

Quantitative Research

Fed's monetary policy: We expect a 25bps hike in July's meeting

- The NLP model suggests that the Fed's terminal will continue to stand at 5.25%
- However, our model only considers the semantic within the FOMC statements and does not take into account the rate projections within the dot-plot
- Even though June's FOMC statement didn't showed significant changes from May's communiqué, the dot-plot strongly indicates that most FOMC members consider increasing the target rate range by 50bps in 2023
- Given that the Fed's written communication today was not consistent with the rate projections, we can conclude that the congruence between the language used in previous monetary policy announcements and the current tightening cycle has been lost
- Based on the expected 50bps increase in the dot-plot, we believe that the Fed will raise its target rate by 25bps at the next monetary policy meeting (July 26)

Fed's topics classification using NLP and ML techniques. In July 2022 we published a research note where we described a model using natural language processing (NLP) techniques that classify and interpret the FOMC statements. In addition, it also provides a methodology to confirm whether the communication made by the Central Bank is consistent with the monetary policy implemented (refer to: Welcome to the Machine (Learning): An NLP framework for analyzing the Fed's monetary policy statements).

The relationship between the Fed funds rate and the semantic classification obtained was also analyzed. In this regard, the most important finding in our research note was the degree of strength in the relationship between the Fed funds rate and the semantic classification obtained, given that the latter can explain 9 out of 10 rate movements. The model also defines the range of variation of the terminal reference rate (refer to Chart 1).

The Fed's semantics allude to a terminal rate of 5.25%. Following today's monetary policy announcement, the model ranked the semantics of the statement with the central topic congruent with a terminal rate of 5.25% (Topic 8 in Chart 2). It is worth noting that this topic has been the dominant one since the Fed began implementing its hiking cycle in March 2022. In this context, the semantics of today's statement were identical to those of May, so the model continues to exhibit strength in the classification of statements.

Nevertheless, the Fed also released its summary of economic projections. The dot-plot showed that 12 FOMC members would be willing to raise the target level for the federal funds rate by at least 50bps in the remainder of this year. It is worth mentioning that **our model analyzes only the semantics of the statements and does not take into consideration the dot-plot projections**.

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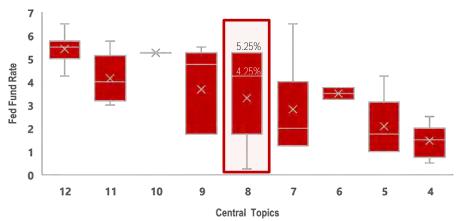
This implies that the Fed's written communication within the statements continues to allude to a 5.25% terminal rate. Therefore, we can conclude that the congruence between the language used in previous monetary policy announcements and the current tightening cycle has been lost.

We expect a 25bps increase in the Fed's reference rate at July's meeting. Although our model correctly anticipated the Fed's previous rate hikes, the dotplot strongly indicates that most FOMC members consider increasing the target rate range by 50bps in the remainder of the year. Therefore, we believe that the Fed will increase the target range by 25bps at the next meeting (July 26).

Chart 1: Banorte's Fed Topic Index vs Fed Funds Rate (upper range) %; Central Topics FDTR (LHS) ••••• Central Topics (RHS)

1990 1993 1996 1999 2002 2005 2008 2011 2014 2017 2020 2023
Source: Banorte, Federal Reserve, Bloomberg

Chart 2: Range of Fed Funds Rate by Topic Central Topics



Source: Banorte, Federal Reserve, Bloomberg



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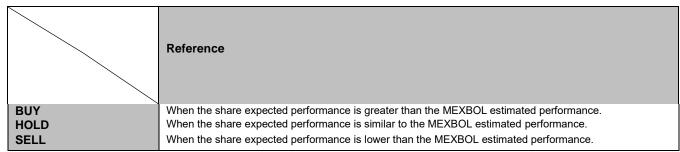
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