BofA Global Research Podcasts

Inflation means shopping around for gasoline and hedges

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Equities
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Key takeaways

- BofA Global Research Podcasts are an ongoing series of discussions covering growth industries and topical market themes.
- Divergence in volatility between rates and equities could mean a regime shift is underway and normal hedges may not work.
- We discuss risk anomalies in the market, what's fueling this regime shift and the volatility to come for equity investors.

Sticky inflation means the Fed put slips away

Volatility markets in rates and equities are sending different signals. Equity volatility has fallen back to pre-COVID levels while rate volatility is still elevated. Ben Bowler suggests that despite lots of uncertainty in rate markets, equity investors are still conditioned to “buy the dip.” But high inflation means that the free Fed backstop is no longer and tail risks are greater. The low level of implied equity volatility means that there’s an alternative to the Fed put--one can own volatility. Inflation also means that Treasuries aren’t the hedge they once were, instead, Bruno Braizinha has been having conversations with investors about owning volatility as their hedge rather than Treasuries. Bruno also warns us that the full impact of rate hikes hasn’t hit yet. *BofA Global Research Podcasts can now be found on public podcast platforms, including Spotify, Apple Podcasts, Google Podcasts, and Amazon Music. These podcasts are first released to clients and then to the platforms.*

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Full Podcast Transcript

T.J. Thornton, Head of Product Marketing: Hello and welcome to BofA Global Research Podcast, where we discuss what's rising from growth industries to rising risks and opportunities in global markets. I'm T.J. Thornton, Head of Product Marketing at BofA Global Research, and we're recording this episode on Thursday, August 31, 2023.

We've seen record sharp ratios in equities, rising valuations and low volatility, which we argue is really a function of free Fed puts. It was 1987 when Alan Greenspan first invented this idea of the central bank put and only now for the first time since '87, have policymakers been constrained from using these free central bank puts freely, due to higher inflation. And I think this is a big deal and it means that the tail risks are implicitly higher today. But equities, I just don't think are really pricing it.

- Benjamin Bowler

Cross asset volatility is normally quite correlated across equity, FX, rates, commodities and credit. That's because over time these assets discount similar macro risks in the economy. But today, rates volatility or the expected magnitude of future price changes in interest rates is still elevated. Earlier this year, rates vol (volatility) was back up above the March 2020 COVID peaks, while equity volatility on the other hand is back to pre-COVID levels and remains low. The gap is present now, and it's actually persisted for much longer than we have ever seen. The question is what that means? And here to address that today is Ben Bowler, Head of Global Equity Derivatives Research and Bruno Braizinha from US Rates Strategy. Thanks both for joining us today.

Bruno Braizinha, US Rates Strategist: Thank you.

Benjamin Bowler, Head of Global Equity Derivatives Research: Yeah, thanks T.J., great to be here.

T.J. Thornton: Okay, so we'll start with a question that both of you can answer. Ben's going to start answering, but that is why have rates and equities had such wide divergences in risk perception and which is most likely right?

Benjamin Bowler: It's been the big conundrum in the macro volatility space from our standpoint. This gap in implied risk that really began to open up in late 2021 or early '22 came with rates vol rising, as you noted to levels even surpassing the March '20 COVID peaks earlier this year during the banking crisis, while other asset classes have lagged and equity has really been the poster child of the lagging asset, that's in pricing a tremendous amount of I think optimism. As you said, not only is this gap in perception hit record highs this year, it's also persisted longer than we've ever seen. And it's somewhat unusual in that rates vol historically has dragged other asset classes with it, so when we see rates markets getting stressed, other asset classes tend to catch up over relatively short periods of time, and that hasn't happened. The big question from our perspective is, why, again, why have rates and equities had such wide divergences in risk perception, and ultimately who is right? History shows that rates generally are better at predicting macro risk than equity is. Rates only have macro to worry about, unlike equity that can struggle to know when, for example, to switch between macro and micro. Equity markets also tend to be more subject to behavioral bias. In fact, most major financial crises in the last 20 years, including the GFC (Global Financial Crisis), have been better telegraphed by FICC (Fixed Income Currencies Commodities) markets, so fixed income markets, including rates versus equities, so GFC is a good example. The first and second round of the Euro sovereign crisis were good examples, maybe the one exception was COVID, where stress in equities tended to better foresee that. But I think the bottom line is that if Fed policy is as big a risk for markets, as is commonly thought and certainly commonly discussed by investors and in the media, then one should not ignore this very elevated stress and uncertainty in rates markets right now.

T.J. Thornton: Bruno, do you want to add anything there?

Bruno Braizinha: So, I would add four points to what Ben just said. The first one is that over the cycle there are really two periods where you expect to see peak data dispersion. And by that I mean, if you look at a set of leading indicators, there's two periods in the cycle where you see some of these leading indicators pointing one way and a set pointing the other way. When you're coming out of a recession and the market starts to grow, some leading indicators point to this kind of pickup in growth, others still look backwards to the recession. And then when you reach the peak of the cycle and the cycle starts to turn, which is pretty much where we are now, or we've been over the last year or so, the Fed overshoots the neutral, financial conditions tighten and naturally macro data dispersion increases. So where we are already calls for relatively high data dispersion, supported volatility, high uncertainty. Then there's point number two is that in the current cycle, there's been a breakdown of one of the most fundamental correlations in microeconomic data, which is a correlation between growth and inflation, correlation and causality and that has exacerbated the uncertainty. Once those two big sets of microeconomic data become decoupled like you saw last year in peak stagflation expectations, uncertainty tends to increase even further. And then out of all of this, I think is important to acknowledge that the two markets look at risk very differently. The rates market is a risk off market, right, carries positive in rates for long positions and long positions benefit from deteriorating micro fundamentals and the need to hedge those risks, so the rates market tends to outweigh the downside tails of the distribution, whereas the equity market tends to outweigh perhaps the positives. It's natural that you see some decoupling in the way the two markets look at the distributions of risks and it's natural that the distribution of risks is as wide as it is right now. But we've seen way beyond what I think is natural to expect. These types of soft landing scenarios that the market is pricing for the outlook are scenarios where essentially risky asset valuations continue to be as much driven by their own intrinsic fundamentals, which in equities are earnings expectations, as they are driven by the discounting. And so when you price a lot of risk, and this risk essentially boils down to scenarios where the Fed may need to cut sooner and more aggressively, that lends support for equity valuations and for the equity outlook. And therefore you start to see this somewhat abnormal context where the term structural volatility is inverted in a rate space, but it's relatively steep in equity space, the kind of decoupling of the two vol markets in rates and equities.

T.J. Thornton: Okay. And Bruno, you sort of alluded to some of this in the prior answer, but why do you think rates markets then are so stressed? Why this big gap where rates volatility is so high relative to equity and relative to its own history?

Bruno Braizinha: Yeah, so there's something else that I think is at play here, which is to some extent the scope for a regime shift in the dynamic of rates and volatility. A key puzzle for the market is why the economy is not slowing down, given that the Fed is roughly 300 basis points tight relative to the neutral. If you believe the Fed's view for the neutral, which is let's say in the 2.5% to 3% context, we are roughly 250 basis points to 300 basis points above that. The economy should be slowing down. There's two ranges of broad explanations for that. One is obviously monetary policy leads and lags, right? And the lags are still to unfold, so this FRB (Federal Reserve Board) model, the model that the Fed uses to kind of understand how monetary policy shocks the economy, basically the response functions peak at roughly, let's call it 12 to 15 months. So if you deliver a hike today, the peak of the impact of that hike in the economy is going to be felt in roughly 12 to 15 months. We've only now roughly 12 months past the last of the 75 base points hikes of last year, so we're only now starting to feel the full impact of the tightening that we delivered in 2022. But there's another class of explanations for this type of resilience of the economy, to which is potentially the neutral rate for the US economy is higher than these 2-2.5% potential 3% view that the Fed holds. Right, so if the neutral rate is higher, the Fed is not as tight relative to the neutral as they believe they are. Because if the neutral rate is higher, then we're really shifting ranges here for backend deals, and we've shifting ranges here for volatility, and we've seen some of that repricing very clearly in the dynamic of the curve. We've seen clearly a reset of yield ranges at the backend of the curve in 10-year yields. And I think we're seeing some signs of shift in regime on the left side of the volatility grid, which is the part of the volatility grid in rate space that is more linked to the Fed policy. All of that creates an environment that is rather supportive for rates volatility, and to some extent, almost in a stressed camp when you see inversions of the term structural volatility of 20 basis points. And by that inversion, I mean, when you look at one month expires into 10-year rates versus one year expires into 10-year rates. When that spread is inverted by roughly 20 basis points, we are in rather extremely stressed type of context. Those inversions don't usually last long and they've lasted quite long periods of time over the last year or so.

T.J. Thornton: Okay. So Bruno, to sum it up, essentially, the market is saying that there's a chance that the neutral rate still needs to go higher as far as rates has gone already. And there's also this chance that we haven't yet seen the full impact of the rate hikes and maybe you get some more severe slowdown, maybe some sort of accident, which probably pushes rates quite a bit lower.

Bruno Braizinha: Exactly.

T.J. Thornton: Okay. So Ben, why doesn't equity care about this great rate uncertainty like it used to?

Benjamin Bowler: It's a bit ironic, T.J., because arguably Fed support in recent decades has created one of the most attractive environments for owning equities in the last hundred years. We've seen record Sharpe ratios in equities, rising valuations and low volatility, which we argue is really a function of free Fed puts. It was 1987 when Alan Greenspan first invented this idea of the central bank put, and only now for the first time since '87, have policymakers been constrained from using these free central bank puts freely due to higher inflation. And I think this is a big deal and it means that the tail risks are implicitly higher today. But equities, I just don't think are really pricing it. And it's not just indicated by let's say a relatively low VIX level, but it's also expressed by the buoyancy of equity markets themselves, the expansion and valuations and low realized volatility. So the question is, again, why? And I think the simple answer is that equities have become increasingly conditioned by the Fed from years of stepping in at low levels of stress. This has led investors to essentially believe that upside risk is a larger concern than downside and that dips are really a source of alpha, as we like to say. One stat that I think is incredibly striking and provides strong evidence to this behavioral bias effect is that the average retail investor, who bought S&P 500 ETFs (exchanged traded funds) with their stimulus check post-COVID, achieved a better risk adjusted return than the best hedge funds that we know of on the planet for nearly two years for essentially zero cost. This is an incredible set of expectations to imbue investors with that hasn't been unwound. And I think the meme stock craze, the rise of zero days-to-expiry options are so-called 0DTEs are essentially all part of the same kind of mania. I think the other point too is that buy the dip is not dead this year. In fact, so far, in 2023, it's the fifth best year in nearly a hundred years for a simple strategy of buying the S&P, if it's down on the day and selling it at the next day's close. As a result, US equity investors have again, as I said, a distorted perception of risk that's, I think, yet to really be reality checked. And even the professional investors, who understand it, just can't fight the trend. And I think this is ultimately why we see so many active managers claiming that this may be the most frustrating market that they have traded in their career.

T.J. Thornton: Ben, I wanted to follow up on the point you made about 0DTE. It's garnered a lot of attention. You compared it to meme stocks, but the meme phenomenon, while not dead, is highly diminished versus where it was in the stimulus check days. 0DTE on the other hand is sort of as strong as it's been, so why do you think that that's the case and do you think 0DTE means anything for the S&P?

Benjamin Bowler: Yeah, it's, it’s been the question of the day and in the equity derivatives world are 0DTEs actually driving markets. But to answer the first bit of your question first, I don't think the mentality that huge returns can be made investing in equities is really gone. I think the market just hasn't delivered enough pain to break this belief. Having said that, the best estimates that we've seen, which come from the exchange itself, is just that around 30% to 40% of the market and the zero day to expiry options market, which is concentrated in the S&P 500, just 30% to 40% is retail, and the rest is institutional. A big part of the interest in 0DTEs comes from institutional players largely trying to harvest elevated risk premia to generate yield. And you're right to point out, as I said, that the debate has raged over whether this rapid rise in volume has been distorting underlying equity markets, but our work shows that it's less than many suggest. And the point that most are missing is that even though option volumes are very high, the net imbalances between buys and sells of end users, which we can see from high frequency data coming directly from the exchange, shows the market is actually pretty well balanced. And on top of that, we don't see any evidence of excess futures volume, which suggests that market makers are hedging these options in a way that would heavily influence underlying equity markets, let's say. Unfortunately in our world, it's easy to try to explain unexplainable moves in markets with stories of quant or derivative flows, and sometimes they definitely can be impactful, but our work in the last several decades suggests that it's often an overplayed story that just doesn't add up.

T.J. Thornton: Okay. So we've talked about some of the anomalies in the market. Interested to hear from both of you about what you can do about this and the opportunities that this presents?

Benjamin Bowler: Our view is you have to be fearful of both tails. You cannot underestimate the potential for equities to defy gravity given the distortion in risk perception that we've seen. At the same time, markets remain fragile as trading liquidity is poor and investor sentiment is fickle. And I think the longer the Fed stays on hold, the greater the risk that something breaks. Bruno mentioned it before, but our work, going back to 2005, has shown that there is a pretty strong relationship between the level of interest rates and the level of vol. Interest rate levels tend to predict volatility with about a two year lag - this is equity volatility in particular - with rates just starting to rise in March of last year, we have yet to see the full brunt of the rate hikes, and this relationship would suggest that VIX shouldn't peak again until 2025. The good news is that it's cheap to hedge equities with vol suppressed and rates high. In fact, longer dated put prices are close to the lowest levels we've seen since before the GFC, so 15 years ago. The $64,000 question, of course is when do things crack? And that's admittedly a hard question and one that's already vexed many bears. The autumn period is definitely a riskier period, and we've already seen cross asset volatility starting to rise from the summer lows. But the more investors get pulled into markets against their better judgment, the greater the risks of repeated fragility. The fact that so few will correctly time the risk off perfectly is why we still continue to believe that systematic strategies that are cheap to carry are very sensible. Systematic protection takes away the timing risk, which is a very valuable asset in this environment.

Bruno Braizinha: I would add a couple of things to what Ben just said. Fundamentally, I think there's a crisis of conviction. When I go and see clients, and when I discuss the outlook, generally I have a core scenario that I present, and generally I have, let's say 60%, 70%, maybe 80% conviction in that scenario. And then I always discuss outlier scenarios and those hedges for the outlier scenarios. Right now, the level of conviction, I think in your central scenario is much lower, so that implies that you need really, spend significant amount of time thinking about what the tails are, what those tail scenarios are, what they imply in terms of potential moves in risky assets, bond yields for the curve, so you need to spend a lot of time doing that. And then the second step is understanding what probability the market is assigning to those scenarios, and there vol plays an important role in the analysis because even investors that are not necessarily going to trade volatility to look at the volatility market to understand the distribution of risk the volatility market’s pricing is an important step to try to judge the level of underpricing or overpricing of those tail risks. And then obviously the third step is once you've identified your tail risks, and they are significant right now, and whether the market is underpricing or overpricing some of those risks, you hedge those risks in your portfolio and you find the most efficient way to hedge those risks. Now clearly at this point, there are two tail risks in the distribution of outcomes, one scenario where the economy is so resilient that the Fed may have to deliver a lot more than what the market is pricing right now. Those scenarios I think are worth hedging in portfolios, and they are also scenarios that generally force the Fed to break something at some point. So on the other side of these types of scenarios you have hard lending probabilities, medium term, right? On the other side of the distribution, you have scenarios where, you know, the Fed cuts sooner and more aggressively than the market is pricing. And broadly, I think this is the approach you need to take, understanding what is the core view, what are the tails, what probability the market is signing to those tails, and whether those tails are appropriately priced and how to hedge those tails in the portfolio.

T.J. Thornton: Okay, and Bruno, we'll start with you on this last question. 2022 was among the worst years for multi-asset portfolios that use bonds as a diversifier. We've heard about the death of 60/40, obviously it did not perform well last year. What are investors doing to manage this risk and the fact that maybe bonds might not be the hedge that they thought they were?

Bruno Braizinha: Okay, so the challenge in 2022 was really a high inflation context, was a context where you saw a breakdown of that correlation between growth and inflation fundamentals, and all of this destroys the utility of treasuries as a portfolio diversifier and as a hedge, and you basically have to be more creative. And volatility as an asset class is one of the ways in which you can get creative in hedging those tail risks. Now, the expectation was that 2023 was going to be a year where you essentially see a recoupling of growth and inflation fundamentals, and you see an increase of the utility of Treasuries as a hedge and diversifier, and that story has been, to some extent, put on hold. Scenarios where the economic backdrop deteriorates very rapidly, but inflation stays sticky and that continues to erode the utility of treasuries as a hedge. I think that's where volatility really shines and that's why I think over the last year we've seen an increasing number of clients trying to sort of educate themselves on the asset class, understanding how to trade the asset class.

Benjamin Bowler: Again, I think this loss of diversification of bonds to risk assets, including equities, it's a big deal. And it's another example of the loss of a "free put" that investors have relied on really since the late nineties. History shows that if rates stay higher for longer, this two-way risk, in other words, the fact that bonds have more freedom to both rally and fall means that bonds are just not going to be that free put that many have enjoyed. The last 20 years have been what I call 'the era of diversification maximization', where strategies like risk parity have become prominent that essentially lever up lower risk assets like bonds and bet that diversification across asset classes will bring that risk back down. But what's interesting is this style of asset allocation, which again, has become so popular in the last 20 years, has not performed well recently and did not perform well in past periods of higher inflation such as the seventies and in eighties. Again, I think this speaks to the degree to which this new environment we find ourselves in absent liberally wielded high strike central bank puts, and absent the ‘free lunch’ of diversification truly is a monumental regime shift for markets. Very few have investing experience from this pre-nineties period, which was really the last time that markets had to navigate absent these free puts. And history shows that it was a riskier environment than what many in markets today are currently projecting.

T.J. Thornton: Thanks Bruno. Thanks, Ben.

Bruno Braizinha: Thank you.

Benjamin Bowler: Thank you.

T.J. Thornton: The point that Bruno and Ben made is that we're in the midst of a regime change, where the Fed put may not be present because we're dealing with higher and somewhat sticky inflation, inflation that may not slow much, even if growth slows. This means that bonds are unlikely to be the hedge that they've been, so investors should look for other hedges like volatility. Relatively high interest rate volatility seems to reflect some of this regime shift already, while equity vol is low by historical standards. And equity vol tends to pick up two years after rates start to rise because rates impact the economy with lag. That means that getting the timing right is tough. The spike may not be imminent, but it's still likely to come, and Ben does point out that the autumn tends to be a riskier period. Thanks for joining.

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