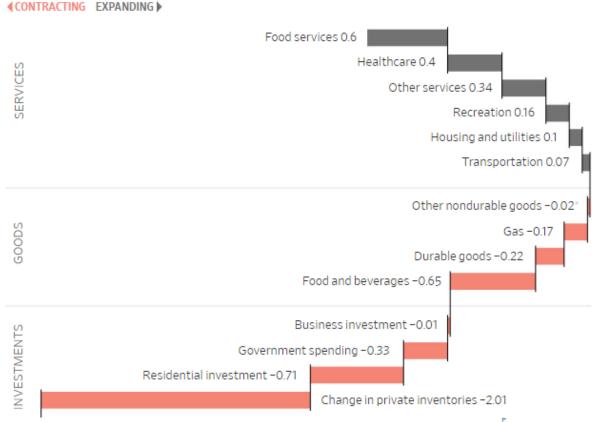
		<u>July 2022</u>	YTD	<u>1-Year</u>	3-Years	<u>5-Years</u>	10-Years
U.S. Large Cap Equities	S&P 500	9.22%	-12.58%	-4.64%	13.36%	12.83%	13.80%
U.S. Small Cap Equities	Russell 2000	10.44%	-15.43%	-14.29%	7.51%	7.12%	10.60%
Energy Infrastructure Equities	Alerian U.S. Midstream Energy	11.90%	25.28%	31.50%	9.67%	6.15%	-
U.S. Real Estate Equities	Dow Jones U.S. Select REIT	8.90%	-14.12%	-3.23%	4.94%	5.88%	7.33%
Global Equities	MSCI All Country World Index	6.98%	-14.61%	-10.48%	8.52%	7.86%	9.35%
International Developed Equities	MSCI EAFE	4.98%	-15.56%	-14.32%	3.16%	2.61%	5.79%
Emerging Market Equities	MSCI Emerging Markets	-0.25%	-17.83%	-20.09%	0.90%	0.95%	2.84%
U.S. Taxable Fixed Income	Bloomberg U.S. Aggregate	2.44%	-8.16%	-9.12%	-0.21%	1.28%	1.65%
U.S. Tax-Exempt Fixed Income	Bloomberg Municipal Aggregate	2.64%	-6.58%	-6.93%	0.43%	1.88%	2.49%
High Yield Fixed Income	Bloomberg U.S. Corporate High Yield	5.90%	-9.12%	-8.02%	1.95%	3.06%	4.87%
Floating Rate Loans	S&P/LSTA Leveraged Loan	2.12%	-2.53%	-0.71%	2.53%	3.20%	3.84%
International Fixed Income	Bloomberg Global Aggregate Ex-U.S.	1.92%	-14.88%	-18.45%	-4.24%	-1.90%	-0.97%

- Economic data released in July provided further evidence of global economic deceleration, but equities were broadly positive.
 - The U.S. economy contracted for the second consecutive quarter amid rising interest rates and high inflation (see next slide).
 - Against a lower-growth backdrop, U.S. equity indexes were positive, as markets began to price in future interest rate cuts.
 - Growth stocks performed better as long duration assets surged, and the growth-heavy S&P 500 Index recouped much of its 2022 losses.
 - Value also gained in July, returning 5.9%, while offering a considerably better valuation and yield proposition compared to growth.
 - The excellent energy infrastructure equity return was the result of fears that Russia could shut off supply to Europe.
 - High inflation in Europe prompted the European Central Bank to deliver its first interest rate hike in more than a decade, which lifted the Eurozone out of negative borrowing rates.
 - Emerging markets equities were the laggard in July, declining 0.3%, as China's real estate weakness turned the EM Index negative.
- Bond markets were broadly positive in July, as slightly lower yields pushed prices upwards.
 - Government bonds performed very well in July, with the 10-year Treasury gaining nearly 4.0%, in anticipation of a policy pivot.
 - Investment grade bonds gained approximately 2.5% (taxable/municipal combined), as yields declined about 0.45%.
 - High yield corporate bonds led all fixed income categories with a gain of 5.9%; default rates remained low at 1.1% (average is 3.6%).
 - Leveraged loans gained 2.1% in July. As opposed to traditional bonds, the yields also increased as coupons on these floating rate loans reset with higher short-term interest rates. & Independence

- The U.S. economy contracted for the second consecutive quarter, which is generally considered the definition of a recession.
- Economic growth is gauged in terms for gross domestic product, or GDP, which is a broad measure of goods and services production.
- The root cause of the lower growth was a slower pace of inventory restocking, which subtracted 2.01% from second quarter GDP.
- On a positive note, the unemployment rate, a key barometer of economic health, held firm at a low 3.6% for the past four months.
- According to Goldman Sachs, "We're seeing a sharp and necessary deceleration rather than a recession."
- The NBER (National Bureau of Economic Research) will likely need to see declining employment, personal income and corporate profits before it declares a recession.
- The chart below shows the percentage point contribution to GDP change for the select categories for the second quarter.





- Equity valuations increased slightly as expectations for higher interest rates lessened, and recession fears moderated.
- Comparing relative forward P/E ratios of value and growth stocks showed that value was "cheap" and growth was "expensive". (Left Chart)
- The return gap between value and growth narrowed in July, as growth continued to trade well over its historical average.
- Bonds broadly gained in July as yields moved lower. (Right Chart)
- Leveraged loans returned 2.1% in July, improving the year-to-date return to negative 2.2%. (Right Chart)
- The yield for leveraged loans increased 1.6% in July to 8.8%. (Right Chart).

Current P/E vs. 20-year avg. P/E						
	Value	Blend	Growth			
Large	13.7	17.4	23.8			
Mid	13.5	15.7	22.2			
Small	14.7	18.6	25.2 / 35.4			
Cur	rent P/E as	% of 20-yea	ır avg. PE			
	Value	Blend	Growth			
Large	Value 99.9%	112.3%	128.3%			
Mid Large						
Ī	99.9%	112.3%	128.3%			

,	YTD		
	Value	Blend	Growth
Large	-7.3%	-12.8%	-19.6%
Mid	-9.3%	-14.0%	-22.5%
Small	-9.3%	-15.5%	-21.7%
:	Since mark	et low (Mar	ch 2020)
	Value	Blend	Growth
Large	90.5%	90.9%	89.7%
Mid	112.3%	99.1%	72.1%
Small	118.5%	93.1%	67.7%

	Yield		Return			
U.S. Treasuries	8/1/2022	12/31/2021	2022 YTD	Avg. Maturity	Correlation to 10-year	Correlation to S&P 500
2-Year	2.90%	0.73%	-2.72%	2 years	0.68	-0.30
5-Year	2.66%	1.26%	-5.37%	5	0.92	-0.27
TIPS	3.02%	-1.04%	-4.88%	10	0.58	0.27
10-Year	2.60%	1.52%	-8.36%	10	1.00	-0.24
30-Year	2.92%	1.90%	-19.55%	30	0.93	-0.24
Sector						
U.S. Aggregate	3.37%	1.75%	-7.71%	8.6	0.85	0.12
IG Corps	4.28%	2.33%	-11.07%	11.6	0.47	0.44
Convertibles	7.83%	3.66%	-15.85%	-	-0.20	0.87
U.S. HY	7.67%	4.21%	-8.84%	5.9	-0.17	0.74
Municipals	2.77%	1.11%	-6.42%	13.0	0.43	0.16
MBS	3.30%	1.98%	-5.51%	7.1	0.79	0.00
ABS	4.32%	1.96%	-2.55%	2.4	-0.39	0.61
Leveraged Loans	8.81%	4.60%	-2.21%	2.6	0.00	0.20

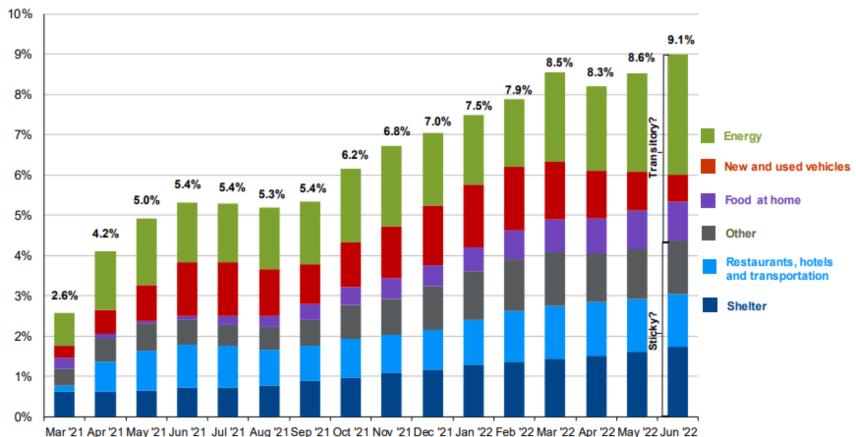


U.S. Inflation July 31, 2022

- Headline CPI increased 9.1% from a year ago in June, which was above the 8.8% Dow Jones estimate.
- Excluding food and energy, Core CPI increased 5.9%, compared to the 5.7% estimate.
- Inflation surged amid higher prices for gasoline, groceries and rents (shelter).
- After adjusting for inflation, hourly wages for workers fell 1% in June, and were down 3.6% from one year prior.

Contributors to headline inflation

Contribution to y/y % change in CPI, non seasonally adjusted



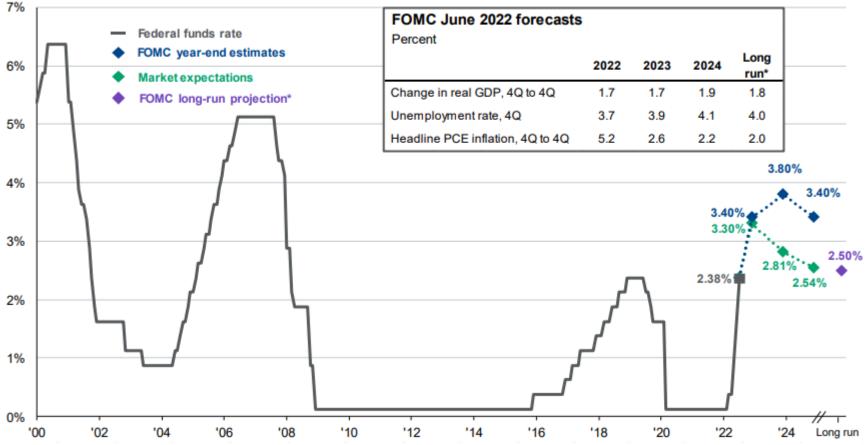
U.S. Interest Rates July 31, 2022

- The U.S. Federal Reserve raised interest rates by 0.25% in March, 0.50% in May and 0.75% at both the June and July meetings.

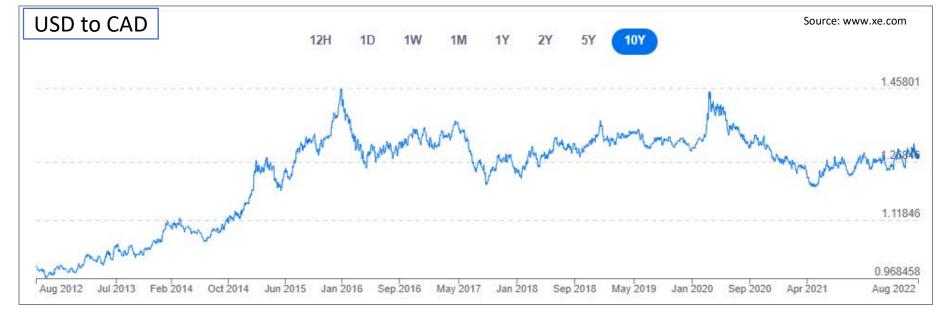
- The Fed's next opportunity to raise interest rates will be in September, when the FOMC convenes on the 21st and 22nd.
- The market expectation for Fed Funds rates decreased to 3.30% by the end of 2022, with a peak of 3.5% in early 2023.
- The longer-term market expectation for Fed Funds rates decreased to 2.81% by the end of 2024.

Federal funds rate expectations

FOMC and market expectations for the federal funds rate



- The U.S. dollar weakened 0.6% against the Canadian dollar in July, ending the month with an exchange rate of 1.2798.
- In terms of growth, recent data shows the Canadian economy was neutral in May, with real GDP flat following a 0.3% expansion in April.
- During the month, growth in service-producing industries was offset by a decline in goods-producing industries.
- The largest declines were reported in the construction and manufacturing sectors, while transportation and warehousing gained the most.
- According to Statistics Canada, preliminary data indicates second quarter GDP at 4.6% annualized, which is an improvement from the first quarter that saw GDP at 3.1%.
- The Bank of Canada is expected to raise interest rates when it meets on September 7th, as inflation remains at a 39-year high of 8.1%.



Date Range	USD to CAD	+/-
YTD	1.2655-1.2798	+1.1%
1-Year	1.2478-1.2798	+2.6%
3-Years	1.3142-1.2798	(2.6%)

\$USD 1,000,000
=
\$CAD 1,279,874
@ 1.2798
(7/31/2022)

CAD Profile				
*Inflation Rate	8.1% (June 2022)			
Interest Rate	2.50% (July 2022)			
Information	http://www.bankofcanada.ca			





The larger chart below shows the historical price of copper, which is displayed in U.S. dollars per pound. The chart provides 25 years of price history. The embedded chart provides a zoomed-in image of daily copper price movement over the past 12 months.

Copper prices were down \$0.86 per pound year-to-date, or 19.3% (7/31/2022). Since the \$2.10 low point on March 23, 2020, prices have risen \$1.50 per pound, or 71%.

The price of copper was \$3.60 per pound as of July 31, 2022.



Copper Price Outlook

Copper price movement was volatile in July, falling during the first half of the month and gaining during the second half. Copper prices declined nearly 5% during the month, as the second half recovery could not offset the steeper decline at the start of the month.

Copper futures have since moved lower, trading at around \$3.50 per pound, as escalating tensions between the U.S. and China prompted a broad decline in risk assets. Weak manufacturing data in primary countries including the U.S., China and the Eurozone area has put additional downward pressure on metals markets.

Looking ahead, guidance suggests copper will trade at \$3.50 USD per pound by the end of the third quarter, and at \$3.28 in 12 months' time.



The primary chart below shows the historical monthly price of aluminum for the past 25 years.

The secondary chart shows the daily price movement over the past 12 months.

Prices are in USD per tonne (London Metal Exchange).

Aluminum prices were down \$311 per tonne year-to-date, or 11.1% (7/31/2022). Since the \$1,472 low point on April 6, 2020, prices have risen \$1,025, or 69.6%. The all-time record price of aluminum was \$3,849 per tonne in March of 2022.

3750
3600
3750
3600
3250
3000
2750
3000
2750

Supp Nov 2022 Mar May Jul ©

The price of aluminum was \$2,497 per tonne as of July 31, 2022.



Aluminum Price Outlook

Aluminum prices moved incrementally higher in July after falling precipitously between March and June.

Aluminum futures have since moved lower and are currently trading at around \$2,440 per tonne amid outlooks for lower demand and strong inventories in China.

Looking ahead, base metals are expected to remain under pressure amid a worsening macroeconomic backdrop, an expectation for slowing demand and new data from the Shanghai Metals Market that showed aluminum inventories rose by 7,000 tonnes over the past week.

Amid slowing demand and rising supply, aluminum is forecasted to trade at \$2,435 USD/tonne by the end of the third quarter. The 12-month forecast shows aluminum trading at \$2,259.



- The price of a barrel of crude oil decreased \$11.16 in July, or 10%, to \$98.62.
- The average price of regular unleaded gasoline was \$4.21 per gallon at the end of July, which marked a decline of \$0.63 per gallon, or 13%.

Change in production and consumption of liquid fuels

Production, consumption and inventories, millions of barrels per day

Production	2019	2020	2021	2022*	2023*	Growth since '19
U.S.	19.5	18.6	18.9	20.3	21.4	9.9%
OPEC	34.6	30.7	31.7	34.2	34.8	0.7%
Russia	11.5	10.5	10.8	10.8	9.3	-19.1%
Global	100.3	93.9	95.6	100.3	101.6	1.3%
Consumption						
U.S.	20.5	18.2	19.8	20.5	20.8	1.3%
China	14.0	14.4	15.3	15.4	16.1	15.1%
Global	100.8	91.8	97.4	99.6	101.6	0.8%
Inventory Change	-0.5	2.0	-1.7	8.0	0.0	

Oil prices ended July trading below \$100 per barrel after declining \$23.49, or 19.2%, from the most recent high (set on June 8th).

Prices have continued to trend lower, with futures currently trading at around \$94 per-barrel, as investors await the outcome of an OPEC+ meeting. Expectations are that the Organization will maintain its policy of modest supply increases amid capacity constraints.

Concerns that a global slowdown will lower demand for oil have gripped the energy market over the past two months. Futures markets indicate crude oil is expected to trade at \$102 per barrel by the end of the third quarter, and \$114 per barrel in 12 months' time.

