

U.S. Recession Scorecard

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Tighter credit conditions add to the probability of recession

All seven factors that make up our Recession Scorecard were giving the U.S. economy a unanimous green light one year ago. However, three of our seven leading indicators of U.S. recession—two of them with perfect forecasting track records—were switched to red some months ago, signaling that an economic downturn was on the way. In April, two further indicators—monthly unemployment claims and the federal funds rate relative to the growth rate of the economy—looked to be headed toward giving negative signals within the next few months, persuading us to shift both into the cautionary yellow column a month ago.

The two remaining indicators—the unemployment rate and the free cash flow generated by non-financial businesses—are still giving expansionary readings.

Those 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. **It is worth remembering that the official start date of any recession may not be announced until many months or quarters after the fact.**

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

For important and required non-U.S. analyst disclosures, see [page 7](#).

All values in U.S. dollars and priced as of market close, May 31, 2023 unless otherwise stated
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Yield curve (10-year to 1-year Treasuries)

The 1-year Treasury yield rose above the 10-year yield decisively last July, and the negative gap has widened over the past 10 months. **The history of this indicator after crossing into negative territory suggests the U.S. economy will be in recession by summer 2023.**

Adding weight to the “tight money” message coming from the yield curve, the Fed’s most recent Senior Loan Officer Survey (released in May) further extended the year-long trend of a majority of U.S. banks raising lending standards on almost every category of business and consumer loan.

The same survey also revealed that a majority of banks are reporting reduced demand for commercial and industrial loans as well as a reduced willingness to make such loans. A growing majority are also requiring higher credit scores for consumer loans and larger down payments for car loans.

ISM New Orders minus Inventories

The difference between the New Orders and 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 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. **This measure has never before reached its current depth without a recession eventually following.**

Conference Board Leading Economic Index

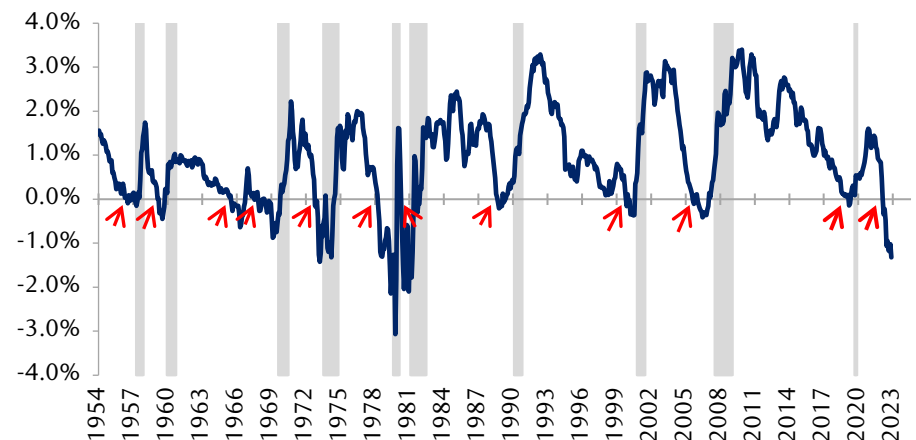
Historically, this series has given reliable early warnings of recession. When the index has fallen below where it was a year earlier, a recession has always followed—usually two to three quarters later.

This indicator turned decisively negative in Q3 2022, shifting it to the red column on our Scorecard. The latest reading, for April, indicated a further deepening of its negative message. It strongly suggests a U.S. recession will be underway sometime in Q2 or Q3 2023.

Unemployment claims

The monthly low for this cycle occurred in September. The cycle low for claims has typically been registered about 12 months before the start of the next recession. So,

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



Note: Shaded areas indicate U.S. recessions; arrows indicate where yield curve inverts.

Source - RBC Wealth Management, Bloomberg, Federal Reserve Bank of St. Louis; monthly data through April 2023

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if no lower reading is posted in the coming months, its history would suggest a recession could get underway this fall.

Claims have recently bumped up above that September low, suggesting the smoothed trend may indeed be reversing from down to up. The fact that both temporary employment and job openings are falling on a year-over-year basis adds to our conviction that the tide is turning for unemployment claims. While we wait either for that shift to be confirmed or for claims to subside once again, this ambiguity warranted shifting the indicator's status to yellow last month.

Unemployment rate

The unemployment rate revisited a five-decade low of 3.4% in April after hitting the same mark in January. In our view, a move above 4.0% 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 when the time gap was only two to three months.

Free cash flow of non-financial businesses

This gives an indication of the ability of such businesses, in aggregate, to internally fund any capital spending

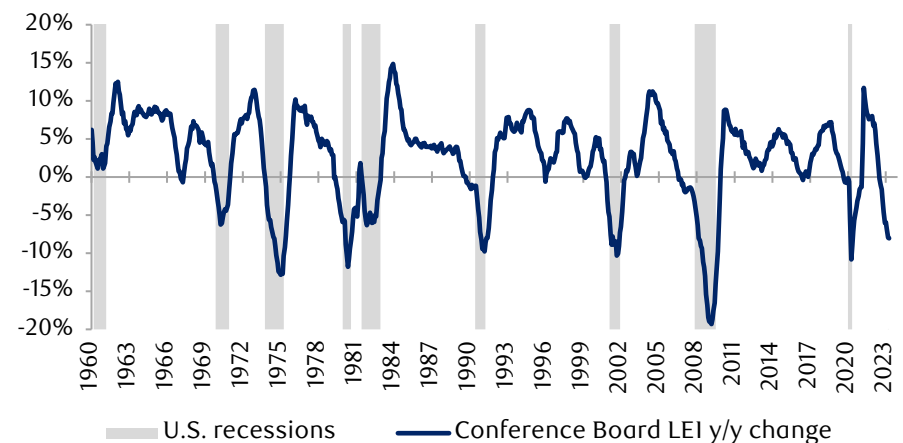
they want or need to do. Historically, whenever it has fallen below where it was a year earlier, a decline in corporate capital spending has typically followed, as has a recession. This number dipped slightly in Q4 2022 but remained elevated, and still appears some way from giving a negative signal. The Q1 reading won't be released until early June.

Fed funds rate vs. nominal GDP growth

The federal funds rate has risen above the six-month annualized run rate of nominal GDP either before or at the very start of every recession in the last 70 years. (Nominal GDP is GDP not adjusted for inflation.) That run rate has been declining since peaking in Q2 2021. By Q4 2022, it was down to 7.2% but still well above the funds rate, which at the time had risen to 4%. Now the fed funds rate is up to 5.25% and Q1 GDP data shows the six-month run rate of nominal GDP growth slowing to just 6.0%. We expect nominal GDP to slow further, and by Q2 or Q3 of this year will likely fall to or below 5%, meeting that historical precondition of recession.

Given that the gap between the fed funds rate and the economic growth rate has narrowed to such a degree, and our view that a negative crossing point likely will be reached within the next few months, we shifted this indicator from green to yellow back in April.

Conference Board Leading Economic Index year-over-year change



Source - RBC Wealth Management, Conference Board; monthly data through April 2023

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Bottom Line

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 a 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, we think the start date could easily move out later into the second half of the year.

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