Globicus Leading Economic Index

Outlook May 2023

Leading Economic Index:

No Recession Yet but Coming Soon

Globicus Inc.

New York

May 11, 2023

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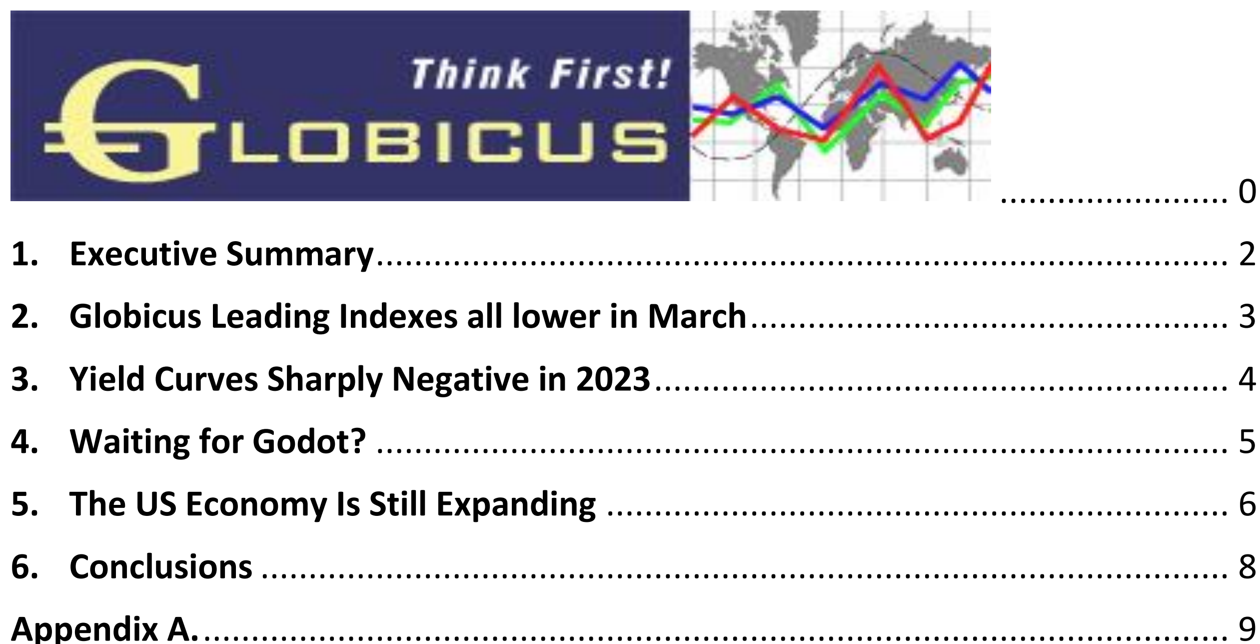

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1. Executive Summary

Globicus Leading Economic Indexes declined further in March, the latest reading, new and revised data showed. All leading indexes are negative and suggest that a US recession may start in the middle of 2023. The model has an excellent historical record having predicted all recessions since the 1960s. If the economy continues to expand it would be the first time ever the model would have had a false positive and predicted a recession that did not materialize. The coincident index showed continued growth although at a slower pace in the first quarter of the year. The US economy was still expanding in March, according to Globicus' coincident index for March as and the latest releases of the National Bureau of Economic Research's Business Cycle Dating Committee's recession indicators (NBER)[1] .

With some improvement on the inflation front, and lingering banking problem, the Fed may pause its rate hiking campaign but is unlikely to reverse course unless unemployment rises significantly.

Inflation is a lagging indicator and does not usually decline until unemployment, also a lagging indicator, rises and the economy enters a recession. Historical experience is that higher unemployment is necessary to reduce inflation significantly. This makes it exceedingly difficult for the FOMC to tighten appropriately to reduce inflation while at the same time avoiding a recession. During periods with high inflation the Fed mostly continued to keep interest rates high at the beginning of the recessionary period.

[1] National Bureau of Economic Research is a private, nonpartisan economic research organization. The NBER's Business Cycle Dating Committee maintains a chronology of US business cycles as well as decides the dates of the recessions.

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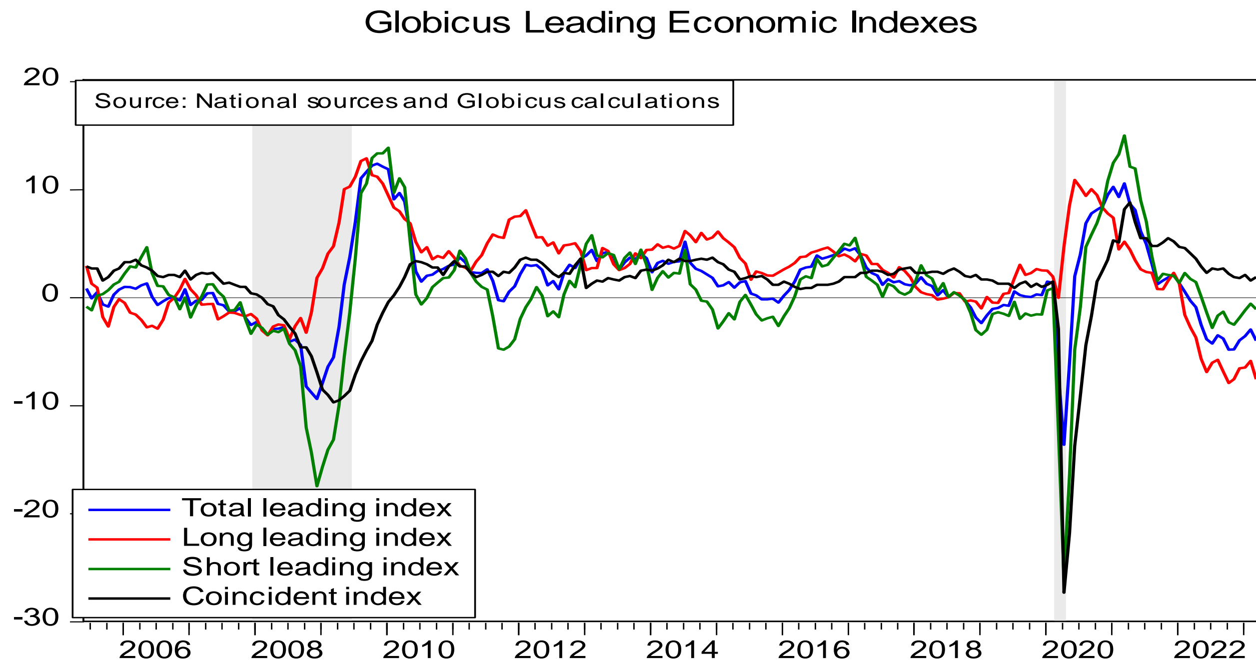
2. Globicus Leading Indexes all lower in March

Globicus Leading Economic Indexes (Total- Long- and Short leading index)[2] all declined in March. The coincident index, designed to coincide or measure the overall economy, is moderating from strong post pandemic numbers. The last few months the growth rate has been around 2%.



In March the total leading index's Six-month Smoothed Growth Rate ("SMGR")[3] (blue line) declined to -4.1 from -3.0 in February, the twelfth consecutive monthly negative reading, new and revised data showed[4]. The long leading index (red line)

[2] We are using three leading indexes. The reason for this is that leading indicators have different lead time, and it can be useful to disaggregate what the long and short leading indexes indicates. The total leading index is a combination of the short and the long leading index and is constructed to smooth out the volatility of the individual indexes and to get a timely indication.

[3] For input series X the formula for six-month smoothed growth rate is: Xsmgr= (X(t)/Avg of previous 12 months)^(12/6.5)-1

[4] The latest updates as of February 3, 2023

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fell to -7.6 in March from -6.0 in February, its fourteenth monthly negative reading. The short leading index (green line) fell to -1.2 in March, from -0.6 in February.
The coincident index (black line), a measure of the current economic activity, edged higher to 1.8 SMGR in March from 1.5 the previous month. Although still relatively strong, the coincident index has slowed significantly from the 4.0 SMGR a year ago. The growth rate seems to have stabilized at the potential economic growth speed around 2%.
Overall, economic weakness is likely to intensify and spread more broadly throughout the US economy over the coming months with a recession likely to start in the middle of 2023.

3. Yield Curves Sharply Negative in 2023

Inverted yield curves, as you can see in the chart below, usually precede a recession, particularly the spread between 10-year and the 3-month treasury securities usually turns negative before a recession. This spread has narrowed dramatically since the Fed got religion and turned negative in October and was -1.79 on May 12, the lowest level since 1981 when Paul Volker was the chair of the Fed. The spread typically turns from negative to positive before the recession starts and has always done so since the 1990 recession. However, that was not the case during the four recessions in the 1970 to 1982 period. These four recessions were all preceded by high inflation in contrast to the following recessions that were accompanied by more modest inflation. Therefore, we may not see a reversal of the negative spread before the recession starts as the high inflation rate today is more reminiscent of the high inflation recessions during the seventies and eighties rather than the more recent lower inflation recessions.

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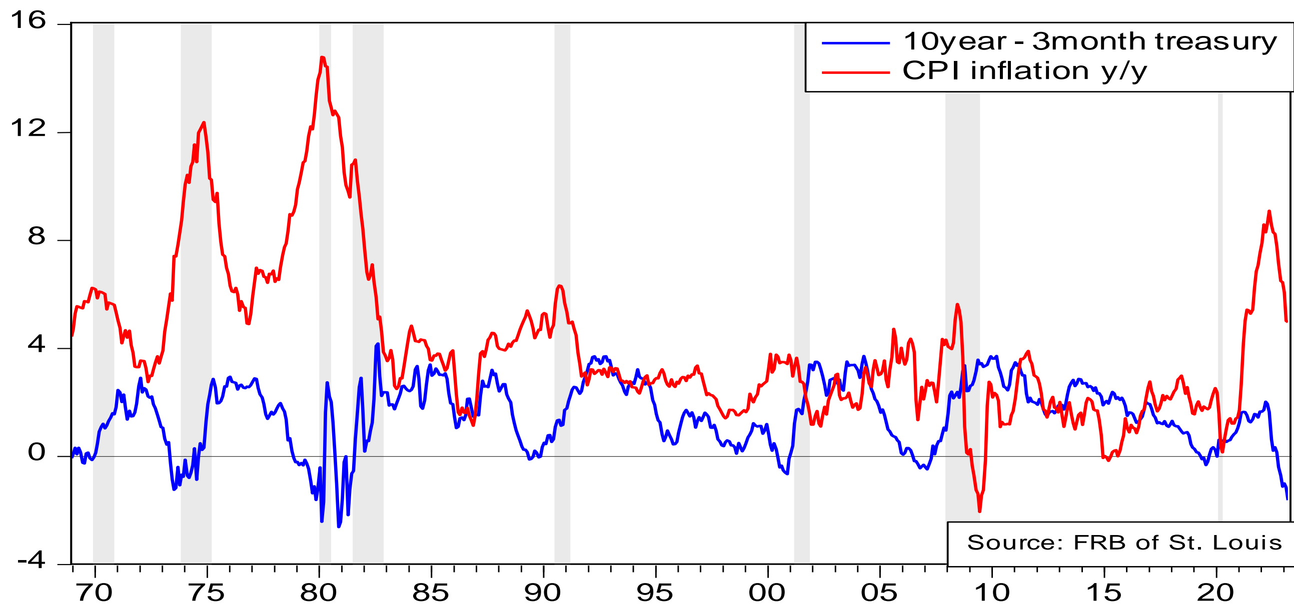

4. Waiting for Godot?

Below are the model's results since 1970. The blue line is the model's total leading growth rate, designed to forecast economic activity and recessions. The red line is the coincident index, designed to measure current economic activity. How reliable is the model? We have high confidence in the recession prediction. The model has predicted all recessions since the 1970s. However, the exact timing of the start of a recession is more challenging. When the total leading index turns negative it precedes a recession on average by 9 months, but the lead has been as long as 16 months. So, are we waiting for Godot? We don't think so. The longest lead times for any recession are for the 1980 and the 2007 recessions. For the recession 1980 there were 13 months between when we first got the recession signal and the month NBER determined as the start of the recession and for the 2007 recession 16 months. As of the latest reading for the total leading index there have been 13

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months since the first indication of a recession. There is of course no guarantee that the lead time will not be longer this time, particularly after the unprecedented fiscal and monetary stimulus during the pandemic. If the lead would be the same as for the 2007 recession, the beginning of this downturn would start in June/ July.

5. The US Economy Is Still Expanding

NBER's Business Cycle Dating Committee maintains the chronology of the US business cycles. The committee's definition of a recession is "a significant decline in economic activity that is spread across the economy and that lasts more than a few months."[5]

The committee's determination of the months of peaks and troughs is based on a range of monthly measures of aggregate real economic activity. These include real personal income less transfers, nonfarm payroll employment, employment as measured by the household survey, real personal consumption expenditures, wholesale-retail sales, and industrial production. In addition to the monthly indicators, they use two quarterly indicators, gross domestic income (GDP) and gross domestic income (GDI). GDP rose 1.1% saar in the first quarter of 2023 and GDI is still not released.

The monthly indicators the Dating Committee uses are shown in the graph below.

[5] NBER Business Cycle Dating; https://www.nber.org/research/business-cycle-dating

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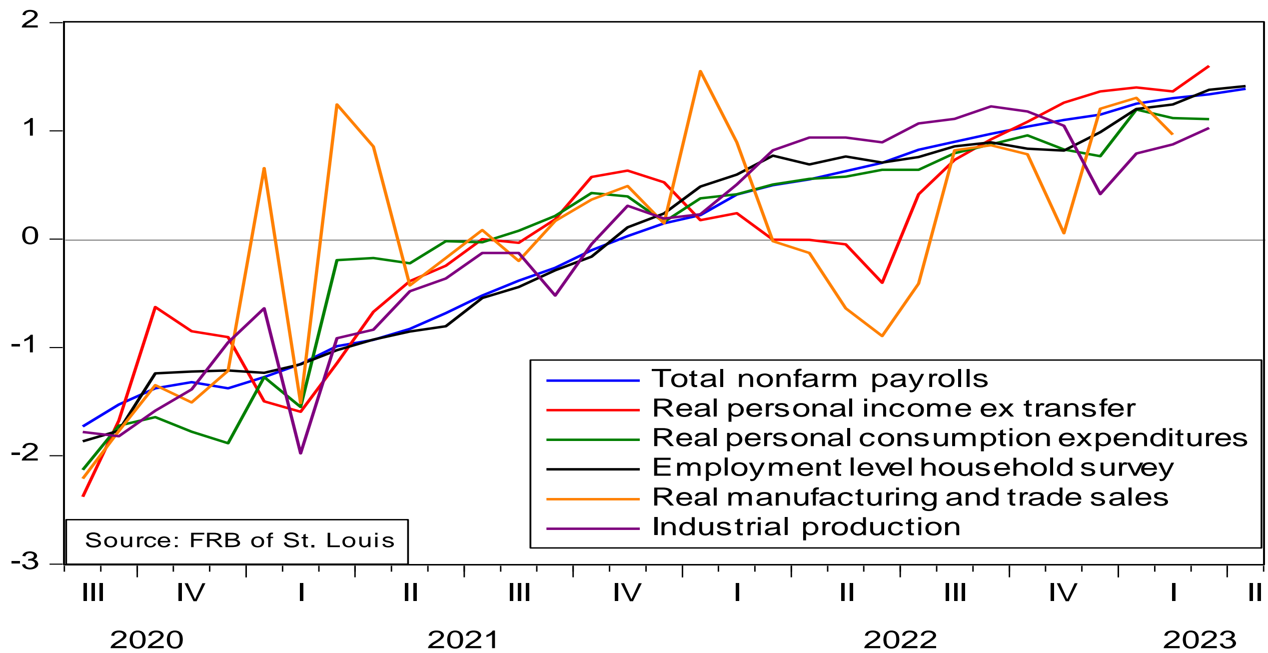

These indicators were mostly higher for the latest available data (March/April). The only weak indicator was real manufacturing and trade sales, which is a very volatile indicator. There is no reason to think the Dating Committee will call a recession on these numbers as the economic weakness is neither widespread nor deep.

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6. Conclusions

In summary, the total leading index suggests that a recession may start in the middle of 2023. However, the strength in the labor market may support the economy for another few months fueled by the remnants of the stimulus measures.

The Fed may pause but is unlikely to cut rates until unemployment rises significantly and that does not normally happen until the economy enters a recession.

From Globicus' coincident index and NBER's Dating Committee's data used to track recessions it is unlikely that the economy is in a recession now. Or for that matter that the economy was in a recession in the first half of 2022, despite two consecutive quarters of negative growth in the first half of 2022.

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Appendix A.

The Leading Index Approach

Macroeconomic forecasts attempt to provide useful information on aggregate economic conditions. When it succeeds it can provide clients with specific information that allows him or her to make better decisions.

One approach to forecasting is to construct a theoretical model, build an econometric model around it and identify economic relationships, and then use the model to forecast economic activity. A different approach to economic forecasting involves using explicit statistical model that requires little economic theory. Examples of this atheoretical approach are vector autoregressive (VAR) models, ARIMA models and the leading index approach. The leading economic index approach, unlike standard economic models, is not to primarily predict the magnitude of future economic growth, but rather to recognize and predict major turning points for the economy.

The leading index approach was developed in the mid-1930s by Arthur F. Burns & Wesley C. Mitchell associated with the National Bureau of Economic Research (NBER)[6]. Their research explored cyclical patterns of economic fluctuations that consist of expansions followed by recessions which then merge into the expansion phase of the next cycle. Leading indicators are series that tend to change direction in advance of the business cycle and lead the overall economy. Coincident indicators are the series that coincide and move in sync with the overall aggregate economy. A coincident economic index should turn at the same time as the general economy and rise and fall at a similar pace as the overall economy. A leading economic index should decline before recessions, increase before a recovery, and forecast change in the overall economy's pace.

[6] "Measuring Business Cycle" by Arthur F. Burns & Wesley C. Mitchell is their classical 1946 Book.

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The leading index approach is designed to predict the direction of the economy in future months by predicting turning points in economic activity. For that purpose, indexes are developed from economic variables that leads the general economic activity. To better determine the turning points, we use six-month smoothed growth rate as it better represent turning points than regular moving average.

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