RIVERSIDE ANALYTICS INC

DATE: March 15, 2025

RIVERSIDE ANALYTICS INC
Wayne Yeo
Wayne.yeo@riversideanalyticsinc.com
www.riversideanalyticsinc.com

Economic Outlook

RIVERSIDE'S DISCLAIMER

- All trading / investing comes with risk.
- The insights contained in this presentation do not constitute advice, rather are meant for educational purposes from which you may make more educated decisions taking into account your individual risk profile and needs for return.
- At Riverside, we assess probabilities using systematic quantitative methodology. We do not provide advice. There are no guarantees for positive return. All investing/trading is at your own risk.
- Riverside is about helping active and affluent investors learn how to make better decisions in financial markets.
- All charts shown in this presentation have been referenced from Amibroker unless otherwise noted.

Good investing is <u>not</u> an "event" like finding the next growth opportunity or catching the next market turn. Rather, good investing is a disciplined process that converts research and training into a well-tested methodology, and then makes a habit of following that approach day after day.

John P. Hussman, Ph.D
President, Hussman Strategic Advisors

ECONOMIC DATA

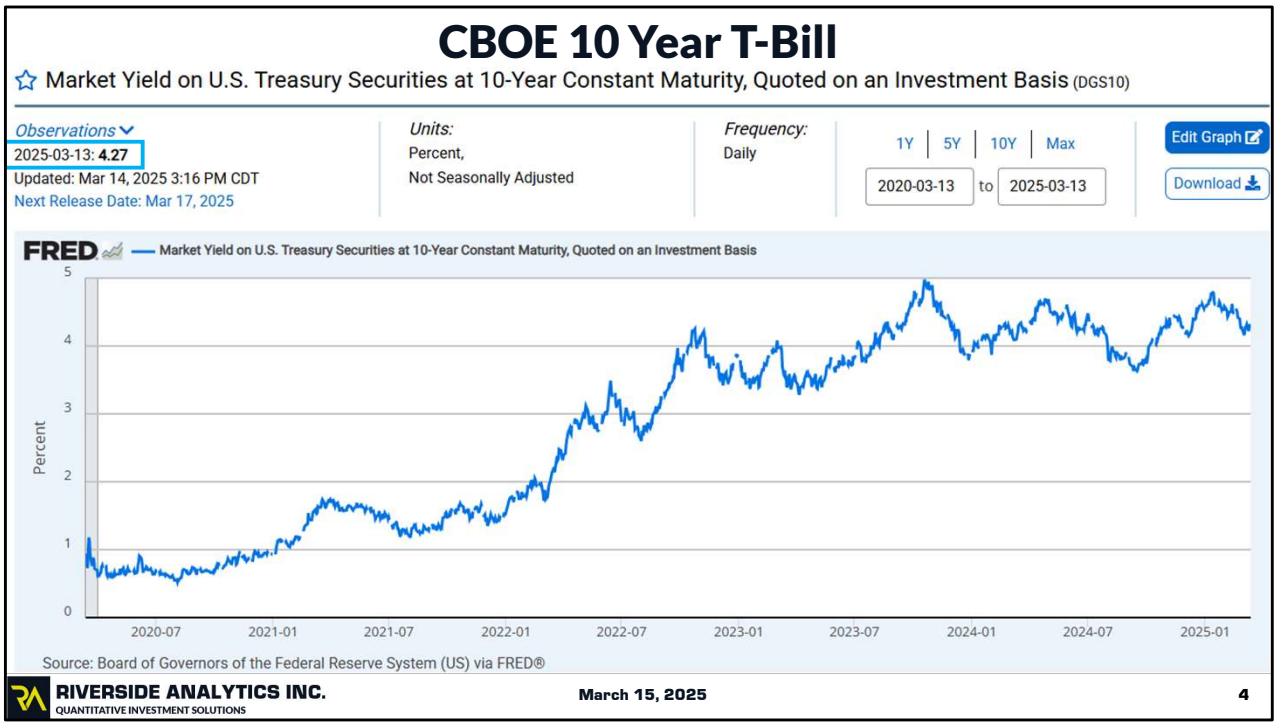
Indicator review

US Drives the bus, when it comes to the Canadian economy.

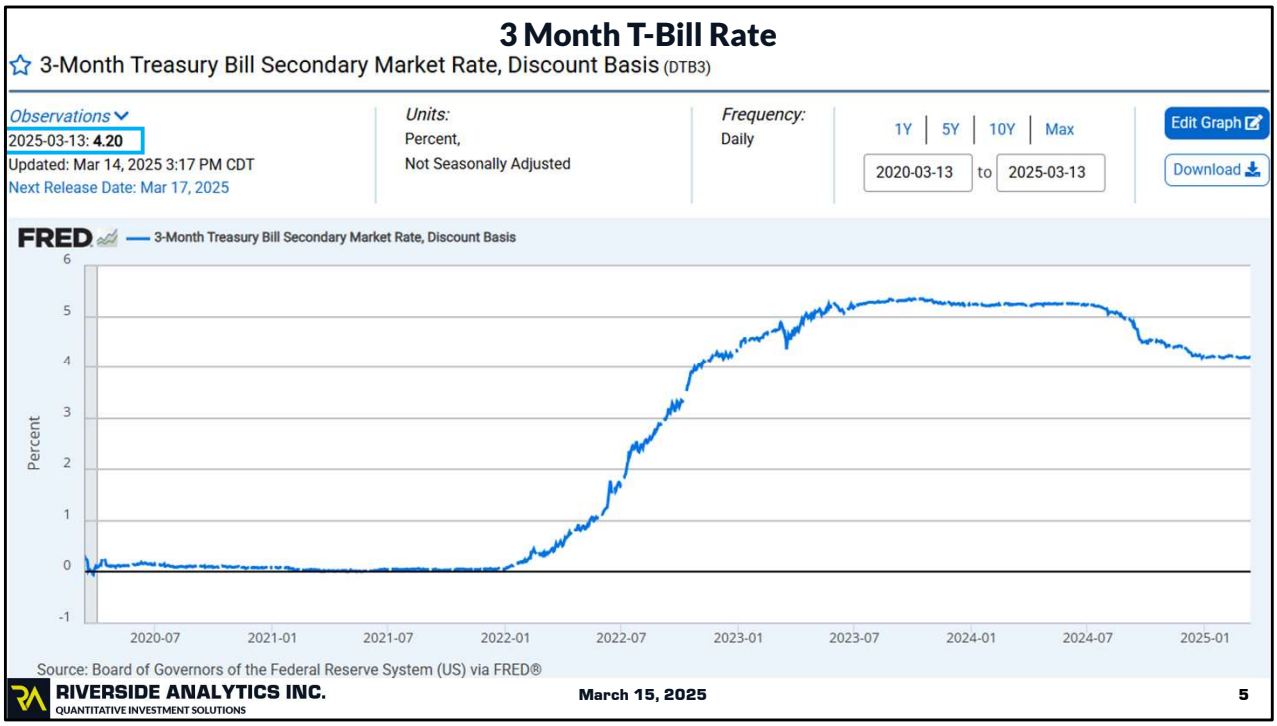
Please check the notes on each slide.

Short summary, risk of recession has increased.
Trump tariffs are upsetting short term business planning.
There is very little in the data indicating trouble. Sentiment, and industry level Breadth are the exceptions

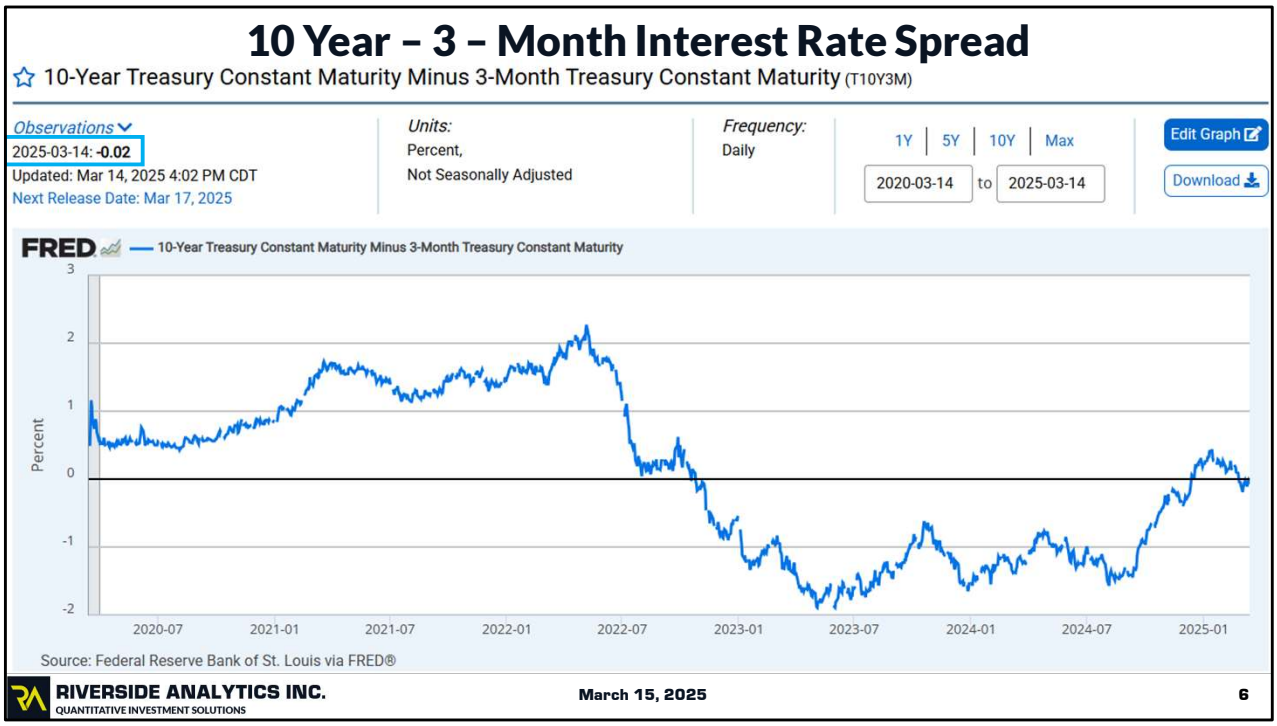
CBOE 10 Year T-Bill



March – Last month was 4.52. This month it is down 25 points.

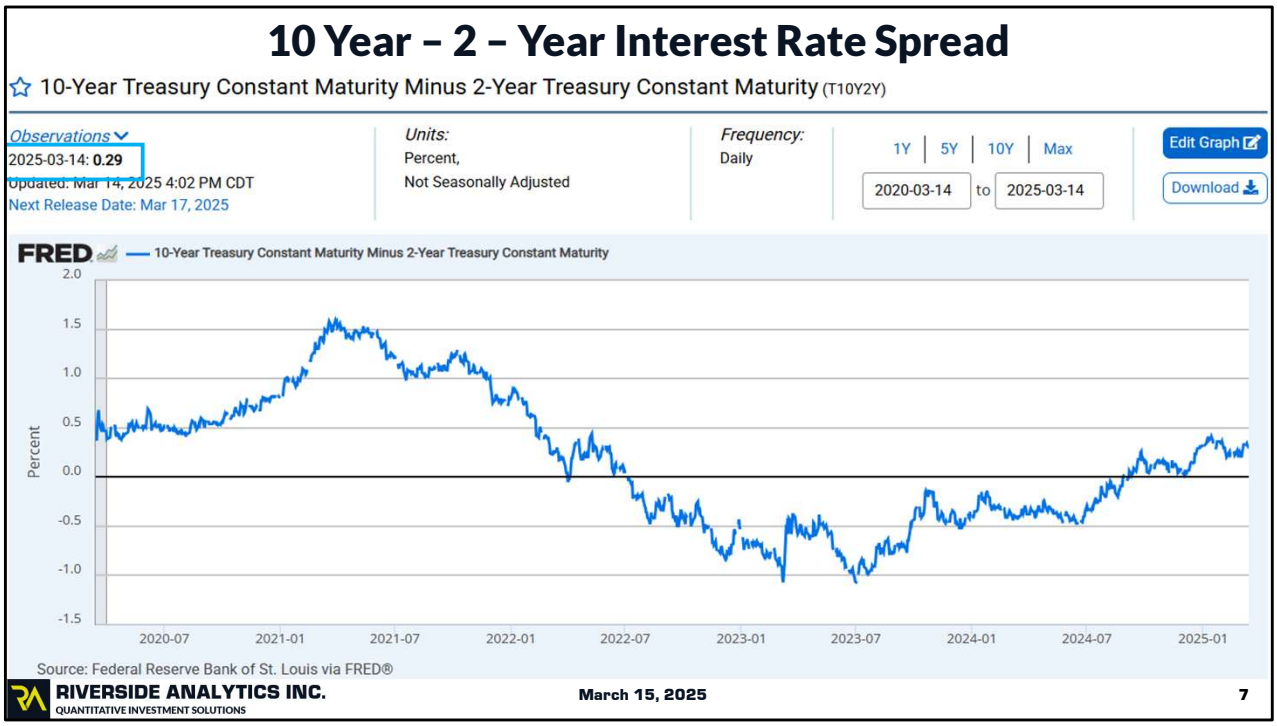


March – last month was 4.22. Essentially this has not changed in 4 months, and likely will not for another 3 months.



March - Last month was 0.13 The decrease in the spread is due to the 10 year yield decline

Based on previous Riverside analysis, a recession does not occur until AFTER the inversion as righted itself. The Chinese tariffs have not been rolled back. Canadian and Mexican across the board tariffs have, on account of the President is not allowed to implement them without congressional approval. That threat is hollow.



March – Last month was 0.21. This seems to be the beginning of another range bound chart, stuck between 0.5, and 0.25.

There is some noises in the market suggesting a recession could happen as early as mid to late July. Time will tell. I want to see data, not opinion media pieces !

If history holds, a recession shows up mid to late second quarter 2025 to mid 3rd quarter. Early rate interest reductions could have helped cushion any slowdown. Now with the tariff noises, the Fed has backed off on interest rate reductions, fearing they may have to raise rates to stave off a new round of inflation.

As you will see later, the Fed is more likely to reduce rates to fight softness in the economy than worry about inflation.

BoC Interest Rates
February 15th



Weekly Wednesday, rates in percentage	CANSIM	2025-01-15	2025-01-22	2025-01-29	2025-02-05	2025-02-12
Prime rate[1]	V80691311	5.45	5.45	5.45	5.20	5.20
Conventional mortgage						
1-year	V80691333	7.24	7.24	7.24	7.24	6.99
3-year	V80691334	6.54	6.54	6.54	6.54	6.54
5-year	V80691335	6.49	6.49	6.49	6.49	6.49

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS
March 15, 2025
8

February – official rates dropped 25 points, One year conventional dropped 25 points, but the 3 and 5 year did not budge, BUT, bank websites have dropped !

CIBC has 5 year fixed – 4.59, down 30 points, Royal – 4.59, down 30 points, TD - 5.04 down 20, and BMO - 4.74 down 20
BNS continues to make customers work for a discount remains at 6.49, remaining well above all the others.

BoC Interest Rates
March 15th



Weekly Wednesday, rates in percentage	CANSIM	2025-02-12	2025-02-19	2025-02-26	2025-03-05	2025-03-12
Prime rate[1]	V80691311	5.20	5.20	5.20	5.20	5.20
Conventional mortgage						
1-year	V80691333	6.99	6.99	6.99	6.99	6.99
3-year	V80691334	6.54	6.54	6.54	6.54	6.54
5-year	V80691335	6.49	6.49	6.49	6.49	6.49

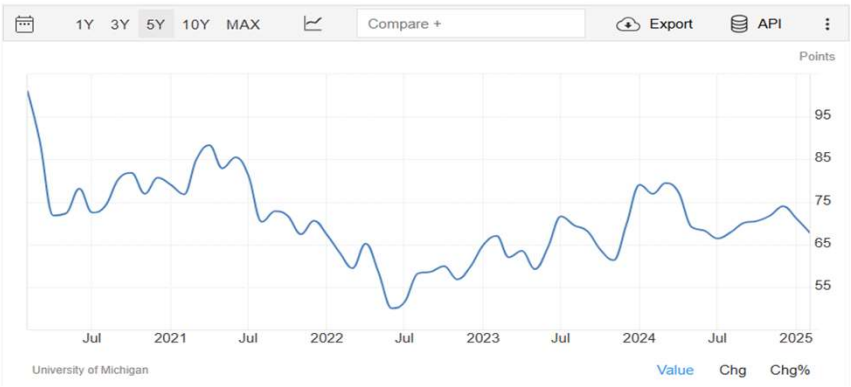
RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS
March 15, 2025
9

March – official rates dropped another 25 points, but I do not see that reflected on the website.

CIBC has 5 year fixed – 4.34, down 25 points, Royal – 4.29, down 30 points, TD - 4.59 down 45, and BMO - 4.74 NO CHANGE, however they do have a special on Default insured mortgages at 4.39
BNS has not changed, and continues to make customers work for a discount remains at 6.49, remaining well above all the others.

UoM Sentiment Index

The University of Michigan consumer sentiment for the US fell to 67.8 in February 2025 from 71.1 in January and below forecasts of 71.1, preliminary estimates showed. Consumer sentiment fell for the 2nd straight month to reach its lowest reading since July 2024, with the gauge for current economic conditions falling to 68.7 from 74 and the expectations subindex declining to 67.3 from 69.3. There was also a 12% slide in buying conditions for durables, in part due to a perception that it may be too late to avoid the negative impact of tariff policy. In addition, inflation expectations for the year ahead soared to 4.3%, the highest since November 2023, from 3.3%. This is only the fifth time in 14 years we have seen such a large one-month rise (one percentage point or more) in year-ahead inflation expectations. Many consumers appear worried that high inflation will return within the next year. Also, long-run inflation expectations ticked up to 3.3%, the highest since June 2008, from 3.2%. source: University of Michigan

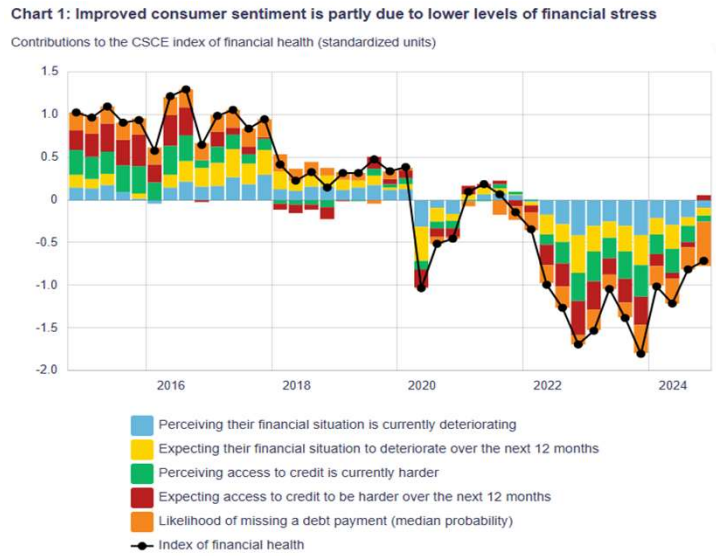


March – Consumers are concerned, and the chart clearly shows that. Sentiment is down near where it was in November of 2022 with its high covid related inflation numbers. This is entirely a White House created reduction. It is going to take a couple months for the data to provide the magnitude of business and consumer behavior change. I suspect this is more of a hold on to cash, and see where this goes situation. That in of itself, is enough to trigger a significant decline in GDP. IF we start seeing some serious layoffs, then it becomes harder to recover from. We will review unemployment numbers later in the presentation.

This particular chart is from the Trading Economics Website.
https://tradingeconomics.com/united-states/consumer-confidence

BoC Consumer Sentiment – Q4 Data Released

March – NO UPDATES
Canadian Sentiment likely Declined.



https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

March - NO UPDATES – based on the US sentiment indicator, it is pretty safe to say, Canadian sentiment has declined !

The whole elbows up, buy Canadian process happened since this report. It is too early to see that data affects.

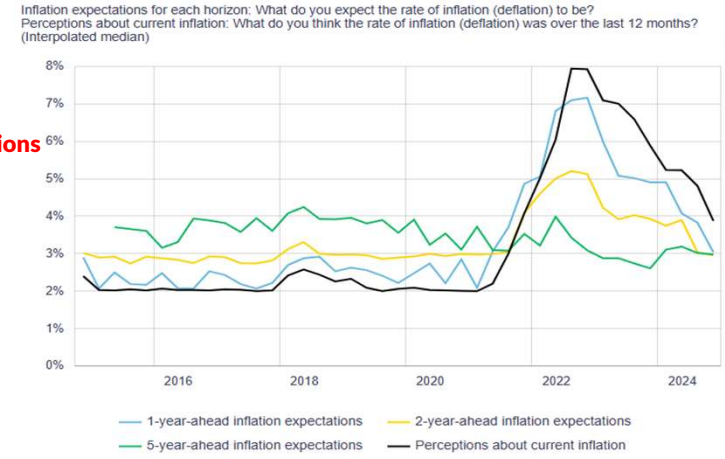
“In this survey, consumers perceived an improvement in their financial health (Chart 1, black line). Fewer consumers than last quarter reported that their finances had worsened over the past 12 months. In addition, more consumers said they see access to credit as easier than before, and more expect access to continue to improve. These positive developments, which are broad-based across both renters and homeowners, partly reflect recent interest rate cuts and consumers’ expectations of further cuts. In contrast, despite this general improvement in perceived financial health, the perceived risk of missing a debt payment increased. This is notably the case for renters, who, according to survey results, generally experience more affordability issues than homeowners. This result echoes the assessment last spring in the Bank of Canada’s Financial Stability Report—2024, when signs of increased financial stress appeared more concentrated among renters.”

There is lots in this report if you really want to dig in !
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-

fourth-quarter-of-2024/

BoC Inflation Expectations – Q4 Data Released

March – NO UPDATES
Canadian inflation expectations
Likely increased.



Inflation expectations have largely returned to where they were before the COVID-19

This could tick upwards due to political instability in the US.

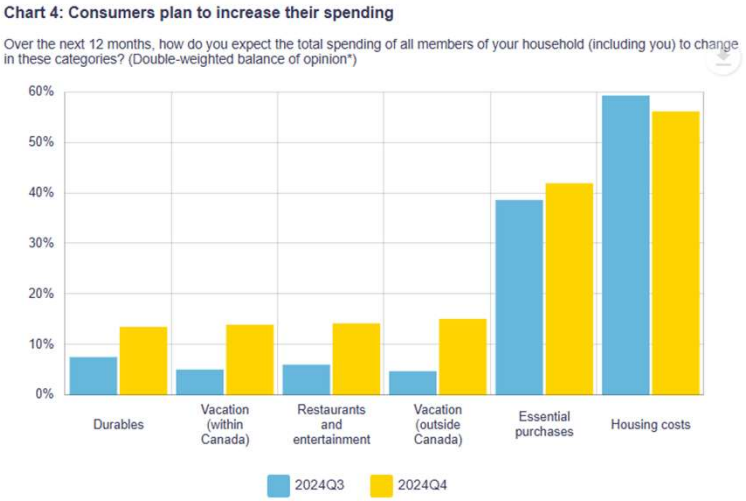
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

March - NO UPDATES - 2024 4th Quarter report has been released ! The 2 and 5 year expectations have not changed.

There is lots in this report if you really want to dig in !
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

BoC Expectations – cont. Q4 Update

March – NO UPDATES



https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

March - NO UPDATES – Given all the press, spending expectations likely is doing a reversal.

As of the data release - About 60% of expect to spend more money in the next 12 months.

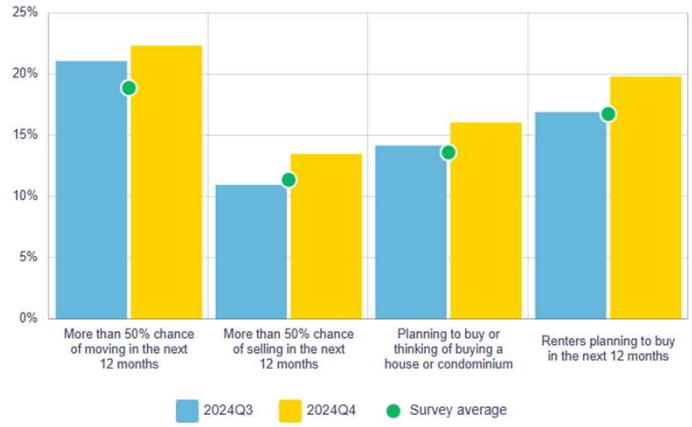
There is lots in this report if you really want to dig in !
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

BoC Expectations – cont. Q4 Update

March – NO UPDATES

Chart 5: Home-buying intentions have increased

What do you think is the percent chance that over the next 12 months you will move to a different primary residence?
What do you think is the percent chance that over the next 12 months you will put your primary residence on the market for sale?
Are you planning to buy or thinking of buying a house or condominium now?
Renters: Are you planning to buy a house or condominium during the next 12 months?
(Share of respondents)



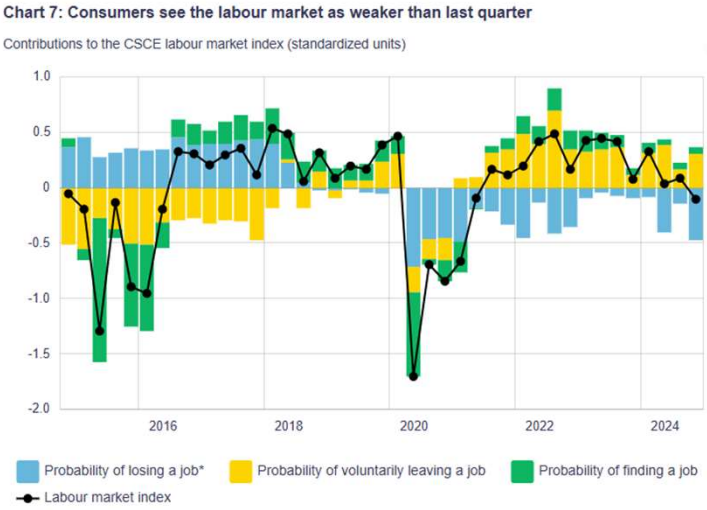
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

March - NO UPDATES – It will be interesting to see what the data says about this one.

Housing data is not showing any significant movement, as you will see later in the report.

BoC Expectations – cont. Q4 Update

March – NO UPDATES



https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

March - NO UPDATES – It will be interesting to see what the data says about this one.

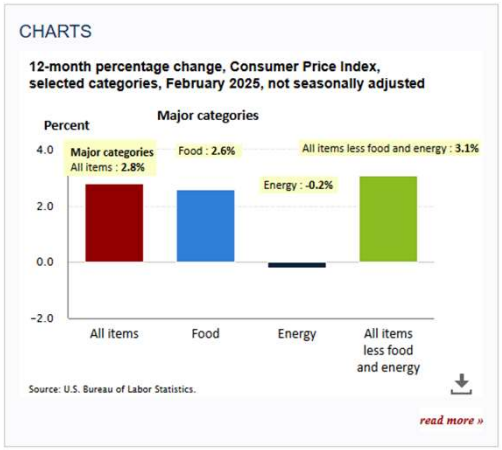
TD Economics report – March 7th - The Canadian labour market came back down to earth in February, adding just 1.1k positions, compared to a gain of 76k in January. Full-time positions declined (-19.7k), offset by gains in part-time (+20.8k).

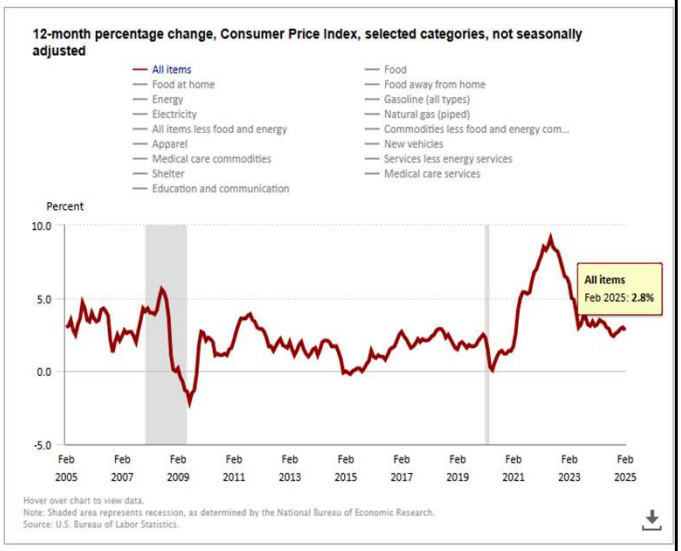
Due note, these numbers float around, so drawing any conclusions on a single data point is dangerous. Watching the labour market in the coming months is prudent, which is what we do every month.

February – The downtrend over the past 18 months continues, but the numbers are small.

There is lots in this report if you really want to dig in !
https://www.bankofcanada.ca/2025/01/canadian-survey-of-consumer-expectations-fourth-quarter-of-2024/

US Inflation Rate





All items : 2.8, was 3.0%
All items less food and energy : 3.1, was 3.3 %
Food : 2.6 was 2.5
Energy : -0.2 was 1.0

https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

March 15, 2025

March – Inflation declined since the last report. I had expected to see an increase.

Food is the first place tariffs likely show inflation, and there is nothing to show this month !

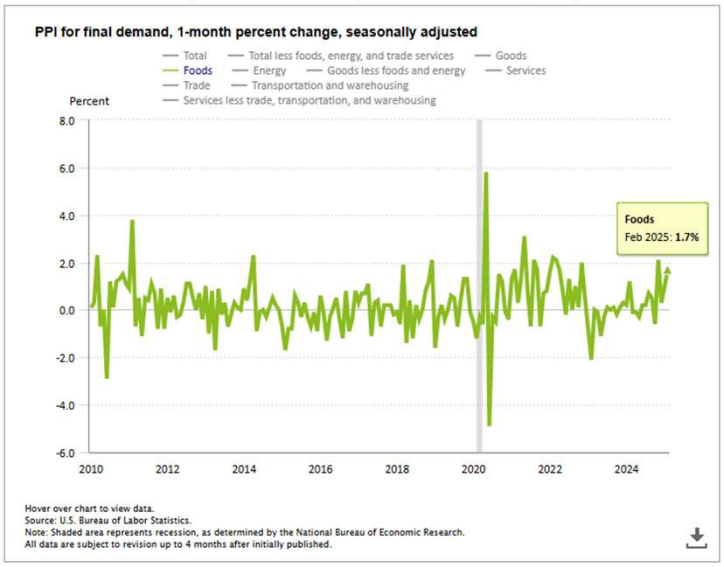
If you go to the website, there is table that is MUCH easier to see the details.

Lots of additional detail is located here – Each of the index items in the right hand cart above, has its own data.
The way you avoid muddying up the chart, is click once on the item you want to remove in the index.
https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm

Producer Price Index – Food

1-month percent change, seasonally adjusted

Dec -0.1, Jan 1.1, and now 1.7

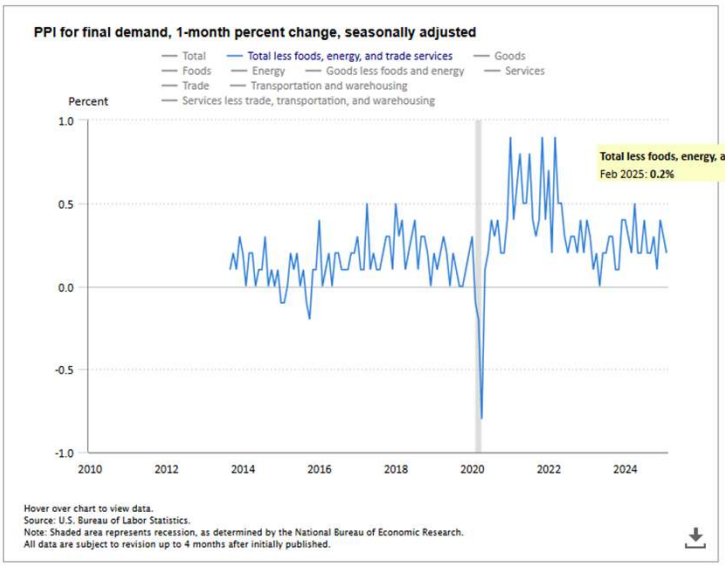


March – Up from 1.1 percent in February and -0.1 percent in January. Range bound it is ! Details are here >> https://www.bls.gov/charts/producer-price-index/final-demand-1-month-percent-change.htm#

Producer Price Index – Total

1-month percent change, seasonally adjusted

Dec 0.4,
Jan 0.3,
Feb 0.2

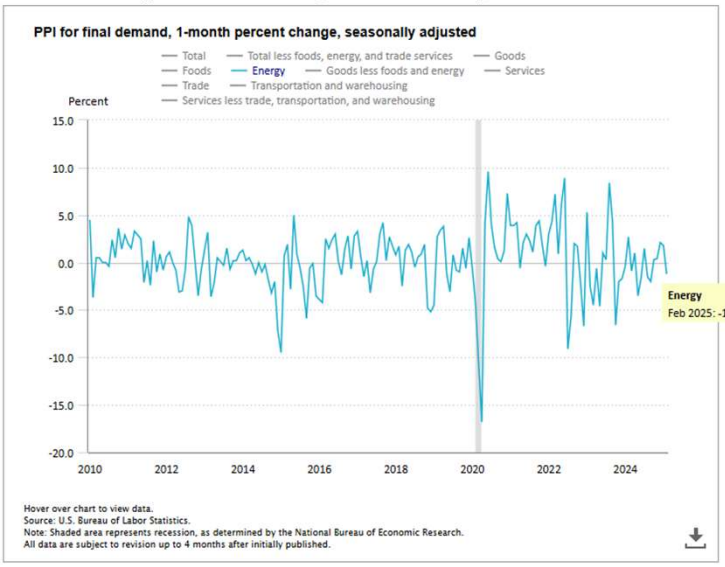


March – Range bound. Tariffs, so far, have no influence here !
https://www.bls.gov/charts/producer-price-index/final-demand-1-month-percent-change.htm#

Producer Price Index – Energy

1-month percent change, seasonally adjusted

Dec's 2.2
January 1.7
February dips to -1.2
2.9% swing in one month!

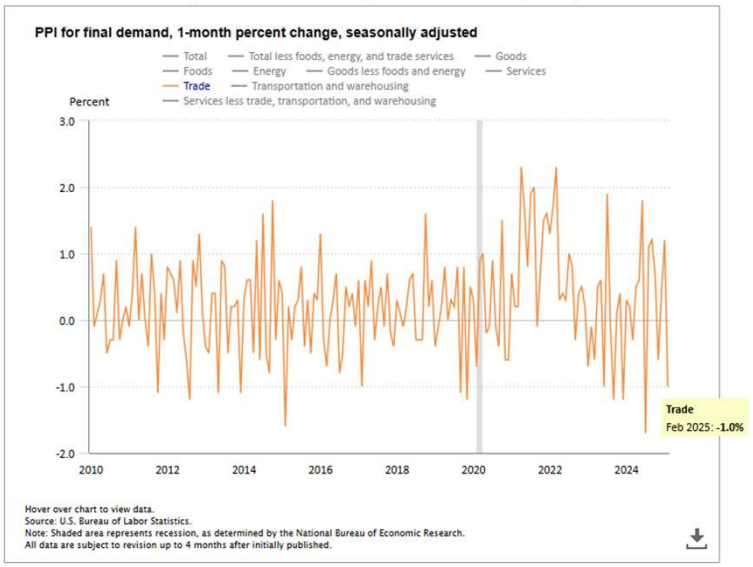


March - Energy can have some volatile swings month to month. This was one of them ! https://www.bls.gov/charts/producer-price-index/final-demand-1-month-percent-change.htm#

Producer Price Index – Trade

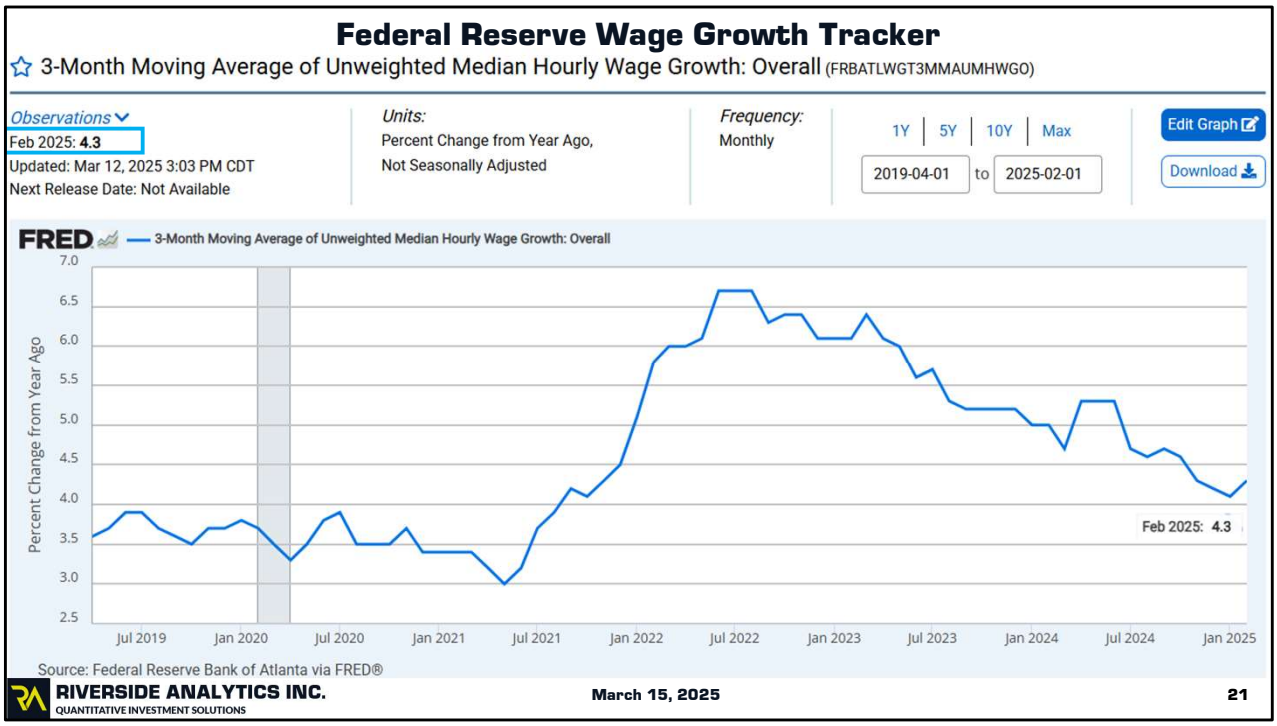
1-month percent change, seasonally adjusted

Last month's -0.1 was adjusted up to 1.2 February comes in at -1.0



March – last month got adjusted up, to match last September, and this month comes in at -1.0. Well within the range of normal. No tariff affects here !

https://www.bls.gov/charts/producer-price-index/final-demand-1-month-percent-change.htm#



March – Last month 4.1. This month up 2/10ths to 4.3. Normal noise !

https://fred.stlouisfed.org/series/FRBATLWGT3MMAUMHWGO

Leading Indicators

Housing Starts
Manufactures New Orders
Commodity Prices
Average Hours Worked

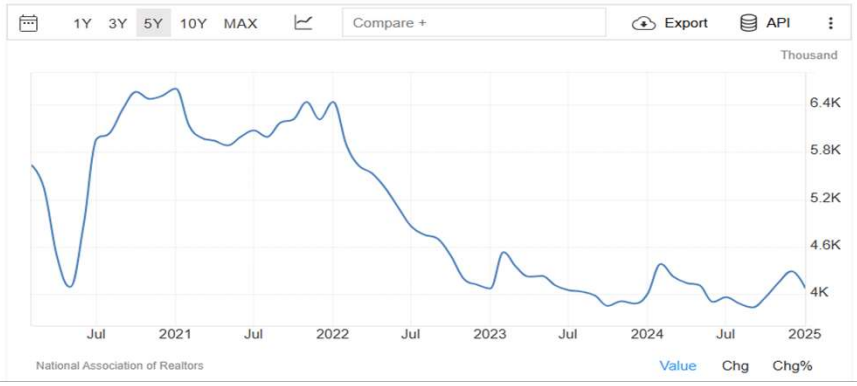


March – More range bound housing starts.

Some builders are giving 5% commissions of real estate agents for a completed sale. They are pushing incentives to move units !

US Existing Home Sales

Existing home sales in the US sank by 4.9% to a seasonally adjusted annualized rate of 4.08 million in January of 2025, the sharpest decline in seven months, and missing market expectations of 4.12 million. "Mortgage rates have refused to budge for several months despite multiple rounds of short-term interest rate cuts by the Federal Reserve. When combined with elevated home prices, housing affordability remains a major challenge." The median price for existing home sales inched 1.9% lower from the previous month to $396,000. In the meantime, inventory of unsold housing grew to 3.9 months of supply at the current sales pace from 3.7 months of supply in December. From the previous year, existing home sales were 2% higher. source: National Association of Realtors



March – another rangebound graph. Two years of very similar activity ! It is shaping up to be three spring peaks of 4.5 (2023), 4.4 (2024), and 4.3 (2025).

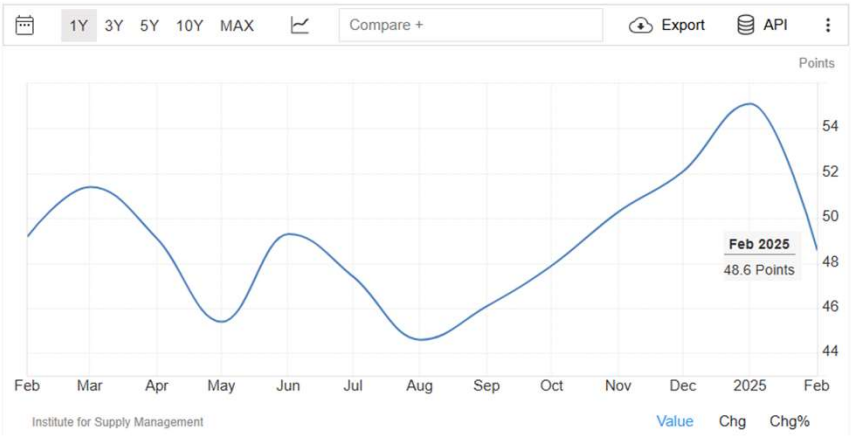
From Trading Economics, who sourced it from National Association of Realtors



March - Range bound it is ! So far, tariff threats are not showing up in the data !

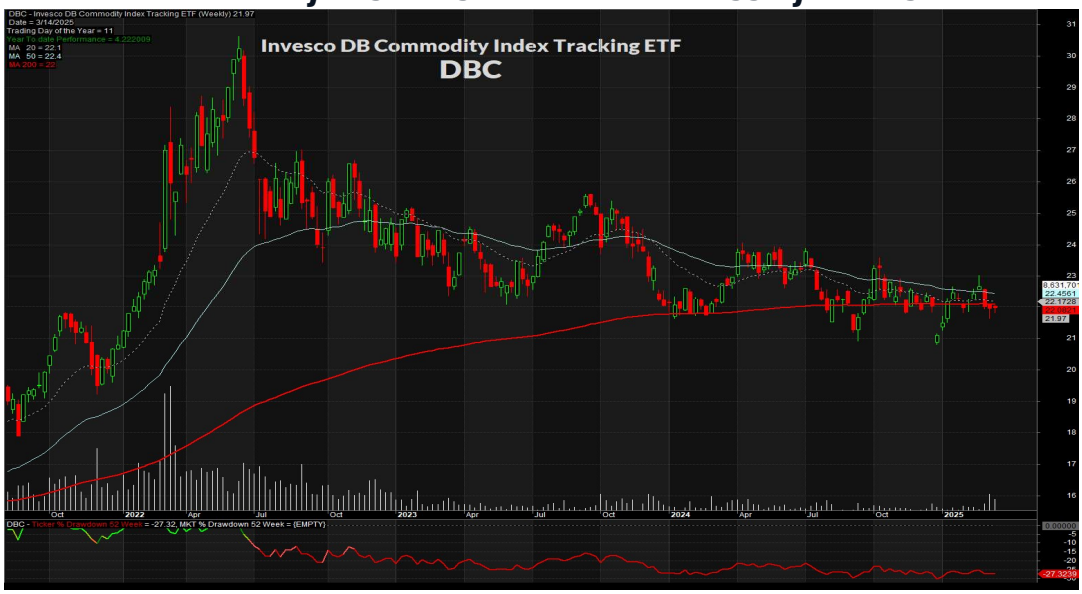
ISM Manufacturing New Orders Index

The ISM Manufacturing New Orders Index in the United States tumbled by 6.5 points to 48.6 in February 2025, pointing to contraction. ISM Manufacturing New Orders in the United States averaged 55.46 points from 1950 until 2025, reaching an all time high of 82.60 points in June of 1950 and a record low of 24.20 points in June of 1980. source: Institute for Supply Management



March – This one had some bite to it.
Source : Trading Economics
https://tradingeconomics.com/united-states/ism-manufacturing-new-orders

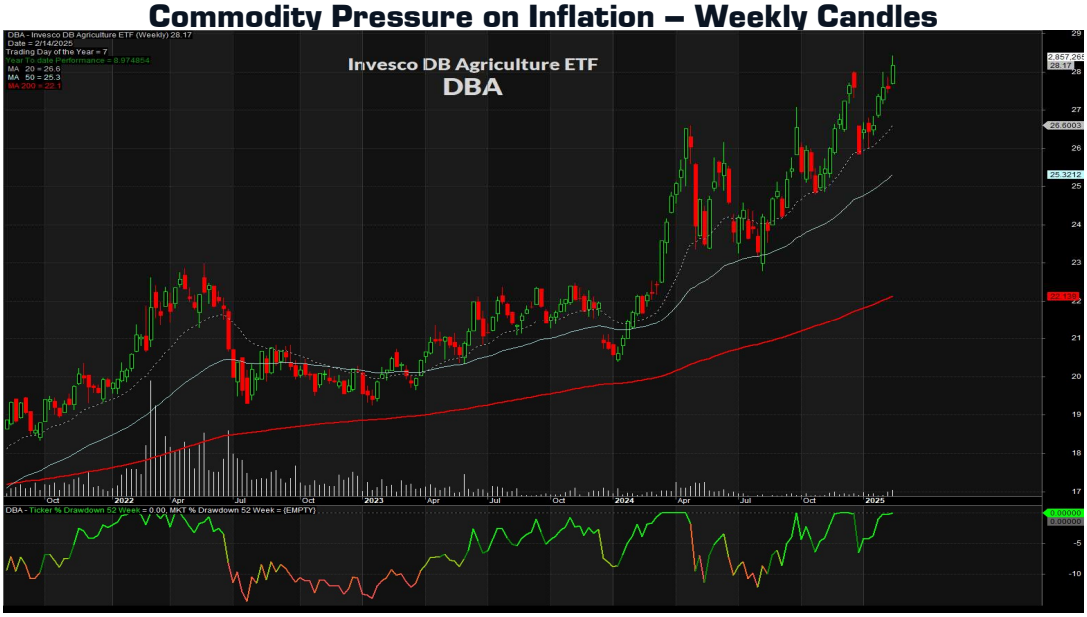
Commodity Pressure on Inflation – Weekly Candles



Continues to be supportive of muted inflation pressure.

March – No significant change in the past couple months. The 20, and 50 MA remain on the trend down, indicating muted future inflation from carbon based energy, Gold, Silver, Aluminum, Zinc, Copper Grade A, Corn, Wheat, Soybeans, and Sugar.

Commodity Pressure on Inflation – Weekly Candles



Agriculture inflation on the other hand, is suggesting manufactured food price increases likely to remain elevated.

March – Same comment as last month. The underlying index includes corn, soybeans, wheat, Kansas City wheat, sugar, cocoa, coffee, cotton, live cattle, feeder cattle, and lean hogs. The one good thing is that Y/Y comparisons are likely to be more favourable than 2024, thus the RATE of change should be lower for 2025.

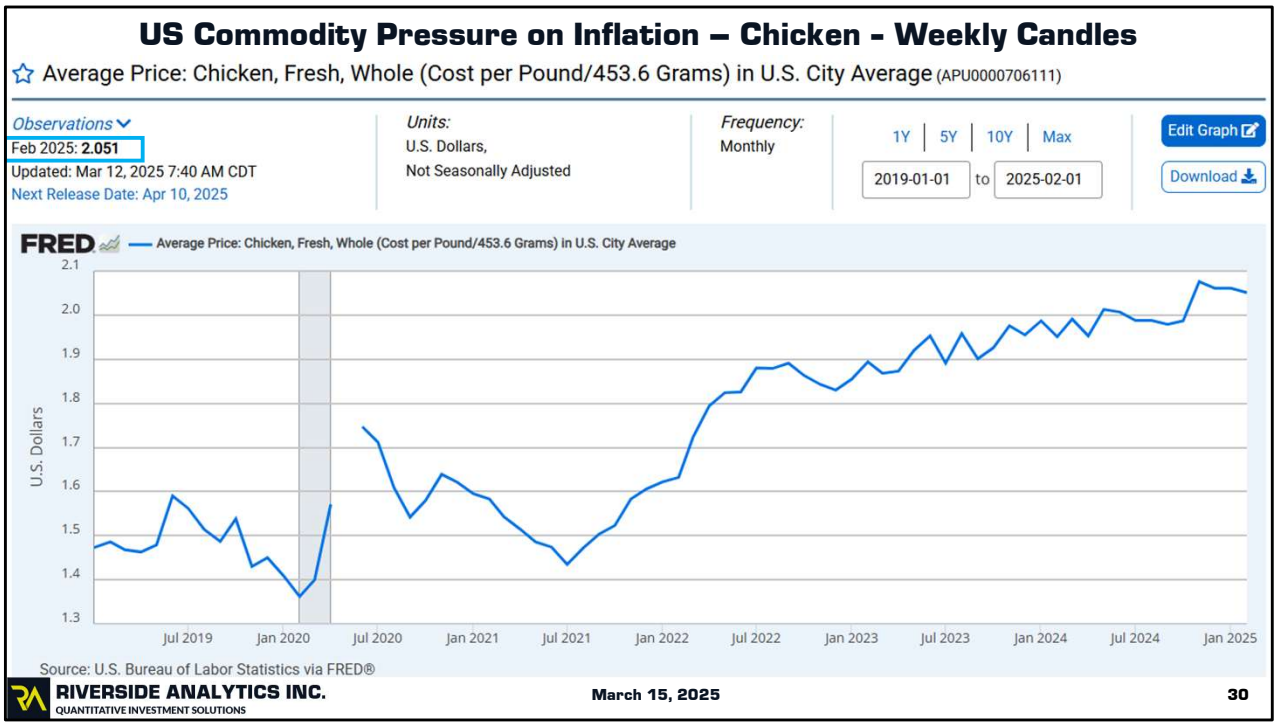
Keep an eye on your grocery store in Q1 for the annual price changes, and /or shrinking package. Weight changes tend to infer higher price changes than you would expect at the cash register. **15 percent shrinkage for the same great price is common.**

Commodity Pressure on Inflation – Weekly Candles



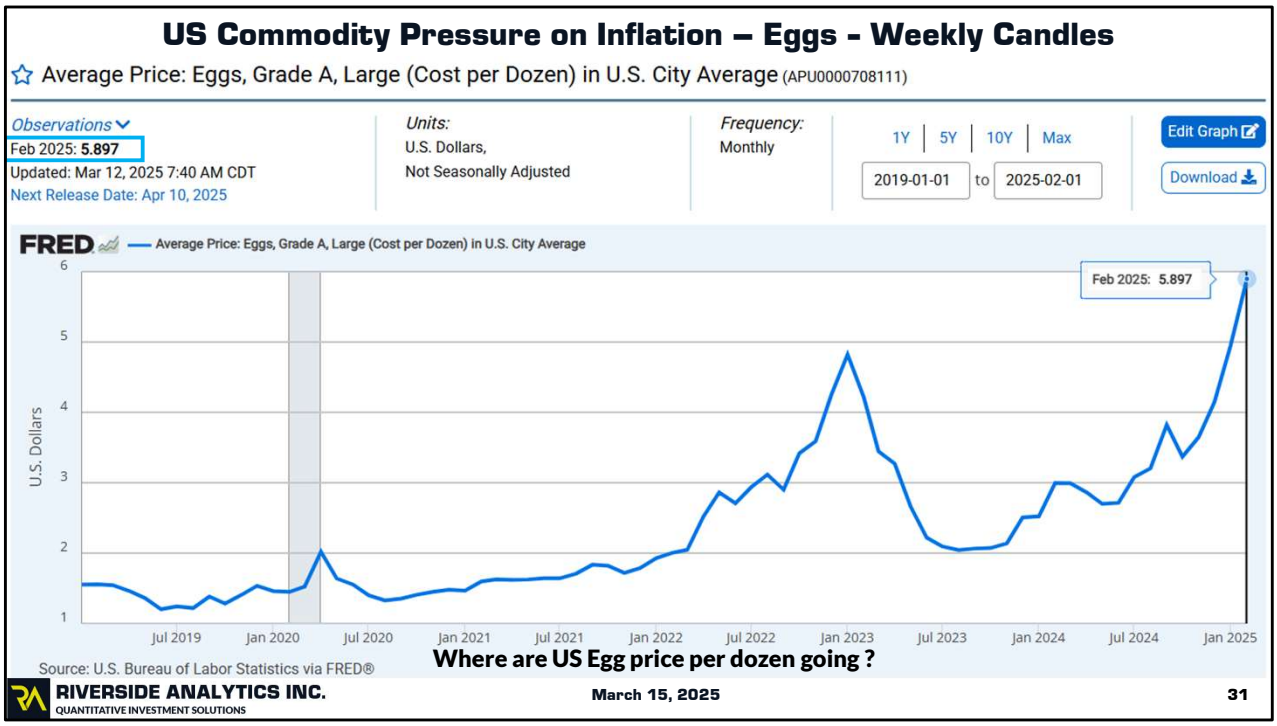
Where are primary protein prices going ?

March – another range bound month. Consumers need protein in their diets, and make up about 1/3 of the calories they consume. This covers both Cattle and Pork.



March – Bird flu has impacted egg prices in the US, and has had some upward pressure on chicken prices.

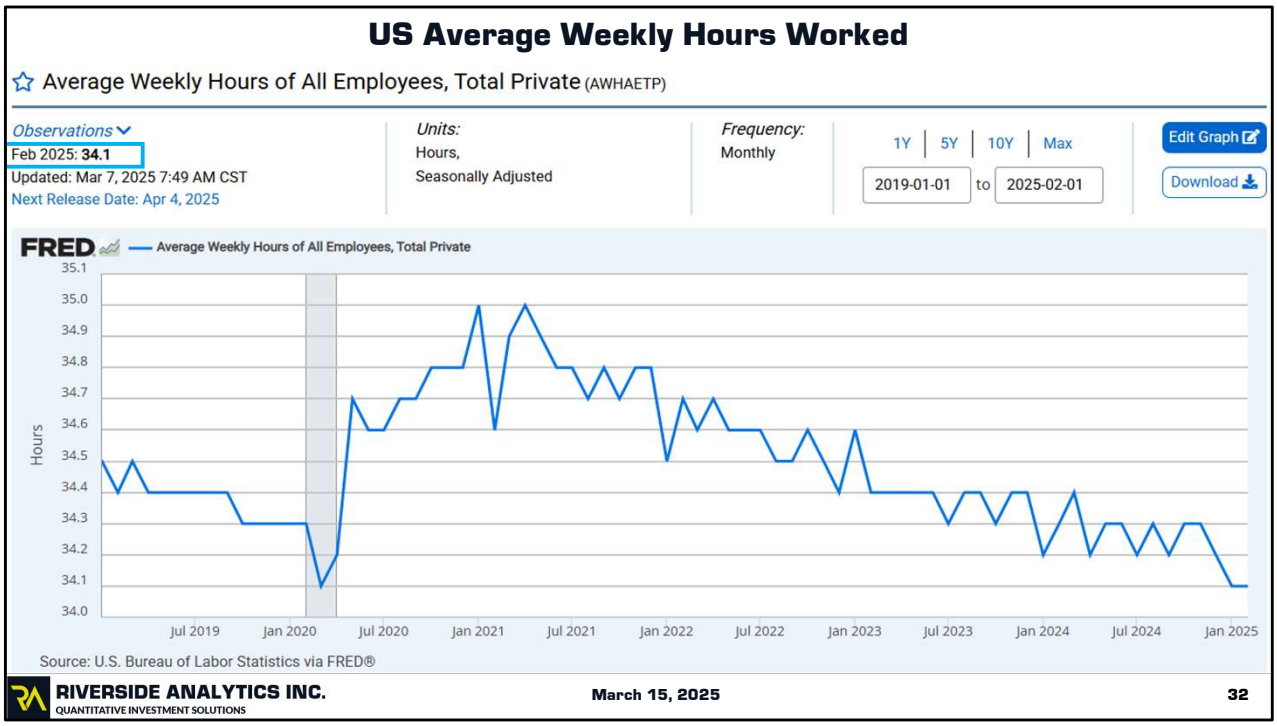
The jump in the chart to the right is November.



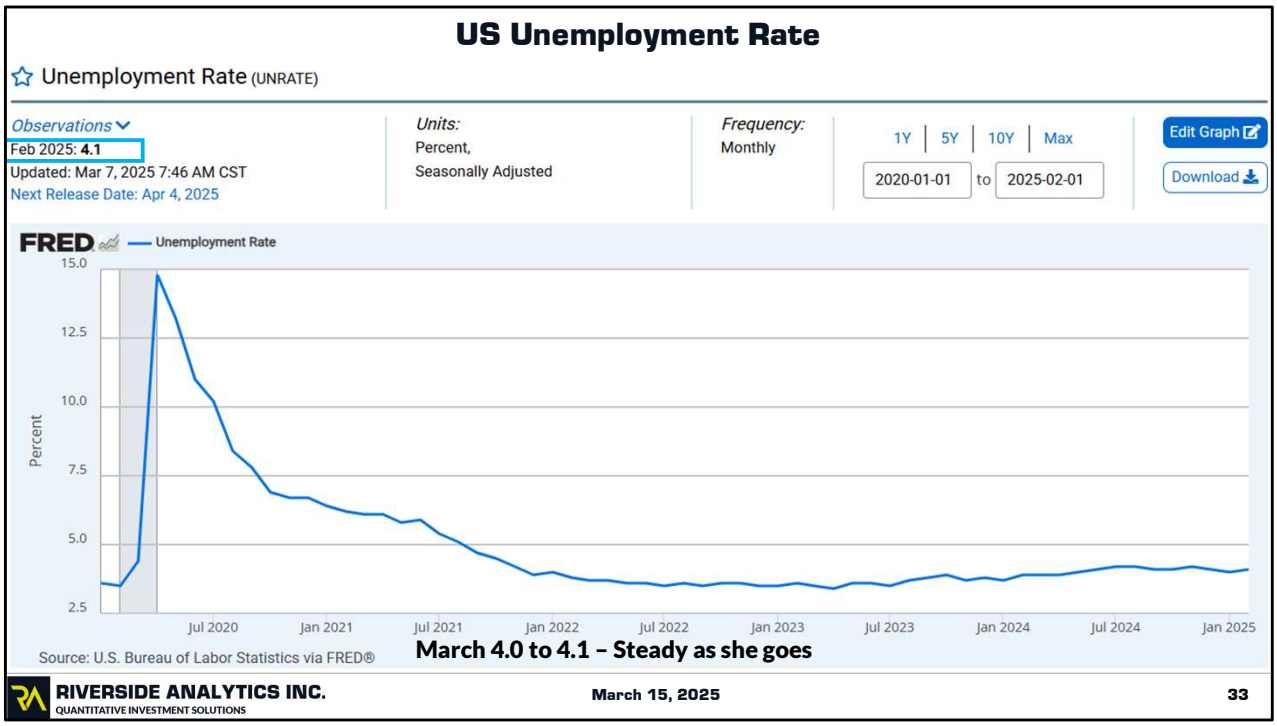
March – US egg prices are well above normal ranges. This is equivalent to a jump of $7.03 CAD in January to 8.49 CAD in February!

US to CAD = 1.44

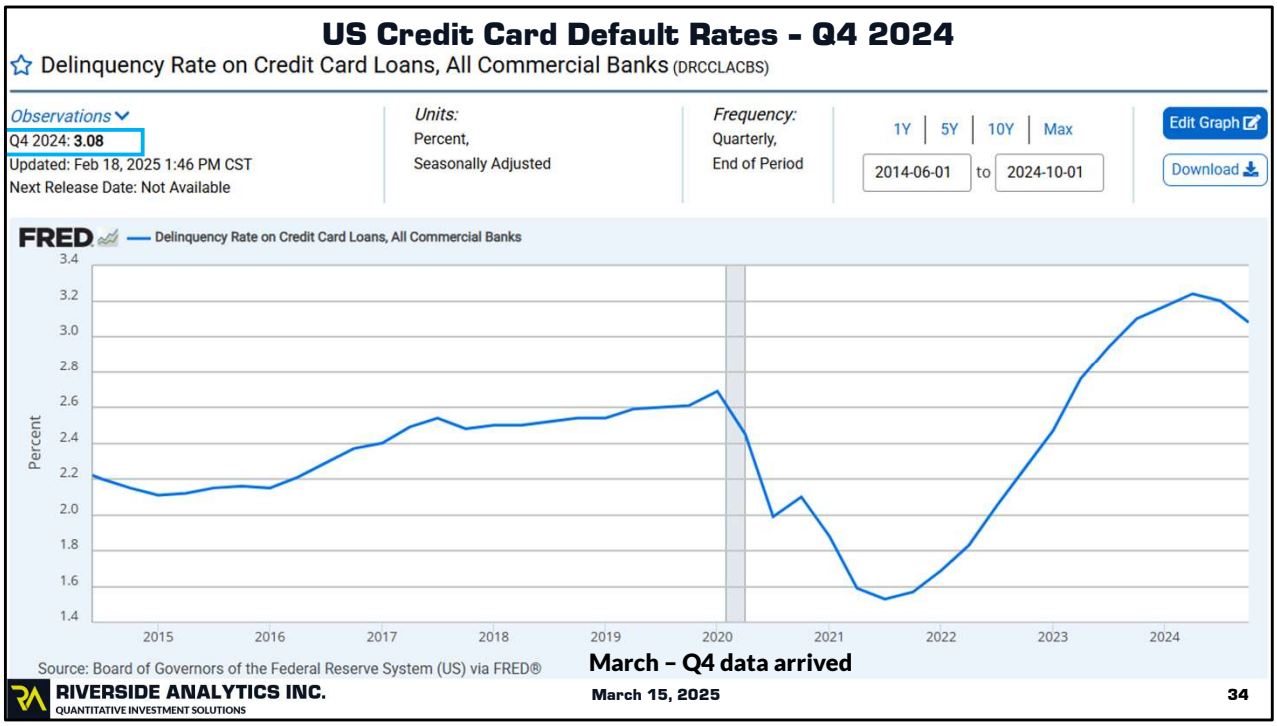
I have bought eggs at the local Costco in Florida around 12 of March for $8.99 USD for two dozen, so some moderation seems to be taking place. The local regular grocery store had a better selection than late last month. There were times where I could not find eggs in any of the stores.



March – No change this month.



March – up a 1/10th to 4.1… continuing statistical noise routine.



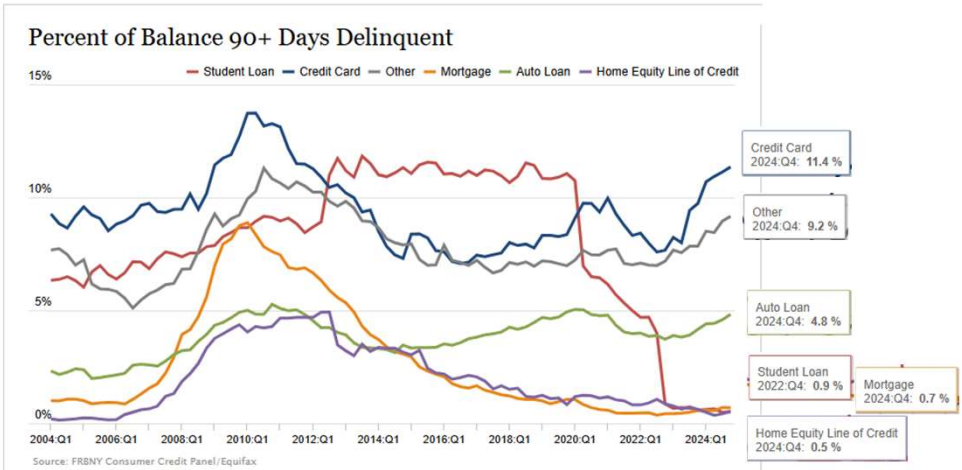
March – 2024 Q4 3.08 is a decline from the 3.24 peak in Q2.

As you will see on the next slide, there is a difference between numbers of cards defaulting, and the value of the debt defaulting!

Delinquent loans are those past due thirty days or more and still accruing interest as well as those in nonaccrual status. They are measured as a percentage of end-of-period loans.

Credit Card Default Rates – NY Fed – March Q4 Arrived.

US Household Debt Hits $18.04 Trillion



Aggregate delinquency rates increased slightly in the fourth quarter of 2024. As of December, 3.6 percent of outstanding debt was in some stage of delinquency, up from 3.5 percent in the third quarter. Transition into early delinquency held steady for nearly all debt types; the exception was for credit card balances, which saw a small uptick in the rate at which balances went from current to delinquent. Transition into serious delinquency, defined as 90 or more days past due, edged up for auto loans, credit cards, and HELOC balances but remained stable for mortgages.

March – Q4 data arrived – A smaller number of debtors are defaulting, but the balances they are defaulting is higher !

Household Debt Hits $18.04 Trillion; Auto and Credit Card Delinquency Transition Rates Remain Elevated

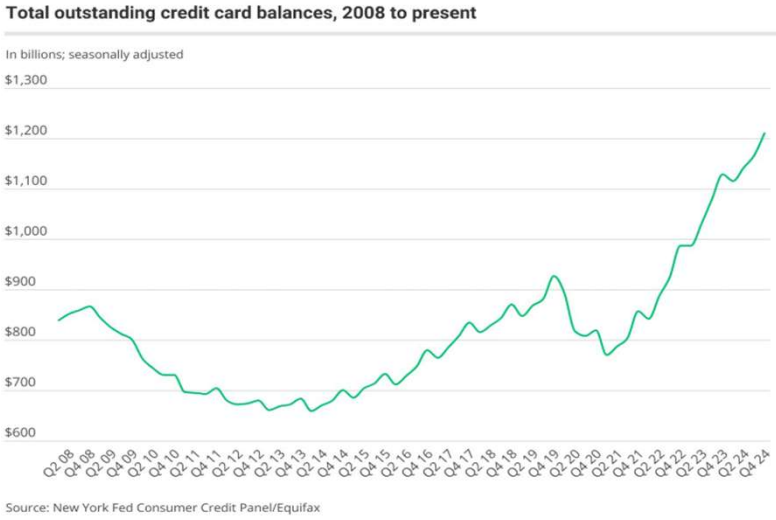
Total household debt increased by $93 billion to reach $18.04 trillion in the fourth quarter, according to the latest *Quarterly Report on Household Debt and Credit*. Aggregate delinquency rates ticked up 0.1 percentage point (ppt) from the previous quarter to 3.6 percent of outstanding debt in some stage of delinquency. Mortgage balances rose by $11 billion to stand at $12.61 trillion at the end of December. Transition into serious delinquency, defined as 90 or more days past due, remained stable for mortgages, but edged up for auto loans, credit cards, and HELOC balances. Auto loan balances saw an $11 billion increase to $1.66 trillion in the fourth quarter, while credit card balances increased by $45 billion from the previous quarter to reach $1.21 trillion at the end of December.

November – Federal Reserve Bank of New York.
https://www.newyorkfed.org/microeconomics/hhdc.html

Another way to look at the credit card delinquency rate. About 47% of cardholders carry a month to month balance. If 11 percent of those are in trouble, this infers about 23 percent of those carrying a balance, are in serious trouble.

What is the difference between delinquency and charge-off?
Charge-offs are the value of loans and leases removed from the books and charged against loss reserves. Charge-off rates are annualized, net of recoveries. Delinquent loans and leases are those past due thirty days or more and still accruing interest as well as those in nonaccrual status

US Credit Card Outstanding Balances – No Updates



$1.211 trillion

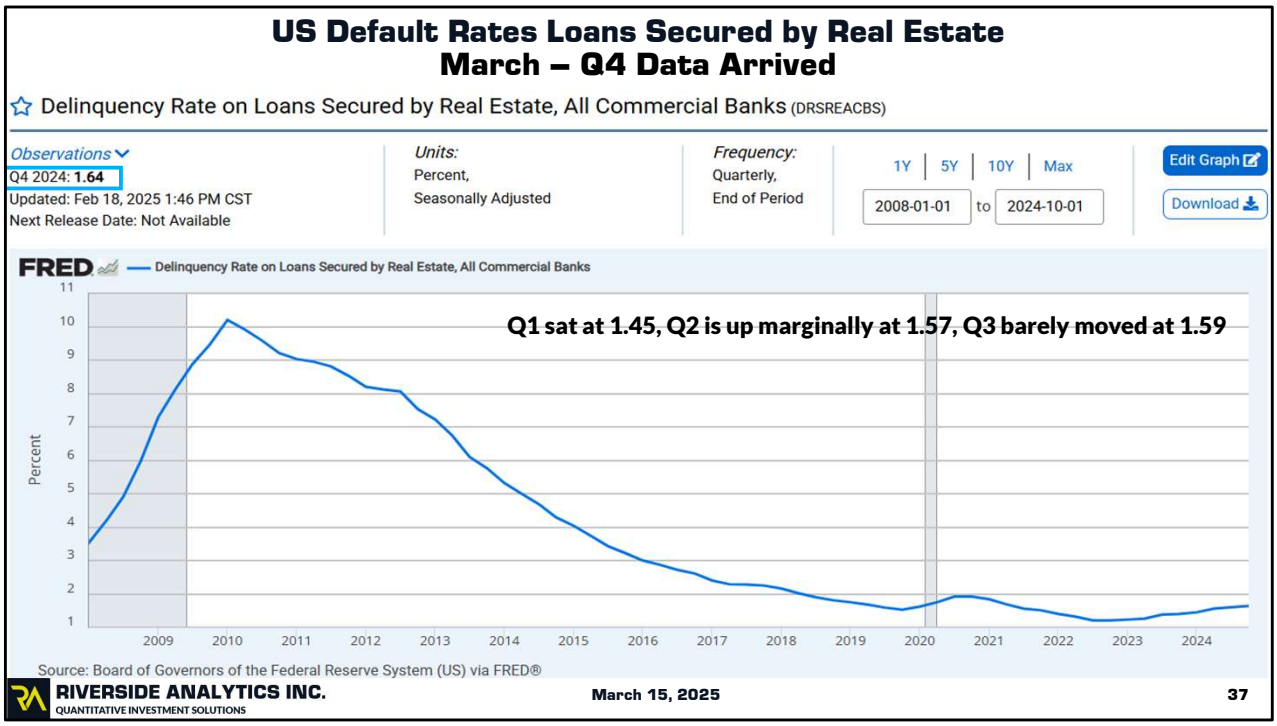
This is costing the 47 % of card holders on average $120.60 a month in interest charges or $1447 / year.

Average Interest rate : 22.8%

47% of card holders carry a balance month to month ! Average CC balance $7,236 in Q3

March – No updates - About half the population is paying some stiff interest charges on rotating debt.

https://www.lendingtree.com/credit-cards/study/credit-card-debt-statistics/
Additional detail here > https://www.bankrate.com/credit-cards/news/credit-card-debt-survey/#many-carry-debt-for-more-than-a-year



March – **Q4 is 1.64 ,** Q1 sat at 1.45, Q2 is up marginally at 1.57, Q3 barely moved at 1.59,

NY Fed is indicating no concern in this category.

Only about 10 percent of US Real Estate mortgages are variable rates.

US Net Percentage of Domestic Banks Tightening Standards – No New Data

☆ Net Percentage of Domestic Banks Tightening Standards for Commercial and Industrial Loans to Large and Middle-Market Firms (DRTSCILM)

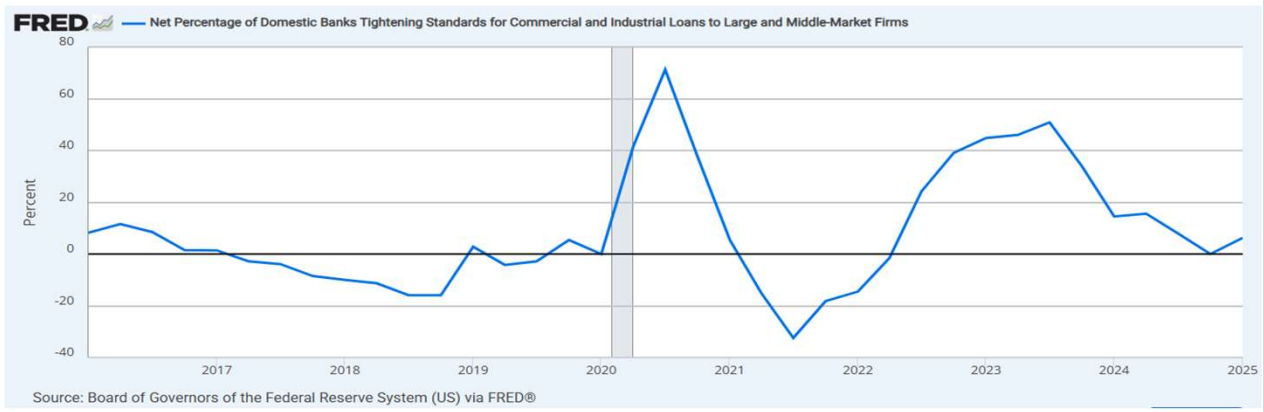
Observations
Q1 2025: **6.2**
Updated: Feb 3, 2025 1:19 PM CST
Next Release Date: Not Available

Units:
Percent,
Not Seasonally Adjusted

Frequency:
Quarterly

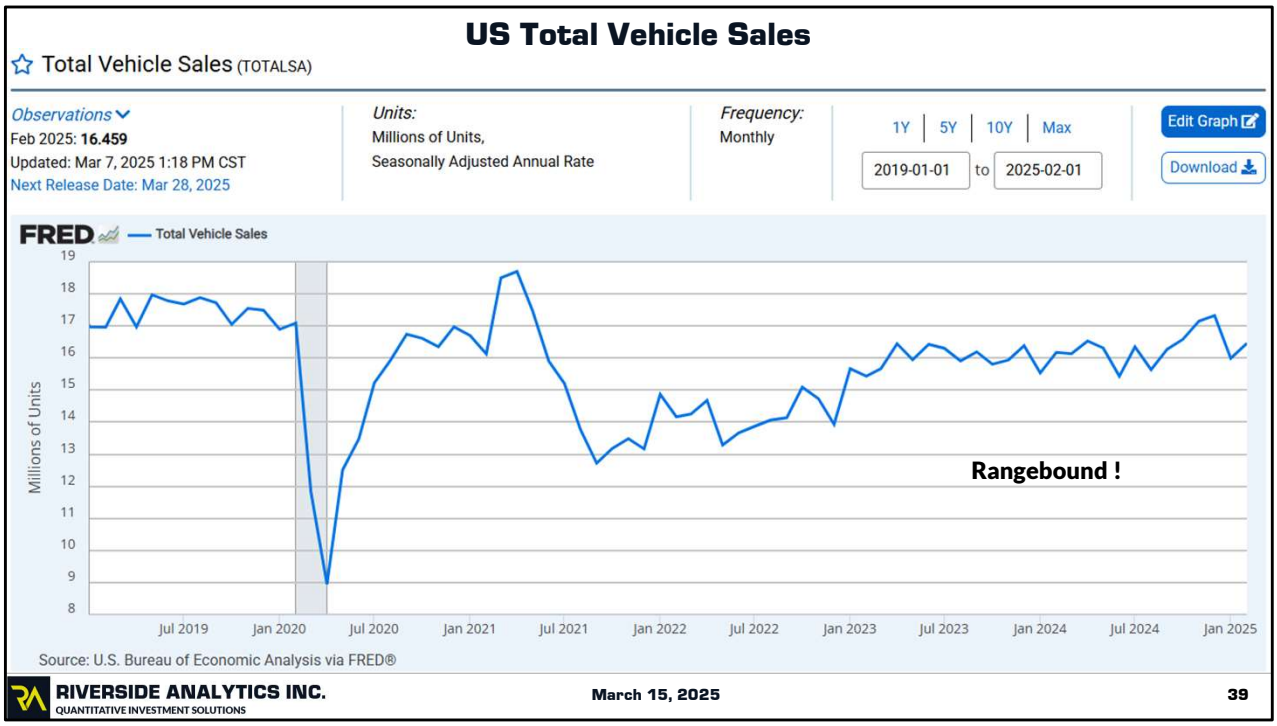
1Y | 5Y | 10Y | Max
2016-01-01 to 2025-01-01

Edit Graph
Download

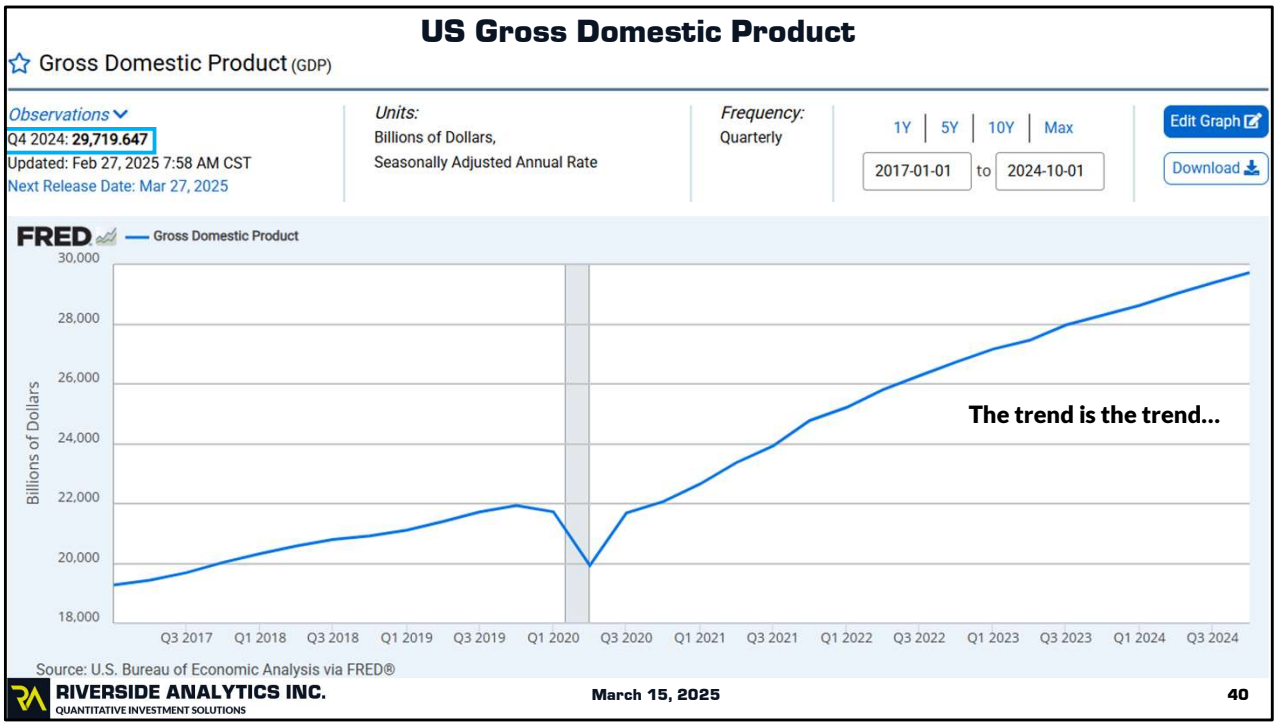


February – 6 percent uptick observed !

March – No change. **This is a quarterly report,** so it will take another month or two before I get new data.



March – Range bound - until numbers fall below the 2023 – 2024 range, nothing to worry about.



March – Q4 Update - 29,719 vs 29,700 - US economy is remains healthy, except existing home resales !

The March 27th update could be interesting. The first hints of Q1 should be present.

S&P 500 YEARLY RETURNS

AVERAGE YEAR vs YEAR #1 OF THE US PRESIDENTIAL CYCLE

US Presidential Election Cycle - S&P 500 Performance Analysis

	Jan%	Feb%	Mar%	Apr%	May%	Jun%	Jul%	Aug%	Sep%	Oct%	Nov%	Dec%	Yr. Profit%
Average Year 1	0.76	-1.66	0.61	2.45	1.90	0.56	2.28	-0.04	-1.52	-0.59	0.68	0.54	6.63
Average Year 2	0.47	0.01	0.11	0.26	-0.76	-1.32	1.01	-0.45	-1.48	2.16	2.03	1.19	3.11
Average Year 3	3.40	1.58	0.57	2.55	-0.17	2.07	1.24	-0.02	-1.08	0.84	-0.50	2.24	13.51
Average Year 4	0.05	-0.25	0.36	-0.12	-1.23	1.69	2.19	2.90	-0.50	-0.34	1.14	1.51	6.56
Democrats Avg Year 1	0.56	-1.64	1.14	3.79	2.72	1.06	2.71	1.04	-0.92	-0.70	1.25	0.71	12.89
Democrats Avg Year 2	0.46	-0.08	-1.38	1.29	-1.57	-0.25	1.80	-1.52	-0.46	1.85	1.61	2.72	3.29
Democrats Avg Year 3	2.25	0.52	0.28	2.46	0.23	1.08	2.53	-0.71	0.99	2.07	-0.18	2.60	14.68
Democrats Avg Year 4	0.32	-0.55	2.48	0.00	-0.23	2.72	0.78	1.08	0.64	1.64	0.64	0.27	9.77
Republicans Avg Year 1	1.00	-1.68	-0.03	0.86	0.95	-0.02	1.76	-1.33	-2.23	-0.45	0.00	0.33	-0.76
Republicans Avg Year 2	0.47	0.12	1.88	-0.96	0.19	-2.59	0.07	0.81	-2.67	2.50	2.48	-0.47	2.89
Republicans Avg Year 3	4.66	2.72	0.89	2.65	-0.61	3.16	-0.16	0.73	-3.34	-0.51	-0.85	1.84	12.23
Republicans Avg Year 4	-0.25	0.07	-1.96	-0.26	-2.33	0.57	3.73	4.88	-1.65	-2.32	1.63	2.75	3.35

March – So far, March is not doing very well at going sideways for the Republicans !

CME FedWatch Tool

TARGET RATE PROBABILITIES AS OF February 15, 2025

FED FUND FUTURES												
ZQG5	ZQH5	ZQJ5	ZQK5	ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6
95.6713	95.6725	95.6775	95.7150	95.7650	95.8275	95.8775	95.9175	95.9725	96.0175	96.0475	96.0800	96.1000

	CME FEDWATCH TOOL - CONDITIONAL MEETING PROBABILITIES									
MEETING DATE	250-275	275-300	300-325	325-350	350-375	375-400	400-425	425-450	450-475	475-500
3/19/2025			0.0%	0.0%	0.0%	0.0%	2.5%	97.5%	0.0%	0.0%
5/7/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	20.3%	79.2%	0.0%	0.0%
6/18/2025	0.0%	0.0%	0.0%	0.0%	0.2%	8.5%	44.2%	47.1%	0.0%	0.0%
7/30/2025	0.0%	0.0%	0.0%	0.0%	1.9%	15.9%	44.8%	37.3%	0.0%	0.0%
9/17/2025	0.0%	0.0%	0.0%	0.7%	7.1%	26.5%	42.1%	23.6%	0.0%	0.0%
10/29/2025	0.0%	0.0%	0.2%	1.9%	10.8%	29.5%	38.5%	19.1%	0.0%	0.0%
12/10/2025	0.0%	0.0%	0.6%	4.1%	15.3%	31.7%	33.8%	14.5%	0.0%	0.0%
1/28/2026	0.0%	0.1%	0.9%	5.1%	16.8%	31.9%	32.1%	13.2%	0.0%	0.0%
3/18/2026	0.0%	0.2%	1.3%	6.3%	18.4%	31.9%	30.1%	11.8%	0.0%	0.0%
4/29/2026	0.0%	0.2%	1.6%	7.0%	19.1%	31.8%	29.1%	11.2%	0.0%	0.0%
6/17/2026	0.0%	0.2%	1.6%	6.9%	18.9%	31.6%	29.1%	11.4%	0.1%	0.0%
7/29/2026	0.0%	0.3%	1.9%	7.5%	19.6%	31.5%	28.2%	10.8%	0.1%	0.0%
9/16/2026	0.0%	0.3%	1.7%	7.0%	18.5%	30.4%	28.5%	12.4%	1.1%	0.0%
10/28/2026	0.0%	0.3%	1.6%	6.6%	17.5%	29.4%	28.7%	13.8%	2.1%	0.1%
12/9/2026	0.2%	1.4%	5.9%	16.1%	27.9%	28.8%	15.7%	3.6%	0.4%	0.0%

Looks a lot like a hurry up and wait situation

February – small chance of quarter point reduction in the summer, then nothing until late spring 2026.

CME FedWatch Tool

TARGET RATE PROBABILITIES – Aggregated AS OF February 15, 2025

FED FUND FUTURES												
ZQG5	ZQH5	ZQJ5	ZQK5	ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6
95.6713	95.6725	95.6775	95.7150	95.7650	95.8275	95.8775	95.9175	95.9725	96.0175	96.0475	96.0800	96.1000

	CME FEDWATCH TOOL - AGGREGATED MEETING PROBABILITIES			
MEETING DATE	350-375	375-400	400-425	425-450
3/19/2025	0.00 %	0.00 %	2.50 %	97.50 %
5/7/2025	0.00 %	0.00 %	21.28 %	78.72 %
6/18/2025	0.00 %	0.00 %	61.83 %	38.17 %
7/30/2025	0.00 %	0.00 %	82.50 %	17.50 %
9/17/2025	0.00 %	19.26 %	80.74 %	0.00 %
10/29/2025	0.00 %	38.50 %	61.50 %	0.00 %
12/10/2025	0.00 %	62.64 %	37.36 %	0.00 %
1/28/2026	0.00 %	71.50 %	28.50 %	0.00 %
3/18/2026	0.00 %	82.33 %	17.67 %	0.00 %
4/29/2026	0.00 %	87.50 %	12.50 %	0.00 %
6/17/2026	0.00 %	86.16 %	13.84 %	0.00 %
7/29/2026	0.00 %	91.50 %	8.50 %	0.00 %
9/16/2026	0.00 %	82.36 %	17.64 %	0.00 %
10/28/2026	0.00 %	73.50 %	26.50 %	0.00 %
12/9/2026	60.86 %	39.14 %	0.00 %	0.00 %

The Fedwatch tool's "Aggregated" view compares the rates implied by CME's Fed Funds futures with the current target rate range as set by the Federal Reserve. As such, it provides a view into the cumulative number of hikes or cuts that the market is pricing by a certain point in the future. This is provided in addition to the traditional "Conditional" view of probabilities, familiar to long-term users of the FedWatch tool.

February – Fed is holding its cards close to its chest. They continue to do data driven decision making, precisely as they should be.

CME FedWatch Tool – Probabilities

TARGET RATE PROBABILITIES AS OF March 15, 2024

FED FUND FUTURES												
ZQH5	ZQJ5	ZQK5	ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6
95.6700	95.6750	95.7350	95.8100	95.9150	96.0000	96.0650	96.1550	96.2250	96.2900	96.3250	96.3500	96.3700

	CME FEDWATCH TOOL - CONDITIONAL MEETING PROBABILITIES									
MEETING DATE	225-250	250-275	275-300	300-325	325-350	350-375	375-400	400-425	425-450	450-475
3/19/2025				0.0%	0.0%	0.0%	0.0%	2.0%	98.0%	0.0%
5/7/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	27.7%	71.8%	0.0%
6/18/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	19.0%	57.7%	22.9%	0.0%
7/30/2025	0.0%	0.0%	0.0%	0.0%	0.1%	6.9%	32.6%	45.5%	14.8%	0.0%
9/17/2025	0.0%	0.0%	0.0%	0.1%	4.2%	22.4%	40.3%	27.1%	5.9%	0.0%
10/29/2025	0.0%	0.0%	0.0%	1.3%	9.6%	27.7%	36.4%	20.7%	4.2%	0.0%
12/10/2025	0.0%	0.0%	0.5%	4.6%	16.7%	31.1%	30.3%	14.3%	2.5%	0.0%
1/28/2026	0.0%	0.1%	1.0%	5.9%	18.3%	31.0%	28.5%	13.0%	2.3%	0.0%
3/18/2026	0.0%	0.3%	2.0%	8.6%	21.0%	30.5%	25.1%	10.7%	1.8%	0.0%
4/29/2026	0.0%	0.4%	2.6%	9.6%	21.8%	30.0%	23.9%	9.9%	1.6%	0.0%
6/17/2026	0.1%	0.6%	3.1%	10.6%	22.5%	29.6%	22.9%	9.3%	1.5%	0.0%
7/29/2026	0.1%	0.7%	3.4%	11.1%	22.8%	29.3%	22.3%	8.9%	1.4%	0.0%
9/16/2026	0.1%	0.8%	3.7%	11.4%	23.0%	29.1%	21.9%	8.7%	1.4%	0.0%
10/28/2026	0.1%	0.7%	3.4%	10.7%	21.9%	28.5%	22.5%	9.9%	2.0%	0.1%
12/9/2026	0.6%	3.1%	9.8%	20.5%	27.7%	23.3%	11.5%	3.0%	0.4%	0.0%

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

March 15, 2025

44

March – 50 / 50 probability of a cut in the summer.

What is the likelihood that the Fed will change the Federal target rate at upcoming FOMC meetings, according to interest rate traders? Use CME FedWatch to track the probabilities of changes to the Fed rate, as implied by 30-Day Fed Funds futures prices.

CME FedWatch Tool – Aggregated

TARGET RATE PROBABILITIES AS OF February 15, 2024

FED FUND FUTURES												
ZQH5	ZQJ5	ZQK5	ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6
95.6700	95.6750	95.7350	95.8100	95.9150	96.0000	96.0650	96.1550	96.2250	96.2900	96.3250	96.3500	96.3700

	CME FEDWATCH TOOL - AGGREGATED MEETING PROBABILITIES				
MEETING DATE	325-350	350-375	375-400	400-425	425-450
3/19/2025	0.00 %	0.00 %	0.00 %	2.00 %	98.00 %
5/7/2025	0.00 %	0.00 %	0.00 %	28.76 %	71.24 %
6/18/2025	0.00 %	0.00 %	0.00 %	96.87 %	3.13 %
7/30/2025	0.00 %	0.00 %	32.00 %	68.00 %	0.00 %
9/17/2025	0.00 %	0.00 %	92.07 %	7.93 %	0.00 %
10/29/2025	0.00 %	22.00 %	78.00 %	0.00 %	0.00 %
12/10/2025	0.00 %	60.93 %	39.07 %	0.00 %	0.00 %
1/28/2026	0.00 %	72.00 %	28.00 %	0.00 %	0.00 %
3/18/2026	0.00 %	93.72 %	6.28 %	0.00 %	0.00 %
4/29/2026	2.00 %	98.00 %	0.00 %	0.00 %	0.00 %
6/17/2026	9.72 %	90.28 %	0.00 %	0.00 %	0.00 %
7/29/2026	14.00 %	86.00 %	0.00 %	0.00 %	0.00 %
9/16/2026	16.86 %	83.14 %	0.00 %	0.00 %	0.00 %
10/28/2026	8.00 %	92.00 %	0.00 %	0.00 %	0.00 %
12/9/2026	95.36 %	4.64 %	0.00 %	0.00 %	0.00 %

The Fedwatch tool's "Aggregated" view compares the rates implied by CME's Fed Funds futures with the current target rate range as set by the Federal Reserve. As such, it provides a view into the cumulative number of hikes or cuts that the market is pricing by a certain point in the future. This is provided in addition to the traditional "Conditional" view of probabilities, familiar to long-term users of the FedWatch tool.

Some indication for a summer 25 point drop in the summer, then another in the fall. Soft Q2 coming?

March – The aggregate tool is calling for a 25 point cut in June or July, then another one September or October.

This is an increase of two cuts this year from just one last month. **The Fed is more concerned about a slow down becoming visible in the second quarter.**

Canadian Charts

St Louis Fed has quite a number of charts of Canadian data !

Residential Property Prices

Unemployment rate

Consumer Price Index

Inverted Yield Curve

Gross Domestic Product

Cdn existing home sales

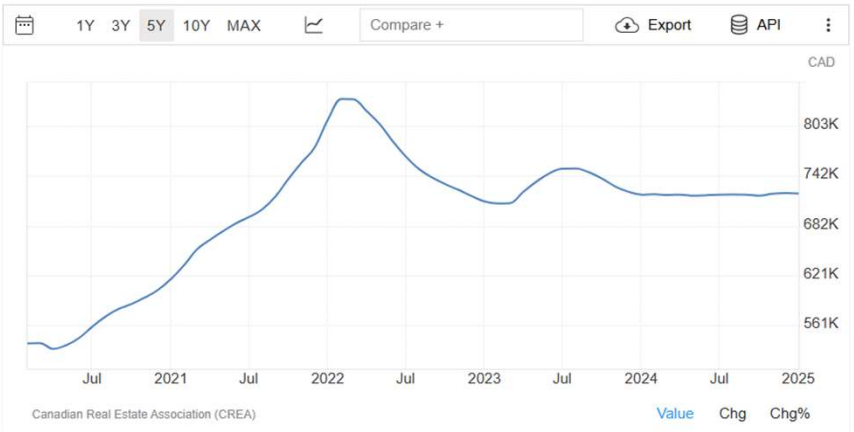
New Vehicle Sales

ST Louis Fed tracks a number of Canadian Metrics.

https://fred.stlouisfed.org/categories/32268

Average House Prices for Canada – No Update

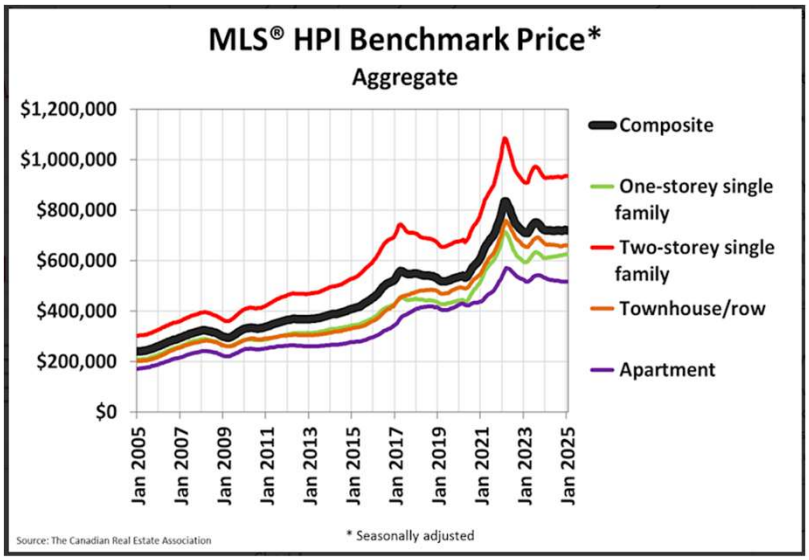
Average House Prices in Canada decreased to 720500 CAD in January from 721100 CAD in December of 2024. Average House Prices in Canada averaged 465661.41 CAD from 2005 until 2025, reaching an all time high of 834700.00 CAD in February of 2022 and a record low of 239800.00 CAD in January of 2005. source: Canadian Real Estate Association (CREA)



March – prices were flat all last year, and this month's number is no different. 3K wiggles either way are to be ignored !

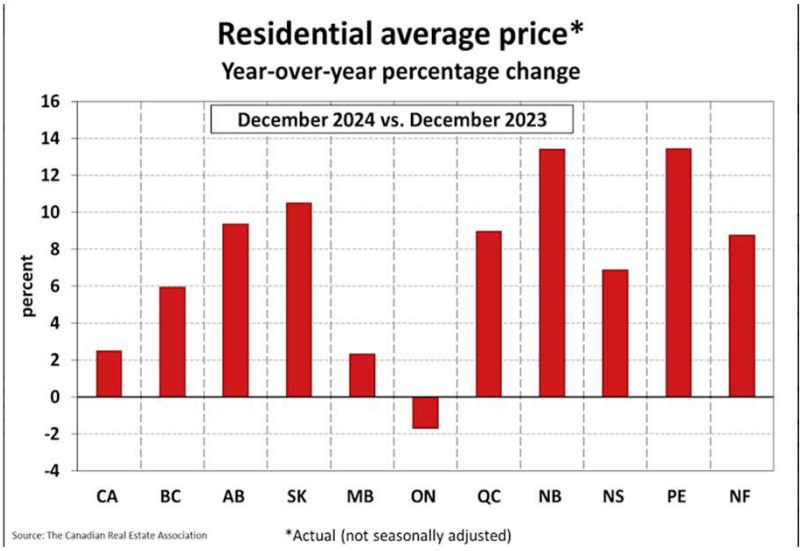
Source : Trading Economics

Average House Prices for Canada – cont.
March – No updates



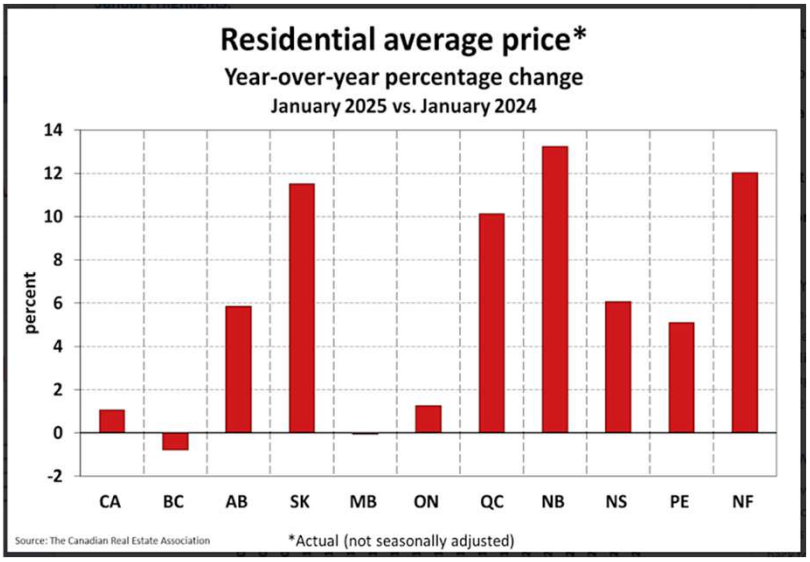
March – Quarterly report – no new data
Full report is here > https://creastats.crea.ca/en-CA/

Average House Prices for Canada – cont.
By Province – December – No New Data



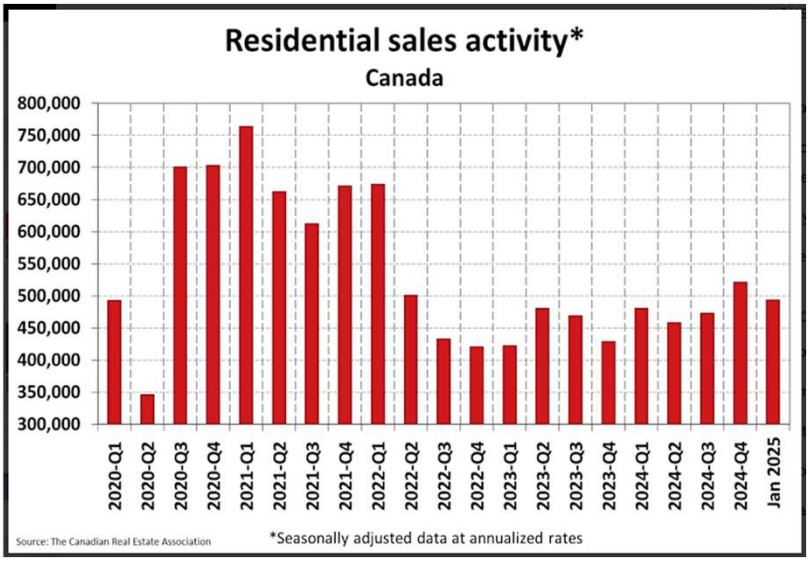
March – Quarterly report – no new data

Average House Prices for Canada – cont.
By Province – March – No New Data



March – Quarterly report – no new data

Home Sales Activity for Canada – No New Data



March – Quarterly report – no new data

This is from The Canadian Real Estate Association.

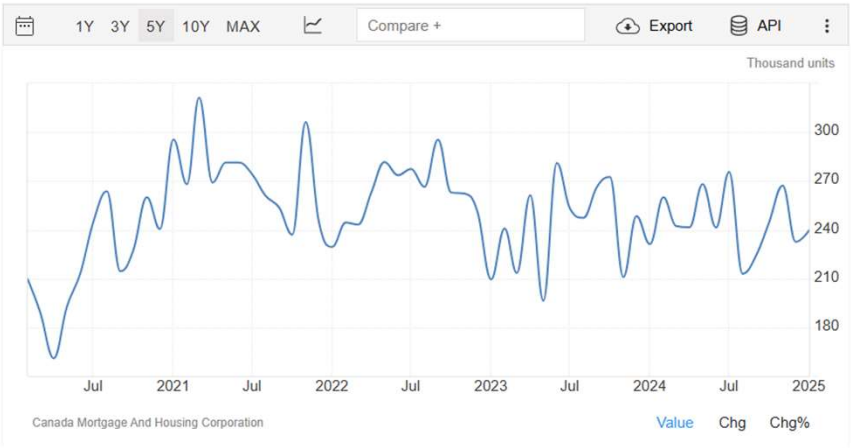
Housing Starts - % Change – Canada – No New Data

Housing starts in Canada increased by 3% month-over-month to 239,739 units in January 2025, below market expectations of 251,000 units, according to the Canada Mortgage and Housing Corporation. The seasonally adjusted annual rate (SAAR) of total urban housing starts in centers with populations of 10,000 or more increased by 3% to 220,643 units, driven by a 14.7% drop in multi-unit urban starts to 168,515 units and a 9.54% decrease in single-detached urban starts to 45,485 units. The SAAR estimate for rural starts stood at 19,096 units. Actual housing starts in centers with populations of 10,000 or greater were up 7% year-over-year in January 2025, with Montréal posting a 112% year-over-year increase, reflecting a recovery from historically low levels last year. In contrast, while Vancouver recorded a 37% increase, Toronto fell 41% from January 2024, driven by decreases in multi-unit starts. source: Canada Mortgage And Housing Corporation



March – No New Data

Housing Starts – 5 Year – Canada
6 Month Seasonally Adjusted Annual Rate – No New Data



march - Trading Economics – Big picture – No New Data

Housing Activity for GTA

View ~19,536 Home Listings in Toronto | Powered by Wahi

Greater Toronto Area (GTA) Housing Market Overview

DATA FOR FEBRUARY 2025

ALL PROPERTY TYPES	DETACHED	SEMI-DETACHED	FREEHOLD TOWNHOUSE	CONDO APARTMENT
$1,084,547 **Avg. Sold Price** 4.2% increase (1-month change) 2.2% decrease (12-month change)	$1,445,879 Avg. Sold Price 5.0% increase (1-month change) 0.2% increase (12-month change)	$1,079,996 Avg. Sold Price 3.1% increase (1-month change) 3.9% decrease (12-month change)	$991,066 Avg. Sold Price 0.7% increase (1-month change) 4.2% decrease (12-month change)	$688,055 Avg. Sold Price 2.6% increase (1-month change) 1.0% decrease (12-month change)
4,037 **Transactions (Buy/Sell)** 4.9% increase (1-month change) 28% decrease (12-month change)	1,706 Transactions (Buy/Sell) 8.0% increase (1-month change) 32% decrease (12-month change)	356 Transactions (Buy/Sell) 2% increase (1-month change) 23.1% decrease (12-month change)	404 Transactions (Buy/Sell) 1.2% decrease (1-month change) 27% decrease (12-month change)	1,225 Transactions (Buy/Sell) 5.5% increase (1-month change) 22.8% decrease (12-month change)

https://wowa.ca/toronto-housing-market

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

March 15, 2025

54

March – the above table is from the WOWA. They have about 4 million users, so their data should be decent.

Y/Y transactions are down sharply !

WOWA - Housing Activity for GTA

Single-Family Detached Home Prices in the GTA



Statistics for February 2025

Average Price:	$1,445,879	↑0.2% from Feb. 2024
Units Sold:	1,706	↓-32% from Feb. 2024
New Listings:	5,057	↑4.2% from Feb. 2024

Semi-Detached Home Prices in the GTA



Statistics for February 2025

Average Price:	$1,079,996	↓-3.9% from Feb. 2024
Units Sold:	356	↓-23.1% from Feb. 2024
New Listings:	798	↑8.9% from Feb. 2024

https://wowa.ca/toronto-housing-market

March – My traditional sources are slow to update.

Inventory is up, and sales are down !

WOWA - Housing Activity for GTA

Townhouse Prices in the GTA



Statistics for February 2025

Average Price:	$991,066	↓-4.2% from Feb. 2024
Units Sold:	404	↓-27% from Feb. 2024
New Listings:	1,076	↑5.9% from Feb. 2024

Apartment Prices in the GTA



Statistics for February 2025

Average Price:	$688,055	↓-1.0% from Feb. 2024
Units Sold:	1,225	↓-22.8% from Feb. 2024
New Listings:	4,082	↑7.6% from Feb. 2024

https://wowa.ca/toronto-housing-market

[Canadian Housing Market Report Feb. 20th, 2025 | Interactive Map - WOWA.ca]

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

March 15, 2025

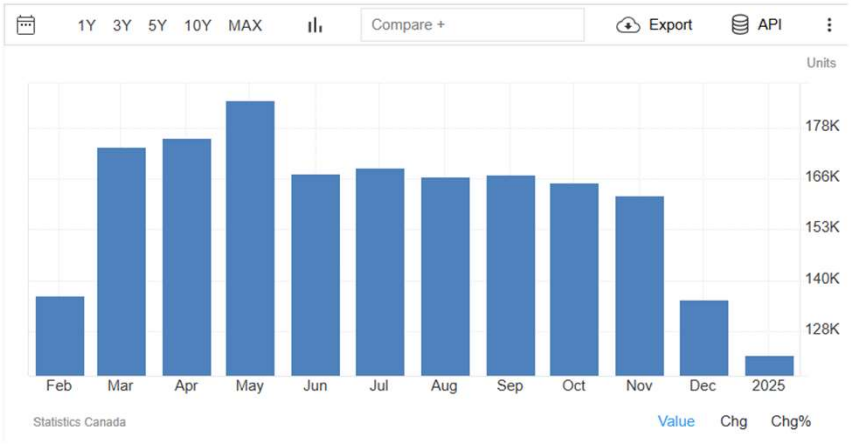
56

March – My traditional sources are slow to update.

There is lots of data to explore here as well.
https://wowa.ca/reports/canada-housing-market

New Vehicle Sales Activity for Canada

New Motor Vehicle Sales in Canada decreased to 121628 Units in January from 135511 Units in December of 2024. It is the lowest level in about a year. Car Registrations in Canada averaged 103929.07 Units from 1950 until 2025, reaching an all time high of 220858.00 Units in May of 2018 and a record low of 19807.00 Units in December of 1951. source: Statistics Canada

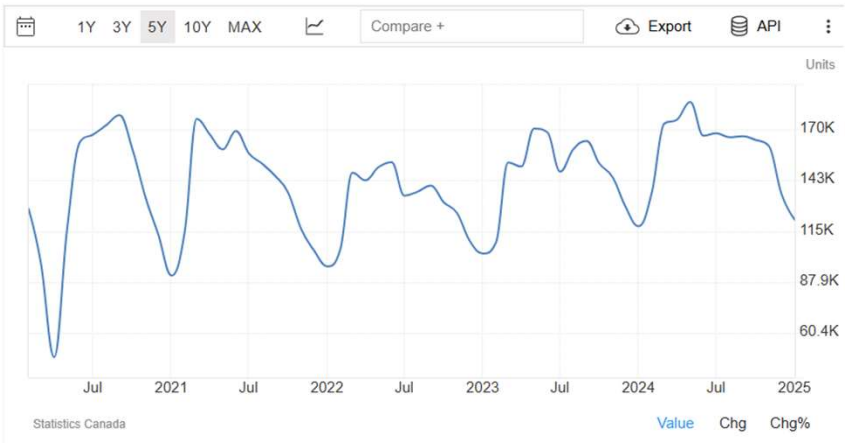


A January drop in sales is normal

March - Trading Economics – Every January sales drop. This is perfectly normal.

Next month is the one to watch. Does it continue with normal behavior or not.

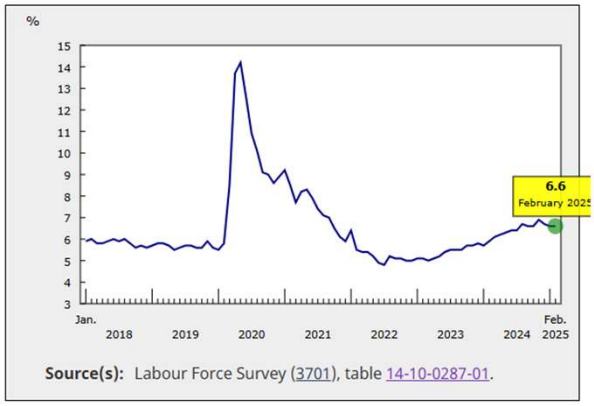
New Vehicle Sales Activity for Canada – 5 Year Chart



It is normal that sales decline near calendar year end !
Higher highs, and higher lows is a good thing !

March - Trading Economics – Sales are following their normal patterns.

Unemployment Rate for Canada



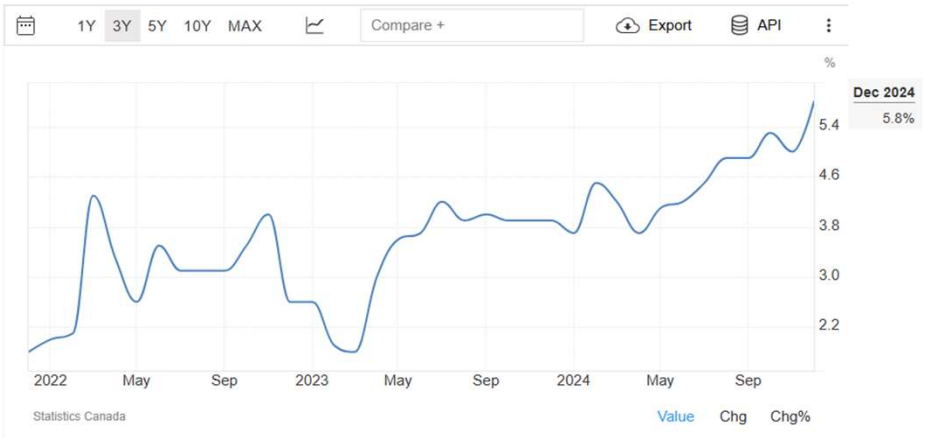
March – Unchanged from February

March - this month the StatsCan is more up to date.
And no, I did not deliberately lob off the date, that was the way it displayed on the website !

Source : StatsCan >> https://www150.statcan.gc.ca/n1/daily-quotidien/250307/dq250307a-eng.htm

Canada Average Weekly Earnings YOY – 3 Year Chart

Average weekly earnings of non-farm payroll employees in Canada rose by 5.8% year-on-year to $1,290.82 in December 2024, the most since March 2021, following a 5.0% year-over-year increase in November, with 17 of the 20 sectors reporting gains. The largest increases were recorded in mining, quarrying, and oil and gas extraction (+9.8% to $2,472); information and cultural industries (+9.4% to $1,828); educational services (+6.5% to $1,271) and health care and social assistance (+5.6% to $1,138). Conversely, earnings decreased in utilities (-2.3% to $2,069); forestry, logging and support (-0.4% to $1,411) and construction (-0.1% to $1,504). source: Statistics Canada

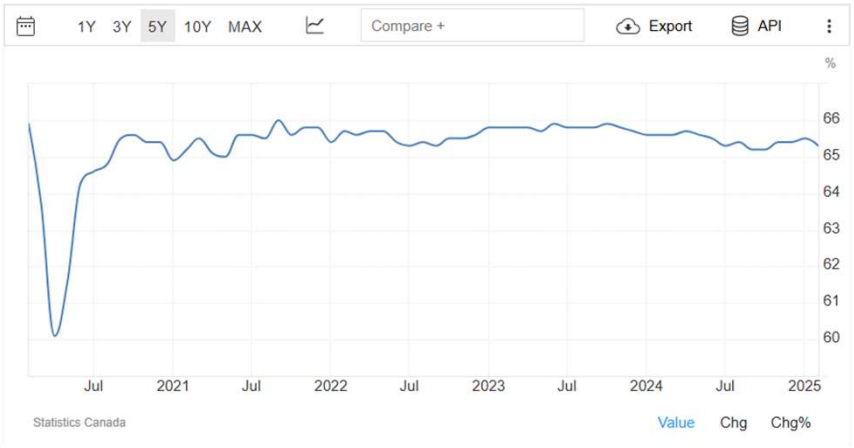


March - **December is the last reported month. This data is slow to update.**
Source is Trading Economics

There are LOTs of charts in this category on the Trading Economics website.
https://tradingeconomics.com/canada/wage-growth

Participation rate - Employed Persons for Canada

Labor Force Participation Rate in Canada decreased to 65.30 percent in February from 65.50 percent in January of 2025. Labor Force Participation Rate in Canada averaged 65.73 percent from 1976 until 2025, reaching an all time high of 67.70 percent in December of 2003 and a record low of 60.10 percent in April of 2020. source: Statistics Canada



Number of employed persons in Canada on a percentage basis

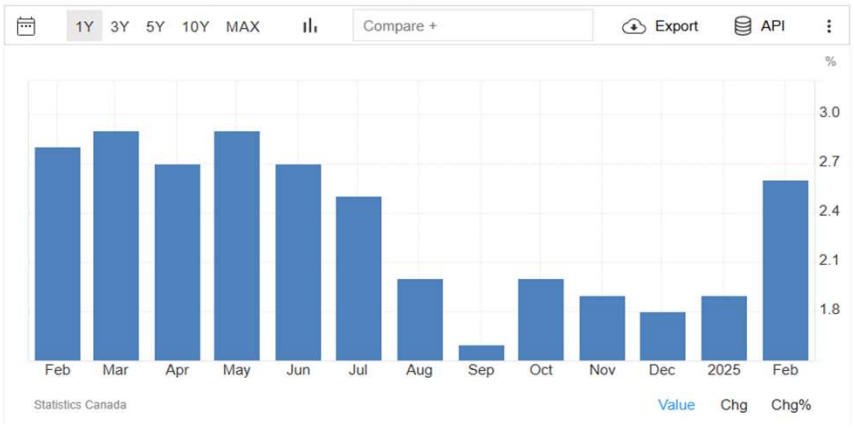
March – no meaningful change here.
This is also known as the Participation Rate.

Trading Economics > **https://tradingeconomics.com/canada/labor-force-participation-rate**

Details by age group are here >>
https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028702
The participation rates vary by age group. I would really like to see the 55 and over group broken into two pieces. 55 – 65, and 66 and over.

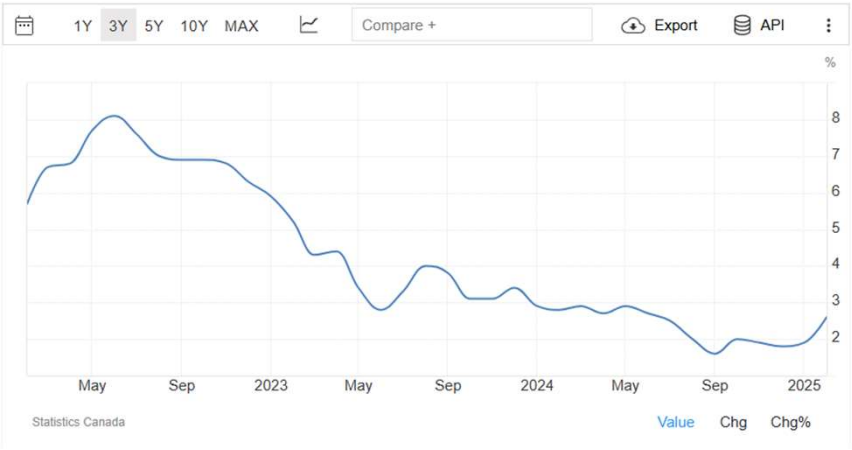
Consumer Price Index: Monthly Canada – March 18th Release

The annual inflation rate in Canada jumped to 2.6% in February of 2025 from 1.9% in the previous month, the highest in eight months, sharply above market expectations of 2.2% and ahead of the Bank of Canada's forecast of 2.5%. The surge was mostly owed to the end of goods and services tax (GST) and harmonized tax (HST) breaks halfway through the period, triggering sharp increases in the price of eligible goods. Consequently, inflation slowed sharply for restaurants (-1.4% vs -5.1% in January) and alcoholic beverages from stores(-1.4% vs -3.6%), driving the food subindex to rebound sharply (1.3% vs -0.6%). Prices also rebounded for clothing and footwear (1.4% vs -1.3%) and accelerated for recreation, education, and reading (3.7% vs 1.9%). From the previous month, the end of tax credits drove the CPI to jump 0.7%, the most since May 2022. source: Statistics Canada



March – I am not sure I agree with the assessment that the surge is due to the end of the GST holiday. That was on February 16th. GST holiday started December 14th. The lull in the data was last summer and into the fall. Normally, I present this as a line chart, but it is important to see the February data in isolation.
IMHO – there is some front end loading in price increases with the expectation of tariffs.

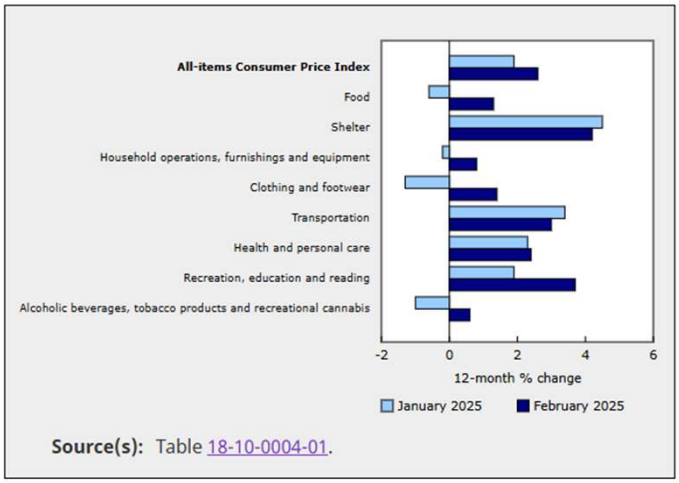
Consumer Price Index: 3 Year View Canada



March – With all the tariff noise, it may take some time for that to settle down. Once price increases are applied, businesses are reluctant to reduce them, unless unit sales drop too much, or inventory climbs above acceptable levels especially on the seasonal products that would have to be stored for another year. Season ending sales could get interesting.

We need a couple more months of data to see what is going on.

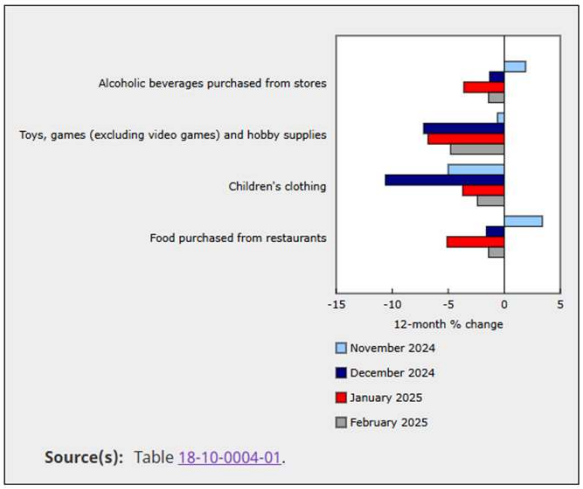
Consumer Price Index: Monthly Canada



The first Y/Y food drop since 2017, that happened last month, did not last long !
A 1.9% pop month over month ! Food is volatile, so conclusions can be challenging.

March – A number of categories popped higher relative to last month.
Source : StatsCan

Consumer Price Index: Monthly Canada



Source(s): Table 18-10-0004-01.

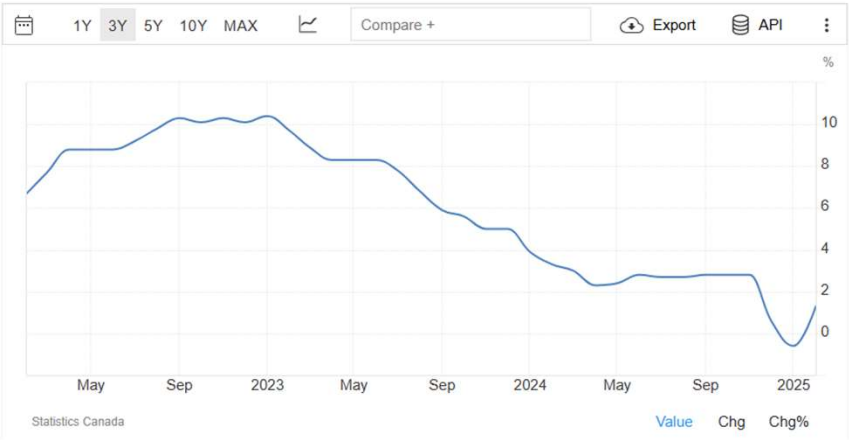
Since when does alcohol prices go down ? – There was some affect due to the GST holiday in restaurants, pubs, and bars.

March – I suppose squeezed consumers could trade down to cheaper alcohol.

A couple of these categories will be influenced by the GST holiday, therefore next month should see a jump higher.
Source : StatsCan

Consumer Price Index: Food – Feb 18th Release – 3 Year

Cost of food in Canada increased 1.30 percent in February of 2025 over the same month in the previous year. Food Inflation in Canada averaged 3.90 percent from 1951 until 2025, reaching an all time high of 20.18 percent in July of 1978 and a record low of -7.14 percent in December of 1952. source: Statistics Canada

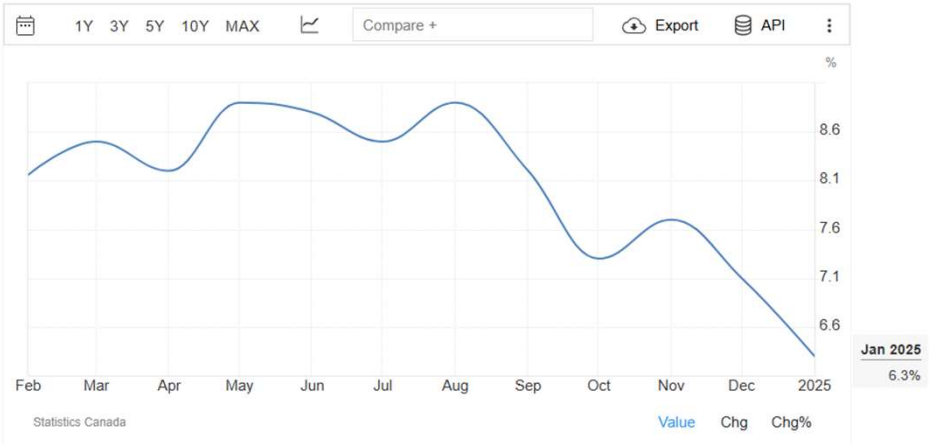


March – (StatsCan) – March 18th release.

https://tradingeconomics.com/canada/food-inflation

Consumer Price Index: Rent

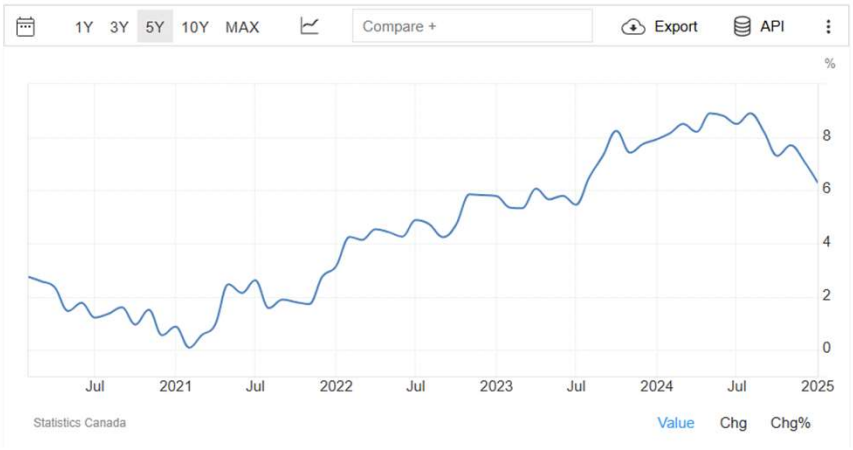
Rent Inflation in Canada decreased to 6.30 percent in January from 7.10 percent in December of 2024. Rent Inflation in Canada averaged 2.78 percent from 1951 until 2025, reaching an all time high of 10.27 percent in September of 1982 and a record low of 0.00 percent in September of 1961. source: Statistics Canada



March – At 6.3% Y/Y inflation, that is still a very stiff rate increase for renters !

https://tradingeconomics.com/canada/rent-inflation

Consumer Price Index: Rent – Jan 21st Release
Long Term View



March 18th release.

February – Long view – renters has a long way to go before their shelter cost growth rates come down to something more manageable.

https://tradingeconomics.com/canada/rent-inflation

Gasoline Prices – Canada Average



March – Nothing crazy going on here.
https://www.gasbuddy.com/can/on

Gas tools > Gas Price Charts, Choose Canada Average, and Canadian c/L

Interest Rates: Yields: 10-Year: Canada – Weekly Candles



March – Closed 3.04, barely budging from Feb 13th close at 3.1

Canada 10 Years / Canada 3 Months Government Bond spread

The Canada 10 Years / Canada 3 Months Government Bond Spread reached a maximum value of 201.8 bp (27 March 2022) and a minimum value of -205.6 bp (20 December 2023).

Available Data Source: from 17 April 2015 to 16 March 2025



March - close is 42.4bp UP 10.5 bp from the February close of 31.9bp

https://www.worldgovernmentbonds.com/spread/canada-10-years-vs-canada-3-months/

Canada 10 Years / Canada 3 Months Government Bond spread
Longer Term View



March – the longer view.

https://www.worldgovernmentbonds.com/spread/canada-10-years-vs-canada-3-months/

Real Gross Domestic Product for Canada – March - No New Data
BoC Survey Results

1.1 What is your forecast for real GDP growth (year-over-year percentage change) in Canada?

	GDP growth in Canada (year-over-year % change)	
	End of 2025 (n = 27)	End of 2026 (n = 26)
25th percentile of responses	1.5	1.7
Median of responses	1.8	1.9
75th percentile of responses	2.1	2.0

1.6 What is the probability of the Canadian economy being in a recession in each of the following individual time frames?*

	Probability of a recession in Canada (%)			
	In 0 to 6 months (n = 25)	In 6 to 12 months (n = 25)	In 12 to 18 months (n = 24)	In 18 to 24 months (n = 23)
25th percentile of responses	20	15	20	18
Median of responses	25	30	30	25
75th percentile of responses	35	35	35	33

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS
March 15, 2025
73

March – No New Data - The Market Participants Survey results are based on questionnaire responses from about 30 financial market participants.

Participants think the probability of recession is low, but certainly not zero !

Real Gross Domestic Product for Canada – March - No New Data
I found some interesting BoC Survey Results

Monetary policy

2.1 What is your forecast for the Bank of Canada's policy interest rate?

	Policy interest rate (%)			
	25th percentile of responses	Median of responses	75th percentile of responses	Number of responses
2025				
January	3.00	3.00	3.25	28
March	2.75	3.00	3.00	28
April	2.75	2.75	3.00	28
June	2.50	2.75	2.75	28
July	2.50	2.50	2.75	28
September	2.25	2.50	2.75	28
October	2.25	2.50	2.75	27
December	2.25	2.50	2.75	27

March – No New Data - The Market Participants Survey results are based on questionnaire responses from about 30 financial market participants.
They are expecting two more 25 point cuts this year.

Participants think the probability of recession is low, but not zero !

https://www.bankofcanada.ca/2025/02/market-participants-survey-fourth-quarter-of-2024/



March – down another penny from February, but holding in a range since late last December

Soft landing is a coin toss ?

Consumer sentiment and Manufacturing New Orders are areas to watch.

US economy – I see nothing to suggest it is in any trouble. Political noises likely to remain elevated.

Yield spreads are steady. The economy itself is pretty happy.

The lowering of Canadian Interest rates is improving its housing market, but it remains a buyers market, for those with the means.

Housing market is challenging on both sides of the border. US resales remain very poor. This does not seem to harming the larger economy.

Banks are well capitalized to weather repricing of mortgages. BoC reductions have achieved neutrality. 2025 likely sees 2, 25 point drops. 50 points would put retail 5 year mortgages close just above 4%.

Banks have been heavily building reserves for several years.

Total CPI is stabilizing near 2% target. Shelter inflation remains high.

Expected interest rate reductions will be helpful in Canada, US will reduce rates if economic deterioration becomes obvious.

I am expecting tariffs will be targeted, as Trump must save face and apply some. Universal unlikely to be applied. Canada, Mexico, EU and China are responding in kind specifically targeting Republican states and companies. CEOs are not happy!

March – BoC has been proactive bringing rates down. The number of future cuts likely will be data dependent.

White house threats of tariffs, with the exception of aluminum and steel so far have been avoided. Lots of huff and puff, but no clear direction.

Recession Risk Summary

- I look at all the data, and I see nothing material to suggest any significant trouble.
- Trumps on again off again tariffs are driving people crazy, but other than Steel and Aluminum, it's benign.
- CDN Inflation remains stabilized. Shelter costs remain high.
- US inflation is stable. There is nothing in the data to suggest tariffs on Chinese goods are hitting the consumer.
- Canadians with variable rate mortgages are seeing some relief. Renter increases still excessive.
- CDN Interest rate was just cut 25 points, is good for borrowers.
- Unemployment is steady.
- Food price increases are within normal ranges
- Gasoline prices are stable
- Stock Market is in a rough spot. Industry level breadth is very poor, SP500 is neutral, Trend is LOST
- US stock market health is usually negative in 1st year of a Republican Presidency.
- Canadian new vehicle registrations remain steady.
- Credit card default rates are declining, but amounts in default are rising.
- Canadian mortgage renewals are being helped with interest rate reductions. Canada is proactive.
- CAD is struggling, but so far, inflation is muted
- US interest rates likely get 25 point drop in the summer, then again late fall – THIS IS NEW.
- Expect some bumps, more mixed signals !
- Recessions tend to occur 5 to 7 months after the yield inversion fixes itself
- There is nothing to suggest a recession is on the horizon.


THAT'S IT FOR TODAY!
The End
RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS
March 15, 2025
78

RIVERSIDE'S DISCLAIMER

- All trading / investing comes with risk.
- The insights contained in this presentation do not constitute advice, rather are meant for educational purposes from which you may make more educated decisions taking into account your individual risk profile and needs for return.
- At Riverside, we assess probabilities using systematic quantitative methodology. We do not provide advice. There are no guarantees for positive return. All investing/trading is at your own risk.
- Riverside is about helping active and affluent investors learn how to make better decisions in financial markets.
- All charts shown in this broadcast have been referenced from stockcharts.com, Amibroker or eSignal unless otherwise noted.

Good investing is <u>not</u> an "event" like finding the next growth opportunity or catching the next market turn. Rather, good investing is a disciplined process that converts research and training into a well-tested methodology, and then makes a habit of following that approach day after day.

John P. Hussman, Ph.D
President, Hussman Strategic Advisors