Working papers economics - Reading Between the Lines: A Quantitative Analysis of Colombia’s Central Bank Minutes

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AUTHORS AND/OR EDITORS Calderón-Camacho, Pedro Pablo Gaitán-Maldonado, Celina Herrera-Pinto, Nicolle Valentina Ramos-Veloza, Mario Andrés
By analyzing nearly two decades of monetary policy minutes using natural language processing tools, this study shows that these documents effectively explain monetary policy decisions, insofar as they shed light on the internal balance of risks assessed by the Board of Directors. This balance is consistent and coherent with the changes adopted in the policy interest rate and, in turn, this information is incorporated into agents' inflation expectations. Taken together, these findings indicate that the minutes constitute a key instrument in Banco de la República's communication strategy.

Publication Date: Tuesday, 6 of October 2026 **Approach**
This study examines the tone of the Colombian Central Bank’s (BDBR) monetary policy minutes between 2007 and 2025 and its relationship with the formation of inflation expectations. We construct a corpus of 194 minutes, divided into 12,468 individual sentences, and classify each sentence as hawkish, dovish, or neutral according to the degree of inflationary pressure. For classification, we applied three NLP methodologies: a context-sensitive dictionary built using Word2Vec embeddings, a fine-tuned BETO transformer model, and a GPT-4o prompt-based classifier, and compared their classification performance. We further examine whether the tonality of the minutes is associated with subsequent revisions in inflation expectations drawn from Banco de la República's Quarterly Survey of Economic Expectations, conditional on relevant macroeconomic controls.

Contribution
This study makes several contributions. First, we focus on the minutes of the Central Bank's meetings rather than its press releases because the minutes discuss the Board's assessment of inflation risks and the discussion of the members of the Board of Directors in reaching their decision in much greater detail. Second, we used three different methods to measure the tone of the minutes and compared how well each method classified our corpus and its dynamics. Third, we show that the tone of the minutes closely tracks and tends to shift during the tightening phases of monetary policy. Finally, we find that a more hawkish tone in the minutes is followed by a downward revision in people's inflation expectations, and that this pattern is stronger when the Board's decision is unanimous.

Results

Across all three methods, the tone of the minutes tracks Colombia's tightening of monetary policy closely: it rises before the Central Bank starts raising interest rates and falls before it starts cutting them. A more hawkish tone in the minutes is associated with a downward revision in expected inflation relative to current inflation, a pattern that fits better with the idea that the Bank is signaling that it will act firmly to bring inflation down, rather than simply revealing new inflationary information. This pattern is stronger when the Board's decision is unanimous, and it holds up even after accounting for other factors that might explain it, although we can not fully rule out that something else about those decisions is driving this relation.

Fuente: https://www.banrep.gov.co/en/publications-research/working-papers-economics/reading-between-lines-quantitative