Market Bulletin

May 2, 2019

Fixed Income: Why all the negativity?

In brief

- Sluggish global growth, muted inflation and dovish central banks have seen bond yields fall sharply around the world. Currently, 28% of global government debt has a negative yield.
- Investors should be cautious of holding government bonds at very low yield levels. The nature of bonds begins to alter at low yield levels and can lead to steep, short-term losses should bond yields suddenly reverse.
- Lower bond yields have reignited the hunt for yield within fixed income. Outside of fixed income, lower bond yields often give rise to higher equity market multiples as well as providing a more supportive environment for gold.

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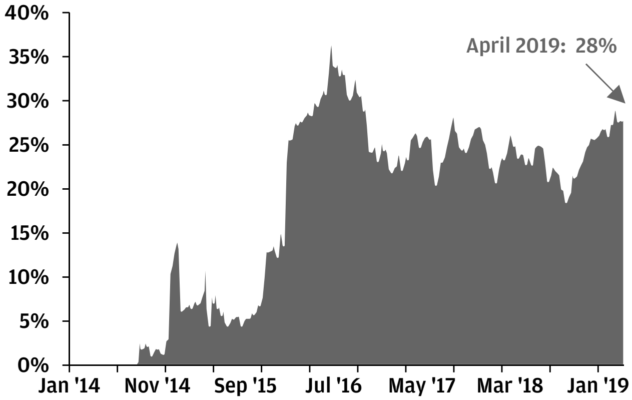
Negative energy

Global bond yields have been falling sharply in 2019. As highlighted in **EXHIBIT 1**, 28% of government bonds trade with a negative yield and 50% of government bonds trade with a yield of below 1%. In total, an estimated $10.4 trillion worth of debt currently trades with a negative yield, one of the highest levels since December 2017.

Much of the negative yielding debt is concentrated in regions such as the eurozone and Japan, who account for 36% and 62% of negative yielding government debt, respectively. However, negative yields are not just constrained to government bonds: $754 billion of corporate debt also trades with a sub-zero yield, mostly in the eurozone.

Low, or even no, yields in international bond markets have weighed on U.S. Treasuries with the U.S. 10-year falling by 73bps since November 2018. Despite its current low yield, the U.S. government bond market still looks to be the best house on the block. At a yield of just 2.50%, it is higher than 90% of other developed market government bonds.

EXHIBIT 1: PERCENTAGE OF GLOBAL GOVERNMENT BONDS YIELDING IN NEGATIVE TERRITORY

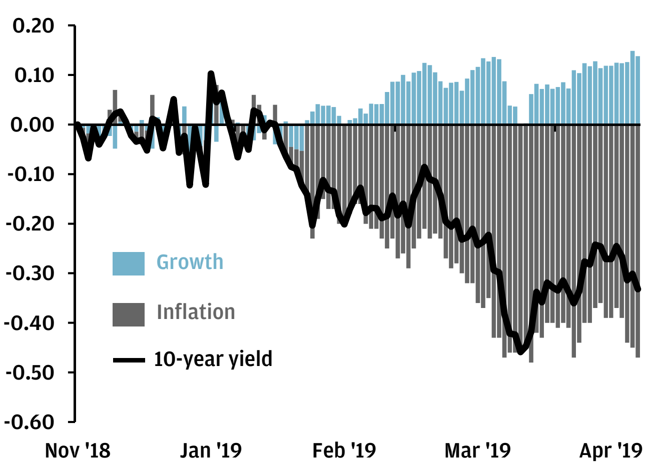


Source: Bloomberg, BofA/Merrill Lynch, J.P. Morgan Asset Management. Index shown is the BoFA/ML Global Government Bond index. Data are as of April 30 2019.

Why have bond yields been falling so sharply in 2019? Bond yields are a function of investors' expectations of both inflation and growth. As highlighted in **EXHIBIT 2**, inflation expectations have declined this year as investors' outlooks have become less sanguine.

EXHIBIT 2: DECOMPOSING CHANGE IN YIELDS; GROWTH AND INFLATION

BASIS POINTS, THROUGH APRIL 30, 2019



Source: FactSet, Tullet Prebon, J.P. Morgan Asset Management. Growth is measured using the change in U.S. 10Y TIPs yield. Inflation is measured as the difference in nominal 10Y and U.S. 10Y TIPs yield. Data are as of April 30, 2019.

WHY WOULD AN INVESTOR HOLD NEGATIVE YIELDING BONDS?

Negative yielding debt is a strange phenomenon whereby an investor will guarantee themselves a loss if they hold the bond to maturity. There are three types of investors who would willingly hold negative yielding assets:

- **Forced buyers:** There are a number of market participants, such as central banks, insurance companies and financial institutions, that must purchase bonds regardless of the yield in order to meet regulatory requirements or, in the case of central banks, to carry out asset purchase programs[1].
- **Cautious investors:** An investor with a gloomy economic outlook may purchase negative yielding bonds because they want the protection that government bonds might provide against much bigger losses elsewhere in the financial markets.
- **Bond traders:** Some investors may purchase a negative yielding bond in order to later sell that bond at an even larger negative yield and therefore make a profit off the position.

THE CHALLENGE WITH LOW BOND YIELDS

As bond yields head into low or negative territory and market participants begin to hold government bonds for reasons other than their income stream or their diversification benefits, the nature of government bonds begins to alter.

One of the biggest misunderstandings in financial theory is that higher risk is related to higher volatility. In practice, investors don't mind sharply rising prices but do have problems with sharply falling prices. This loss-aversion mindset means that financial theory

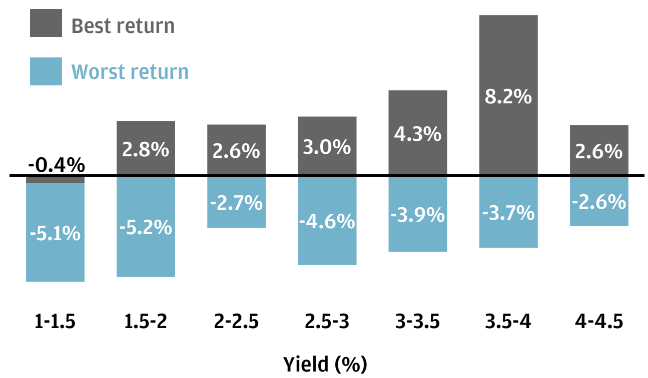
[1]For example, IMF data shows that as of 2Q 2018, the U.S. Federal Reserve owns 13% of U.S. government debt, the Bank of England owns 25%, the Bank of Japan owns 38% and the European Central Bank owns approximately 20%.

should really focus on the skew of an asset class over its volatility.

As we highlight in **EXHIBIT 3**, at low levels of bond yields the chance of a sharp decline in returns going forward begins to rise as the potential for bond yields to increase and a lower yield provides less of a cushion. This phenomenon is partly explained by bond convexity, which measures the curvature in the relationship between bond prices and bond yields. At low yields, convexity rises, making a bond increasingly sensitive to a change in yields. In short, investors should become increasingly cautious of holding government bonds at lower and lower levels of yields.

EXHIBIT 3: 3-MONTH BEST AND WORST PRICE RETURNS AT GIVEN YIELD LEVELS

Bloomberg Barclays Global Treasury 7-10-yr (GDP-weighted)



Source: Barclays, Bloomberg, Thomson Reuters, J.P. Morgan Asset Management. Data reflect historical performance and is not indicative of future returns. Data are as of April 30, 2019.

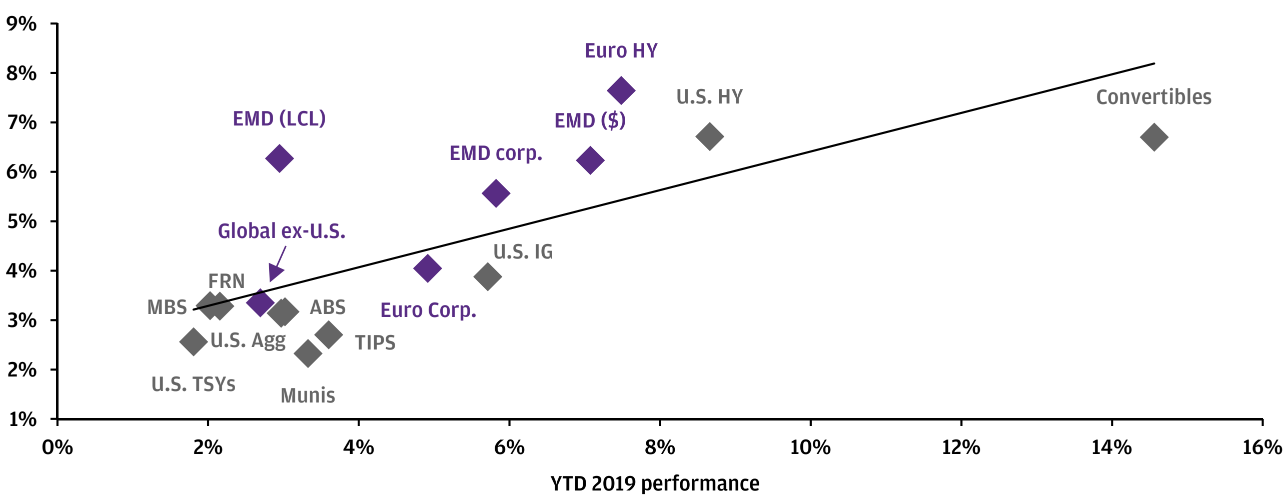
WHAT DO NEGATIVE YIELDS MEAN FOR FINANCIAL MARKETS?

1. The hunt for yield continues

Falling bond yields have reignited the hunt for yield as investors are squeezed out of low-yielding government bonds and search for higher returns in riskier fixed income areas. **EXHIBIT 4** highlights the average yield of different fixed income asset classes in 2019 and their overall performance so far this year. In 2019, investors who have gone hunting for yield have so far been rewarded.

However, investors should be cautious about taking too much risk into their fixed income portfolios at such a late stage of the economic cycle. Areas like high yield and convertible debt may look appealing in a low-yielding world but these higher risk assets will not protect investors if economic conditions deteriorate.

EXHIBIT 4: RETURNS OF FIXED INCOME SECTORS AND YIELDS



Source: Bloomberg, FactSet, ICE, J.P. Morgan Asset Management. Sectors shown above are represented by Bloomberg indices except for EMD – U.S. Aggregate; U.S. TSY's: Government Treasury; MBS: U.S. Aggregate Securitized - MBS; ABS: ABS + CMBS; U.S. IG: U.S. Corporates; Munis: Muni Bond 10-year; U.S. HY: Corporate High Yield; TIPS: Treasury Inflation-Protected Securities (TIPS); FRN: Floating Rate (BBB); Convertibles: U.S. Convertibles Composite; EMD ($): J.P. Morgan EMBIG Diversified Index; EMD (LCL): J.P. Morgan GBI EM Global Diversified Index; EM Corp.: J.P. Morgan CEMBI Broad Diversified Index; Euro Corp.: Euro Aggregate Corporate; Euro HY: Pan-European High Yield. Convertibles yield is based on the U.S. portion of the Bloomberg Barclays Global Convertibles. International fixed income sector returns are in hedged U.S. dollar returns except EMD local index. Returns for international sectors are in hedged returns using three-month LIBOR rates between the U.S. and international LIBOR. Yields for each asset class are a year-to-date average. All returns are total return and in USD. Data are as of April 30, 2019.

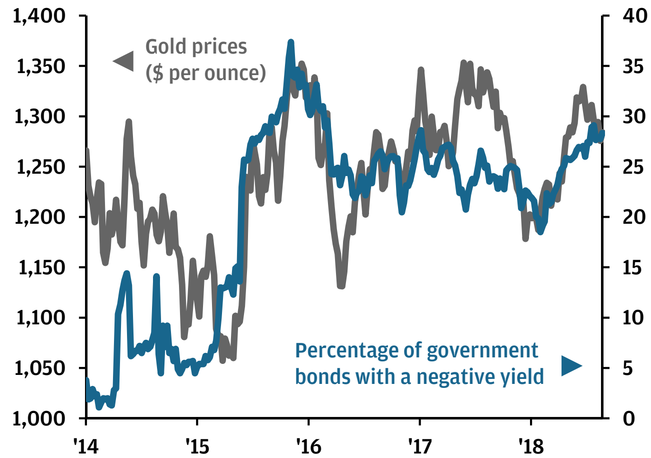
2. Equity multiples get a boost

Bonds and equities do not work in isolation from one another. As we highlight in **EXHIBIT 5**, historically lower bond yields push equity multiples higher. As equity prices today are a function of future cash flows discounted at an interest rate, a lower interest rate puts a higher relative value on those future cash streams and therefore leads to higher multiples in equities. Historically, a 10-year yield of between 2.25%-2.5% has led to multiples of approximately 17.0x forward price-to-earnings (P/E) ratios on the S&P 500, slightly higher than P/E ratios of 16.5x today.

3. Gold glistens in a negative world

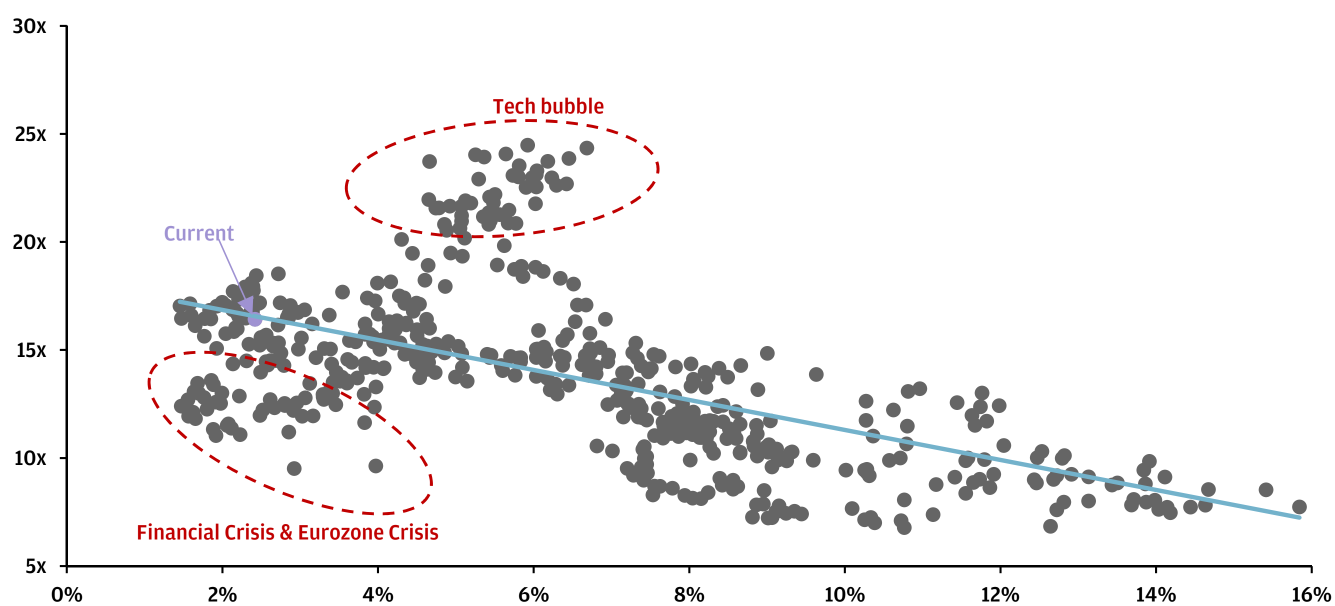
Negative bond yields are typically supportive of gold prices. Historically, when investors were looking for a safe haven asset class, they would prefer government bonds over gold because of the income received from bonds. However, as seen in **EXHIBIT 6**, with nearly 30% of government bonds trading with a negative yield, gold looks relatively attractive as a safe haven – it might not generate income but at least investors don't lose money while they hold it.

EXHIBIT 6: GOLD PRICE VERSUS PERCENTAGE OF DEBT IN NEGATIVE TERRITORY



Source: Barclays, Bloomberg, FactSet, J.P. Morgan Asset Management. Index shown is the Bank of America & Merrill Lynch Global Government Bond Index. Correlation between gold and negative yield government bonds is 0.66 over chart period. Data are as of April 30, 2019.

EXHIBIT 5: S&P 500 P/E RATIO VERSUS U.S. 10-YEAR YIELDS



Source: FactSet, IBIS, Shiller, J.P. Morgan Asset Management. IBIS NTM estimates are used until 1985. Between 1975 and 1985, CAPE-Shiller P/E ratios are used. Data are as of April 30, 2019.

INVESTMENT IMPLICATIONS

- Lower bond yields are a function of subdued inflationary pressures and weaker global growth, which has turned central banks dovish in 2019.
- A growing percentage of negative yielding bonds has weighed on U.S. Treasuries. Investors should become increasingly wary of lower and lower bond yields as the nature of government debt begins to change at low or negative yields.
- A greater percentage of negative yielding bonds has reignited the hunt for yield as investors look for higher yields in riskier asset classes. Equity market multiples are also likely to expand and gold typically can perform strongly in a negative yielding world.

MI-MB_ Negative Bond Yields

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