

As earnings go, so goes the market

Fresh off a market bounce that was partly sparked by better-than-feared Q2 earnings reports, investors should consider where U.S. corporate profits could be headed next year.

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It's a question of timing



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Flying blind



**U.S. RECESSION
SCORECARD**
Trouble with the curve

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Produced: August 5, 2022 11:17 am ET; Disseminated: August 5, 2022 12:50 pm ET

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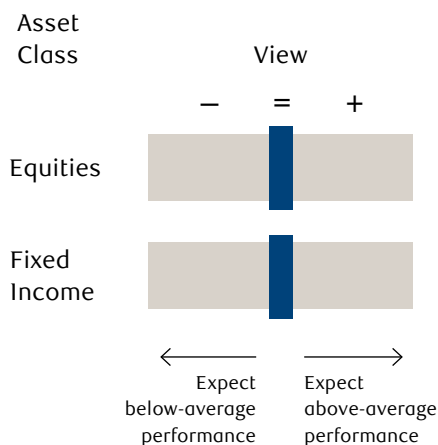
One of our most reliable indicators of U.S. recession—the yield curve—has flipped to negative and is now strongly suggesting a recession is on the way. Most others on the scorecard remain positive but less decidedly so than was true a few months ago.

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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

- Equity markets have bounced nicely off their mid-June lows on better-than-feared Q2 corporate earnings reports and as sovereign bond yields, especially Treasuries, receded from recent highs. We think many of this period's unique headwinds have already been priced into equity markets—as long as central banks don't slam on the brakes too hard by raising interest rates much higher than conditions warrant, and as long as inflation doesn't linger at elevated levels for a prolonged period.
- But some range-bound trading and more volatility may be in order for the remainder of the year. With two negative quarters of U.S. GDP growth in the books, Europe increasingly flashing recessionary impulses, and China's ongoing strict measures to fight COVID-19, equity markets will likely be attentive to forthcoming economic and earnings data.
- Our Market Weight (neutral) recommendation for U.S. and global equities is designed to balance recession risks with the possibility that ebbing inflationary pressures and slowing growth could provoke a change of heart on the part of the Fed and other central banks as early as the first half of next year.

FIXED INCOME

- Government bond yields have likely peaked for the year, in our view. After closing as high as 3.47% in June, the benchmark 10-year Treasury note traded to a yield as low as 2.68% in July. While elevated volatility could put levels slightly north of 3.00% back in play, we believe that 3.47% will ultimately prove to be the high water mark for this year—and perhaps this economic cycle. Despite persistently high inflationary pressures, yields will likely be anchored lower by growing recession risks prompting an early end to the Fed's rate hike cycle and a likely shift to rate cuts as early as next year, according to interest rate futures pricing.
- We previously shifted our duration positioning to a modestly long profile as Treasury yields broke north of 3.00%, and maintain that positioning as we believe Treasury yields have already peaked. We also reduced our allocation to high-yield corporate debt in July to Underweight from Overweight, reallocating up the credit quality ladder into investment-grade corporate bonds based on our assessment that credit valuations were too rich relative to growing recession risks, and we maintain that view.
- We maintain our Market Weight in global fixed income, with a Market Weight allocation to corporate credit via investment-grade corporate bonds and bank-issued preferred shares, with Underweights to high-yield corporates and international bonds.

MONTHLY
Focus



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As earnings go, so goes the market

Fresh off a market bounce that was partly sparked by better-than-feared Q2 earnings reports, investors should consider where U.S. corporate profits could be headed next year. While we think the bulk of market risks are in the rearview mirror, it may take more time to reveal whether the economic and earnings vulnerabilities have been fully incorporated into stock prices.

Key points

- **Given the very real economic headwinds, consensus S&P 500 earnings forecasts seem too rosy. They assume steady increases, reaching \$245 per share for full-year 2023, despite deteriorating leading economic indicators.**
- **The good news is we don't think institutional investors' expectations are so lofty. Their healthy skepticism leads us to believe that at least some degree of earnings pessimism has been factored into the market.**
- **But investors should consider other potential outcomes, including RBC Capital Markets' much more conservative \$212 per share 2023 forecast and the profit declines normally associated with recessions. Either of these scenarios could bring forth more market volatility.**

The U.S. equity market has already factored in a lot of bad news so far this year: a spike in inflation to its highest level in 40 years; the start of the Fed's most aggressive rate hike campaign since the early 1980s; weakening domestic and global economic activity; skepticism about corporate earnings growth; military hostilities in Ukraine; commodity price spikes related to Western sanctions on Russia; the first stage of a European energy crisis; and renewed supply chain and growth concerns stemming from China's strict measures to control COVID-19.

So it's little wonder that the S&P 500 and Nasdaq Composite dropped 23 percent and 32 percent, respectively, from the start of the year through mid-June, before bouncing nicely on better-than-feared Q2 earnings results and as Treasury yields backed off of their recent peak levels.

The S&P 500 has rebounded off its mid-June low (YTD % change)



Source - RBC Wealth Management, Bloomberg; daily data through 8/1/22

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As earnings go, so goes the market

While the worst blows to the equity market seem like they are in the rearview mirror, we question whether an outright decline in corporate profits, typically associated with recession periods, has been fully priced into the S&P 500 and other major indexes.

When the Federal Reserve hikes interest rates, there is normally a lag of some months before higher borrowing costs begin to weigh on U.S. economic activity; any additional weakness in the consumer and service segments of the economy could pose challenges for S&P 500 earnings growth in coming quarters. With two consecutive quarters of GDP declines already in the books, and risks of an official broad-based recession having risen, we think it prudent for investors to weigh various earnings scenarios—including the typical impact of an economic contraction on corporate profits.

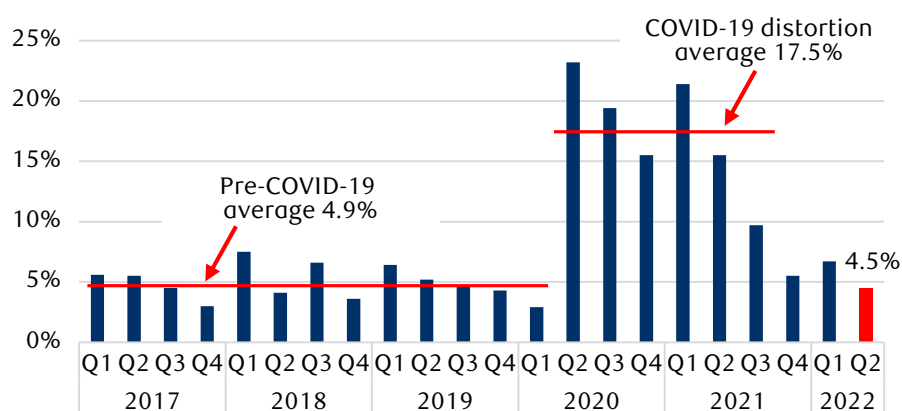
Q2 earnings season provides some hints

First things first: Consider the developments during the ongoing Q2 earnings season, as there are signals about how the earnings trajectory could unfold in future quarters. With 64 percent of S&P 500 companies having reported Q2 results so far...

- Earnings growth is pacing at 8.1 percent year over year, higher than the 5.5 percent consensus forecast at the start of earnings season. S&P 500 profit margins have pulled back 4.8 percent year over year (-9.8 percent excluding Energy).
- Many companies have posted strong results, and some have benefited from pricing power due to inflation. However, there also have been high-profile misses and/or reduced forward guidance from the likes of Allstate, AT&T, Capital One Financial, Intel, IBM, JPMorgan Chase, Meta Platforms (Facebook), Procter & Gamble, Verizon, and Walmart, among others. Big misses happened during the Q1 reporting season as well.
- The earnings surprise level (the amount by which S&P 500 earnings growth exceeds the consensus forecast) has dropped back near the pre-pandemic average; this is to be expected.

Earnings beats have moderated to a more normal level

Historical S&P 500 quarterly earnings beat rate and thus far for Q2 2022 (percentage point beat above the consensus forecast)



Source - RBC Wealth Management, national research correspondent, Refinitiv I/B/E/S, FactSet; data as of 8/2/22. Q2 2022 data (red vertical bar) is preliminary.

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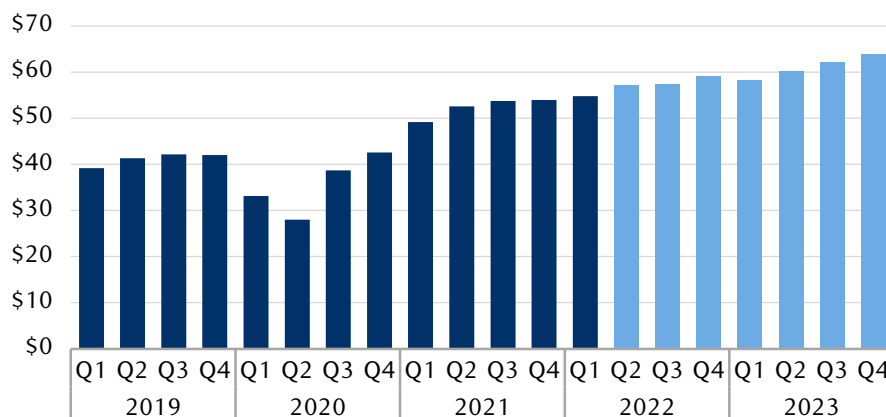
Overall, we view this as a solid earnings season thus far, especially given the headwinds. But when margins compress and high-profile earnings misses mount in a variety of sectors for two straight quarters, this typically signals that analysts' estimates have become loftier and more challenging to clear, and/or that the earnings growth cycle is entering a later, more mature phase. We think all of these factors are in play, and are signs the growth cycle is losing momentum. This is actually normal given the more challenging economic backdrop.

Are consensus earnings estimates too high?

It's notable that the consensus earnings forecasts of Wall Street industry analysts for 2022 and 2023 assume earnings will steadily increase. It's as if the tumultuous events of the past months hadn't happened or would have no consequences for profits going forward. We think the 2023 consensus estimate assumes a soft landing for the U.S. economy—in other words, no recession.

Are earnings estimates too optimistic?

S&P 500 quarterly earnings per share: actual in dark blue, consensus estimates in light blue



Source - RBC Wealth Management, Refinitiv I/B/E/S; data as of 8/2/22

Is this an all-clear signal? Not so fast—there are a few complicating factors to consider.

Since the global financial crisis in 2008 and 2009, company management teams have become more cautious with their forward earnings estimates. They have little incentive to go out on a limb, especially when economic prospects become more uncertain. And compared to years ago, a higher proportion of companies are reluctant to disclose their forecasts beyond the next quarter, let alone for the next year. This means Wall Street industry analysts have less formal corporate guidance to work with than they used to. Consequently, when the economy wobbles and weakens, as it's doing now, we think consensus estimates become less useful as guideposts.

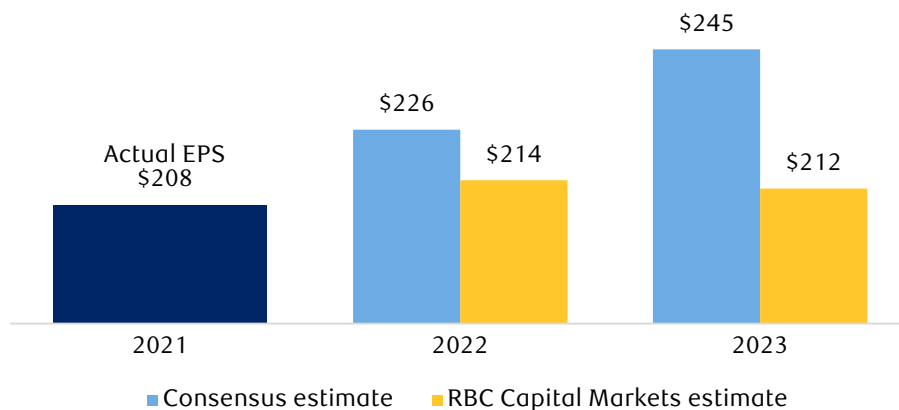
Based on the wide range of research we monitor from internal and external equity market strategists, anecdotal evidence leads us to believe that institutional investors—portfolio managers who oversee mutual funds, pension funds, and hedge funds—are not confident in the

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RBC's earnings estimates are much more conservative

S&P 500 EPS: actual and estimates



Source - Refinitiv I/B/E/S, RBC Capital Markets U.S. Equity Strategy; data as of 8/2/22

current consensus forecasts. We think their expectations, collectively, lie somewhere between the consensus forecasts and the recently revised RBC Capital Markets estimates, which are much more conservative.

In terms of the market, we think it's actually good news that institutional investors are skeptical of the consensus forecasts, because it suggests the S&P 500 is already discounting earnings growth that is less robust than those levels. Institutional investors' doubts about earnings growth likely contributed to the market selloff from April to mid-June, meaning some degree of earnings pessimism has been factored into stock prices.

It's worth taking a closer look at RBC Capital Markets estimates, especially the 2023 earnings-per-share (EPS) forecast of \$212, as it assumes that earnings basically go nowhere from 2021 to 2023.

Lori Calvasina, head of U.S. equity strategy at RBC Capital Markets, LLC, derived this estimate by taking into account a number of inputs, including both corporate fundamentals and macroeconomic factors. Her 2023 forecast assumes, first of all, that S&P 500 revenues keep growing, but that profit margins take a hit later this year and next year. It also assumes the U.S. economy comes close to contracting in Q4 2022 on a year-over-year basis, then experiences sluggish growth of one percent to two percent in 2023, and that inflation comes down from its peak but remains elevated for much of next year. Calvasina anticipates the Fed will start cutting interest rates in the first half of next year.

Following a strong 12.3 percent bounce off its mid-June low, the S&P 500's price-to-earnings (P/E) ratio now stands at 19.4x based on Calvasina's 2023 estimate. While this isn't overly expensive, in our view, it is not inexpensive and is above the historical average. The S&P 500's forward P/E multiple has averaged 16.2x over the past 10 years and 15.3x since 1990.

Profits normally retreat during recessions

When considering earnings scenarios, we also find it informative to review historical earnings trends during previous economic downturns that were officially declared to be recessions by the National Bureau of Economic Research. Regardless of whether the present episode ultimately receives

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the official title, RBC Capital Markets, LLC's Chief U.S. Economist Tom Porcelli says, "[things are already feeling recessionary.](#)"

Surrounding the previous 11 recession periods since the 1950s, RBC Global Asset Management found that S&P 500 earnings fell 23.6 percent, on average. But there are nuances.

Excluding the two periods associated with unique financial system turmoil (1990, 2007) that caused overall S&P 500 earnings to decline severely, the average retrenchment was 18.9 percent. We think there are legitimate reasons to set aside these two periods: there are currently no signs of financial system stress, according to a wide range of measures; and U.S. bank balance sheets appear sturdy enough to withstand the increase in loan losses that accompanies most recessions.

If we focus on just the four recession periods associated with inflation shocks (1953, 1973, 1980, 1981), we see an average earnings decline of 17.7 percent. Because some companies are exhibiting inflation-related pricing power during this earnings cycle even as the economy slows, thus maintaining strong revenue growth, we think these periods are useful guideposts. Accordingly, investors should not rule out the possibility that earnings could retreat 10 percent or more from peak to trough, similar to prior inflationary periods.

S&P 500 earnings retreated in each of the prior 11 U.S. recessions

Periods that coincided with inflationary shocks highlighted in red

Recession start	Earnings peak	Earnings trough	Earnings decline duration (months)	Earnings peak per share	Earnings trough per share	EPS change peak to trough
July 1953	Dec. 1950	Dec. 1953	36	\$2.8	\$2.5	-11.6%
Aug. 1957	Feb. 1956	March 1959	37	\$3.6	\$2.8	-23.4%
April 1960	June 1960	June 1961	12	\$3.6	\$3.0	-14.6%
Dec. 1969	April 1969	June 1970	14	\$6.1	\$5.1	-16.2%
Nov. 1973	Jan. 1975	Feb. 1976	12	\$9.6	\$7.6	-21.6%
Jan. 1980	July 1980	Aug. 1981	13	\$15.6	\$13.7	-11.9%
July 1981	Aug. 1982	July 1983	11	\$16.3	\$12.1	-25.8%
July 1990	Aug. 1989	May 1992	33	\$25.7	\$15.5	-39.7%
March 2001	Sept. 2000	March 2002	18	\$55.8	\$41.3	-25.9%
Dec. 2007	Aug. 2007	Oct. 2009	26	\$89.8	\$45.1	-49.8%
Feb. 2020	Jan. 2020	Feb. 2021	12	\$152.5	\$122.8	-19.5%
Average			20	\$34.7	\$24.7	-23.6%
Median			14	\$15.6	\$12.1	-21.6%

Source - RBC Global Asset Management

When might the earnings peak arrive? It could happen in the current Q2 reporting period, or during the Q3 or Q4 reporting seasons, or even early next year, depending on when and how economic activity decelerates.

Calvasina has modeled a full-blown recessionary scenario in which the economy contracts for several quarters on a year-over-year basis, but at a milder rate than it did during the three most recent recessions. In that case, she forecasts that S&P 500 earnings would fall to \$195 per share in 2023. This estimate is within the zone of previous peak-to-trough earnings retrenchments during inflationary recession periods.

MONTHLY FOCUS

As earnings go, so goes the market

Uncertain, but not unmanageable

In summary, while we think the bulk of the equity selloff and market risks are likely behind us, it may take more time to reveal whether the economic and earnings vulnerabilities have been fully incorporated into stock prices.

The good news for investors is we don't think that the market is currently assuming the lofty consensus earnings forecast for 2023 will play out, and instead seems to be expecting a less-rosy scenario.

We believe Calvasina's much more conservative \$212 per share estimate for 2023 leaves little room for upside. Basically, her earnings estimates call for range-bound market action through the end of this year, with some downside risk.

Investors should also consider the possibility that a full-blown recession could cause a bigger retrenchment in earnings, similar to those that have occurred during previous inflation-driven recession periods.

At this stage, we recommend maintaining U.S. equity exposure at the Market Weight level. Many of the risks seem to be reflected in stock prices, but investors should bear in mind that there could be more volatility or downside as the economy finds its path and the corporate earnings picture becomes clearer.

GLOBAL Equity



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It's a question of timing

Essentially, our view on the outlook for global equity markets has not changed from that laid out in our [Midyear Outlook](#). Equity markets are likely to continue to correct or consolidate the very large gains posted in 2020–2021 until a catalyst arrives to revive investor optimism. With recession risks rising, the only catalyst strong enough to propel the market sustainably into new high ground looks to be the Fed and some other central banks reversing course and cutting rates. We think the conditions that might make that possible won't be in place before next year.

Europe appears to be staring at a recession immediately ahead, if not already underway. In China, renewed COVID-19 shutdowns have taken a bigger toll on GDP than generally expected. A full re-opening there would run into slumping foreign demand from Europe, North America, emerging economies, and parts of Asia.

In the U.S. (and Canada) the yield curve has inverted as short-term interest rates are now higher than long-term rates. Inversion of the yield curve has always correctly signalled a recession is on the way—usually within 11–13 months (see update on [page 14](#)). However, since the beginning of the year, the stock market has been behaving as though the recession had already arrived. We expect the question of when (and if) a recession will arrive to remain an open, hotly contested one for some time.

Meanwhile, the readings of intense investor pessimism that prevailed through May and June, as is usually the case, could not be sustained. The market has chosen to rally even as some weaker economic data has been arriving. But most market commentators remain unconvinced, labelling any market

Equity views

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

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

strength from here as no more than a “relief rally” or a “rally in a bear market.” That could prove to be the correct interpretation. However, such unanimity is rarely rewarded indefinitely. The stock market often seems perversely intent on making the maximum number of observers uncomfortable in their views.

We maintain our late June view: “We think the most likely path for equity prices through the remainder of this year will be generally sideways until evolving circumstances reinvigorate the case for sustained economic and corporate earnings growth—or, conversely, reveal that a recession is rapidly approaching.” The yield curve inversion strongly suggests a recession will eventually arrive, probably sometime in H1 2023. Bear markets usually end before the associated recession does, and the trigger is often an abrupt, positive change in the outlook for monetary conditions, typically signalled by central bank rate cuts.

We think the conditions that would provoke such a shift to rate cutting by the Fed are some way off. But there are some encouraging signs that inflation may be peaking. The futures prices of soybeans, wheat, and corn are all down between 30% and 40% from their peaks. The same is true for most industrial metals as well as for shipping costs and container prices.

Gasoline prices have fallen seven straight weeks in the U.S.

Our Market Weight (neutral) recommendation for the equity component of a global balanced investment portfolio is designed to balance the rising risks of an

approaching recession with the possibility that ebbing inflationary pressures and slowing growth could provoke a change of heart on the part of the Fed and other central banks as early as the first half of next year.

GLOBAL
Fixed income



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Flying blind

After using explicit forward guidance to lead markets through an aggressive, front-loaded monetary tightening, many global central banks have switched to a data-dependent approach and plan to make policy decisions on a meeting-by-meeting basis, as dictated by incoming data.

The European Central Bank (ECB) was the first major central bank to make the pivot, in July, with a move of 50 basis points (bps) that took the policy rate back to 0% and ended the negative rate era in the eurozone. RBC Capital Markets continues to see a peak rate of 1.50% from the ECB, and believes the central bank will likely reach that target in Q1 of next year, an acceleration from the previous Q2 expectation.

Whereas the ECB has only just begun the process of getting policy rates back to more neutral levels, the U.S. Federal Reserve appears to have achieved that goal via a second consecutive 75 bps rate hike at its July meeting that brought policy rates to a range of 2.25% to 2.50%, in the middle of the 2.0% to 3.0% zone Fed policymakers estimate to be the

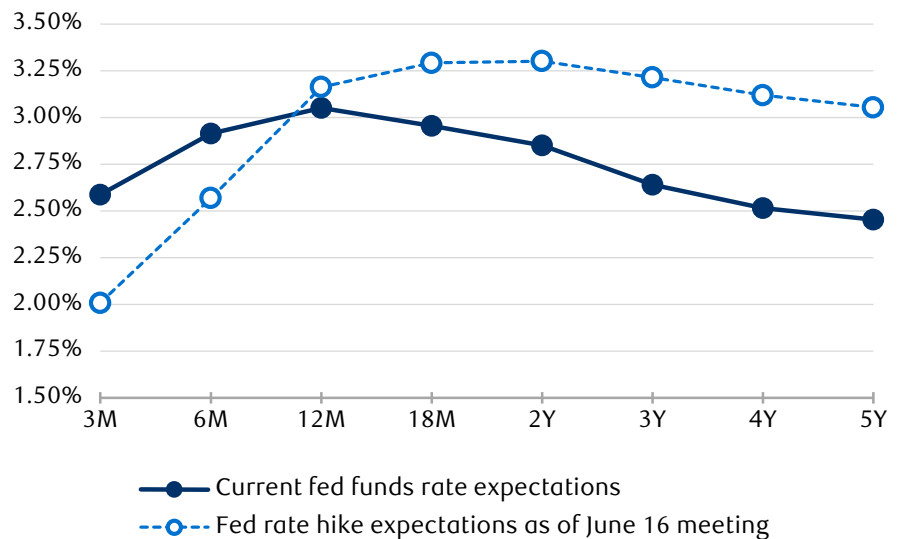
Fixed income views

Region	Gov't bonds	Corp. credit	Duration
Global	=	=	5-7 yr
United States	-	=	7-10 yr
Canada	+	+	5-7 yr
Continental Europe	=	=	5-7 yr
United Kingdom	=	=	5-7 yr

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

neutral range for the U.S. economy. Given that positioning, we believe each further rate hike from here increases the risks of overtightening and/or a policy misstep. This is probably why Fed Chair Jerome Powell declined to offer much in the way of forward guidance ahead of the next meeting of the bank's rate-setting body on September 20-21. The Fed appears ready to await more data on whether inflation has finally peaked, and will likely balance that against economic momentum—which

Shifting expectations: The market now expects more near-term rate hikes, but also earlier rate cuts



Source - RBC Wealth Management, Bloomberg, data based on Overnight Index Swap Rates

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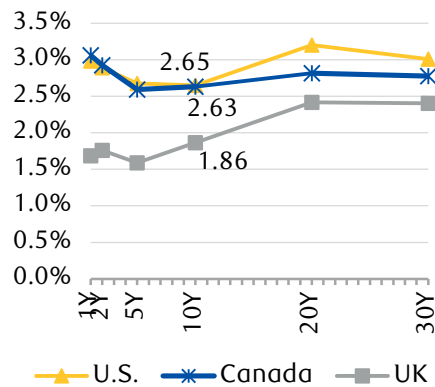
looks to be slowing following a second straight quarter of economic contraction, with the first estimate of Q2 GDP reflecting a 0.90% decrease after a 1.60% drop in Q1.

If and when the Fed decides to raise interest rates again, we think it will pull back to 25 bps increments; however, we maintain our view that while the pace of rate hikes may change at any given meeting,

ultimately the Fed will only raise rates to 3.00% or 3.25%, meaning the rate hike cycle may already be nearing its end.

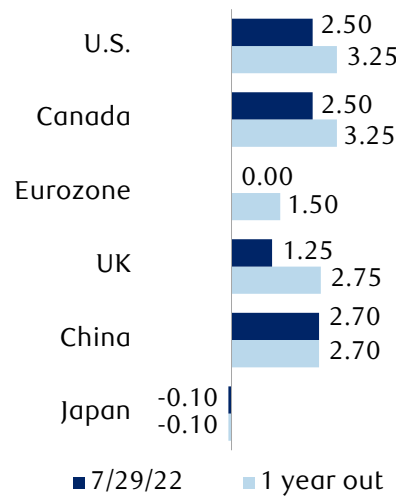
While it has been a volatile start to the year, central banks' shift away from forward guidance may only further increase volatility, as both markets and central banks react to each piece of key incoming economic data.

Sovereign yield curves



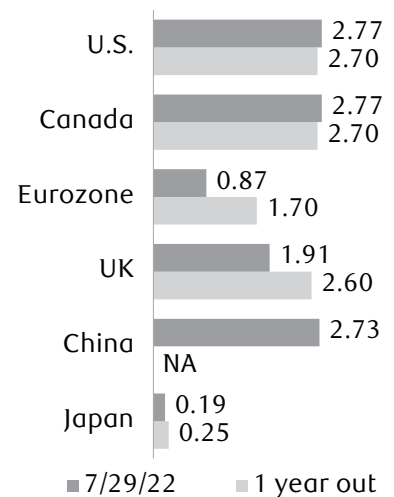
Source - Bloomberg; data through 7/31/22

Central bank rate (%)



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

10-year rate (%)



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

U.S. RECESSION Scorecard

Trouble with the curve

One of our most reliable, long-leading indicators of U.S. recession—the spread between the 1-year Treasury yield and the 10-year yield—has flipped to negative and is now strongly suggesting a recession is on the way. Another, the Conference Board Leading Economic Index, could do the same within the next few months, while a third, ISM New Orders minus Inventories, moved into the “red” column two months ago.

The remaining four are all still firmly positive but moving (slowly) in the wrong direction.

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

With the decisive inversion of the yield curve in July, the probability of a recession getting underway sometime in the next 12 months has increased greatly. One-year Treasury yields moving above the 10-year yield has preceded the start of every recession for the past 75 years, with an average lead time of roughly 11–13 months.

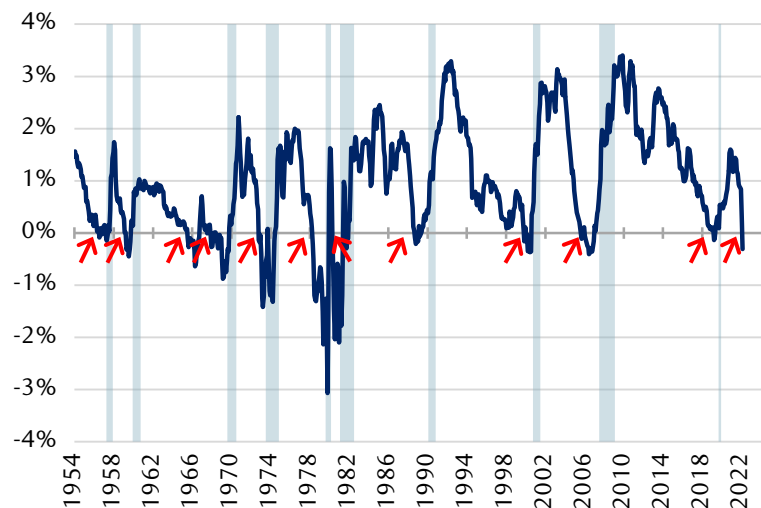
[Historical note: While every recession has been preceded by an inversion, not every inversion has produced a recession. The one

exception was the inversion of late 1965. It was followed by a plunge in real GDP growth from 10.1% to just 1.4% one quarter later. Even slower growth followed for the next four quarters but without the economy ever slipping into recession. However, corporate profits fell and the S&P 500 retreated by 22% at its worst point.]

Recessions have always been associated with periods of earnings decline—on average, since the 1950s, S&P 500 earnings have fallen by 24% from peak to trough. And the index itself has done somewhat worse, dropping an average of 31%.

The yield curve’s greatest virtue as a recession indicator, beyond its sheer reliability, is the fact that it has usually given a long early warning signal—between 11 months (the median) and 13 months (the mean) ahead of the recession’s start date. In fact, the interval between inversion and the onset of recession has usually been so long that very often the curve has de-inverted (i.e., the 1-year yield has moved back down below the 10-year yield) before the recession even started. However, a recession has typically arrived anyway.

Yield differential between the 10-year and 1-year U.S. Treasury notes



Yield curve inverts	Recession begins	Interval
December 1956	August 1957	8 months
September 1959	April 1960	7 months
April 1968	December 1969	20 months
March 1973	November 1973	8 months
September 1978	January 1980	16 months
September 1980	July 1981	10 months
February 1989	July 1990	17 months
April 2000	March 2001	11 months
January 2006	December 2007	23 months
August 2019	February 2020	6 months
Average		13 months
Median		11 months

Note: Arrows indicate where yield curve inverts; shaded areas indicate U.S. recessions

Source - National Bureau of Economic Research; data through 7/31/22

U.S. RECESSION SCORECARD

Looking at the yield curve history by itself, we believe the most likely start date of the next recession would be sometime in Q2 or Q3 of next year. It certainly could begin before that, but we think it is highly unlikely a recession is already underway. To quote RBC Capital Markets, LLC's Chief U.S. Economist Tom Porcelli: "...contrary to what many people say, two consecutive quarters of declining GDP does not a recession make." The National Bureau of Economic Research, which makes the official call, is looking for a decline in activity spread across the economy. As Porcelli points out, that criterion has not been met at this point, despite many things already feeling recessionary.

It's worth noting that from the standpoint of the stock market, the bull market peak has, on average, occurred four to six months after inversion. There have been some exceptions where the peak came in before inversion. However, if the recession were not to start until the second or third quarter of next year, as several of these indicators would point to, then the possibility of a new high for the S&P 500 can't be ruled out in the intervening months, in our opinion.

Conference Board Leading Economic Index

This may turn out to be the next shoe to drop. When this index falls below where it was a year earlier a recession has always been on the way, usually a couple of quarters down the road but sometimes much sooner. If this index just stays where it was in June, then it will breach that barrier this quarter. However, it has come close to giving a "recession is coming" signal a number of times in past cycles only to rebound sharply without falling into negative territory. So anticipating the line being crossed ahead of time hasn't always been useful—stay tuned.

And as for all the rest ...

The other readings remain as they were. Weekly unemployment claims are an important series to watch. Recessions usually start about a year after they set their low. The most recent low reading was 178,000 in March and they are well above that at 250,000 in July, although that is still one of the historically lowest readings ever. If claims don't fall back below the March posting, then a recession could be expected to arrive in the first half of next year.

The unemployment rate remains at its cycle low of 3.6% and would have to get above 4.5% in the next few

U.S. recession scorecard

Indicator	Status		
	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	✓		

Source - RBC Wealth Management

U.S. RECESSION SCORECARD

months to signal a recession was close to starting.

Free cash flows of non-financial corporate businesses as a percentage of GDP remained very elevated at the end of Q1. We won't see the Q2 data until late this month, but we have seen some components of this calculation which suggest this indicator will stay in the "green" column for some time yet. Over the past 80 years there has been only one instance of a recession starting before this indicator went negative. On average, the lead time has been about a year.

Finally, in past cycles, the fed funds rate has always moved up to a point that puts it higher than the year-over-year run rate of nominal GDP

growth either before or shortly after a recession has gotten underway. Today it is a very long way below that growth rate, which measures the growth of GDP without adjusting for inflation. Looked at that way, the U.S. economy was 9.3% higher in Q2 than a year earlier (down from 10.6% in Q1). By the end of this year the nominal GDP growth figure should be down to between 7% and 8%. We think the earliest an aggressive Fed could get the funds rate higher than the nominal growth rate of the economy would be the middle of next year.

MARKET Scorecard

Data as of July 31, 2022

Equities

Global equity markets mostly posted gains, with the exception of the Hang Seng and Shanghai Composite as China continues facing COVID-19 lockdowns.

Bond yields

While most global bond markets rallied, German Bunds fell amid rising inflationary pressures in the eurozone.

Commodities

Commodity prices lost steam amid stronger performance from both global equity and bond markets; oil prices in particular fell below \$100 per barrel for the month.

Currencies

The U.S. dollar firmed against most major currencies and is now trading near 1:1 versus the euro, which has weakened dramatically against the greenback.

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 0.78 means 1 Canadian dollar will buy 0.78 U.S. dollar. CAD/USD -2.5% return means the Canadian dollar has fallen 2.5% vs. the U.S. dollar during the past 12 months. USD/JPY 133.27 means 1 U.S. dollar will buy 133.27 yen. USD/JPY 21.5% return means the U.S. dollar has risen 21.5% vs. the yen during the past 12 months.

Index (local currency)	Level	1 month	YTD	12 month
S&P 500	4,130.29	9.1%	-13.3%	-6.0%
Dow Industrials (DJIA)	32,845.13	6.7%	-9.6%	-6.0%
Nasdaq	12,390.69	12.3%	-20.8%	-15.6%
Russell 2000	1,885.23	10.4%	-16.0%	-15.3%
S&P/TSX Comp	19,692.92	4.4%	-7.2%	-2.9%
FTSE All-Share	4,107.01	4.2%	-2.4%	1.9%
STOXX Europe 600	438.29	7.6%	-10.1%	-5.1%
EURO STOXX 50	3,708.10	7.3%	-13.7%	-9.3%
Hang Seng	20,156.51	-7.8%	-13.9%	-22.4%
Shanghai Comp	3,253.24	-4.3%	-10.6%	-4.2%
Nikkei 225	27,801.64	5.3%	-3.4%	1.9%
India Sensex	57,570.25	8.6%	-1.2%	9.5%
Singapore Straits Times	3,211.56	3.5%	2.8%	1.4%
Brazil Ibovespa	103,164.69	4.7%	-1.6%	-15.3%
Mexican Bolsa IPC	48,144.33	1.3%	-9.6%	-5.4%
Bond yields	7/31/22	6/30/22	7/31/21	12 mo. chg
U.S. 2-Yr Tsy	2.884%	2.953%	0.184%	2.70%
U.S. 10-Yr Tsy	2.649%	3.013%	1.222%	1.43%
Canada 2-Yr	2.964%	3.095%	0.450%	2.51%
Canada 10-Yr	2.610%	3.223%	1.203%	1.41%
UK 2-Yr	1.710%	1.842%	0.060%	1.65%
UK 10-Yr	1.864%	2.229%	0.565%	1.30%
Germany 2-Yr	0.281%	-0.601%	-0.762%	1.04%
Germany 10-Yr	0.817%	-0.185%	-0.461%	1.28%
Commodities (USD)	Price	1 month	YTD	12 month
Gold (spot \$/oz)	1,765.94	-2.3%	-3.5%	-2.7%
Silver (spot \$/oz)	20.36	0.4%	-12.7%	-20.1%
Copper (\$/metric ton)	7,931.25	-3.9%	-18.6%	-18.2%
Oil (WTI spot/bbl)	98.62	-6.8%	28.1%	33.4%
Oil (Brent spot/bbl)	110.01	-4.2%	41.4%	44.1%
Natural Gas (\$/mmBtu)	8.23	51.7%	120.6%	110.2%
Agriculture Index	456.95	-3.7%	2.6%	12.1%
Currencies	Rate	1 month	YTD	12 month
U.S. Dollar Index	105.9030	1.2%	10.7%	14.9%
CAD/USD	0.7815	0.6%	-1.2%	-2.5%
USD/CAD	1.2795	-0.6%	1.3%	2.6%
EUR/USD	1.0220	-2.5%	-10.1%	-13.9%
GBP/USD	1.2171	-0.1%	-10.1%	-12.5%
AUD/USD	0.6985	1.2%	-3.8%	-4.9%
USD/JPY	133.2700	-1.8%	15.8%	21.5%
EUR/JPY	136.1600	-4.3%	4.0%	4.6%
EUR/GBP	0.8393	-2.5%	-0.2%	-1.7%
EUR/CHF	0.9731	-2.8%	-6.2%	-9.5%
USD/SGD	1.3805	-0.7%	2.3%	1.9%
USD/CNY	6.7445	0.7%	6.1%	4.4%
USD/MXN	20.3672	1.2%	-0.8%	2.5%
USD/BRL	5.1733	-1.6%	-7.2%	-0.7%

Research resources

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			Count	Percent
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Sell [Underperform]	46	3.16	6	13.04

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