How Much Information Do Monetary Policy Committees Disclose? Evidence from the FOMC Minutes and Transcripts

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1. Abstract
The purpose of central bank minutes is to give an account of monetary policy meeting discussions to outside observers, thereby enabling them to draw informed conclusions about future policy. However, minutes are by necessity a shortened and edited representation of a broader discussion. Consequently, they may omit information that is predictive of future policy decisions. To investigate this, we compare the information content of the FOMC’s minutes and transcripts, focusing on three dimensions which are likely to be excluded from the minutes: 1) the committee’s degree of hawkishness; 2) the chairperson’s degree of hawkishness; and 3) the level of agreement between committee members. We measure committee and chairperson hawkishness using a novel dictionary that is constructed using the FOMC’s minutes and transcripts. Agreement is measured by performing deep transfer learning, a technique that involves training a deep learning model on one set of documents—U.S. congressional debates—and then making predictions on another—FOMC transcripts. Our findings suggest that transcripts are more informative than minutes and heightened committee agreement typically precedes policy rate increases.

2. Measurement
We introduce two text-based measures of policy inclination. The first captures net hawkishness using a novel dictionary-based method, which builds on the approach in Apel and Blix Grimaldi (2012). This revised version of the dictionary is partitioned into three sections, each of which has direct relevance for part of the Fed’s dual mandate: 1) inflation; 2) economic activity; and 3) employment. We then compute the set of most frequently used terms, drawing from the unigrams and bigrams in the minute and transcript texts, and associate those terms with policy relevant with a dictionary. We next select the modifiers that are most frequently used in the same sentence as each noun to determine whether the term was used in a hawkish or dovish context. For example, for “inflation,” we pick modifiers such as “rising” and “accelerating.” We apply this dictionary to the FOMC’s minutes and transcripts, as well as chairperson’s text within the transcripts.

Our measure of agreement is constructed by performing transfer learning. We first train a deep learning model with a long short-term memory architecture to classify agreement in U.S. congressional debate texts. We do this by making use of a pre-labeled dataset that contains information about whether a speaker voted against or in favor of a bill. We then apply the trained model to FOMC transcripts to identify whether each speaker has adopted a tone that is generally agreeable or disagreeable. The two examples given below show cases with high agreeable ratings for the training set—U.S. congressional debates—and the test set—FOMC discussions.

3. Empirical Specification
Our main empirical specification consists of an ordered probit where the dependent variable, Policy, can take on three values: -1 for a monetary easing; 0 for no change; and +1 for a monetary tightening. Transcripts, Transcripts, is the level of the net hawkishness index for the transcripts, Minutes, is the level of the net hawkishness index for the minutes. Agreement, is a measure of agreement among committee members, Chair, is a measure of the chairperson’s net hawkishness, and X_{t-1} is a vector of controls.

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\text{Policy}_t = \alpha + \beta_1 \text{Transcripts}_t - 1 + \beta_2 \text{Minutes}_t - 1 + \beta_3 \text{Agreement}_{t-1} + \beta_4 \text{Chair}_{t-1} + \beta_5 X_{t-1}
\]

4. Results
We introduce a novel measure of policy inclination using dictionary-based methods, which captures hawkishness in central bank texts, as well as a measure of agreement, which is constructed using transfer learning. We find that the transcripts contain sentiment content that predicts future policy decisions, even after controlling for the sentiment of minutes, as well as macroeconomic and financial variables. We also find that heightened committee agreement appears to precede monetary tightening, suggesting that committees may be more reluctant to raise rates and face negative media coverage until they have achieved an internal consensus.

Train Set: I thank the gentleman for yielding me this time and for his great work on this bill. Mr. chairman,