

Understanding the Relationship Between Stocks and Interest Rates: It's Complicated!



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At a glance:

- A common assumption in equity investing is that interest rates have a direct, inverse impact on equity valuations; this is sometimes, but not always, the case
- When interest rates fall, the response from the equity market can be mixed, but rising rates often coincide with better returns on equities; ultimately, the economy—and the reason for the change in rates—matter
- Today's interest rate environment is favorable for equities; however, that positive outlook hinges on an increasingly clouded geopolitical picture

As with hard sciences like physics or chemistry, finance has commonly held “principles” somewhat akin to laws that help govern how investors value assets. The difference is that finance is not a hard science but, like economics, more of a social science that relies on human behavior and psychology. As a result, even the most widely accepted tenets deserve to be examined and turned on their heads at times to evaluate under what circumstances they actually hold up. In this article, we do just that with the relationship between equity valuations and interest rates. What we learn is that changes in interest rates sometimes lead to inverse changes in stock prices, but the economy is often the more important determinant for both interest rates and stocks.

The relationship

The rule of thumb is that interest rates have a direct, inverse impact on equity valuations. That is, when interest rates are lower, equity valuations could, or even should, be higher. We saw this play out in the late 1990s, as interest rates fell and equity price-to-earnings multiples climbed to record highs. The converse is also deemed to be true, as was the case between mid-2017 and 2018, when the 10-year Treasury yield climbed by almost 1.25% while equity valuations fell (Figure 1). However, as is evident from the chart, this relationship is not always consistent. Allow me to explain.

Figure 1

Correlation between rates and stocks shifts over time

Interest rates and equity multiples



The price-to-earnings ratio for the S&P 500 index is based on estimates over the next 12 months.

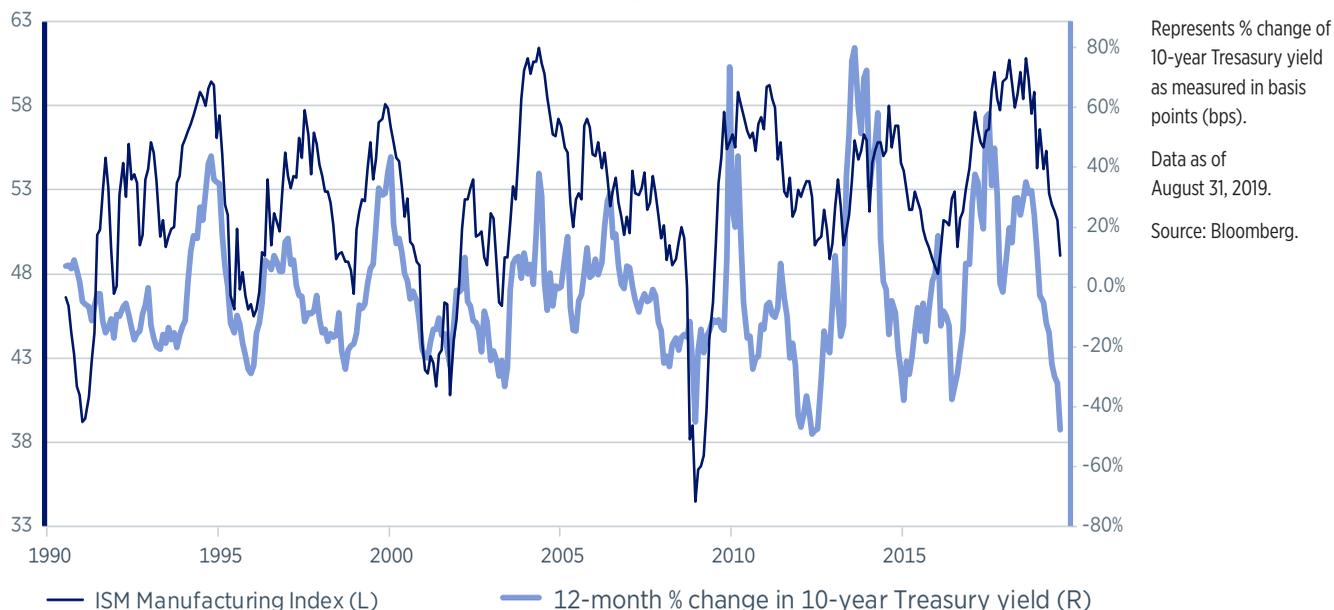
Data as of August 31, 2019. Source: Bloomberg.

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Figure 2

Interest rates linked to economic growth

The ISM Manufacturing Index and the 12-month % change in the 10-year yield



As interest rates fall, it lowers the “income opportunity cost” of investing in stocks over bonds. In an environment where yields are compressed across asset classes, investors find themselves reaching for yield in other areas of the market, including stocks.

There are two main reasons to explain the logic behind lower interest rates supporting stock prices. First, the current price of a stock is simply the present value of the sum of all future cash flows (earnings plus buybacks plus dividends). Interest rates are directly linked to the cost of capital, or the rate used to discount those future cash flows (earnings plus buybacks plus dividends) of a stock or index. The lower that discount rate (in the denominator), all else being equal, the higher the present value of any future payouts (those payouts are in the numerator) and the higher the stock price.

Second, as interest rates move lower, the relative appeal of other income-generating assets—including stocks—increases, even if they carry extra risk over a traditional bond. Stocks and bonds form the bedrock of most diversified investment portfolios, where stocks offer long-term capital appreciation and bonds generally provide a stream of income. As interest rates fall, it lowers the “income opportunity cost” of investing in stocks over bonds. In an environment where yields are compressed across asset classes, investors find themselves reaching for yield in other areas of the market, including stocks. In fact, the term “TINA” (there is no alternative) has been coined by strategists to characterize the present environment in which investors find stocks as the best within a mediocre set of asset classes. A way of quantifying this dynamic is through the equity risk premium (ERP), or expected return of stocks over and above a riskless asset.* See our recent [Wilmington Wire blog post](#) for a deeper dive into the ERP in today’s market.

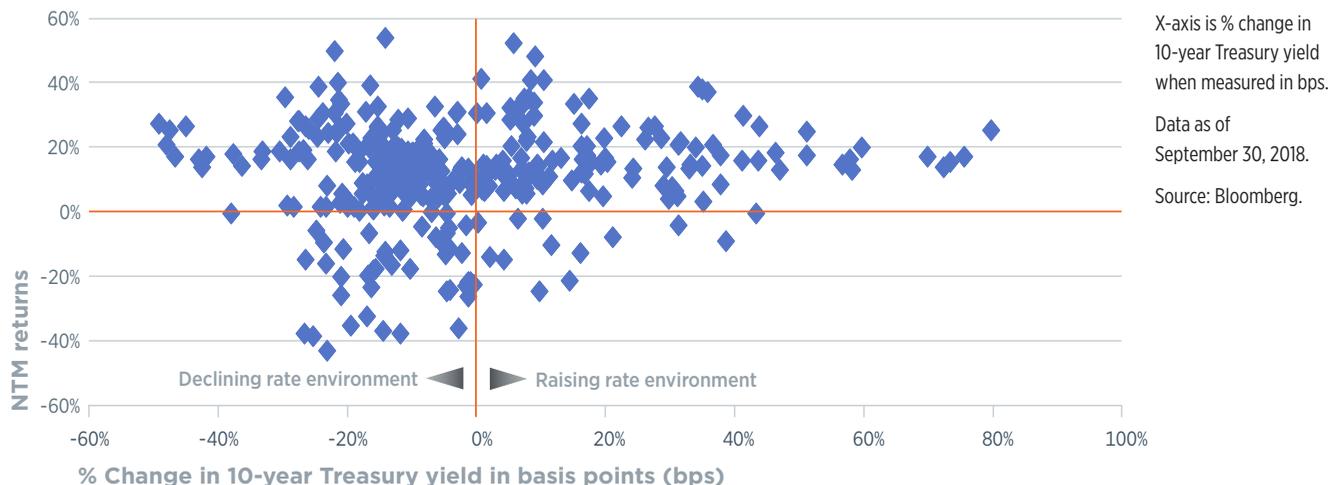
* “Riskless” generally refers to cash or an instrument where the return is certain, as with the 10-year Treasury.

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Figure 3

Rising rates have often been positive for stocks

Next 12-month S&P 500 returns vs. 10-year yield % change



One further wrinkle relates to the global nature of financial markets, with interest rates in the U.S. linked to interest rates overseas.

The wrinkles

The relationship and rationale I've just described make sense on the surface, but there are a few wrinkles that need to be worked out.

The discount rate argument above, for example, holds true if *all else is equal*. This is an important caveat, as it suggests that all other variables in the discounted cash flow model remain the same as interest rates fall. In reality, interest rates are tied to expectations about future economic growth¹ (Figure 2), and if interest rates are declining, it would be reasonable to expect the stock's cash flows to also decline. If this were to happen, then the decline in interest rates would not necessarily lead to a higher stock price.

In addition, when comparing stocks to bonds, particularly when utilizing the ERP, not only does that suggest an investor is relegated to just two assets, but the comparison often focuses on the value presented by stocks. A high ERP (which can be calculated many different ways but in the simplest sense looks at the expected earnings yield on stocks minus the yield on a 10-year Treasury bond) is usually interpreted as a bullish signal for stocks. The truth is that a high ERP may say more about the value of bonds than it does about the value of stocks. In other words, at today's interest rates, stocks may be expensive, but bonds may be even more expensive, which would not bode well for future stock returns or be a compelling reason to pile into stocks.

One further wrinkle relates to the global nature of financial markets, with interest rates in the U.S. linked to interest rates overseas. Ultra-low rates in Europe, for example, make the higher yield and perceived safety of U.S. fixed income attractive, driving investor demand for U.S. bonds and lowering U.S. rates (which move inverse to bond prices). This can distort the U.S. yield curve and relationship between equities and rates.

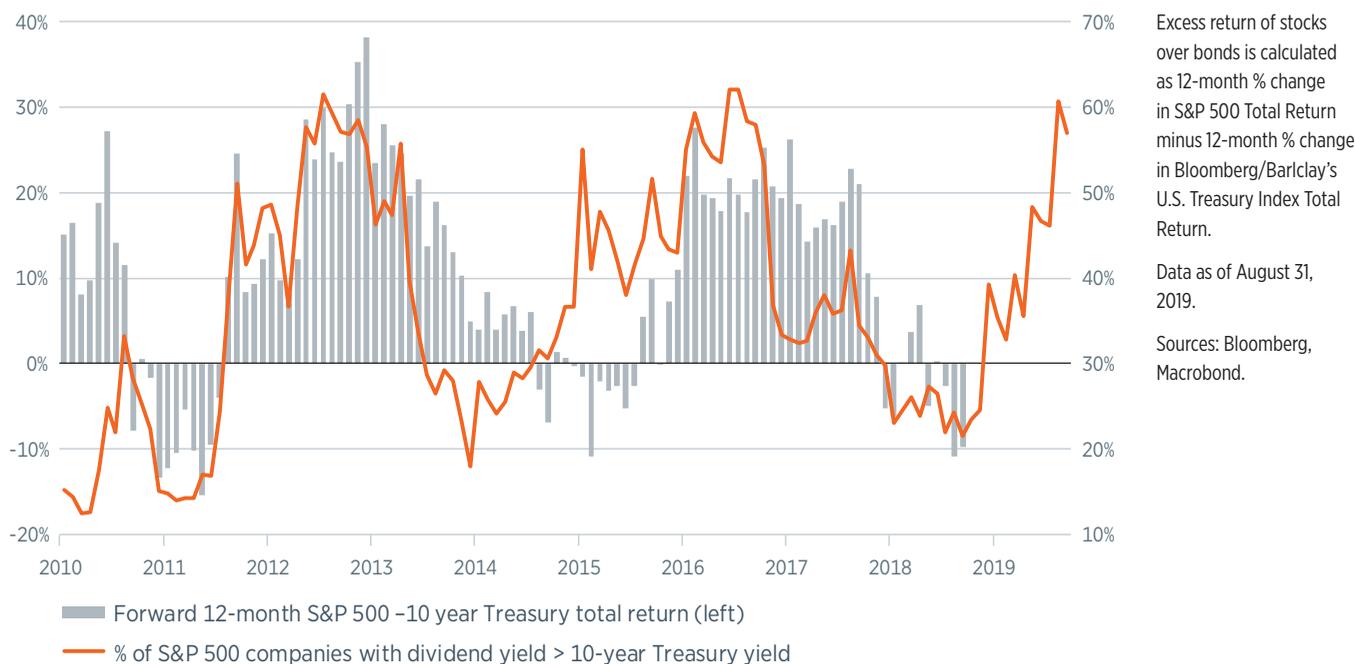
¹ The ISM Manufacturing Index is a survey of businesses that gauges current and future activity, and it is sometimes used as a leading indicator of economic activity because it is released in advance of many other economic indicators and is closely linked to GDP. In the survey, a number above 50 indicates businesses in aggregate are expanding, while a number below 50 indicates contraction.

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Figure 4

Stock dividend yields attractive relative to bonds

Percent of stocks with dividend yield exceeding the 10-year Treasury, and excess return of stocks over bonds



60%

of the S&P 500 has a dividend yield above the 10-year Treasury yield, meaning investors can collect more income from stocks while also enjoying the potential for dividend growth and capital appreciation (or, of course, loss).

The reality

The relationship between rates and equities is more complex than the simple premise that lower rates increase the equity multiple and subsequent returns. Historically, a decline in the 10-year yield over the course of one year has been met with very mixed results for equity valuations, but when the 10-year yield is increasing, it has generally had a positive correlation with the price-to-earnings ratio on the S&P 500. The same holds true for comparisons of changes in interest rates to forward-looking equity returns (Figure 3). Simply put, most of the time rising rates are good for stocks because the increase in earnings growth expectations—which typically goes along with that increase in rates—tends to overwhelm the higher discount rate (with one exception being a stagflationary scenario of rising inflation and slowing growth).

What this all amounts to is the importance of understanding why rates are moving as they are. A decline in rates from a rolling over of growth expectations at the onset of an economic slowdown or recession would certainly be bad for prospective equity returns, as would a decline in rates triggered by deflationary fears (a particularly acute concern for the pricing power of companies and equity earnings). But a decline in rates that is resulting from central bank monetary policy easing and an expectation of growth improving in the near term could present a buying opportunity for equity investors. The speed of the rate move, whether an increase or a decrease, can also be telling, with very rapid moves in interest rates generally more disruptive to risk markets in the short term.

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For more background, see our *Wilmington Wire* blog post, "[Equity Risk Premium](#)."

That does not make comparisons of the equity market's yield to that of bonds a moot point. In fact, today 60% of the S&P 500 has a dividend yield above the 10-year Treasury yield, meaning investors can collect more income from stocks while also enjoying the potential for dividend growth and capital appreciation (or, of course, loss). Historically, this type of environment has been a good one for equities (Figure 4).

Our research also indicates that a higher-than-average ERP suggests higher-than-average equity returns, with the most outsized returns historically realized when the ERP was more than one standard deviation above the mean. With the ERP, the best predictive value (as with most valuation metrics) occurs over a three- to five-year time horizon.

Today's environment

The complex relationship between interest rates and equities makes us cognizant of interest rates both as an input into risk models but also as a signaling mechanism. In short, today's interest-rate environment is a favorable one for equities. Low yields make the dividends offered by stocks an attractive source of income, and forward-looking expectations for returns as measured by the ERP are supportive of positive, albeit modest, equity returns over the next 12–24 months. Interest rates have fallen, but we expect them to gradually move higher over the next year alongside improved growth domestically and abroad, which has generally coincided with healthy stock returns. However, that forecast hinges on an increasingly clouded geopolitical picture. The impact of U.S.–China trade negotiations on growth and risk sentiment is significant but yet to be determined. The U.S. political backdrop is also increasing uncertainty around future policies, with unclear outcomes compounding less-than-obvious market reactions to those outcomes. As a result, we feel a neutral allocation to equities remains appropriate at this time. As always, no one indicator—whether interest rates, the ERP, etc.—is sufficient to allocate portfolios, and we continue to believe in a measured approach that monitors a broad array of economic and market signals, with a focus on mitigating downside risks.

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