

## CIO Quarterly Commentary

3Q2021

### COVID Dynamics and Evolving Market Risks

The world is currently amid a COVID Delta variant surge. Vaccines seem to be working fairly well against this new and more virulent Delta variant, but not perfectly. Exact data has been hard to come by, but for the most part the serious cases of infections are so far occurring predominantly in unvaccinated people. With football starting and stadiums filling with excited fans we will really put vaccine efficacy to the test this fall. The economic assistance programs that kept many countries afloat during the initial outbreak are ending, causing enormous numbers of people to face the dilemma of risking their health to work, or risking their financial well-being to stay home. Rather than reinstating assistance programs, many governments, including here in the US, are taking a harder line, and implementing mandatory vaccines for workers. Mandatory vaccinations by governments and businesses will likely remain a controversial topic this fall and winter. What we will try and do in this letter is outline what we believe are the potential impacts of these developments on the financial markets.

We supported the initial government fiscal support programs when COVID hit, and we believe they saved many businesses and individuals from financial ruin and kept the economy out of what would likely have become a depression. Without the quick implementation of these massive programs, we might still be in a deep economic hole. Instead, the US economy today is larger than it has ever been, having made up for the entire COVID-related downturn and moved to new record levels of output. The US has nearly 11 million job openings posted and only about 8 million people unemployed and actively looking for a job, the fewest potential employees per open job ever. The economic recovery has been remarkable.

The markets have benefitted from these fiscal programs too. Stocks, which in 2020 had the fastest decline from a record high into a bear market ever, dropped by 33% from their pre-COVID highs to a low of 2237 (on the S&P 500), and subsequently rallied by over 100% to a new record high of 4536 in September of 2021. There have been 53 record highs so far this year in one of the strongest and sharpest rallies ever. Booming corporate earnings, to new record highs, have supported stock gains, which have been further helped by the Fed keeping interest rates low and monetary policy supportive.

As investors try to value stocks, they often attempt to predict earnings out into the future and then discount those earnings back into a present value – asking themselves, “what should I pay for \$1 of earnings in, say, 10 years?” The lower interest rates are, the higher the present value of \$1 in earnings in 10 years, and hence today’s elevated stock prices. Interest rates can be a huge influence on stock prices and stock professionals need to worry about the level and direction of interest rates.

With the COVID Delta variant rising quickly, why aren’t markets plummeting as they did in the late winter/early spring of 2020? We believe the main reason is that investors believe the vaccines are good enough to ultimately beat COVID. Yes, we may need to get a booster shot every year in the future, much the same way we get an annual flu shot, but the huge uncertainty that COVID initially represented is now considered to be a “livable risk” for most. Many now think the days of completely shutting down an economy due to a COVID outbreak are behind us, and thus the days of massive declines in consumer spending and hence corporate earnings are also behind us. If so, then today’s estimated earnings of \$1 in 10 years can be at that level or higher, not on the way to \$0 or less in a future COVID lockdown.

Earlier this year some investors started to worry that the economy was expanding too fast, creating bottlenecks, leading to inflation. This may yet happen. We have written about this topic in the past and so will only re-state our view that there are good arguments for and against this view. The Fed continues to believe the current spike in inflation is transitory; the markets seem to believe the Fed and are keeping yields on 10-year Treasuries at about 1.35%, even while the CPI hovers above 5%. These low interest rates levels certainly suggest most investors believe inflation will retreat like bonds today.

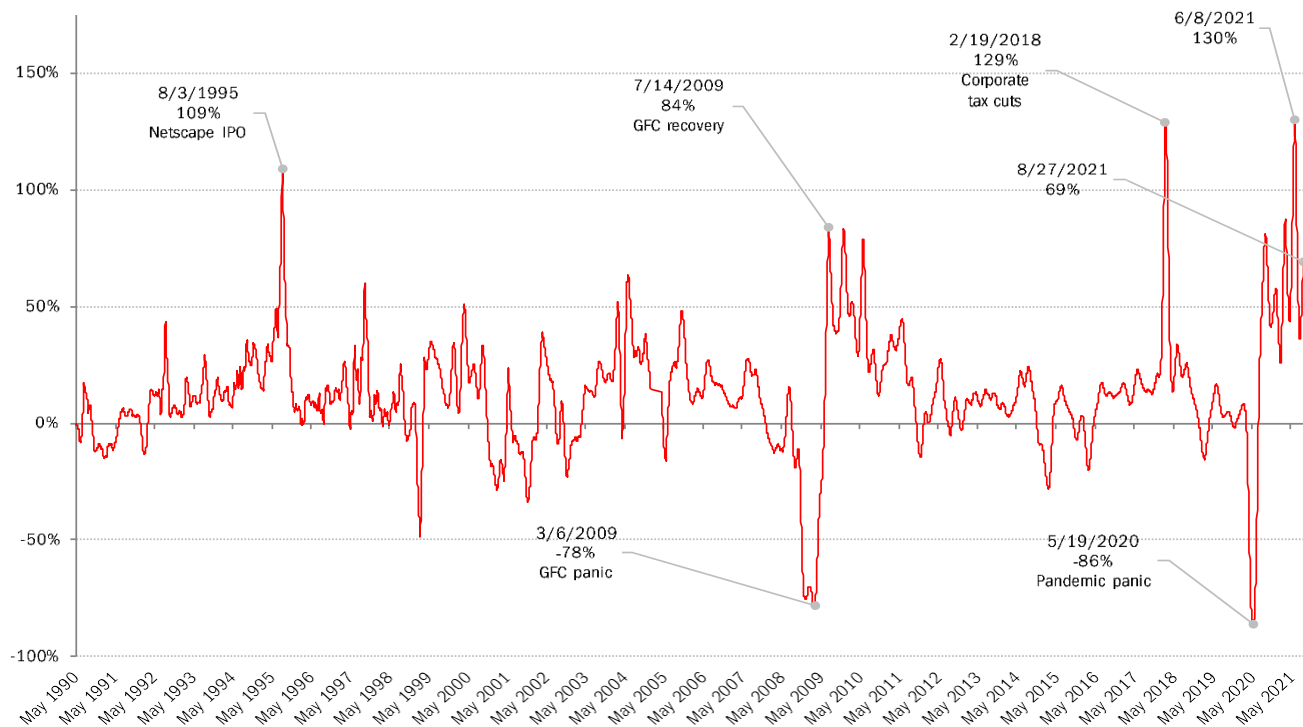
Negative real rates are not attractive to investors who believe these low inflation rates will persist. Some smart investors who dislike fixed income today believe that rates are as low as they are because investors are attempting to discount what the Fed will do, not what inflation will be. There is an old saw in our business, “Don’t fight the Fed.” With the level of economic intervention that has occurred in the last 18 months, this conventional wisdom has been as true as ever, if not more so. Some believe that if current Fed policies begin to cause other unwanted outcomes, such as sustainably higher inflation or a declining US dollar for example, the Fed likely will have to reverse course and raise rates to ameliorate these “new” more important problems. The economy, they believe, will be (already is) able to stand on its own without further economic support. Accordingly, the Fed will likely have the freedom to raise rates to address inflation without causing a recession, though it will hurt bond prices in the process. We don’t know if the Fed will prove correct and inflation will prove transitory, or if inflation will rise enough to push the Fed to raise rates as some suggest. Regardless, we continue to believe that even if the Fed is correct and inflation is temporary, real rates are negative and not attractive to long-term investors. Higher rates would only exacerbate this unattractive investment proposition. This analysis keeps us underweight fixed income and short duration vs our benchmark.

If we are right and the US and most western economies adopt a “live with it” COVID policy, then you may ask what the financial implications of something like a Delta surge could be. Our best guess may seem counter intuitive. Because markets are today concerned about over-heating and inflation, it is plausible that the pauses or temporary economic slowdowns caused by Delta or future variants may prove less disruptive to markets than most believe. If, of course, a very deadly and vaccine resistant strain develops, this is wrong, but with that caveat here’s why. Businesses will have less pressure to rebuild their employee bases and supply chains in a compressed period, allowing them to do a more thoughtful job while not having to pay top-dollar for everything. This scenario could help to dampen inflation and inflationary concerns, allow for higher profit margins, and keep the Fed from having to change its focus to some new area of concern. Hence, future earnings could be higher for longer and interest rates could be lower for longer. Both results should be good for stock prices.

You might wonder, what if we are wrong and the economy does shut down again? Our best guess is we would see something similar to what we saw last spring. Stocks would drop, but hopefully not as much because there will be some increased level of confidence that another vaccine can be developed. Financial markets would not be as negative as they were, but major declines in the value of portfolios would be likely. The Fed likely would keep interest rates low in an effort to support the system and help prevent a depression. Assistance likely would be reinstated, though possibly not as generous because of the growing budget deficits. To us, this outcome is difficult to forecast and presents a tail risk, though it would not be a complete surprise as some investors (although not us) are today positioned for just such an outcome. This is part of the wall of worry the market continues to climb.

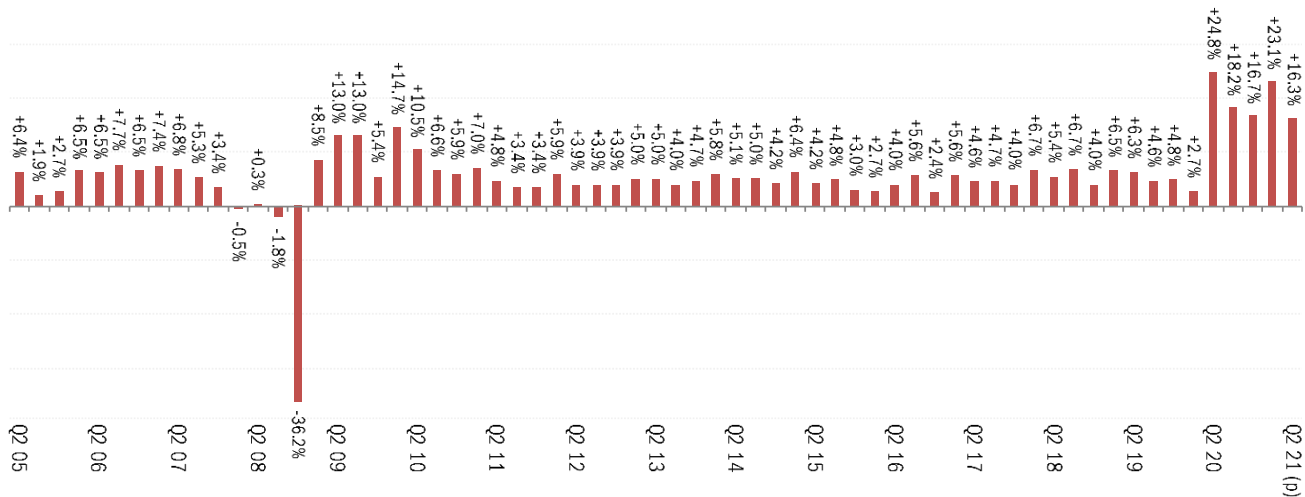
Still, we remain concerned about the impact that rising inflation could have on bond and stock prices. Although we do not currently see one side of the inflation argument as more likely than the other, we are continuing to analyze the potential impacts of both. To that point, we received several interesting pieces from TrendMacro (an economic forecasting firm to which we subscribe) that we thought worth

sharing. The charts below demonstrate why the market has performed so well since March 2020. The top graph shows the change in analysts' earnings estimates for the coming year over the last 30 days, annualized. You can see on the far right that analysts have been very aggressively raising their estimates over much of the last year plus. The improving fundamental backdrop has supported these higher revisions. The bottom clip shows how actual S&P 500 earnings compared to the estimates analysts had posted. Even after massive rises in analysts' estimates, actual earnings exceeded these estimates by the widest margins in a very long time. (You may wonder how actual earnings beat estimates in the first and second quarters of 2020, and the answer is that analysts had marked down their estimates below what companies actually earned. Since then, analysts have not kept up with the enormous earnings rebound.) The stock market has been in the sweet spot of "beat and raise" for nearly a year and a half. The big question, as always, is what comes next?



## S&P 500 earnings surprise, by earnings season

Source: Bloomberg, TrendMacro calculations



*Caution: we're going to get a little technical, but hope you'll find it worthwhile.*

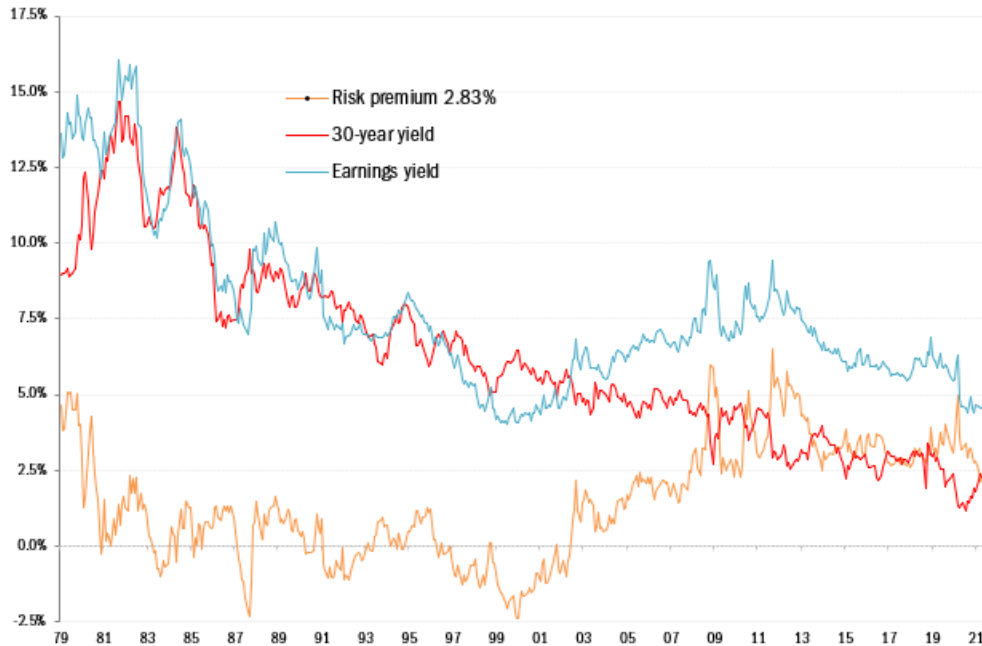
Investors generally seek to compare prospective risk and returns of one asset to another as they construct their investment portfolios. This comparison includes one stock to another, one bond to another, stocks vs bonds, etc. This last comparison (asset allocation) is very important. One way to make this stocks vs. bonds comparison is to compare the expected earnings yield of stocks (most use either (1) the expected 12-month forward earnings divided by the current price or (2) the expected earnings in dollars divided by the current market capitalization – both methods work) to the current yield on a bond. We will use the first calculation method and a 30-year treasury bond here.

In mid-September, the S&P 500 12-month forward earnings estimate is \$207.53 and the price is 4458.58, giving us an earnings yield of 4.65%. This compares to a 30-year treasury bond yield of 1.93%. The difference between these is the equity risk premium (ERP), today equal to 4.65% - 1.93%, or 2.72%. This 2.72% is the additional return expected from an investment in stocks today vs. bonds today. Over approximately the last year the ERP has been in a range of about 2.25% - 3.25%, so today rests near the middle of the range (as you can see on the following TrendMacro graph). Longer-term the ERP has ranged from as low as negative -2% (in the tech bubble) to as high as nearly 7% (in the great financial crisis of 2008-9). If you pushed us, we would suggest the current ERP is within a reasonable range of fair given the ongoing economic recovery, the fiscal and monetary support that both abets economic and market advances and dampens their volatility, and the current very low level of interest rates.

A few things jump out from the next TrendMacro chart, which shows how each yield has moved for the last 40 years. First, the blue earnings yield line (for S&P 500 stocks) and the red 30-year treasury yield line moved pretty much in tandem from the Volker era (early 80s) when inflation began to come under control right up to about the bursting of the tech bubble in 2000. In the early 2000s investors began demanding higher returns from their risky stock holdings than from their 30-year treasury bonds, pushing up the ERP. Treasury yields have continued to trend lower ever since the tech bubble burst.

The earnings yield for stocks rose through the great financial crisis, but has turned lower since, moving more in line with Treasury yields. The resultant orange ERP is shown along the lower part of the chart.

## Historic S&P 500 Equity Risk Premium

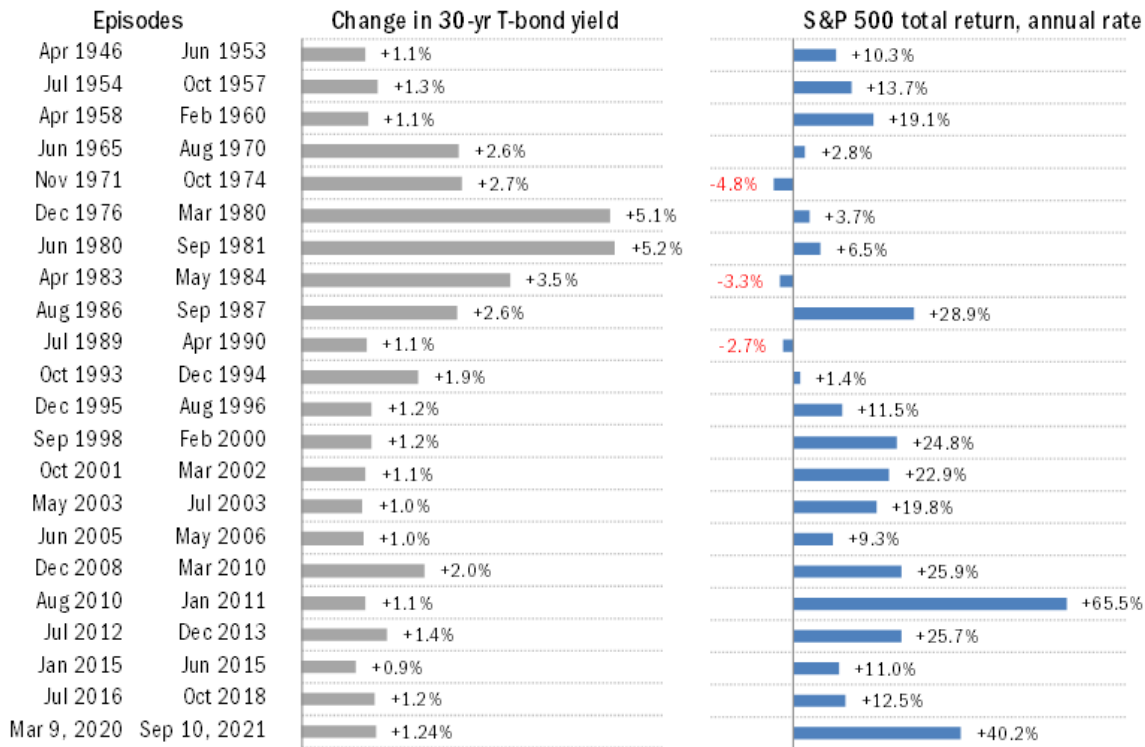


Source: TrendMacro calculations

You may well ask “what’s the risk” if rates rise? Do stock prices or bond prices go down more if 30-year rates rise to 4% in the next two years? We have two responses to that question. First, see the table below, which shows annualized equity market returns during periods of rising 30-year interest rates. Surprising to many, over the last nearly 70 years (based on TrendMacro data) 30-year treasury yields rose by ~1% or more on 24 separate occasions. On 21 of these occasions equity prices also rose. That is, when bond prices went down (yields rose 1% or more), stock prices went up. That might happen because investors see an accelerating economy and faster earnings growth, as many forecast today, more than compensating for an increased discount rate. Even in the instances when rates rose the most, equities hung in better than many would expect. It was not until later, after the rise in rates began to slow the economy, that stocks came under pressure and posted more negative returns. The takeaway here is that usually the early phases of a rate rise are less harmful to stocks than most anticipate. (Note: We are assuming that the rise from March 9, 2020 to September 10, 2021 was not enough to impede the current expansion.)

Back-ups in 30-year Treasury yield (Month-end data except for most recent)

Source: Various, TrendMacro calculations



The second response is harder and more specific, requiring us to look at history, to imagine how things could transpire to push rates to 4% today, and then do some math. Here’s our summary. If in two years it turns out the Fed was right and inflation has settled back into a comfortable 2% zone and the economy has continued to make positive progress without having to shut down due to a more severe COVID strain, then real returns on 30-year treasuries would likely move back into normal historical ranges of about 1-4%, so using 2% seems reasonable. Alternatively, maybe inflation will be a little higher than the Fed is targeting at, say, 3% and real rates peak at 1%. In either scenario, envisioning a roughly 4% yield on 30-year treasuries is not particularly difficult.

The investment implications for holders of 30-year treasury bonds, however, are less “normal” than investors may expect. A rise in yields today from 1.94% to 4% over two years would shave about 34% off the value of today’s 30-year bond. Adding back two years of yield still leaves an investor down - 30%.

On the equity front, we need to estimate earnings growth and what the final ERP might be. These estimates are hard to get right and change quickly, so we’ll outline a few different scenarios. First, let’s assume earnings grow at a compounded 15% rate (about the current consensus estimate) and that the ERP remains unchanged. If rates rise to 4% in this scenario, then equity prices would decline by about 7.5%, plus two years of dividends produces a total return of -5% for equities. Using 7% earnings growth and the same ERP results in a -17% loss for equities.

The possibility that as investors flee bonds, the ERP could decline is equally plausible to us. If we use the same earnings growth from above and the ERP declines by 1% from today’s level to 1.72%, then equity returns in the 15% earnings growth scenario turn positive at 11.6%, and only fall to a -3% return

in the 7% growth environment. Finally, for those interested in what might cause equities to lose more than bonds, there are lots of combinations but something like 0% earnings growth and an ERP of 3% gets you there, as does 7% earnings growth and an ERP of 4%. While there are a multitude of possible combinations where equities underperform bonds, we continue to believe that the risk/reward of owning equities today is superior to that of owning fixed income.

We would make the following points as we try to summarize a fairly complex and technical letter:

1. COVID is a horrible disease that science is allowing most countries and individuals to live with.
2. Future COVID disruptions are likely to be shorter and shallower, and may extend the economic and market cycles, becoming the economic pause that refreshes.
3. The equity market rally reflects the tremendous economic and earnings recovery, and earnings multiples are contracting – making valuation appear somewhat less stretched.
4. Rising inflation and bond yields are a potential risk, though perhaps not as troubling for equities as many investors fear. However, they will definitely hurt fixed income returns if they become more lasting.
5. Future returns are unlikely to be as strong as what we've seen in the last 18 months but could continue to be decent for some time longer.

As always, we sincerely appreciate the opportunity to manage your capital and to help you achieve your organization's financial goals. We are here to assist you, so please do not hesitate to contact us. We hope 2021 is proving to be a better year than expected for you, your family, and your organization.

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