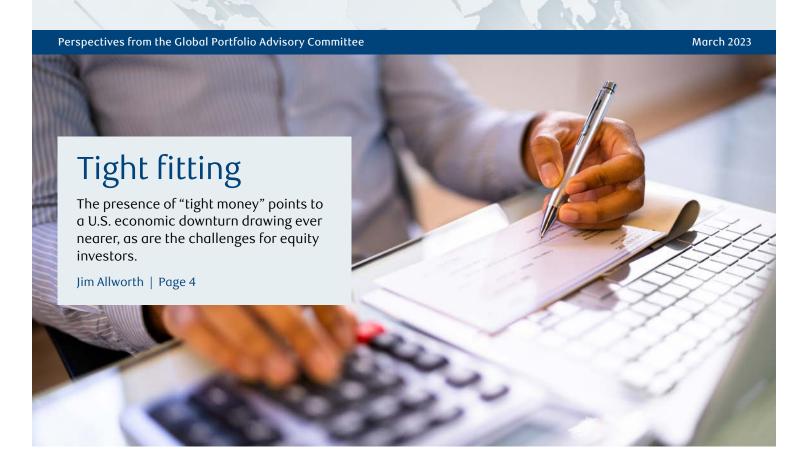
Insight





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GLOBAL FIXED INCOME

Making the most of second chances



U.S. RECESSION SCORECARD History would argue a U.S. recession will arrive later this year

For important and required non-U.S. analyst disclosures, see page 14. Produced: March 1, 2023 3:23 pm ET; Disseminated: March 1, 2023 4:00 pm ET

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Insight

March 2023

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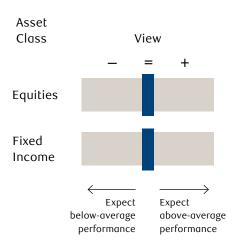
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RBC'S INVESTMENT Stance

Global asset class views



(+/=/-) represents the Global Portfolio Advisory Committee's (GPAC) view over a 12-month investment time horizon.

- + Overweight implies the potential for better-than-average performance for the asset class or for the region relative to other asset classes or regions.
- = Market Weight implies the potential for average performance for the asset class or for the region relative to other asset classes or regions.
- Underweight implies the potential for below-average performance for the asset class or for the region relative to other asset classes or regions.

Source - RBC Wealth Management

Equities

- Market sentiment shifted in February. After beginning with a confidence that inflation was getting under control and believing the Fed could soon pivot, investors started worrying about an extension to the U.S. interest hiking cycle. Inflation is proving stubborn and the labor market too buoyant. These factors, combined with an uninspiring Q4 earnings reporting season and further erosion of consensus estimates, caused U.S. equities to pull back.
- Though the U.S. economy, and the consumer in particular, remains resilient so far, we believe higher interest rates and higher lending standards will eventually start to bite. A recession late this year appears more likely than not.
- In this uncertain environment, with financial markets prone to crosscurrents, we believe a neutral position in global equities is warranted. We would be biased to quality, defensive sectors, with a preference for dividend payers.

Fixed income

- Government bond yields are on the rise once again as volatility remains elevated. The average yield on the Bloomberg Global Aggregate Bond Index currently sits at 3.8%, just shy of its 2022 high of 4.0%, which remains the high-water mark for global bond yields since 2008. Though central banks largely remain hawkish, we continue to believe that rate hike cycles for many major global central banks will come to an end in the first half of 2023, meaning that sovereign yields—at least further out on the yield curve—have likely already peaked, leading us to lock in yields where possible.
- We remain Market Weight U.S. fixed income with yields near multiyear highs and hold a positive outlook for bank-issued preferred shares and U.S. high-yield corporate debt amid a resilient U.S. economy. We also maintain a positive outlook for U.S. government debt on attractive yields and downside protection should a recession materialize later in the year.
- We reiterate our Market Weight stance in global fixed income, with a Market Weight allocation to credit.

GLOBAL Equity



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Tight fitting

- With the Fed pursuing one of its most aggressive rate hike cycles in history, domestic credit conditions have become progressively more restrictive. We believe this "tight money" will eventually help push the U.S. economy into recession.
- Recessions typically take a toll on corporate earnings, on investors' confidence in the future, and on share prices. That challenging period for stock markets usually begins a few months before the associated recession gets underway.
- We think the equity rally that began in October could have weeks or months further to run. But the highly probable arrival of a recession later in the year argues for an emphasis on quality, sustainable dividends, and a reduced exposure to sectors and companies that are highly sensitive to the business cycle.

With just two exceptions, every U.S. recession for more than a hundred years has been triggered by the arrival of tight monetary conditions. In our view, so-called "tight money" has two components that are typically present simultaneously in the run-up to a recession.

The first is prohibitively high interest rates—high enough to induce those would-be borrowers who have a choice to defer their borrowing plans. It just doesn't make sense to buy that building (or piece of equipment, or business, or new car, or home, or holiday) if one has to commit to a loan at such a punishing rate.

The second factor is an aggressive hiking of lending standards by banks, accompanied by a growing reluctance to lend even to those borrowers who meet the elevated standards.

Both of these factors have undergone a massive negative shift over the past 12 months. A year ago the federal funds rate was at just 0.25%, where it had been from the onset of the pandemic. Today it is at 4.75%—one of the steepest increases in history. Meanwhile, over the same interval, the majority of U.S. banks transitioned from a stance of repeatedly lowering lending standards to one that has featured four successive quarters of raising

Equity views

Region	Current
Global	=
United States	=
Canada	=
Continental Europe	-
United Kingdom	-
Asia (ex Japan)	=
Japan	+

+ Overweight; = Market Weight; – Underweight Source - RBC Wealth Management

lending standards on almost every category of business and consumer loan.

The Fed's January Senior Loan Officer Survey also revealed that a majority of banks are reporting reduced demand for commercial and industrial loans as well as for credit card and car loans, presumably in response to much higher interest rates. Despite the very large interest rate increases already in place, there appears to be still more to come with the Fed guiding toward a rate of greater than 5% by this summer.

We think that will be enough to ensure that a U.S. recession is underway by sometime in the second half of the year. One of the seven leading indicators of recession we report on (see our <u>U.S. Recession Scorecard on page 9</u>) is the gap

GLOBAL EQUITY

Net percentage of domestic banks tightening standards for commercial and industrial loans to small firms



Source - RBC Wealth Management, U.S. Federal Reserve; quarterly data through December 2022

between the fed funds rate and the year-over-year nominal growth rate of GDP—that's the growth rate including inflation, which differs from the data normally featured in government reports that excludes inflation. Over the last 75 years it's always been the case that the fed funds rate has moved above the nominal GDP growth rate either just before or just as a recession is getting underway.

The nominal year-over-year growth rate of U.S. GDP peaked at a startling 17.4% in Q2 2021—aided mightily by comparison with the pandemic-induced deep decline in the same quarter a year earlier. Since then, the year-over-year growth rate sagged to 7.4% as of Q4 2022. By Q3 of this year we expect it will be at or below 5%, putting the fed funds rate in the ascendant and strongly suggesting a recession would then soon be underway.

While it appears likely Fed rate hikes may peak this summer, we do not see any rate cutting materialising before late in the year. All major central banks including the Fed have alluded to the danger of cutting before inflation has been convincingly contained.

Changes in monetary policy in either direction are thought by many economists to produce effects in the economy six to 12 months later. Just

as last year's sharp sequence of rate hikes has only recently produced signs of economic slowdown, we believe that any start to rate cutting in late 2023 would be unlikely to turn the trajectory of the U.S. economy higher before the middle of 2024 at the earliest.

Meanwhile, consensus earnings estimates for 2023 for the S&P 500 have already come down from \$252 per share back in May of last year to just \$222 recently. But as the expected recession draws ever nearer and eventually gets underway, earnings estimates and reported earnings themselves are likely to weaken even further. For now, we think the equity rally that began last October could have further to run. But at some point, the seeming inevitability of a recession arriving later this year would usher in another challenging period for equities. While equity markets usually turn higher before the associated recession ends, in our view it would be too much to expect a new bull market to emerge before that coming recession has even begun.

Invested but cautious

Since all U.S. recessions have been associated with equity bear markets, we expect the advance in equity prices that has been underway since

GLOBAL EQUITY

U.S. recessions and global equity bear markets go hand in hand



Source - Standard & Poor's, Toronto Stock Exchange, FactSet; quarterly data through 12/31/22, shown on a logarithmic scale, indexed to December 1959 = 100.

October, no matter how far it goes, eventually will give way to another period of falling share prices. Such an eventuality would reflect the declining expectations for earnings and eroding confidence in the future that typically comes with a period of economic retrenchment.

In our view, equities should be at no more than their long-term target weight in a global balanced portfolio.

We believe leaning more heavily toward quality and sustainable dividends and away from specific individual company risks that may come home to roost in a recession continues to look like a good approach in a world where the timing of the economic cycle remains an open question.

Fixed income



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Making the most of second chances

Just when they thought they were out, the economic data pulls them back in.

The feel-good vibes of January for global bond markets fueled by improving inflation data appears to have been short-lived. Through the first month of the year, the Bloomberg Global Aggregate Index was off to its best start in at least 30 years, posting gains of over 4% in just one month. But through February, those returns have now been completely wiped out.

Resurgent economic activity and a subsequent resurgence in global bond yields have driven bond prices lower on fears that global central banks still have more work to do. This just one month removed from when markets thought policy rates might have already peaked for the current rate hike cycle, and that central banks would soon move to the sidelines to assess the work they have done to this point.

To be sure, the end games for central bank rate hikes remain in sight. While markets have modestly repriced for higher peak policy rates in the coming months, we think the biggest factor driving yields higher is the idea that rates will indeed need to remain at

Fixed income views

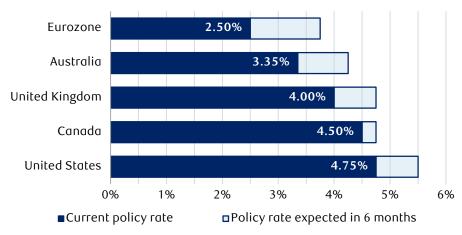
Region	Gov't bonds	Corp. credit	Duration
Global	=	=	5–7 yr
United States	-	=	3–7 yr
Canada	=	+	5–7 yr
Continental Europe	=	=	5–7 yr
United Kingdom	=	=	5–7 yr

+ Overweight; = Market Weight; – Underweight Source - RBC Wealth Management

elevated levels for an extended stretch of time.

For example, in the U.S., after the Federal Reserve's February 1 policy meeting, markets foresaw the Fed pausing rate hikes below 5% in the first half of the year, before pivoting to multiple rate cuts in the back half. Now the expectation is that rates will ultimately reach 5.5% and remain above 5% into 2024. And whether the Fed shares that view will soon become clear with the March 21–22 meeting where policymakers will update their economic and rate

As central banks race to their respective finish lines, some are seen as closer than others



Source - RBC Wealth Management, Bloomberg, 6-month implied rates based on overnight index swap data

GLOBAL FIXED INCOME

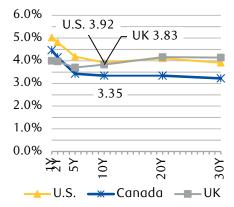
projections for the first time since December 2022, when they expected to pause at 5.25%.

For investors who may have feared that they missed out on the opportunity last fall to put higher yields into their bond portfolios, we think this is another window to do just that. Five-year sovereign bond yields for the U.S., Canada, the UK,

and Germany have reached 4.2%, 3.5%, 3.6%, and 2.6%, respectively—nearly matching the post-pandemic highs of last fall.

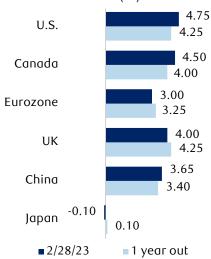
Amid renewed rate hike fears, we would take the long-term view and make the most of a second chance to add income at levels that have been fleeting over the past two decades.

Sovereign yield curves



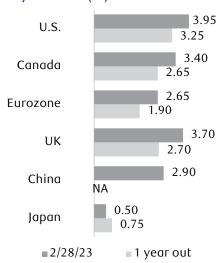
Source - Bloomberg; data through 2/28/23

Central bank rates (%)



Source - RBC Investment Strategy Committee, RBC Capital Markets forecasts, Global Portfolio Advisory Committee, RBC Global Asset Management

10-year rates (%)



Note: Eurozone utilizes German Bunds. Source - RBC Investment Strategy Committee, Global Portfolio Advisory Committee, RBC Global Asset Management

u.s. recession Scorecard

History would argue a U.S. recession will arrive later this year

Three of our seven leading indicators of U.S. recession continue to signal an economic downturn is on the way. Two others are still firmly in expansionary territory but are moving (slowly) in the wrong direction. The two employment-related indicators—weekly unemployment claims and the unemployment rate—are at or near their cycle lows and not yet threatening to generate a negative signal.

The indicators that have flipped to recessionary status so far point toward a recession getting underway by late Q2 or early Q3 2023, in our view.

Yield curve (10-year to 1-year Treasuries)

The position of short-term interest rates relative to long-term rates—a.k.a. the shape of the yield curve—has been the most reliable leading indicator of a U.S. recession. Before the start of every recession for the past 75 years, the 1-year Treasury yield has risen above the 10-year yield, indicative of the arrival of tighter credit conditions. About a year after this crossing occurs, on average, a recession begins.

The 1-year yield rose above the 10year yield decisively last July. The negative gap has widened further over the intervening seven months.

The history of this indicator suggests the U.S. economy will be in recession by summer 2023.

A majority of U.S. banks continue to raise lending standards (see the January 2023 Fed Senior Loan Officer Opinion Survey released on February 6), extending a trend begun about a year ago. This has added further weight to the inverted yield curve's signal that credit conditions have become more restrictive. Loan payment delinquencies and default rates have been mostly rising but remain low by historical standards. Therefore, credit could remain accessible, albeit more expensive, for some time yet.

ISM New Orders minus Inventories

The difference between the New Orders and the Inventories sub-indexes of the ISM Purchasing Managers' Index has turned negative near the start of most U.S. recessions. But it has also registered occasional false positives—signaling a recession was imminent when none

U.S. recession scorecard

	Status		
Indicator	Expansionary	Neutral	Recessionary
Yield curve (10-year to 1-year Treasuries)			✓
Unemployment claims	✓		
Unemployment rate	✓		
Conference Board Leading Economic Index			✓
Free cash flow of non-financial corporate business	✓		
ISM New Orders minus Inventories			✓
Fed funds rate vs. nominal GDP growth	✓		

U.S. RECESSION SCORECARD

subsequently arrived. Moreover, this indicator only relates to activity in the manufacturing sector (some 15% of the U.S. economy) and is derived from a survey rather than hard data. Therefore, we view this as a corroborative indicator—one to pay attention to if other longer-term indicators are implying a recession is on the way. It has been negative since May 2022 from which point it has steadily worsened. This measure has never reached this depth before without a recession eventually following.

Conference Board Leading Economic Index

Historically, this series has given reliable early warnings of recession. When the index has fallen below where it was a year earlier, a recession has always followed—usually two to three quarters later.

This indicator turned decisively negative in Q3 2022, shifting it to the red column on our scorecard. It strongly suggests a U.S. recession will be underway by Q2 2023.

Unemployment claims

This series set its monthly low, so far, for this cycle back in March 2022 at 178,000. The cycle low for claims has typically been registered about 12 months before the start of the next recession. So, if no lower reading is posted in the coming months, its history would suggest a recession could get underway by spring of this year.

As it happens, new monthly claims sagged sharply in January (down to 192,000) getting much closer to the cycle low posted last March. They look to have stayed at about the same level through February. If a new low for claims were to be posted in the coming months then this particular "clock" would have to be reset, pushing out the expected start date of the coming recession. However, RBC Capital Markets, LLC Chief U.S. Economist Tom Porcelli points out that seasonal adjustment

factors for employment data are suspect around this time of the year because of the usually large number of short-term jobs created leading up to Christmas and the shedding of those jobs early in the new year. Christmas hiring last year was unusually subdued, meaning postholiday layoffs (and claims) were too. February and March data may bring clarity to this topic.

Unemployment rate

The unemployment rate set a new five-decade low of 3.4% in January.

The unusually large number of net new jobs in the nonfarm payroll report looks to have been the biggest contributing factor. But the seasonality factors referred to above with respect to claims may have had similar distorting effects on the jobs data.

In our view, a move above 4.0% for the unemployment rate would signal a recession is on the way. Once that signal is given, on average, it has been eight to nine months from the lowest monthly reading until a recession gets underway, although there have been several instances where the time gap was only two to three months.

As for the rest ...

Neither the free cash flow of nonfinancial corporate business nor the fed funds rate vs. nominal GDP growth appear close to crossing the threshold into a recessionary reading, although in both cases the positive gap looks to be narrowing.

Weighing up the current positioning of all seven indicators and projecting their likely paths over the next couple of quarters continues to point to a growing probability the U.S. will enter recession sometime late in the first half or in Q3 of 2023, in our view. However, absent some notable weakness in the employment data in the coming months, the start date could easily move out later into the second half.

Forecasts

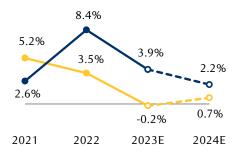




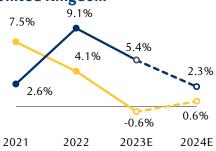
Canada



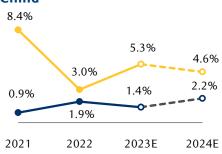
Eurozone



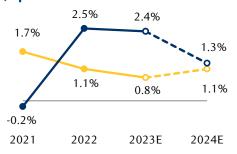
United Kingdom







Japan



---- Real GDP growth

Inflation rate

 $Source-RBC\ Investment\ Strategy\ Committee,\ RBC\ Capital\ Markets,\ Global\ Portfolio\ Advisory\ Committee,\ RBC\ Global\ Asset\ Management,\ Bloomberg\ consensus\ estimates$

Market Scorecard

Data as of February 28, 2023

Equities

February proved to be a challenging month for global equity markets, with the S&P 500, Dow Jones, and Hang Seng declining most.

Bond yields

Global bond yields rose amid continued economic uncertainty. German bond yields rose 0.49% in February.

Commodities

Gold, silver, and copper saw price declines, with silver falling 11.9%.

Currencies

The U.S. dollar weakened against the British pound, euro, and Japanese yen.

Equity returns do not include dividends, except for the Brazilian Ibovespa. Equity performance and bond yields in local currencies. U.S. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/USD is the exception). Currency returns quoted in terms of the first currency in each pairing.

Examples of how to interpret currency data: CAD/USD 0.73 means 1 Canadian dollar will buy 0.73 U.S. dollar. CAD/USD -7.1% return means the Canadian dollar has fallen 7.1% vs. the U.S. dollar during the past 12 months. USD/JPY 136.17 means 1 U.S. dollar will buy 136.17 yen. USD/JPY 18.4% return means the U.S. dollar has risen 18.4% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 2/28/23

Inday (local currency)	Level	1 month	YTD	12 month
Index (local currency) S&P 500	3,970.15	-2.6%	3.4%	-9.2%
		-2.6% -4.2%		-3.6%
Dow Industrials (DJIA) Nasdaa	32,656.70	-4.2%	-1.5% 9.4%	-16.7%
Russell 2000	11,455.54	-1.1%	7.7%	-7.4%
	20,221.19	-2.6%	4.3%	-4.3%
S&P/TSX Comp FTSE All-Share				
	4,304.48	1.1%	5.6%	3.5%
STOXX Europe 600	461.11	1.7%	8.5%	1.8%
EURO STOXX 50	4,238.38	1.8%	11.7%	8.0%
Hang Seng	19,785.94	-9.4%	0.0%	-12.9%
Shanghai Comp	3,279.61	0.7%	6.2%	-5.3%
Nikkei 225	27,445.56	0.4%	5.2%	3.5%
India Sensex	58,962.12	-1.0%	-3.1%	4.8%
Singapore Straits Times	3,262.63	-3.1%	0.3%	0.6%
Brazil Ibovespa	104,931.93	-7.5%	-4.4%	-7.3%
Mexican Bolsa IPC	52,758.06	-3.3%	8.9%	-1.2%
Bond yields	2/28/23	1/31/23	2/28/22	12 mo. chg
U.S. 2-Yr Tsy	4.816%	4.201%	1.432%	3.38%
U.S. 10-Yr Tsy	3.920%	3.507%	1.825%	2.10%
Canada 2-Yr	3.791%	3.752%	1.435%	2.36%
Canada 10-Yr	3.173%	2.916%	1.813%	1.36%
UK 2-Yr	3.689%	3.468%	1.039%	2.65%
UK 10-Yr	3.826%	3.332%	1.410%	2.42%
Germany 2-Yr	3.137%	2.651%	-0.531%	3.67%
Germany 10-Yr	2.651%	2.286%	0.135%	2.52%
Commodities (USD)	Price	1 month	YTD	12 month
Gold (spot \$/oz)	1,826.92	-5.3%	0.2%	12 month -4.3%
Gold (spot \$/oz) Silver (spot \$/oz)	1,826.92 20.91	-5.3% -11.9%	0.2% -12.7%	12 month -4.3% -14.5%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton)	1,826.92	-5.3% -11.9% -2.7%	0.2% -12.7% 7.0%	12 month -4.3% -14.5% -9.8%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl)	1,826.92 20.91	-5.3% -11.9%	0.2% -12.7%	12 month -4.3% -14.5%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl)	1,826.92 20.91 8,951.00	-5.3% -11.9% -2.7%	0.2% -12.7% 7.0%	12 month -4.3% -14.5% -9.8%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl)	1,826.92 20.91 8,951.00 77.05	-5.3% -11.9% -2.7% -2.3%	0.2% -12.7% 7.0% -4.0%	12 month -4.3% -14.5% -9.8% -19.5%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index	1,826.92 20.91 8,951.00 77.05 83.89	-5.3% -11.9% -2.7% -2.3% -0.7%	0.2% -12.7% 7.0% -4.0% -2.4%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index Currencies	1,826.92 20.91 8,951.00 77.05 83.89 2.75	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index	1,826.92 20.91 8,951.00 77.05 83.89 2.75 447.04	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3% -5.7%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6% -5.0%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index Currencies U.S. Dollar Index CAD/USD	1,826.92 20.91 8,951.00 77.05 83.89 2.75 447.04 Rate 104.8690 0.7328	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3% -5.7% 1 month 2.7% -2.5%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6% -5.0% YTD 1.3% -0.7%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9% 12 month 8.4% -7.1%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index Currencies U.S. Dollar Index CAD/USD USD/CAD	1,826.92 20.91 8,951.00 77.05 83.89 2.75 447.04 Rate 104.8690 0.7328 1.3647	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3% -5.7% 1 month 2.7% -2.5% 2.6%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6% -5.0% YTD 1.3% -0.7% 0.7%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9% 12 month 8.4% -7.1% 7.7%
Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index Currencies U.S. Dollar Index CAD/USD USD/CAD EUR/USD	1,826.92 20.91 8,951.00 77.05 83.89 2.75 447.04 Rate 104.8690 0.7328 1.3647 1.0576	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3% -5.7% 1 month 2.7% -2.5%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6% -5.0% YTD 1.3% -0.7%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9% 12 month 8.4% -7.1%
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Gold (spot \$/oz) Silver (spot \$/oz) Copper (\$/metric ton) Oil (WTI spot/bbl) Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Agriculture Index Currencies U.S. Dollar Index CAD/USD USD/CAD EUR/USD GBP/USD AUD/USD	1,826.92 20.91 8,951.00 77.05 83.89 2.75 447.04 Rate 104.8690 0.7328 1.3647 1.0576	-5.3% -11.9% -2.7% -2.3% -0.7% 2.3% -5.7% 1 month 2.7% -2.5% 2.6% -2.6%	0.2% -12.7% 7.0% -4.0% -2.4% -38.6% -5.0% YTD 1.3% -0.7% 0.7% -1.2%	12 month -4.3% -14.5% -9.8% -19.5% -16.9% -37.6% -13.9% 12 month 8.4% -7.1% 7.7% -5.7%
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