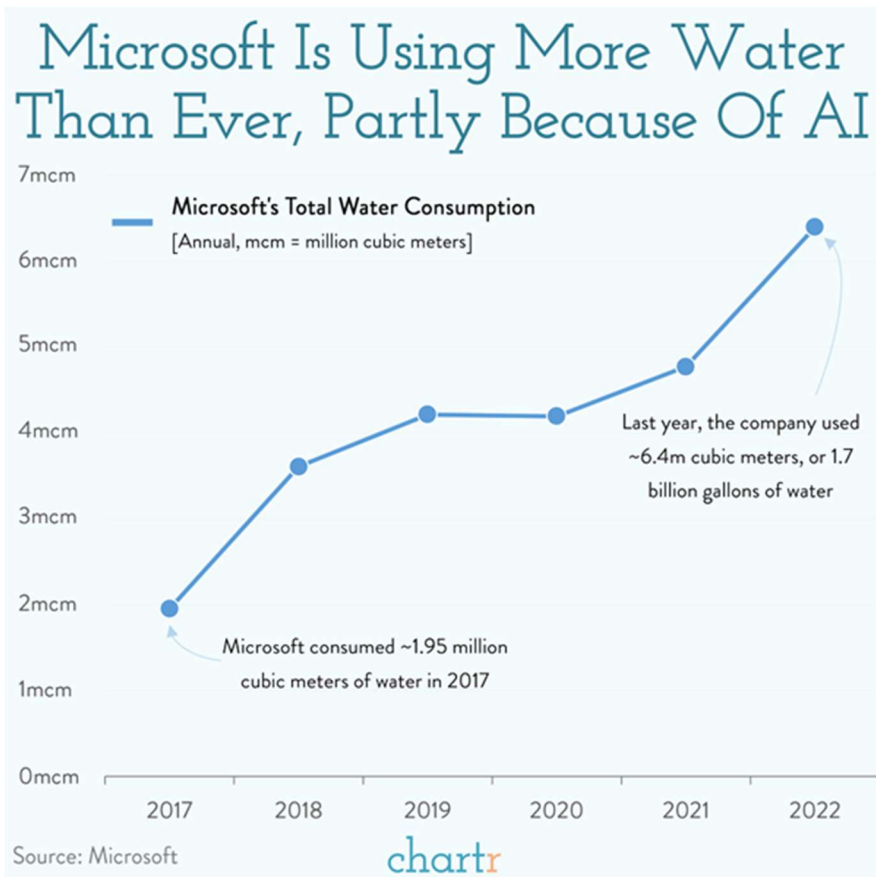




WEEKEND READING

Shedding the light on what's happening - our world - our finances - our times

This Fall will stock prices follow the leaves?



Source: Chart

Thirst bots

Until someone finds a better way to contextualize large volumes of liquid, we'll put it like this: in 2022, **Microsoft** consumed enough water to fill over **2,500** Olympic-sized swimming pools as it continued to fuel and cool its growing stable of AI [tools and projects](#).

Every time you ask the **ChatGPT-powered Bing** to inspire you with recipe ideas — which honestly might not be that often — it's thirsty work for the bot. Researchers estimate that, owing to the cooling processes required for the hardware, **ChatGPT** almost guzzles a full 16-oz bottle of water for every **5-50** prompts [it's fed](#).

Water hoarding

Microsoft, along with a growing list of companies like [Meta](#) and [Alphabet](#), has set **2030** as a deadline for restoring more water to the environment than it consumes for operations, otherwise known as being "[water positive](#)". However, building and maintaining models like the Microsoft-backed GPT-4 requires a lot of computing and hardware, which produces a lot of energy and heat... and in turn requires a lot of water to cool systems within data centers so they don't overheat, resulting in the sort of consumption **MSFT** saw last year.

In 2022, the company's water use was up **34%** from the year before, with **~6.4 million** cubic meters — or 1.7 billion gallons — consumed. That figure becomes even more stark when compared to Microsoft's usage in 2017, just **5 years** prior, when the company sunk **~1.95 million** cubic meters of water, a whopping **228%** less.

How do we contextualize this to personal use?

'Every time you talk to ChatGPT it drinks 500ml of water; here's why' - Business Today Sept 11, 2023

<https://www.businesstoday.in/technology/news/story/microsofts-water-usage-surges-by-thousands-of-gallons-after-the-launch-of-chatgpt-study-397951-2023-09-11>



The above explains why we hold **First Trust Water ETF**

First Trust Water ETF (FIW-US-\$86.52) – weekly ranges – 3 years



We began **acquiring First Trust Water ETF** in late June/2020 around \$53.00 USD. At today's \$87 quote we're happy. In June/2020 we also reviewed the **US ALPS Clean Energy ETF (ACES-\$41.07)**. In late June/2020 ACES traded around \$39.00 USD.

US ALPS Clean Energy ETF (ACES - \$41.07) weekly ranges – 3 years.



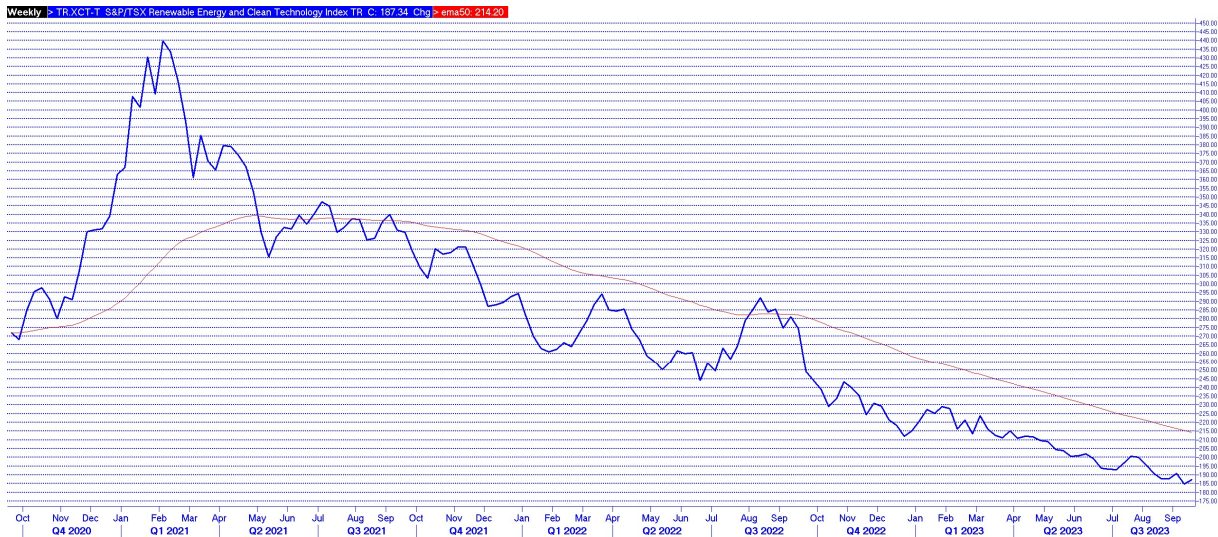
Joe Biden was elected in Nov/2020. Investors rushed into green-tech stocks. We researched ACES in June/2020 but decided to pass. We missed out on the post-Biden 54% spike to \$101.72 in Feb/2021. We also missed the subsequent 60% crash back to today's \$41 range.

That's the US markets. What about the broad Canadian Clean Energy space?

The **S&P/TSX Renewable Energy and Clean Tech Total Return Index (TR.XCT)** tracks the Canadian listed companies in the sector.



S&P/TSX Renewable Energy & Clean Tech TR Index (TR.XCT) – weekly – 3 years



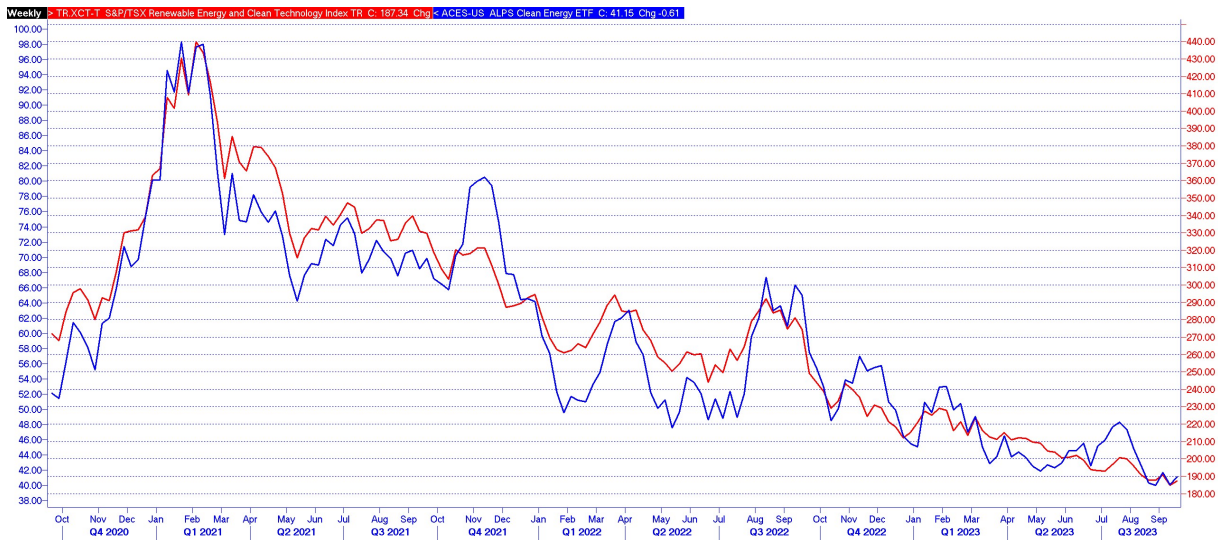
The current narrative on this sector is...

1. Canada can be world leaders in the sector (sure, why not?)
2. We can do so independently (great idea).
3. It will be very profitable (we like making money!)

This platform has been popular at the Federal and Provincial level. The Federal party with this platform has been in power since October 2015, long enough to have proof of leadership, independence, and profits.

Here is TSX Renewables with ALPS Clean energy overlaid.

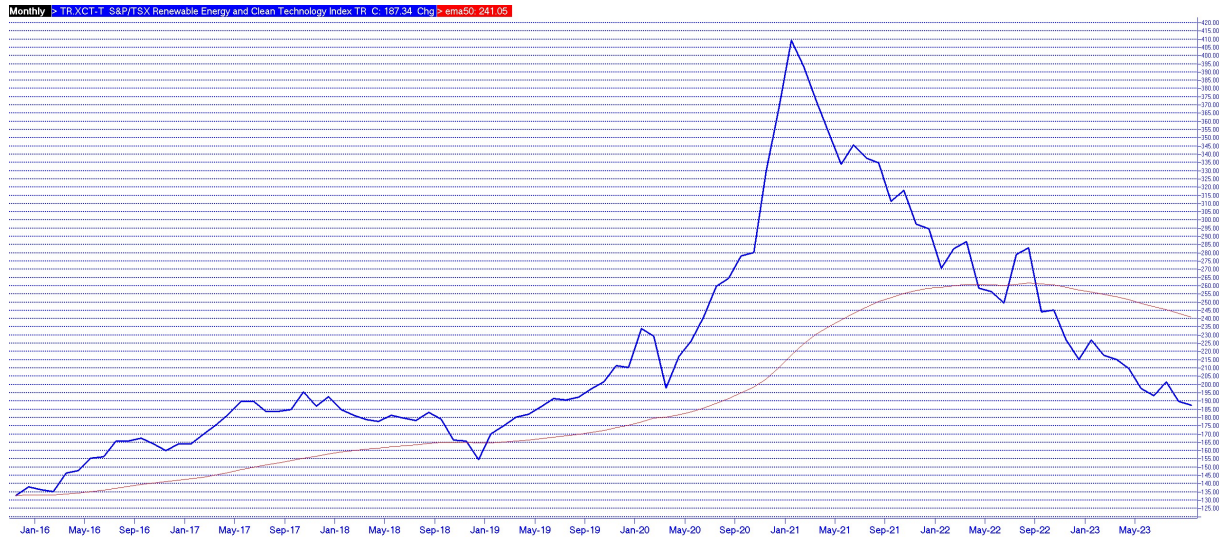
TSX Renewables (XCT-red) ALPS Clean Energy (ACES-blue) weekly – 3 years.



The S&P/TSX Renewable index (red) has tended to lag the US index.

Sept/2020-Sept/2023 the TSX Renewables Index total return has been -31%. It's been a rough period for tech stocks, so maybe that's not fair. What about during the 2015-2023 tenure of the present Canadian Federal government?

S&P/TSX Renewable Energy & Clean Tech Index (TR.XCT) Oct-2015-Sept/2023



The starting level on Nov 30/2015 is 135.85. The closing level Sept 14, 2023 is 187.34. Total return +38%, over 8 years = roughly 4.75% per year...depending on when you started. Investing any time after late summer 2017 has resulted in losses. US President Joe Biden was elected in November 2020. The Canadian Renewables index peaked in Feb/2021 at 454.51 as investors chased the Biden Green Wave idea. The index has dropped 59% from that peak. Nov/2020-Sept/2023 the Canadian large cap TSX 60 Index generated 99.65% total return. We note the TSX 60 performance was aided by the +97% return of conventional energy over that period.

Conclusions:

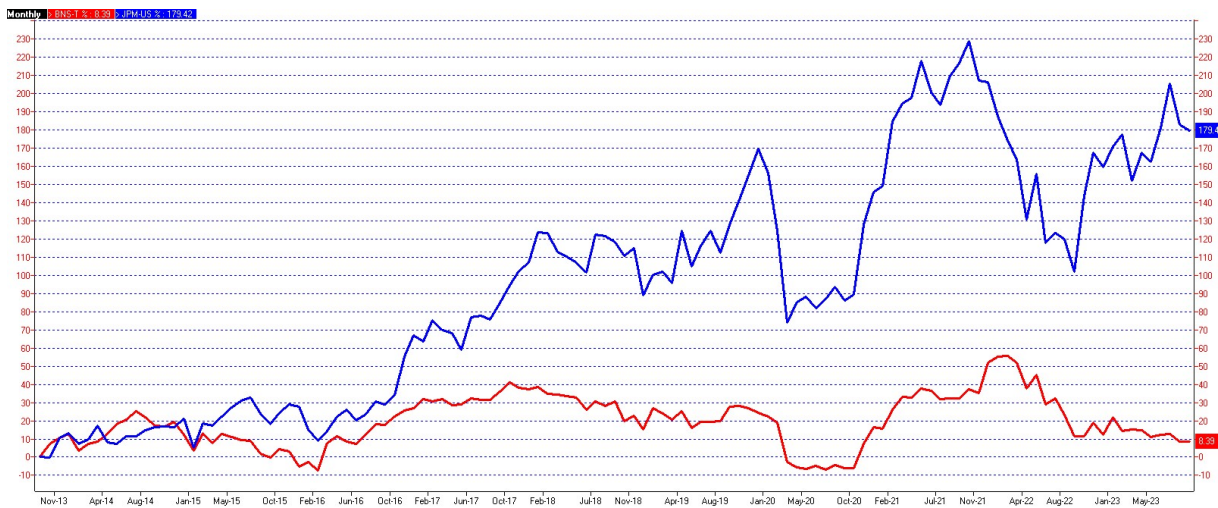
- Leadership? Investors are pricing our stocks in a lag to the US.
- Independence? Investors are pricing in line with US experience.
- Profitable: Depending on your start date, Clean Tech Is has been profitable, less so than the broad Canadian markets.

The above confirms we're not ignoring climate change and its related opportunities. We're keeping our eyes on the road.



Why do we hold US Banks?

JP Morgan (JPM +188.6%) vs. Bank of Nova Scotia (BNS +10.7%) price % change 10 years.



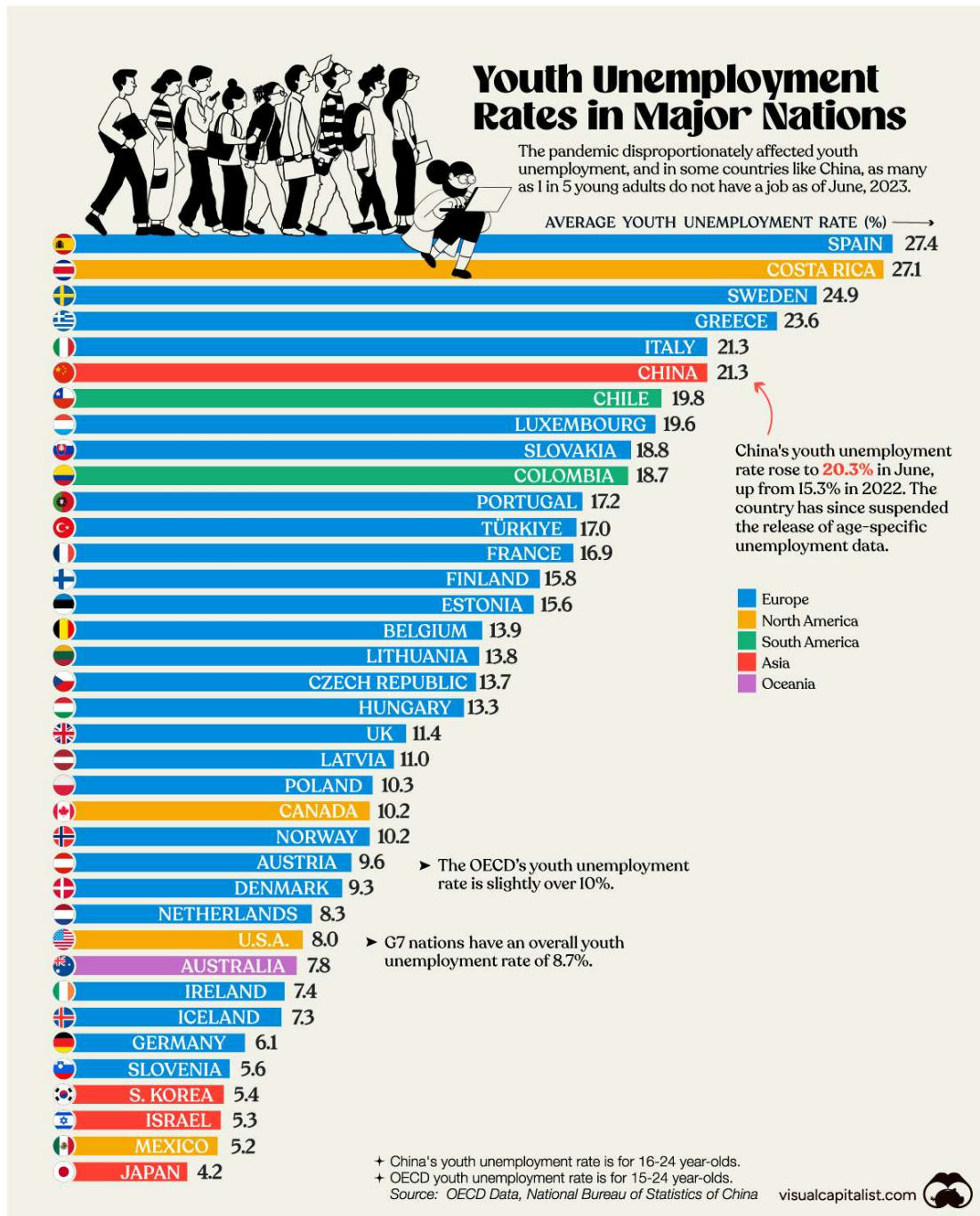
The performance difference tells us two things.

1. Owning US banks makes sense for Canadians.
2. After 10 years of business growth Scotia Bank trades at the same price. This is unlikely to continue.
3. The chart is share-price only. The total returns (all dividends reinvested in local currency) are as follows: JP Morgan. +275%. Scotia Bank +76.5% (a bit over 7% per year) proving that US banks are worth owning and dividends matter!

Idle hands / Idle minds...

Charted: Youth Unemployment in the OECD and China Visual Capitalist

September 15, 2023



<https://www.visualcapitalist.com/youth-unemployment-in-oecd-and-china/>

Youth unemployment in Europe remains higher than in any three North American countries (don't forget Mexico). Clearly socialist policies discourage employment in the younger generation. This is never a good thing. At the top of the list, Spain has policies severely restricting employers' ability to lay off or fire employees. The experience of Nissan closing its Catalonia car plant in 2020 is an example. In 2009 French workers 'Bossnapped' management of the Caterpillar engine plant.



https://english.elpais.com/spanish_news/2020-05-28/hundreds-of-workers-protest-nissan-closure-in-barcelona.html

<https://www.theguardian.com/world/2009/apr/01/boss-hostage-france-caterpillar>

Small wonder EU employers are loth to hire new employees.

China's youth unemployment at 21.3% is up 20% over last year. That's REALLY not a good thing. An unhappy younger population is fodder for Strong Man populist leaders, blaming it all on external forces or minorities. Keep an eye on Chinese stability.

On Inflation:

We predicted government policies would drive up the cost of living, that voters would grumble, and that politicians would attempt to deflect blame. Check, check, and check.

This week's Liberal caucus wrapped up with statements on the cost of food.

'Government calls for meeting with CEOs of Canada's biggest grocery chains to talk food prices' – CBC Sept 15, 2023

"All summer long, the Trudeau government has been hammered by the Conservatives on the issue of affordability. The Liberals are now facing the worst polling they've seen since the Trudeau government first took office in 2015.

After what some MPs called a "frank discussion" with the prime minister behind closed doors at the Liberals' caucus retreat, Trudeau and his ministers announced a series of affordability measures.

"It's always a good time to fight," Champagne said Thursday. "We're going to be fighting and finding solutions to help Canadians. That's what they want from us."

Champagne's office said they've asked the grocery CEOs or company chairpersons — not lawyers or other representatives — to meet with the minister in person.

So far, both Metro and Loblaw have told CBC News that their CEOs will be attending Monday's meeting.

Trudeau said the grocery chains have until Thanksgiving to share their plans to stabilize their prices. If they don't, he said, Ottawa will take action.

"And let me be very clear," said Trudeau. "If their plan doesn't provide real relief... then we will take further action and we are not ruling anything out, including tax measures."

<https://www.cbc.ca/news/politics/government-grocery-store-meeting-ottawa-food-prices-1.6967978>

The idea of a photo-op of chastised ‘Big Food’ CEO’s must be appealing. Presumably they will go cap in hand and apologize for costs that are not under their control. The solution of adding tax costs is familiar. It’s been tried in energy, housing and income. Driving up the grocer’s costs via tax increases seems a strange path to lowering costs to consumers. The opposite is likely. As tobacco has proved, if you want less of something, tax it. Increasing housing supply was another Government talking point. As Andrew Coyne noted Canadian house prices are a mess.

‘Home truths about Canada’s housing mess’ - Andrew Coyne - Globe & Mail Sept 15, 2023

(may require subscription)

<https://www.theglobeandmail.com/opinion/article-many-of-the-so-called-solutions-to-canadas-housing-mess-are-merely/>

NBF’s Weekly Economic Watch

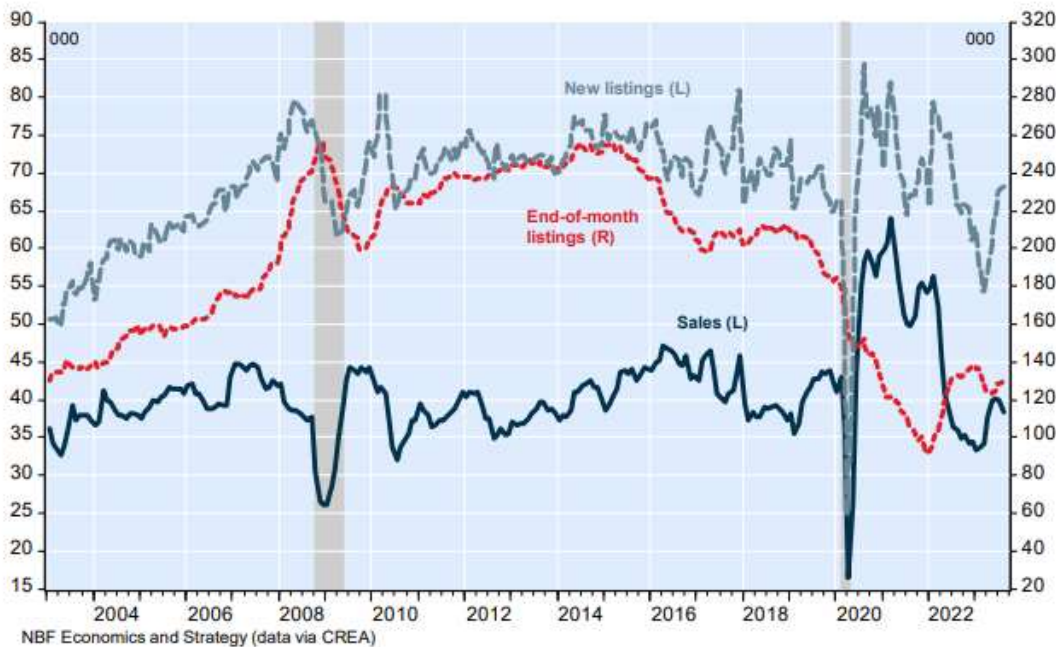
Timely with the news flow out of the Liberal Convention, NBF’s economics team starts off this week’s update with everybody’s favorite sport, Canadian real estate.

Week in review

CANADA: On a seasonally adjusted basis, **home sales** decreased 4.1% from July to August, a second monthly contraction in a row following the renewed monetary tightening cycle of the Bank of Canada.

Canada: Home sales and listings
Seasonally adjusted. Last observation: August 2023

Canada: Home sales and listings
Seasonally adjusted. Last observation: August 2023



Sales increases were observed in 5 of the 10 provinces, notably in Newfoundland (+18.0%), New Brunswick (+12.5%), and Alberta (+2.8%), while declines in B.C. (-10.7%), Ontario (-6.2%), and Quebec (-4.9%) completely erased these gains. With the growing impact of interest rate hikes and our expectation for a slowing labour market, the real estate market could continue lose momentum in the months ahead. However, the record demographic growth we are currently experiencing in the country prevents a significant drop in activity.

Source: NBF Weekly Economic Watch Sept 15, 2023

<https://nbf.bluematrix.com/sellside/EmailDocViewer?encrypt=c49e51f3-2656-4e8e-9203-395abed769aa&mime=pdf&co=nbf&id=steven.hilberry@nbc.ca&source=mail>

It will be a busy fall. Between now and October month end, we have NBF guest speakers lined up and our semi-annual reviews planned. Autumn winds are coming. Hang on to your hats. We keep our eyes out for bargains.

Have a Great Weekend

Steve & Anna Hilberry



Steve Hilberry
Wealth Management Advisor, CIM

Anna Hilberry
Wealth Management Advisor, CIM

FOR THE RECORD Sept 15, 2023

DOW INDUSTRIALS:	34,596
S&P 500:	4,448
S&P/TSX COMP:	20551
WTI:	\$91.07
LOONIE IN \$USD:	\$0.7394 \$US



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