In addition to the theoretical and empirical evidence, policymakers themselves talk about unemployment/output and inflation in Taylor rule terms whilst deliberating over monetary policy. For example, in one meeting on December 11, 2007, Board Governor Kroszner explained that "each incremental step we take with respect to policy easing potentially has higher and higher costs with respect to inflation. There are no free lunches here." Similarly, even for those cases when the Taylor rule is not used explicitly, members still use these two topics to anchor their thinking. Board Governor Gramlich on June 30, 2005 notes, "We don't necessarily follow the explicit Taylor rule outcomes of the Bluebook but we look at inflation and unemployment and try to make them hit our target values, at least over some time horizon."

To validate that more counts of inflation words indicates greater concern for rising (rather than falling) inflation and that more counts of output and unemployment words are being used to express concern about falling (rather than rising) employment and output, we examine the inflation statements expressed by committee members by looking at key word in context (KWIC). First, we search for all instances of the words *inflation, output,* and *employment* and expand the context around those words to include twenty terms and strip whitespace for easier reading. This gives the context around the word in the document. Second, two graduate students, both with specialization in political economy and one with specific expertise in monetary policy, as well as the first author, manually coded 500 randomly selected KWIC statements for their sentiment. We labeled a statement as 1 if the inflation statement was risk language or "Hawkish"; -1 if the statement was no-risk language or "Dovish"; and 0 if the statement is on balance or the risk of inflation as "Moderate." For the output and unemployment topics, coding is the reverse. In order to assess the sentiment, we then take the majority class of the labeled statements across the coders as the final label.

Of the 384 statements that had a sentiment, 66 percent of our hand-coded statements are "Hawkish" whereas 18 percent are "Dovish" and 16 percent

"Moderate." The results of our coding exercise is shown graphically in Figure A.1. Interestingly, the large expression of inflation risks in the random sample of statements is particularly meaningful given inflation is both low and stable throughout the period. In our three year sample, average monthly changes in inflation are slightly above the FOMC's target rate of 2% annual inflation and yet, despite this, FOMC members spend most of their time speaking about inflation risks.[16]

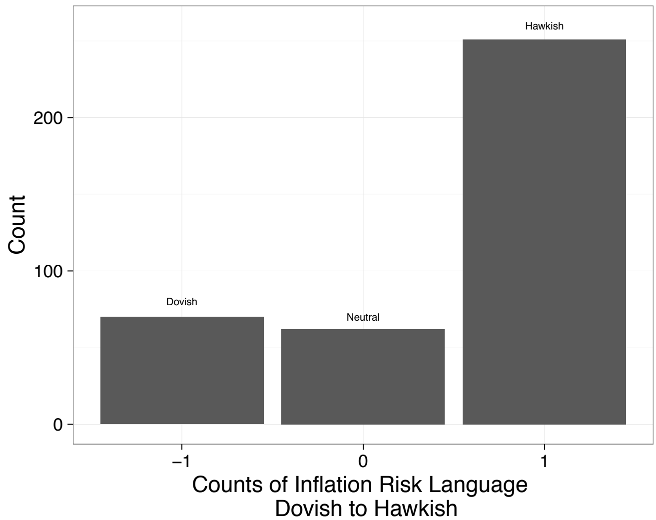

Figure A.1. Inflation Language Sentiment from FOMC Transcripts

In a separate analysis, we also compare members' estimated positions from the full meeting and positions from the economic-go around when members report on their district and where members can request when to speak (at the start, middle, or end) – thus allowing for strategic behavior. We find no evidence that members take on different positions within a meeting.[17]

[16]The inter-coder reliability score across the three coders is 0.44 using the Fleiss' Kappa score for three raters.

[17]Results are available upon request from the authors.

One possible concern is that as the housing crisis approaches, members might be more troubled by housing rather than concerned with output or inflation. As shown in table A.1, however, members talk about inflation eight times more than they do housing which means that adding housing as a topic will do little to change the results.

To give a sense of what words and phrases are generated by the topics we label output and inflation, we show the most likely five words and most likely five phrases associated with each topic:

- **Output/Unemployment:** productivity, compensation, energy, measured, hour, market psychology, large trucks, filter estimate, price elasticity, weekend strains

- **Inflation:** inflation, percent, year, time, don, basis points, core inflation, monetary policy, inflation expectations, energy prices

TABLE A.1 *Top topic unigram words for k=25 and number of instances using keywords in context*

	Count
inflation	**2924**
percent	1466
year	1096
markets	1077
financial	603
district	552
president	532
contacts	392
capital	384
terms	370
people	347
laughter	298
monetary	261
output	**260**
unemployment	**245**
mortgage	198
ceo	136
december	128
nation	126
statement	118
world	110
katrina	96
largest	81
july	78
florida	77

TABLE A.2 *Individual Ideal Point estimates for FOMC members derived from topic proportions in FOMC meeting transcripts from February 2005 to January 2008.*

Speaker	Lower	Ideal Point	Upper
POOLE	-2.59	-2.42	-2.26
FISHER	-1.35	-1.17	-0.99
YELLEN	-1.27	-1.10	-0.93
EVANS	-0.81	-0.48	-0.14
GRAMLICH	-0.79	-0.45	-0.11
PIANALTO	-0.64	-0.43	-0.22
KOHN	-0.59	-0.40	-0.22
GUYNN	-0.61	-0.38	-0.15
GREENSPAN	-0.56	-0.35	-0.14
FERGUSON	-0.48	-0.22	0.03
LACKER	-0.40	-0.20	-0.01
BIES	-0.44	-0.20	0.04
LOCKHART	-0.43	-0.10	0.22
STERN	-0.32	-0.07	0.17
MINEHAN	-0.27	-0.07	0.13
MOSKOW	-0.15	0.07	0.29
OLSON	-0.13	0.24	0.60
PLOSSER	0.06	0.28	0.51
WARSH	0.11	0.36	0.61
BERNANKE	0.24	0.45	0.66
STONE	-0.08	0.46	1.00
SANTOMERO	0.21	0.56	0.91
KROSZNER	0.32	0.60	0.88
HOENIG	0.47	0.76	1.06
GEITHNER	0.84	1.12	1.39
HOLCOMB	0.30	1.38	2.45
MISHKIN	1.11	1.58	2.04

TABLE A.3 *Verbatim Discussion of Inflation Risks in FOMC Committee Meetings in 2007 by Yellen and Bernanke*

Date:	**Yellen:**	**Bernanke:**
Jun. 27:	Risks to inflation are also significant	Risks to inflation to the upside and remain the predominant concern
Aug. 17:	There is downside pressure on inflation	Risks to inflation remain on the upside
Sept. 18:	I lowered my inflation forecast slightly	I see less upside risk. I think the slowing that we are likely to see will probably remove some of the upside risk that we have been concerned about. But, I don't dismiss inflation risks by any means, and we know that policy changes can work through expectations as well as resource pressures, and so I consider that to be a serious concern
Oct. 30:	Inflation news has continued to be favorable but some upside risk has become prominent	If you wanted to be defensive about inflation, you could point out that the movement in oil prices and the dollar and so on is in part due to our actions. But it is also due to a lot of other things [...] That said, I share with Governor Warsh the concern that the visibility of these indicators day after day in financial markets and on television screens has a risk of affecting inflation psychology. I do worry about that. I think we should pay attention to that. So I do think that is a concern, and we obviously need to take it into consideration in our policies, in our statements, and in our public remarks.
Dec. 11:	[D]ata on the core measure continues to be favorable. Wage growth remains moderate, and the recent downward revisions to hourly compensation have relieved some worries there. Inflation expectations remain contained. As I mentioned, I expect some labor market slack to develop, and this should offset any, in my view, modest inflationary pressures from past increases in energy and import prices and help keep core PCE price inflation below 2 percent. Continued increases in energy and import prices pose some upside risk to the inflation outlook, but there are also downside risks to inflation associated with a weakening economy and rising unemployment.	With respect to inflation– again, people made these points as well– it is unfortunate that we do have some instability, some risks there. We saw some stabilization of the dollar over the past six weeks. That is obviously not exogenous. It depends on our behavior and our communication. I think oil prices depend also to some extent on our policy, directly or indirectly. We will be seeing some ugly near-term inflation numbers with oil price increases, which we hope will move out of the data shortly, but we're not sure. So obviously we have to watch that.