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Investment Insights into Current Events

AMID RISING GROWTH CONCERNS, YIELD CURVE INVERTS FURTHER

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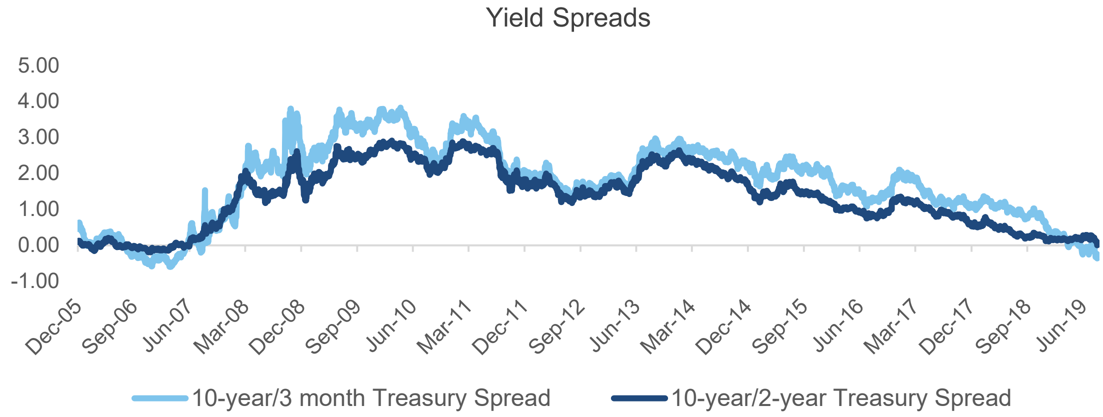
On Wednesday, August 14, equity markets pulled back sharply on weak data out of Germany and China, fueling investor concerns over global growth. Germany's economy contracted 0.1 percent in the second quarter due to a decline in exports, whereas Chinese industrial production grew 4.8 percent in July, falling below the 5.9 percent forecast and noticeably down from 6.3 percent as of June. Amid the market tumult, investors rushed to the safety of Treasury bonds, resulting in the 10-year Treasury yield falling to 1.56 percent, while the 30-year Treasury yield hit an all-time low of 2.0 percent.

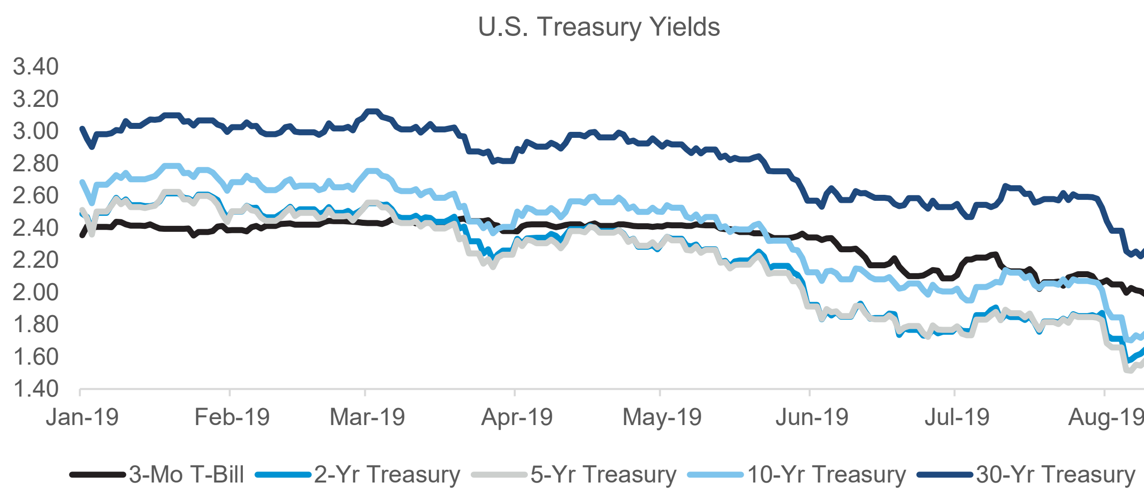
In recent months, numerous articles have highlighted the inverted yield curve and its implications. The article that follows summarizes recent market developments while also providing longer-term context.

1) **What Happened and Why Does It Matter?**
   For the first time since 2007, the yield on the 10-year Treasury fell below that of the two-year Treasury, reflecting a further inversion of the yield curve. While this inversion certainly added to investors' anxiety, it is not a new development as portions of the yield curve have been inverted since last December, with shorter-term rates exceeding those of longer-term rates.



Source: Bloomberg

Most investors closely follow the two-/10-year spread, as it historically served as a reliable predictor of a future recession. Though, research by the Federal Reserve has shown the predictive power of a yield curve inversion is more meaningful when the three-month yield exceeds the 10-year yield; that has existed since May.



Source: Bloomberg

2) What Does an Inverted Yield Curve Imply?

Ordinarily, an inverted yield curve may reflect that markets expect an economic slowdown or recession thus lowering future interest rates. This signal may be followed by a credit creation decline as financial institutions become less incentivized to provide credit (loans) due to declining profitability from taking shorter-term deposits while lending out longer-term funds. A slowdown in credit creation ultimately inhibits economic growth, which may, in turn, contribute to a recession.

Given the significant extent to which the Federal Reserve has influenced the short-end of the yield curve, some economists contend that inverted yield curve implications may be less clear than in the past. In its September 2018 meeting minutes the Federal Open Market Committee (FOMC) noted:

> *"A few participants offered perspectives on the term structure of interest rates and what a potential inversion of the yield curve might signal about economic prospects in light of the historical regularity that an inverted yield curve has often preceded the onset of recessions in the United States. On the one hand, an inverted yield curve could indicate an increased risk of recession; on the other hand, the low level of term premiums in recent years — reflecting, in part, central bank asset purchases — could temper the reliability of the slope of the yield curve as an indicator of future economic activity."*

In April, JPMorgan CEO, Jamie Dimon, noted in an annual letter to investors that he "would not look at the yield curve and its potential inversion as giving the same signals as in the past… There has simply been too much interference in the global markets by central banks and regulators to understand its full effect on the yield curve."

It bears noting that 25 percent of global government bonds, valued at approximately $15 trillion, currently trade at negative yields. Some market observers concluded that these negative yields led to significant global demand for longer-term Treasuries depressing long-term rates, thus impacting the shape of the yield curve.

3) Given the Inverted Yield Curve, is a Recession Imminent?
While an inverted yield curve has preceded each recession over the last 50 years, there is a lag between the signal and a subsequent slowdown. As such, an inverted yield curve should be judged as an early warning sign rather than an immediate precursor and should be viewed in conjunction with other key economic data.

According to an analysis by Credit Suisse, following an inversion of two-year and 10-year Treasury yields, a recession has, on average, followed 22 months afterwards. In July 2018, Jonathan Golub, Chief U.S. Equity Strategist at Credit Suisse noted, “The lead time is extremely inconsistent. Historically, an inverted yield curve has been accompanied by a variety of other ominous economic signals including layoffs and credit deterioration.”

4) Have Odds of a Recession Risen?
Economists raised the probability of a U.S. recession within the next 12 months, though still projecting fairly healthy U.S. economic growth due to strong consumer spending and a robust labor market. That said, ongoing global trade tensions could pose a significant challenge for growth both nationwide and abroad.

5) How Do Markets React Following a Yield Curve Inversion?
Investors might understandably expect poor returns in the aftermath of an inversion given the negative association of the signal, though markets can still produce positive returns. Since 1978, the S&P 500 rose 13 percent on average between the inversion and the start of the recession, according to Dow Jones Market Data.

Over the past five recessions the S&P 500 Index did not peak until almost a year after the yield curve inverted, with a median gain of nearly 22 percent, according to research by LPL Financial.

AN INVERTED YIELD CURVE ISN'T TROUBLE IMMEDIATELY

2–10 Year Yield Curve Inverts	S&P 500 Peak	Months From Inversion Until S&P 500 Peak	S&P 500 Price Return From Inversion to Peak
08/18/78	09/12/78	0.8	2.2%
09/12/80	11/28/80	2.6	11.9%
12/13/88	07/16/90	19.3	33.2%
05/26/98	03/24/00	22.3	39.6%
01/31/06	10/09/07	20.5	22.3%
	Average	19.3	22.3%
	Median	13.1	21.8%

Source: LPL Research, FactSet, 07/12/18
All indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.

6) **How Might the Federal Reserve React in the Months Ahead?**
In July the Federal Reserve cut its federal funds rate by 0.25 percent, its first rate cut since 2008. At the time Fed Chair Jerome Powell noted, "The outlook for the U.S. economy remains favorable, and this action is designed to support that outlook." Powell was quick to note that the cut was "a mid-cycle adjustment" due to risks from weak global growth and trade tensions and was "not the beginning of a long series of rate cuts."

Given recent developments, futures have shifted to indicate a greater likelihood of additional rate cuts by the Fed in the coming months. As of August 15 federal funds futures were pricing in a 67 percent chance of a quarter-point cut and a 33 percent chance of a half-point cut following the mid-September FOMC meeting. And, futures are pricing in at nearly a 93 percent chance that the federal funds rate will be lower by 0.50 percent *or more* by year-end, according to the CME FedWatch Tool.

7) **How Should Investors Respond?**
To quote the great Yogi Berra, "It's tough to make predictions, especially about the future." The reality is that no one knows when the next recession will occur or the driving factor(s). As long-term investors, we must acknowledge that recessions are a normal part of longer-term economic cycles.

While market volatility is currently elevated and is likely to remain so, we would caution investors against making broad changes. Reactive decisions are often ill-timed and can impair the effectiveness of a thoughtfully designed investment plan.

We do not find compelling reasons at this time to justify overriding our asset allocation methodology despite elevated uncertainty. DiMeo Schneider & Associates, L.L.C. continues to believe investors should be patient and adhere to a well-constructed, diversified investment portfolio anchored to long-term goals and time horizon.

For more information, please contact any of the professionals at DiMeo Schneider & Associates, L.L.C.

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Nick provides investment consulting services to nonprofit organizations, corporate executives, family trusts and other high net worth investors. He services clients by providing advice and expertise on asset allocation, portfolio design, investment policy statements, manager search process and overall investment management. Nick is also a member of the firm's Core Investment Strategy Group. Prior to joining the firm in 2007, Nick was a Senior Financial Planner with The Ayco Company where he provided comprehensive advice to affluent clientele. Nick earned a BA in Finance and Economics from the University of Illinois at Urbana-Champaign. He obtained the designation of Certified Financial Planner (CFP®) from the College of Financial Planning and is a CFA® charterholder and member of the CFA Society of Chicago. Nick enjoys spending time with his family and long distance running, having completed three marathons and multiple half-marathons.

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Ryan researches and performs operational due diligence on core investment managers. He is a member of our Global Public Markets Team. Prior to joining the firm in 2014, Ryan served as a Research Assistant in U.S. Public Finance for S&P Ratings Services. He received a BS in Management from Indiana University's School of Public and Environmental Affairs. He is a CFA® charterholder and member of the CFA Society of Chicago and CFA Institute. Ryan is a member of the Children's Research Fund Junior Board and enjoys competing in triathlons.