

Economic and Financial Markets ResearchOuantitative Research

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

- The Fed decided to pause its hiking cycle. Nevertheless, our NLP model continued to rank the semantics of today's statement with the central topic congruent with a terminal rate of 5.25%. Our model also perceived a marginally more hawkish tone in today's statement with respect to the one published in September
- The Fed's written communication has been consistent since the beginning of the current tightening cycle. However, the congruence between the language used and the monetary policy decisions has been lost since July's statement
- We continue to believe that the Fed will raise its target rate by 25bps at the next monetary policy meeting (December 13)

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%. The Fed decided to maintain the reference rate between 5.25% and 5.5%. Nevertheless, our NLP model continued to rank the semantics of today's statement with the central topic congruent with a terminal rate of 5.25% (upper range; Topic 8 in Chart 2). Our model also perceived a marginally more hawkish tone in today's statement with respect to the one published in September. It is worth noting that this topic has been the dominant one since the Fed began its hiking cycle in March 2022. In this context, the semantics of today's statement were identical to previous announcements, so the model continues to exhibit strength in the classification of statements.

We highlight that our model only considers the semantic within the FOMC statements. Given that the Fed's written communication has been consistent since the beginning of the current tightening cycle. However, the congruence between the language used and the monetary policy decisions has been lost since July's statement

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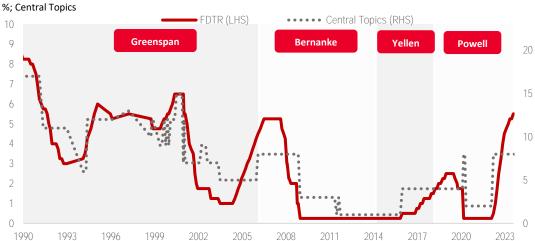


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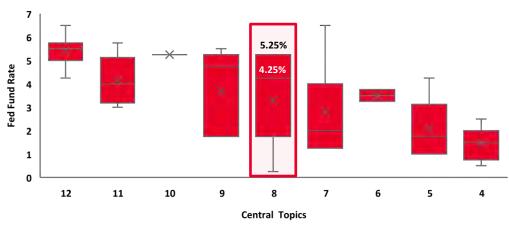
We expect a 25bps increase in the Fed's reference rate at December's meeting. Although our model correctly anticipated the Fed's previous rate hikes, we believe that the FOMC members kept the door open for an additional hike. Therefore, we estimate that the Fed will increase the target range by 25bps at December's meeting. However, it is worth noting that the tone of the press conference was marginally less hawkish than the statement, and the increase in the benchmark rate will be subject to the inflation and employment reports that will be released before the December's monetary policy announcement.

Chart 1: Banorte's Fed Topic Index vs Fed Funds (upper range)



Source: Banorte, Federal Reserve

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



Source: Banorte, Federal Reserve



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