

# Economic & Market Outlook

## Executive Summary

- ~ The level of negative-yielding debt outstanding continues to grow, and now accounts for over one quarter of the investment-grade bond market
- ~ Meanwhile, interest rates in the US have fallen precipitously, and investors are becoming open to the possibility of negative rates at home
- ~ The principal impact of interest rates at or below zero is elevated asset class valuations and below-average forward rates of return

## Introduction

This is not our normal commentary. We are not going to write extensively about the China trade saga or discuss the valuations of each asset class, because the truth is little has changed on these fronts. Instead, we thought we would spend a little more time discussing the unusual world we live in. Specifically, a world where interest rates, at or below zero, are the new normal and the major implications associated with this reality.

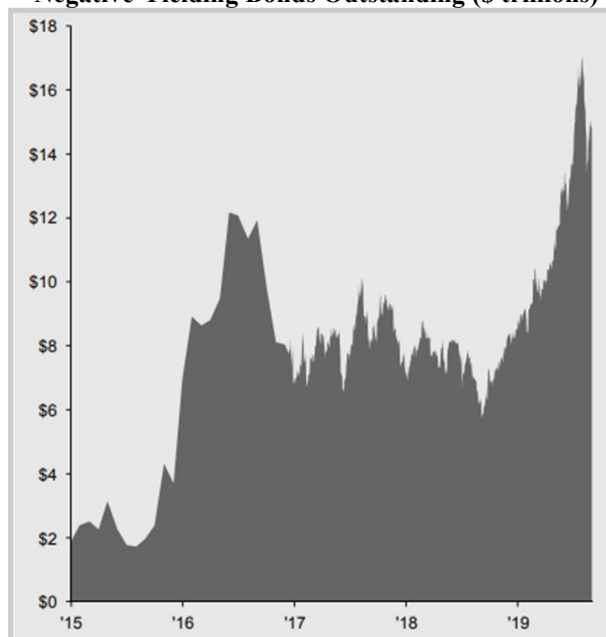
## An Introduction to Negative Rates or Negative-Yielding Bonds

Let's start with negative rates. Imagine we asked you to loan us \$100,000 dollars, and in exchange, we offered to pay you \$99,000 dollars one year later. Your response should be an immediate "no" if not outright laughter. We both know there is nothing rational about engaging in such a transaction. Yet, transactions like this are taking place all over the world's bond market.

Bonds are financial instruments that represent a loan made by an investor to a borrower. If you buy a Treasury bond you are loaning money to the US government. If you buy a corporate bond you are loaning money to a corporation. In exchange for the loan, the bond owner typically collects a series of fixed interest payments (coupons) and when the loan matures, they also recoup their principal.

Negative interest rates (or negative bond yields) arise when an investor pays more for a bond than they can cumulatively recoup in interest payments and principal. For instance, this past August, Germany went to market with a 30-year bond that pays 0.0% in annual interest. Investors offered 103.6% of principal to buy this bond. Effectively, the German government was paid €3.6 euros for every €100 euros it borrowed.

Negative-Yielding Bonds Outstanding (\$ trillions)



Source: JP Morgan

At quarter end, there was roughly \$15 trillion in negative-yielding debt outstanding. To put that number into perspective, it is over one quarter of the investment-grade bond market. Most of this debt is associated with sovereign or government-backed bonds. Over three quarters of Japanese government debt carries a negative yield, and in the case of Switzerland, that percentage is approaching 100%. Negative yields have also pushed into the corporate credit markets. Currently, over \$1.2 trillion in corporate bonds carry negative interest rates, and a tiny handful of those are junk bonds. Danish institutions have even offered borrowers “negative” mortgages.

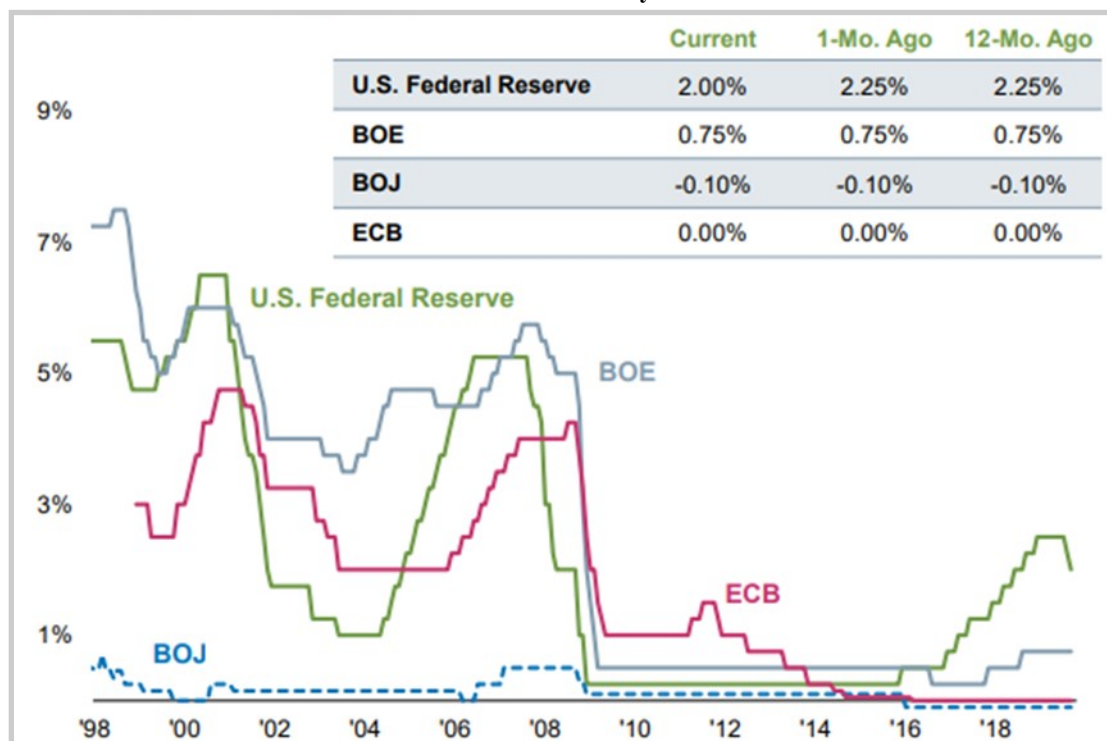
### How Did This Come to Be?

To be certain, this was not supposed to happen, and as far as we can tell it hasn't before. Sidney Homer certainly didn't catalog any such events in *The History of Interest Rates*, a text that examined interest rates dating back to 2000 B.C. The idea of negative interest even flies in the face of rational economic and financial theory. Consider the economic concept of a zero-lower bound, where interest rates cannot fall below zero because individuals can opt to hold cash instead of negative-yielding assets. Or even more importantly, the time value of money, the idea that an individual would prefer \$1 today over \$1 tomorrow. So why did this happen? How did low and subzero rates become so pervasive?

We can't give you a precise answer. Nobody can. Instead we will offer up a host of explanations, which are all interrelated to varying degrees.

Reason number one (and the most obvious conclusion) is that interest rates have been manipulated by central banks. Consider the European example. In 2014, the European Central Bank (“ECB”) began charging banks interest on excess reserves held at the ECB. For the unacquainted, excess reserves simply refers to a bank's surplus cash. The ECB's hope was for this action to incentivize bank lending and spur consumer spending. Additionally, central banks have been a major source of demand for sovereign bonds. Last month, the ECB announced it would spend up to €20 billion euros buying various European sovereign bonds for as long as it deems necessary.

Central Bank Policy Rates



Source: Eaton Vance

Another reasonable question to ask is who is purchasing these bonds outside of the central banks? The answer is more people than you might guess. For various regulatory reasons, financial institutions like banks, insurance companies, and pensions are often captive buyers, but don't exclude the possibility that they are willing buyers as well. There are also passive investment vehicles whose goal is to mirror or track an index. Consider the Vanguard World Bond

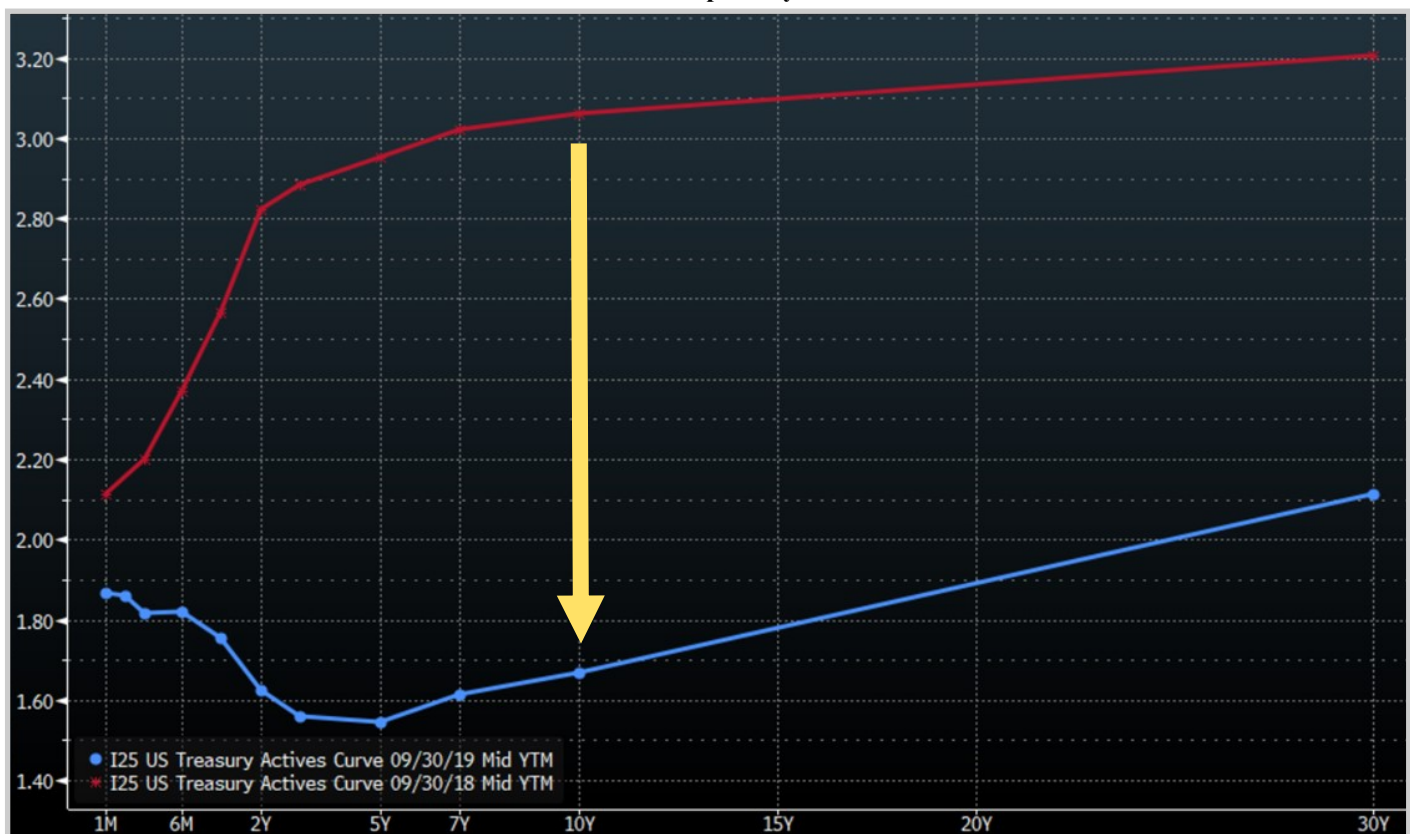
Market Index Fund (VTIBX), a \$138 billion fund, meant to track the global bond market. By our calculations, over 45% of the bonds it holds carry a negative yield-to-maturity. There are even active investors attempting to outperform the market by purchasing these bonds. For US dollar-denominated funds, there is an attractive carry trade to be had. Some may be playing the shape of the curve, while others might simply be speculating on higher prices.

It is also plausible the growing quantity of negative-yielding debt is an indicator of fear and uncertainty in the marketplace, a prognostication of negative things to come. If investors, in aggregate, expect an economic slowdown, then purchasing negative-yielding assets might make sense. Think of it as an insurance policy where the negative yield represents the annual premium. If risk assets, like equities, were to sell off, investors may seek the safety of sovereign bonds, in which case their prices would temporarily appreciate.

### Coming to America

Less than a year ago, the US Federal Reserve was tightening monetary policy, and the consensus among investors was US rates were heading higher. The negative interest rates in Europe and Japan were perceived to be specific to those economies, and not plausible in the US. In recent months, the consensus view has changed, as US bond yields have plummeted. Some, like former Federal Reserve Chair, Alan Greenspan, think negative US rates are a matter of when, not if.

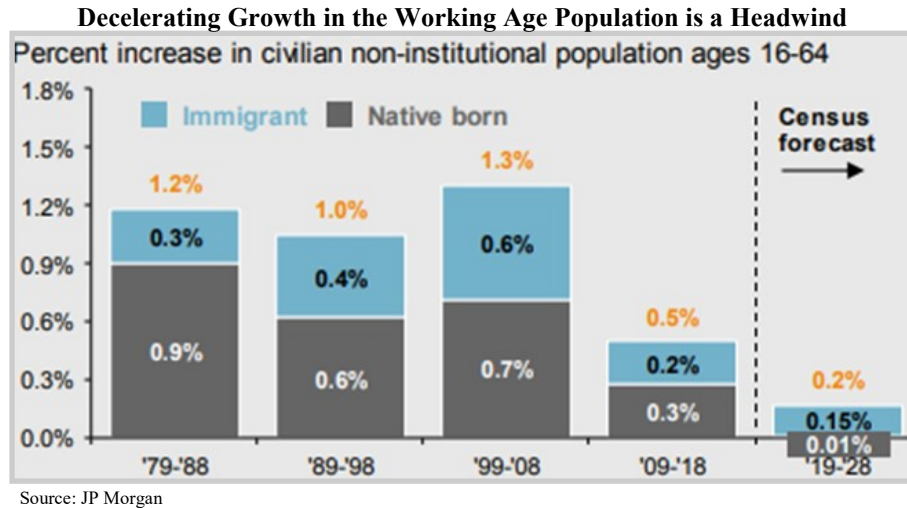
US Rates Have Fallen Precipitously Over the Last Year



Source: Annandale Capital, Bloomberg

Again, the exact catalyst for negative rates is unclear. We are not certain we will see them in the US, but given their prevalence abroad, US investors can no longer rule out the possibility. For those in Chairman Greenspan's camp, the argument might go something like this.

A country's economic growth can be broken down by its pool of labor and the productivity of those laborers. Since the financial crisis, for reasons economists don't quite understand, US labor productivity has been low. But what we do know is that the growth rate in the US supply of labor (i.e. its working age population) has steadily been falling and will continue to fall. So, without an increase in labor productivity, economic growth, by definition, will decelerate.



Add to that the fact that the US is actively engaged in a trade war, and nobody knows quite how it will end. The Trump and Xi administrations may reach a deal that puts this uncertainty behind us, or our two nations could become entirely walled off when it comes to trade. We don't know. But we do know the back and forth is already impacting parts of the US and world economy. In the past two commentaries, we mentioned US manufacturing growth was slowing. Today, that slowdown has morphed into a full-on contraction. Within the manufacturing sphere: new orders, production levels, employment levels, prices, backlogs, and most notably export orders are falling. The saving grace for the US economy has been and remains the service sector, which continues to expand, albeit at a declining pace. If the US economic growth engine does finally crack, we could see the Federal Reserve take a more unconventional path, like the ECB or Bank of Japan. We also can't rule out the potential that market forces, without the intervention of the Federal Reserve, drive interest rates down this path.

### Low Rates Impact on Financial Assets

To be 100% clear, we don't know where interest rates are heading. Nobody does. We can't name anyone who foresaw two decades of near 0% nominal rates in Japan. We certainly can't name anyone who foresaw the dawn of negative interest. The only thing we can tell you is today's global interest rate regime is impacting every corner of the financial markets in a myriad of ways.

The impact we feel most acutely is in the pricing of financial assets. Our conjecture is that abnormally low/negative interest rates have driven the price of financial assets higher and, in turn, the forward returns on financial assets lower. Before we jump into specific examples, let's review some basic financial theory.

$$Price = \frac{D}{(r - g)}$$

The equation above is from the Gordon Growth Model and can be used to value perpetual cash flow streams. For example, suppose someone offered to sell you an asset that paid a \$100 distribution ( $D$ ) this year. Let's also assume the distribution grew ( $g$ ) by 2% every year thereafter into perpetuity. The amount you are willing to pay for this asset will depend on your required rate of return or discount rate ( $r$ ). So, the question becomes, what should be my discount rate? To answer this question, you are likely to see what you can earn on competing investments. If you decide that you can safely earn 5.0% going forward than you should pay no more than \$3,333 for this asset.

$$Price = \frac{D}{(r - g)} = \$3,333 = \frac{\$100}{(5.0\% - 2.0\%)}$$

Now imagine investors trying to determine their required rate of return today. As a group, they survey the market and see negative European yields, negative Japanese yields, 10-year Treasury yields at 1.7%, and 30-year Treasury yields at only 2.1%. What discount rate would the market (the collective group of investors) assign to this asset? 3.0% seems plausible, implying yield-starved investors would pay up to \$10,000 for this security.

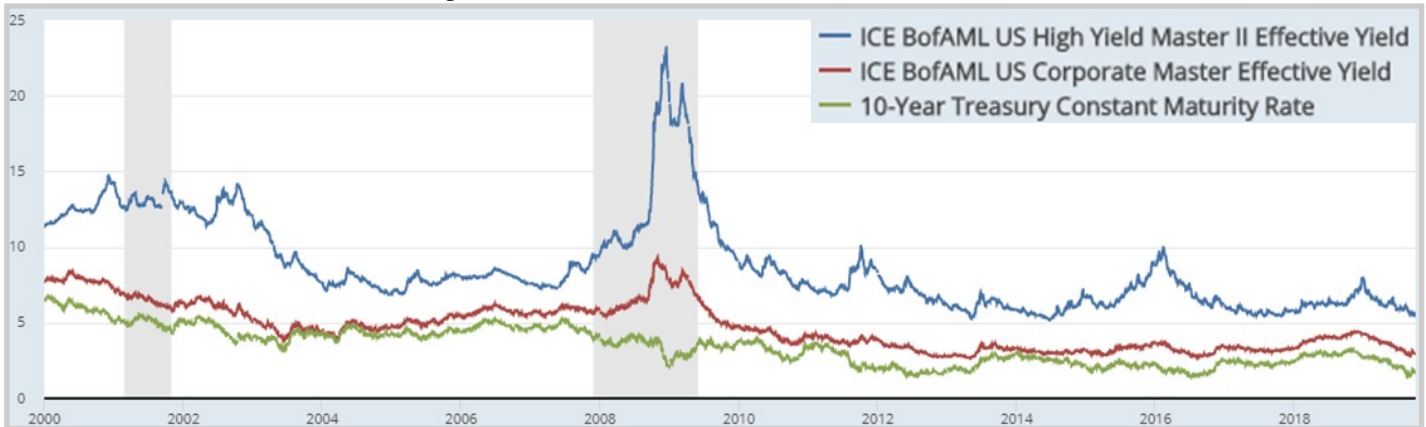
$$Price = \frac{D}{(r - g)} = \$10,000 = \frac{\$100}{(3.0\% - 2.0\%)}$$

The point we are trying to stress is the rate of return you can obtain on risk-free assets has a direct bearing on the price and forward rates of return for other assets.

## Corporate Debt

The easiest way to illustrate our point is with bonds. As the rate or yield on Treasuries has fallen, so has the yield on riskier forms of debt. The chart below shows the benchmark yields for 10-year Treasuries (green line), investment-grade corporate bonds (red line), and high-yield/junk bonds (blue line). As you can plainly see, the yield on investment-grade and high-yield corporate has trended down with risk-free rates. At present, investment and junk-rated bonds sit near historic lows, yielding 2.9% and 5.5%, respectively. We would also add that the spreads between benchmark rates and various credit instruments are below historical averages.

**Corporate Bond Yields Continue Their Descent Lower**



Source: Federal Reserve of St. Louis

The hunt for yield is even more difficult in Europe where benchmark interest rates are negative. For comparison, the European investment-grade benchmark offers up a mere 0.4%, and the European high-yield benchmark 3.8%. And as we mentioned earlier, a handful of corporate issues carry negative yields. The obvious takeaway is that low yields on risk-free investments (i.e. Treasuries) are forcing investors to accept lower yields on riskier investments, in this case bonds that carry the risk of default.

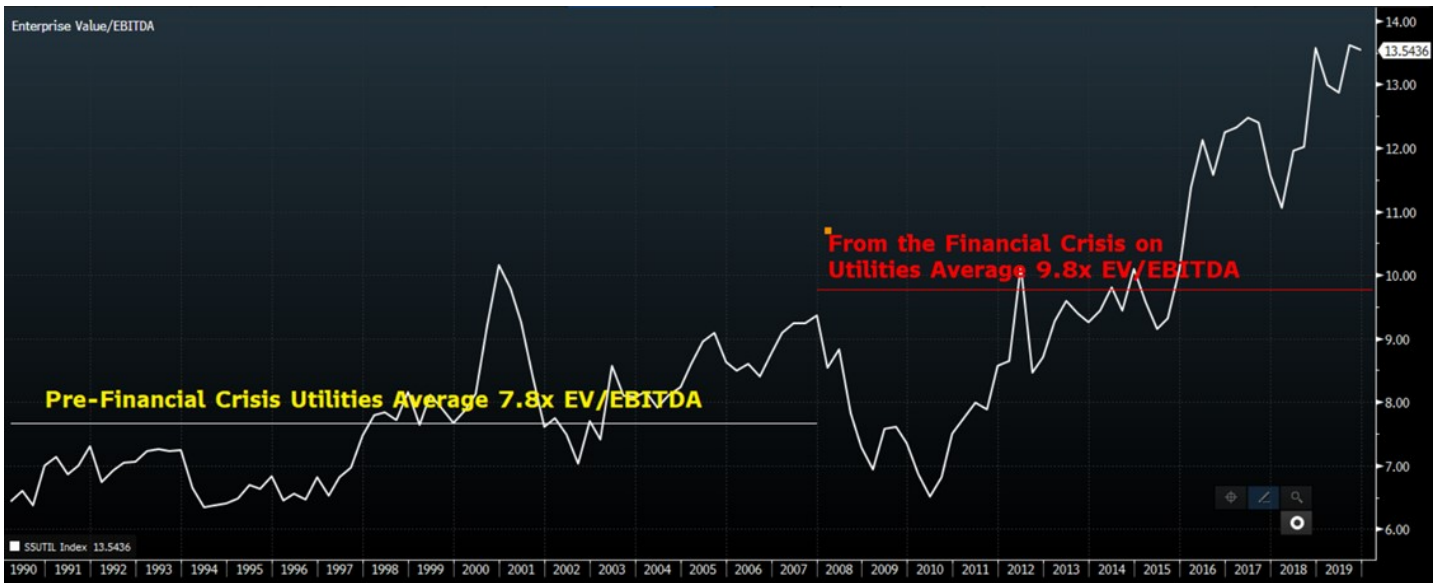
## The US Utility Sector

The US utility sector serves as another great case in point. Over the last 12 months, utility stocks have returned 27.6% compared to 6.1% for the broader US equity market, and over the last 3-years, their returns rank second only to the technology sector. The abnormally strong performance is likely the result of two things. First, utility stocks tend to perform well during times of economic stress and/or uncertainty, because their cash flows are perceived to be safer than most equities (i.e. an electric or gas bill is one of the last things to be cut by a consumer facing hardship). Second, and to our original point, utility stocks tend to attract income investors who at present have few “safe” yield alternatives.

The following chart illustrates the dramatic shift in how investors value utility stocks. Before the financial crisis, utility stocks traded at roughly 7.8x enterprise value (the total value of a company) to EBITDA (a measure of cash-flow). We would also add that during that period they never traded above 10.0x. From the financial crisis onward, utilities have averaged valuations roughly 25% higher, and today they trade at 13.5x. In other words, investors are currently paying a 74% premium per dollar of cash flow (EBITDA) to own a stake in these enterprises.

< See Graphic on the Following Page >

## Utility Valuations Continue to Set New Records as Rates Fall



Source: Annandale Capital, Bloomberg

The reason we chose to make an example of utilities is because they are relatively easy to value. They are after all regulated businesses, which means regulators dictate the level of profits they are allowed to generate. Over the last 5 years, this sector has averaged returns on equity capital of 7.5%. This would be akin to your child investing \$100 into building/operating a lemonade stand and making \$7.50 in profits. For the sake of our math, let's be generous, and assume regulators allow utilities to earn 10.0% on their equity going forward. We won't bore you with the exact math (you can see it in the box below), but because we know how much investors are currently paying for a \$1 of equity, we can solve for the returns investors are currently underwriting. Under our assumptions, which we believe are generous, a utility investor can expect to earn 5.6% assuming valuations do not change.

#### Derivation of Implied Returns

We can solve for the implied discount rate (or expected return) by rearranging the Gordon Growth model.

$$\text{Price} = \frac{D}{(r - g)} \rightarrow r = \frac{D}{P} + g$$

Furthermore, we can derive  $P$ ,  $D$ , and  $g$ , because we know the following facts and assumptions. Utilities on average trade at 2.4x equity or book value. We have assumed utilities will generate a 10% return on equity and continue to payout 75% of their earnings in the form of dividends.

$$g = \text{ROE} \times (1 - \text{Payout Ratio}), \quad D = \text{Equity} \times \text{ROE} \times \text{Payout Ratio}, \quad P = 2.35 \times \text{Equity},$$

Substituting these facts and assumptions into our original equation yields the following:

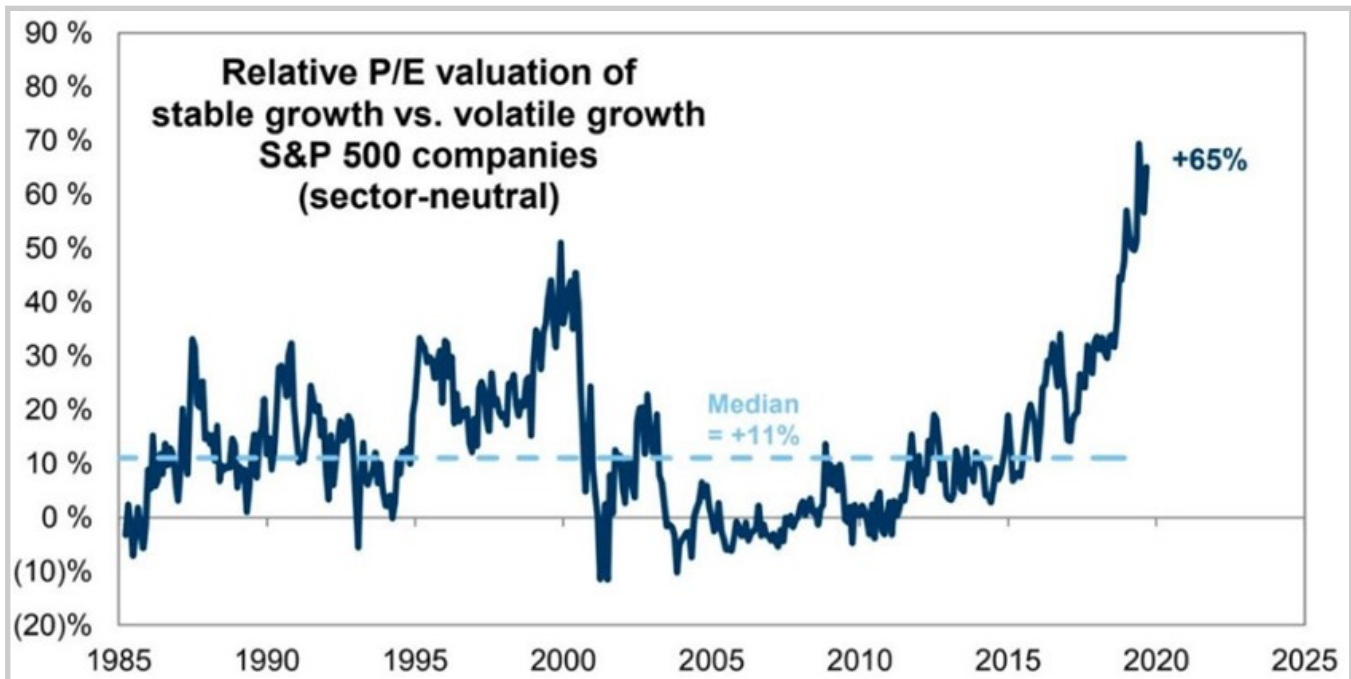
$$r = \frac{\text{Equity} \times 10\% \times 75\%}{2.35 \times \text{Equity}} + (10\% \times (1 - 75\%)) = 5.6\%$$

#### Low Volatility Exchange Traded Funds

The utility sector isn't the only public equity domain benefiting from investors lowering discount rates; it is all stocks. However, perceived haven stocks like utilities, REITs, and consumer staples seem to be at the epicenter of this movement. Of the thousands of exchange traded funds (ETFs) in existence, the iShares Minimum Volatility Fund (USMV) has been the single most popular ETF among investors in 2019. To our earlier point, investors are pouring money into asset classes that offer the perception of safety. This ETF targets stocks (and combinations of stocks) that have historically exhibited less volatility (price fluctuations). Some of its top holdings are household names like Coca-Cola, Waste Management, McDonalds, Visa, Pepsico, and Verizon. Year to date, this ETF has returned 24.0% (4% above

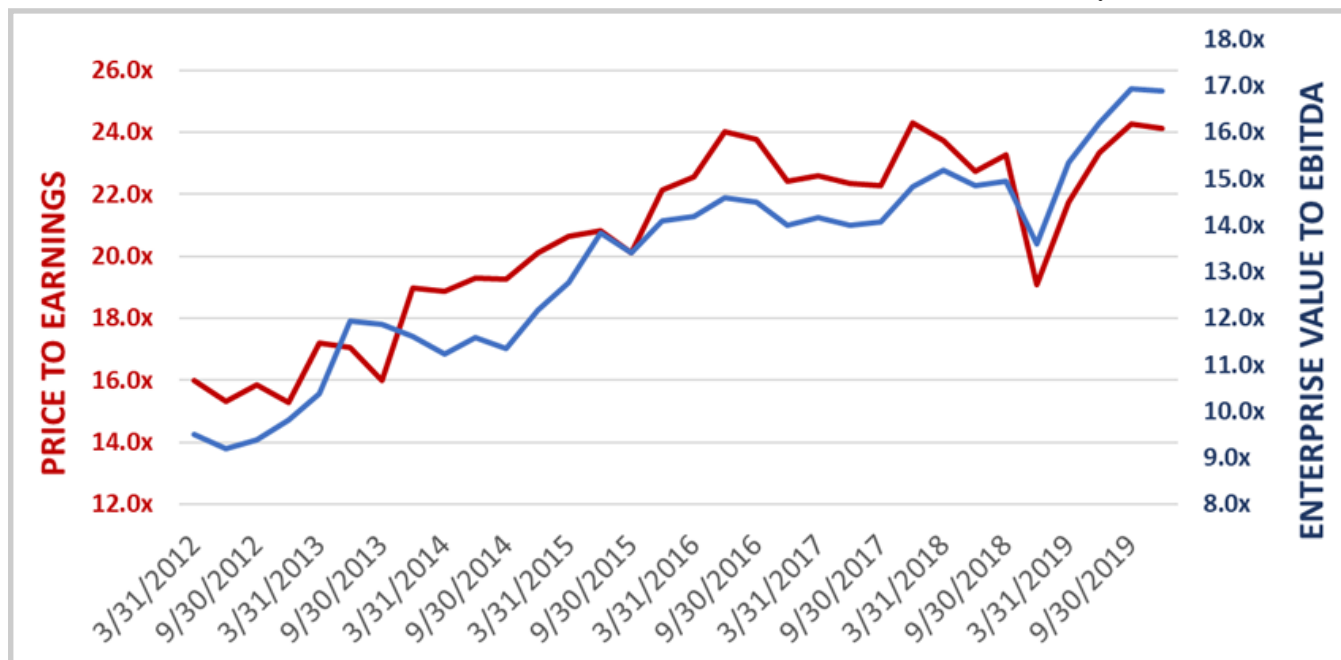
the S&P). Over 100% of this return can be explained by investors simply paying more for a dollar of earnings, as the constituents of USMV, in aggregate, have seen their earnings fall year to date.

#### Investors are Paying Record Premiums for Stable Growth



Source: Goldman Sachs

#### Valuations Continue to Rise for the Constituents of the US Minimum Volatility ETF

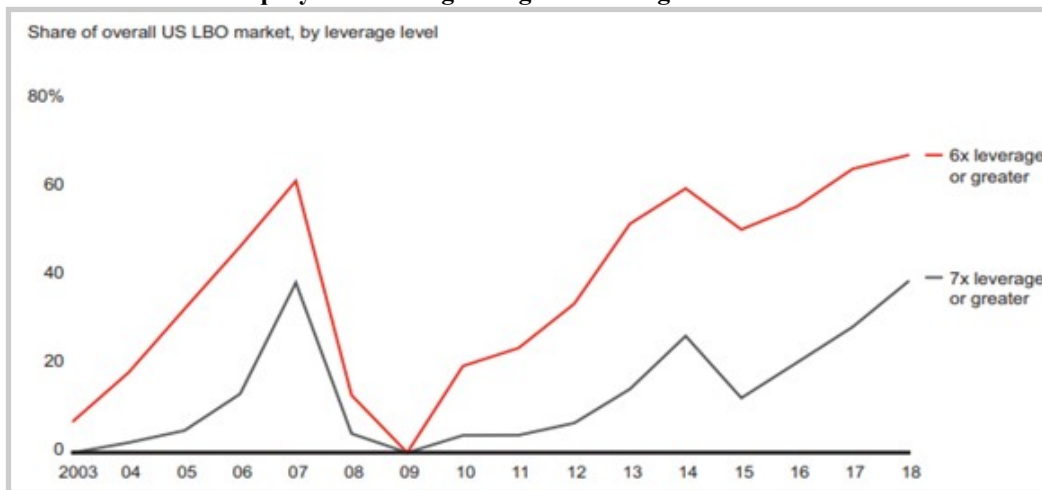


Source: Annandale Capital, Bloomberg

### The Quandary

It's undeniable. Interest rates influence everything from the pricing of a plain vanilla bond to the valuations of venture capital funding rounds. Unfortunately, this reality presents investors with a dilemma. Do you begrudgingly accept lower rates of return or do you take incrementally higher levels of risk?

### Private Equity is Resorting to Higher Leverage to Generate Returns



We fear too many investors are choosing the latter path. When presented with the option of near zero percent risk-free rates, they are moving one step out on the risk spectrum. They are either targeting riskier asset classes, using leverage/debt to enhance their returns, or some combination of the two.

The current era of low rates has rewarded and even encouraged this behavior. Default rates on corporate credit are artificially depressed, because easy access to cheap credit allows companies to perpetually stave off bankruptcy. As a result, credit investors have forgotten what a default cycle looks like. Disruptive startups can flourish without ever achieving profitability, because they have unlimited access to funds from venture capital. In the real estate markets, almost every transaction makes sense on a levered basis, because the buyer's cost of capital is so low. And, as we stated in our commentary, every investor is looking for better alternatives in a yield-starved world.

At Annandale, our goal is maximizing risk-adjusted returns. For instance, our fixed income portfolio offers the same level of yield as the broader investment-grade bond market, but it does so with roughly 70% of the interest rate risk (as measured by duration). Additionally, the weighted-average credit quality of our portfolio is better. We have also avoided what we consider to be the frothiest areas of the equity market, such as so called "low-volatility stocks." We know that even great companies can turn out to be terrible investments if the price paid is too high. When it comes to the private capital markets, we never chase allocations in the funding rounds of hot venture investments. Instead, we spend our time looking long and hard for a small handful of differentiated opportunities. We focus on risk-adjusted returns, because we know that when the market regime changes, the amount of risk investors have truly been taking will become apparent.

We appreciate the trust you have placed in us, and we are hard at work looking for ways to grow your portfolio without taking undue risk.

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