

Insights
from
Brett
WanderChief Investment
Officer, Fixed IncomePerspective on global economic and fixed
income developments

Bonds, bubbles, and Bitcoin

Spring 2018

Over the past few years, stocks, bonds, and Bitcoin have inspired conversations regarding what an advisor should recommend to clients when asset prices reach extremes. This is hardly surprising, given that U.S. stocks rose to all-time highs early this year after a remarkable 2017, and at more than \$9,000, Bitcoin is up by roughly 600% over the last year alone.¹ In addition, fixed income credit spreads remained tight and bond yields remarkably low even as the Federal Reserve (Fed) repeatedly hiked short-term rates. Do these scenarios represent asset bubbles or have extreme valuations been fundamentally supported by rational decision making? Additionally, what characteristics tend to show up when asset valuations have reached bubble territory? To help address potential questions like these from your clients, let's dive into this quarter's edition of our fixed income insights.

Client insights regarding asset bubbles

Details have varied from one asset bubble to another, but three characteristics have generally surfaced: (1) extreme price levels, (2) crowd euphoria/panic buying, and (3) a disconnect from underlying fundamentals. The table at the top of the next page captures these characteristics where stocks, bonds, and Bitcoin are concerned.

Key takeaways:

- Extreme prices, crowd euphoria, and a disconnect from fundamentals can be signs of an asset bubble.
- We don't believe that fixed income is in a bubble environment right now.
- The jump in longer-term bond yields in February was primarily driven by rising inflation expectations.
- Two-year U.S. Treasury yields are back above the dividend yield on the S&P 500® Index for the first time in about a decade.
- Even though asset prices can reach extremes, these valuations can make sense when supported by underlying fundamentals.

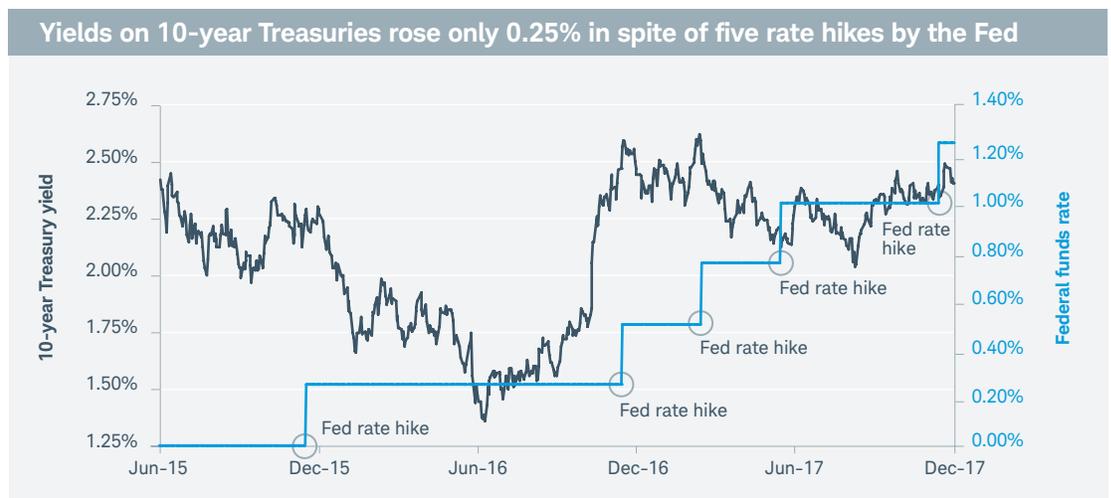
Asset-bubble characteristics	Stocks	Bonds	Bitcoin
Extreme prices	●	●	●
Crowd euphoria/panic buying	●	–	●
Disconnect from fundamentals	–	–	?

Stocks and Bitcoin have both traded at extremes this year, fulfilling one critical ingredient in the asset-bubble equation. Crowd euphoria and panic buying for fear of missing out is an additional characteristic that these assets shared during January in particular, fulfilling a second criteria and illustrating the role that behavioral finance can play in your clients' investment decisions. However, a potential disconnect from underlying fundamentals is where the two assets may differ.

Fundamentally assessing the underlying factors that support the value of an individual stock requires a wide range of calculations and considerations, some of which—such as P/E ratios—are subject to interpretation. At a macro level though, U.S. stocks are benefiting from corporate profit growth and solid consumer confidence, while international equities are supported by still-accommodative central bank policies in many key countries and regions. By comparison, Bitcoin's underlying fundamentals are far more intangible, since as a startup currency, its ultimate adoption is extremely uncertain. Overall then, stocks and Bitcoin may be trading at extremes, but these levels appear to be justifiable, perhaps making their prices not so extreme after all.

Even after five rate hikes by the Fed,

10-year Treasury yields were only 25 basis points (0.25%) higher than where they began.



Sources: Charles Schwab Investment Management; Bloomberg.

Bond extremes are quite justifiable

What about bonds? For years, long-term U.S. Treasury yields have been extremely low, at least by historical standards. However, these low yields haven't been a reflection of crowd euphoria or panic buying, but are instead a reflection of the underlying fundamentals that affect fixed income securities in general.

The extreme yield levels at which bonds are trading are justifiable from our perspective.

The U.S. economy is transitioning from a period of historically low short-term interest rates that drove yield-seeking investors ever-further out the credit- and bond-maturity spectrum, contracting yield spreads in the process. The extreme yield levels at which bonds are trading reflect this fact more than anything else, and are therefore justifiable from our perspective.

Rate hikes don't necessitate a parallel curve shift

Given that bond yields are justifiable, your clients might be wondering if the Fed's rate hikes were behind the jump in longer-term rates earlier this year. If so, you might consider speaking with them about the chart below. The Fed began scaling back their accommodative policies in 2015 and hiked rates 1.25% in total by the end of 2017. Yet as the chart illustrates, yields on 10-year Treasuries finished that period only about 25 basis points higher.

Inflation expectations dictate the direction of longer-term rates more than any other single factor.

Inflation expectations shift

If Fed rate hikes weren't the catalyst for the February jump in longer-term rates, what was? The short answer is inflation expectations, which dictate the direction of longer-term rates more than any other single factor. In spite of ongoing improvements in the jobs market in recent years, U.S. wage pressures have been well contained. At least that was the case until unexpectedly strong data was released for January and February. These improvements, combined with the potential effects of recent tax revisions, painted a picture of potentially faster inflation over the intermediate-term, pushing longer-term bond yields higher in February, with 10-year Treasuries reaching nearly 3.0%. That was a significant jump in yields over a fairly short period of time and might be worth discussing with your clients to address any potential concerns regarding their fixed income allocations and why longer-term rates have been rising.

A bumpy road for bonds

After the initial February yield spike, longer-term bond yields have been relatively range-bound. Worries about trade wars and the potential for a ramp up in imported inflation have played a hand, leading to a fluctuating outlook where U.S. economic prospects are concerned. We've

For the first time in more than a decade, yields on 2-year Treasuries are above the dividend yield on the S&P 500 Index.

witnessed a similar pattern with many of Donald Trump's initiatives and tweets since he became president, with the markets initially pricing in a worst-case scenario that has often gone unrealized, eventually allowing the markets to self-correct.

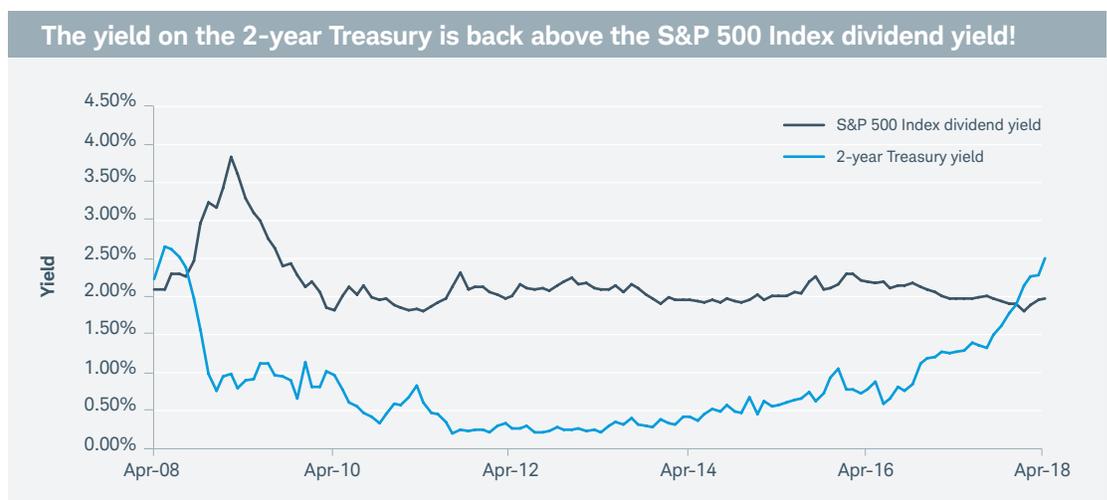
Where do short-term rates go from here

The Fed has forecasted two more rate hikes before year-end and three subsequent rate hikes in 2019. So short-term rates are set to rise fairly quickly, creating a potential conversation opportunity with your clients.

For the first time in a decade, 2-year Treasury yields are higher than the dividend yield on the S&P 500® Index, as illustrated in the chart below. Conversations about the historically income-focused appeal of bonds—with less relative credit risk than equities—have therefore once again become relevant. Elevated levels of equity market volatility earlier this year and potential client anxieties associated with this historical return to normalcy would make such a conversation timely as well.

What about longer-term rates

The outlook for longer-term rates remains hinged on inflation expectations. On one side of the equation are the tightening jobs market and recent tax changes that could fuel rising wages, more spending, and faster inflation. On the other side of the equation are sovereign debt yields across G7 countries like the U.K., France, Germany, and Japan that remain well below U.S. Treasury yields. In fact, even yields on high-yield European corporate debt are below comparable-maturity Treasuries, while representing



Sources: Charles Schwab Investment Management; Bloomberg.

far more credit risk. Given the global appeal of Treasuries, this should help keep a lid on any significant increase in longer-term U.S. rates, even if the Fed continues to raise the federal funds rate, as expected. As a result, we think that inflation expectations would need to rise considerably for longer-term rates to move materially higher from here.

Final takeaways for your clients

Extreme asset prices can make sense if they're supported by underlying fundamentals. We believe that fundamental support is in place where fixed income is concerned, in spite of tight credit spreads, inflation pressures, and the favorable economic environment. Moreover, while fixed income is always a relevant asset class, it can play a particularly important role when equity markets turn volatile, anchoring the performance of your clients' portfolios. So help your clients understand the importance of sticking to their long-term investment plan, and consider reminding them that a well-diversified portfolio should generally include an allocation to fixed income, and U.S. Treasuries in particular.



Brett Wander, CFA

Chief Investment Officer, Fixed Income
Charles Schwab Investment Management

About the author

Brett Wander is Chief Investment Officer (Fixed Income) of Charles Schwab Investment Management, Inc. (CSIM), a subsidiary of The Charles Schwab Corporation. Wander joined CSIM in 2011 and is responsible for all aspects of the firm's fixed income and money market portfolios, leading a team of more than a dozen investment professionals. Over his more than 20 years of investment management experience, Wander has been intimately involved in the design, development, and oversight of a wide range of active, indexed, and alternative fixed income strategies. His expertise spans a wide range of global and domestic markets and sectors. He is a frequent industry speaker, presenting at conferences and in various media forums. He has taught MBA-level investment courses at the University of Southern California. Wander earned an MBA from the University of Chicago and a BS in system science engineering from the University of California, Los Angeles. He is a Chartered Financial Analyst® charterholder.

Important disclosures

Past performance is no guarantee of future results.

¹ Bloomberg; Charles Schwab Investment Management, Inc.; Bitcoin price return based on data for the trailing 12 months ended 04/15/18.

The information provided here is for general informational purposes only and should not be considered an individualized recommendation or personalized investment advice (either under the Investment Advisers Act of 1940, or the Department of Labor's Fiduciary Advice Rule). The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision.

Some of the statements in this document may be forward looking and contain certain risks and uncertainties. All expressions of opinion are subject to change without notice in reaction to shifting market conditions. Data contained herein from third party providers is obtained from what are considered reliable sources. However, its accuracy, completeness or reliability cannot be guaranteed.

Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.

©2018 Charles Schwab Investment Management, Inc. All rights reserved. IAN (0518-8NUH) MKT101402-00 (05/18)
00208013

For more insights, visit us at schwabfunds.com.

