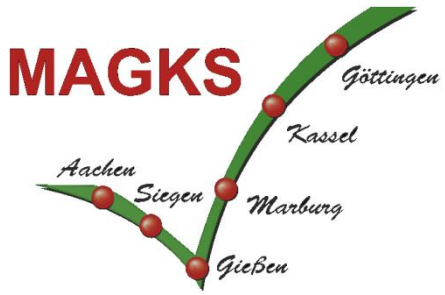

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The FOMC Attention Cycle*

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January 10, 2025

Abstract

We use a new data set of daily visits of the website of the Federal Reserve Board to study the acquisition of information about monetary policy around meetings of the FOMC.

Keywords: monetary policy, communication, Federal Reserve, information acquisition
JEL Classification: E58

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1 Introduction

Market participants around the world closely watch announcements of the Federal Open Market Committee (FOMC) of the Federal Reserve (Fed). The coverage of the Fed's decisions in newspapers and newswire services increases strongly in the run-up to the FOMC meeting. While we observe an increase in reporting about the Fed, i.e. the supply of information, relatively little is known about how information is gathered. Hence, the demand for information from households, firms and investors remains largely unknown. This is because we can measure the amount of newspaper reporting about the Fed, but it is less straightforward to measure the public's attention to this type of information.

In this paper, we use an exclusive data set of daily visits on the Fed's website to study the acquisition of information about monetary policy. Existing research shows (Binder (2017); Haldane and McMahon (2018); Haldane et al. (2021)) how difficult it is for central banks to communicate with the general public and not just a small circle of specialists. Website views are one measure of the public's attention, because they reflect the direct engagement of viewers. A major drawback is that we cannot infer how the information is used and how well the website content is understood. We concentrate on the main important, regular events in the calendar of policymaking: the meetings of the Fed's FOMC, which sets U.S. monetary policy. The data reveals the dynamics of website views around the FOMC meeting, which we label the FOMC attention cycle.

We differentiate between meetings followed by a press conference and meeting without a press conference. Boguth et al. (2019) show that the press conference attracts particular attention by markets.[1] The authors measure attention by the average amount of newswire reporting in the three days before the announcement. The number of newspaper articles as in Boguth et al. (2019), however, does not contain information about how often an article is viewed. Instead, we show the cyclical properties of daily attention

[1]The special role of Fed press conferences for the price formation in financial markets is also corroborated by Bodilsen et al. (2021).

measured more directly from website views.[2]

We find that attention to the policy-related sections of the website increases strongly in the days before the announcement day. The public acquires more and more information about monetary policy as the FOMC meeting approaches. We also that attention is systematically higher on the meeting day and the rest of the FOMC week following larger absolute policy surprises.

Ehrmann and Hubert (2024) analyze traffic on Twitter.com on issues related to the European Central Bank (ECB) during the quiten period, i.e. in the run-up to ECB meeting days. They find that traffic increases in the days before the ECB decision and interpret this as an increase in information exchange. Furthermore, they show that attention on Twitter is associated with higher absolute policy surprises on meeting days, which is different from our result. However, conditional on the level of disagreement about the state of the economy, a higher level of attention reduces the absolute size of surprises.

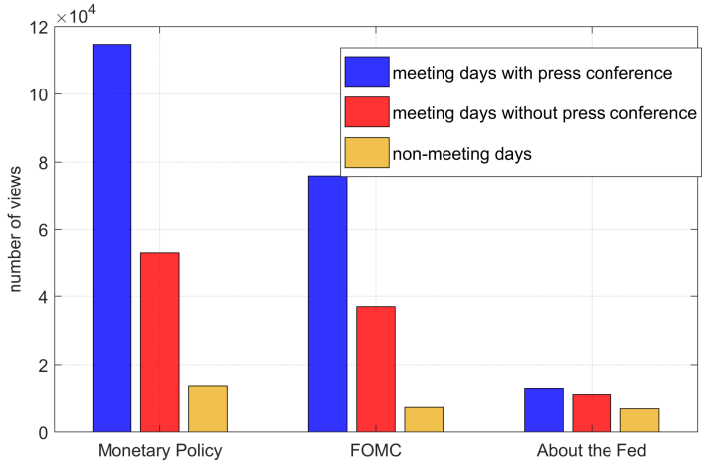
2 Views of the Fed's website

We measure the public's attention by the daily number of views of specific sections of the Fed's website (`www.federalreserve.gov`). The "Monetary Policy" section, and the "FOMC" subsection in particular, contains most of the information that is related to monetary policy decisions. We refer to these sections as the policy-relevant sections of the website. We contrast the views of these sections with the attention received by the "About the Fed" section, which does not contain information that is immediately policy-relevant. Since we can narrow the analysis to the views of the policy-related sections of the website, we can isolate the attention to monetary policy from attention to other aspects of central banking such as banking supervision

[2] Monaco and Murgia (2023) use the search volume on Google as a measure of investors' attention to the FOMC announcement.

or the provision of statistics. The data is not publicly available.[3] We filed a Freedom of Information Act request to the Fed and obtained daily series of website views for the sample period October 2, 2015 to October 8, 2019. This sample includes 32 meetings of the FOMC. Before 2019, the Fed chair gave a press conference after the March, June, September and December meeting. Since then, every meeting is followed by a press conference. The sample covers 19 meeting with a press conference and 13 without. The Fed also publishes economic projections on every second scheduled meeting day.[4]

Figure 1: Average number of website views



Notes: The figure shows the average number of website views on selected days for three sections of the Fed's website.

Figure (1) shows the average number of visits to the three selected sections of the website on meeting days of the FOMC with and without a press conference as well as non-meeting days. We see that attention to the website is much higher on meeting days compared to non-meeting days. For meeting days that include a press conference of the Fed chair, the increase in the absolute number of views is particularly remarkable. Across all three types of

[3]See Tillmann (2023) for more information about the data, including plots of the series as well as the correlation of views across website sections.

[4]Hence, before 2019, when a press conference was held once in each quarter, the distinction between meetings with and without a press conference coincides with the distinction between meetings with and without the publication of projections.

days, the policy-relevant sections receive a larger attention than the "About the Fed" section.

3 The dynamics of attention to the FOMC

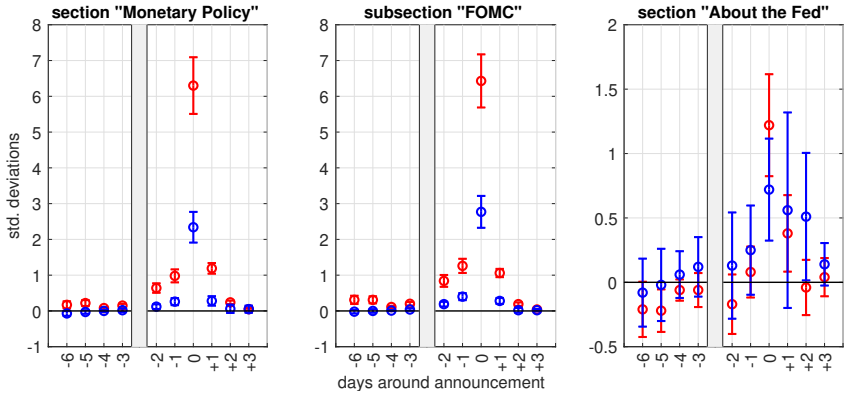
To understand the dynamic pattern of website views, we run a simple regression model. We regress daily website views on a battery of dummy variables that allow us to elaborate which events lead to a systematic increase in the demand for information. Our set of control variables include dummies reflecting (1) FOMC meeting days with and without a press conference and (2) the subsequent publication of minutes following meetings with and without a press conference, typically three weeks after the announcement day. Each of these dummies is included with leads and lags in order to capture the build-up of attention before the event and the decline thereafter. Since the number of website views strongly depends on the day of the week, with website traffic falling on Friday and over the weekend, we also include day-of-the-week dummies. To better compare our coefficients across sections, we standardize our time series.

In Figure (2), we plot the coefficient on each lead and lag of the announcement day dummies for meetings with and without a press conference as circles. We also depict 1.65 (robust) standard errors as vertical bars. Two findings are particularly noteworthy: First, attention to the policy-related sections increases strongly in the run-up to the announcement day. For non-policy sections, here reflected by the "About the Fed" section, the increase in attention is much smaller. This means that the public acquires more and more information about monetary policy as the FOMC meeting approaches. In this process, visitors might "click around" the website, thus driving up traffic on the non-policy sections as well.[5]

On the meeting day itself, website views of the policy-relevant sections are two to seven standard deviations higher than normal. For the "Monetary Policy" section, one standard deviation corresponds to 15,473 daily views.

[5] Herbert et al. (2024) show a similar cycle for the media coverage of FOMC meetings.

Figure 2: Views of different sections of the Fed's website



Notes: The figure shows the estimated coefficients (circles) from a regression of the daily number of website views of the respective website section on leads and lags of dummies highlighting FOMC announcement days, among other variables. The announcement takes place at day 0. Announcement days with (without) a press conference are shown in red (blue). The vertical bars indicate 1.65 (robust) standard errors.

The corresponding values for the "FOMC" ("About the Fed") section are 10,601 (3486). This finding of an increase in the demand for policy-relevant information is similar to the result of Hoopes et al. (2015). These authors use website traffic to show how the public's demand for information about the tax code increases as the deadline for the capital-gains tax approaches.

Second, the attention cycle is different for announcements followed by a press conference compared to announcements without. Views of the "Monetary Policy" section increase by more than six standard deviations on press conference days (day 0 in the figure), but by only two standard deviations on announcement days without a press conference. According to Figure (1), the absolute difference in the number of views between days with and without a press conference amounts to 50,000 views.

Interestingly, the public's attention to the Fed starts to differ between announcements with and without a press conference as early as one week before the meeting. Attention is significantly higher on day -1 and -2, i.e. on Tuesday and Monday of the FOMC week when a press conference is

approaching.[6] Even on day -5 and -6, i.e. on Friday and Thursday of the week before the FOMC week, attention is significantly higher when the chair holds a press conference after the upcoming meeting. Hence, the demand for information is significantly higher before FOMC meetings with a press conference. Apparently, the public anticipates more important decisions in a meeting followed by a press conference. In light of the before mentioned research, which establishes that non-experts have difficulties understanding the intricacies of monetary policy setting, the increased website traffic could also be triggered by an increase in media coverage.

The difference to the FOMC cycle without a press conference is particularly visible for the views of the FOMC subsection. Website views also remain higher on day +1, i.e. on Thursday after the announcement, if there was a press conference the day before. For the non-policy sections of the website, we do not find increased attention before the meeting, let alone differences between press conference and non-press conference announcement days.

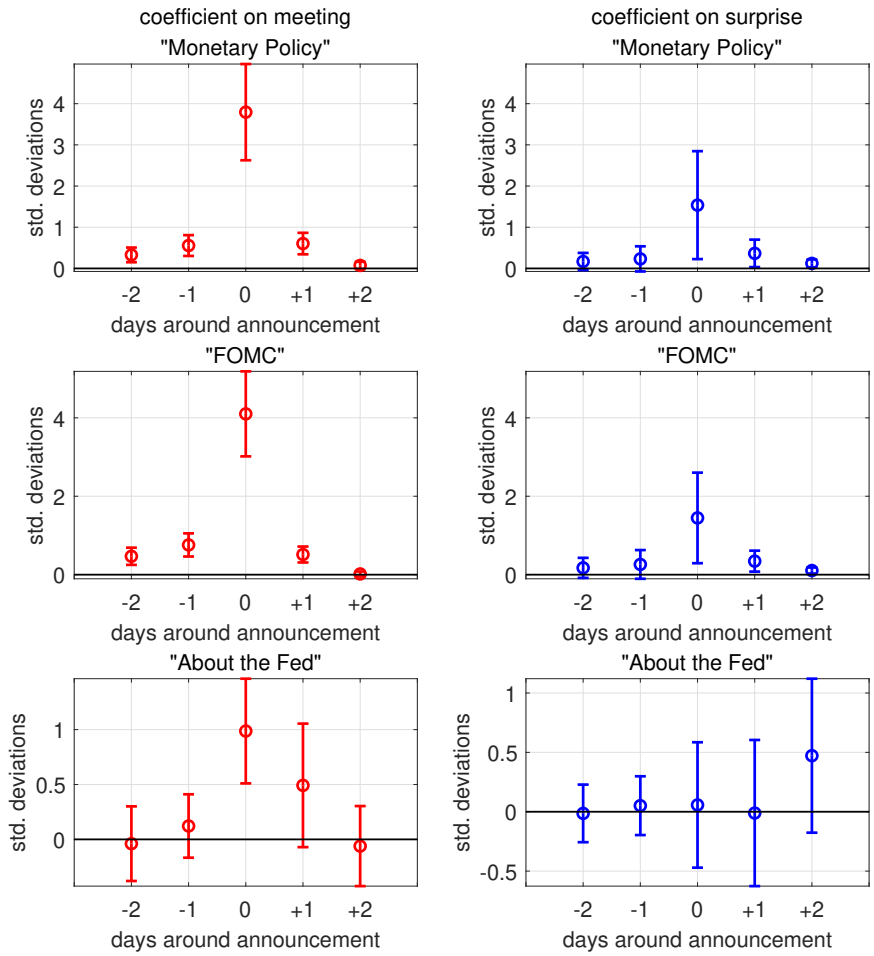
Attention on the meeting day and the following days should also be triggered by the magnitude of the monetary policy surprise. We augment the regression with the absolute intraday monetary policy surprise on FOMC meeting days identified by Swanson (2021).[7] Hence, we do not just include a binary variable indicating FOMC meeting, but also two leads and lags of the magnitude of the policy surprise. In this estimation, we do no longer differentiate between meetings with and without a press conference.

Figure (3) shows the estimated coefficients. We find that the attention cycle discussed before remains intact (left column). In addition, we now see that attention is systematically higher on the meeting day and the rest of the FOMC week following larger policy surprises (right column). Naturally, attention before the meeting day is not sensitive to the meeting surprise. The views of the non-policy section do not respond to the meeting surprise.

[6] For 31 of our 32 meetings, the announcement falls on a Wednesday.

[7] We use the sum of the Federal funds rate factor, the forward guidance factor and the LSAP factor identified by Swanson (2021).

Figure 3: Views of different sections of the Fed's website: the role of policy surprises



Notes: The left column shows the estimated coefficients from a regression of the daily number of website views of the respective website section on leads and lags of dummies highlighting FOMC announcement days, among other variables. The announcement takes place at day 0. The right column shows the coefficient on the absolute intraday policy surprise from Swanson (2021). The vertical bars indicate 1.65 (robust) standard errors.

4 Interpretation

Our key finding is that attention is indeed not constant over time.[8] The public remains inattentive in the inter-meeting period and sharply raises attention in the run-up to the meeting.

This result would be surprising if the environment were characterized by Rational Expectations. In addition, FOMC members and senior Fed officials adhere to a strict blackout period in the pre-meeting week (see Ehrmann and Fratzscher (2009), for details). Policymakers do not give speeches or interviews in this period. There is usually no significant new information available on the policy-related sections of the website during the blackout. Data releases, which could happen during the blackout period, are reported in the "Data" section of the website, not the policy-related sections. Hence, viewers of the website, who increasingly aim at acquiring new information as the meeting day approaches, do not find information that was not available a week or two before. The demand for information should thus not surge in the run-up to scheduled policy events. However, theories such as Rational Inattention (Reis, 2003, 2006), in contrast, imply that the public's ability to process information is limited. As a result, agents choose an optimal level of attention with attention increasing when the stakes are high. This is what we observe before FOMC meeting days which involve a press conference. The results from Figure (3) corroborate the notion that attention is higher after a big surprise.

This paper could also be read against the backdrop of the literature on the pre-FOMC announcement drift initiated by Lucca and Moench (2015). They document large excess returns in the days before the FOMC meeting. These returns cannot easily be explained based on standard asset pricing models. The authors (p. 363) reflect on time-variation in the level of attention as a possible explanation:

> "One possible way to rationalize the timing of returns would be to assume that investors have restricted information sets or

[8] See Haldane et al. (2021) for a similar finding based on the reception of the Bank of England's Inflation Report.

> short investment horizons due to myopic preferences. For example, investors may be slow at updating their information sets ... One could interpret the pre-FOMC window as a time when investors focus on monetary policy news because of the upcoming announcement, even if the news may have been available before."

This paper is an attempt to measure the time-varying attention to monetary policy, though we do not know to which extent this reflects market attention as opposed to media attention or academic attention.

Website views are a useful statistic to measure public attention even if they are only a small fraction of total attention. That being said, there are limitations of our data. Importantly, we have the number of views at hand, not the number of viewers. Thus, we do not know how frequent a given visitor clicks on the site, nor do we know how much time a viewer spends or how she reached the website in the first place. This is because the Fed does not run personalized cookies in order to track individual viewers. This also implies that we cannot differentiate between domestic viewers and viewers from abroad, nor do we know who chooses to acquire information about monetary policy and who chooses to ignore it. Data from a more detailed tracking of website viewers could further enhance our knowledge about market attention to the Fed and help to design central bank communication directed towards the general public.

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