Journal of Macroeconomics 49 (2016) 18–32

Contents lists available at ScienceDirect

Journal of Macroeconomics

journal homepage: www.elsevier.com/locate/jmacro

Have minutes helped to predict fed funds rate changes?

Alexander Jung*

Senior Economist at the European Central Bank, Directorate Monetary Policy, Sonnemannstr. 20, D-60314 Frankfurt, Germany

ARTICLE INFO

Article history:
Received 12 October 2015
Revised 20 April 2016
Accepted 24 April 2016
Available online 27 April 2016

JEL codes:
C34
E52
E58

Keywords:
Monetary policy
Communication
FOMC minutes
Predictability
Ordered Probit

ABSTRACT

This paper examines whether the release of minutes of the Federal Open Market Committee (FOMC) has provided markets with systematic clues about its future policy rates. We explain the future fed funds rate changes using Ordered Probit models (sample 1996–2008). We find that timely FOMC meeting minutes have provided assurance to markets about the most likely path of future interest rates. Though, their release did not cause markets to fundamentally revise their expectations on future policy decisions. In line with Riboni and Ruge-Murcia (2014), the paper also finds that the internal skew derived from the Reserve Bank Presidents' interest rate preferences of the FOMC contained systematic information about fed funds rate changes at forthcoming meetings.

1. Introduction

On a global scale, central banks have been very active in overhauling their monetary policy frameworks so as to enhance transparency and monetary policy effectiveness (Poole, 2005a; Geraats, 2006; Dincer and Eichengreen, 2014; Horváth and Vaško, 2016). More openness about individual views of policy-makers may enhance monetary policy transparency, but increasing the degree of openness may not always be desirable from the perspectives of accountability and clarity (Issing, 2005). In addition, as shown by Meade and Stasavage (2008), greater openness about central bank policymaking may prevent the full and frank (internal) discussion among policy-makers that is needed to make the best decisions.

In policy discussions on enhancing central bank transparency, central bank minutes have received particular attention in academic debates. By now, most major central banks subscribe to the practice of publishing timely minutes of their internal deliberations together with or without voting records (see Table 1 and Hammond, 2012). Central banks provide the public with very detailed information about the confidential deliberations of a monetary policy committee for several reasons. First, they may have to comply with a legal requirement (e.g., the Bank of Japan, the Bank of England, and the Federal Reserve). Second, by explaining in more depth the considerations that lie behind the decisions of the monetary policy committee, they aim to enhance transparency about monetary policy decision-making. In some instances, notably in frameworks with individual accountability of policy-makers, publishing individual votes is part of the accountability process. Third, by revealing the main factor(s) contributing to a decision, a central bank signals openness. Fourth, information about policy options and

* Corresponding author.
E-mail address: alexander.jung@ecb.europa.eu

http://dx.doi.org/10.1016/j.jmacro.2016.04.008
0164-0704/

Table 1
Publication of minutes by main central banks.

Central bank	Meetings (per year)	Published minutes	Publication lag (in weeks)	Published voting record
Bank of Canada	8	no	na	no
Bank of England(1)	12	yes	2	yes
Bank of Japan (2)	8	yes	7 to 8	yes
European Central Bank (3)	8	yes	4	no
US Federal Reserve	8	yes	3	yes
Norges Bank	6	no	After 12 years	yes
Reserve Bank of Australia	12	yes	2	no
Swedish Riksbank	6	yes	2	yes
Swiss National Bank	4	no	na	no

Notes: "na" means not applicable. (1) The Warsh Review recommended in December 2014 that the MPC should in future meet on eight occasions through the year. The Government has announced its intention to implement these changes. (2) Prior to 2016 the Bank of Japan had 14-19 meetings per year. (3) Since 2015, the ECB publishes accounts of the Governing Council meetings. In addition, as of January it changed from a monthly to a six-week meeting cycle.

about disagreement in a monetary policy committee can help to increase predictability of policy decisions. Fifth, publication of minutes gives a clear structure to the decision-making process and may enhance effectiveness of internal discussion.

The communication strategy of the US Federal Reserve (Fed) is of particular interest, since it has evolved over time and the Fed has a long tradition in publishing minutes and voting records. Over recent decades, the Fed has undertaken sustained efforts to improve the public's understanding of its monetary policy (Woodford, 2005; Spencer et al., 2013).[1] It has managed to change from a regime of secrecy to a high level of transparency thereby aiming at making monetary policy more effective (Yellen 2012). The Fed, which is today ranked among the most transparent central banks in the world (Dincer and Eichengreen, 2014; Horváth and Vaško, 2016), provides markets with a wide range of communications which contain information about the future monetary policy stance (e.g., statements, speeches, minutes, press conferences, transcripts). The literature has shown that financial markets respond to all sorts of communications by the Fed (Kohn and Sack, 2003; Bernanke et al., 2004). Most empirical studies find that the Fed is a very predictable central bank and that its communications have helped markets to anticipate future policy rate changes (e.g., Wilhelmsen and Zaghini, 2011; Ehrmann and Fratzscher, 2007a). Though, a knowledge gap exists as to whether the publication of the FOMC minutes has helped markets in real time to improve their predictions of forthcoming fed funds rate changes.

The aim of this paper is to examine whether the release of FOMC minutes has provided markets with systematic clues about the future course of the Fed´s monetary policy. Therefore, far many studies have examined the Federal Open Market Committee´s (FOMC) voting record showing that members´ dissent can help forecast future policy decisions (e.g., Chappell et al., 2005; Meade, 2005; Jung, 2013; Riboni and Ruge-Murcia, 2014). For several central banks, the interest rate skew as a measure of disagreement in a monetary policy committee contains information that helps markets to predict future policy moves (Gerlach-Kristen, 2004; Horváth et al., 2012a). For the Fed a related study by Horváth et al. (2012b) has shown that, for the early Greenspan years, the interest rate skew from the voting members could have helped markets to predict the fed funds rate. Since in that period the voting record was released after the subsequent meeting, markets could not use the skew for interest rate predictions in real time. We also address the more specific question whether this result still holds for the Fed, because over the past decades the Fed has made important changes in its disclosure policy, such as the timelier release of the minutes, the release of the voting record immediately after the meeting and the occasional adoption of forward guidance. Moreover, a host of factors contributed to more consensual voting in the FOMC such as the Great Moderation, the Taylor rule as a framework to guide policy decisions, Chairman Greenspan's outstanding leadership (El-Shagi and Jung, 2015a), the FOMC bias statement (Chappell et al., 2007), and informal rules limiting the dissent, such as the "musical chairs" (Meyer, 2004).

The present analysis focuses on the sample 1996–2008 and deliberately excludes the more recent episode of the zero lower bound from it. Unlike for the MPC members of the Bank of England, FOMC members' votes do not solely apply to the monetary policy decision itself, but they may also include members' views on extraordinary measures. In such an environment, the quality of the interest rate skew as a predictor for forthcoming policy rate changes can deteriorate. For example, between March 2010 and September 2013, the voting record signalled disagreement in the FOMC about whether to embark on further quantitative easing measures and on whether to exit from the extraordinary accommodative stance. Some members were requesting the termination of the QE programme with their dissent, which implied a positive skew, although, given the Fed's forward guidance it was clear to markets that it would maintain its fed funds target rate unchanged at the level of 0–0.25%.

[1] Chairman Bernanke introduced a number of additional communication measures. In November 2007 the FOMC added numerical forecasts to the meeting minutes four times per year, with a three-year horizon. On 23 February 2009, the Federal Reserve (Fed) launched a new website and provided detailed information about the Fed's policy actions during the financial crisis. On 27 April 2011, it added a quarterly press conference to the release of a summary of economic projections. On 25 January 2012, it provided a statement on the committee´s longer-run goals and monetary policy strategy including a 2% inflation target and Fed policy-makers started reporting their short-term interest rate projections over the next few years ("dot plot chart").