The Inverted Yield Curve: Harbinger of Recession?

May 2019

Key Takeaways

Cautionary Signals

- An inversion of the U.S. yield curve historically precedes a U.S. recession with an average lead time of about 14 months.
- According to our yield curve-based model, there is a 34% probability of a recession in the next 12 months.

Safe Signals

- The Index of Leading Economic Indicators indicates that the U.S. economy is slowing, not contracting. The latter, not the former, is what usually precedes a recession.
- The spread between year-over-year nominal GDP growth and the federal funds rate suggests that current policy is still accommodative.
- Solid corporate profit growth and a record low unemployment rate underpin a positive fundamental view.

Conclusion

- We believe that a recession is not imminent, but that caution is likely warranted as some indicators are now flashing warning signs.

The U.S. yield curve has been flattening since 2013 and is very close to being inverted, triggering another round of concerns that a downturn is near. We do not believe increased concern is currently warranted. In this article, we examine several indictors that could offer some help in determining if a recession is approaching.

The inverted yield curve was a predictor of every downturn, almost. Since the end of World War II, there has been a recession nearly every time the yield curve inverted (see Figure 1). As such, many consider a yield curve inversion to be a harbinger of economic turmoil. Historically, the 1y10y spread tends to provide fewer false signals than the 3m10y and 2y10y measures. The only instance that saw the 10-year U.S. Treasury yield fall under the 1-year and a recession did not soon follow was in 1966. It took almost another four years for a recession to begin after that inversion. Every other time, a yield curve inversion

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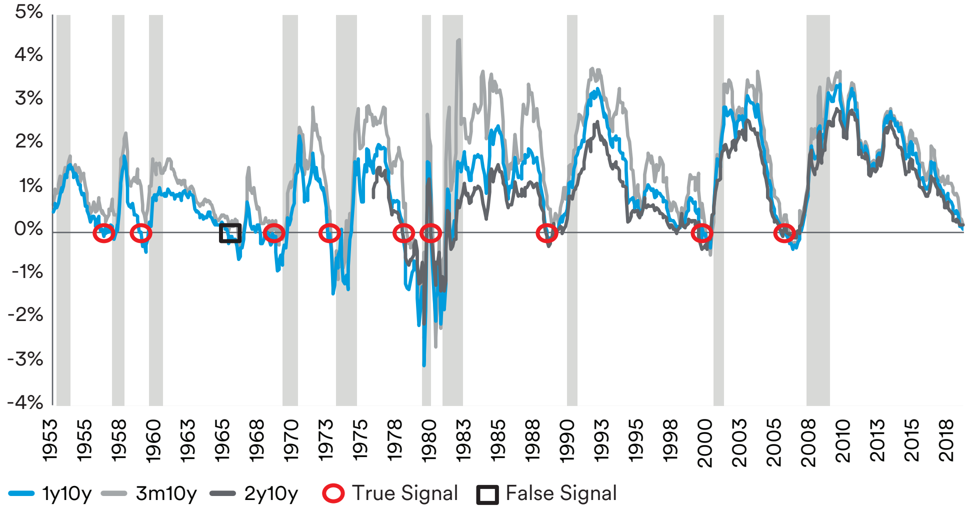
has preceded a recession by approximately 14 months, on average. However, the range of "lead time" provided is rather wide, anywhere from 9 months to two years.

Figure 1 | The Yield Curve



Source: FRED, Haver Analytics, MetLife Investment Management (MIM)

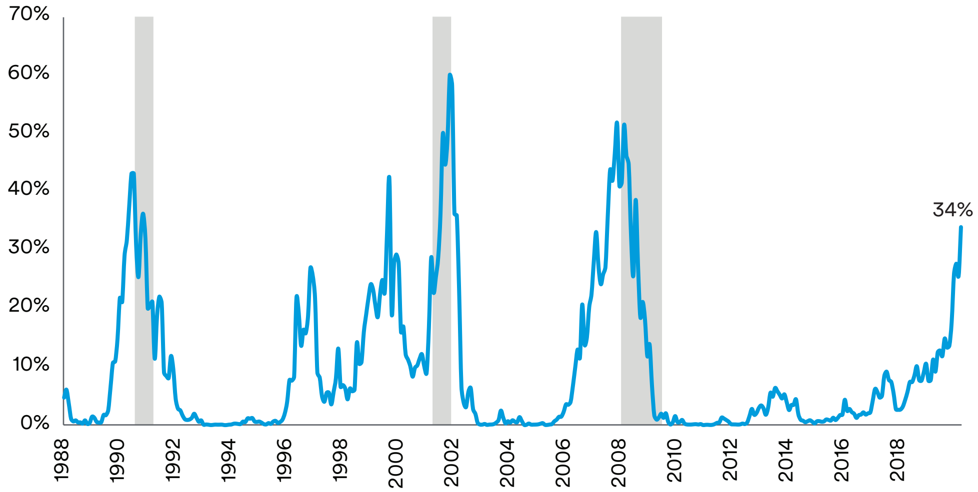
Some analysts argue that the yield curve may not have the same predictive power as before because Quantitative Easing, slow growth, low inflation, and low global interest rates may have all contributed to structurally shifting the U.S. 10-year yield lower. Regardless of the causes of yield curve inversions, the fact remains that an inverted yield curve may have the same economic effects it has always had, such as the cost of short-term funding rising above long-term financing.

The yield curve is not currently inverted on a monthly average measure, but it's inching close. We believe that this should be viewed as a cautionary signal.

A flattening yield curve leads to a higher probability of recession. Our yield curve-based recession probability model has reached highs not seen since the late 2000s (see Figure 2). The model is currently showing a 34% chance of a recession in the next 12 months and this figure will climb higher as long as the yield curve continues to flatten. We view a reading above 40% as worrisome. Our recession probability model is a probit model based on only one variable: the spread between the 3-month T-bill and the 10-year U.S. Treasury yield. We use this model to try and forecast the probability of a recession over the next 12 months.

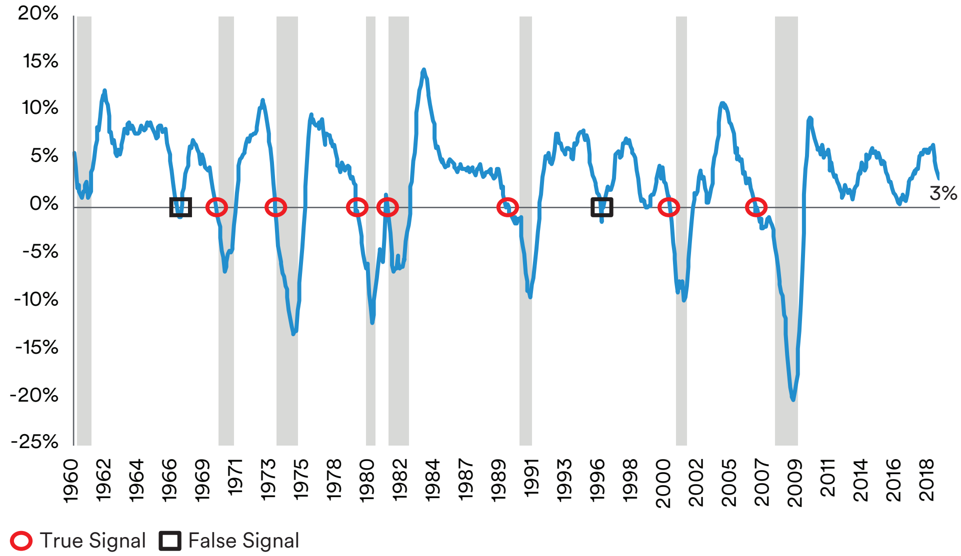
Slower, not contracting, growth. Economic activity typically contracts at the beginning of a recession and we find leading economic indicators to be helpful in gauging this activity. As Figure 3 shows, the Conference Board's Index of Leading Economic Indicators (LEI) typically falls below 0% prior to a recession. A reading above 0% points toward an expansion of economic activity in the coming months while a reading below 0% signals expected economic contraction. Therefore, the current reading of 3% suggests that the economy could continue expanding. Although the pace of the expansion may slow given the recent drop in the index from 6.6%, it is not suggesting that the economy should contract, in our view.

Figure 2 | Recession Probability Model



Source: Haver Analytics, MIM

Figure 3 | Index of Leading Economic Indicators YoY

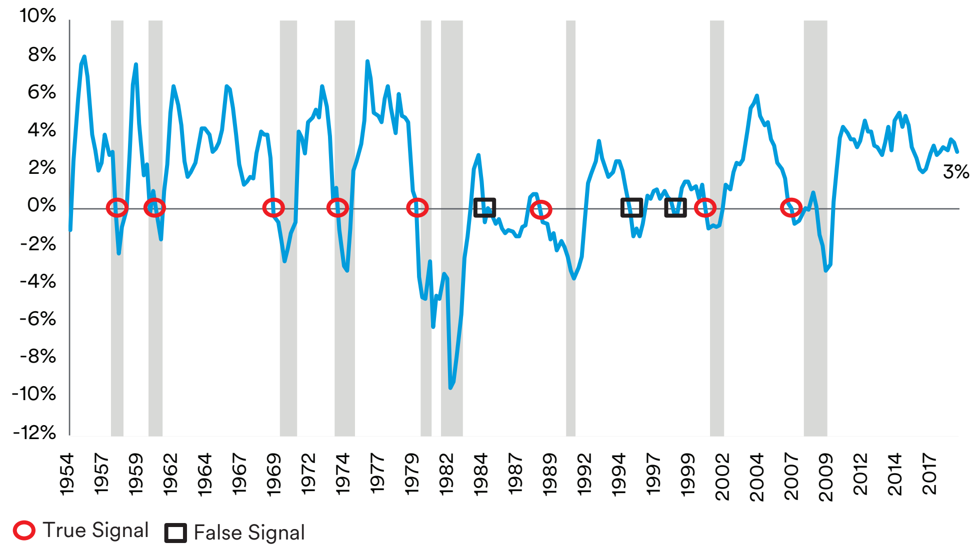


Source: Bloomberg, Conference Board, MIM

Note: The Conference Board U.S. Leading Indicators include 10 economic variables that tend to move before changes in the overall economy. These indicators give a sense of the future state of an economy. (1. Average weekly hours, manufacturing; 2. Average weekly initial claims for unemployment insurance; 3. Manufacturers' new orders, consumer goods and materials; 4. ISM new orders index; 5. Manufacturers' new orders, nondefense capital goods excl. aircraft; 6. Building permits, new private housing units; 7. Stock prices, 500 common stocks; 8. Leading Credit Index™; 9. Interest rate spread, 10-year Treasury notes less federal funds; 10. Avg. consumer expectations for business conditions).

Monetary policy is still relatively accommodative. Economic cycles do not end due to longevity but can be cut short by restrictive monetary policy. The Fed hiking its policy rate makes the cost of borrowing more expensive, typically slowing down the economy. As measured against GDP growth, the federal funds rate is still rather accommodative (see Figure 4). We feel the Federal Reserve has not yet tightened sufficiently to end the current expansion. In prior recessions, the spread between these indicators usually goes negative. The current reading remains at historically elevated levels. This suggests that there may be more time before the next recession.

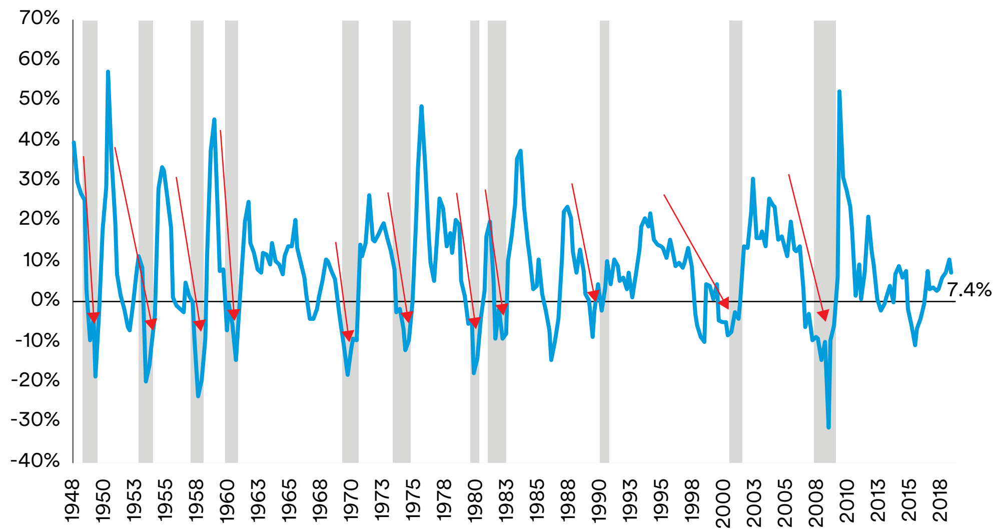
Figure 4 | Nominal GDP Growth YoY Minus FFR



Source: Haver Analytics, MIM

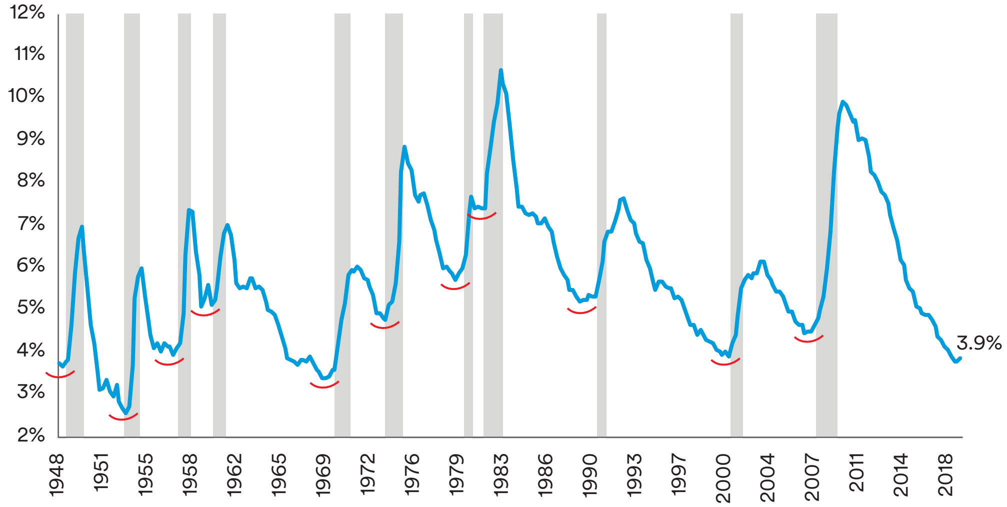
We are seeing solid corporate profits and near record low unemployment, both of which are not typical before a recession. Historically corporate profit growth usually goes negative and the unemployment rate tends to bottom before a recession. From a fundamental perspective, current corporate profit growth of 7.4% year-on-year and a near record low quarterly average unemployment rate of 3.9% (see Figures 5 and 6) do not signal that a recession is near.

Figure 5 | Corporate Profits w/ IVA & CCAdj YoY



Source: Haver Analytics, MIM

Figure 6 | Unemployment Rate



Source: Haver Analytics, MIM

In summation, we believe that a recession is not imminent, but that caution is likely warranted as some indicators are now flashing warning signs. With the current expansion on track to become the longest in U.S. history, some indicators suggest that recessionary risk is growing. That said, there is nothing showing that a recession is imminent per se, only that caution is needed as the probability of a downturn has risen relative to earlier in the cycle. It is important to see these measures as tools in estimating the likelihood of an impending recession and not as hard predictors. Business confidence is solid, corporate profit growth remains strong, unemployment is historically low, and the consumer is healthy. As long as these economic fundamentals hold and the Federal Reserve remains patient, we do not believe that a recession is around the corner.

Global Economic & Market Strategy

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