Online Appendix: Monetary Policy Communication, Policy Slope, and the Stock Market

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I Linguistic Speech Classification

In applying the search-and-count approach, we first follow a procedure often employed in natural language processing, i.e., we first remove stop words (e.g., "and" or "the") and then create stem words.

We collect all speeches for members of the FOMC from http://www.federalreserve.gov/newsevents/. To classify the tone of speeches, we use a "search-and-count" approach as in Apel and Grimaldi (2012). Search-and-classify is an automated method to classify text into categories. The key input into "search-and-count" classification is a pre-specified word list which the research classifies as "hawkish" or "dovish." Using this pre-specified word list, we can count the hawkish and dovish terms within one speech and aggregate over the document. Following this procedure, we obtain a classification if a speech is on average more hawkish or dovish.

A subtlety arises in applying the approach of Apel and Grimaldi (2012) to our data as they work with Swedish texts. In Swedish, compound words such as "output gap" appear without a blank between the two words. In English many interesting words in our application are compound words, e.g., "labor force participation." We therefore first use a list of such compound words to create a list of relevant nouns to be paired with an adjective or verb. We then look at all two-grams (contiguous combinations of two words within a document). We require that one word within a two-gram contains either one of our nouns or verbs or adjectives. After this filtering step, we obtain a list of two-grams which we classify into hawkish and dovish. To obtain this classification, we read a large number of speeches to determine in which context these two-grams are typically used. We make the classified two-grams and our initial word list available under http://faculty.chicagobooth.edu/michael.weber/research/data/HD_classification.xlsx and in Table A.13.

II Additional Results

A. Difference-in-Differences Slope

In our baseline analysis, we use a first-stage regression to purge the short-run variation in federal funds futures and define the regression residual as slope. One concern might be a generated regressor problem or a small sample bias in point estimates, or in sample overfit. To sidestep these concerns, we now construct a new slope factor as a simple difference-in-differences estimator:

$$slope_{simple\_diff} = \Delta ff_{t,t+1,3} - \Delta ff_{t,t+1,1}. \tag{A.1}$$

This construction has the advantage that it does not rely on first-stage estimation, does not use full-sample data in the construction, and we do not have to bootstrap standard errors. Table A.6 reports the results. We see results are economically and statistically indistinguishable from our baseline results in Table 2.

B. Blackout Periods

The Fed restricts the extent to which members of the FOMC can give public speeches during FOMC blackout periods. These periods start at midnight ET seven days before the beginning of the FOMC meeting and end at midnight ET on the day after the meeting. Table A.7 in the Online Appendix shows that our results are robust to the exclusion of blackout weeks. In column (2), we exclude weeks with FOMC meetings; that is, the week we calculate the slope factor covers the blackout period. Results are economically and statistically similar to our baseline results in column (1). The same holds true when we exclude weeks in which our return calculation overlaps with the blackout period or when we exclude both weeks in columns (3) and (4).

C. Target, Path, and Slope

Gürkaynak et al. (2005b) document that two factors are necessary to explain the reaction of yields to monetary policy news. They use the first two principal components in federal funds futures to explain the reaction of bond yields to FOMC press releases, and show

rotations of the principal components resemble a target and a path factor. The target factor is similar to the measure of monetary policy surprise used in the event-study literature, whereas the path factor contains information in FOMC press releases that moves future rates.[1] Unconditionally, we find a correlation of the slope factor with the target factor of 15.09% and with the path factor of 14.37%.

Table A.8 adds the path and target factors from Gürkaynak et al. (2005b).[2] Column (1) repeats the baseline results. We see in column (2) that a higher target factor increases the predictive power and leads to a drop in the next weeks' excess return. Adding the target factor, however, has no effect on the point estimate of the slope factor. Similar results hold when we add the path factor in column (3) or both in column (4). Adding the path factor, however, adds little explanatory power for stock returns. We also add the 30-minute intraday monetary policy shock around FOMC press releases from Gorodnichenko and Weber (2016) in column (5). The high-frequency shock further increases the predictive power and drives out the target factor but has no impact on the point estimate for the slope factor.

These results are consistent with Gürkaynak et al. (2005b), who find little predictive power of their path factor for stock returns. The slope factor differs from their path factor in that it indicates the speed of future increases or decreases in federal funds target rates rather than just any future policy change.

D. Longer Horizons

Table A.9 repeats our baseline estimation of equation (6) for different horizons ranging from one to four weeks. The predictive power of the slope factors for returns is contained at the one-week horizon. Returns over the next two to four weeks are still negative but smaller in absolute value and no longer statistically significant.

E. Simple-Difference Slope

In Table A.10, we create a placebo slope factor based on the difference between the changes in the three-month federal funds futures-implied rate and the one-month futures-implied

[1]The correlation between the target factor of Gürkaynak et al. (2005b) and the monetary policy shock of Gorodnichenko and Weber (2016) is 95.5% over the common sample.

[2]The data for target and path factors limit our sample to end in December 2004.

rate:

$$slope_{placebo} = ff_{t+1,3} - ff_{t+1,1}. \tag{A.2}$$

The placebo slope factor has no predictive power for weekly stock returns across specifications and explains less than 0.15% of the variation in stock returns.

F. Contemporaneous Association

We argue in the main body of the paper that studying the contemporaneous association between the slope factor and the excess returns of the CRSP value-weighted index is difficult due to endogeneity and reverse-causality concerns. We indeed find a positive, statistically significant coefficient on slope of 8.52 (s.e. 2.99). Once we remove scheduled FOMC meeting weeks, the point estimate reduces to 5.57 (s.e. 3.77) and is no longer statistically significant. Notwithstanding other concerns, scheduled FOMC meetings and regular monetary policy shocks measured as in Gorodnichenko and Weber (2016) drive the positive contemporaneous association between the slope-factor and excess stock market returns.[3]

G. Monetary Policy News versus News about the Economy

A Taylor (1993) rule with nominal interest rates reacting to the output gap and inflation empirically describes actual monetary policy in the United States well. Positive changes in the slope factor might indicate upward revisions of market participants about future output growth or inflation. The reaction of stock returns to the slope factor might therefore constitute a reaction to news about the macro economy rather than monetary policy shocks.

Table A.11 adds macroeconomic shocks to our baseline analysis using data from Haver Analytics. We define macro shocks as the difference between the actual release as first reported and the median forecast from Haver Analytics. We assign the shock values to the five-day period over which we calculate the changes in federal funds futures when

[3]The change in the one-month futures is highly correlated with the standard monetary policy shock around FOMC meetings during meetings weeks, and enters the calculation of the slope factor with a negative sign.

the macro announcement occurs between Thursday of week t and Wednesday of week $t+1$.

We add surprise GDP growth ($shock\_gdp$) as an additional covariate to our baseline specification in column (1) of Table A.11. Positive news about GDP positively predicts weekly stock returns, but is only marginally statistically significant. GDP news, however, has little impact on economic or statistical significance of the slope factor. In column (2), we add news about core consumer price inflation ($shock\_cpi$). Higher-than-expected inflation negatively predicts stock returns, but statistical significance is sparse. Inflation surprises have no impact on the predictive power of the slope factor. Column (3) adds both inflation and GDP news jointly. The point estimate on slope barely changes.

Column (4) also adds news about capacity utilization ($shock\_cu$), consumer confidence ($shock\_cc$), employment costs ($shock\_ec$), initial unemployment claims ($shock\_ic$), the manufacturing composite index ($shock\_mfg$), new home sales ($shock\_nhs$), non-farm payroll ($shock\_nfp$), core producer price inflation ($shock\_ppi$), retail sales ($shock\_rs$), and unemployment ($shock\_ur$). In addition to GDP news, retail sales positively predict the next weeks' stock returns, whereas higher-than-expected capacity utilization and news about higher unemployment negatively predict next weeks' returns. The additional covariates, however, have no impact on the economic or statistical significance of the slope factor.[4]

In the last column, we regress the slope factor on the macro surprises. Higher-than-expected capacity utilization, consumer confidence, manufacturing index, non-farm payroll, producer price inflation, retail sales, and lower-than-expected unemployment numbers lead to an increase in slope consistent with the idea that stronger macroeconomic fundamentals warrant an increase in the speed of future monetary policy tightening.

Table A.11 shows that macro news affects the slope factor, but news about the economy is unlikely to drive the predictability of weekly stock returns by the slope factor. Rather, news about the stance of monetary policy seems to be the driving force behind the stock return predictability by the slope factor.

[4]We find a point estimate and statistical significance of slope which is unaltered when we measure macro news over the return week.

H. Economic Magnitudes

We employ the results in Campbell and Thompson (2008) to assess the economic significance of our findings. Specifically, we assess how much an investor could possibly gain following the predictions the slope factor generates, to create a link between statistical measures of forecast performance (out-of-sample R^2) and more interesting economic quantities, such as gains in excess returns or increases in Sharpe ratios.

To generate out-of-sample forecasts, we first re-estimate equation (6) from 1988 through 1994 and use the parameters estimates ($\hat{\alpha}$ and $\hat{\beta}$) to compute an out-of-sample version of the slope factor for the time period from 1995 through 2007:

$$slope_t^{oos} = \Delta ff_{t,t+1,3} - \left(\hat{\alpha} + \hat{\beta}\Delta ff_{t,t+1,1}\right). \tag{A.3}$$

For the period from 1988 through 1994, we also estimate the following predictive regression:

$$R_{t+1} = \gamma_0 + \gamma_1 slope_t + \varepsilon_t. \tag{A.4}$$

We then use the parameters estimates from equation (A.4) together with the out-of-sample slope factor to compute an out-of-sample prediction for excess returns, as

$$\widehat{R_{t+1}} = \hat{\gamma}_0 + \hat{\gamma}_1 slope_t^{oos}. \tag{A.5}$$

Following Campbell and Thompson (2008), we then compute the out-of-sample R^2 as

$$R^2_{OOS} = 1 - \frac{\sum_{t=1}^{T}\left(R_{t+1} - \widehat{R_{t+1}}\right)^2}{\sum_{t=1}^{T}\left(R_{t+1} - \bar{R}_{t+1}\right)^2}, \tag{A.6}$$

where $\bar{R}_{t+1}$ denotes the average excess return over the period from 1988 through 1994. We obtain an out-of-sample R^2 of 0.27%.

Assuming mean-variance preferences with risk-aversion parameter ρ, Campbell and

Thompson (2008) show that a buy-and-hold investor will earn an excess return of

$$\frac{S^2}{\rho},$$

where S^2 denotes the unconditional squared Sharpe ratio.

An investor conditioning on the prediction of the slope factor will earn an average excess return of

$$\left(\frac{1}{\rho}\right)\left(\frac{S^2 + R^2_{OOS}}{1 - R^2_{OOS}}\right).$$

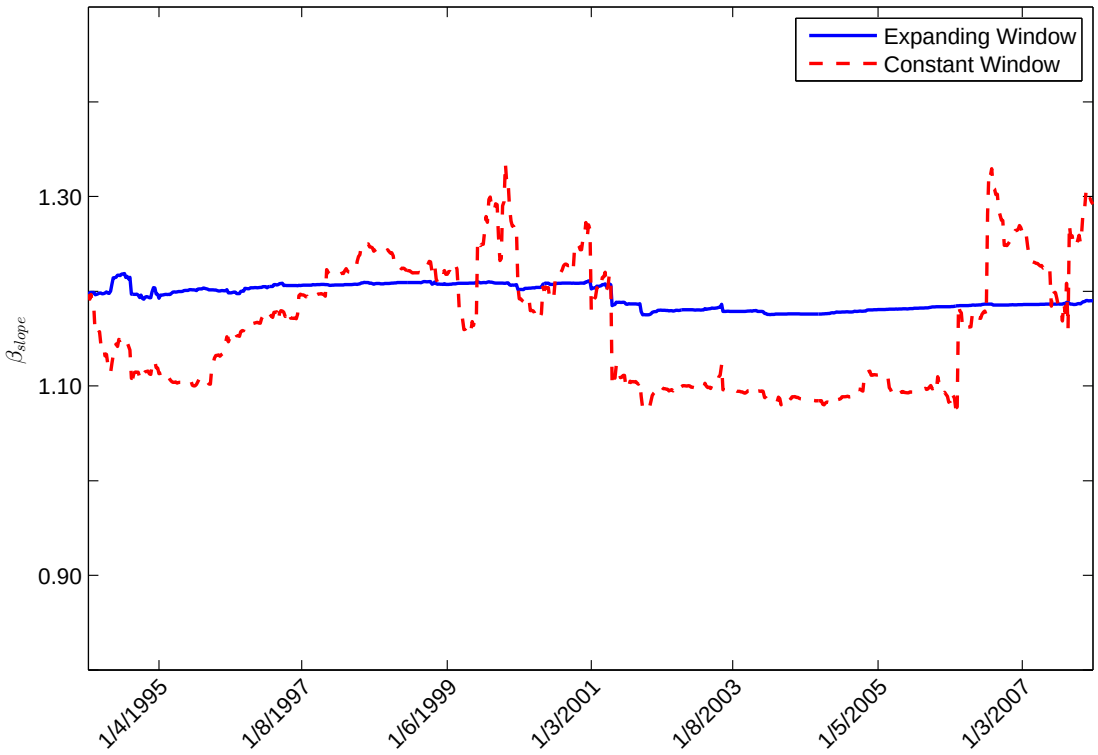
The weekly unconditional Sharpe ratio from 1988 through 2007 is approximately 7.31%, so a buy-and-hold investor with unit risk aversion would have received an average weekly excess return of 0.53%. An investor using the slope factor to make conditional portfolio choices would have earned an average weekly excess return of 0.81%.

Cochrane (1999) suggests an alternative methodology to evaluate the economic significance of return predictability. Sharpe ratios of a buy-and-hold investor (S) and an investor conditioning on the slope factor are related by $S^* = \sqrt{\frac{S^2+R^2_{OOS}}{1-R^2_{OOS}}}$. For our example, we get an increase in the weekly Sharpe ratio of almost 20%, that is, $S^* = 9.00\%$ compared to $S = 7.31\%$.

I. Subsample Analysis

Table A.12 reports results for varies subsamples and finds the predictive power of slope estimated across different subsamples for weekly stock returns is a robust feature of the data.

Figure A.1: **Regression Coefficient for Slope Estimation**



This figure plots the time series of the regression coefficient, regressing changes in the six-month futures-implied federal funds rate on changes in the one-month futures-implied federal funds rate from 1994 to 2007. The blue solid line reports estimates of an expanding window regression, whereas the red dashed reports coefficients for a constant window estimation of 250 weeks.

Table A.1: **Predictive Regressions: Long Sample (1994–2018)**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$), lagged index returns (R_t), the dividend-price ratio (dp_t), the VIX (VIX_t), realized variance (RV_t), the variance risk premium (VRP_t), the federal funds target rate ($Fedfunds_t$), the term spread ($TermSpread_t$), and the monetary policy shock (mp_t) from Gorodnichenko and Weber (2016). We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)) for the sample until 2007 and use the changes in the six-month and three-month futures-implied rates to construct the slope factor subsequently. Our sample period is from the first week of 1994 to the last week of 2018 for a total of 1284 weeks.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	0.11**	0.12**	−0.18	0.11	0.20	0.00	0.14	0.14	0.11**	−0.21
	(0.06)	(0.06)	(0.26)	(0.24)	(0.16)	(0.13)	(0.09)	(0.10)	(0.06)	(0.33)
$Slope_t$	−4.15***	−3.62**	−3.58**	−3.61**	−3.65**	−3.48**	−3.61**	−3.58**	−3.51**	−3.27*
	(1.51)	(1.52)	(1.71)	(1.71)	(1.52)	(1.72)	(1.52)	(1.53)	(1.50)	(1.70)
R_t		−0.06	−0.05	−0.06	−0.06	−0.04	−0.06	−0.06	−0.06*	−0.04
		(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
dp_t			15.83							23.94*
			(13.09)							(13.08)
VIX_t				0.00						0.04
				(0.01)						(0.03)
RV_t					−0.01					−0.04
					(0.01)					(0.03)
VRP_t						−0.03				
						(0.03)				
$Fedfunds_t$							−0.01			−0.03
							(0.02)			(0.03)
$TermSpread_t$								−0.01		−0.09
								(0.05)		(0.07)
mp_t									−6.95*	−7.23*
									(4.14)	(4.10)
R^2	0.50	0.80	0.96	0.81	0.85	1.08	0.81	0.81	1.60	2.28
Nobs	1284	1283	1283	1282	1283	1282	1283	1281	1283	1280

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.2: **Predictive Regressions: 6 month minus 1 month Slope**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$), lagged index returns (R_t), the dividend-price ratio (dp_t), the VIX (VIX_t), realized variance (RV_t), the variance risk premium (VRP_t), the federal funds target rate ($Fedfunds_t$), the term spread ($TermSpread_t$), and the monetary policy shock (mp_t) from Gorodnichenko and Weber (2016). We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the six-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 696 weeks (the six month futures contract was not heavily traded at the beginning of the sample which explains the missing weeks).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Constant	0.12*	0.14*	−0.46	−0.06	−0.04	0.18	0.01	−0.09	0.11*	−1.40**
	(0.09)	(0.09)	(0.39)	(0.30)	(0.21)	(0.15)	(0.22)	(0.20)	(0.09)	(0.71)
$Slope_t$	−3.11***	−2.59**	−2.55**	−2.48**	−2.52**	−2.61***	−2.60***	−2.62**	−2.15**	−2.03**
	(1.08)	(1.05)	(1.05)	(1.02)	(1.03)	(1.05)	(1.05)	(1.07)	(1.02)	(1.02)
R_t		−0.10*	−0.10*	−0.09*	−0.10*	−0.10**	−0.10*	−0.09*	−0.12**	−0.11**
		(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
dp_t			36.03*							62.77***
			(21.95)							(25.94)
VIX_t				0.01						0.00
				(0.02)						(0.03)
RV_t					0.01					0.01
					(0.02)					(0.03)
VRP_t						0.01				
						(0.03)				
$Fedfunds_t$							0.03			−0.10
							(0.05)			(0.10)
$TermSpread_t$								0.09		0.23
								(0.07)		(0.15)
mp_t									−12.28***	−11.96***
									(2.82)	(2.88)
R^2	1.18	2.02	2.39	2.10	2.15	2.06	2.07	2.06	5.26	6.31
Nobs	696	695	695	694	695	694	695	689	695	688

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.3: **Predictive Regressions: Meeting Types**

This table reports weekly predictive regressions of the returns of the CRSP value-weighted index on the slope factor ($Slope_t$) and lagged index returns (R_t) conditional on meetings types. We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)
Constant	0.13	0.23***	0.23***	0.13	0.16*
	(0.09)	(0.09)	(0.09)	(0.08)	(0.09)
$Slope_t$	−6.96***	−6.90***	−6.91***	−7.07***	−7.44***
	(1.98)	(2.49)	(2.40)	(2.10)	(1.95)
R_t	−0.09*	−0.08	−0.08	−0.09**	−0.08**
	(0.05)	(0.05)	(0.05)	(0.04)	(0.04)
$Meeting$		−0.59***			
		(0.22)			
$Slope \times Meeting$		−0.55			
		(4.39)			
$Regular$			−0.66***		
			(0.23)		
$Slope \times Regular$			−0.90		
			(4.60)		
$Intermeeting$				1.27	
				(1.01)	
$Slope \times Intermeeting$				0.68	
				(12.45)	
$Turningpoint$					−2.33***
					(0.85)
$Slope \times Turningpoint$					28.42
					(20.16)
R^2	2.61	3.57	3.75	2.84	4.23
Nobs	724	724	724	724	724

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.4: **Predictive Regressions: Asymmetries**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$) lagged index returns (R_t) allowing for asymmetric effects of slope: Slope > 0 captures positive values of the slope factor; Slope $<= 0$ captures negative values of the slope factor; $Slope_{upside}$ captures values of the slope factor larger than one standard deviation above 0; $Slope_{downside}$ captures values of the slope factor larger than one standard deviation below 0; $Slope_{normal}$ captures the intermediate values of slope; $Slope_{large}$ captures value of the slope factor larger than 0.015 in absolute value. We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)
Constant	-0.01	0.01	0.05	0.07	0.27^{**}
	(0.11)	(0.11)	(0.09)	(0.09)	(0.11)
$Slope_t > 0$	-2.54	-2.07			
	(3.67)	(3.61)			
$Slope_t <= 0$	-12.21^{***}	-11.25^{***}			
	(3.62)	(3.44)			
R_t		-0.08^{*}		-0.08^{*}	-0.08
		(0.05)		(0.05)	(0.06)
$Slope_{t,\ normal}$			7.52	7.84	
			(6.27)	(6.20)	
$Slope_{t,\ upside}$			-3.82	-3.41	
			(3.47)	(3.43)	
$Slope_{t,\ downside}$			-12.08^{***}	-11.21^{***}	
			(3.43)	(3.27)	
$Slope_{t,\ large}$					-7.33^{***}
					(1.97)
R^2	2.31	2.96	2.34	3.02	4.22
Nobs	725	724	725	724	413

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.5: **Predictive Regressions: Raw Changes and PCA**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$), the first two principal components of changes in federal funds futures (PC_1, PC_2), and the changes in the one-month and three-month federal funds futures-implied rates ($\Delta ff_{t,t+1,1}$, $\Delta ff_{t,t+1,3}$). We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.14	0.14	0.14*	0.14	0.12	0.13	0.13	0.13
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
$Slope_t$	−6.76***		−7.61**				−6.75***	−6.32**
	(1.98)		(3.85)				(1.98)	(2.59)
R_t	−0.09*	−0.10*	−0.09*	−0.11**	−0.11**	−0.09*	−0.09*	−0.09*
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
PC_1		0.90*	−0.01					
		(0.49)	(0.64)					
PC_2		−2.74	1.11					
		(2.26)	(3.25)					
$\Delta ff_{t,t+1,1}$				−0.65		7.41**	−0.50	
				(2.01)		(3.01)	(2.01)	
$\Delta ff_{t,t+1,3}$					−2.61**	−6.75***		−0.43
					(1.30)	(1.98)		(1.69)
R^2	2.62	2.15	2.65	1.26	1.86	2.63	2.63	2.63
Nobs	695	695	695	695	695	695	695	695

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.6: **Predictive Regressions: Difference Slope**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$), lagged index returns (R_t), the dividend-price ratio (dp_t), the VIX (VIX_t), realized variance (RV_t), the variance risk premium (VRP_t), the federal funds target rate ($Fedfunds_t$), the term spread ($TermSpread_t$) and the monetary policy shock (mp_t) from Gorodnichenko and Weber (2016). We report Newey-West standard errors in parentheses. We construct the slope factor as the simple difference of weekly changes of the three-month federal funds futures-implied rate and the one-month federal funds futures-implied rate. Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	0.12	−0.64	−0.02	0.03	0.13	0.03	−0.05	0.12	−2.33***
	(0.09)	(0.42)	(0.30)	(0.16)	(0.12)	(0.24)	(0.23)	(0.08)	(0.77)
$Slope_t$	−6.76***	−7.05***	−6.65***	−6.65***	−6.76***	−6.75***	−6.61***	−6.23***	−6.13***
	(2.06)	(2.09)	(1.96)	(2.04)	(2.07)	(2.01)	(2.04)	(1.89)	(1.85)
R_t	−0.09**	−0.09**	−0.08**	−0.09**	−0.09**	−0.09**	−0.08**	−0.11***	−0.10**
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
dp_t		41.80**							94.60***
		(20.13)							(26.71)
VIX_t			0.01						0.02
			(0.02)						(0.03)
RV_t				0.01					0.02
				(0.01)					(0.02)
VRP_t					0.00				
					(0.02)				
$Fedfunds_t$						0.02			−0.12
						(0.05)			(0.09)
$TermSpread_t$							0.07		0.19
							(0.08)		(0.13)
mp_t								−11.81***	−11.73***
								(2.53)	(2.49)
R^2	2.59	3.22	2.64	2.64	2.60	2.62	2.53	5.56	7.28
Nobs	724	724	723	724	723	724	718	724	717

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.7: **Predictive Regressions: Blackout Periods**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$) and lagged index returns (R_t), excluding weeks during blackout period which restrict the extent of public communication. We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	All Weeks	No Blackout Period Slope Week	No Blackout Period Return Week	No Blackout Period in either Week
	(1)	(2)	(3)	(4)
Constant	0.13	0.23	0.04	0.13
	(0.09)	(0.09)	(0.09)	(0.09)
$Slope_t$	-6.96^{***}	-6.87^{***}	-6.63^{***}	-6.36^{***}
	(1.98)	(1.98)	(1.98)	(1.98)
R_t	-0.09^{*}	-0.08^{*}	-0.07^{*}	-0.08^{*}
	(0.05)	(0.05)	(0.05)	(0.05)
R^2	2.61	2.10	2.54	2.17
Nobs	724	606	606	490

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.8: **Predictive Regressions: Target and Path Factor**

This table reports weekly predictive regressions of the returns of the CRSP value-weighted index on the slope factor ($Slope_t$), lagged index returns (R_t), the target ($Target\ factor$) and path ($Path\ factor$) factors from Gürkaynak et al. (2005b), and the monetary policy shock (mp_t) from Gorodnichenko and Weber (2016). We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)
Constant	0.13	0.14	0.13	0.14	0.07
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
$Slope_t$	-7.48^{***}	-6.93^{***}	-7.28^{***}	-6.71^{***}	-6.66^{***}
	(2.07)	(2.06)	(2.04)	(2.02)	(2.01)
R_t	-0.06	-0.08	-0.06	-0.08	-0.08
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
$Target\ factor$		-0.10^{***}		-0.10^{***}	0.10
		(0.03)		(0.03)	(0.09)
$Path\ factor$			-0.04^{*}	-0.04^{**}	-0.04^{**}
			(0.02)	(0.02)	(0.02)
mp_t					-20.66^{***}
					(8.14)
R^2	2.42	4.57	3.13	5.38	6.76
Nobs	568	568	568	568	568

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.9: **Predictive Regressions: Different Horizons**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$) for different forecast horizons running from one week to four weeks. We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	R(t,t+1)	R(t,t+2)	R(t,t+3)	R(t,t+4)
	(1)	(2)	(3)	(4)
Constant	0.12	0.23**	0.33**	0.43***
	(0.08)	(0.11)	(0.14)	(0.16)
$Slope_t$	−7.70***	−3.31	−2.83	−5.17
	(2.07)	(3.01)	(3.23)	(3.84)
R^2	1.91	0.19	0.10	0.23
Nobs	725	725	725	725

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.10: **Predictive Regressions: Placebo Slope**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on a placebo slope factor ($Slope_{Placebo}$) and lagged index returns (R_t). We report bootstrapped standard errors in parentheses. We construct the placebo slope factor as the difference between the three-month federal funds futures-implied rate and the one-month federal funds futures-implied rate (see equation (A.2)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)
Constant	0.15	0.17*
	(0.10)	(0.10)
$Slope_{t\ Placebo}$	−0.43	−0.45
	(0.45)	(0.45)
R_t		−0.10**
		(0.05)
R^2	0.15	1.25
Nobs	725	724

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.11: **Predictive Regressions: Macro News**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$), lagged index returns (R_t), and macro surprises from Haver Analytics: news about GDP growth (shock_gdp), core consumer price inflation (shock_cpi), capacity utilization (shock_cu), consumer confidence (shock_cc), employment costs (shock_ec), initial unemployment claims (shock_ic), the manufacturing composite index (shock_mfg), new home sales (shock_nhs), non-farm payroll (shock_nfp), core producer price inflation (shock_ppi), retail sales (shock_rs), and unemployment (shock_ur). We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	(1)	(2)	(3)	(4)	(5)
Constant	0.13	0.13	0.12	0.09	−0.00
	(0.09)	(0.09)	(0.09)	(0.09)	(0.00)
$Slope_t$	−6.84***	−6.86***	−6.74***	−6.71***	
	(1.98)	(1.99)	(1.99)	(2.04)	
R_t	−0.09**	−0.09**	−0.09**	−0.08*	
	(0.05)	(0.05)	(0.05)	(0.05)	
shock_gdp	0.59*		0.58*	0.55*	−0.00
	(0.37)		(0.37)	(0.37)	(0.01)
shock_cpi		−1.99	−1.98	−1.43	0.02
		(1.58)	(1.58)	(1.57)	(0.04)
shock_cu				−0.77*	0.02**
				(0.52)	(0.01)
shock_cc				−0.03	0.00**
				(0.04)	(0.00)
shock_ec				0.04	0.04
				(1.56)	(0.04)
shock_ic				−0.00	−0.00*
				(0.00)	(0.00)
shock_mfg				−0.05	0.00***
				(0.07)	(0.00)
shock_nhs				−0.00	0.00
				(0.00)	(0.00)
shock_nfp				−0.00**	0.00***
				(0.00)	(0.00)
shock_ppi				0.58	0.02**
				(0.68)	(0.01)
shock_rs				0.54*	0.02***
				(0.35)	(0.01)
shock_ur				−2.40**	−0.05**
				(1.20)	(0.02)
R^2	2.97	2.76	3.12	5.17	9.23
Nobs	724	724	724	724	726

***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Table A.12: **Predictive Regressions: Subsamples**

This table reports weekly predictive regressions of the excess returns of the CRSP value-weighted index on the slope factor ($Slope_t$) for different subsamples. We report bootstrapped standard errors in parentheses. We construct the slope factor as a regression residual of weekly changes of the three-month federal funds futures-implied rate on the one-month federal funds futures-implied rate (see equation (6)). Our sample period is from the first week of 1994 to the last week of 2007 for a total of 725 weeks.

	1994-2007	1994-2002	1988-2007	1988-2002
	(1)	(2)	(3)	(4)
Constant	0.13	0.11	0.14^{**}	0.12
	(0.09)	(0.11)	(0.07)	(0.08)
$Slope_t$	-6.96^{***}			
	(1.98)			
R_t	-0.09^{*}	-0.06	-0.09^{**}	-0.07
	(0.05)	(0.06)	(0.04)	(0.05)
$Slope_{1994-2002}$		-8.05^{***}		
		(2.32)		
$Slope_{1988-2007}$			-4.63^{***}	
			(1.56)	
$Slope_{1988-2002}$				-4.96^{***}
				(1.62)
R^2	2.61	2.85	1.75	1.65
Nobs	724	463	995	734

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A.13: **Hawk–Dove Classification**

This table reports the classification of the twograms we use to classify speeches by FOMC members as dovish or hawkish. Our sample period is from June 1996 to December 2007.

Dovish	Hawkish
anchor inflationexpectations	aggregatedemand higher
anchored inflationexpectations	assetprices increase
boost aggregatedemand	assetprices rise
boost economicactivity	businessinvestment increased
cut federalfundsrate	declines unemploymentrate
cut interestrates	declining unemploymentrate
cuts federalfundsrate	drop unemploymentrate
cutting federalfundsrate	economicactivity increased
declines assetprices	economicoutlook increased
declines crudeoil	employment increased
declines economicactivity	energyprices rise
declines employment	exchangerates lower
declines energyprices	gradualincreases federalfundsrate
declines houseprices	grossdomesticproduct rising
declines laborforceparticipation	growing currentaccountdeficit
declining houseprices	higher assetprices
declining interestrates	higher employment
downwardpressure assetprices	higher energyprices
downwardpressure houseprices	higher federalfundsrate
downwardpressure interestrates	higher houseprices
drop crudeoil	higher inflationexpectations
drop houseprices	higher interestrates
easedstance monetarypolicy	higher productivitygrowth
easing monetarypolicy	higher unitlaborcosts
employment declined	houseprices increase
employment fallen	houseprices increased
employment fell	houseprices rise
employment stable	houseprices rising
federalfundsrate lower	increase assetprices
firmlyanchored inflationexpectations	increase coreinflation
houseprices declined	increase currentaccountsurpluses
houseprices fallen	increase economicactivity
houseprices fell	increase employment
increase aggregatedemand	increase energyprices
increase currentaccountdeficit	increase federalfundsrate
increase laborproductivity	increase houseprices
increase unemploymentrate	increase inflationexpectations
increased productivitygrowth	increase interestrates
increases laborproductivity	increase productivitygrowth
increases productivitygrowth	increase resourceutilization

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Table A.13: **Hawk–Dove Classification (continued)**

Continued from previous page.

Dovish	Hawkish
inflationexpectations anchored	increase targetfederalfunds
inflationexpectations declined	increase unitlaborcosts
inflationexpectations firmlyanchored	increased economicactivity
inflationexpectations remainedstable	increased employment
inflationexpectations stable	increased laborforceparticipation
inflationexpectations wellanchored	increases aggregatedemand
interestrates declined	increases assetprices
interestrates drop	increases businessinvestment
interestrates easing	increases crudeoil
interestrates lower	increases employment
interestrates lowering	increases energyprices
interestrates remain	increases federalfundsrate
keeping interestrates	increases houseprices
keeping monetarypolicy	increases inflationexpectations
laborproductivity increased	increases interestrates
lower energyprices	increases outputgap
lower federalfundsrate	increases unitlaborcosts
lower houseprices	inflationexpectations increased
lower inflationexpectations	interestrates higher
lower interestrates	interestrates increase
lower levelrealoilprices	interestrates increased
lower potentialoutput	interestrates mightrise
lowered federalfundsrate	interestrates mustrise
lowering federalfundsrate	interestrates raise
lowering interestrates	interestrates raised
monetarypolicy easing	interestrates rise
nonaccelerating inflationrate	interestrates rising
productivitygrowth increased	lower currentaccountdeficit
productivitygrowth increases	lower productivitygrowth
raise aggregatedemand	lower unemploymentrate
rapid productivitygains	monetarypolicy tightening
reduce federalfundsrate	personalsavingrate fallen
reduce interestrates	raise federalfundsrate
reduce unemploymentrate	raise interestrates
reduced economicactivity	raised interestrates
reduced federalfundsrate	raising assetprices
reduced interestrates	raising federalfundsrate
reducing federalfundsrate	raising interestrates
reducing interestrates	rapid productivitygrowth

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Table A.13: **Hawk–Dove Classification (continued)**

Continued from previous page.

Dovish	Hawkish
reduction aggregatedemand	reduce currentaccountdeficit
reduction federalfundsrate	reductions unemploymentrate
reduction inflationexpectations	resourceutilization increased
reduction interestrates	rise assetprices
reductions federalfundsrate	rise coreinflation
reductions interestrates	rise employment
resourceutilization subdued	rise energyprices
rise productivitygrowth	rise federalfundsrate
rise unemploymentrate	rise headlineinflation
rising currentaccountdeficit	rise houseprices
rising productivitygrowth	rise inflationexpectations
risks economicactivity	rise interestrates
risks economicoutlook	rise personalsavingrate
risks outlookeconomicactivity	rise unitlaborcosts
stabilizing economicactivity	rising assetprices
stabilizing employment	rising employment
stabilizing monetarypolicy	rising energyprices
stable economicconditions	rising houseprices
stable inflationexpectations	rising inflationexpectations
stable inflationrate	rising interestrates
stable interestrates	risks longterminflationoutlook
stable monetarypolicy	sharpincreases energyprices
stableprices moderate	sharpincreases interestrates
subdued unitlaborcosts	sharprise interestrates
sustainable employment	tightening monetarypolicy
unemploymentrate declined	unemploymentrate declining
unemploymentrate rising	unemploymentrate fallen
upwardpressure exchangerates	unemploymentrate fell
wellanchored inflationexpectations	unemploymentrate lower
	upwardpressure coreinflation
	upwardpressure interestrates

Table A.14: **Speeches by FOMC members**

This table reports the speeches we use for the linguistic analysis, the speaker with link to the speech, the role of the speaker, the number of hawkish and dovish words, and the net index. The sample period is June 1996 to December 2007 for a total of 794 speeches.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
6/13/1996	Alan Greenspan	Chairman	yes	0	0	1
6/18/1996	Edward W. Kelley, Jr.	Governor		0	0	1
9/8/1996	Laurence H. Meyer	Governor		1	1	1
9/19/1996	Alan Greenspan	Chairman	yes	0	0	1
10/2/1996	Lawrence B. Lindsey	Governor		0	0	1
10/5/1996	Alan Greenspan	Chairman	yes	0	0	1
10/7/1996	Alan Greenspan	Chairman	yes	0	0	1
10/9/1996	Lawrence B. Lindsey	Governor		1	1	1
10/11/1996	Lawrence B. Lindsey	Governor		0	0	1
10/16/1996	Alan Greenspan	Chairman	yes	0	0	1
10/24/1996	Susan M. Phillips	Governor		0	0	1
10/31/1996	Edward W. Kelley, Jr.	Governor		0	0	1
11/18/1996	Alan Greenspan	Chairman	yes	0	0	1
11/21/1996	Laurence H. Meyer	Governor		0	0	1
11/25/1996	Susan M. Phillips	Governor		0	0	1
12/3/1996	Edward W. Kelley, Jr.	Governor		0	0	1
12/5/1996	Alan Greenspan	Chairman	yes	0	1	0
12/6/1996	Alan Greenspan	Chairman	yes	2	0	2
12/19/1996	Alice M. Rivlin	Vice Chair	yes	0	0	1
1/5/1997	Laurence H. Meyer	Governor		0	1	0
1/14/1997	Alan Greenspan	Chairman	yes	1	0	2
1/16/1997	Laurence H. Meyer	Governor		3	2	1.2
1/24/1997	Laurence H. Meyer	Governor		0	0	1
1/28/1997	Susan M. Phillips	Governor		0	0	1
1/29/1997	Edward W. Kelley, Jr.	Governor		0	0	1
2/14/1997	Susan M. Phillips	Governor		0	0	1
2/21/1997	Alan Greenspan	Chairman	yes	0	0	1
3/3/1997	Susan M. Phillips	Governor		0	0	1
3/7/1997	Alan Greenspan	Chairman	yes	0	0	1
3/13/1997	Alice M. Rivlin	Vice Chair	yes	0	0	1
3/22/1997	Alan Greenspan	Chairman	yes	0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
4/4/1997	Alice M. Rivlin	Vice Chair	yes	0	1	0
4/10/1997	Laurence H. Meyer	Governor		0	0	1
4/12/1997	Alan Greenspan	Chairman	yes	0	0	1
4/24/1997	Laurence H. Meyer	Governor		11	2	1.692308
4/29/1997	Alan Greenspan	Chairman	yes	0	0	1
5/1/1997	Alan Greenspan	Chairman	yes	0	0	1
5/3/1997	Alan Greenspan	Chairman	yes	0	0	1
5/8/1997	Alan Greenspan	Chairman	yes	3	0	2
5/23/1997	Laurence H. Meyer	Governor		0	1	0
6/10/1997	Alan Greenspan	Chairman	yes	0	0	1
6/18/1997	Susan M. Phillips	Governor		0	0	1
6/18/1997	Laurence H. Meyer	Governor		0	0	1
9/4/1997	Laurence H. Meyer	Governor		2	3	0.8
9/5/1997	Alan Greenspan	Chairman	yes	0	0	1
9/12/1997	Alan Greenspan	Chairman	yes	0	0	1
9/12/1997	Laurence H. Meyer	Governor		0	0	1
9/17/1997	Laurence H. Meyer	Governor		2	2	1
9/19/1997	Susan M. Phillips	Governor		0	0	1
9/23/1997	Edward W. Kelley, Jr.	Governor		0	0	1
10/5/1997	Alan Greenspan	Chairman	yes	0	0	1
10/11/1997	Alan Greenspan	Chairman	yes	0	0	1
10/14/1997	Alan Greenspan	Chairman	yes	0	0	1
10/14/1997	Alan Greenspan	Chairman	yes	0	0	1
10/14/1997	Laurence H. Meyer	Governor		5	2	1.428571
10/15/1997	Susan M. Phillips	Governor		0	0	1
10/30/1997	Susan M. Phillips	Governor		0	0	1
10/31/1997	Laurence H. Meyer	Governor		0	0	1
11/4/1997	Susan M. Phillips	Governor		0	0	1
11/7/1997	Alan Greenspan	Chairman	yes	0	0	1
12/1/1997	Laurence H. Meyer	Governor		0	0	1
12/2/1997	Alan Greenspan	Chairman	yes	3	0	2
12/3/1997	Alan Greenspan	Chairman	yes	0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
12/15/1997	Edward W. Kelley, Jr.	Governor		0	0	1
1/3/1998	Alan Greenspan	Chairman	yes	3	0	2
1/8/1998	Laurence H. Meyer	Governor		2	3	0.8
1/12/1998	Alan Greenspan	Chairman	yes	0	0	1
1/16/1998	Alan Greenspan	Chairman	yes	0	0	1
2/11/1998	Edward W. Kelley, Jr.	Governor		0	0	1
2/17/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
2/26/1998	Alan Greenspan	Chairman	yes	0	0	1
2/27/1998	Alan Greenspan	Chairman	yes	0	0	1
2/27/1998	Edward M. Gramlich	Governor		1	1	1
3/2/1998	Laurence H. Meyer	Governor		0	0	1
3/3/1998	Alan Greenspan	Chairman	yes	0	0	1
3/4/1998	Roger W. Ferguson, Jr.	Governor		1	0	2
3/6/1998	Edward M. Gramlich	Governor		0	0	1
3/9/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
3/16/1998	Laurence H. Meyer	Governor		7	3	1.4
3/17/1998	Susan M. Phillips	Governor		0	0	1
3/19/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
3/19/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
3/26/1998	Susan M. Phillips	Governor		0	0	1
4/2/1998	Alan Greenspan	Chairman	yes	0	0	1
4/2/1998	Laurence H. Meyer	Governor		3	4	0.857143
4/4/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
4/9/1998	Laurence H. Meyer	Governor		1	2	0.666667
4/16/1998	Laurence H. Meyer	Governor		0	0	1
4/16/1998	Roger W. Ferguson, Jr.	Governor		1	1	1
4/23/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
4/30/1998	Laurence H. Meyer	Governor		2	1	1.333333
5/2/1998	Alan Greenspan	Chairman	yes	0	0	1
5/7/1998	Alan Greenspan	Chairman	yes	0	0	1
5/7/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
5/12/1998	Laurence H. Meyer	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
5/12/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
5/20/1998	Alan Greenspan	Chairman	yes	0	0	1
6/3/1998	Laurence H. Meyer	Governor		0	1	0
6/9/1998	Laurence H. Meyer	Governor		0	0	1
6/18/1998	Alice M. Rivlin	Vice Chair	yes	2	0	2
7/9/1998	Roger W. Ferguson, Jr.	Governor		2	3	0.8
7/10/1998	Alan Greenspan	Chairman	yes	0	0	1
7/20/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
8/28/1998	Alan Greenspan	Chairman	yes	1	0	2
9/4/1998	Alan Greenspan	Chairman	yes	0	0	1
9/15/1998	Edward M. Gramlich	Governor		0	0	1
9/17/1998	Roger W. Ferguson, Jr.	Governor		2	2	1
9/18/1998	Laurence H. Meyer	Governor		0	0	1
9/28/1998	Alice M. Rivlin	Vice Chair	yes	0	0	1
9/29/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
10/5/1998	Laurence H. Meyer	Governor		0	7	0
10/14/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
10/16/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
10/22/1998	Roger W. Ferguson, Jr.	Governor		0	1	0
10/22/1998	Laurence H. Meyer	Governor		0	0	1
10/22/1998	Alice M. Rivlin	Vice Chair	yes	2	0	2
10/27/1998	Roger W. Ferguson, Jr.	Governor		0	0	1
10/29/1998	Edward W. Kelley, Jr.	Governor		0	1	0
11/5/1998	Alan Greenspan	Chairman	yes	1	0	2
11/6/1998	Edward M. Gramlich	Governor		0	0	1
11/12/1998	Laurence H. Meyer	Governor		0	0	1
1/3/1999	Roger W. Ferguson, Jr.	Governor		1	3	0.5
1/4/1999	Laurence H. Meyer	Governor		0	0	1
1/11/1999	Laurence H. Meyer	Governor		0	0	1
1/15/1999	Roger W. Ferguson, Jr.	Governor		0	1	0
1/21/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
2/11/1999	Roger W. Ferguson, Jr.	Governor		1	0	2

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
2/16/1999	Alan Greenspan	Chairman	yes	0	0	1
2/24/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
2/25/1999	Laurence H. Meyer	Governor		7	6	1.076923
2/25/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
3/1/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
3/3/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
3/8/1999	Edward M. Gramlich	Governor		0	0	1
3/8/1999	Alan Greenspan	Chairman	yes	2	0	2
3/9/1999	Alan Greenspan	Chairman	yes	0	0	1
3/10/1999	Edward W. Kelley, Jr.	Governor		0	0	1
3/12/1999	Laurence H. Meyer	Governor		0	0	1
3/16/1999	Alan Greenspan	Chairman	yes	0	1	0
3/16/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
3/19/1999	Alan Greenspan	Chairman	yes	0	0	1
3/25/1999	Edward W. Kelley, Jr.	Governor		0	1	0
4/6/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
4/13/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
4/14/1999	Laurence H. Meyer	Governor		5	4	1.111111
4/16/1999	Alan Greenspan	Chairman	yes	0	0	1
4/22/1999	Laurence H. Meyer	Governor		8	3	1.454545
4/22/1999	Edward M. Gramlich	Governor		3	3	1
4/26/1999	Laurence H. Meyer	Governor		0	1	0
4/29/1999	Alan Greenspan	Chairman	yes	1	0	2
5/6/1999	Alan Greenspan	Chairman	yes	0	2	0
5/13/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
5/13/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
6/1/1999	Alice M. Rivlin	Vice Chair	yes	0	0	1
6/2/1999	Alan Greenspan	Chairman	yes	0	0	1
6/3/1999	Laurence H. Meyer	Governor		0	0	1
6/10/1999	Roger W. Ferguson, Jr.	Governor		0	1	0
6/10/1999	Alan Greenspan	Chairman	yes	0	0	1
6/14/1999	Laurence H. Meyer	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
6/16/1999	Edward M. Gramlich	Governor		1	0	2
6/22/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
7/29/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
8/27/1999	Alan Greenspan	Chairman	yes	0	0	1
9/8/1999	Alan Greenspan	Chairman	yes	0	0	1
9/8/1999	Laurence H. Meyer	Governor		7	3	1.4
9/9/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
9/15/1999	Edward M. Gramlich	Governor		0	0	1
9/16/1999	Edward W. Kelley, Jr.	Governor		0	0	1
9/17/1999	Alan Greenspan	Chairman	yes	0	0	1
9/17/1999	Edward M. Gramlich	Governor		0	0	1
9/21/1999	Roger W. Ferguson, Jr.	Governor		2	1	1.333333
9/27/1999	Laurence H. Meyer	Governor		0	0	1
9/27/1999	Alan Greenspan	Chairman	yes	0	0	1
9/28/1999	Roger W. Ferguson, Jr.	Governor		0	0	1
9/30/1999	Alan Greenspan	Chairman	yes	0	0	1
10/1/1999	Laurence H. Meyer	Governor		0	0	1
10/6/1999	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/11/1999	Alan Greenspan	Chairman	yes	0	0	1
10/12/1999	Laurence H. Meyer	Governor		4	6	0.8
10/14/1999	Alan Greenspan	Chairman	yes	0	0	1
10/15/1999	Alan Greenspan	Chairman	yes	0	0	1
10/19/1999	Alan Greenspan	Chairman	yes	0	0	1
10/28/1999	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/28/1999	Alan Greenspan	Chairman	yes	2	0	2
11/2/1999	Alan Greenspan	Chairman	yes	1	0	2
11/4/1999	Edward M. Gramlich	Governor		1	1	1
11/15/1999	Alan Greenspan	Chairman	yes	0	0	1
11/30/1999	Laurence H. Meyer	Governor		4	3	1.142857
12/15/1999	Laurence H. Meyer	Governor		0	0	1
1/7/2000	Roger W. Ferguson, Jr.	Vice Chair		4	0	2
1/13/2000	Edward M. Gramlich	Governor		1	1	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
1/13/2000	Alan Greenspan	Chairman	yes	4	2	1.333333
1/14/2000	Laurence H. Meyer	Governor		0	0	1
1/20/2000	Laurence H. Meyer	Governor		1	0	2
2/3/2000	Laurence H. Meyer	Governor		0	0	1
2/17/2000	Roger W. Ferguson, Jr.	Vice Chair		1	1	1
2/23/2000	Laurence H. Meyer	Governor		0	1	0
2/25/2000	Laurence H. Meyer	Governor		0	0	1
3/3/2000	Laurence H. Meyer	Governor		6	1	1.714286
3/6/2000	Alan Greenspan	Chairman	yes	1	0	2
3/6/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/7/2000	Edward M. Gramlich	Governor		0	0	1
3/8/2000	Alan Greenspan	Chairman	yes	1	0	2
3/13/2000	Edward M. Gramlich	Governor		0	0	1
3/22/2000	Alan Greenspan	Chairman	yes	0	0	1
3/30/2000	Edward W. Kelley, Jr.	Governor		0	0	1
4/5/2000	Alan Greenspan	Chairman	yes	3	0	2
4/6/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/7/2000	Alan Greenspan	Chairman	yes	1	0	2
4/10/2000	Alan Greenspan	Chairman	yes	0	0	1
4/11/2000	Alan Greenspan	Chairman	yes	0	0	1
4/12/2000	Laurence H. Meyer	Governor		25	2	1.851852
4/14/2000	Alan Greenspan	Chairman	yes	0	0	1
4/14/2000	Edward M. Gramlich	Governor		0	0	1
4/17/2000	Edward M. Gramlich	Governor		0	0	1
4/20/2000	Edward M. Gramlich	Governor		1	1	1
4/27/2000	Alan Greenspan	Chairman	yes	1	0	2
5/4/2000	Alan Greenspan	Chairman	yes	0	0	1
5/4/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/9/2000	Roger W. Ferguson, Jr.	Vice Chair		5	1	1.666667
5/11/2000	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
5/12/2000	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
5/18/2000	Alan Greenspan	Chairman	yes	0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
5/22/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/25/2000	Alan Greenspan	Chairman	yes	0	0	1
5/26/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/31/2000	Laurence H. Meyer	Governor		0	0	1
6/1/2000	Laurence H. Meyer	Governor		0	0	1
6/6/2000	Laurence H. Meyer	Governor		11	5	1.375
6/13/2000	Alan Greenspan	Chairman	yes	1	1	1
7/11/2000	Alan Greenspan	Chairman	yes	0	0	1
7/12/2000	Alan Greenspan	Chairman	yes	0	0	1
8/25/2000	Alan Greenspan	Chairman	yes	0	1	0
8/31/2000	Laurence H. Meyer	Governor		0	0	1
9/15/2000	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
9/18/2000	Alan Greenspan	Chairman	yes	0	0	1
10/11/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/16/2000	Alan Greenspan	Chairman	yes	0	0	1
10/19/2000	Laurence H. Meyer	Governor		15	3	1.666667
10/19/2000	Alan Greenspan	Chairman	yes	0	1	0
10/19/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/20/2000	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/24/2000	Laurence H. Meyer	Governor		2	3	0.8
10/31/2000	Roger W. Ferguson, Jr.	Vice Chair		3	0	2
11/14/2000	Alan Greenspan	Chairman	yes	0	0	1
11/20/2000	Alan Greenspan	Chairman	yes	0	0	1
11/21/2000	Edward M. Gramlich	Governor		0	0	1
12/5/2000	Alan Greenspan	Chairman	yes	2	0	2
12/6/2000	Edward M. Gramlich	Governor		0	0	1
12/6/2000	Roger W. Ferguson, Jr.	Vice Chair		6	1	1.714286
12/8/2000	Alan Greenspan	Chairman	yes	0	0	1
1/12/2001	Roger W. Ferguson, Jr.	Vice Chair		4	4	1
1/25/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
2/14/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
2/15/2001	Laurence H. Meyer	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
2/20/2001	Edward M. Gramlich	Governor		2	5	0.571429
2/27/2001	Roger W. Ferguson, Jr.	Vice Chair		1	1	1
3/5/2001	Laurence H. Meyer	Governor		0	0	1
3/7/2001	Alan Greenspan	Chairman	yes	0	0	1
3/9/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/15/2001	Laurence H. Meyer	Governor		0	0	1
3/23/2001	Edward M. Gramlich	Governor		0	0	1
3/27/2001	Alan Greenspan	Chairman	yes	0	0	1
3/28/2001	Laurence H. Meyer	Governor		1	1	1
4/5/2001	Edward M. Gramlich	Governor		0	0	1
4/5/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/6/2001	Alan Greenspan	Chairman	yes	0	0	1
4/19/2001	Roger W. Ferguson, Jr.	Vice Chair		0	3	0
4/19/2001	Edward M. Gramlich	Governor		0	0	1
4/26/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/27/2001	Alan Greenspan	Chairman	yes	1	1	1
5/10/2001	Alan Greenspan	Chairman	yes	1	1	1
5/10/2001	Laurence H. Meyer	Governor		0	0	1
5/17/2001	Laurence H. Meyer	Governor		0	0	1
5/18/2001	Alan Greenspan	Chairman	yes	0	0	1
5/21/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/21/2001	Laurence H. Meyer	Governor		1	2	0.666667
5/24/2001	Laurence H. Meyer	Governor		6	0	2
5/24/2001	Alan Greenspan	Chairman	yes	5	2	1.428571
6/6/2001	Laurence H. Meyer	Governor		9	3	1.5
6/11/2001	Edward M. Gramlich	Governor		0	0	1
6/14/2001	Roger W. Ferguson, Jr.	Vice Chair		4	0	2
6/20/2001	Alan Greenspan	Chairman	yes	0	0	1
6/20/2001	Edward M. Gramlich	Governor		1	0	2
6/28/2001	Alan Greenspan	Chairman	yes	0	0	1
6/28/2001	Alan Greenspan	Chairman	yes	1	1	1
7/17/2001	Laurence H. Meyer	Governor		0	10	0

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
7/18/2001	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
8/3/2001	Edward M. Gramlich	Governor		0	0	1
8/31/2001	Alan Greenspan	Chairman	yes	1	0	2
8/31/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
9/4/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/11/2001	Alan Greenspan	Chairman	yes	0	0	1
10/12/2001	Laurence H. Meyer	Governor		0	1	0
10/15/2001	Laurence H. Meyer	Governor		0	0	1
10/16/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/23/2001	Alan Greenspan	Chairman	yes	0	0	1
10/23/2001	Edward M. Gramlich	Governor		0	0	1
10/24/2001	Alan Greenspan	Chairman	yes	0	0	1
10/26/2001	Alan Greenspan	Chairman	yes	0	0	1
11/8/2001	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
11/8/2001	Edward M. Gramlich	Governor		0	0	1
11/13/2001	Alan Greenspan	Chairman	yes	0	1	0
11/27/2001	Laurence H. Meyer	Governor		4	4	1
11/30/2001	Edward M. Gramlich	Governor		2	3	0.8
11/30/2001	Alan Greenspan	Chairman	yes	0	0	1
12/3/2001	Alan Greenspan	Chairman	yes	0	0	1
12/5/2001	Laurence H. Meyer	Governor		0	0	1
12/18/2001	Laurence H. Meyer	Governor		0	0	1
1/8/2002	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
1/10/2002	Alan Greenspan	Chairman	yes	0	0	1
1/11/2002	Alan Greenspan	Chairman	yes	0	1	0
1/16/2002	Roger W. Ferguson, Jr.	Vice Chair		1	6	0.285714
1/16/2002	Laurence H. Meyer	Governor		2	5	0.571429
1/16/2002	Alan Greenspan	Chairman	yes	0	0	1
1/18/2002	Edward M. Gramlich	Governor		0	0	1
2/7/2002	Mark W. Olson	Governor		0	0	1
2/8/2002	Mark W. Olson	Governor		0	0	1
2/20/2002	Edward M. Gramlich	Governor		5	0	2

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
2/27/2002	Roger W. Ferguson, Jr.	Vice Chair		2	6	0.5
2/28/2002	Alan Greenspan	Chairman	yes	0	1	0
2/28/2002	Susan Schmidt Bies	Governor		3	0	2
3/1/2002	Edward M. Gramlich	Governor		0	0	1
3/4/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/4/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/7/2002	Edward M. Gramlich	Governor		0	0	1
3/12/2002	Mark W. Olson	Governor		0	0	1
3/13/2002	Alan Greenspan	Chairman	yes	0	0	1
3/21/2002	Susan S. Bies	Governor		1	3	0.5
3/26/2002	Mark W. Olson	Governor		0	0	1
3/26/2002	Alan Greenspan	Chairman	yes	0	0	1
4/8/2002	Edward M. Gramlich	Governor		0	0	1
4/22/2002	Alan Greenspan	Chairman	yes	0	0	1
4/30/2002	Mark W. Olson	Governor		0	0	1
5/2/2002	Edward M. Gramlich	Governor		0	0	1
5/3/2002	Alan Greenspan	Chairman	yes	0	0	1
5/9/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/10/2002	Alan Greenspan	Chairman	yes	0	0	1
5/11/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/13/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/17/2002	Mark W. Olson	Governor		0	0	1
5/21/2002	Mark W. Olson	Governor		0	0	1
5/21/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/31/2002	Mark W. Olson	Governor		0	0	1
6/10/2002	Susan S. Bies	Governor		0	0	1
6/11/2002	Susan S. Bies	Governor		1	3	0.5
6/20/2002	Susan S. Bies	Governor		0	0	1
7/5/2002	Edward M. Gramlich	Governor		0	0	1
7/8/2002	Mark W. Olson	Governor		0	0	1
7/26/2002	Mark W. Olson	Governor		0	0	1
8/30/2002	Alan Greenspan	Chairman	yes	2	1	1.333333

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
9/25/2002	Alan Greenspan	Chairman	yes	0	0	1
9/25/2002	Alan Greenspan	Chairman	yes	0	0	1
9/25/2002	Alan Greenspan	Chairman	yes	0	0	1
9/28/2002	Susan S. Bies	Governor		1	2	0.666667
10/1/2002	Susan S. Bies	Governor		1	0	2
10/3/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/7/2002	Alan Greenspan	Chairman	yes	0	0	1
10/8/2002	Susan S. Bies	Governor		1	0	2
10/9/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/15/2002	Ben S. Bernanke	Governor		12	2	1.714286
10/16/2002	Roger W. Ferguson, Jr	Vice Chair		2	3	0.8
10/16/2002	Roger W. Ferguson, Jr	Vice Chair		0	0	1
10/16/2002	Edward M. Gramlich	Governor		0	0	1
10/22/2002	Mark W. Olson	Governor		0	0	1
10/23/2002	Alan Greenspan	Chairman	yes	0	0	1
10/24/2002	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/29/2002	Alan Greenspan	Chairman	yes	0	0	1
11/7/2002	Susan S. Bies	Governor		0	0	1
11/7/2002	Edward M. Gramlich	Governor		0	0	1
11/8/2002	Ben S. Bernanke	Governor		2	0	2
11/12/2002	Alan Greenspan	Chairman	yes	0	1	0
11/12/2002	Roger W. Ferguson, Jr.	Vice Chair		0	7	0
11/12/2002	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
11/12/2002	Mark W. Olson	Governor		0	0	1
11/12/2002	Susan S. Bies	Governor		0	1	0
11/18/2002	Mark W. Olson	Governor		0	0	1
11/18/2002	Alan Greenspan	Chairman	yes	0	0	1
11/19/2002	Alan Greenspan	Chairman	yes	0	0	1
11/20/2002	Roger W. Ferguson, Jr.	Vice Chair		1	0	2
11/21/2002	Ben S. Bernanke	Governor		1	1	1
11/22/2002	Donald L. Kohn	Governor		1	1	1
12/13/2002	Susan S. Bies	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
12/13/2002	Mark W. Olson	Governor		1	0	2
12/19/2002	Alan Greenspan	Chairman	yes	1	1	1
1/4/2003	Edward M. Gramlich	Governor		1	4	0.4
2/3/2003	Ben S. Bernanke	Governor		2	5	0.571429
2/5/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
2/6/2003	Mark W. Olson	Governor		0	0	1
2/11/2003	Susan Schmidt Bies	Governor		3	0	2
2/12/2003	Roger W. Ferguson, Jr	Vice Chair		1	2	0.666667
2/21/2003	Ben S. Bernanke	Governor		1	3	0.5
2/27/2003	Susan Schmidt Bies	Governor		0	0	1
2/28/2003	Donald L. Kohn	Governor		10	8	1.111111
3/4/2003	Alan Greenspan	Chairman	yes	0	0	1
3/7/2003	Alan Greenspan	Chairman	yes	0	0	1
3/13/2003	Mark W. Olson	Governor		0	0	1
3/24/2003	Donald L. Kohn	Governor		2	1	1.333333
3/25/2003	Ben S. Bernanke	Governor		2	5	0.571429
3/28/2003	Alan Greenspan	Chairman	yes	0	0	1
4/3/2003	Alan Greenspan	Chairman	yes	0	0	1
4/4/2003	Alan Greenspan	Chairman	yes	0	0	1
4/7/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/9/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/9/2003	Alan Greenspan	Chairman	yes	0	0	1
4/10/2003	Mark W. Olson	Governor		0	0	1
4/24/2003	Edward M. Gramlich	Governor		0	0	1
4/24/2003	Ben S. Bernanke	Governor		1	0	2
4/28/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/7/2003	Susan Schmidt Bies	Governor		0	0	1
5/8/2003	Alan Greenspan	Chairman	yes	0	0	1
5/13/2003	Alan Greenspan	Chairman	yes	0	0	1
5/16/2003	Roger W. Ferguson, Jr.	Vice Chair		0	2	0
5/22/2003	Mark W. Olson	Governor		2	1	1.333333
5/30/2003	Susan Schmidt Bies	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
5/31/2003	Ben S. Bernanke	Governor		0	3	0
6/10/2003	Donald L. Kohn	Governor		0	0	1
6/10/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
6/11/2003	Susan Schmidt Bies	Governor		0	0	1
6/11/2003	Roger W. Ferguson, Jr.	Vice Chair		1	2	0.666667
6/11/2003	Ben S. Bernanke	Governor		0	0	1
6/13/2003	Edward M. Gramlich	Governor		2	0	2
6/16/2003	Susan Schmidt Bies	Governor		0	0	1
6/17/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
6/20/2003	Donald L. Kohn	Governor		0	0	1
6/26/2003	Mark W. Olson	Governor		0	0	1
7/23/2003	Ben S. Bernanke	Governor		1	3	0.5
8/7/2003	Susan Schmidt Bies	Governor		0	0	1
8/10/2003	Susan Schmidt Bies	Governor		0	0	1
8/18/2003	Edward M. Gramlich	Governor		0	0	1
8/29/2003	Alan Greenspan	Chairman	yes	0	0	1
9/4/2003	Edward M. Gramlich	Governor		0	0	1
9/4/2003	Ben S. Bernanke	Governor		0	2	0
9/22/2003	Mark W. Olson	Governor		0	0	1
9/24/2003	Donald L. Kohn	Governor		14	0	2
9/26/2003	Alan Greenspan	Chairman	yes	0	0	1
10/1/2003	Edward M. Gramlich	Governor		0	1	0
10/2/2003	Ben S. Bernanke	Governor		6	5	1.090909
10/8/2003	Susan Schmidt Bies	Governor		4	2	1.333333
10/8/2003	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
10/8/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
10/9/2003	Edward M. Gramlich	Governor		0	0	1
10/17/2003	Ben S. Bernanke	Governor		0	0	1
10/17/2003	Donald L. Kohn	Governor		0	1	0
10/24/2003	Ben S. Bernanke	Governor		1	0	2
10/29/2003	Alan Greenspan	Chairman	yes	0	0	1
10/31/2003	Susan Schmidt Bies	Governor		1	0	2

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
11/6/2003	Alan Greenspan	Chairman	yes	0	2	0
11/6/2003	Ben S. Bernanke	Governor		1	3	0.5
11/13/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
11/14/2003	Edward M. Gramlich	Governor		0	0	1
11/20/2003	Alan Greenspan	Chairman	yes	0	1	0
11/21/2003	Roger W. Ferguson, Jr.	Vice Chair		0	2	0
11/22/2003	Mark W. Olson	Governor		0	0	1
12/2/2003	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
12/11/2003	Alan Greenspan	Chairman	yes	0	0	1
1/3/2004	Alan Greenspan	Chairman	yes	3	2	1.2
1/3/2004	Ben S. Bernanke	Governor		3	1	1.5
1/3/2004	Ben S. Bernanke	Governor		0	0	1
1/4/2004	Ben S. Bernanke	Governor		3	2	1.2
1/4/2004	Roger W. Ferguson, Jr.	Vice Chair		1	0	2
1/7/2004	Donald L. Kohn	Governor		3	1	1.5
1/13/2004	Alan Greenspan	Chairman	yes	0	0	1
1/14/2004	Ben S. Bernanke	Governor		0	0	1
1/26/2004	Alan Greenspan	Chairman	yes	0	0	1
11/19/2004	Alan Greenspan	Chairman	yes	1	0	2
12/2/2004	Ben S. Bernanke	Governor		0	0	1
12/7/2004	Susan Schmidt Bies	Governor		0	0	1
2/4/2004	Susan Schmidt Bies	Governor		0	0	1
2/19/2004	Susan Schmidt Bies	Governor		1	0	2
2/20/2004	Ben S. Bernanke	Governor		1	2	0.666667
2/20/2004	Alan Greenspan	Chairman	yes	0	1	0
2/23/2004	Alan Greenspan	Chairman	yes	2	1	1.333333
2/25/2004	Edward M. Gramlich	Governor		2	1	1.333333
2/25/2004	Susan Schmidt Bies	Governor		0	0	1
2/26/2004	Susan Schmidt Bies	Governor		5	4	1.111111
2/26/2004	Ben S. Bernanke	Governor		0	1	0
2/27/2004	Mark W. Olson	Governor		0	0	1
2/27/2004	Alan Greenspan	Chairman	yes	0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
3/1/2004	Mark W. Olson	Governor		0	0	1
3/2/2004	Alan Greenspan	Chairman	yes	0	0	1
3/2/2004	Ben S. Bernanke	Governor		13	2	1.733333
3/12/2004	Alan Greenspan	Chairman	yes	0	1	0
3/17/2004	Alan Greenspan	Chairman	yes	0	1	0
3/25/2004	Alan Greenspan	Chairman	yes	0	0	1
3/25/2004	Donald L. Kohn	Governor		6	0	2
3/26/2004	Edward M. Gramlich	Governor		0	0	1
3/26/2004	Donald L. Kohn	Governor		0	0	1
3/27/2004	Ben S. Bernanke	Governor		0	0	1
3/30/2004	Ben S. Bernanke	Governor		2	3	0.8
3/31/2004	Edward M. Gramlich	Governor		2	1	1.333333
4/1/2004	Ben S. Bernanke	Governor		0	0	1
4/1/2004	Donald L. Kohn	Governor		8	1	1.777778
4/8/2004	Roger W. Ferguson, Jr.	Vice Chair		3	0	2
4/15/2004	Ben S. Bernanke	Governor		1	2	0.666667
4/16/2004	Alan Greenspan	Chairman	yes	0	0	1
4/16/2004	Ben S. Bernanke	Governor		0	0	1
4/22/2004	Susan Schmidt Bies	Governor		5	4	1.111111
4/22/2004	Ben S. Bernanke	Governor		4	4	1
4/23/2004	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/23/2004	Ben S. Bernanke	Governor		4	4	1
4/26/2004	Mark W. Olson	Governor		0	0	1
4/26/2004	Susan Schmidt Bies	Governor		0	0	1
4/27/2004	Alan Greenspan	Chairman	yes	0	0	1
4/27/2004	Susan Schmidt Bies	Governor		0	0	1
5/5/2004	Mark W. Olson	Governor		0	2	0
5/6/2004	Susan Schmidt Bies	Governor		0	0	1
5/6/2004	Alan Greenspan	Chairman	yes	2	0	2
5/6/2004	Mark W. Olson	Governor		0	0	1
5/13/2004	Alan Greenspan	Chairman	yes	0	0	1
5/14/2004	Edward M. Gramlich	Governor		2	1	1.333333

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
5/17/2004	Roger W. Ferguson, Jr.	Vice Chair		0	1	0
5/17/2004	Susan Schmidt Bies	Governor		0	0	1
5/19/2004	Susan Schmidt Bies	Governor		0	0	1
5/20/2004	Edward M. Gramlich	Governor		0	0	1
5/20/2004	Ben S. Bernanke	Governor		1	0	2
5/20/2004	Alan Greenspan	Chairman	yes	0	0	1
5/21/2004	Edward M. Gramlich	Governor		1	1	1
5/22/2004	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
6/3/2004	Susan Schmidt Bies	Governor		0	0	1
6/4/2004	Donald L. Kohn	Governor		5	2	1.428571
6/8/2004	Alan Greenspan	Chairman	yes	1	0	2
6/10/2004	Mark W. Olson	Governor		0	0	1
6/15/2004	Mark W. Olson	Governor		0	2	0
6/21/2004	Ben S. Bernanke	Governor		0	1	0
6/22/2004	Susan Schmidt Bies	Governor		0	0	1
6/24/2004	Edward M. Gramlich	Governor		0	0	1
7/7/2004	Roger W. Ferguson, Jr.	Vice Chair		1	1	1
7/15/2004	Susan Schmidt Bies	Governor		4	1	1.6
7/16/2004	Susan Schmidt Bies	Governor		0	0	1
7/21/2004	Roger W. Ferguson, Jr.	Vice Chair		1	0	2
8/12/2004	Edward M. Gramlich	Governor		0	0	1
8/12/2004	Susan Schmidt Bies	Governor		0	0	1
8/27/2004	Alan Greenspan	Chairman	yes	0	1	0
9/10/2004	Edward M. Gramlich	Governor		0	0	1
9/16/2004	Edward M. Gramlich	Governor		1	2	0.666667
9/28/2004	Susan Schmidt Bies	Governor		0	0	1
9/30/2004	Susan Schmidt Bies	Governor		5	1	1.666667
10/4/2004	Ben S. Bernanke	Governor		0	0	1
10/5/2004	Alan Greenspan	Chairman	yes	0	0	1
10/6/2004	Roger W. Ferguson, Jr.	Vice Chair		5	1	1.666667
10/7/2004	Roger W. Ferguson, Jr.	Vice Chair		2	0	2
10/7/2004	Ben S. Bernanke	Governor		1	2	0.666667

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
10/7/2004	Alan Greenspan	Chairman	yes	0	0	1
10/8/2004	Ben S. Bernanke	Governor		0	1	0
10/8/2004	Roger W. Ferguson, Jr.	Vice Chair		0	2	0
10/14/2004	Ben S. Bernanke	Governor		1	0	2
10/15/2004	Donald L. Kohn	Governor		1	0	2
10/15/2004	Alan Greenspan	Chairman	yes	0	0	1
10/19/2004	Alan Greenspan	Chairman	yes	0	0	1
10/21/2004	Ben S. Bernanke	Governor		6	2	1.5
10/21/2004	Susan Schmidt Bies	Governor		0	0	1
10/23/2004	Susan Schmidt Bies	Governor		4	0	2
10/26/2004	Roger W. Ferguson, Jr.	Vice Chair		1	0	2
10/29/2004	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
11/5/2004	Susan Schmidt Bies	Governor		0	0	1
11/15/2004	Mark W. Olson	Governor		4	1	1.6
11/18/2004	Susan Schmidt Bies	Governor		0	0	1
1/6/2005	Donald L. Kohn	Governor		0	0	1
1/7/2005	Ben S. Bernanke	Governor		0	0	1
1/7/2005	Roger W. Ferguson, Jr.	Vice Chair		1	5	0.333333
1/9/2005	Donald L. Kohn	Governor		2	0	2
1/12/2005	Roger W. Ferguson, Jr.	Vice Chair		3	2	1.2
1/18/2005	Susan Schmidt Bies	Governor		5	1	1.666667
1/19/2005	Ben S. Bernanke	Governor		7	4	1.272727
1/27/2005	Roger W. Ferguson, Jr.	Vice Chair		3	2	1.2
2/4/2005	Alan Greenspan	Chairman	yes	0	0	1
2/6/2005	Alan Greenspan	Chairman	yes	0	0	1
2/7/2005	Susan Schmidt Bies	Governor		0	0	1
2/11/2005	Ben S. Bernanke	Governor		0	3	0
2/24/2005	Ben S. Bernanke	Governor		7	4	1.272727
2/28/2005	Mark W. Olson	Governor		0	0	1
3/2/2005	Edward M. Gramlich	Governor		0	1	0
3/8/2005	Ben S. Bernanke	Governor		7	5	1.166667
3/10/2005	Alan Greenspan	Chairman	yes	2	0	2

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
3/10/2005	Ben S. Bernanke	Governor		5	3	1.25
3/11/2005	Alan Greenspan	Chairman	yes	1	0	2
3/14/2005	Susan Schmidt Bies	Governor		0	0	1
3/18/2005	Alan Greenspan	Chairman	yes	0	0	1
3/30/2005	Ben S. Bernanke	Governor		0	0	1
3/31/2005	Susan Schmidt Bies	Governor		0	0	1
4/5/2005	Alan Greenspan	Chairman	yes	0	0	1
4/8/2005	Alan Greenspan	Chairman	yes	0	0	1
4/14/2005	Donald L. Kohn	Governor		11	0	2
4/14/2005	Ben S. Bernanke	Governor		5	3	1.25
4/18/2005	Susan Schmidt Bies	Governor		7	1	1.75
4/20/2005	Roger W. Ferguson, Jr.	Vice Chair		5	2	1.428571
4/21/2005	Edward M. Gramlich	Governor		0	0	1
4/22/2005	Donald L. Kohn	Governor		11	3	1.571429
4/27/2005	Roger W. Ferguson, Jr.	Vice Chair		0	2	0
5/5/2005	Alan Greenspan	Chairman	yes	0	0	1
5/12/2005	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
5/15/2005	Alan Greenspan	Chairman	yes	0	0	1
5/16/2005	Mark W. Olson	Governor		0	0	1
5/17/2005	Susan Schmidt Bies	Governor		0	0	1
5/19/2005	Alan Greenspan	Chairman	yes	3	0	2
5/19/2005	Susan Schmidt Bies	Governor		0	0	1
5/19/2005	Mark W. Olson	Governor		0	0	1
5/20/2005	Donald L. Kohn	Governor		1	2	0.666667
5/20/2005	Alan Greenspan	Chairman	yes	1	1	1
5/26/2005	Edward M. Gramlich	Governor		0	1	0
5/26/2005	Susan Schmidt Bies	Governor		0	0	1
5/27/2005	Roger W. Ferguson, Jr.	Vice Chair		4	0	2
6/3/2005	Edward M. Gramlich	Governor		0	0	1
6/3/2005	Mark W. Olson	Governor		1	0	2
6/6/2005	Alan Greenspan	Chairman	yes	1	0	2
6/7/2005	Susan Schmidt Bies	Governor		1	0	2

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Table A.14: **Speeches by FOMC members (continued)**

Continued from previous page.

Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
6/8/2005	Susan Schmidt Bies	Governor		0	0	1
6/14/2005	Susan Schmidt Bies	Governor		1	0	2
6/15/2005	Donald L. Kohn	Governor		0	0	1
6/23/2005	Mark W. Olson	Governor		0	0	1
7/21/2005	Donald L. Kohn	Governor		0	0	1
8/26/2005	Alan Greenspan	Chairman	yes	2	1	1.333333
8/27/2005	Donald L. Kohn	Governor		1	3	0.5
8/27/2005	Alan Greenspan	Chairman	yes	1	0	2
9/16/2005	Mark W. Olson	Governor		1	0	2
9/24/2005	Roger W. Ferguson	Vice Chair		0	0	1
9/26/2005	Susan Schmidt Bies	Governor		0	0	1
9/26/2005	Alan Greenspan	Chairman	yes	2	1	1.333333
9/27/2005	Alan Greenspan	Chairman	yes	0	0	1
9/28/2005	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
9/29/2005	Donald L. Kohn	Governor		1	2	0.666667
10/11/2005	Donald L. Kohn	Governor		1	2	0.666667
10/12/2005	Alan Greenspan	Chairman	yes	0	0	1
10/12/2005	Susan Schmidt Bies	Governor		1	0	2
10/12/2005	Mark W. Olson	Governor		2	2	1
10/13/2005	Mark W. Olson	Governor		2	2	1
10/17/2005	Alan Greenspan	Chairman	yes	2	1	1.333333
10/18/2005	Roger W. Ferguson, Jr.	Vice Chair		15	0	2
10/19/2005	Donald L. Kohn	Governor		14	3	1.647059
10/26/2005	Alan Greenspan	Chairman	yes	0	0	1
10/27/2005	Alan Greenspan	Chairman	yes	0	0	1
11/3/2005	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
11/7/2005	Mark W. Olson	Governor		0	0	1
11/14/2005	Alan Greenspan	Chairman	yes	1	0	2
11/15/2005	Mark W. Olson	Governor		0	0	1
11/15/2005	Roger W. Ferguson, Jr.	Vice Chair		5	1	1.666667
11/28/2005	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
11/29/2005	Roger W. Ferguson, Jr	Vice Chair		1	0	2

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
11/30/2005	Susan Schmidt Bies	Governor		1	0	2
12/2/2005	Alan Greenspan	Chairman	yes	0	0	1
12/2/2005	Alan Greenspan	Chairman	yes	0	0	1
12/5/2005	Mark W. Olson	Governor		0	0	1
12/6/2005	Susan Schmidt Bies	Governor		0	0	1
12/14/2005	Alan Greenspan	Chairman	yes	0	0	1
1/18/2006	Susan Schmidt Bies	Governor		2	1	1.333333
2/2/2006	Susan Schmidt Bies	Governor		1	0	2
2/6/2006	Ben S. Bernanke	Chairman	yes	0	0	1
2/23/2006	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
2/24/2006	Ben S. Bernanke	Chairman	yes	4	2	1.333333
2/24/2006	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/3/2006	Roger W. Ferguson, Jr.	Vice Chair		21	1	1.909091
3/8/2006	Ben S. Bernanke	Chairman	yes	0	0	1
3/10/2006	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
3/13/2006	Mark W. Olson	Governor		0	0	1
3/16/2006	Donald L. Kohn	Governor		4	0	2
3/20/2006	Ben S. Bernanke	Chairman	yes	1	5	0.333333
3/29/2006	Susan Schmidt Bies	Governor		0	0	1
3/31/2006	Susan Schmidt Bies	Governor		0	0	1
3/31/2006	Roger W. Ferguson, Jr.	Vice Chair		0	0	1
4/3/2006	Randall S. Kroszner	Governor		0	0	1
4/5/2006	Ben S. Bernanke	Chairman	yes	0	0	1
4/6/2006	Randall S. Kroszner	Governor		0	1	0
4/10/2006	Mark W. Olson	Governor		0	0	1
4/10/2006	Susan Schmidt Bies	Governor		0	0	1
4/13/2006	Donald L. Kohn	Governor		14	1	1.866667
4/13/2006	Mark W. Olson	Governor		3	1	1.5
4/17/2006	Roger W. Ferguson, Jr.	Vice Chair		0	2	0
4/20/2006	Ben S. Bernanke	Chairman	yes	0	0	1
4/27/2006	Donald L. Kohn	Governor		0	1	0
4/28/2006	Susan Schmidt Bies	Governor		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
5/3/2006	Ben S. Bernanke	Chairman	yes	0	0	1
5/4/2006	Susan Schmidt Bies	Governor		2	0	2
5/11/2006	Donald L. Kohn	Governor		0	0	1
5/16/2006	Ben S. Bernanke	Chairman	yes	0	0	1
5/16/2006	Susan Schmidt Bies	Governor		0	0	1
5/16/2006	Mark W. Olson	Governor		0	0	1
5/18/2006	Ben S. Bernanke	Chairman	yes	0	0	1
5/18/2006	Donald L. Kohn	Governor		0	1	0
5/24/2006	Randall S. Kroszner	Governor		0	0	1
5/25/2006	Mark W. Olson	Governor		1	0	2
6/5/2006	Ben S. Bernanke	Chairman	yes	3	0	2
6/6/2006	Susan Schmidt Bies	Governor		0	0	1
6/9/2006	Ben S. Bernanke	Chairman	yes	0	0	1
6/12/2006	Ben S. Bernanke	Chairman	yes	0	0	1
6/12/2006	Mark W. Olson	Governor		0	0	1
6/12/2006	Susan Schmidt Bies	Governor		0	0	1
6/13/2006	Ben S. Bernanke	Chairman	yes	0	0	1
6/14/2006	Susan Schmidt Bies	Governor		2	0	2
6/15/2006	Ben S. Bernanke	Chairman	yes	10	0	2
6/15/2006	Randall S. Kroszner	Governor		2	1	1.333333
6/16/2006	Donald L. Kohn	Governor		1	3	0.5
6/16/2006	Randall S. Kroszner	Governor		2	1	1.333333
7/4/2006	Susan Schmidt Bies	Governor		0	0	1
7/6/2006	Donald L. Kohn	Vice Chair		1	1	1
7/18/2006	Kevin Warsh	Governor		2	0	2
8/25/2006	Ben S. Bernanke	Chairman	yes	0	0	1
8/31/2006	Ben S. Bernanke	Chairman	yes	1	4	0.4
9/1/2006	Ben S. Bernanke	Chairman	yes	0	0	1
9/11/2006	Donald L. Kohn	Vice Chair		0	0	1
9/27/2006	Randall S. Kroszner	Governor		6	3	1.333333
10/4/2006	Ben S. Bernanke	Chairman	yes	1	0	2
10/4/2006	Donald L. Kohn	Vice Chair		5	3	1.25

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
10/11/2006	Susan Schmidt Bies	Governor		0	0	1
10/12/2006	Frederic S. Mishkin	Governor		1	0	2
10/16/2006	Ben S. Bernanke	Chairman	yes	0	0	1
10/17/2006	Susan Schmidt Bies	Governor		2	0	2
11/1/2006	Ben S. Bernanke	Chairman	yes	1	0	2
11/2/2006	Susan S. Bies	Governor		2	1	1.333333
11/3/2006	Donald L. Kohn	Vice Chair		0	0	1
11/10/2006	Ben S. Bernanke	Chairman	yes	0	1	0
11/16/2006	Randall S. Kroszner	Governor		0	2	0
11/21/2006	Kevin Warsh	Governor		0	0	1
11/28/2006	Ben S. Bernanke	Chairman	yes	3	5	0.75
11/30/2006	Susan Schmidt Bies	Governor		0	0	1
12/1/2006	Ben S. Bernanke	Chairman	yes	0	0	1
12/1/2006	Donald L. Kohn	Vice Chair		1	1	1
12/15/2006	Ben S. Bernanke	Chairman	yes	0	1	0
1/5/2007	Ben S. Bernanke	Chairman	yes	0	0	1
1/8/2007	Donald L. Kohn	Vice Chair		3	3	1
1/11/2007	Susan Schmidt Bies	Governor		2	0	2
1/17/2007	Frederic S. Mishkin	Governor		10	0	2
1/18/2007	Susan Schmidt Bies	Governor		3	1	1.5
2/6/2007	Ben S. Bernanke	Chairman	yes	0	0	1
2/21/2007	Donald L. Kohn	Vice Chair		0	0	1
2/26/2007	Susan Schmidt Bies	Governor		0	0	1
3/2/2007	Ben S. Bernanke	Chairman	yes	1	3	0.5
3/5/2007	Randall S. Kroszner	Governor		0	0	1
3/5/2007	Kevin Warsh	Governor		1	0	2
3/6/2007	Ben S. Bernanke	Chairman		0	0	1
3/9/2007	Randall S. Kroszner	Governor		0	2	0
3/9/2007	Donald L. Kohn	Vice Chair		1	0	2
3/12/2007	Randall S. Kroszner	Governor		5	2	1.428571
3/22/2007	Randall S. Kroszner	Governor		0	0	1
3/22/2007	Donald L. Kohn	Vice Chair		0	0	1

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
3/23/2007	Frederic S. Mishkin	Governor		0	7	0
3/30/2007	Ben S. Bernanke	Chairman	yes	0	1	0
4/10/2007	Frederic S. Mishkin	Governor		3	11	0.428571
4/11/2007	Ben S. Bernanke	Chairman	yes	0	0	1
4/20/2007	Frederic S. Mishkin	Governor		2	2	1
4/25/2007	Ben S. Bernanke	Chairman	yes	0	0	1
4/26/2007	Frederic S. Mishkin	Governor		0	0	1
5/1/2007	Ben S. Bernanke	Chairman	yes	1	0	2
5/10/2007	Randall S. Kroszner	Governor		0	0	1
5/15/2007	Ben S. Bernanke	Chairman	yes	0	0	1
5/15/2007	Randall S. Kroszner	Governor		0	0	1
5/16/2007	Donald L. Kohn	Vice Chair		0	0	1
5/16/2007	Randall S. Kroszner	Governor		1	1	1
5/17/2007	Ben S. Bernanke	Chairman	yes	1	0	2
5/22/2007	Ben S. Bernanke	Chairman	yes	0	0	1
5/23/2007	Randall S. Kroszner	Governor		0	0	1
5/24/2007	Frederic S. Mishkin	Governor		1	3	0.5
6/1/2007	Randall S. Kroszner	Governor		5	1	1.666667
6/5/2007	Ben S. Bernanke	Chairman	yes	1	0	2
6/5/2007	Kevin Warsh	Governor		0	0	1
6/14/2007	Randall S. Kroszner	Governor		0	0	1
6/15/2007	Ben S. Bernanke	Chairman	yes	2	0	2
6/23/2007	Frederic S. Mishkin	Governor		0	0	1
7/10/2007	Ben S. Bernanke	Chairman	yes	4	8	0.666667
7/12/2007	Randall S. Kroszner	Governor		0	0	1
8/1/2007	Randall S. Kroszner	Governor		0	0	1
8/31/2007	Ben S. Bernanke	Chairman	yes	2	1	1.333333
9/1/2007	Frederic S. Mishkin	Governor		0	1	0
9/6/2007	Randall S. Kroszner	Governor		0	0	1
9/10/2007	Frederic S. Mishkin	Governor		0	1	0
9/11/2007	Ben S. Bernanke	Chairman	yes	2	0	2
9/21/2007	Donald L. Kohn	Vice Chair		1	4	0.4

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Table A.14: **Speeches by FOMC members (continued)**

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Date	Speaker with link	Role	Chair	# Hawks	# Doves	Net Index
9/21/2007	Kevin Warsh	Governor		0	1	0
9/21/2007	Frederic S. Mishkin	Governor		0	0	1
9/24/2007	Ben S. Bernanke	Chairman	yes	0	0	1
9/27/2007	Frederic S. Mishkin	Governor		2	4	0.666667
9/28/2007	Frederic S. Mishkin	Governor		1	1	1
10/5/2007	Donald L. Kohn	Vice Chair		1	0	2
10/5/2007	Kevin Warsh	Governor		0	1	0
10/11/2007	Randall S. Kroszner	Governor		0	2	0
10/12/2007	Ben S. Bernanke	Chairman	yes	0	0	1
10/12/2007	Donald L. Kohn	Vice Chair		0	2	0
10/15/2007	Ben S. Bernanke	Chairman	yes	1	1	1
10/19/2007	Ben S. Bernanke	Chairman	yes	0	1	0
10/20/2007	Frederic S. Mishkin	Governor		7	2	1.555556
10/22/2007	Randall S. Kroszner	Governor		0	0	1
10/26/2007	Frederic S. Mishkin	Governor		10	4	1.428571
11/5/2007	Frederic S. Mishkin	Governor		4	4	1
11/5/2007	Randall S. Kroszner	Governor		0	0	1
11/6/2007	Ben S. Bernanke	Chairman	yes	0	0	1
11/7/2007	Kevin Warsh	Governor		0	3	0
11/13/2007	Randall S. Kroszner	Governor		0	0	1
11/14/2007	Ben S. Bernanke	Chairman	yes	0	1	0
11/16/2007	Randall S. Kroszner	Governor		2	3	0.8
11/28/2007	Donald L. Kohn	Vice Chair		1	2	0.666667
11/29/2007	Ben S. Bernanke	Chairman	yes	0	0	1
11/29/2007	Frederic S. Mishkin	Governor		2	6	0.5
11/30/2007	Randall S. Kroszner	Governor		0	0	1