

The Vicious Cycle of Rates and Currencies - Where Does it End?

- The U.S. Dollar (USD) is a global reserve currency, and as the Fed hikes rates the USD strengthens, meaning foreign currencies weaken against it.
- A weakening of a country's currency increases inflation and prompts the local central bank to hike interest rates in order to mitigate that local inflation.
- Ultimately this becomes a vicious cycle of rates and currencies, as higher U.S. yields and a stronger USD are typically very negative for global growth.
- As of today, the terminal Fed funds rate is generally expected to end up between 4.5 - 5%. But is that the peak? This is what we - and the markets - are trying to solve for.
- If we assume that the Fed's decision to tighten financial conditions is satisfied with an inversion of the 3-month/10-year UST yield curve between -50 to -75 basis points (i.e. the 3-month reaches 4.5 - 4.75% in 2023) then we may also be able to conclude a 10-year UST terminal yield of roughly 4% (+ or -25 basis points).

Jim Caron: Markets are extraordinarily volatile right now. One of the things that we can say is that there's a vicious cycle between rates and currencies that helps explain this. The question that the market is asking is where does it end? What I'd like to do in this audiocast is go through what we think is taking place and how this all plays out.

The first thing we have to look at is the global risk picture, where we have to look outside of the U.S. to explain what's going on **inside** of the U.S. There's a lot going on with central banks and currencies elsewhere. It's not just about U.S. rates and the U.S. currency, although the U.S. currency has a large role to play in this. We think of this as a vicious cycle for rates and currencies.

We all know what the Fed did last week, and Fed policy impacts global monetary policy disproportionately. The Fed hiked rates aggressively in terms of their terminal rate forecast. The 75 basis points was what we expected but then they increase their terminal rate forecast by 100 basis points which was not expected. Again, global monetary policies are disproportionately impacted by the Fed because the Fed is the largest central bank in the world - and also because the dollar is a global reserve currency. So let's go through some definitions here.

A reserve currency means that other central banks need to hold the U.S. dollar (USD) in larger quantities than other currencies to offset USD liabilities. In other words, it needs to have an ample amount of dollars to spend in times of stress. Now these dollars are held in reserve and they are mostly invested in U.S. Treasuries to earn some income. As the Fed hikes, interest rates and the USD strengthens, which means by definition that other foreign currencies start to weaken against it.

This creates another problem. A weakening of a country's currency increases inflation and prompts their local central bank to hike interest rates in order to strengthen their currency versus the USD to slow local inflation. This in turn becomes a bit of a cyclical problem. The other thing that a country can do is intervene directly in their currency markets by directly buying their own local currency back. But what do they buy back with? Well they buy it back with USD which effectively ends up creating more USD strength. To raise USD they can then sell their U.S. Treasury (UST) holdings that can then push U.S. Treasury yields higher. A lot of the currencies being held at foreign central banks are in USD, and those dollars are invested in treasuries, and those treasuries need to be sold to raise those dollars. And this is effectively what creates this vicious cycle.

This is why we're seeing global interest rates rise. Remember that UK interest rates over the past couple of trading sessions are up about 100 basis points. That's quite a large move. Ultimately this vicious cycle of rates and currencies does push UST and also pushes the dollar stronger. Which can be negative for global growth, noting that many foreign liabilities are priced in USD and spread off of UST yields. As UST yields go up it will put pressure on other assets, particularly in emerging markets and in other areas.

Now let's look at the local picture. The market is essentially asking what is the peak in terminal Fed policy rates for this cycle? As I said before, the Fed surprised the markets by increasing the terminal Fed funds rate by 100 basis points more than what they previously forecasted. Now the market is thinking it may end up anywhere between 4.5 and 5% broadly speaking. The question is though, is that the peak? This is what the market is trying to solve for and here's how we're thinking about it. We have to go back to Powell's press conference, where he implied that he believed there should be positive real yields across the curve and that may be required to sufficiently tighten financial conditions in order to bring down inflation.

Let's assume that level is a 50 basis points real yields across the curve. Remember, a real yield is a nominal interest rate minus inflation. But then that begs the question, what's the inflation rate that we're using? Well, Powell answers that too, and what he said was that real interest rates should be based on the projected inflation level by the Fed, not the spot level. So don't use this 8% CPI number that's out there, use what the Fed is telling us inflation will be in the future. That's the math that the Fed is doing, and let's just say that the math gets a little bit fuzzy from here on out because now we have to take some liberties to extrapolate this to a logical conclusion in terms of how the Fed is actually seeing it and why that's important is because we're trying to anticipate their actions.

So if we take the Fed's projection that inflation falls to 3.5% (the Fed is actually saying 3.1% in 2023, but I'm going to say 3.5% just to be a little bit more conservative). Let's say that happens again over the next year in 2023, then we can say that a 4% average yield across the entire UST curve is sufficient to satisfy the condition that the Fed is discussing of about a 50 basis point real yield across the curve. When we think about where yield might be gravitating towards you're going to probably think about that 4% average level. Two-year UST yields today around 4.25% and 10-year yields are about 3.75%, but I'm saying an average level across the entire curve. That's the way we have to think about things in terms of in aggregate. So taking the shape of the yield curve into consideration, we can consider the Fed's curve, which is the spread between the 3-month UST and the 10-year. That's what the Fed typically looks at

when it talks about the yield curve. If we assume that the Fed's decision to tighten financial conditions is satisfied with an inversion of this curve, where 3-month/10-year curve inverts between 50 and 75 basis points meaning that the 3-month ends up 50 or 75 basis points higher than the 10-year yield. That would imply that the 3-month gets to 4.5 - 4.75%, pretty darn close to what the Fed is indicating that their policy may go to. We then may be able to conclude that the U.S. 10-year terminal yield maybe somewhere around 4% - plus or minus 25 basis points with a reasonable degree of confidence all else being equal.

This is the way that we start to think about calculating this and we're making a lot of assumptions but we're doing the best we can to try and understand what the Fed is saying and what kind of an impact it may have on the markets. Of course there are many conditions that can affect us, not the least of which are these foreign flows that I mentioned earlier. But we can use this approach as a reasonable starting point to understand at what level does the Fed end it's tightening cycle and reach a terminal rate. Perhaps this is why there is a greater confidence in the 4.5 to 5% terminal Fed funds rate than there was before. Again, I'm saying 10-year yields will end up around that 4% level plus or minus 25 basis points. I think that's a reasonable assessment as to where we think these yields can go to in 2023. I'm just going out for one year. Then of course we have to look at 2024, where if inflation refused to fall enough, the Fed may have to do more. But that's a risk for a later date as a lot can happen between now and 2024.

We take this in terms of 12-month investment horizons and we think that longer duration fixed income can look attractive around these levels given the 10-year yield today of around 3.75%. That why we're saying that maybe the 10-year UST yield gets to 4, maybe 4.25%. This is all very subjective and depends on what happens in the future, what happens to inflation, what happens with foreign flows and everything else. That is a starting point, where we think we can start to try to make some sense out of this market and try to pick some points in the future where we think some of this yield rise may come to a conclusion.

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