LTAM WHITE PAPER MARCH 2021
Market Analysis Using the Conference Board Leading Economic Index®

Spotting a Bear Market

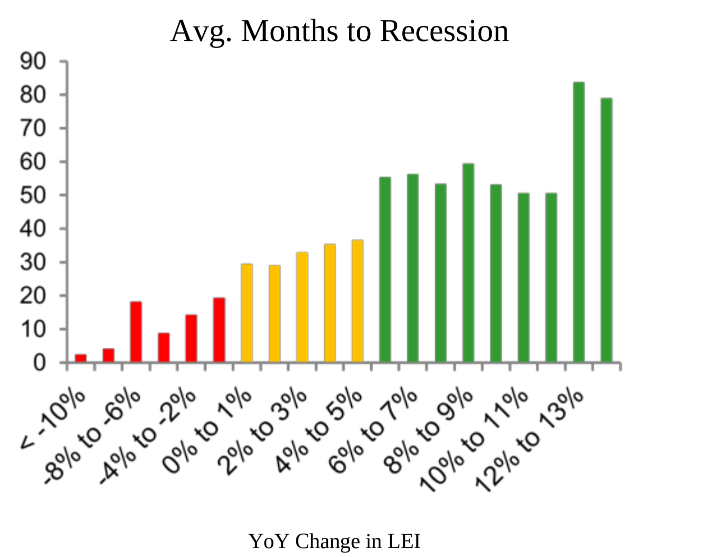
Bear markets are dangerous for investors, not just because of how difficult it is to recover from the loss but because humans tend to overreact and miss substantial upside following big declines. As asset managers, our goal is to avoid these losses as much as possible, but how can we tell when a bear market is around the corner? The good news is that real bear markets (which are stock declines of 20% or more) almost exclusively happen when the economy is falling apart and/or the Fed is tightening by raising rates. It is easy to know when the second situation is happening but predicting recessions is more challenging.

As part of the Ladenburg Thalmann Asset Management (LTAM) research process, our Investment Policy Committee reviews economic data points, indexes and research from several sources to develop a market outlook that serves as the fundamental catalyst for making tactical shifts in our portfolios. One of our key sources of U.S. economic data comes from the Conference Board, an independent business membership and research association, which publishes various indexes aimed at helping economists anticipate changing conditions in global markets. Specifically, LTAM closely monitors the Conference Board's Leading Economic Index® (LEI) for the U.S., which is designed to signal peaks and troughs in the business cycle, and can be a good indicator of how likely it is that we have a recession, and potentially a bear market, lurking around the corner. The LEI is a composite average of ten individual leading indicators, constructed to show common patterns in economic data, which results in what can be viewed as a projection of where the economic cycle is headed over the next 3-6 months. What we like about this measure is that the included indicators (listed at right) cover a wide range of the economy and when monitored over time, the index can provide a signal through the noise of the many individual data releases that come out every day. [1]

THE TEN COMPONENTS OF THE LEADING ECONOMIC INDEX FOR THE U.S.

1. Average weekly hours, manufacturing
2. Average weekly initial claims for unemployment insurance
3. Manufacturers' new orders, consumer goods and materials
4. ISM® Index of New Orders
5. Manufacturers' new orders, nondefense capital goods excluding aircraft orders
6. Building permits, new private housing units
7. Stock prices, 500 common stocks
8. Leading Credit Index™
9. Interest rate spread, 10-year Treasury bonds less federal funds
10. Average consumer expectations for business conditions.

Figure 1:



We looked at the LEI going back to its first release in 1959 and compared the year over year change to the average amount of time until the next recession began, and not surprisingly, when the change was negative, we were uncomfortably close to a recession. This is the "red zone" in our study. The next zone is the "yellow zone", when the change in LEI was positive but still 5% or less. In this zone, we were usually about 20-30 months away from a recession on average. Safer, but not out of the bear filled woods just yet. Above 5%, the length of time until a recession jumps up considerably and stays above 50 months on average. While this does not mean that a recession is impossible while LEI is in the "green zone", based on historical evidence, the odds are substantially lower, and so we are more comfortable being more aggressive with our equity allocations.

Where are we now?

We begin 2021 slightly in "red zone" as the economy continues to recover from the COVID-19 Pandemic. LEI has moved into the "green zone" in this latest reading. We would expect LEI to be volatile over the months ahead as the economy reopens; data could also be influence by base effects from 2020. While the length of time until a recession is helpful in

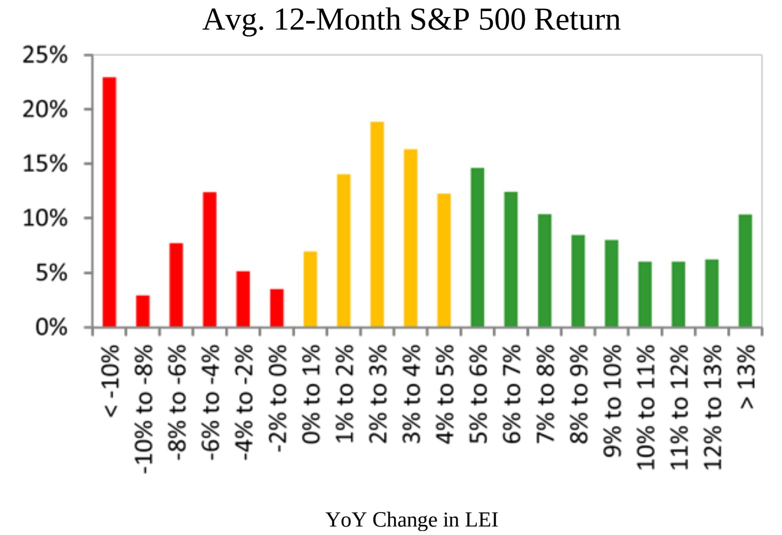
[1] *The Conference Board Global Business Cycle Indicators.* May 22, 2014. https://www.conference-board.org/data/bcicountry.cfm?cid=1 (accessed July 21 2014).

managing the risk of significant losses, it is not always the case that markets and the economy recover at the same speed. Frequently, stocks will outperform while the economy is still in the early stage of a recovery.

We can use the LEI to look at how the S&P 500 performs at different stages in the cycle.

In Figure 2, we can see that historically, S&P 500 returns have been higher during economic recoveries, or when the year-over-year change in the LEI is between +1% and +8%. S&P 500 returns have, in general, been lower when the change in the LEI is in the "red zone" and are also lower when LEI is showing double digit improvement, which occurs in the early recovery stages. The best performance for the S&P 500 follows a negative change in the LEI of over 10%. This makes sense given what we know about bear markets and why they are so dangerous for investors. During recessions, markets tend to overshoot losses and investors who sell at the bottom run the risk of missing a significant portion of the upside when markets begin to rally again.

Figure 2:



We also use LEI in our tactical decisions to diversify within equity and fixed income.

To use LEI as an indicator in our tactical equity decisions on size and style, we looked at the performance of the Russell Indexes in the month following the date of release. We further broke LEI into two types: if the LEI was above its 12-month moving average, the pace of economic growth was accelerating and if it was below the moving average, the pace was slowing. While an accelerating LEI might indicate an expansion, the reverse could indicate a recession is approaching. We wanted to find the historically best returns in each of these different environments.

Figure 3:

LEI Minimum	LEI Maximum	Russell 1000 Growth	Russell 1000 Value	Russell Midcap Growth	Russell Midcap Value	Russell 2000 Growth	Russell 2000 Value
-25.0%	-10.0%	3.29%	2.67%	2.71%	2.67%	1.46%	1.01%
-10.0%	-5.0%	0.42%	2.08%	2.50%	3.96%	2.20%	4.62%
-5.0%	-2.5%	1.54%	2.92%	3.66%	4.30%	6.52%	6.86%
-2.5%	0.0%	1.95%	2.55%	1.43%	2.88%	1.25%	3.14%
0.0%	1.0%	-6.10%	-5.22%	-7.20%	-5.21%	-8.02%	-6.04%
1.0%	2.0%	1.13%	0.74%	0.89%	-0.49%	0.14%	-0.42%
2.0%	3.0%	2.51%	0.98%	0.78%	1.40%	1.13%	0.58%
3.0%	4.0%	1.39%	0.66%	1.64%	0.97%	2.77%	1.74%
4.0%	5.0%	0.93%	1.70%	1.00%	1.98%	3.20%	0.94%
5.0%	6.0%	1.98%	1.73%	1.88%	1.56%	2.10%	1.91%
6.0%	7.0%	1.65%	1.51%	0.91%	1.92%	1.30%	1.29%
7.0%	**8.0%**	**2.48%**	**2.98%**	**2.94%**	**2.35%**	**0.85%**	**1.90%**
8.0%	10.0%	0.14%	-0.09%	0.70%	0.46%	0.15%	-0.46%
10.0%	25.0%	-0.88%	0.39%	-0.45%	0.79%	-0.68%	0.50%

The LEI index increased +1.3% in March representing an increase of +7.9% year-over-year. Positive contributions came from average weekly initial claims for unemployment insurance (inverted), the ISM New Orders Index, the interest rate spread, average weekly manufacturing hours, the Leading Credit Index (inverted), average consumer expectations for business conditions, building permits, manufacturers' new orders for nondefense capital goods excluding aircraft, stock prices, and manufacturers' new orders for consumer goods and materials. LEI turned negative early last year as the COVID-19 Pandemic unraveled in the U.S. and has turned positive in the latest reading. We would expect additional growth in the months ahead as the economy reopens.

LEI can't predict the future but it's an important piece of the portfolio management puzzle, providing both a red flag warning of danger to come and some insight into which asset classes are likely to outperform at different points in the business cycle.