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## Federal reserve communications and newswire coverage

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# **Federal Reserve Communications and Newswire Coverage**

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## **Federal Reserve Communications and Newswire Coverage**

### **Abstract**

In this paper, we explore the determinants of newswire coverage of Federal Reserve (Fed) communications. Our sample covers all 344 forward-looking communications made in the period May 1999–May 2004. We find, first, that there is a higher likelihood of newswire coverage for monetary policy reports and speeches by Chairman Greenspan than for testimony and speeches by other Fed members. Furthermore, communications with an explicit monetary policy inclination or tone different from the current interest rate path are particularly likely to be covered. However, the release of important macroeconomic news reduces the likelihood of newswire coverage. Second, speeches by regional Fed presidents are relatively less likely to be reported than speeches by Board members. Nevertheless, newswire coverage of Fed president speeches is more likely if central bank communication is stale. Finally, our results indicate that Ben Bernanke played a distinguished role even before his chairmanship.

**Keywords:** Central Bank Communication, Federal Open Market Committee, Federal Reserve, Monetary Policy, Newswire Coverage.

**JEL:** D83, E52, E58.

## 1. Introduction

Central bank communication is now widely accepted as being an important monetary policy tool.<sup>1</sup> Woodford (2005, 55) concludes that “the increased willingness of the FOMC under the Chairmanship of Alan Greenspan to speak openly about both current policy decisions and the Committee’s view of likely future policy has greatly increased the ability of markets to anticipate Fed policy.”

There is a growing body of literature investigating the effects of Federal Reserve (Fed) communications (for a comprehensive survey of the relevant literature, see Blinder et al., 2008). Post-meeting statements and congressional hearings (including the semi-annual monetary policy reports) are found to influence financial markets and increase the predictability of upcoming interest rate decisions (see, among others, Connolly and Kohler, 2004; Kohn and Sack, 2004; Reinhart and Sack, 2005; Lucca and Trebbi, 2009; Chirinko and Curran, 2013).

However, in addition to these “formalized” channels of communication, the members of the Board of Governors and regional Fed presidents deliver 100–150 speeches per year. Seeing as there are only eight post-meeting statements and two monetary policy reports (MPR) per year, these speeches are an important complement to formal statements and monetary policy decisions. Hence, market participants might very well utilize this additional information. Indeed, “informal” speeches also contribute to a better predictability of interest rates (Hayo and Neuenkirch, 2010) and influence financial markets (Ehrmann and Fratzscher, 2007; Hayo et al., 2008).

Given the flood of daily information financial market participants are exposed to, it is important to know how, for instance, a newswire agency like Reuters selects particular central bank communications events as newsworthy. Indeed, Neuenkirch (2009, 52) concludes that “financial market news is not necessarily created at the time when the information becomes available, but comes into existence only after it goes through a filtering process by the media.” By combining two data sets on original central bank communication events (Hayo et al. (2008); henceforth, HKN) and Reuters reports on these events (Ehrmann and Fratzscher, 2007; henceforth, EF), this paper goes a step beyond the previous analyses and explores the determinants that make a

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<sup>1</sup> Theoretically, central bank communication matters (i) in the absence of a stationary economy or monetary policy rule or (ii) in the presence of non-rational expectations (Blinder et al., 2008).

communication event newsworthy.<sup>2</sup> We expect Reuters to act as filter for communications that are particularly relevant to financial markets. That is, the reported communications should provide valuable information with respect to the future course of interest rates.

However, it is important to keep in mind that the media itself might influence the coverage of central bank communication events. Against this background, a different strand of the literature suggests that media coverage is affected by the views and preferences of the audience. Obviously, the success of a particular media provider depends on the demand for its products and services by the audience (e.g., Mullainathan and Shleifer 2005; Hamilton 2004). In addition, Gentzkow and Shapiro (2010) show that news reporting responds strongly to consumer preferences.

Ehrmann and Fratzscher (2007, 515) acknowledge that “newswire services may wrongly report or misinterpret a statement by policy makers.”<sup>3</sup> Consequently, the question arises as to whether this filtering process helps agents cope with the flood of information and if it is an accurate representation of the Fed’s view. Or, put differently, do the media distort central bank communication to such a degree that observing the original source is more useful? Hayo and Neuenkirch (2010) conclude that newswire reports of central bank communications are not a substitute for the original communication when predicting target rate decisions.

Our sample period covers all 344 forward-looking communications by Federal Open Market Committee (FOMC) members and related newswire reports during the period May 1999–May 2004. Econometrically, we use a probit model to answer the following research question: *What determines newswire coverage of Federal Reserve communications?* Several potential factors are tested in our analysis: (i) communication type and position within the FOMC, (ii) the type of information conveyed in communications, (iii) the uncertainty surrounding the communication event, (iv) the announcement of other important news on the day of communication, and (v) the macroeconomic environment in general.

The remainder of the paper is organized as follows. Section 2 introduces the data. Section 3 establishes the empirical strategy and puts forward our hypotheses. Section 4

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<sup>2</sup> There are very few papers that examine the role of the media when it comes to central bank communication. The transmission of central bank communication events to financial markets is studied by Neuenkirch (2009) and Hayo and Neuenkirch (2012). The favorableness of media communication on central banks is assessed in Berger al. (2011) and Böhm et al. (2012).

<sup>3</sup> The risk of misinterpretation obviously extends to the researcher coding the statements. However, EF and HKN try to minimize such risk by using content analysis techniques (Holsti, 1969). See also Section 2.

presents the empirical results for the full sample. Section 5 offers additional insights into the newswire coverage of communications made by two subgroups: the Board of Governors and regional Fed Reserve presidents. Section 6 concludes.

## 2. Data

The crucial task of our analysis is to match the datasets by EF and HKN. Both data sets were generated and applied in the context of financial market reaction to central bank communication events. The EF approach focuses on speeches that are actually covered by Reuters newswire service, whereas HKN cover all speeches on the written content reported on the Fed websites. Comparing the EF and HKN approaches in terms of financial market reaction, Neuenkirch (2009) finds a larger influence for the former.

In their paper, Ehrmann and Fratzscher (2007) use all statements related to monetary policy made by individual FOMC members in the period between two meetings. Their sample focuses on the period May 1999–May 2004. The Reuters newswire service is used to extract all reports about forward-looking policy statements, which either can be congressional hearings, speeches, or interviews. Their dataset includes only the first report on each communication event and distinguishes between two types of statements, one referring to the monetary policy inclination, and the other to the economic outlook. In a final step, they sort the intermeeting statements into those, for the first type, that give an inclination of tighter monetary policy versus no change or lower interest rates, and, for the second, accordingly to whether the statement provides a positive, neutral, or negative economic outlook.

Hayo et al. (2008) cover all speeches, congressional hearings, and post-meeting statements by FOMC members during the period January 1998–December 2009 based on the written content reported on the Fed websites. Similar to EF, the communications are categorized into tightening/neutral/easing statements about future monetary policy and by whether they convey a positive/neutral/negative economic outlook.<sup>4</sup> To provide a match to the EF dataset, we drop (i) all communications outside the May 1999–May 2004 sample period, (ii) all post-meeting statements, and (iii) all speeches with no indication of forward-looking policy. The final sample consists of 344 communication events.

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<sup>4</sup> The exact coding procedures (content analysis) are described in great detail in both papers.

Finally, all 344 communication events of HKN are matched with the corresponding newswire reports. Table 1 presents a summary of all forward-looking communications and their newswire coverage.<sup>5</sup>

Table 1: Summary of Forward-looking Communications and Their Coverage

	Covered Events (EF)	Total Events (HKN)	% Covered
Monetary Policy Reports	16	20	80.0%
Testimony	11	17	64.7%
Speeches	64	307	20.8%
... Greenspan	13	19	68.4%
... Vice Chairman	6	20	30.0%
... Board Members	11	42	26.2%
... Voting Presidents	18	102	17.6%
... Non-Voting Presidents	16	124	12.9%

In total, 91 of the 344 communication events are covered by the newswire service. However, the coverage rate varies across communication types. The semi-annual MPR and other congressional hearings garner much more media attention than do speeches. Speeches by Chairman Alan Greenspan generate more newswire reporting than speeches by other FOMC members. In general, the coverage rate decreases with the speaker's position in the FOMC.

### 3. Empirical Strategy

Econometrically, we use a probit model to explain whether a communication event is covered by Reuters (Category 1) or not (Category 0). Our specification is as follows:

$$\begin{aligned}
 (1) \text{ newswire coverage}_i^* &= \alpha + \beta_1 \text{day of the week}_i + \beta_2 \text{communication type/position}_i \\
 &+ \beta_3 \text{content}_i + \beta_4 \text{staleness/uncertainty}_i + \beta_5 \text{information flow}_i \\
 &+ \beta_6 \text{macro environment}_i + \varepsilon_i
 \end{aligned}$$

*Newswire coverage<sub>i</sub><sup>\*</sup>* is the latent continuous variable representing the binary choice for communication event *i*. Our empirical specification contains five groups of explanatory variables (see below) and controls for day of the week effects with Monday

<sup>5</sup> One complication is that the EF sample also includes interviews, which generally are not reported at the Fed websites. Consequently, we exclude these events from the analysis since we are not able to reconcile them with an official source.



as the reference day. The residuals  $\varepsilon_i$  are assumed to follow a standard normal distribution, which implies that the probabilities of the different outcomes can be written as:

$$Pr[\text{Media coverage}_i = 1|z_i] = \phi(z_i'\beta) \text{ and } Pr[\text{Media coverage}_i = 0|z_i] = 1 - \phi(z_i'\beta)$$

$\phi$  denotes the cumulative standard normal distribution,  $z_i$  is a vector of explanatory variables, and  $\beta$  a vector of coefficients. The probit models are estimated by maximum likelihood.

### *3.1. Communication Type and Position Within FOMC*

The first set of explanatory variables measures the type of communication and the position held by the speaker: (i) MPR, (ii) other testimony, (iii) speeches by Greenspan, (iv) speeches by the Vice Chairman of the Board of Governors, (v) speeches by other members of the Board of Governors (reference group), (vi) speeches by voting presidents, and (vii) speeches by non-voting presidents. Most of the empirical papers studying the impact of central bank communication on financial markets have two findings in common. First, the influence is larger when the communication channel is more formal: MPR and testimony are more important than speeches. Second, the more prominent the speaker's position, the stronger the financial market reaction conditional on newswire reporting (see also, Neuenkirch, 2009). Our descriptive statistics show a similar pattern in the context of newswire coverage. Consequently, our first set of hypotheses is as follows:

H1a: The likelihood of newswire coverage increases with the formality of the communication event.

H1b: In case of speeches, the likelihood of coverage increases with hierarchy within the FOMC.

### *3.2. Information Conveyed in Communications*

The second group of explanatory variables depicts the amount of information conveyed in communications.<sup>6</sup> Hayo et al. (2008) find that FOMC speakers make more comments

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<sup>6</sup> It was suggested that market impact could be an important determinant of newswire coverage of communication events. However, it is unclear whether (i) a larger market impact leads to a higher

regarding the economic outlook than the monetary policy inclination. However, the latter is a more direct indication of the future interest rate course. Consequently, we expect a higher rate of coverage for those speeches that explicitly mention monetary policy inclination compared to those that contain only an economic outlook component. Furthermore, a negative monetary policy inclination is much rarer than a signal for an interest rate hike (see also Hayo et al., 2008). Thus, we expect an additional positive effect for the coverage of communications conveying an easing inclination.

Neuenkirch (2009) points out that speeches are sometimes simply a newly shuffled assortment of well-known facts that change only slightly over prolonged periods of time. Their news component may be very small. We try to proxy this news component by creating an indicator that is 1 when the tone conveyed in the communication event (the “bias”) is in line with the current interest rate path and 0 if the bias is different from the current path.<sup>7</sup> Our second set of hypotheses is as follows:

H2a: Communications directly referring to the future interest rate course are more likely to be covered by the newswire service.

H2b: Indicating an interest rate cut further increases the probability of newswire coverage.

H2c: Communications that are in line with the current interest rate path are less likely to receive media attention.

### *3.3. Staleness and Uncertainty*

A third block of explanatory variables is included to measure the uncertainty surrounding communication events and the staleness of central bank information. In a different context, Ehrmann and Sondermann (2009) show that other macroeconomic announcements become more relevant the more time has elapsed since the latest

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coverage probability or (ii) it is the newswire report on central bank communication that leads to an adjustment of traders' behavior and, consequently, a higher market impact (see also Neuenkirch, 2009).

<sup>7</sup> To this end, all communications are sorted into three categories depending on whether they indicate likely increases in the federal funds rate, decreases in the rate, or no change in the target rate. Communications that directly reference monetary policy are easily interpreted; others are not so straightforward. For example, speeches presenting a bright economic outlook can be interpreted as an indication of future rate hikes because in good economic times, the Fed needs to take steps to prevent the economy from overheating. Hayo et al. (2008) point out that the Fed typically does not talk extensively about rate cuts and therefore a speech about a negative economic outlook can be a particularly useful indicator of this possibility. In a very few cases, a positive economic outlook coincides with a trend toward loose monetary policy, or a pessimistic outlook is accompanied by tighter monetary policy. As the monetary policy stance is a more direct indicator of future target rate decisions, we code these rare cases based on monetary policy stance.

release of an official inflation report. We test this idea of staleness of central bank information and include three variables measuring the distance (in days) to (i) the last actual interest rate change, (ii) the last FOMC meeting or MPR, and (iii) the last newswire coverage of a communication event.<sup>8</sup> All three variables are important reference points for central bank communications and, therefore, a longer distance to these points should increase the likelihood of newswire coverage.

Uncertainty about the future course of interest rates can also arise for other reasons. First, some of the interest rate decisions during our sample were made either at an unscheduled meeting or came as a surprise insofar as market participants expected a different interest rate announcement.<sup>9</sup> Since such unexpected rate changes obviously increase market uncertainty, we expect more newswire coverage of communication events made after such changes. Consequently, we include an indicator variable that takes the value 1 after unexpected target rate decisions (until the next scheduled and expected decision) and 0 otherwise. Second, the Fed has explicit blackout guidelines around policy meetings. This practice of “purdah” should deter excessive market volatility (see also Ehrmann and Fratzscher, 2009). However, on some occasions, there are communications during this blackout period and we expect a higher probability of coverage for these rare events. Our third set of hypotheses is as follows:<sup>10</sup>

H3a: The likelihood of newswire coverage increases with distance to (i) the last actual interest rate change, (ii) the last FOMC meeting or MPR, and (iii) the last newswire coverage of a communication event.

H3b: The probability of newswire coverage is higher for communications made after unexpected interest rate decisions.

H3c: Communications during the blackout period around FOMC meetings are more newsworthy.

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<sup>8</sup> Since we include a variable referring to the last newswire coverage of communication events, we have to drop all observations before the first event that was actually covered by Reuters. Consequently, our empirical analysis contains 339 observations instead of 344.

<sup>9</sup> For instance, a “surprise hike” can be (i) an unexpected rise in the target rate or (ii) an unchanged target rate when a rate cut was expected.

<sup>10</sup> We also considered including a variable measuring the coverage probability of speeches by FOMC members who dissented at the last meeting. This idea goes back to Gerlach-Kristen (2004, 2009), who finds that (attributed) voting records are informative as to future monetary policy. However, there are very few dissents in our sample period and, interestingly, these dissenters generally do not make forward-looking speeches during the intermeeting period after their dissent. Another indicator measuring voiced disagreement in internal FOMC discussions is put forward by Meade (2005). Unfortunately, the time series in her dataset is too short to be employed in this paper’s context.

### *3.4. (Over-)Flow of Information*

The fourth group of explanatory variables captures the amount of information that hits financial markets every day. Financial agents are obviously time constrained and cannot monitor all relevant information by themselves (Sims, 2003). Similarly, newswire services are found to be selective in their reporting, insofar as some speeches containing forward-looking information are ignored. One reason for this might be the release of an important macroeconomic indicator on the day of a communication event. To capture these announcement dates, we include a variable that takes the value 1 on days with an important macroeconomic release and 0 otherwise. This indicator variable is created on the basis of 10 important news releases: advance gross domestic product (GDP), industrial production, trade balance, employment report, Conference Board consumer confidence, Institute for Supply Management (ISM) survey, retail sales, housing starts, consumer price index (CPI), and producer price index (PPI). Since some of these events might be more important than others, we provide a second set of regression estimates in Section 4 where we replace the overall indicator with a separate indicator variable for each of these 10 announcements.

In addition, sometimes there is more than one communication event on a single day. The occurrence of multiple communication events might indicate that the Fed wants to transmit important information to the public (assuming that the speakers have some degree of freedom in choosing the timing of their speeches). Consequently, more than one FOMC member commenting on forward-looking policy issues on one day should attract media attention. Our fourth set of hypotheses is as follows:

H4a: Multiple communications on a single day increase the probability of newswire coverage.

H4b: The release of macroeconomic announcements decreases the likelihood of newswire coverage of Fed communications.

### *3.5. Macroeconomic Conditions*

The final set of explanatory variables assesses the influence of macroeconomic conditions (in real-time) on newswire coverage of central bank communication. Following the argument by Berger et al. (2011), we expect the media to fulfill a type of “watchdog” function. Bad macroeconomic conditions, such as a high unemployment rate, a high inflation rate, or high stock market volatility, should lead to an increase in

newswire coverage of communication events. Consequently, our final hypothesis is as follows:

H5: Bad macroeconomic conditions increase the probability that Fed communication will receive newswire coverage.

Table 2 summarizes all explanatory variables and their expected signs in the regression analysis.

Table 2: Summary of Explanatory Variables and Their Expected Signs

<b>Explanatory Variable</b>	<b>Exp. Sign</b>	<b>Explanatory Variable</b>	<b>Exp. Sign</b>
<u>Day of the Week</u>		<u>Staleness/Uncertainty</u>	
Monday	Reference	Distance to	
Tuesday	?	... Last Target Rate Change	+
Wednesday	?	... Last FOMC Meeting/MPR	+
Thursday	?	... Last Newswire Coverage	+
Friday	?	Last Decision Surprise	+
		Blackout Period	+
<u>Communication Type/Position</u>		<u>(Over-)Flow of Information</u>	
Monetary Policy Reports	+	Multiple Communications	+
Testimony	+	Macro Announcements	–
Speeches			
... Greenspan	+		
... Vice Chairman	+		
... Board Members	Reference		
... Voting Presidents	–		
... Non-Voting Presidents	–		
<u>Conveyed Information</u>		<u>Macroeconomic Conditions</u>	
Explicit MP Direction	+	Unemployment Rate	+
Explicit MP Direction NEG	+	Inflation Rate	+
No Change in “Bias”	–	VIX Index	+

#### 4. Empirical Results

Table 3 sets out the average marginal effects for two different versions of Equation (1). Column (1) shows the results using a composite indicator for all days with a macroeconomic announcement, whereas Column (2) differentiates between 10 different types of macroeconomic announcements. Since the average marginal effects for all other

explanatory variables are nearly the same across both specifications, we focus on Column (2) for the following interpretation.

First, we find evidence for the hierarchy hypothesis (H1b) since speeches by Chairman Alan Greenspan are more likely to be reported than speeches by any other FOMC member.<sup>11</sup> Compared to the reference group (speeches by Board members), newswire coverage of speeches by Greenspan is 30.8 percentage points (pp) more likely. The conditional coverage rate of speeches by the Vice Chairman and voting presidents is equal to the reference group, whereas speeches by non-voting presidents generate significantly less media attention than speeches by Board members (−14.2 pp).

The formality hypothesis (H1a) is partly supported by our data as the semi-annual MPR is more often covered by Reuters than is testimony or any type of speech, with Greenspan speeches being the only exception.<sup>12</sup> The likelihood of coverage is 33.7 pp higher for MPR than for speeches by Board members. In addition, testimony is more relevant for the media than speeches by voting and non-voting presidents.<sup>13</sup>

In general, the picture is more subtle when it comes to ranking different communication types or speakers: (i) MPR and Greenspan speeches are most relevant and of similar importance to the media, followed by (ii) other testimony, (iii) speeches by the Vice Chairman, other Board members, and speeches by voting presidents, and (iv) speeches by non-voting presidents. Since the testimony accompanying the MPR is made by the chairman, we can also interpret this finding as a chairman (or Greenspan) effect.

Second, we find support for hypotheses H2a–H2c. A speech directly referring to the future course of interest rates is 20.6 pp more likely to be reported compared to a speech that references only the general economic outlook. Since speeches indicating looser monetary policy are very rare, the likelihood of them receiving coverage is 51.4 pp higher compared to speeches without an explicit monetary policy inclination. Speeches without any interesting information, as compared to those discussing the current interest rate path, are 15 pp less likely to be reported by the newswire service.

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<sup>11</sup> Test statistics: Greenspan vs. Vice Chairman:  $\chi^2(1) = 6.86^{***}$ ; Greenspan vs. voting presidents:  $\chi^2(1) = 19.88^{***}$ ; Greenspan vs. non-voting presidents:  $\chi^2(1) = 27.97^{***}$ .

<sup>12</sup> Test statistics: MPR vs. testimony:  $\chi^2(1) = 3.62^*$ ; MPR vs. Greenspan:  $\chi^2(1) = 0.26$ ; MPR vs. Vice Chairman:  $\chi^2(1) = 8.64^{***}$ ; MPR vs. voting presidents:  $\chi^2(1) = 24.14^{***}$ ; MPR vs. non-voting presidents:  $\chi^2(1) = 33.16^{***}$ .

<sup>13</sup> Test statistics: testimony vs. voting presidents:  $\chi^2(1) = 7.38^{***}$ ; testimony vs. non-voting presidents:  $\chi^2(1) = 12.93^{***}$ .

Table 3: Explaining Coverage of Federal Reserve Communications

	(1)	(2)
<u>Day of the Week</u>		
Tuesday	0.058	0.035
Wednesday	0.035	0.018
Thursday	0.098	0.099
Friday	0.220 ***	0.247 ***
<u>Communication Type/Position</u>		
Monetary Policy Reports	0.366 ***	0.337 ***
Testimony	0.164 *	0.164 *
Speeches by...		
... Greenspan	0.309 ***	0.308 ***
... Vice Chairman	0.016	0.004
... Voting Presidents	-0.065	-0.069
... Non-Voting Presidents	-0.135 **	-0.142 **
<u>Conveyed Information</u>		
Explicit MP Direction	0.199 ***	0.206 ***
Explicit MP Direction NEG	0.250 **	0.308 ***
No Change in "Bias"	-0.141 ***	-0.150 ***
<u>Uncertainty/Staleness</u>		
Distance to		
... Last Target Rate Change	0.000	0.000
... Last FOMC Meeting / MPR	-0.001	-0.002
... Last Newswire Coverage	0.004 ***	0.004 ***
Last Decision Surprise	0.079	0.056
Blackout Period	-0.020	-0.006
<u>(Over-)Flow of Information</u>		
Multiple Communications	0.035	0.029
Macro Announcements	-0.054	---
... Advance GDP	---	-0.026
... Industrial Production	---	0.060
... Trade Balance	---	-0.193 *
... Employment Report	---	-0.181
... Consumer Confidence	---	0.024
... ISM Index	---	-0.326 **
... Housing Starts	---	0.068
... Retail Sales	---	-0.144
... CPI	---	0.042
... PPI	---	-0.017

Table 3 (Continued)

	(1)	(2)
<u>Macroeconomic Conditions</u>		
Unemployment Rate	-0.031	-0.046
Inflation Rate	-0.049	-0.051
VIX Index	-0.002	-0.002
Observations	339	339
LR Statistic	106.0 ***	116.3 ***
Pseudo Log-Likelihood	-128.4	-123.1
Pseudo R <sup>2</sup>	0.346	0.372
Correct Predictions	82.6%	84.1%

Notes: Table shows average marginal effects. Dependent variable is the newswire coverage of Federal Reserve communication events (1 = yes, 0 = no). \*/\*\*/\*\* denotes significance at the 10/5/1% level. Huber (1967)/White (1980) robust standard errors are used.

Thus, the content of communications is also an important factor when it comes to newswire coverage of central bank communication. Speeches with more direct information on the future course of monetary policy are more relevant for the media; speeches without any new information are less important.

Third, we find evidence for only one indicator measuring the staleness of communications (H3a). Each additional day since the last newswire report on central bank communication increases the likelihood of coverage by 0.4pp. The more time has elapsed since the last newswire report on communications, the more interesting are incoming communications as an information update. Put differently, a higher degree of staleness makes it easier for news agencies to “sell” news about central bank communication. Distance to the last actual target rate change and the last FOMC meeting or MPR is not significant. Furthermore, communications after a surprise decision (H3b) and during the blackout period (H3c) are not more likely to generate newswire reporting.

Fourth, multiple communications on a single day do not significantly affect the likelihood of coverage (H4a). However, the release of some macroeconomic news items reduces the probability of newswire reports on central bank communications. A release of the ISM index, the most relevant business climate indicator in the United States, reduces the likelihood of newswire coverage by 32.6 pp. Similar effects are found for the release of trade balance data (-19.3 pp) and the employment report (-18.1 pp), which is



marginally insignificant.<sup>14</sup> Thus, when there is other important information (macroeconomic announcements) to be reported, communication events are less likely to receive media attention.

Fifth, we find no evidence for H5 since macroeconomic conditions do not affect the probability of newswire coverage. In addition to including the absolute value for the unemployment rate, the inflation rate, and the VIX volatility index, we explore the robustness of this finding with threshold variables for macroeconomic conditions and additionally explore asymmetric conditional coverage rates during good and bad times. However, none of these specifications generated any additional insight and, therefore, we only present the results based on the simple specification.

Finally, one of the day of the week effects is significant. Newswire coverage is more likely on Fridays than on any other business day. The probability of a report on communication is 24.7 pp higher on a Friday than on a Monday. Similar to the finding concerning the staleness of newswire coverage, one could interpret this as an attempt to “sell” news to financial markets before the weekend.

In general, our findings indicate that the likelihood of newswire coverage is higher for MPR and speeches by Greenspan than for testimony and speeches by other FOMC members. Furthermore, communications with an explicit monetary policy inclination or new information, as compared to the current interest rate path, are of particular relevance. The release of important macroeconomic news (ISM index, trade balance, and employment report) reduces the likelihood of newswire coverage of Fed communication. Finally, the probability of coverage increases with the time elapsed since the last newswire report on communication.

## **5. Further Results for Board Members and Presidents**

For a more detailed investigation into the determinants of newswire coverage, we split the dataset and conduct separate analyses for two subgroups: the Board of Governors (column labeled “Board” in Table 4) and the regional Fed Reserve presidents (Pres.). In addition, we provide a robustness test for frequent speakers (those with more than 10

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<sup>14</sup> Note that the p-value for this variable is 0.101.

speeches) to control for any person-specific effects (Board (a) and Pres (a)).<sup>15</sup> Table 4 sets out the average marginal effects.

First, confirming the findings in Section 4, MPR and Greenspan speeches are most relevant and of similar importance for the media, followed by other testimony, and then speeches by the Vice Chairman and other Board members (reference group), in both models for the Board of Governors. Similarly, speeches by voting presidents are more likely to generate newswire reports than speeches by non-voters (reference group) in the column labeled “Pres.”

Second, only two of the 10 frequent speakers<sup>16</sup> make a statistical difference. Speeches by Ben Bernanke are 28.3 pp more likely to be covered by the newswire service than are speeches by other Board members. In addition, statistical testing fails to reject the null hypothesis when comparing this effect to MPR, testimony, and Greenspan speeches.<sup>17</sup> This can be interpreted as evidence for the distinguished role of (at that time) future Chairman Bernanke. In the case of the presidents, speeches by the Dallas Fed President Robert McTeer are noteworthy for having a much lower probability of coverage (−78.5 pp) than speeches by any of the other Fed presidents.

Third, there are interesting differences across both groups when it comes to the role of communication content. The likelihood of coverage does not change for Board member communications when they do not provide any new information compared to the current interest rate path. However, in case of regional presidents, the probability of generating a newswire report is reduced by 24.9 pp (column labeled “Pres.”) when the communication contains no new information. Thus, the overall effect found in Table 3 is driven by the regional presidents.

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<sup>15</sup> To conserve degrees of freedom and ensure convergence in the probit estimations, we use only the portmanteau variable for macroeconomic announcements and do not include real-time macroeconomic conditions as control variable.

<sup>16</sup> In the case of the Vice Chairman, we are unable to distinguish between Alice Rivlin and Roger Ferguson since the former spoke only two times during our sample period.

<sup>17</sup> Bernanke vs. MPR:  $\text{Chi}^2(1) = 1.92$ ; Bernanke vs. testimony:  $\text{Chi}^2(1) = 0.00$ ; Bernanke vs. Greenspan:  $\text{Chi}^2(1) = 1.17$ .

Table 4: Explaining Coverage of Communications by Board Members and Presidents

	Board	Pres.	Diff.	Board (a)	Pres. (a)	Diff.
<u>Day of the Week</u>						
Tuesday	0.326 *	-0.036	*	0.403 **	-0.060	**
Wednesday	0.263	-0.006		0.322	-0.042	*
Thursday	0.340 *	0.057		0.393 **	0.027	*
Friday	0.373 *	0.178 **		0.386 *	0.149 **	
<u>Communication Type/Position</u>						
MPR	0.442 ***	---		0.513 ***	---	
Testimony	0.200 *	---		0.282 **	---	
Speeches						
... Greenspan	0.361 ***	---		0.450 ***	---	
... Vice Chairman	0.014	---		0.117	---	
... Voting Pres.	---	0.068 *		---	0.057	
<u>Individual Speakers</u>						
... Bernanke	---	---		0.283 **	---	
... Meyer	---	---		0.045	---	
... Broadbent	---	---		---	-0.058	
... Gynn	---	---		---	-0.119	
... McTeer	---	---		---	-0.785 ***	
... Minehan	---	---		---	0.044	
... Moskowitz	---	---		---	0.065	
... Parry	---	---		---	-0.015	
... Poole	---	---		---	-0.031	
... Santomero	---	---		---	0.048	
<u>Conveyed Information</u>						
Expl. MP Dir.	0.210 **	0.192 ***		0.261 ***	0.174 ***	
Expl. MP Dir. NEG	0.300 *	0.332 ***		0.257	0.390 ***	
No Change in "Bias"	-0.011	-0.249 ***	**	-0.015	-0.238 ***	**
<u>Uncertainty/Staleness</u>						
Distance to						
... Last TR Change	0.000	0.000		0.000	0.000	
... Last Meet. / MPR	0.002	-0.002		0.001	-0.003	
... Last Newswire Cov.	0.001	0.004 ***		0.000	0.004 ***	
Last Decision Surpr.	0.058	0.066		0.041	0.058	
Blackout Period	-0.197	0.117	*	-0.192	0.165 **	**
<u>(Over-)Flow of Information</u>						
Multiple Comm.	0.064	0.038		0.046	0.062 *	
Macro Announcem.	-0.079	-0.022		-0.070	-0.004	

Table 4 (Continued)

	<b>Board</b>	<b>Pres.</b>	<b>Diff.</b>	<b>Board (a)</b>	<b>Pres. (a)</b>	<b>Diff.</b>
Observations	114	225		114	225	
LR Statistic	43.4 ***	43.5 ***		43.3 ***	312.6 ***	
Pseudo Log-L	-55.9	-64.5		-54.4	-58.7	
Pseudo R <sup>2</sup>	0.292	0.325		0.312	0.385	
Corr. Predictions	77.2%	88.9%		76.3%	90.7%	

Notes: Table shows average marginal effects. Dependent variable is the newswire coverage of Federal Reserve communication events (1 = yes, 0 = no). The column labeled “diff” shows whether the difference across models is significant. \*/\*\*/\*\* denotes significance at the 10/5/1% level. Huber (1967)/White (1980) robust standard errors are used.

Fourth, our findings concerning the staleness of communication are also driven by the regional Fed presidents. Each additional day since the last newswire report on central bank communication increases the likelihood of coverage by 0.4 pp for Fed presidents, whereas it remains unchanged for Board members. Furthermore, speeches by Fed presidents during the blackout period are significantly more likely to be covered than speeches made outside the Purdah window.<sup>18</sup> In contrast, the marginal effect for Board members during that window is insignificant.

Finally, the coefficient on multiple communications on one day is significant in the case of Fed presidents and one specification (column labeled “Pres. (a)”) but not for Board members.<sup>19</sup>

In general, there are three striking differences between the groups. Speeches by presidents are relatively more newsworthy (i) if they provide new information about future interest rates, (ii) the more time that has elapsed since the last newswire report on communications, and (iii) if they are delivered during the blackout period. In all three cases, the likelihood of newswire coverage for communications by members of the Board of Governors is unchanged. Thus, in order to attract media attention, speeches by Fed presidents have to be either relatively more interesting (i.e., providing new information on the “bias”) than communications by Board members or to be delivered during a time of communication staleness or uncertainty. Finally, our results indicate that Ben Bernanke played a distinguished role in the FOMC even before his tenure as chairman.

<sup>18</sup> Note that the p-value for this coefficient in the column labeled “Pres. (a)” is 0.106.

<sup>19</sup> Note that there is also a difference in the day of the week pattern of communication across both groups. In the case of Board members, communications are less likely to be covered on Mondays than on any other day. In contrast, communications by Fed presidents are more likely to be reported on Fridays than on any other day.

## 6. Conclusions

In this paper, we explore what makes central bank communication a newsworthy event. We expect Reuters to act as a filter for communications that are particularly relevant to financial markets. That is, the reported communications should provide valuable information with respect to the future course of interest rates. Our sample period covers all 344 communications by Federal Open Market Committee members and related newswire reports by Reuters during the period May 1999–May 2004. Econometrically, we use a probit model and explore the role of several potential factors in explaining newswire coverage of forward-looking FOMC communications. Our results are as follows.

First, the likelihood of newswire coverage is higher for MPR and speeches by Greenspan than for testimony and speeches by other FOMC members. Speeches by non-voting presidents have the lowest conditional coverage probability. Since the testimony accompanying the MPR is made by the chairman, we can interpret this finding as a chairman (or Greenspan) effect. The content of communications is also an important factor when it comes to newswire coverage of central bank communication. Speeches with more direct information on the future course of monetary policy are more relevant for the media (in comparison to speeches that provide only a broad economic outlook), whereas speeches without any new information (in comparison to the current interest path) are less important. The likelihood of newswire coverage increases with the distance from the last covered communication. Put differently, the more time that has elapsed since the last newswire report on communication, the more interesting are incoming communications as an information update. The release of important macroeconomic news (ISM index, trade balance, and employment report) reduces the likelihood that Fed communications will receive newswire coverage. On these days, there is other important information that seemingly makes coverage of communication events less likely.

Second, there are striking differences in the factors determining newswire coverage of members of the Board of the Governors and the regional Fed presidents. Speeches by presidents are relatively more newsworthy (i) if they provide new information about future interest rates, (ii) the more time that has elapsed since the last newswire report on communications, and (iii) if they are delivered during the blackout period. In all three cases, the likelihood of newswire coverage for communications by the Board of Governors is unchanged. Thus, in order to attract media attention, speeches

by Fed presidents have to be either relatively more interesting (i.e., provide new information on the “bias”) than communications by Board members or to be delivered during a time of communication staleness or uncertainty.

Third, we also control for speaker-specific effects. Most noteworthy, speeches by Ben Bernanke are as important as speeches by Greenspan or even MPR. This can be interpreted as evidence for the distinguished role of (at that time) future Chairman Bernanke.

In general, we find that Reuters is selective in its coverage of central bank communication. More important speakers (Greenspan or Bernanke) and more formalized events (MPR) are more likely to be covered than are speeches by regional Fed presidents. However, newswire coverage of speeches by Fed presidents is relatively more likely if their speeches contain valuable information about the future course of monetary policy or provide a “bias” that is different from the current interest rate path. Thus, despite ignoring a great deal of the communications made by this group, the newswire service is careful in analyzing speeches and determining their noteworthiness. Nevertheless, there is some evidence that the media attempts to “sell” news to financial markets. The probability of newswire coverage is higher if communication has become stale or right before the weekend. Finally, financial market participants should take note on days when other important macroeconomic news is published. On these days, newswire coverage of communication is less likely and, therefore, by relying on newswire reports, financial market participants might miss important information. On the other hand, Fed speakers should refrain from delivering important speeches on these days if they are interested in reaching a broader audience via more likely newswire coverage of their speech.

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