Recession not on horizon, despite yield curve concerns

Investors continue to closely watch the bond market yield curve's "flat" profile that shows little difference between the yields on securities of varying maturities. There is concern that the curve may invert – with short-term yields higher than those of longer-term securities – and what that might mean for the markets and the U.S. economy. While an inverted yield curve has been a precursor to several past recessions, we do not believe a downturn in the U.S. economy is on the horizon.

TIGHT SPREADS, FLAT CURVE

The market's focus on the yield curve generally refers to the difference in yields between the two-year and 10-year U.S. Treasury notes. A "normal" yield curve has an upward slope, indicating higher yields for longer maturities. That higher yield compensates investors for the longer time commitment and associated risk.

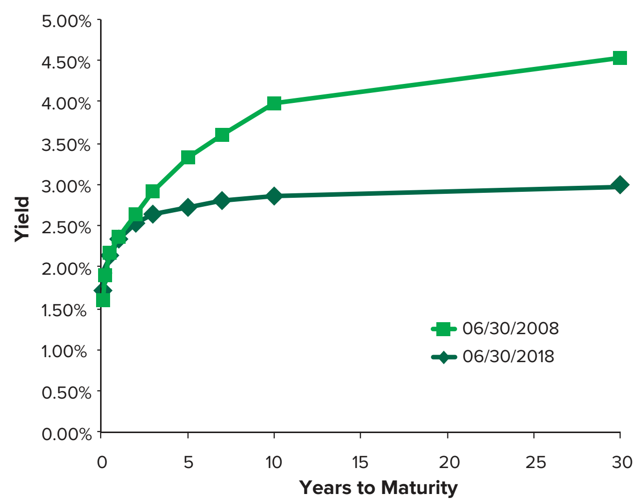
The spread in yields has tightened in the past year based on several factors, including the expectation that the U.S. Federal Reserve (Fed) will steadily increase interest rates. For example, the spread on June 30, 2017, was 92 basis points as the two-year note yielded 1.38% and the 10-year note yielded 2.30%. By the end of 2017, the spread had tightened - meaning a flatter yield curve - to 52 basis points, with the two-year at 1.89% and the 10-year at 2.41%. As of June 30, 2018, the yield curve had flattened even further. The spread was only 32 basis points, with the two-year note at 2.50% and the 10-year at 2.82%.

We believe the yield curve will stay flat for the foreseeable future, based on the Fed's stated intention to continue increasing short-term interest rates and the modest inflationary pressures on the long end of the curve.

The Fed has increased short-term rates seven times since 2015 as part of its current tightening cycle, bringing the fed funds rate to a target range of 1.75-2.00% at its June 2018 meeting. Markets generally expect the Fed will increase rates another 0.25-0.50 percentage point this year. The yield on the 10-year note is much less affected by the actions of the Fed when compared with the two-year, and tends to be more sensitive to investor concerns about gross domestic product growth, inflation, trade, regulations and taxes, to name a few key factors.

The short end of the curve primarily is being affected by the Fed's decision to bring the key fed funds rate to what it considers neutral, meaning it neither stimulates nor restrains economic growth. The long end of the curve is being affected by the "push" of increased Treasury supply from budget deficits, the Fed's balance sheet normalization and an increased term premium versus the "pull" forces of global trade/growth concerns, a strong U.S. dollar, a global search for yield, political concerns and emerging market volatility. The pull factors currently outweigh the push factors, although we think that is a consequence of investor fears of economic troubles. Ideas of an inverted yield curve have added to those fears, with the potential that it could predict recession and prompt a psychological effect that would lead to a market sell-off and damage consumer confidence.

YIELD CURVE MUCH FLATTER THAN IT WAS 10 YEARS AGO

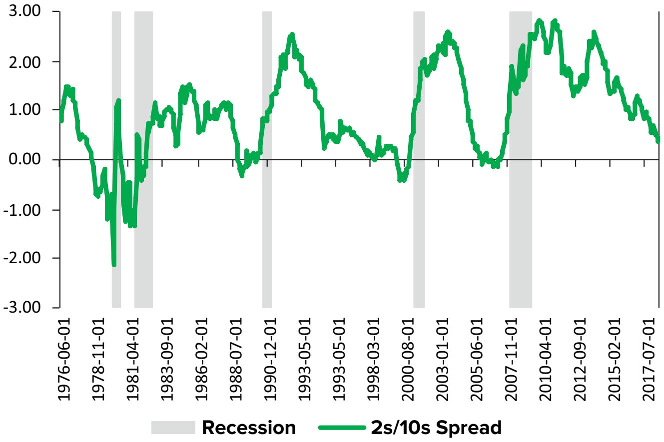


Past performance is not a guarantee of future results. Source: U.S. Treasury; yield curve chart on 06/30/2008 versus 06/30/2018; for illustrative purposes only.

YIELD CURVE AS A PREDICTIVE TOOL

Since 1981, there have been four U.S. recessions. An inversion of the yield curve has called them all. The past recessions began from six to 24 months after the inversion in the yield curve and averaged 17 months in duration.

INVERSION OF YIELD CURVE WAS HARBINGER OF PAST U.S. RECESSIONS



Source: Federal Reserve Bank of St. Louis; interest rate spread of two-year versus 10-year U.S. Treasury notes, shown in percent

The yield curve did invert briefly during June-July 1998 before steepening again without a recession following closely. But another inversion in February 2000 preceded the 2001 recession.

An inversion in the two-year/10-year Treasury spread thus appears to have been an effective predictor of recession. A flat yield curve, on the other hand, does not seem to have much predictive power. As an example, during the period Dec. 1, 1994, to Jan. 31, 2000, the average two-year/10-year spread was 34 basis points and market returns remained healthy.

While an inverted yield curve indicated future economic weakness, it has not called a top in equities. On average, equity markets peaked about seven months before the start of each recession and 10 months after the yield curve has inverted.

INVERTED YIELD CURVE HAS NOT PREDICTED EQUITY MARKET MOVES

Month of Inversion	Cycle Peak		Period Return	
	Russell 1000	Russell 2000	Russell 1000	Russell 2000
Sept. 1978	March 1981	May 1981	10.1%	23.9%
Jan. 1989	June 1990	Sept. 1989	25.6%	12.9%
Feb. 2000	Aug. 2000	Feb. 2000	11.3%	0.0%
Feb. 2006	Oct. 2007	May 2007	24.6%	15.6%
		Avg.	17.9%	13.1%

Past performance is not a guarantee of future results. Source: Federal Reserve Bank of St. Louis and Morningstar Inc. Period return refers to the time from the month of inversion to the month of equity cycle peak. All returns stated are as of the last day of the month noted.

IVY VIEW: RECESSION NOT ON THE HORIZON

The yield curve is flat and has been for some time. While history indicates it stands a better chance of inverting when the spread is tight, as it is now – rather than because of a sudden seismic shift in the spread – there is no timetable for when, or if, it will do so.

The U.S. economy has been in economic expansion mode for nearly 10 years, the second-longest expansion on record. Many feel we are in the later innings of this expansion, but corporate profits are not showing signs of weakening. While an inverted yield curve has been a precursor to several past recessions, the current curve has not inverted and we do not believe a downturn in the U.S. economy is on the horizon.

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