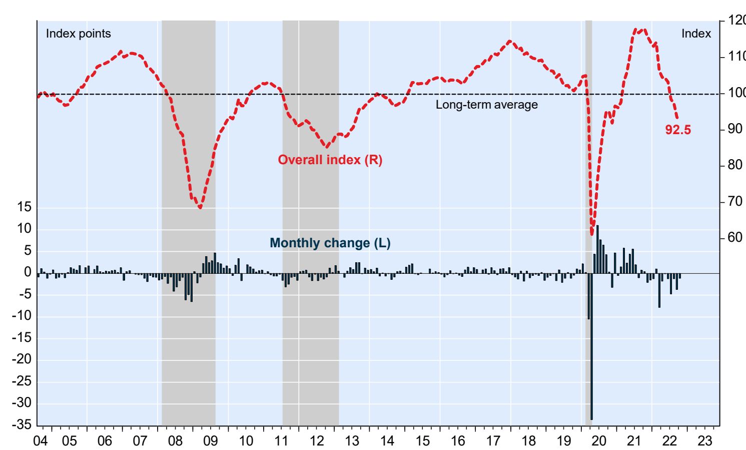
Sentiment about the economy has continued to deteriorate accordingly, slipping significantly below the historical average.

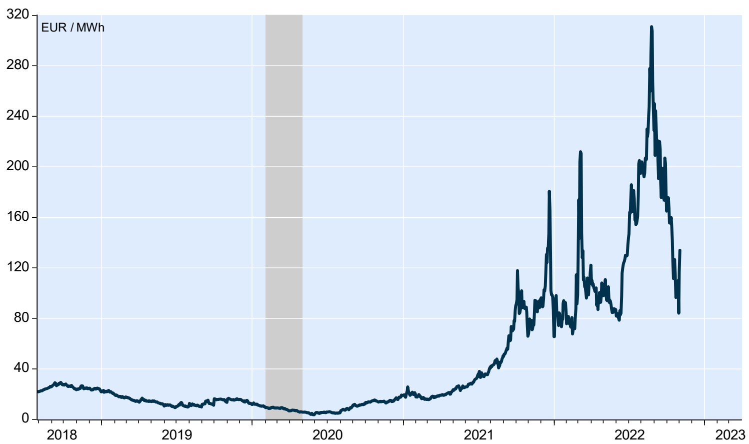
Eurozone: Economic sentiment now in recession territory
European Commission economic sentiment indicator. Last observation October 2022



NBF Economics and Strategy (data from Refinitiv)

In a small ray of hope for the economy, the energy picture has improved since the end of Q3. Among other developments, above-seasonal temperatures have let natural gas prices fall about 60% since August.

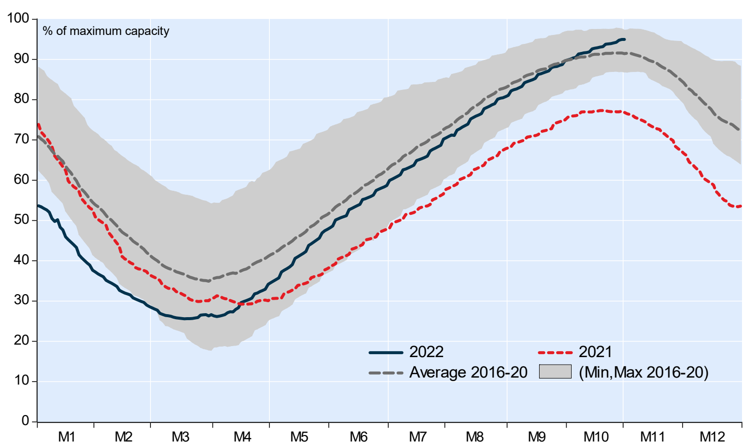
Eurozone: Natural gas price down 60% since August
Price of natural gas for delivery to Netherlands in one month



NBF Economics and Strategy (data from Bloomberg)

Gas reserves have continued to increase and are now at 95% of capacity, 18 percentage points more than a year previously and comfortably above the 80% objective set earlier this year by the European Union.

Europe: Natural gas reserves near capacity
Natural gas reserves

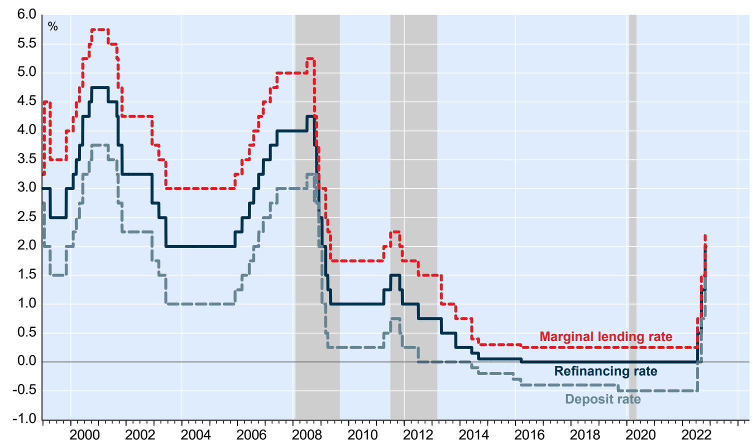


NBF Economics and Strategy (data from Bloomberg)

Europe is not out of danger for all that. Since gas reserves will cover no more than 80 or 90 days of maximum demand, the continent will be exposed to stoppage of Russian exports this winter, a possibility that more and more experts are taking seriously. And even if Moscow were to maintain its current pace of deliveries, gas prices could stay high enough to inhibit the economy. It should be kept in mind that even after the recent drop they are still hovering around €115 per megawatt-hour – a price per unit of energy corresponding to $180 per barrel of oil.

Despite the slight improvement in outlook, we maintain our view that the Eurozone will have entered recession in this last quarter of the year. In addition to gas prices, the degree of slowdown will depend on what the European Central Bank does. Judging by the 75-basis-point hike at its last meeting, the ECB seems still determined to curb inflation with rapid monetary tightening. Hardly reassuring for the economy.

Eurozone: The ECB tightens the screws
European Central Bank policy rates



NBF Economics and Strategy (data from Bloomberg)

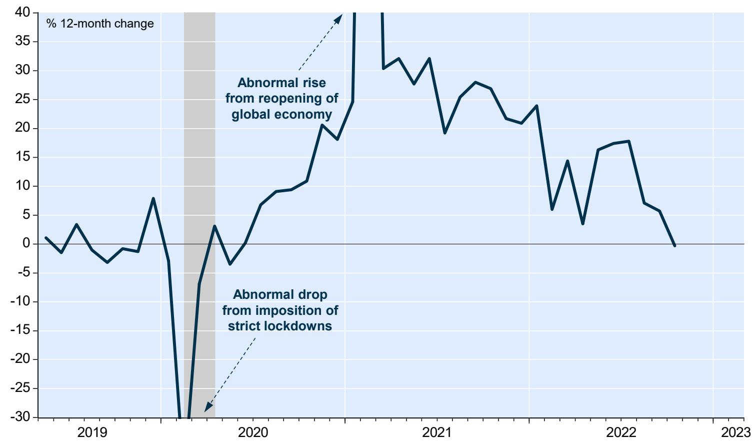
But beyond this sharp hike, ECB communications suggest that the central bank is increasingly concerned by the slowing of growth. Meeting the press after the rate announcement, ECB chair Christine Lagarde recognized that the Eurozone economy zone had "probably slowed significantly" and that a recession had become more likely. True, she maintained that the ECB "had more road to travel," but removal of the section of the press release stipulating that rates would likely be raised "at each of the coming meetings" leads us to think the finish line is not far down the road. So much the better.

In contrast to the North American story, the upward deviation of inflation in the Eurozone cannot be laid to excess demand. The cause has been rather a severe supply shock over which the tools of the central bank have no hold. To blindly hike rates in this landscape would serve only to aggravate an already difficult situation. That the central bank now recognizes the compromise between inflation and growth is thus good news that could spare the economy useless suffering. But since the full effect of the rate rises put in place so far have yet to be felt in the economy, the change of tone has probably come too late to head off a downturn.

Elsewhere in the world, our concerns have changed little over the last month. Emerging markets are still feeling the pressure of a strong greenback that is pushing up inflation and making it harder to repay loans denominated in USD. China, meanwhile, continues to feel the economic effects of its zero-Covid policy, under conditions where a weakness of consumption can no longer be fully offset by increased exports. The rapid slowing of global growth has sapped demand for Chinese goods, as attested by October's first dip in 12-month exports since the onset of the pandemic. Together with persistent problems in the housing sector, this dip could make the government's growth targets even harder to achieve in coming quarters.

Chine: Stalling of global growth is crimping exports

12-month change in total exports expressed in USD



NBF Economics and Strategy (data from Bloomberg)

Given recent developments, we are keeping our global growth forecasts virtually unchanged for 2022 (+3.2%) and 2023 (+2.2%). For 2024 we see an expansion of 2.9%.

World Economic Outlook

	2022	2023	2024
Advanced Economies	**2.5**	**0.3**	**1.3**
United States	1.9	0.3	1.4
Eurozone	3.2	-0.8	0.7
Japan	1.6	1.3	1.2
UK	4.2	-1.4	0.9
Canada	3.3	0.7	1.5
Australia	4.0	1.0	1.8
Korea	2.6	1.5	2.4
Emerging Economies	**3.6**	**3.5**	**4.1**
China	3.3	4.4	4.7
India	6.8	6.0	6.7
Mexico	2.5	1.2	2.2
Brazil	2.5	1.1	2.0
Russia	-4.5	-2.0	1.5
World	**3.2**	**2.2**	**2.9**

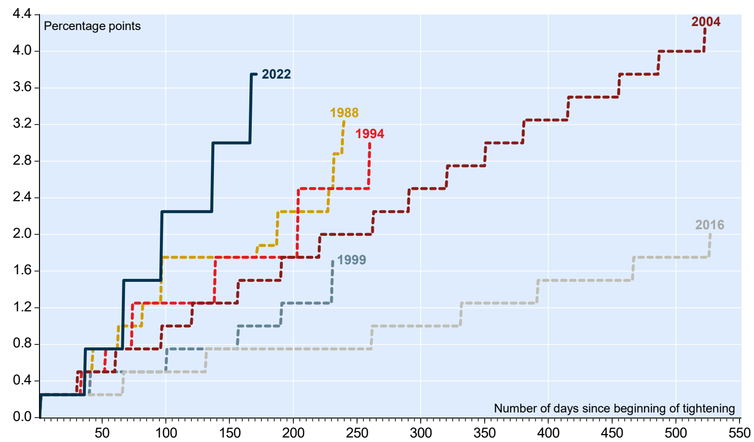
NBF Economics and Strategy (data via NBF and Conensus Economics)

U.S.: A backward-looking Fed risks pushing the economy over the edge

The beginning of November was marked in the U.S. by an FOMC meeting that raised the target range of the policy rate from 3.00-3.25% to 3.75%-4.00%. It was a fourth consecutive 75-basis-point hike and the sixth hike of the tightening phase in which the central bank has so far raised its policy rate by a total of 375 bp.

U.S.: Brutal monetary-policy tightening

Paths of the policy rate in the most recent phases of monetary tightening

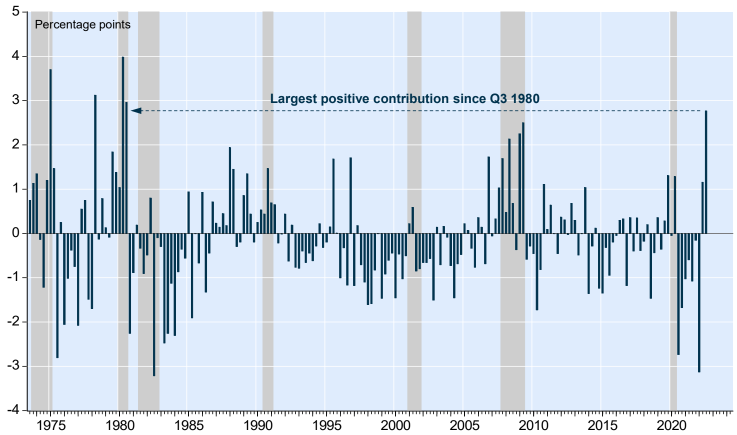


NBF Economics and Strategy (data from Bloomberg)

The move was expected, but the same cannot be said of the hawkish tone adopted by Jerome Powell when he met the press after the announcement. The Fed chairman surprised more than one observer by stating that the data released since the previous meeting were consistent with a terminal policy rate higher than the 4.75% flagged in the most recent dot plot. We disagree with this statement, believing instead that signs of an economic slowdown have intensified in recent weeks.

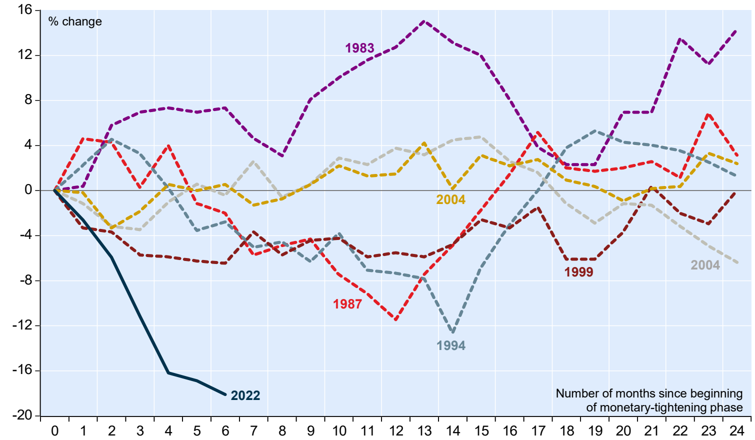
Let's start with the GDP numbers for the third quarter. True, they showed a rebound of growth, but that was no surprise after contractions of 1.6% in Q1 and 0.6% in Q2. Apart from confirming that the U.S. economy was not in recession at the beginning of the year, the 2.6% growth rate of the third quarter served only to bring real GDP back to the level of Q4 2021. Neither was the growth mix especially encouraging: the Q3 expansion was due in large part of foreign trade.

U.S.: Q3 growth was due largely to net exports
Contribution of net exports to growth of real GDP



NBF Economics and Strategy (data from Refinitiv)

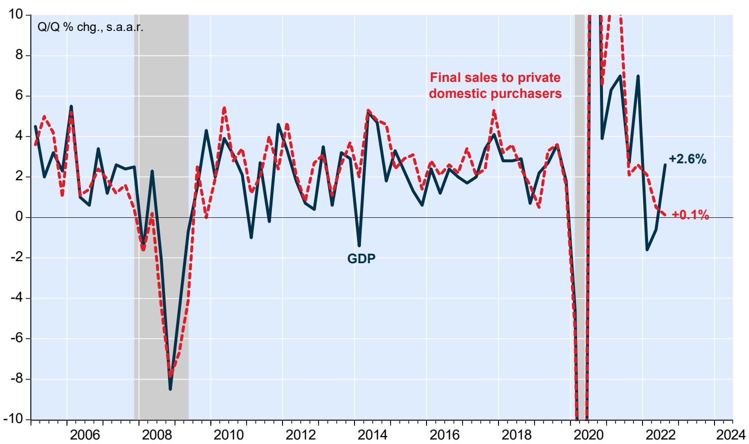
U.S.: Rapid transmission of monetary tightening (1)
Monthly change in home resales in the two years following the beginning of Fed tightening phases



NBF Economics and Strategy (data from Refinitiv)

Meanwhile, final sales to private domestic buyers – a category consisting of household consumption and gross business investment – continued to slow, growing only 0.1% annualized.

U.S.: Growth rebounds but private demand continues to slow
Quarterly change of real GDP and of final sales to private domestic purchasers

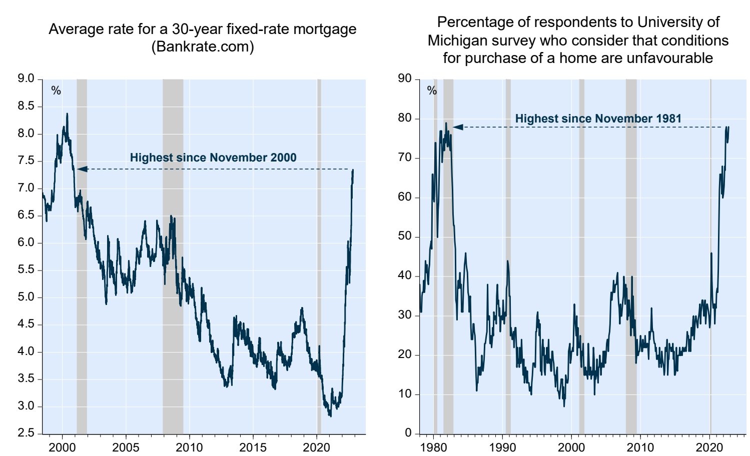


NBF Economics and Strategy (data from Bloomberg)

More specifically, residential investment was down for a sixth straight quarter, the longest such run since the Great Recession of 2008-09. This weakness contradicts Jerome Powell's idea that for the moment there is no data to support the idea that FOMC monetary-policy moves are taking effect on the economy faster than in previous cycles. The data on home sales suggests rather that rate rises take less time to funnel into the economy after a price surge such as the one observed in the re-opening phase of the pandemic.

The degree of tightening also counts for something. Mortgage rates are up no less than 450 basis points from their pandemic low, a hike of a steepness that has contributed to demoralizing potential buyers.

U.S.: Rapid transmission of monetary tightening (2)

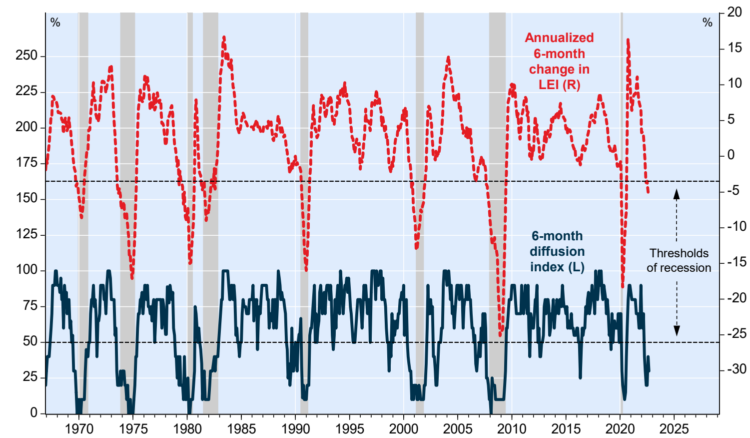


NBF Economics and Strategy (data from Bloomberg)

Some will say that real estate accounts for such a small part of U.S. GDP that its weakness should not worry us unduly. We agree that the decline of residential investment will not in itself tip the economy into recession, but we think it imprudent to consider what is currently happening in housing as simply a return to normal following the pandemic boom. Within the GDP data, residential investment can be seen as a leading indicator because it reacts faster to changes in interest rates. The Federal Reserve would accordingly do well to pay more attention here. A deeper dive into the data might well lead it to conclude that current monetary policy is more restrictive than would appear, a restrictiveness that might be masked in consumption data by excess savings accumulated during the pandemic. The central bank instead limits itself to saying the consequences of the current slowdown will be lesser than in 2008, which is obvious given the catastrophic dimensions of the housing crisis that began a few months before the Great Recession.

Since the start of the pandemic, the central bank has tended to overlook many leading indicators in its analysis of the economy, whether it be housing or others. This shortcoming led it a year ago to underestimate risks related to price rises and could now lead it to monetary overtightening, since the leading indicators suggest a substantial slowing of the economy in coming months.

U.S.: Leading indicators announce a slowing of growth
Conference Board Index of leading economic indicators (LEI), last observation September 2022

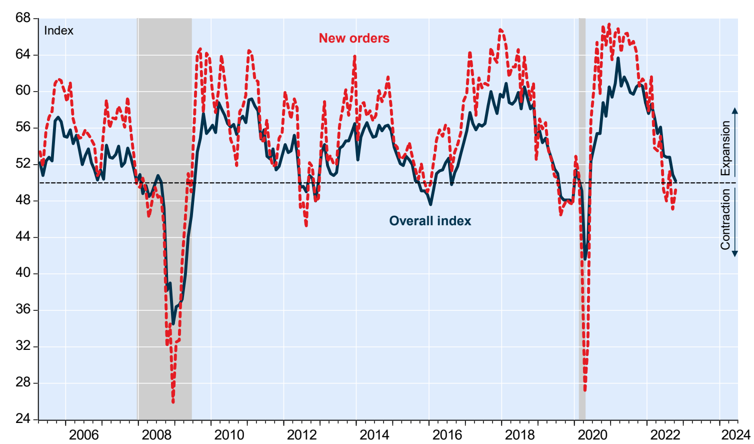


NBF Economics and Strategy (source: Conference Board, via Refinitiv)

The Fed's mandate makes no mention of leading indicators in its twin requirement that the central bank keep inflation under control and employment high. But since there is a lag in the reaction of inflation and employment measures to the ups and downs of the economy, the central bank ought to broaden its field of vision in order to better anticipate future trends.

Take inflation, for example. Though it continues to hover at unacceptable highs, signs of a coming turnaround are now abundant. The rise of goods prices has already slowed markedly, and the difficulties of the manufacturing sector suggest this trend could continue in the coming months. To be sure, the ISM PMI index in October flagged the weakest expansion of manufacturing output since the early months of the pandemic. It also showed new orders contracting for the fourth time in the last five months.

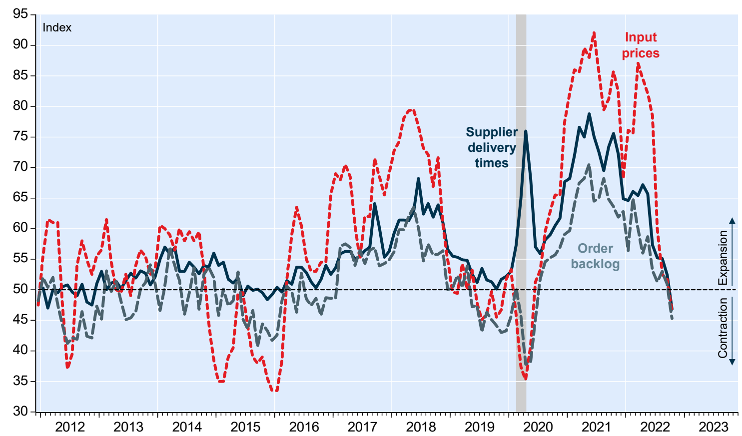
U.S.: Manufacturing sector stalling
ISM Manufacturing PMI



NBF Economics and Strategy (data from Refinitiv)

Signs of improvement in supply chains were also clearly visible in the October PMI. This is especially important in matters of price change. The input price index fell below the threshold of 50 for the first time in two and a half years, while the index of supplier delivery times showed the largest shortening since March 2009. These drops, combined with that of new orders, resulted in the first decline of the order backlog in 28 months.

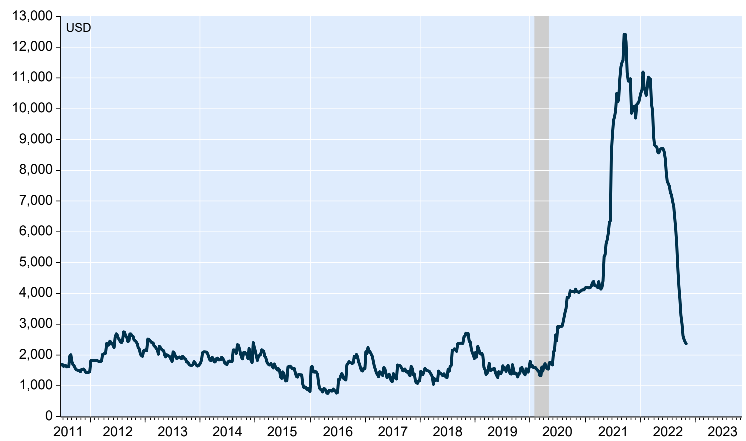
U.S.: The supply chain is rapidly becoming more fluid
ISM Manufacturing PMI



NBF Economics and Strategy (data from Refinitiv)

Other factors also support our hope of seeing goods prices decelerate, in particular the decline of international transport costs…

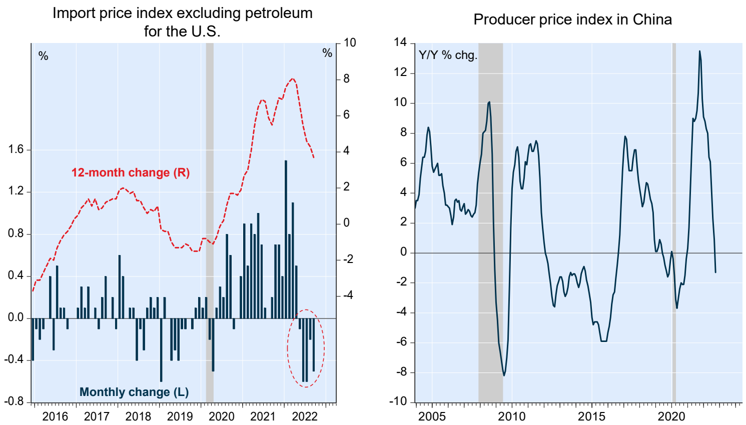
U.S.: A big drop in international transport costs
Price to transport a 40-foot container from Shanghai to Los Angeles



NBF Economics and Strategy (data from Bloomberg)

… and the strength of the U.S. dollar, which together with the decline of production costs in China is helping to reduce import prices.

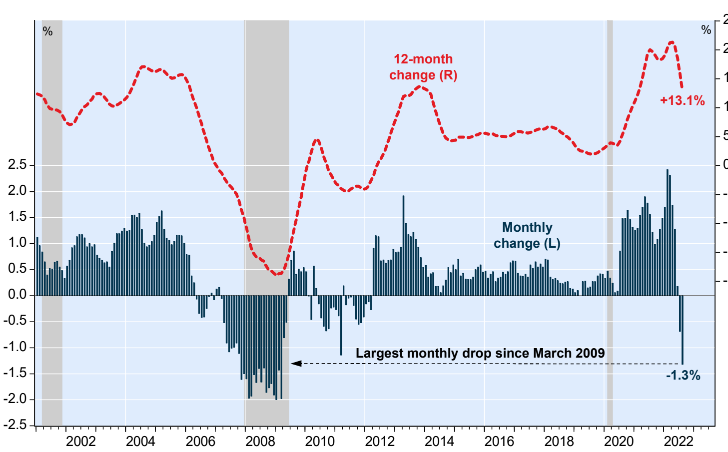
U.S.: Falling import prices



NBF Economics and Strategy (data from Refinitiv)

On the services side, the return to more acceptable rates of inflation could take longer. But the process nevertheless seems to be under way. It should be kept in mind that since categories linked to housing account for a disproportionate share of the core index for services, the path of the latter could be dictated in large part by the fluctuation of housing prices and rents. For price stabilization the weakness of the housing market is thus good news, because it is now reflected in a decline of home prices. That said, since price movements in real estate generally lag inflation data, the effect of this change of trend may not show up until the first half of 2023.

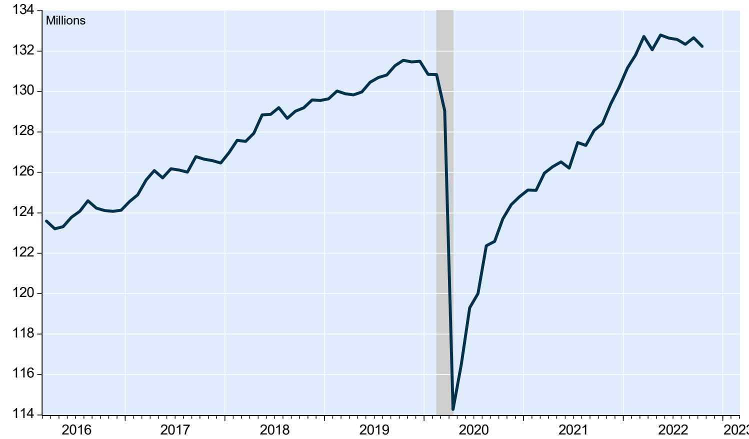
U.S.: An accelerating decline of home prices
S&P CoreLogic Case-Shiller 20-city home price index, last observation August 2022



NBF Economics and Strategy (data from Refinitiv)

Until then, the vigour of the labour market is likely to sustain prices for other services via a substantial rise in remuneration of labour. But even here a ray of hope appears on the horizon, as hiring seems to be slowing. At first sight the October statistics seem impressive – the payroll survey reported a gain of 261,000 jobs. But this good impression is at least partly offset by a loss of 328,000 reported by the household survey (including 431,000 full-time jobs, the fifth decline in seven months).

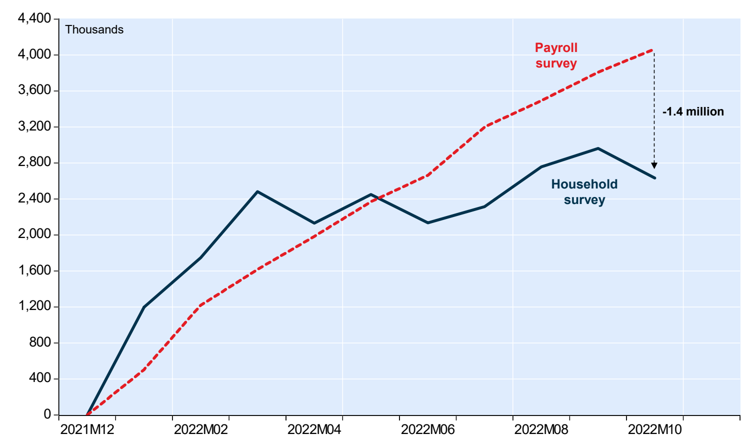
U.S.: Full-time employment plateauing
Full-time employment according to the household survey



NBF Economics and Strategy (data from Bloomberg)

Such spreads between the two surveys are not unprecedented. They are, after all, rather imprecise indicators with very different methodologies. The problem is that, even over a longer period, the two surveys seem completely out of phase with each other. The payroll survey shows employment gains distinctly greater since the beginning of the year (+4.1 million) than the household survey (+2.6 million).

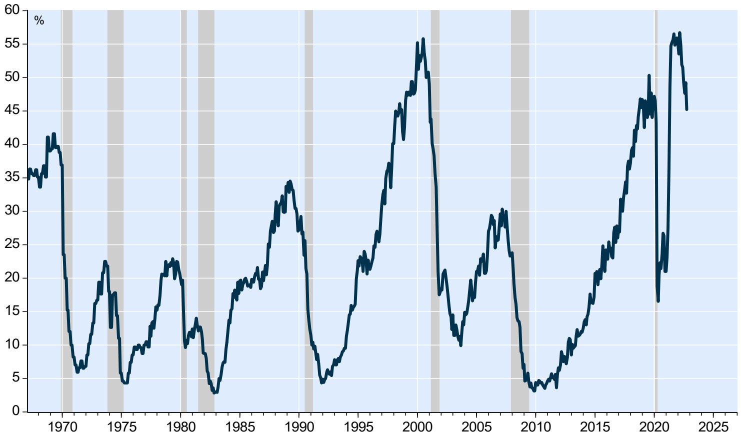
U.S.: Two labour-market surveys … two different worlds
Cumulative employment gains since December 2021, household survey vs. payroll survey



NBF Economics and Strategy (data from Bloomberg)

The real state of the labour market is accordingly difficult to evaluate, but we hypothesize that it is somewhere between these two narratives, i.e. that it is still resilient though definitively less buoyant than just a few weeks ago. This hypothesis seems to be supported by data gathered by the Conference Board in its survey of household confidence.

U.S.: Consumers report a hiring slowdown
Conference Board Consumer Confidence Index, share of respondents deeming that jobs are abundant



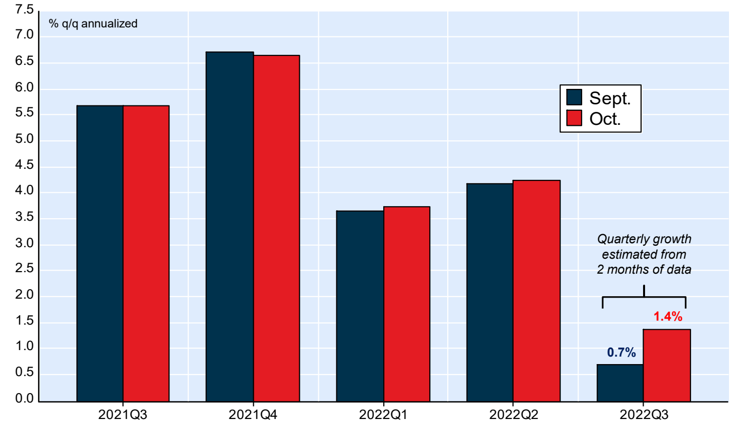
NBF Economics and Strategy (data from Bloomberg)

So we continue to think that job growth will slow significantly, which should give the Federal Reserve some wiggle room. The central bank should take this opportunity to end its tightening phase no later than the first monetary policy meeting of 2023 – our baseline scenario. A recession in 2023 will otherwise be almost inevitable. A Fed pivot even that soon would not head off a significant slowing of growth next year. We foresee a tough first half of next year, leading to an expansion of only 0.3% over the whole year. With the Fed likely taking its foot off the brakes at some point next year, growth should reaccelerate to 1.4% in 2024.

Canada: Ready for landing

The performance of the Canadian economy in the first half of 2022 was enviable compared to the rest of the G7. GDP by industry grew at an annual rate of almost 4%, well above potential. With the monetary tightening that began in March – the tightest since 1994-95 –, the landing of the economy from this overheating has begun. When the GDP data for July were released (with preliminary numbers for August), the slowing for Q3 appeared much more pronounced than it does now. The revised numbers for the first two months of the quarter show growth at 1.4% annualized, double the 0.7% estimated a month earlier. This is essentially in line with the Bank of Canada's forecast of 1.5% in its Monetary Policy Report of October.

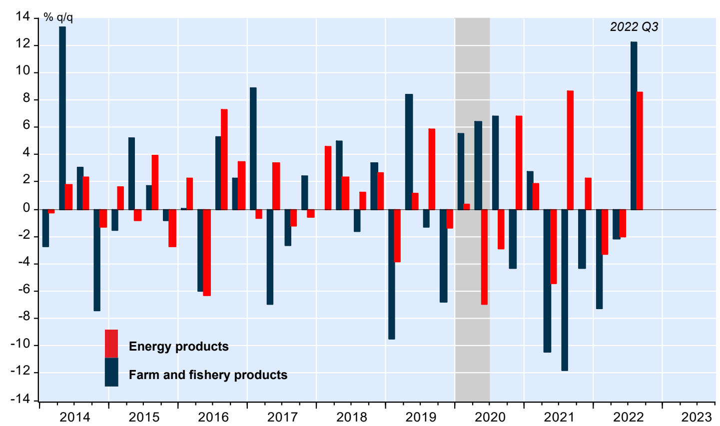
Canada: GDP revisions foreshadow a third quarter better than expected
Annualized quarterly growth, Q3 as estimated in September (including preliminary estimate) and in October



NBF Economics and Strategy (data via Statistics Canada)

The Q3 growth turns out to have been strongly supported by net exports, thanks to geopolitics that benefited the resource sector. Export producers enjoyed both high prices and higher export volumes. After five straight quarters of decline, farm and fishery exports are growing the strongest since 2014 thanks to an especially good summer harvest. Energy products, meanwhile, show the fourth-strongest growth on record in Q3.

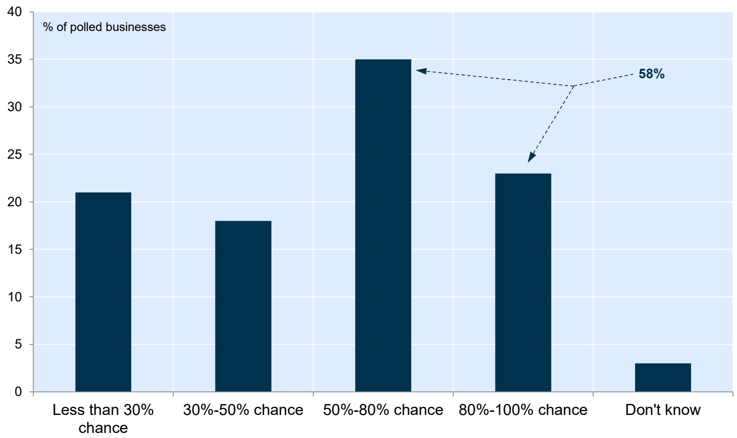
Canada: War in Ukraine has been manna for resource producers
Quarterly changes in export volumes



NBF Economics and Strategy (data via Statistics Canada)

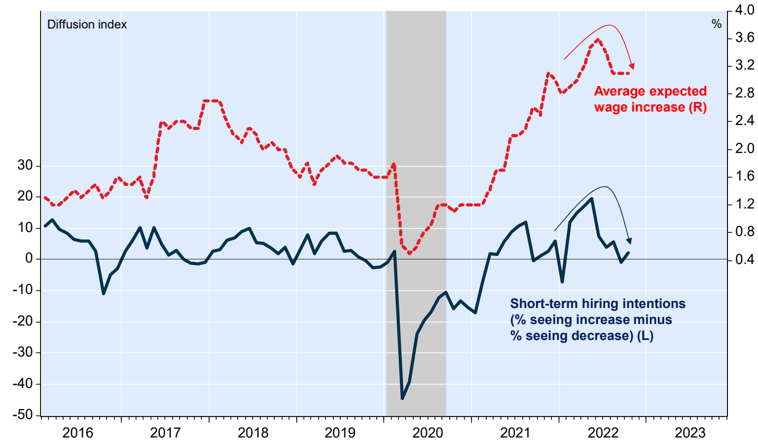
International trade cannot be expected to pull Canada's irons out of the fire in coming quarters, since its trading partners are just as vulnerable to a soft patch in their domestic demand under conditions of international monetary tightening. Neither the Bank of Canada nor the Federal Reserve is trying to hide that some economic pain will be required for anti-inflation gain, and the Bank of Canada's Business Outlook Survey shows the nervousness of business managements rising a notch. No fewer than 58% of businesses put the odds of a recession in the next 12 months at more than 50%.

Canada: Recession odds on the rise
Odds of a recession over the next 12 months (percentage of respondent firms for each probability band)



NBF Economics and Strategy (data via Bank of Canada)

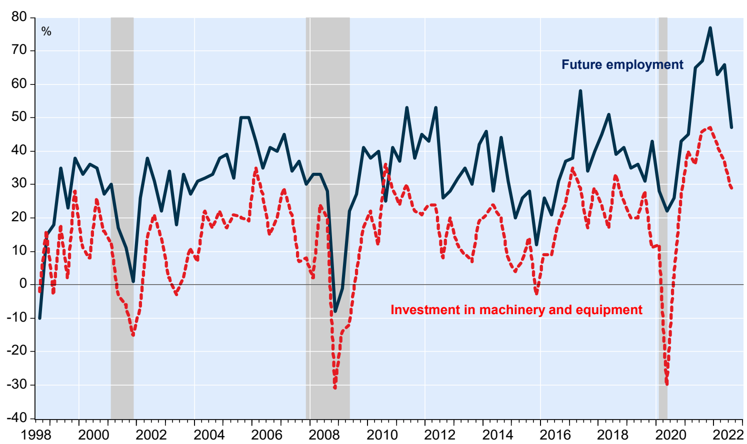
Canada: Are small businesses already in a hiring freeze?
Intentions for full-time hiring in the next 3 or 4 months and average expected wage increase



NBF Economics and Strategy (data via CFIB)

That survey was conducted at a time when many respondents were preparing their budgets for 2023. Their apprehensions are likely to be reflected in greater caution in their investment plans, the more so in that the higher capital costs compromise the profitability of many projects. The same is true for hiring intentions, which also show substantial moderation since the end of 2021.

Canada: Hiring and investment intentions have been moderating
Balance of opinion (businesses expecting more minus businesses expecting less), next 12 months

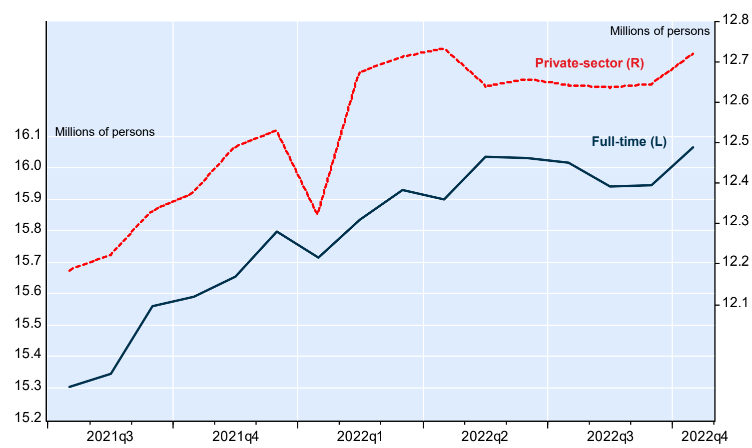


NBF Economics and Strategy (data via Bank of Canada)

The latest survey by the Canadian Federation of Independent Businesses (CFIB), meanwhile, shows small businesses still seeing substantial scarcities of labour but no longer disposed to raise wages as much as at the beginning of the year. A calming of competition for employees and of the accompanying wage pressures is good news for the central bank. As for hiring, small and medium-sized businesses expecting to increase their payroll counts are just as numerous as those expecting to reduce them, suggesting an overall hiring plateau.

This trend is already perceptible in the national employment data. True, employment rebounded 108,000 in October, but that was after falling well short of economists' expectations over the previous six months. The upshot is that full-time employment is only 30,000 higher than in May and private-sector employment still lags its April peak.

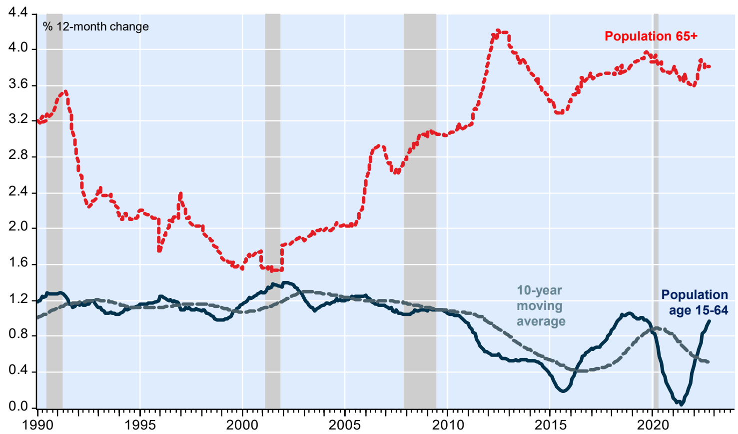
Canada: Stagnation of private-sector and of full-time employment
Full-time employment and private-sector employment



NBF Economics and Strategy (data via Statistics Canada)

October's numbers, good as they were, were not enough to change the unemployment rate, which at 5.2% remained three ticks above its record low of last June and July. A rise of the participation rate certainly had something to do with that, but another factor was a spectacular October increase of 52,000 people in the Canadian population age 15 or older, the third-largest monthly gain on record. True, the baby-boomer cohort continued to stream into the 65-plus age group, less active in the labour market. That age group grew a striking 4% over the past year. But the main working-age cohort, that of 15- to 64-year-olds, also grew at an enviable rate compared to the average of the last 15 years (0.96% vs. 0.52%) thanks to Ottawa's aggressive immigration policy. At this rate, massive layoffs are not needed in order to raise the unemployment rate in coming months – a hiring freeze will do.

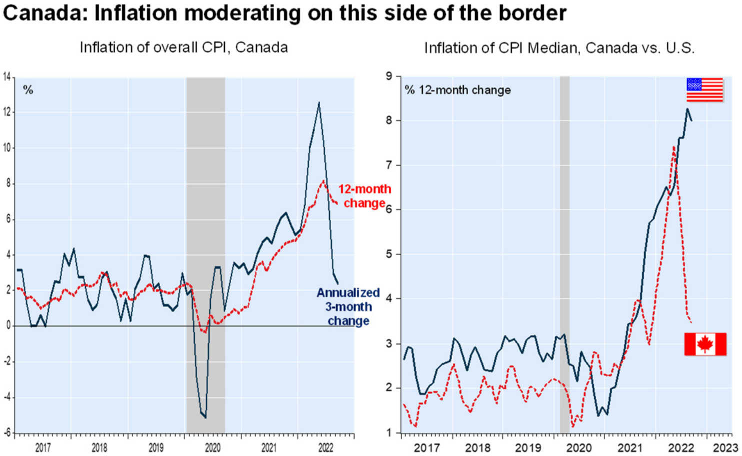
Canada: Strong immigration results in robust growth of 15-64 cohort
12-month growth of populations aged 15-64 and 65+



NBF Economics and Strategy (data via Statistics Canada)

Besides the moderation of the labour market, there is reason to think the path of inflation in recent months may have led the Bank of Canada to show caution at its last rate setting, with a hike of 50 basis points when investors had been anticipating 75 bp. While 12-month inflation remains near 7%, the inflation of the last three months, annualized, was back within the Bank's target range of 1% to 3%. In July the Bank's forecast for 12-month overall inflation in Q3 was 8.0%, or 0.8 percentage points more than the actual 7.2%. If the story had been no more than one of energy price decline, it would not have influenced the central bank unduly. But indicators of core inflation are also showing encouraging signs of general moderation. Between June and September, the CPI Median rose at an annual rate of 3.5% on this side of the border – not bad considering the comparable U.S. rate of 8.0%.

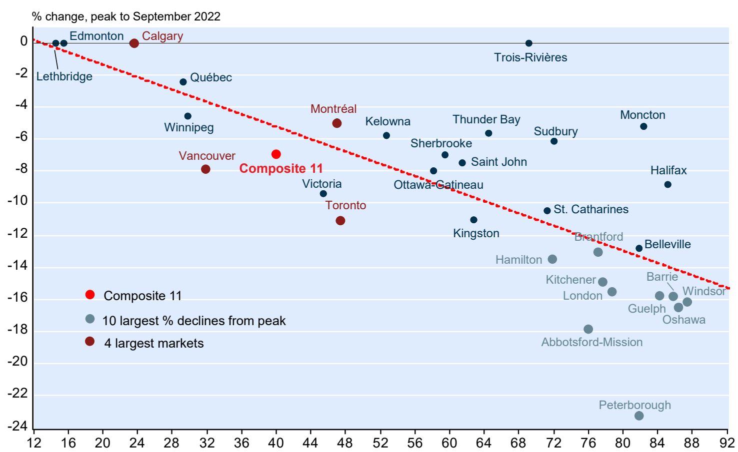
Canada: Inflation moderating on this side of the border



NBF Economics and Strategy (data via Statistics Canada, FRED)

So the manoeuvring for the landing of the economy continues. Things are moving in the right direction for the Bank of Canada, suggesting that we are approaching the terminal policy rate of this tightening phase. The labour market shows signs of moderating and inflationary pressures are less acute and pervasive than earlier this year. However, the haste of the tightening, together with the lag time for transmission of policy-rate moves to the economy, makes it normal for observers to be nervous. Alas, we will know only after the fact whether the Bank went too far. One thing is certain: we can now see a marked slowing in real estate entailing an extremely rapid deflation in that market. To calm inflation, in our view, it will not be necessary to keep interest rates high for long and we accordingly expect the central bank to ease substantially in the second half of next year. Given the monetary tightening, we anticipate anemic growth of 0.7% in 2023, with consumers hit simultaneously by loss of purchasing power, a negative wealth effect and an interest-payment shock.

Canada: Rapid declines after dizzying rises
Change in home prices from February 2020 to peak and from peak to September 2022



NBF Economics and Strategy (data via Teranet-NBC)

United States
Economic Forecast

*(Annual % change)**	*2020*	*2021*	*2022*	*2023*	*2024*	*Q4/Q4 2022*	*2023*	*2024*
Gross domestic product (2012 $)	(2.8)	5.9	1.9	0.3	1.4	0.5	(0.2)	2.1
Consumption	(3.0)	8.3	2.7	0.8	1.3	1.9	0.1	1.9
Residential construction	7.2	10.7	(9.7)	(9.4)	3.6	(15.3)	(1.5)	4.7
Business investment	(4.9)	6.4	3.5	1.1	1.6	3.8	0.2	2.3
Government expenditures	2.6	0.6	(0.9)	1.5	1.9	0.1	1.6	2.0
Exports	(13.2)	6.1	7.4	1.5	0.7	6.0	(1.6)	2.1
Imports	(9.0)	14.1	8.9	0.6	1.9	4.3	0.9	2.5
Change in inventories (bil. $)	(54.6)	(19.4)	115.4	26.3	25.0	75.0	10.0	40.0
Domestic demand	(1.9)	6.7	1.6	0.5	1.5	1.0	0.3	2.1
Real disposable income	6.2	1.9	(6.3)	0.4	1.3	-2.4	0.2	1.9
Payroll employment	(5.8)	2.8	4.1	0.6	0.3	3.3	-0.4	0.5
Unemployment rate	8.1	5.4	3.7	4.3	4.6	3.7	4.5	4.7
Inflation	1.3	4.7	8.0	3.4	3.5	7.2	2.3	3.1
Before-tax profits	(5.9)	22.6	4.9	(1.8)	4.7	-0.7	2.4	3.5
Current account (bil. $)	(619.7)	(940.2)	(1,024.9)	(933.8)	(917.5)	...	...	...

** or as noted*

Financial Forecast**

	Current 11/04/22	*Q4 2022*	*Q1 2023*	*Q2 2023*	*Q3 2023*	*2022*	*2023*	*2024*
Fed Fund Target Rate	4.00	4.50	4.75	4.75	4.50	4.50	3.50	3.00
3 month Treasury bills	4.02	4.55	4.65	4.50	4.05	4.55	3.40	2.65
Treasury yield curve								
2-Year	4.66	4.50	4.45	4.05	3.45	4.50	3.00	2.75
5-Year	4.33	4.10	4.05	3.75	3.40	4.10	3.10	2.95
10-Year	4.17	3.95	3.85	3.60	3.35	3.95	3.20	3.05
30-Year	4.27	4.10	4.00	3.80	3.60	4.10	3.45	3.25
Exchange rates								
U.S.$/Euro	0.99	0.97	0.99	1.03	1.05	0.97	1.06	1.12
YEN/U.S.$	147	146	140	132	125	146	122	119

*** end of period*

Quarterly pattern

	Q1 2022 actual	*Q2 2022 actual*	*Q3 2022 actual*	*Q4 2022 forecast*	*Q1 2023 forecast*	*Q2 2023 forecast*	*Q3 2023 forecast*	*Q4 2023 forecast*
Real GDP growth (q/q % chg. saar)	(1.6)	(0.6)	2.6	1.8	(0.4)	(1.7)	0.2	1.1
CPI (y/y % chg.)	8.0	8.6	8.3	7.2	5.5	3.4	2.4	2.3
CPI ex. food and energy (y/y % chg.)	6.3	6.0	6.3	6.1	5.3	4.3	3.3	2.8
Unemployment rate (%)	3.8	3.6	3.6	3.7	3.9	4.3	4.4	4.5

National Bank Financial

Canada
Economic Forecast

(Annual % change)*	2020	2021	2022	2023	2024	Q4/Q4 2022	Q4/Q4 2023	Q4/Q4 2024
Gross domestic product (2012 $)	(5.2)	4.5	3.3	0.7	1.5	2.1	0.7	1.7
Consumption	(6.2)	5.0	5.4	1.3	1.4	3.7	0.8	1.6
Residential construction	4.3	15.3	(8.1)	(7.1)	(0.8)	(8.7)	(4.0)	0.0
Business investment	(12.1)	2.3	8.2	1.0	2.0	5.8	0.9	2.2
Government expenditures	0.9	5.6	1.7	1.4	2.1	1.2	1.7	2.3
Exports	(9.7)	1.4	3.5	4.7	2.4	4.5	2.6	2.4
Imports	(10.8)	7.7	7.6	2.9	2.0	6.3	2.0	2.0
Change in inventories (millions $)	(18,720)	(2,361)	23,465	14,875	13,050	16,500	14,000	12,500
Domestic demand	(4.1)	5.6	3.2	0.5	1.5	2.0	0.6	1.7
Real disposable income	8.2	0.3	0.5	0.4	1.3	2.7	0.8	1.5
Employment	(5.1)	4.8	3.6	0.6	1.0	1.9	0.4	1.1
Unemployment rate	9.6	7.4	5.3	6.0	6.3	5.3	6.2	6.4
Inflation	0.7	3.4	6.8	2.8	2.2	6.6	1.9	2.1
Before-tax profits	(1.9)	32.3	14.9	(8.3)	0.2	9.3	(5.1)	1.1
Current account (bil. $)	(39.4)	1.1	8.0	(5.0)	(10.0)	....	....	....

** or as noted*

Financial Forecast**

	Current 11/04/22	Q4 2022	Q1 2023	Q2 2023	Q3 2023	2022	2023	2024
Overnight rate	3.75	4.25	4.25	4.25	4.25	4.25	3.75	3.00
3 month T-Bills	4.00	4.30	4.25	4.20	4.05	4.30	3.60	2.90
Treasury yield curve								
2-Year	4.14	4.05	3.95	3.50	3.30	4.05	3.15	2.70
5-Year	3.67	3.40	3.35	3.20	3.05	3.40	2.95	2.85
10-Year	3.50	3.25	3.20	3.10	3.00	3.25	2.95	2.90
30-Year	3.51	3.30	3.25	3.20	3.15	3.30	3.10	3.00
CAD per USD	1.35	1.39	1.36	1.30	1.25	1.39	1.24	1.27
Oil price (WTI), U.S.$	93	82	79	76	77	82	80	75

*** end of period*

Quarterly pattern

	Q1 2022 actual	Q2 2022 actual	Q3 2022 forecast	Q4 2022 forecast	Q1 2023 forecast	Q2 2023 forecast	Q3 2023 forecast	Q4 2023 forecast
Real GDP growth (q/q % chg. saar)	3.1	3.3	1.3	0.6	(0.3)	0.7	1.0	1.4
CPI (y/y % chg.)	5.8	7.5	7.2	6.6	4.9	2.4	1.9	1.9
CPI ex. food and energy (y/y % chg.)	4.0	5.1	5.4	5.4	4.9	3.6	2.7	2.6
Unemployment rate (%)	5.8	5.1	5.2	5.3	5.8	6.0	6.1	6.2

National Bank Financial

NATIONAL BANK OF CANADA
FINANCIAL MARKETS

Provincial economic forecast

Real GDP (% growth)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	-4.6	0.6	1.6	0.7	0.9
Prince Edward Island	-1.6	7.9	2.1	0.8	1.2
Nova Scotia	-3.5	6.2	2.0	0.6	1.1
New Brunswick	-2.7	5.9	1.8	0.5	0.8
Quebec	-5.0	6.0	3.4	0.7	1.4
Ontario	-4.7	5.2	3.2	0.6	1.6
Manitoba	-4.4	1.8	3.4	0.6	1.2
Saskatchewan	-4.8	-0.9	4.2	1.0	1.3
Alberta	-8.0	4.8	3.9	1.2	1.7
British Columbia	-3.0	6.1	2.7	0.7	1.6
Canada	-5.3	4.5	3.3	0.7	1.5

Nominal GDP (% growth)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	-10.0	17.7	12.9	-1.2	0.2
Prince Edward Island	1.4	14.3	9.2	2.4	2.3
Nova Scotia	0.0	10.9	8.4	1.3	2.6
New Brunswick	-1.6	13.8	7.7	0.5	1.1
Quebec	-1.9	11.8	10.6	2.5	3.6
Ontario	-2.9	10.3	10.1	2.0	3.7
Manitoba	-1.3	8.4	11.7	1.0	2.5
Saskatchewan	-7.6	13.1	25.1	-1.1	-0.9
Alberta	-15.7	26.2	18.6	-2.0	-0.2
British Columbia	-0.7	14.2	9.1	0.3	2.5
Canada	-4.6	13.0	11.9	1.0	2.6

Employment (% growth)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	-5.9	3.0	3.9	-0.3	-0.1
Prince Edward Island	-3.2	3.7	6.6	-0.1	1.0
Nova Scotia	-4.7	5.4	3.3	0.5	0.8
New Brunswick	-2.6	2.6	2.3	0.4	0.5
Quebec	-4.8	4.2	2.5	0.5	1.2
Ontario	-4.7	4.9	4.2	0.5	1.1
Manitoba	-3.7	3.5	2.5	0.3	1.0
Saskatchewan	-4.6	2.6	3.2	0.8	0.8
Alberta	-6.5	5.2	5.1	1.0	1.1
British Columbia	-6.5	6.6	3.2	0.5	0.9
Canada	-5.1	4.8	3.6	0.6	1.0

Unemployment rate (%)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	14.1	12.9	10.8	11.3	11.3
Prince Edward Island	10.6	9.4	7.1	9.1	10.1
Nova Scotia	9.7	8.4	6.6	7.0	7.0
New Brunswick	10.0	9.0	7.2	7.7	7.6
Quebec	8.8	6.1	4.3	5.0	5.3
Ontario	9.5	8.0	5.7	6.7	6.9
Manitoba	8.0	6.4	4.6	5.3	5.6
Saskatchewan	8.3	6.5	4.6	5.0	5.5
Alberta	11.5	8.6	5.7	6.0	6.3
British Columbia	9.0	6.5	4.6	5.4	5.5
Canada	9.6	7.4	5.3	6.0	6.3

Housing starts (000)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	0.8	1.3	1.6	1.1	1.0
Prince Edward Island	1.1	1.2	1.0	0.9	0.9
Nova Scotia	4.9	6.0	5.5	4.5	4.5
New Brunswick	3.6	4.0	5.0	3.0	3.0
Quebec	54.2	71.2	62.5	52.5	49.0
Ontario	81.3	101.2	92.0	79.5	75.5
Manitoba	7.3	8.0	7.5	7.2	6.9
Saskatchewan	3.1	4.3	4.6	3.3	3.0
Alberta	24.1	32.1	38.3	30.3	29.8
British Columbia	38.0	47.7	45.5	33.0	31.9
Canada	218.4	276.8	263.5	215.3	205.5

Consumer Price Index (% growth)	2020	2021	2022f	2023f	2024f
Newfoundland & Labrador	0.2	3.7	6.4	2.4	2.3
Prince Edward Island	0.0	5.1	8.9	2.7	2.3
Nova Scotia	0.3	4.1	7.4	2.6	2.2
New Brunswick	0.2	3.8	7.2	2.7	2.2
Quebec	0.8	3.8	6.7	3.1	2.2
Ontario	0.6	3.5	6.8	2.7	2.2
Manitoba	0.5	3.2	7.8	2.9	2.2
Saskatchewan	0.6	2.6	6.5	2.8	2.2
Alberta	1.1	3.2	6.5	2.5	2.2
British Columbia	0.8	2.8	6.9	3.1	2.2
Canada	0.7	3.4	6.8	2.8	2.2

e: estimate　　f: forecast

Historical data from Statistics Canada and CMHC, National Bank of Canada's forecast.

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