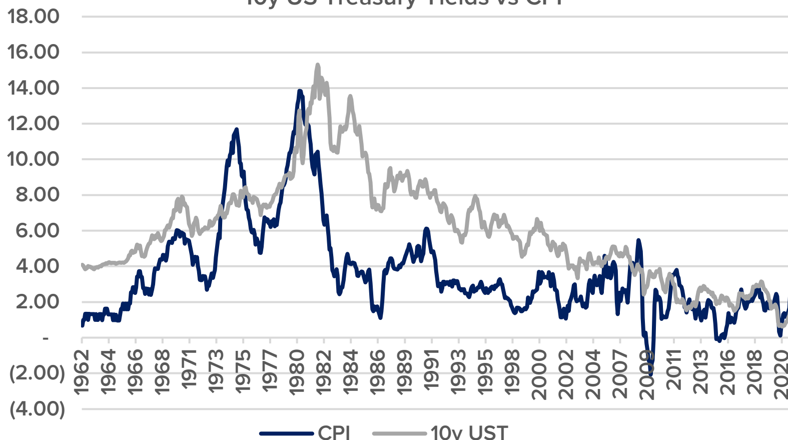
Some clients have recently asked us "Should I still be invested in fixed income, even though interest rates are still low, and the risk of sustained inflation is suddenly high?" Our answer is yes. But given how counter-intuitive it may sound or seem to some clients, we wanted to detail below our explanation for why and the implications for portfolios.

While it is tempting to assume you shouldn't own bonds, if you are like us and view inflation and higher rates as likely, a thorough analysis of various outcomes shows that fixed income still plays an important role in investors' portfolios in terms of risk control and positive expected return vs similar risk alternatives, especially when you consider the rebalancing value that is provided to portfolios. Holding more equities instead of bonds is not the solution as it greatly increases portfolio risk and equities are likely to suffer large drawdowns if rates move materially higher. Holding cash versus fixed income only makes sense if you believe rates will move materially higher (significantly more than is priced in by the market) over the next few years, which we don't view as likely.

Where Are We Now?

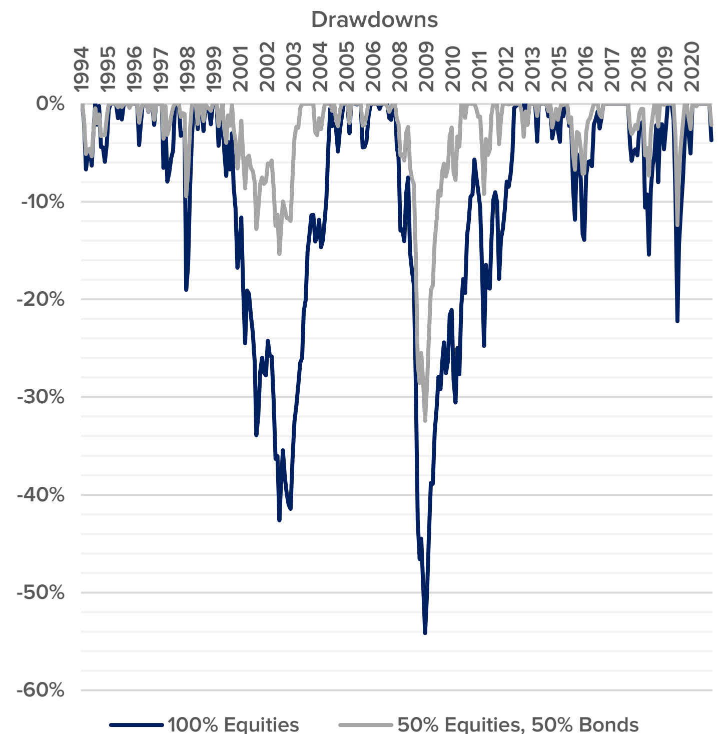
In order to understand the current situation, it is helpful to place it in its historical context. The graph below shows the 10-year US treasury yield over the last 60 years, as well as the year over year (YOY) change in the Consumer Price Index (CPI). As you can see, interest rates are highly connected to the level of inflation over time. With yields below the historical average, it is tempting to assume that they will revert to the historical mean and are likely to rise. According to this logic, one might want to reconsider holding fixed rate bonds, as their prices move down when rates go up. However, as with most things, there's an important and deeper discussion to be had. We must consider the two primary reasons investors hold bonds: risk control and positive expected return.



Source: FRED Database

Risk Control

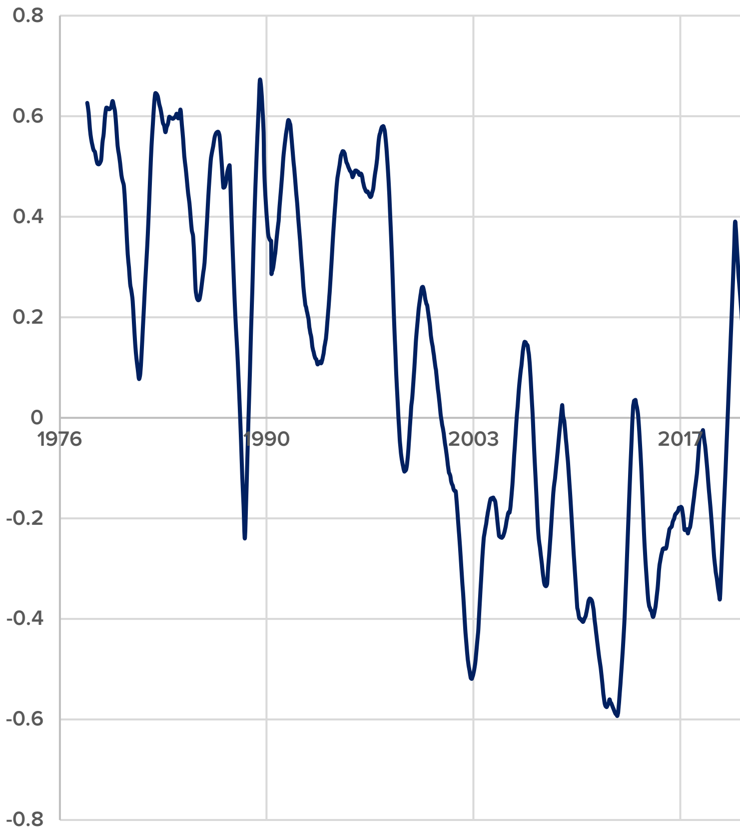
Risk control means controlling the risk of loss in a client's total portfolio. Bonds are less volatile than equities as they represent shorter duration assets with typically higher levels of certainty as to payout. Below is a graph of the historical drawdowns (losses from the previous high value) of two portfolios, one with 50% bonds and 50% equities and one with 100% equities. Notice how the 100% equity portfolio lost 40% peak to through in 2000-2002 and over 50% in 2008 while the 50%/50% portfolio lost 15% and 30% over the same period. For many investors, the 40% and 50% loss of a 100% equity portfolio is more than they can stomach either because the losses are emotionally difficult to weather or because such losses could force changes in lifestyle through reduced ability to spend and/or increased risk of bankruptcy. Portfolio construction must consider the portfolio owner's unique level of risk tolerance, and in this context, bonds are useful.



Source: Bloomberg, GenTrust Calculations

It is worth noting that one of the worrisome things about a higher inflation environment is that there tends to be positive correlation between equities and bonds during such periods. As the graph below demonstrates, during the 70s and 80s, the last high inflation period in this country, bonds and stocks were generally correlated, meaning they went up and down at the same time. This positive correlation between bonds and equities means higher volatility and higher drawdowns on one's total portfolio because both asset classes are losing money at the same time.

There is no assurance that any trends depicted or described will continue. Please refer to important disclosures at the end

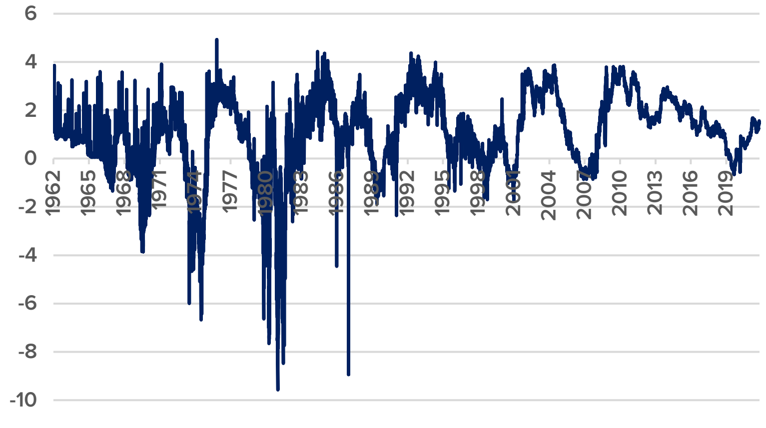


Source: Bloomberg

We have been spoiled by bonds and equities having negative correlations for much of the last 20 years. Over that period, they've tended to counteract each other, with stocks performing strongly most of the time and bonds rallying hard in periods like the Global Financial Crisis (GFC) when the equity market panicked. Yet, in our view even though the risk reduction one receives from a bond allocation will be diminished if inflation is the primary driver of market pricing over the medium term, bonds still play an important risk reducing roll in the portfolio.

Positive Expected Return

Now let's turn to the second point and consider whether bonds can offer a positive expected return. When considering the available return from bonds, the appropriate way to evaluate the yield available in the market is a bond's yield versus other instruments with similar risk characteristics such as cash. The graph below shows the yield of the 10y US treasury compared to the Fed Funds rate (as a proxy for cash returns). If one considers this graph, from our view it becomes clear that bonds don't look so bad when you consider them in comparison with alternatives that have similar or lower risk.



Source: yCharts

An additional component that most people forget about when looking at the ability of fixed income to provide positive portfolio return is the value a fixed income allocation can provide to a portfolio in terms of rebalancing. Take 2020 as an example, if you held a portfolio that was 50% equities and 50% fixed income and rebalanced monthly back to 50/50, you would have made 11.5% over the course of the year. If you had just bought a 50/50 portfolio and held it, you would have made 10.8%. The "value" of holding something different than equities in this case was 0.7% per year on your entire portfolio. Not every year is like 2020 but historically this value has been 0.3-0.5% per year for a 50/50 portfolio, with higher values coming during more volatile times (which is why as an investor you WANT volatility as long as your portfolio is appropriately constructed for your personal risk tolerance ahead of time).

The grid below shows most of the current holdings in our fixed income mix together with their current yields. The grid also shows the yield plus the value that comes from ability to rebalance.

Instrument	Holdings	Yield	Yield + Rebalancing
FCASH	Cash	0.01%	0.81%
VMLUX	Short-Dated Municipals	0.47%	1.27%
VWIUX	Intermediate Municipals	0.86%	1.66%
BND	US Barclays Aggregate Bond	2.21%	3.01%
VCSH	Short-Dated Corporate Bond	0.97%	1.77%
VCIT	Intermediate Corporate Bond	1.92%	2.72%
TIP	Inflation Linked Bonds	1.60%	2.40%

Source: GenTrust Calculations, Vanguard/iShares websites

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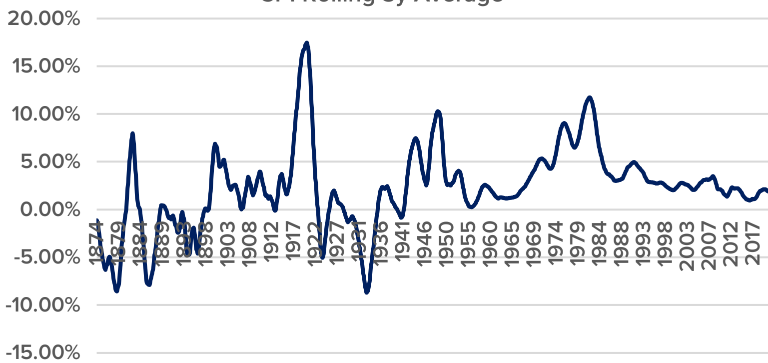
How Bad Can it Get?

As we have seen, bonds are a powerful and multifaceted source of positive expected returns, and furthermore they are key to balancing the overall risk of a portfolio. In this section we will analyze the ways in which we believe the current situation can develop, connecting possible outcomes with these benefits of fixed income allocation. We will begin by evaluating the historical context, before walking through some possible scenarios.

The graph below shows 3y rolling average CPI. As you can tell by the graph, inflation above 5% is rare - 1975-1984, briefly in late 1930s and 1940s, 1915-1920 and again briefly in 1880s and 1900. That's roughly 20 out of 150 years or 13% of the time. Thus, this shouldn't be our base case, though it could happen.

CPI Rolling 3y Average



Source: Shiller Database

Based on this historical assessment, here is our best guess as to the probabilistic distribution of where inflation will average over the next 3-5 years:

What are the Probabilities? Average Inflation Over the Next 3-5 Years:	
<1%	10%
1-2%	20%
2-3%	30%
3-4%	25%
>4%	15%

Source: GenTrust Subjective Estimates

According to these probabilities, our weighted average inflation expectation is 2.75%. Keep in mind that for the better part of the last decade it has averaged 1-2%.

An additional factor to consider is the real yield, because nominal yields = real yields + inflation. Currently real yields are at -0.9% which is very low. The Federal Reserve has been buying bonds and keeping real yields artificially low. The long-term average of real yields in the period since central banks have been buying bonds is close to 0%. Before central banks were buying, the average real yield was closer to 1%.

Here we consider a range of three scenarios. First, we believe if real rates go back to zero, then the 10y rates would gravitate towards 2.65%. This is a reasonable base case for a bond selloff, approximately 1% higher than today over 3 years. Second, a more severe case is one where inflation averages closer to 3.5% and real rates move closer to its long-term average of 1% in which case you could see 10y rates move closer to 4.5% over 3-5 years, approximately 3% higher than today over 3 years. The final case we need to consider is one where the market is currently correct, and rates just follow their current forward pricing (unchanged). Here is our estimate of the performance of our clients' fixed income holdings that would result in each of these three scenarios:

Instrument	Holdings	Annual Return over 3 Years, Rates Unchanged	Annual Return over 3 Years w/100bps Selloff	Annual Return over 3 Years w/300bps Selloff
FCASH	Cash	0.0%	0.5%	1.5%
VMLUX	Short-Dated Municipals	0.5%	0.4%	0.2%
VWIUX	Intermediate Municipals	0.9%	0.4%	-0.2%
BND	US Barclays Aggregate Bond	2.2%	0.5%	-1.9%
VCSH	Short-Dated Corporate Bond	1.0%	0.6%	0.2%
VCIT	Intermediate Corporate Bond	1.9%	0.4%	-2.0%
TIP	Inflation Linked Bonds	1.6%	0.9%	-0.1%
Cash Return:		**0.0%**	**0.5%**	**1.5%**
FI Portfolio Return:		**1.2%**	**0.5%**	**-0.5%**
GT's Estimated Likelihood:		**50.0%**	**35.0%**	**15.0%**

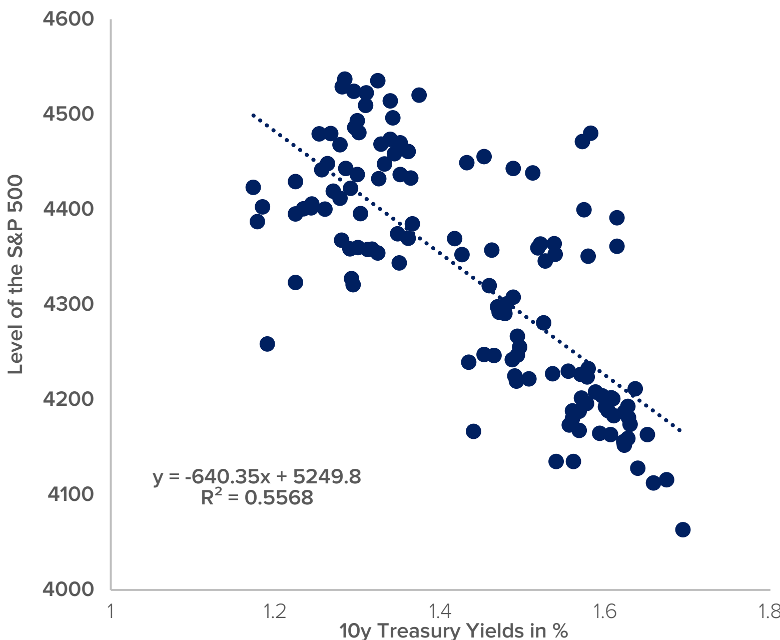
Source: GenTrust Subjective Estimates/Calculations

In our estimation the most likely scenario where the markets are currently priced correctly (which we estimate is 50% likely), the return on our current fixed income portfolio mix is 1.2% per annum vs cash return of 0.0%. This number does not include the 0.8% per annum in rebalancing value we spoke about earlier. In the base case selloff scenario where rates move 100bps higher over 3 years (which we estimate is 35% likely), the return on our current fixed income portfolio mix is 0.5% per annum vs cash return of 0.5%.

Finally, in the severe scenario where rates are 300bps higher over 3 years (which we estimate is 15% likely), the return on our current fixed income portfolio mix is -0.5% per annum vs cash return of 1.5%.

If you consider the choice between bonds and cash with these 3 stylized scenarios it seems that holding fixed income instead of cash is superior unless you believe the much move higher in rates of 300bps is more likely than the unchanged scenario. Our view is the unchanged scenario is 3x as likely as the 300bps selloff scenario, even though we are firmly in the camp of higher inflation.

When we examine the possible effects of a rise in rates on equities, the value of a risk-based approach to portfolio construction becomes clear. While it's difficult to know all the other factors influencing equity returns over the next 3 years, if we just look at the rate impact, returns would be negative. We estimate that equity "duration" (sensitivity to interest rates) is around 10% or so for every 1% rise in long term rates. The regression below is using data from the last 6 months and shows that every 1% rise in rates is a 640 point drop in the SPX which is roughly 14%.



Source: Bloomberg, GenTrust Calculations

We would expect this beta to be lower over longer time horizons which is why we are using 10%. Thus a 3% rise in long term rate would have equities down 30%, a massive headwind over the next 3 years. This could be dampened by other factors such as earnings growth, but it serves to show that even in scenario rates move higher, the choice between bonds and equities is still one dominated by equity risk much more so than rate outlook.

What is GenTrust's Solution?

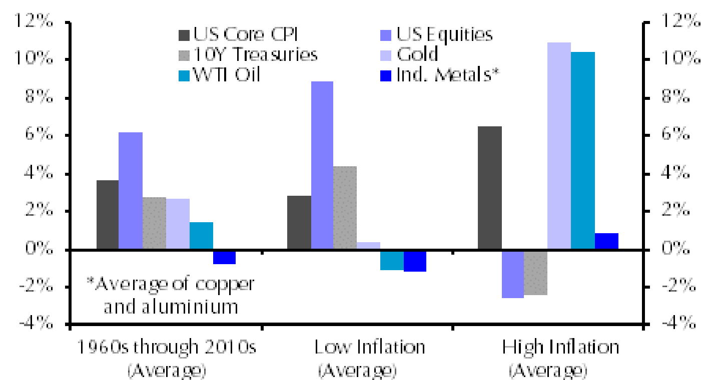
In the end our view is that inflation is likely to pick-up and stay higher than the market expects. We have adjusted positioning to reflect this view although this hasn't meant we have abandoned the use of fixed income for all the reasons mentioned above.

In our view, we have done a lot of work on which asset classes will do well in environment where inflation picks up. The grid below shows various asset classes during time periods where the Fed has been raising rates. As you can see, the clear winners are commodities and gold.

Period	Start Date	End Date	Starting Funds Rate	Ending Funds Rate	Change in Rate	Time	US Equities (S&P 500)	Global Equities (MSCI AW)	US Bond Aggregate	Global Gov't Bonds	Commodities (GSCI)	Gold
1	Apr-71	Sep-71	3.75%	5.50%	1.75%	0.47	-8.44%	-3.93%	11.12%	6.46%	6.06%	20.37%
2	Mar-72	Oct-73	3.25%	10.75%	7.50%	1.59	4.38%	6.95%	5.07%	2.71%	57.75%	58.07%
3	Feb-77	May-80	4.50%	17.50%	13.00%	3.25	9.67%	11.61%	4.87%	8.01%	23.20%	50.30%
4	Aug-80	Feb-81	9.00%	10.00%	1.00%	0.50	22.22%	23.51%	-1.94%	4.12%	-17.17%	-42.23%
5	Jun-83	Sep-84	8.50%	11.50%	3.00%	1.25	2.07%	12.50%	8.42%	14.93%	7.12%	-13.86%
6	Apr-88	Apr-89	6.50%	10.00%	3.50%	1.00	24.70%	24.36%	8.40%	8.04%	34.76%	-14.09%
7	Jan-94	May-95	3.00%	6.00%	3.00%	1.33	10.86%	2.23%	4.23%	4.19%	16.89%	0.65%
8	Jun-99	Aug-00	4.75%	6.50%	1.75%	1.17	9.00%	15.07%	5.89%	5.34%	52.40%	6.55%
9	Jul-04	Sep-06	1.00%	5.25%	4.25%	2.17	2.56%	11.36%	22.10%	19.08%	114.08%	47.71%
10	Dec-15	Feb-19	0.00%	2.25%	2.25%	3.17	10.65%	8.35%	2.24%	4.00%	3.10%	6.62%
					Tightening:	15.90	8.77%	11.20%	7.04%	7.69%	29.82%	12.01%
					All:	45.44	10.46%	9.08%	7.84%	7.25%	13.71%	8.61%
					Non-Tightening:	29.54	11.38%	7.96%	8.28%	7.01%	5.88%	6.82%

Source: Bloomberg

This analysis by Capital Economics confirms our findings.



Source: Capital Economics

In terms of positioning, we are:

1) Underweight but still invested in fixed income
2) Holding a large % but not all of our fixed income in Inflation Linked Bonds (TIPS) and our proprietary fixed income replacement strategy FIRST
3) Holding equities that will do well if rates rise, such as regional banks (KRE)
4) Allocating some of our underweight to fixed income to overweighting real assets we expect to outperform if inflation persists such as commodities

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