Higher inflation: turning threat into opportunity

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Owing to a combination of strong demand as many economies restart post-COVID lockdowns, and widespread supply bottlenecks, inflation has been surging in many parts of the world. While there are good reasons to expect this surge could be transitory, many investors are concerned that inflation may well remain higher than pre-pandemic levels for longer than is comfortable.

How can we prepare for a range of inflationary outcomes in a whole-portfolio context?

What asset classes outperform? Does the answer to this question depend on the investment horizon and the level of precision required? Do old rules of thumb still apply in the new regime, where central banks hold yields low and signal willingness to tolerate higher levels of inflation? What about (opportunity) costs?

To address these questions, BlackRock experts recently discussed their approaches to portfolio construction in this uncertain inflation environment.

Key takeaways include:

- Different investors have different goals (e.g. hedging inflation every year v. beating inflation in the long-run or profiting from inflation), so it's important to differentiate between them and also clarify one's relevant time horizon.
- Looking at the asset classes typically associated with inflation hedging, e.g. cash, inflation-linked bonds, commodities and real assets, the first few might provide some shield. However, this comes at the cost of relatively low expected real returns in the long-run. Whether cash still provides protection in an environment where central banks aim to keep yields low also remains to be seen. While real assets are expected to outperform inflation in the long-run, their less liquid nature and infrequent pricing makes it difficult to assess short-term inflation hedging properties.
- Although equities have beaten inflation over the long-term, in the short-term equities have a near-zero correlation to inflation. In portfolios where fixed income exposures are constructed to balance equities, the threat of inflation poses a significant and historic challenge. Investors therefore need to come up with alternative strategies both within these core asset classes (e.g., certain equity style factors, relative value in fixed income) and beyond.

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Whole portfolio approach to inflation hedging

Isabelle Mateos y Lago (IML): The recent surge in inflation is forcing us to question what this means for portfolios. How can investors take steps to deal with not just a higher inflationary environment, but also higher uncertainty around what is going to happen to inflation over the medium and long term? First, we will discuss some key takeaways from research on inflation in the whole portfolio context. Stephan, what exactly does it mean to prepare a portfolio for inflation?

Stephan Meschenmoser (SM): Investors are often rather vague when it comes to describing what they mean to prepare for higher inflation. They often refer to "hedging" or "protecting against inflation" or "positioning" portfolios to profit from inflation. It is important to be very clear on whether you want:

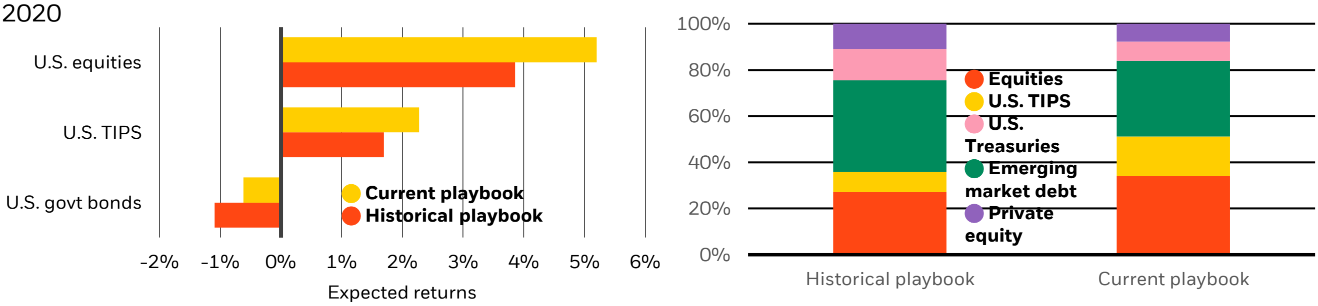
1. To “hedge” inflation precisely every year
2. To “beat” inflation in the long run, i.e. to preserve capital
3. To “profit” tactically from a rising inflation environment

Three points illustrate the importance of clarifying one’s motivation regarding inflation:

- The first is the reference point – what is it when we talk about high or low inflation? It is important to recognize that there is a difference between anticipated and unanticipated inflation. Today's inflation expectations are priced into every asset (class), i.e. the price of every asset class reflects the current market consensus of what inflation will be … over a specific period. When investors want to profit from inflation, they must have an inflation view, which deviates from the market's expectation. In other words, "high" or "low" inflation expectations must always be relative to what the market is pricing in. For instance, if one believes inflation to be 5%, which is deemed to be high but markets prices in an inflation of 7%, one should position the portfolio for lower than expected inflation.
- The second point is considering the relevant time period. When we talk about inflation hedging, some investors (e.g. pension funds or insurances) are incentivized by accounting or regulatory rules to hedge "year-on-year" inflation as precisely as possible, e.g. by cashflow-matching liabilities with (inflation-linked) bonds; the opportunity costs of such a hedge is of second order. Other investors (e.g. foundations) seek to protect and grow the real value of capital over the long run. Their objective is to beat inflation in the long run, not to hedge inflation over shorter periods of time.
- The third point is that assets and liabilities matter. If you have nominal liabilities, you’re benefitting from higher inflation because the present value of your liabilities declines.

Portfolio implications of the current vs. historical inflation playbook

Expected returns and hypothetical strategic 10-year USD allocation under different inflation scenarios, November 2020



This information is not intended as a recommendation to invest in a particular asset class or strategy as a promise – or even an estimate of future performance. Sources: BlackRock Investment Institute. December 2020. Data as of 30 June 2020, Notes: The left chart shows our current CMAs (yellow bars) and hypothetical expected returns under a scenario of a pass through from higher inflation to nominal yields. The right chart shows hypothetical 10-year USD asset allocation to U.S. public assets under the two scenarios described,. We use the macro assumptions and return estimates described here to construct these hypothetical SAAs. For the left-most bar, there is no assumed rise in inflation expectations. It is not possible to invest directly in an index. The hypothetical portfolio may differ from those in other jurisdictions, is intended for information purposes only and does not constitute investment advice. This estimate is illustriative only and does not take into account other factors such as the precise impact of inflation on individual equity sectors. The estimated drag on returns at the top end of the range is equivalent to our assumptions of the alpha contribution to an SAA of a top-quartile U.S. fixed income manager as shown in our 2018 paper Blending alpha-seeking, factor and indexing strategies: a new framework.

So, what assets can help to profit or hedge inflation? If we operate on the idea that investors don’t like inflation, they would be willing to pay an insurance premium for asset classes, which are good inflation hedges. This means that the long-term real expected return of asset classes which typically do well in inflationary environments, such as commodities, cash or inflation-linked bonds, tends to be relatively low. In the case of cash, it is questionable whether it still works as a decent hedge under the new monetary framework. The idea behind cash is that the coupon is reset every 30 days or so, and that this coupon the reflects increases and decreases in inflation. This might not work anymore if central banks have a new policy framework to tolerate higher inflation and keep short-term yield artificially low.

What about the question of whether we can use real assets to hedge inflation? If the motive is to profit tactically from inflation, real assets may not be optimal given high transaction costs. We cannot tell, whether they are a goodyear-on-year inflation hedge, given that they are priced only infrequently (e.g. quarterly). Their higher return potential, however, can make them an important component for a strategy designed to beat inflation in the long run. Some more liquid alternative investments such as commodities or REITs could be worth further investigation.

Inflation hedging – asset class deep dive

IML: Let's now take a deeper dive into equities and fixed income. Andrew, if you run an equity portfolio, where do you look for inflation hedging or inflation beating properties?

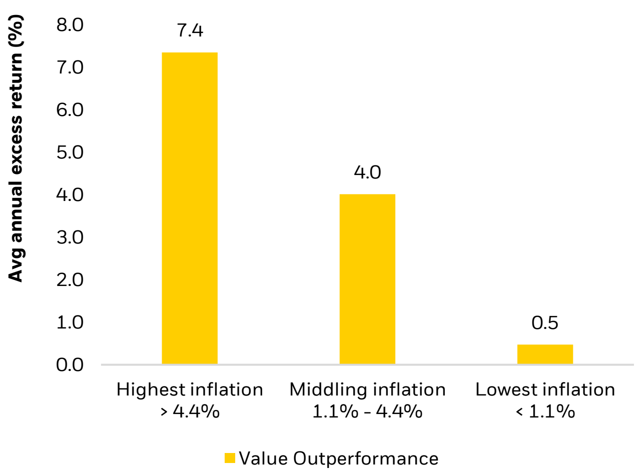
Andrew Ang (AA): Let's start off by looking at the whole equity market. One might think that equities should be a good inflation hedge, being a claim on real assets, and co-move with inflation in the short-run. This is not accurate, however: if we look at the behavior of equities, we have a significant amount of data showing the average equity return at about 11-12%, with an average inflation rate of about 3-4%. Over long periods of time, equities have beaten inflation hands down, with a real return of about 8%. The correlation is close to zero, however: if we rank equity returns with different inflation regimes from low to high, the best types of periods for equities happened to be in low but moderate periods of inflation.

Moving toward different equity strategies, I'll focus on the relationship between inflation and equity style factors – including value, size, momentum, quality, and minimum volatility. Value, size, and momentum have attractive patterns in that their returns increase as we move from low to high inflation environments, demonstrating a positive correlation with inflation. Value and size have performed very well since November 2020 when the economy started to reopen – I expect those factors will continue their run as the global economic restart continues.

To conclude, long-run high returns to beat inflation can be achieved in the aggregate equity market. But if you're after short-term inflation hedging, style factors (especially momentum, value, and size) demonstrate short-term co-movements with inflation.

History of inflation fighting

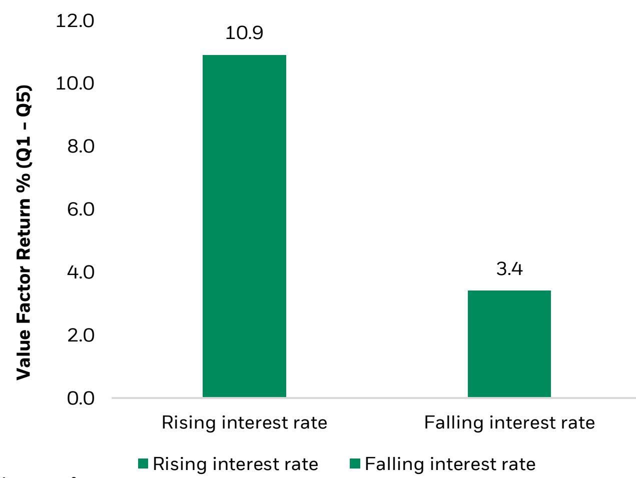
Value outperformance by inflation regime, 1927 - 2020



The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Source: BlackRock, with data from the Kenneth R. French Data Library and from Robert J. Shiller. Fama/French data utilizes the CRSP universe, which includes all companies incorporated in the U.S. and listed on the NYSE, AMEX or NASDAQ exchanges. The level of annual inflation is defined as the year-over-year change in the Consumer Price Index (CPI). "Lowest inflation" represents the bottom 20 years of inflation readings; "highest inflation" represents the top 20 years; and "middling inflation" represents the remainder. The numbers below represent the range in inflation readings for each regime. Value outperformance is annualized and calculated across various inflation regimes using annual data from 1927 to 2020. Value outperformance represents the performance of value stocks minus growth stocks, as defined by the Fama/French HML research factor (i.e., "high valuation minus low valuation" using book to price). For illustrative purposes only.

Track record as a buffer against rising rates

Value factor returns amid rising interest rates, 1978 - 2020



The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Source: BlackRock, with data from Compstat/IBES. Historical date range: 31 December 1978 – 31 December 2020. The chart illustrates the annualized return of Quintile 1 stocks (i.e. cheapest stocks) minus Quintile 5 stocks (i.e. most expensive stocks) as ranked by our proprietary value factor. Returns are aggregated for rising interest rate and falling interest rate periods. Monthly changes in the U.S. 10-Year Treasury Yield are used to define rising and falling interest rate periods. For illustrative purposes only.

IML: Thinking about value, momentum, size – style factors – as a way to build more hedging into your portfolio seems obvious, not necessarily as a strategy but given these factors have been rewarded by this environment, you'd expect them to do well regardless of the economic backdrop. As we go past this reopening phase, how do you gauge when it is less obvious that value is the place to be?

AA: To answer I'll discuss a strategy that has not performed well as we move into a risk-on backdrop driven by the economic reopening – minimum volatility. Min vol has underperformed for the last couple of months, with a beta between 0.75 and 0.8, we'd expect it to lag as the market booms. We see this as the "I've got your back" strategy, that tends to do the best at times of heightened volatility and uncertainty – i.e. times when inflation is very high or very low. If we do go to a very high inflation environment, or even to a deflationary environment, min vol tends to perform well in both of those extremes.

IML: So dealing with inflation risk in equity portfolios seems reasonably manageable; by contrast a higher inflation environment is more of a predicament in fixed income. Jeff, could you please share your perspective on how fixed income investors can get by in this new world of higher inflation?

Jeff Rosenberg (JR): The conversation about inflation for fixed income is challenging but does still depend on the context of the investor. For liability hedgers, rising inflation may be a good thing. For investors with fixed income exposures in a portfolio context where they are designed to balance exposures to equities, of generally provide safety, this inflation threat poses a significant and historic challenges. Unlike any period in the last 40-50 years, the possibility of an inflation regime change is larger than it's ever been, and if it is not transitory, then we need to start thinking about potential consequences in our portfolios.

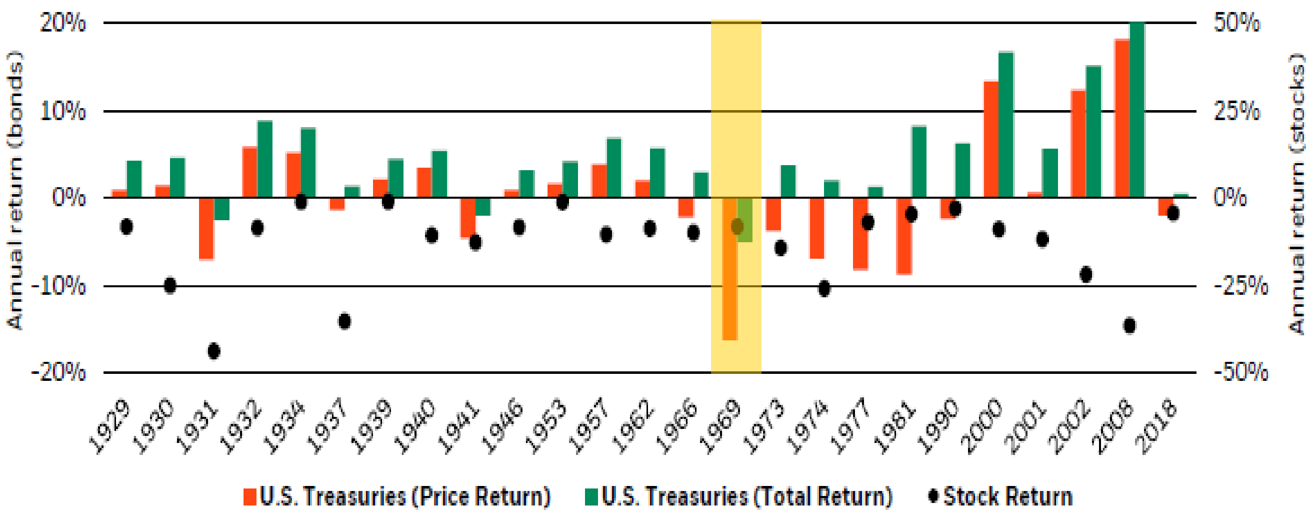
To put this historic change for fixed income into context: for the last 40 years, fixed income has been a fantastic asset, providing diversification and negative correlations to equities, effectively for free. The return profile of fixed income has been positive expected returns with a right tail skew to those returns when equity markets are declining. This has made the return profile and the factor risk of taking risk-free interest rates a very attractive proposition, which may be under siege from this inflation threat. We can look back at history to see some of the potential implications: in the mid-1960s, the anchoring of inflation expectations resulted in a decade of negative price return for fixed income. There were some positive total returns, but only because eventually the coupons got high enough to absorb those high-inflation prints and the increases in nominal interest rates that followed.

As we start the potential shift in the environment, the challenge is that there is no inflation risk premium, so the negative price returns that follow fixed income will be negative total returns until an adequate inflation risk premium is priced in. That challenges the return outlook, which is the vulnerability to fixed income. So what do you do in that kind of environment? Previous years of successful fixed income performance has resulted in an environment where 90% or more of the typical benchmark will come from interest rate risk. But you don't want that kind of concentrated factor exposure in an inflationary regime – you have to re-think, re-benchmark, and re-balance your portfolio and factor exposures between the two major macro factors represented in fixed income, interest rate risk and credit risk. Credit risk has a benefit to inflation; it decreases in inflationary environments because most capital structures are fixed rate debt, which becomes easier to pay off with nominally inflating revenues and cash flows. It's optimal to tilt your factor exposures away from a heavy concentration on interest rates risk, and more toward credit risk. This cost to credit risk substitution is the loss of the diversifying property from equities, which is derived from risk-free rates as credit risk is more positively correlated to equities.

To avoid the loss of the diversification benefit, we have to look to new asset classes and strategies. We look at long-short equity strategies to help generate better inflation return profiles in our diversification buckets to deliver an alternative to fixed income.

Bonds hedge growth, not inflation risks

U.S. stock vs. bond returns in years with negative stock returns, 1929 - 2020



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Inflation hedging – asset class deep dive

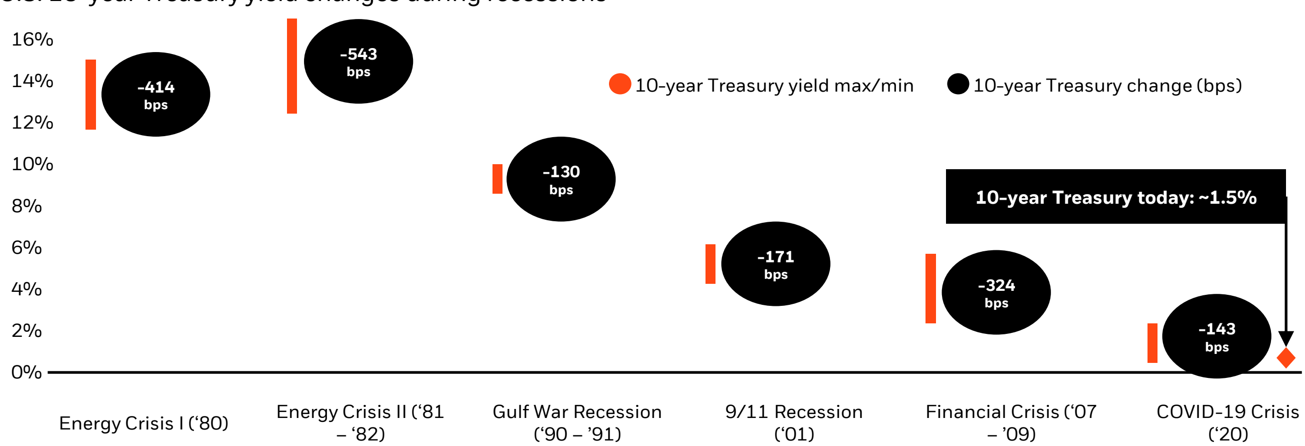
IML: Isn't the most obvious solution to deal with inflation-linked bonds? Or do they come with downsides that may not make them suitable for all investors?

JR: You can use inflation-linked bonds and they have nice characteristics, but the problem is there aren't enough of them. The size of the ILB market pales in comparison to the size of treasury risk exposures; the valuation consequence of a mass shift from interest rate exposure into TIPS exposure would render the TIPS protection ineffective, because prices would be driven so high that inflationary outcomes would already be priced in. The effective hedge is about price; we can add on a bit of inflation protection with TIPS, but we can't deal with the fundamental issue that the vulnerability of nominal treasury risk that represents 90% of the benchmark can't be hedged away with adding a few percentage points of TIPS.

The challenge we all face is the loss of a hedging asset. Historically what is so attractive about bonds is that they would have a positive expected return in good times, and when the cycle turns, they have even more positive expected return because of expectations of flattening the curve and central bank cuts. In an inflationary environment, you don't get that benefit – the cycle is turning because the central banks are raising interest rates, so your fixed income hedging performance doesn't work the way you'd expect it to. Bonds hedge stocks when stocks are going down because of growth fears, central banks can cut interest rates. Bonds don't hedge stocks when stocks are selling off and bonds are selling off because of inflation. In that kind of environment, we again arrive at the conclusion that you need to consider alternative strategies and may want to tilt toward the defensive. If left unstructured, a 60/40 portfolio is more economically exposed in an inflationary environment due to the loss of bonds' diversifying properties. So we can take on more defensive equity strategies, without having too many similar equity investments, and adds some defensive fixed income alternative strategies in the fixed income bucket to try and regain the balance for when we lose in an inflationary outcome.

Bonds may no longer be as effective as a shock absorber to equities

U.S. 10-year Treasury yield changes during recessions



Source: BlackRock, Bloomberg, as of February 2021. U.S. recession periods are defined by National Bureau of Economic Research, Graph displays U.S. 10-year Treasury yield rate changes during recession periods. 10-year treasury change reflects the biggest move seen from as early as six months before the recession period.

In conclusion…

IML: Going back to a whole portfolio context, if you're worried about a sustained inflationary environment you ought to have less fixed income in your portfolio considering the points Jeff has laid out. Where do you put the reduced allocation to fixed income?

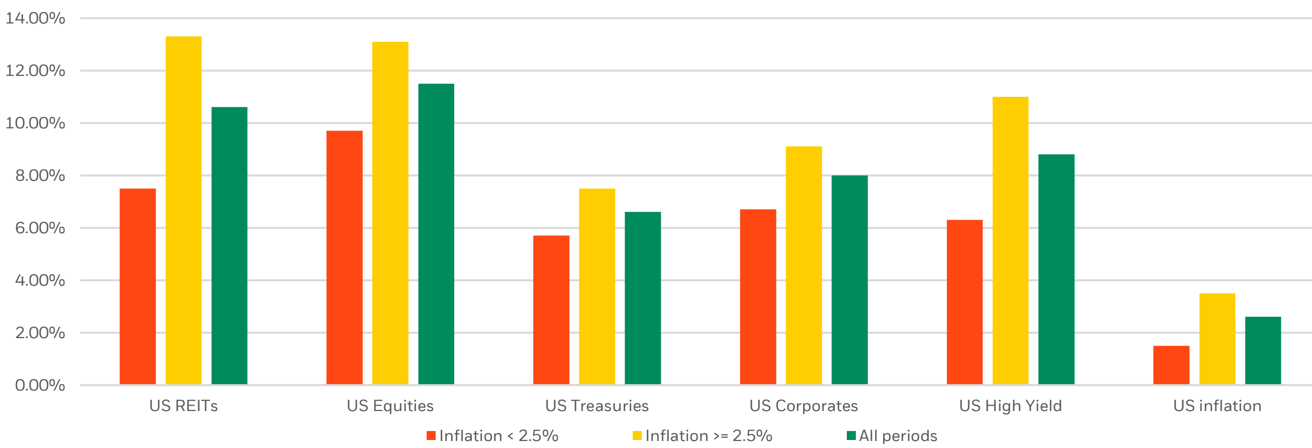
SM: It's a tricky question. We still believe government bonds are protecting against equity market risk, but at a cost. If you want to keep at least some protection we need to get the return somewhere else, presenting the case for a barbell strategy comprising equities and government bonds Of course, if you can factor in alternative active strategies and long-short positions, the case for credit as Jeff made is remains strong. In isolation, fixed income exposures are challenged; in a whole portfolio context, however, you have to adjust where you are taking risks, which risks are most rewarded, and add in balancing assets that help reduce volatility and add some protection in aggregate.

In conclusion...

IML: Back to an earlier point, real assets are not necessarily suitable for tactical hedging. What about liquid real assets?

SM: I think the question is can you find a proper substitute for private real assets? Can higher liquidity be provided without giving up core traits of the alternative investment? Since most "liquid alternatives" are played in segments of the equity market, the question is whether these equity market segments benefit (in a relative sense) form higher inflation. You would expect that those sectors benefit, which have high pricing power or pay high dividends, i.e. you receive a larger proportion of your total return sooner (through dividends) rather than later (through capital appreciation). REITs score highly on these two criteria: there is evidence that the correlation with private real estate increases as the time horizon increases and they pay out relatively high dividends. For infrastructure liquid alternatives, it depends on the specific benchmark, given the dispersion between providers.

Historical returns of various asset class split by different inflation levels



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IML: To wrap up, if you're making one change in your portfolio in the next three months to address inflation, what would it be?

AA: Don't panic. There are lots of strategies that might be considered to hedge inflation, and investors should think outside of the box. While the equity market as a whole is a poor inflation hedge, there are strategies within equities: value, size, and momentum that perform much better at hedging inflation--and these factors provide long-run rewarded returns in excess of the market as well.

JR: If you have inflation-positive equities and inflation-negative equities, it's about alternative strategies – not necessarily introducing new asset classes, but new strategies; you don't have to make these changes because an inflationary outcome may or may not happen, but it's about preparing for the possibility. Preparing for changes in your fixed income portfolio that might be necessary and learning about these alternative strategies such as long / short investing, that can be a very effective tool for isolating inflation exposure. Inflation baskets, long inflation beneficiaries, short inflation firms that suffer, and the combination can deliver a better outcome. We can do that on the fixed income side with defensive characteristics that help to give an alternative form of ballast for the ballast we are losing. Necessity is the mother of invention, and without the loss of traditional asset class performance and an inflationary environment, you don't need these contingency plans. But if we do see that environment come to fruition, we are going to have to open the box, think about portfolio construction in new ways, and introduce these different kinds of strategies to our portfolios to solve problems that an inflationary environment creates for our return expectations and risk management.

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