Liquid Insight

Rates volatility and the Fed

08 November 2022

Rates and Currencies Research
Global

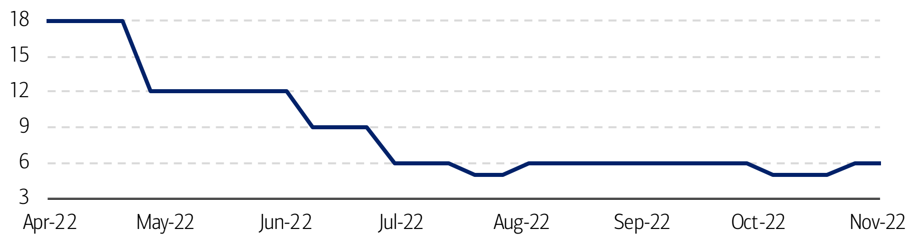
Key takeaways

- The Nov FOMC saw a dissonance between slower Fed expectations and Powell's Q&A focus on the potential for a higher terminal
- The vol market seems to be overweighting the slower pace vs. the higher terminal potential in the recent price action
- We favor using fair left side vol levels & cheap pay/rec skew to hedge the tail risk of a Fed convergence to the Taylor Rule

By Bruno Braizinha

Chart of the day: Market pricing the Fed pivot at a 6m horizon (y-axis in months)...

... on a rolling basis since July... close enough to continue to provide investors some hope, but too distant to effectively support the market



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Rates volatility and the Fed

The Nov FOMC meeting saw a dissonance between expectations for a slower policy trajectory (supported by the statement) and Chair Powell's Q&A focus on the potential for a higher terminal. The vol market seems to be overweighting the slower pace vs. the higher terminal potential in the recent price action (lower vol led by the left side of the grid and gamma, along with the richening of receiver vs. payer skew on the left side).

This dynamic may be supported by a terminal pricing that exhausts the levels consistent with the current framework where the Fed targets real policy rates near-term (c.5-5.5% for the terminal), and reluctance from the market to price a further shift by the Fed towards Taylor Rule type levels. In this context, risks may look more balanced around c.5.25% terminal rates, receivers may find some support vs. payers' skew, and the market may start to overweight Fed slowdown signs vs. the potential for a higher terminal.

The left side of the vol grid is back around fair levels, but the right side is still slightly rich, suggesting the market may be pricing a more persistent buildup of term premium and inflation risk premium in rates. Rather than fading the right side vol richness, we favor using fair left side levels and cheap pay/rec skew to hedge tail risks.

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Timestamp: 07 November 2022 11:30PM EST

Rates volatility and the Fed

The November FOMC meeting saw some dissonance between: (1) the pre-blackout communications, which suggested scope for a soft Fed pivot (see Postcard from Europe); (2) the statement which supported expectations for a more gradual Fed by emphasizing the lags between policy tightening and the full impact of tighter policy in the economy (economic models' response functions generally put the full impact at c.1y horizon); and (3) a hawkish Q&A where the Fed Chair favored emphasizing the potential for a higher terminal, even as he validated expectations for a slower trajectory ahead.

The c.30bp round trip at the frontend of the yield curve between the statement release (10bp rally) and the end of Q&A (20bp sell-off from the lows to the highest 2yT yields since 2007) illustrates the degree of this dissonance. As the rates volatility market netted out the meeting, however, it seemed to have assigned a higher degree of significance to the softer policy trajectory. The left side of the volatility grid and the gamma sector led the underperformance in the week (Exhibit 1), while receivers continued to richen versus payers' skew on the left side of the grid (Exhibit 2).

Exhibit 1: ATM Normal Volatility Grid – Change on the Week (CoW)

Left side underperformed on the grid over the last week

	1Y	2Y	3Y	5Y	7Y	10Y	30Y
1M	-17.0	-18.4	-19.8	-22.3	-21.9	-21.5	-13.4
3M	-15.4	-14.1	-12.5	-9.6	-8.4	-9.2	-5.6
6M	-15.1	-10.6	-8.5	-4.5	-4.0	-4.2	-2.2
1Y	-9.7	-8.5	-7.4	-4.6	-4.4	-4.3	-2.3
2Y	-8.4	-6.2	-5.6	-4.6	-4.3	-4.1	-2.5
5Y	-1.7	-1.0	-1.0	-0.9	-1.1	-1.3	-1.1
10Y	-1.0	-1.0	-1.0	-0.9	-0.9	-0.9	-0.3

Source: BofA Global Research

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Exhibit 2: 3m Z-Score Ratio of Payer/Receiver Skew

Z-Scores cheap payer vs. receiver skew on the left side and belly

	1Y	2Y	3Y	5Y	7Y	10Y	30Y
1M	-1.5	-1.5	-0.9	-1.3	-0.7	0.8	0.4
3M	-1.6	-1.3	-1.3	-1.6	-0.9	1.7	1.1
6M	-1.7	-1.7	-1.6	-1.8	-1.6	1.0	1.5
1Y	-1.9	-2.0	-2.0	-2.2	-2.5	-1.0	0.8
2Y	-2.2	-2.3	-2.2	-2.4	-2.5	1.3	1.0
5Y	-2.2	-2.6	-2.1	-0.2	0.1	0.5	0.6
10Y	-1.6	-1.7	-0.2	0.7	0.7	0.6	0.6

Source: BofA Global Research

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We see two potential drivers for overweighting the slower policy pace vs. the potential for a higher terminal in the recent priced action, the first more technical and the second more fundamental:

1. Positioning is likely to have played a role. The short bias at the frontend has been consensual, and expressed both outright and conditionally. Despite a rather hawkish meeting, indications of a slowdown of the policy trajectory may have driven some profit-taking on these positions.

2. Over the last couple of quarters we have seen the Fed shifting from a rather orthodox view of policy tightening that looks at the nominal neutral rate (2.5% using the Fed's median of the longer run dots as a proxy for the neutral) as the level that separates easy from restrictive territory (and is consistent with terminal rates up to c.3.75-4%) towards targeting positive real policy rates near-term (where the terminal rate > average near-term inflation plus r*). In this shift, the Fed injected a significant amount of volatility into the market, as an exceptional 75bp move in June turned into four such moves. It was also in this context that frontend real yields pushed quickly into positive territory, up c.200bp over the summer.

   There is a range of values that is consistent with this real policy rate targeting framework, which we see around c.5%, perhaps up to 5.5%. When the Fed argues for a higher terminal, it does not necessarily mean a deviation from this framework (it may just mean realizing the forwards). There is scope, however, in a context where both inflation and labor market data continue to run hot, for a new policy shift towards higher Taylor rule levels (in the mid-7% range or above - Exhibit 3), which the Fed Chair actually referred to in the November meeting.

   Notably, for the market to price a new shift towards a higher Fed regime, data may need to surprise more significantly on the upside, instead of trending sideways around the recent highs as it has been doing recently.

The current market pricing for the terminal may therefore be exhausting levels that are consistent with the current framework, while at the same time there may be some reluctance to price a new shift in framework by the Fed. It is in this context that risks may start to look more balanced around c.5.25% terminal rates (Exhibit 1), receiver skew may find some support vs. payer skew, and the market may start to overweight signs of a slowdown vs. the potential for a higher terminal.

Exhibit 3: Taylor rule scenarios contingent on Core PCE and U3
Green = range of scenarios covered by current fed funds level (3.75-4%)
Yellow = range of scenarios covered by terminal expectations (5.25-5.5%)

	Unemployment (%)								
Core PCE (%)	1.5	2	2.5	3	3.5	4	4.5	5	5.5
3.15	6.7	6.2	5.7	5.2	4.7	4.2	3.7	3.2	2.7
3.65	7.5	7.0	6.5	6.0	5.5	5.0	4.5	4.0	3.5
4.15	8.2	7.7	7.2	6.7	6.2	5.7	5.2	4.7	4.2
4.65	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.0
5.15	9.7	9.2	8.7	8.2	7.7	7.2	6.7	6.2	5.7
5.65	10.5	10.0	9.5	9.0	8.5	8.0	7.5	7.0	6.5
6.15	11.2	10.7	10.2	9.7	9.2	8.7	8.2	7.7	7.2
6.65	12.0	11.5	11.0	10.5	10.0	9.5	9.0	8.5	8.0
7.15	12.7	12.2	11.7	11.2	10.7	10.2	9.7	9.2	8.7

Source: BofA Global Research

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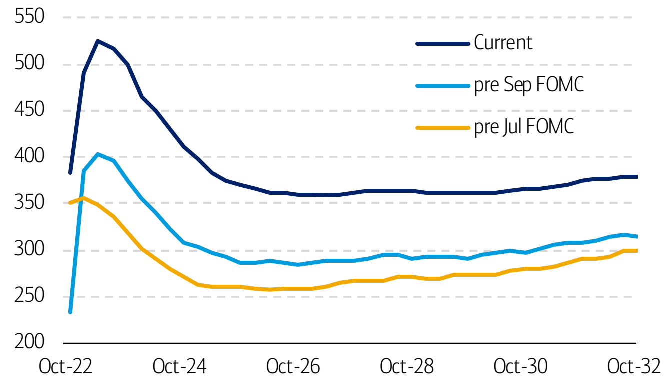
Exhibit 4: Current Fed policy trajectory
Higher terminal, and higher medium-term convergence



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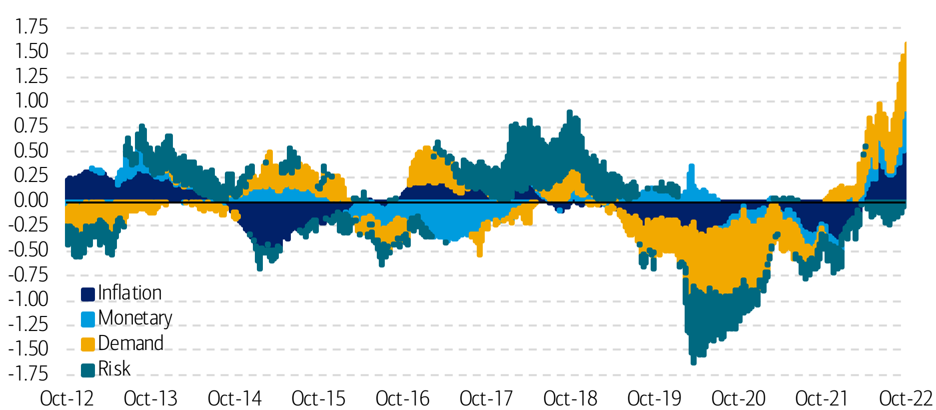
Where do we go from here

The latter has the potential to bring about a more significant shift in the vol market dynamic. However, we are not seeing the soft pivot that the market was fixated on before the November FOMC meeting, but likely only a more gradual shift in view where even as the Fed reaches higher, it may do so by injecting less volatility into the market.

As we have been arguing (see Vol and mixed signals), a context where the market continues to price the full Fed pivot at a rolling 6m horizon (see Exhibit 7) implies fair value for 1y10y implied volatility near-term c.100-110bp, and c.135-140bp for 1y1y vol. We are back around fair levels on the left side, but still slightly higher on the right side of the grid, suggesting that the market may be pricing a more persistent buildup of term premium and inflation risk premium in rates and a re-set of ranges at the backend (see Postcard from Europe and the medium-term policy trajectory in Exhibit 4).

Exhibit 5: Decomposition of the 10yT dynamic as a function of monetary policy, demand, inflation and risk shocks shows risk component lagging in the recent sell-off
Steady state for 10yT over the last decade around 2%, recent sell-off may indicate a reset higher of the steady state towards levels around 2.5-2.75%% or slightly above



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The next leg of volatility normalization is likely to come only as the market starts to price the full Fed pivot with more conviction (inside a 3m horizon - Exhibit 7). At that point, selling volatility becomes more compelling structurally. For now, however, we advise against fading the right side richness as we believe volatility may stay supported by: (1) positive correlations between risky assets and bond yields driven by the fact that the discounting component of equity valuations has superseded by far earnings expectations as the dominant driver of the recent dynamic of equities; and (2) the breakdown of the utility of USTs (and duration more broadly) for portfolios across its three most fundamental drivers (a liquid reserve of value, a diversifier for portfolios and a hedge for risk - see Treasuries' existential crisis). These create scope for more frequent episodes where the broader market dynamic becomes highly negatively convex (see A negatively convex market) and drives significant spikes in volatility.

Instead, we prefer using fair left side vol levels and some of the richness of receiver vs. payer skew there to position for tail scenarios where the Fed may need to reach higher towards Taylor rule type levels (e.g. through payer spreads financed with receivers with expiries around 3m, or payer spreads outright for those who wish to avoid building negative P&L profiles on positions).

Exhibit 6: 2s10s SOFR curve fwds (y-axis) vs. 3m OIS fwds (x-axis)

Market continues to price the Fed pivot at a 6m horizon

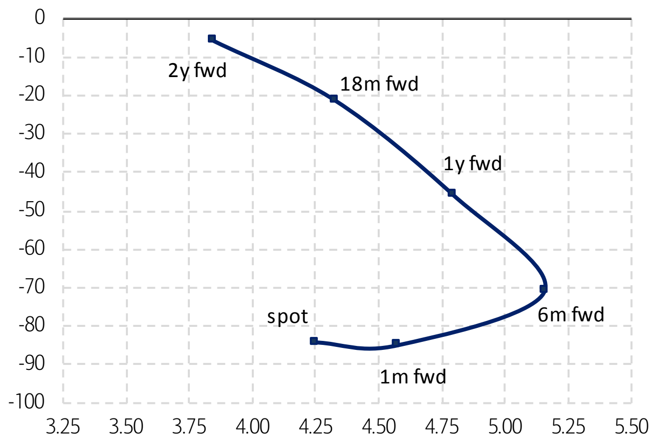

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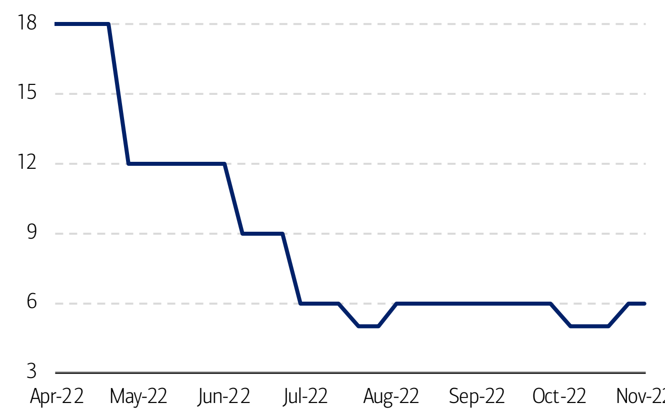
Exhibit 7: Market pricing Fed pivot at a 6m horizon (y-axis in months)...

... on a rolling basis since July... close enough to continue to provide some hope, but too distant to effectively support the market



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Bottom line: The November FOMC meeting saw a dissonance between expectations for a slower Fed policy trajectory and Chair Powell's Q&A focus on the potential for a higher terminal. The volatility market seems to be overweighting the slower policy pace vs. the potential for a higher terminal in the recent price action (vol lower in the week led by the left side and gamma, along with the richening of receiver vs. payer skew on the left). Left side vol is back around fair levels, but the right side of the grid is still slightly rich suggesting the market may be pricing a more persistent buildup of term premium and inflation risk premium in rates. Rather than fading the right side vol richness, we favor using fair left side vol levels and cheap pay/rec skew to hedge tail risks.

Notable Rates and FX Research

- **Global Rates, FX & EM Year Ahead 2022 – "Year Ahead 2022: Top trade-offs"**, 21 Nov 2021
- Read the Fed's lips, **Global FX Weekly**, 04 Nov 2022
- No time to lag, **Global Rates Weekly**, 04 Nov 2022
- Little rally appetite, **Liquid Cross Border Flows**, 31 Oct 2022

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For a complete list of our open trade recommendations, as well as our trade recommendations closed over the past 12 months, see the reports below:

Global FX Weekly: Read the Fed's lips 04 November 2022

Global Rates Weekly: No time to lag 04 November 2022

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