Monetary Policy Committees: Comparing Theory and "Inside" Information from MPC Members*

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How do monetary policy committee (MPC) members form their views about the appropriate level of the interest rate? To what extent do they change their minds during the deliberations in the policy meeting? How important is the chairman? These are issues discussed and analyzed in the literature but so far with limited evidence of how this actually works in practice. We asked former and serving MPC members in Sweden and Norway. The responses confirm a number of theoretical assumptions and predictions, but some results also challenge the conventional view of monetary policymaking by committees. For instance, there seems to be rather limited pooling within the committee; input from the staff is more important than input from other MPC members. Members tend to have decided beforehand how to vote at the policy meeting, and they have a firm idea of what the positions of their colleagues will be. We also find that there is a preference for the status quo regarding institutional features in both central banks, implicitly suggesting that the exact institutional setup is not

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crucial. One way of interpreting this would be to say that the two central banks have managed to establish processes that, according to the respondents, ensure the quality of policy decisions irrespective of the institutional setup.

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1. Introduction

Monetary policy is in many countries set by a committee. The shift away from a single policymaker in charge of interest rate setting has triggered a large number of papers examining the merits and shortcomings of monetary policy committees (MPCs). Most of these papers are theoretical and use models that make assumptions about the characteristics of MPC members, about the way information is gathered and exchanged, and about the procedures and dynamics of the actual policy meetings. Such assumptions influence the results these models yield and the policy recommendations they imply.

In this paper we reexamine assumptions, results, and ambiguous empirical findings in the literature. We do so by asking the people who should know best—actual MPC members. The MPC members interviewed are from Norges Bank (the central bank of Norway) and Sveriges Riksbank (the central bank of Sweden). While both banks operate the same type of flexible inflation targeting in very similar cultures and economies, the Norwegian MPC can be viewed as a collegial committee, whereas the Swedish MPC is generally seen as an individualistic committee.

The research method of posing direct questions to economic agents has traditionally been subject to some skepticism but has become more common during the last two decades.[1] Surveys may add important information on what lies behind agents' decisions, thus enabling better interpretations of findings based on data on realized decisions and potentially pointing to new directions for future theoretical research. For example, studies asking firms about their price-setting behavior have been conducted in a large number of countries, generating valuable information on, for instance,

[1] See Boulier and Goldfarb (1998) for an overview of the methodological debate.

the frequency of price reviews and the sources of price rigidity.[2] Surveys have also been used to investigate central banks' views as regards monetary policy—for example, why credibility is considered important and what makes a central bank credible (Blinder 2000).

While surveys have limitations, we believe they can provide useful evidence on monetary policymaking by committees, in much the same way as they have in other areas.[3] The information contained in our survey is unique, as it is to our knowledge the only survey in the literature where the respondents are actual MPC members. In addition, surveying two different types of MPC in two relatively similar countries with the same type of monetary policy regime provides an interesting comparative analysis.

The issues covered in the paper are the optimal size and composition of an MPC (section 3), the deliberation within MPCs (section 4), the role of the governor (section 5), the heterogeneity between committee members (section 6), and the merits of transparency (section 7). In each section we relate our results to the relevant literature. We discuss some of our results and conclude in the final section of the paper.

Several assumptions and results from the previous literature are confirmed by our survey: a committee is preferable to a single policymaker, but the committee should not be very large; the chairman seems to have more influence in a collegial committee than in an individualistic committee; and MPC members do indeed have heterogeneous preferences.

Other assumptions and results are not confirmed by our survey. There seems, for instance, to be a rather limited amount of pooling of information within the committee. Instead, committee members rely heavily on input from the staff. As regards the policy meeting, members tend to have decided beforehand how to vote and very rarely change their minds during the meeting. They also have a firm idea already before the meeting of their colleagues' positions, and

[2]Studies include Blinder et al. (1998) for the United States; Fabiani et al. (2006) for the euro area; Hall, Walsh, and Yates (2000) for the United Kingdom; Amirault, Kwan, and Wilkinson (2004) for Canada; Apel, Friberg, and Hallsten (2005) for Sweden; and Langbraaten, Nordbø, and Wulfsberg (2008) for Norway.

[3]Limitations arise because responses may be sensitive to the precise wording of the questions or because respondents sometimes have incentives to conceal the truth, etc. See Blinder et al. (1998) for a discussion.

this is not only the case for the full-time committee members at the Riksbank but also for the part-time members at Norges Bank. Thus, the monetary policy decision is more likely to be affected by "pooling by voting" than "pooling by talking."

When asked about the role of external MPC members, the choice of communication strategy, and whether voting records should be published, our respondents displayed a tendency to support the status quo in their respective committee. This indicates that members are content with the present institutional setup and suggests that there is not one obvious preferable choice in this respect.

2. The Questionnaire and the Respondents

2.1 Facts about Sveriges Riksbank and Norges Bank

Both the Riksbank and Norges Bank are inflation targeters, but they differ in certain institutional respects, such as the composition of their monetary policy committees.

The Executive Board of the Riksbank consists of six members. One of the members is appointed governor and is chairman of the Executive Board. Members are appointed for a period of five or six years according to a rolling schedule. There is no restriction on the number of periods for which a member may be reappointed. Several members have served on the board for more than one term, and one member has been reappointed twice. When appointing members, a guiding principle is that "the appropriate competence" should be represented on the Executive Board (Government Bill 1997/98:40). With few exceptions, members have been recruited from outside the bank, typically from the financial sector, government agencies, or academia.

All six Riksbank MPC members are internal full-time members. There is no staff attributed to a particular member, and the members do not hire their own staff. Interest rate decisions are made by voting, with results announced the following day, and the members can publicly express their views. If an equal number of members support different proposed decisions, the chairman has the casting vote. The Riksbank board is thus considered an individualistic, as opposed to a collegial, committee.

The Riksbank is today ranked among the world's most transparent central banks.[4] The minutes of the monetary policy meeting have been published with a lag of two weeks practically ever since the board was established in 1999. Statements in the minutes have been attributed since May 2007, showing who said what during the discussion. Information about who has dissented and their preferred policy rate was initially published together with the minutes. Since May 2009 this information has also been provided in the press release announcing the interest rate decisions.

In the period from 1999 to 2009 (the years covered in the Riksbank survey), there were dissenting votes at about one-third of the monetary policy meetings. Except for the governors and a member who had only recently been appointed at the time of the survey, all members in the sample had dissented at least once. Disagreement was considerably more common in 2010–13, increasing the average share of meetings with dissents for the whole period to more than a half.

The Executive Board of Norges Bank consists of seven members: the governor, the deputy governor, and five external members. The governor and the deputy governor are appointed for six years and may be reappointed once. The external members are appointed for four years according to a rolling schedule and may be reappointed twice. Several members have been on the board for two terms. When appointing members, importance is given to ensuring a breadth of background and expertise, with particular emphasis on economics and finance and a good grasp of socioeconomic issues (Proposition to the Odelsting No. 81 (2002–2003)). Typically, the external members are recruited from outside the bank and have an academic, political, and/or business background.

The external members of the Executive Board of Norges Bank work part-time and keep their ordinary jobs while serving on the board. There is no staff attributed to a particular member, and the members do not hire their own staff. The board is a collegial committee, where the governor seeks a consensus decision. Formally, each member has one vote. The members may dissent from the governor's interest rate proposal, but dissents are not made public for a long

[4]See, e.g., Dincer and Eichengreen (2013) and Eijffinger and Geraats (2006).

period (sixty years up to March 2012, twelve years since). Attributed minutes from the policy meetings are not provided, but since 2011 a summary of the Executive Board's assessment has been published in each Monetary Policy Report.

Table 1 shows that Norges Bank and the Riksbank have smaller MPCs and less frequent monetary policy meetings than the Bank of England (BoE), the Federal Reserve (Federal Open Market Committee, or FOMC), and the European Central Bank (ECB). At these three central banks, MPC members have their own dedicated staff, unlike at Norges Bank and the Riksbank. Dissents on the Swedish MPC are more frequent than on the Federal Open Market Committee but slightly less common than on the Bank of England's MPC.

Figure 1 shows the five-year moving average of headline inflation and the inflation targets in the two countries. Except for some years around 2000, the paths of inflation have been quite similar. Policy rate movements have also been quite similar; see figure 2. During the period 1999–2013 Norges Bank changed the policy rate fifty times, and the Riksbank forty-eight times.

2.2 The Survey

Most questions in the survey focused on institutional design, the decision-making process, and communication. Typically, members were asked to grade a statement on a four-grade scale, e.g., "unimportant," "not very important," "fairly important," and "very important." In order to facilitate comparison, we phrased the questions to the members of the two MPCs as similarly as possible. However, due to institutional differences, some questions were somewhat adjusted. Respondents had the opportunity to provide comments in connection with each block of questions. For some issues we also explicitly asked the members if they had other explanations or views than the ones suggested in the questionnaire.

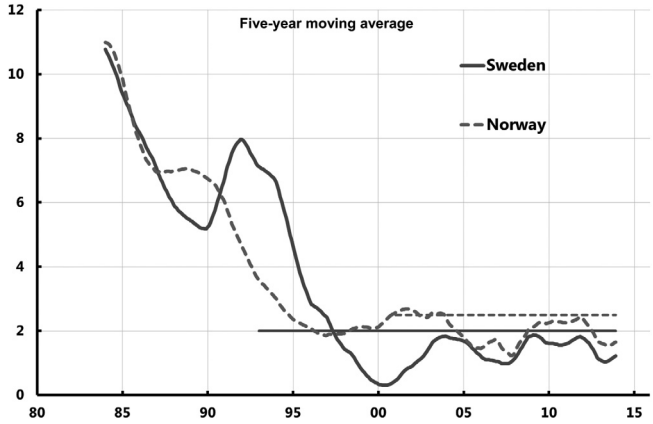
The main survey was conducted during the period May–June 2009 for the Riksbank MPC members and during the period March–April 2011 for the Norwegian respondents. We sent the questionnaire to present and former members of the Riksbank's and Norges

Table 1. MPC Features and Inflation (2000–13)

	MPC					Inflation[a]	
	Size	**Meetings per Year**	**Meetings with Dissents[a]**	**Individualistic**	**Own Staff**	**Objective**	**Mean**
Norges Bank	7	6	N/A	No	No	2.5	2.0
Sveriges Riksbank	6	6	51	Yes	No	2	1.4
FOMC	12	8	34*	No	Yes	N/A	2.4
BoE	9	12	61*	Yes	Yes	2/(2.5)**	2.2
ECB	23	12	N/A	No	Yes	≤ 2	2.1

[a]Percent.
*Includes votes on asset purchases.
**The inflation objective for the Bank of England was changed in December 2003 from 2.5 percent RPIX to 2 percent CPI inflation.

Figure 1. CPI Inflation and Inflation Targets in Norway and Sweden

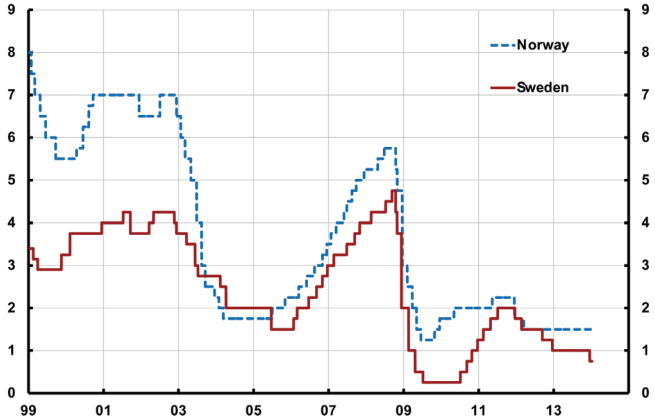


Bank's MPCs in the period from 1999 until the date of the survey. A follow-up survey was sent to some of the members in 2013; see below. Because of the small number of internal members (governors and deputy governors) at Norges Bank in the period we considered, it was difficult to ensure their anonymity. We therefore decided to ask only external members. Since 1999 and up to the date of the survey, a total of thirteen people served on the Riksbank's MPC, while seventeen external members served on Norges Bank's MPC.[5] In order to maximize the number of responses and encourage honesty, we emphasized the confidentiality of individual responses. From the Riksbank we received answers from twelve out of thirteen MPC members, while from Norges Bank we received answers from thirteen out of seventeen members.

In October 2013 we conducted a smaller follow-up survey, with the purpose of obtaining clarifying information about certain issues in the original study. The survey contained supplementary questions on the influence of fellow colleagues on the members' own decisions,

[5]We have included two alternate members of Norges Bank's MPC, because from 2010 the alternate members have attended the meetings and the discussions in the same way as the ordinary members, except that they have no formal voting powers.

Figure 2. Policy Rate Developments in Norway and Sweden



the perceived pros and cons of committee decision making during a crisis, and views on internal vs. external members. As we did not deem it possible to approach all the previous respondents again, we sent the follow-up survey to the six members of the Riksbank's MPC of 2009 and to four members of Norges Bank's MPC of 2011. We received responses from all ten. In the following, the results from this survey are discussed where relevant.

We next turn to the first set of questions in the survey, which deal with the size and composition of the MPC. For expositional reasons, we have chosen to report only the median responses for most of the questions, but report or comment on the dispersion when this information is of particular interest or when the distribution of responses is much skewed.

3. Size and Composition

3.1 Why an MPC?

Blinder (2006) argued that MPCs were not necessary before central banks became independent because "there is no reason to have a monetary policy committee when the central bank is simply taking

orders from its government" (p. 21). With independence came the trend towards MPCs.

In the literature, the main rationale for having a group of people, rather than one individual, responsible for monetary policy decisions is that "several heads are better than one." The idea is that MPCs improve on decisions by pooling members' information and knowledge (see, e.g., Blinder 2007).[6] Moreover, pooling is an insurance against extreme preferences any single MPC member may hold.

The perception that groups tend to make better monetary policy decisions than individuals has received empirical support. For example, Blinder and Morgan (2005, 2008a, 2008b) and Lombardelli, Proudman, and Talbot (2005) find in experiments where students make monetary policy decisions that the decisions are better if made by a group. In a theoretical study, Gerlach-Kristen (2006) finds that if perceptions of the state of the economy differ between individuals, a committee achieves better policy outcomes than a single policymaker.

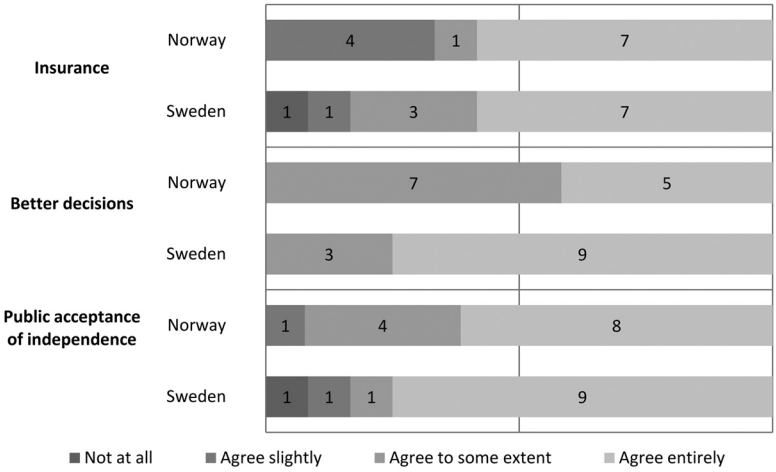
What are the views of actual MPC members on the reasons for having a committee? We asked the members to what extent they agreed with the following statements:

- *Public Acceptance of Independence:* Sufficient acceptance among the general public and politicians of a system where the conduct of monetary policy is delegated to an (independent) central bank requires that monetary policy decisions are made by a group of people and not by one individual.
- *Better Decisions:* Monetary policy decisions will be better if they are made by a group of people instead of one individual.
- *Insurance:* Making decisions as a group functions as an insurance against extreme preferences one individual governing monetary policy might hold.

Figure 3 shows the distribution of responses, where the vertical line represents the median response. We see that the majority of the

[6]This finding goes back to Condorcet's jury theorem, which dealt with court decisions.

Figure 3. Why Monetary Policy by Committee?



Swedish and Norwegian respondents agreed with all three reasons for having a committee.[7]

Are there circumstances where committee decision making is perceived as less favorable? Such a situation might arise when decisions have to be made very quickly, like during a crisis. This is an issue we addressed in the follow-up survey. We asked the following questions: If you compare the situation during a crisis with a more normal situation, what pros and cons do you see with decisions in the crisis situation being made by a group of people? Do the pros outweigh the cons or vice versa?

All respondents, in both Norway and Sweden, found that the pros of group decision making outweigh the cons even in a crisis. Members found that groups are more likely to come up with sufficient information and all relevant arguments, that groups reduce the risk of making large mistakes, and that a group can better lend legitimacy and credibility to serious decisions. Some members mentioned the potential shortcoming that a group may not be able to make decisions sufficiently fast. It was, however, not given much weight, as it

[7]In some cases, like here, some respondents did not answer all questions. In this case the median is not affected by the two missing answers.

was considered not to be borne out by practical experience. Several members of the Swedish MPC stressed that there were no problems of this kind during the financial crisis. One respondent raised the possibility that considerable disagreement within the group may damage public confidence, which is particularly problematic during a crisis. Others argued that decisions tend to be easier to agree upon during a crisis, implicitly suggesting that such a situation is not very likely.

3.2 The Optimal Size

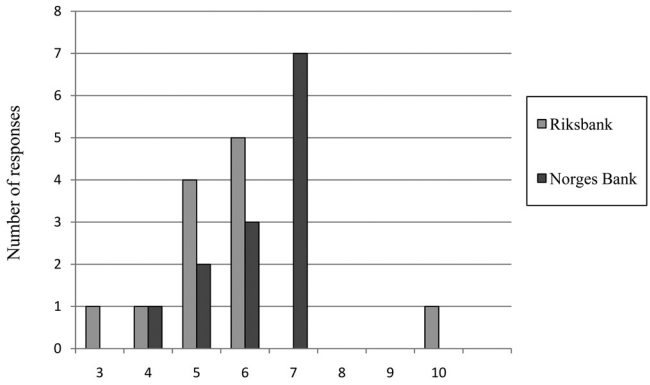
If MPCs improve decisions by pooling members' information and knowledge, this suggests in isolation that the bigger the committee, the better. But there are also costs associated with increasing the size of a committee, such as less thorough (or more time-consuming) discussions and more potential for free-riding, i.e., preparing poorly for policy meetings and instead relying on input from other MPC members.

The question of the optimal MPC size is addressed directly or indirectly in different strands of the literature. In an experimental study on monetary policy decisions, Blinder and Morgan (2008b) find that eight-person groups do not perform significantly better than four-person groups. In a review of the rather small economics literature on committees as well as the older and larger literature on committees in other social sciences, Sibert (2006) concludes that the ideal MPC should not have more than five members. In another interdisciplinary survey of studies, Erhart and Vasquez-Paz (2007) conclude that the optimal committee consists of roughly five to nine members.[8] In simulations using a theoretical model of dynamic decision making by a monetary policy committee, Weber (2010) arrives at the conclusion that there is relatively little benefit in having a committee with more than seven members.

We therefore asked the members what they believed to be the most appropriate size of their respective MPCs. When asked if they

[8]Gerling et al. (2005) survey the game theory literature on committee decision making but do not settle on a specific figure. Berger and Nitsch (2008) provide an international comparison of MPC size.

Figure 4. Appropriate Size of MPC



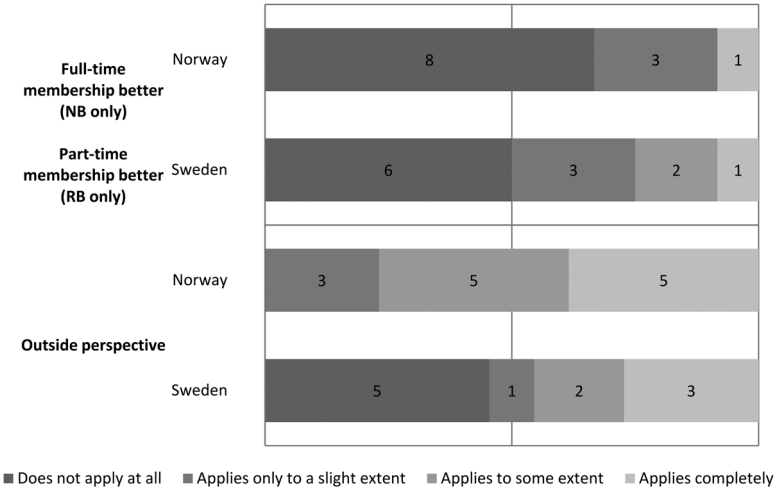
thought their current six-member board was too small, the right size, or too large, half of the Riksbank MPC members thought it was too large, and only one member thought it was too small. The Norwegian respondents were more satisfied with their own seven-member board. More than two-thirds of the members thought that the size was right, while the rest thought it was too large. When asked to state their preferred committee size, the responses were distributed as shown in figure 4. Although the preferred size is within the estimated span of the optimal size in the literature, the average response lies within the lower region of that span.

In the space provided for comments, one respondent wrote that finding qualified people without conflicts of interests can be a problem in a small country like Norway or Sweden. No other member gave any explanation as to why they preferred a specific size. However, as we shall see below, members do not consider input from other MPC members very important for their own views, and this may explain why they believe a relatively small committee is sufficient.

3.3 The Value of Outsiders

One aspect of the composition of an MPC that has received much attention in the literature is the inclusion of external members. One could argue that MPC members should be heterogeneous in order to prevent a high positive correlation in individual judgment errors.

Figure 5. Internal/Full-Time vs. External/Part-Time Members



Related to this, Sibert (2006) argues that external members help avoid "groupthink," which occurs when the committee members' striving for consensus makes them stop paying sufficient attention to alternative courses of action. The committee may then make worse decisions than any of its members would have made on their own.

To investigate views on the issue of internal vs. external members, we asked the Riksbank MPC members to what extent they thought the following statement applied: Having external members would contribute to better decisions, as it adds information, knowledge, and an "outside perspective." The Norges Bank MPC members were asked the same question, but "would contribute" was replaced with "contributes."

The responses are shown in figure 5. The Riksbank MPC members tend not to support the view that having external members would provide a useful "outside perspective" on decisions, although the dispersion in the responses was quite large. One of the members wrote that an MPC with personal responsibility, as in Sweden, should consist of members who all have the same formal status: "Otherwise, they do not have the same possibility to prepare for the decisions to be made." The same member thought the "outside

perspective" can be ensured by members reading external analyses and talking with other people active in various areas. Another member found that "it is more important to have different skills represented in the staff and that the MPC is composed of members with skills acquired from work outside the bank." The Norwegian respondents, however, quite strongly support the view that having external members is beneficial.

The external vs. internal issue was one of the topics addressed in the follow-up survey conducted in October 2013. Even though we had already obtained some explanations from the respondents in the original survey, we wanted to know more about the motives behind the MPCs in both Norway and Sweden defending their respective setup. In the follow-up survey, we asked the following: Assume that you were to set up a monetary policy committee "from scratch." Would you recommend that the committee consists of only internal members, or should it also include external members who are not employed full-time at the central bank but have their main occupation elsewhere, for example in public administration or academia? What are the main motives for your recommendation?

The responses essentially confirmed the results from the original survey. Only one of the six Swedish respondents advocated external members, thinking it would reduce the risk of groupthink. Another respondent was somewhat inconclusive, basically listing pros and cons. This member argued that if the committee is in charge of the bank's complete set of activities, as is the case today, "it would perhaps be more natural if it were internal." The Swedish respondents favoring only internal members believed it would be difficult to have a judicious and focused forecasting and decision-making process with a committee containing external members, and that internal members are likely to have an informational advantage that makes it harder for external members to influence the decisions. Members also found that in a small country like Sweden it may be difficult to find external members for whom there is no conflict of interest between monetary policy and their regular employment. The Norwegian respondents all favored external members and again gave considerable weight to the groupthink argument.

There was thus a tendency for MPC members to defend their own respective systems and thus the "status quo." We also found

a preference for the "status quo" in other matters, which we will return to later. In the discussion at the end of the paper we propose some "institutional" explanations for these preferences for the status quo.

To sum up this section, MPC members believe that they make better decisions as a group than as individuals. This is in line with mainstream theory. They also prefer relatively small committees. Their views on external members differ, however. Riksbank MPC members prefer an MPC with only internal members, and the Norges Bank MPC members prefer a committee which also includes external members. These preferences may reflect differences in the practices and prevailing institutional frameworks in the two countries. We will discuss potential institutional explanations for these diverging results in more detail in the last section of the paper.

Having reviewed the composition of MPCs, we next turn to the question of how interest rate decisions are arrived at.

4. Deliberation

An MPC meeting typically consists of two principal stages. In the first stage—the deliberation stage—the members exchange views. In the second stage—the decision stage—the MPC reaches the policy decision through an agreed aggregation rule (majority voting, for example).

Like any economic agents, MPC members receive information, interpret the information, and update their judgments. The theoretical literature often thinks of this process as Bayesian updating: the MPC members have some priors, or "beliefs," that are confronted with new information, and they form their posterior judgments (Chappell, McGregor, and Vermilyea 2012). In this section, we consider two types of deliberations: the deliberations within the MPC and the deliberations between the MPC and the staff.

At both central banks, the policy process starts at preliminary meetings a few weeks before the final policy meeting; see, e.g., Hallsten and Tägtström (2009) for the case of Sweden. It is therefore legitimate to suspect that members have more or less formed their final and definitive view before the final monetary policy meeting. We end this section by asking whether this is actually the case.

4.1 Deliberations within the MPC

In the existing theoretical literature on MPCs, it is assumed that there is scope for committee members to pool their different information sets, which improves policy outcomes; see, e.g., Berk and Bierut (2011), Gerlach-Kristen (2006 and 2008), and Weber (2010). To investigate the relevance of this assumption for MPCs in practice, we asked the respondents how important they considered the other MPC members as a source of information on the following:[9]

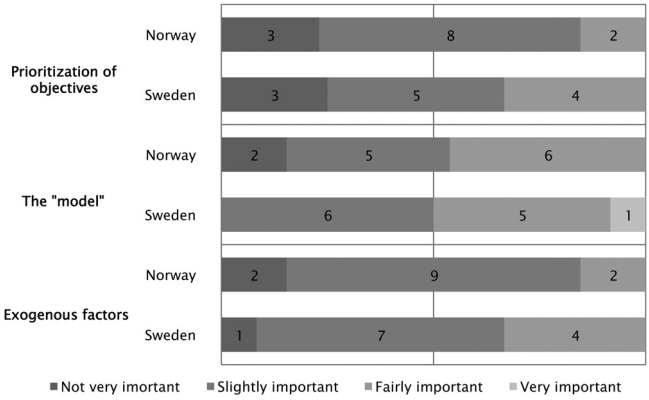
- *Exogenous Factors:* The current economic situation and trends that the bank is unable to influence, such as future oil prices and international economic developments.
- *The "Model":* How the economy functions and thereby how things will develop if the central bank acts in one particular way or another.
- *Prioritization of Objectives:* How quickly inflation should be brought back on target/prioritizing between stabilizing inflation and stabilizing the real economy.

The results are summarized in figure 6. Most members did not consider their fellow members as very important information sources. The median respondent tended to view other members as "not very important" sources of information on all three issues. One explanation for this is probably that in neither of the two banks do members of the MPCs have their own staff. Most of the work on collecting new information, analyzing this information, doing research, building models, etc. is conducted by the bank's staff. Indeed, the important role of the staff is confirmed in the next subsection.

In the follow-up study conducted in October 2013, we looked further into this issue. Instead of referring to the three information categories used in the first survey, we posed the question in a general form: How useful would you say your colleagues on the board are/were to you in the process of reaching your monetary policy position? The respondents were asked to rate their colleagues' contribution as "not very useful," "somewhat useful," "quite useful,"

[9]The Norges Bank MPC members were asked how important the other external members were, as the two internal members (governor and deputy governor) also represent the staff.

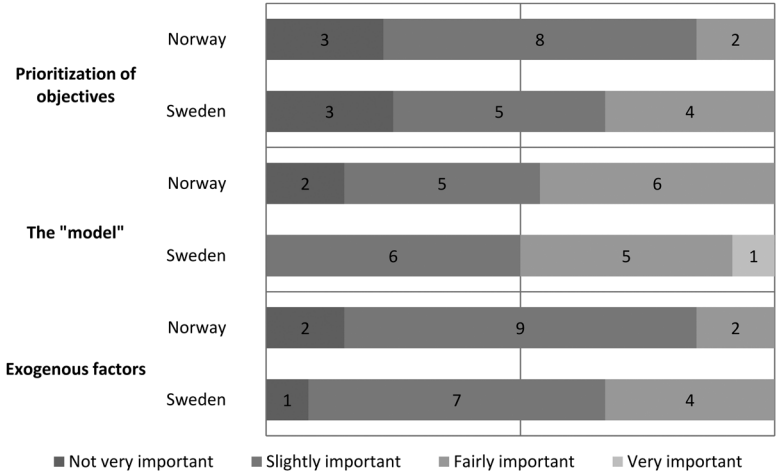
Figure 6. The Importance of Peer Members as Sources of Information



or "very useful." We also asked the respondents to qualify their answers and, in particular, whether there is any kind of input that the members get from their colleagues that they do not get from the staff.

Most respondents in both Norway and Sweden recognized that there are indeed inputs provided only by their colleagues, such as anecdotal information from a particular field of expertise, different interpretations of the information from the staff, and reports from international meetings. Yet at both Norges Bank and the Riksbank, colleagues seem to play quite a modest role when members form their views. The median response for both banks was that colleagues were only "somewhat useful." At Norges Bank, this was the alternative chosen by all the respondents, whereas there was some dispersion in the Riksbank responses, with one responding "quite useful" and one "very useful." One of the respondents from Norges Bank emphasized that the main purpose of having external members is not to provide more information but to ensure that the staff's arguments are well founded. The same respondent also mentioned that it is advantageous that there are more people to decide on the balance between different objectives, which is partly "political" in nature. Our overall interpretation of the results is that members see the benefits of committee decision making as being mainly about providing a

Figure 7. The Importance of Peer Members as Sources of Information



check-and-balance mechanism, and that "pooling by voting" is more important than "pooling by talking."

4.2 The Staff's Role

The theoretical literature on MPCs barely considers the staff's role in the pooling process.[10] But monetary policy decisions are not made in a vacuum. As noted above, the MPC receives considerable inputs from the central bank staff.

How important are these inputs to MPC members? We asked them the same questions as in section 4.1, this time focusing on the role of the staff. Figure 7 shows the results. Most respondents found the staff more important than their fellow members. This suggests that the existing theoretical literature on MPCs, which focuses on information sharing among the MPC members themselves, could miss an important aspect of the decision-making process. Future theoretical work on collective decision making in central banks would

[10]To our knowledge, the only exception is Claussen et al. (2012), who assume that the chairman has access to the staff and is thereby better informed than the other members. They also consider information pooling within the staff prior to the staff advice to the chairman.

therefore benefit from focusing more on the interaction between the staff and the MPC members.[11]

The staff seem to have more influence regarding exogenous factors and the model (which together form the forecasts) than regarding the prioritization of objectives. This is likely to reflect that the latter represents true *policy* decisions as opposed to *economic analysis*. It might also reflect the staff participating less actively in discussions on how to balance the various policy trade-offs.

Although the results from this survey may not necessarily carry over to other central banks, they could be interpreted as giving some support to the results in Romer and Romer (2008), who found that the Federal Open Market Committee (FOMC) members' forecasts did not add any extra value to the staff forecasts. Based on this, Christina and David Romer argued that "a more effective division of labor within the Federal Reserve System might be for the staff to present policymakers with policy options and related forecast outcomes, and for policymakers to take those forecasts as given. With this division, the role of the FOMC would be to choose among the suggested alternatives, not to debate the likely outcome of a given policy." Our results indicate that to some extent such a division of labor takes place, albeit perhaps implicitly, during the monetary policy process preceding the MPC meetings in Norway and Sweden.

Even though respondents from both central banks considered the staff more important than their fellow MPC members, there were some small differences between the groups. The staff seems even more important for the Riksbank MPC members than for the Norwegian respondents, at least as sources of information on current developments and the workings of the economy. This is likely to reflect that the Riksbank MPC members are internal and have easier access to the staff than the external Norges Bank MPC members.

4.3 How Much Is Settled before the Meeting?

As noted above, the policy process in both banks has been under way for a number of weeks by the time of the policy meeting. To

[11]This issue seems particularly important for central banks that publish interest rate paths, as one of the Riksbank respondents wrote that the role of the staff has increased since publication began. See also the discussion in the conclusion.

find out more about the state of affairs before the meeting, we asked the members the following questions:

- *Decided Prior to Meeting:* How often has it happened that you have in principle decided [how you intend to vote]/[which decision you prefer][12] before the monetary policy meeting and not changed your mind during the meeting?
- *New Information:* How often has it happened that information and arguments that are new to you have been presented at the monetary policy meeting?
- *Changed My Mind:* How often has it happened that you have changed your mind during the monetary policy meeting despite having in principle decided in advance?
- *Not Decided Prior to Meeting:* How often has it happened that you have not known [how you would vote]/[which decision you would prefer] prior to the monetary policy meeting?

We also wanted to obtain information about how much the members knew about the views of the other members before the meeting. Due to the institutional differences, we asked the two groups of MPC members somewhat different but related questions. The Riksbank MPC members were asked the following:

- *Clear Impression of Majority:* How often has it happened that you have had a clear impression of how the *majority* of your colleagues intend to vote before going into the monetary policy meeting?
- *Clear Impression of All Members:* How often has it happened that you have had a clear impression of how *all* of your colleagues intend to vote before going into the monetary policy meeting?

The Norges Bank MPC members were asked the following:

- *Clear Impression of Other External Members:* How often has it happened that you have had a clear impression of which

[12] The Riksbank MPC members were given the first formulation, and the Norges Bank MPC members were given the second, as there is less explicit voting in the Norwegian collegial MPC.

decision the other external members would prefer before going into the monetary policy meeting?

- *Clear Impression of the Internal Members:* How often has it happened that you have had a clear impression of what interest rate decision the governor (or deputy governor) would propose at the monetary policy meeting?

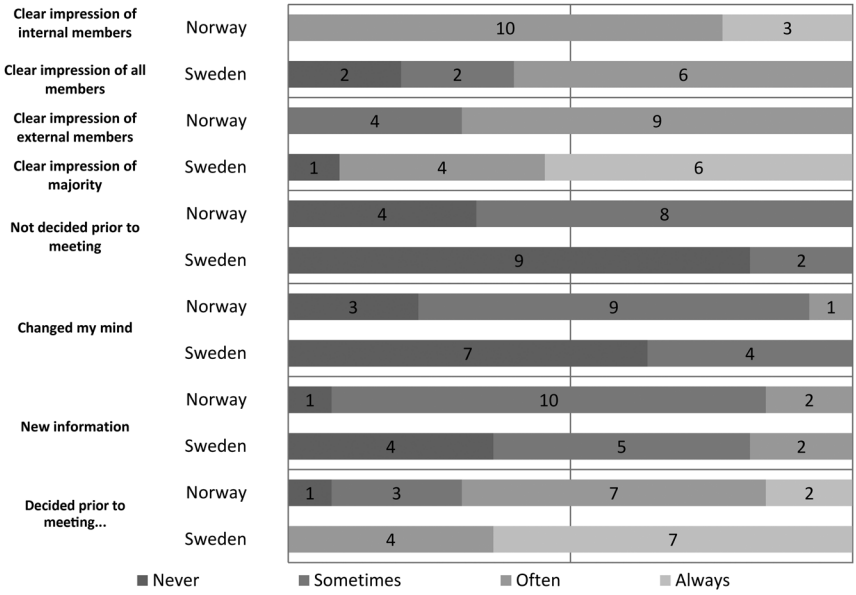
The members' responses are shown in figure 8.[13] The results show that members have often or always decided beforehand which outcome they favor. This tendency is somewhat stronger for the Riksbank than for the Norges Bank MPC members, as the median Swedish respondent has "always" decided in advance how to vote, while the median Norwegian respondent has "often" decided in advance which level of the policy interest rate he or she would prefer. It is also interesting to note that four Norges Bank MPC members responded that they have "never" or only "sometimes" decided in advance which decision they preferred and not changed their minds, while no one from the Riksbank gave such a response.

This is not surprising. The individual accountability and the detailed attributed minutes from the Riksbank meeting—which are published and which we discuss in detail in section 7 below—give a strong incentive to go to the meeting with a clear view on the appropriate decision. At Norges Bank there are no such incentives. Moreover, Swedish MPC members, being full-time staff, simply may have had more time to make up their minds.

In both committees, it is quite unusual that new information or arguments come up at the monetary policy meeting, and it is even more unusual that members change their minds as a consequence. The median Swedish respondent has "never" changed his or her mind, while the median Norwegian respondent has "sometimes" changed his or her mind. One Norges Bank MPC member has, however, "often" changed his or her mind. This confirms that the Riksbank MPC members have a clearer opinion before the meeting. As stated by Svensson (2009, p. 26): "The discussion and exchange at the final monetary policy meeting do not start from scratch, but are the culmination and summary of [a long series of] meetings. Therefore, one would not expect too much spontaneity

[13]One Swedish respondent did not answer these questions.

Figure 8. The Situation before the Meeting



but rather the presentation of the essential summaries and the reasons for the decision by each member." At the Riksbank there is even a meeting a few weeks before the final monetary policy meeting where "the Executive Board attempts to arrive at a repo rate path that it seems likely that the majority of the board members can support" (Hallsten and Tägtström 2009, p. 82).[14] At Norges Bank the process leading to the publication of the Monetary Policy Report also includes several meetings and seminars with board members.

Another finding is that the majority of the members of both MPCs usually have a pretty good impression about the decisions

[14]The main reason for this is that a Monetary Policy Report (or a shorter Monetary Policy Update) explaining the policy decision is published at the same time as the decision is announced. It should, however, be emphasized that although the members of the boards may have formed an opinion during the process, the final decision on the repo rate is made at the policy meeting. The process is designed so that the forecasts and the Monetary Policy Report can be changed following the meeting.

preferred by the other members. The median Riksbank MPC member responded that he or she "always" had a clear impression of what the outcome of the vote would be. The Norges Bank MPC members, who meet less frequently due to their part-time membership, also tend to have a clear picture of which decision the other external members, as well as the governor, would prefer. This result is not so surprising given the process of "preparatory" meetings described above.

To sum up this section, it seems that the focus in the literature on the formal MPC meeting misses important aspects of the monetary policy process. In particular, the staff seem to play a more important role in forming MPC members' views than deliberations at the actual committee meeting, and an MPC member's view of optimal policy seems essentially fixed and known to others prior to the formal meeting. Having established that individuals further down the hierarchy matter for MPC members' views, we now turn to the role of the one person higher up—the chairman.

5. The Role of the Chairman

The role of the chairman has received considerable attention in the MPC literature.[15] Blinder (2007) distinguishes between two major types of decision-making systems: *individualistic* MPCs and *collegial* MPCs. In individualistic MPCs, the members are individually accountable for their voting, and unanimity is not necessarily sought. The decisions are made by majority voting. Collegial MPCs try to reach unanimity, and if this is not achieved the MPC still stands united behind the decision. There may or may not be a formal vote, and dissenting votes are rare. Blinder distinguishes between two polar types of collegial MPCs: *genuinely collegial* and *autocratically collegial*. The difference relates to the role of the chairman, who merely dictates the "consensus" in an autocratically collegial MPC, while all members have equal weight in a genuinely collegial MPC.

[15]Chappell, McGregor, and Vermilyea (2004, 2007a, 2007b) and Gerlach-Kristen and Meade (2010) investigate the influence of the chairman of the FOMC; Chappell, McGregor, and Vermilyea (2014) compare the influence of the chairman in Sweden and the United Kingdom; and Claussen et al. (2012), Gerlach-Kristen (2008), and Riboni and Ruge-Murcia (2010) analyze the role of the chairman in a theoretical setting.

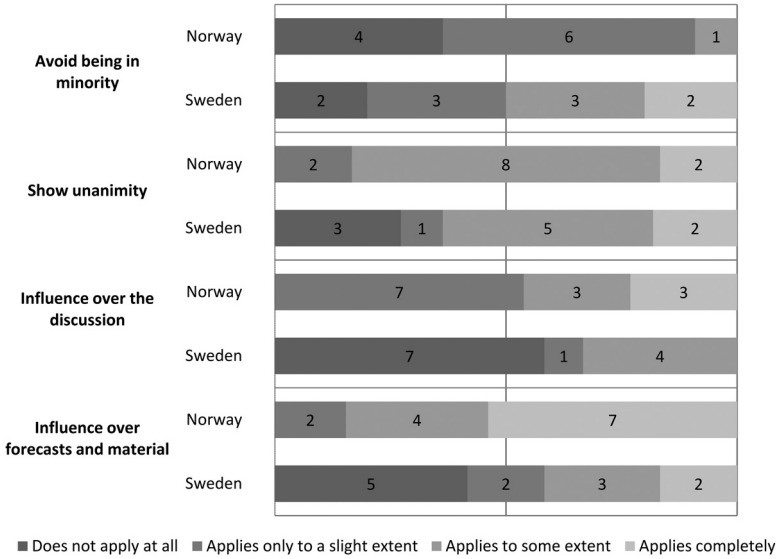
Blinder (2009) cites Norges Bank and the FOMC under Alan Greenspan as examples of autocratically collegial committees. In contrast, the Executive Board of the Riksbank is considered an individualistic committee, as there is formal voting with frequent dissents, and the members are individually accountable for their actions. But even though the Riksbank MPC members are in one sense equal, it is an empirical question whether the chairman is "more equal" than the other members (beyond the fact that he has the casting vote in the case of a tie). It is also an empirical question whether the chairman of the Norges Bank board has a sufficiently dominant role to characterize the board as an autocratically collegial committee.

So, how different are the roles of the chairmen at Norges Bank and the Riksbank? To investigate the role of the chairman, we asked the members to indicate how they thought the following statements, which cover different aspects of chairman dominance, apply:

- *Influence over Forecasts and Material:* The governor has more influence over the forecasts and other materials on which the interest rate decisions are based than the other members of the board.
- *Influence over the Discussion:* As chairman of the monetary policy meeting, the governor is in a particularly good position to influence the discussion, and thereby the interest rate decision.
- *Show Unanimity:* Many members find it worthwhile to show unanimity, and therefore support the governor's view, given that it is reasonably close to their own assessment.
- *Avoid Being in the Minority:* The governor finds it worthwhile not to be in a minority and therefore supports the majority view, given that it is reasonably close to his own assessment.

We see from figure 9 that most of the Norwegian respondents gave strong support to the statement that the governor has more influence over forecasts and other materials than the other members. They did not, however, agree that the chairman can influence the interest rate decision by steering the discussion. The Riksbank MPC members did not find any of the statements particularly convincing, although the views were somewhat dispersed. The proposition that members

Figure 9. The Role of the Chairman



seek unanimity did, however, receive some support at both central banks, with the median respondent giving it the rating "applies to some extent."[16]

To obtain further evidence of the dominance of the chairman, we asked the members if they have refrained from entering a reservation even if they found that another decision would have been better. Entering a reservation means in this case that a member formally declares in the minutes that he or she does not side with the majority. In a truly individualistic committee, one would expect that members would always enter a reservation if they disagreed with the majority. In a truly collegial committee, one would expect that members form a "consensus" that all can stand behind even if some individuals would prefer a different decision.

Our results showed that seven out of twelve Riksbank MPC members have "never" refrained from entering a reservation if

[16] Apel, Claussen, and Lennartsdotter (2010) distinguish between members who were present before and after the publication of the Riksbank's own interest rate forecasts, and suggest that the introduction of interest rate forecasts has reduced the chairman's role.

they thought another decision would have been better, while five responded that they have "seldom" refrained. Five out of twelve Norges Bank MPC members responded that they have "never" refrained from entering a reservation, six stated that they have "seldom" refrained, and one responded that he or she has "sometimes" refrained.

Although there is a stronger tendency to refrain from entering a reservation at Norges Bank than at the Riksbank, the difference is not as striking as one might expect. The fact that many Riksbank MPC members have actually refrained from entering a reservation suggests that a committee which from an institutional perspective appears individualistic also has some collegial elements. Similarly, the collegial Norwegian committee seems to have individualistic traits in that most MPC members have never or seldom refrained from entering a reservation.[17] That said, among those members who had "seldom" or "sometimes" refrained from entering a reservation, the argument that won the strongest support was that the final decision was reasonably close to the decision they would have preferred and that there was a "bargaining margin." Respondents also gave some support to the argument that a reservation was a very strong signal and would hurt the collegial element of the board. One respondent expressed the view that "as an external member, you have a limited 'budget' of a few explicit reservations you can make before it comes at the expense of the collegial spirit."

To summarize this section, our results give ambiguous support to Blinder's (2009) view that the Norges Bank board is an autocratically collegial committee. Only in one dimension—the governor's influence over forecasts and material—does the characterization seem to fit well. The Riksbank board seems to fit into the definition of an "individualistic" committee, although with some "collegial" elements. It therefore seems reasonable for theoretical models to take into account the chairman's influence depending on committee type, but the differences should not be over-emphasized.

[17]One consideration in entering a reservation is the long publication lag in Norway. This may, on the one hand, make dissenting attractive in that it does not attract public attention and avoids rifts in the committee; on the other hand, given the low visibility, the lack of public awareness of the reservation means that it cannot be used as a way of lending the dissent more weight.

6. The MPC Members' Preferences (Individual Loss Functions)

The literature not only distinguishes between different kinds of MPCs but also often assumes heterogeneity in MPC members. It is common to assume that MPC members have different individual loss functions; see, e.g., Gerlach-Kristen (2009) and Riboni and Ruge-Murcia (2008).[18] Can MPC members' preferences be captured by a standard quadratic loss function with the inflation gap and the output gap as arguments? Are there significant differences between the members' preferences?

While the existing empirical literature on heterogeneity in MPC members' preferences uses indirect evidence based on voting behavior (e.g., using reaction function estimates; see, e.g., Riboni and Ruge-Murcia 2008), we decided on a direct approach. The reference for the preference questions was the standard loss function

$$L = (\pi - \pi^*)^2 + \lambda(y - y^*)^2, \tag{1}$$

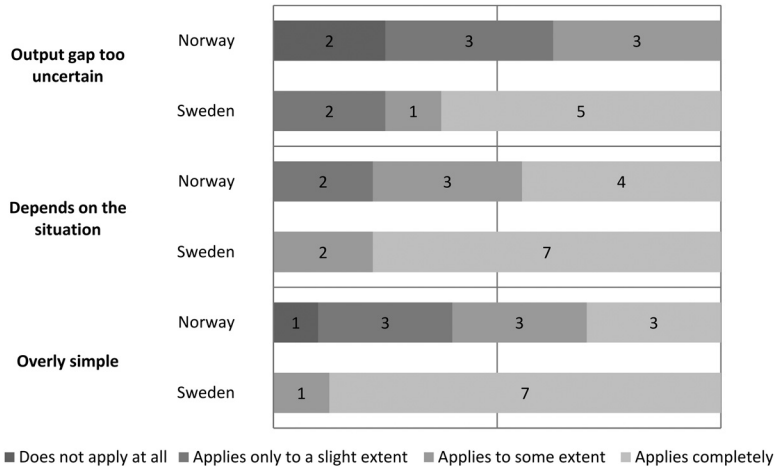
where π is inflation, π^* is the inflation target, $(y - y^*)$ is the output gap (capacity utilization), and λ is the weight on stability in the real economy relative to inflation stability. The respondents were asked if they would be willing to quantify their λ. Only four Riksbank and two Norges Bank MPC members were willing to do this. The typical result was a λ of 1.

Those who responded that they would not consider stating a λ were asked to rate the following three explanations as to why they felt unable to do so:

- *Overly Simple:* The idea that one can use a specific number to describe the relative weight of stabilizing inflation and stabilizing resource utilization is overly simple.
- *Depends on the Situation:* The relative weight depends on the current situation and therefore varies so much that it is meaningless to state a number.

[18] MPC members may also differ by their heuristics, i.e., the model they have in mind, as mentioned in section 4.1, or by the economic data available to them.

Figure 10. The MPS Members' Preferences (individual loss functions)



- *Output Gap Too Uncertain:* The measures of resource utilization in the economy are so uncertain that it is meaningless to state a relative weight.

As seen from figure 10, all of the explanations received considerable support among the Riksbank MPC members, with the median respondent answering "applies completely" for all explanations. Similarly, the median answer for the first and second explanations was "applies to some extent" at Norges Bank. We did not ask whether the quadratic form of the loss function was appropriate, but one of the Norwegian respondents wrote in the questionnaire that "my preferences are not quadratic." Another member wrote that "I will not give my lambda, because it is not always the case that the loss function represents the relevant monetary policy judgments."

Contrary to the Riksbank MPC members, the Norges Bank MPC members did not give much support to the third explanation, represented by a median answer of "applies to some extent." This might be due to differences in the extent to which the output gap has been used by the staff and communicated to the MPC. The Norges Bank staff have a long tradition of estimating and publishing their best estimate of the output gap, while the Riksbank staff have been

more agnostic to the output gap as an indicator of capacity during the sample period. The different takes of the two staffs might have influenced the respective MPC members' views on the output gap.

We then asked the members who did not provide a specific figure for λ whether they would be willing to provide a *rough* estimate of how they value stabilizing inflation in relation to stabilizing resource utilization. They were given the following alternatives:

- $\lambda < 1$: I would give *greater* importance to stabilizing inflation than to stabilizing resource utilization.
- $\lambda > 1$: I would give *less* importance to stabilizing inflation than to stabilizing resource utilization.
- $\lambda \approx 1$: I would give roughly *equal* weight to stabilizing inflation and stabilizing resource utilization.

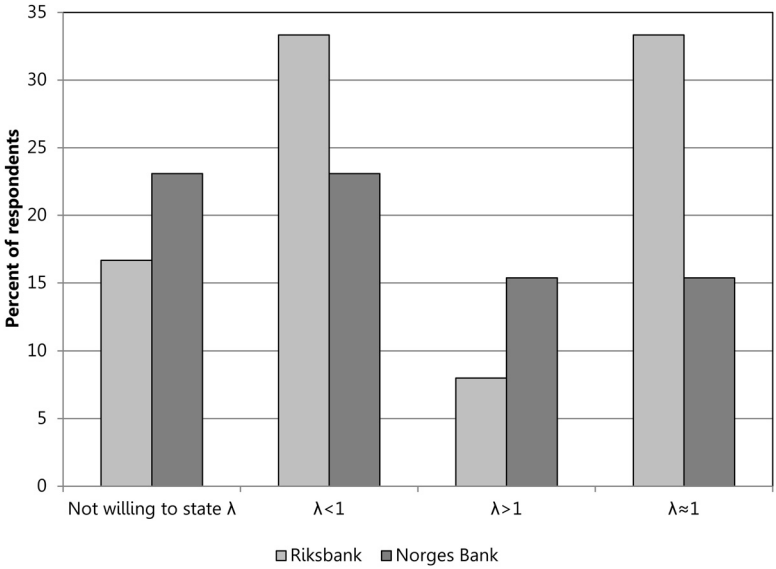
A total of nine Riksbank and eight Norges Bank MPC members were prepared to make either a precise or a rough estimate of the relative importance they would give to stabilizing inflation in relation to stabilizing resource utilization. The results are presented in figure 11. None of the Riksbank MPC members would give greater importance to stabilizing resource utilization than to stabilizing inflation, while two of the Norwegian respondents had such a policy preference. Thus, in our sample, internal members with a full-time position in a central bank are more concerned about price stability than external members with jobs outside the central bank.[19]

Perhaps more interesting than the average λ is its dispersion. Preferences seem to be more dispersed at Norges Bank than at the Riksbank. Since members from both central banks have different backgrounds and expertise, this result suggests that heterogeneity is better preserved if members keep their jobs outside the central bank when joining the MPC than if they become full-time internals.[20]

[19]In a similar vein, Gerlach-Kristen (2009) finds that external MPC members at the Bank of England seem to be recession averse, while internal members appear to have symmetric preferences for the output gap. For the United Kingdom, see also Besley, Meads, and Surico (2008) and Spencer (2006); for the United States, see Chappell, McGregor, and Vermilyea (2005).

[20]In a recent paper related to this issue, Ball (2012) argues that Federal Reserve chairman Ben Bernanke appears to have changed his view about zero-bound policy quite dramatically when becoming a full-time internal at the Federal Reserve.

Figure 11. The Weight on Stabilization of Output Relative to Inflation (λ)



To our knowledge, the theoretical literature does not say whether preference dispersion is good or bad. On the one hand, from a democratic accountability perspective, it may be desirable that the MPC roughly reflects the preference distribution in society as a whole. On the other hand, there are arguments for having MPC members with preferences that deviate from those of society in certain ways, cf. Rogoff's (1985) "conservative" central banker. Notwithstanding, our results indicate that the choice of external vs. internal MPC members may have implications for the degree of preference dispersion within the MPC.[21]

In sum, this section suggests considerable heterogeneity in terms of preferences across MPC members at both the Riksbank and Norges Bank. Theoretical papers assuming such differences seem to be on the right track.

[21] One concern with preference dispersion is that it may be more difficult to reach a decision to change interest rates, particularly if decisions are made unanimously (see Gerlach-Kristen 2005). The problem is reduced in committees that use other decision mechanisms.

7. Transparency

Transparency is one final field in the institutional setup of MPCs that our survey can shed light on. There is a large general literature on monetary policy transparency.[22] The theoretical results on the benefits of transparency are ambiguous, but a rough general conclusion is that neither full secrecy nor full transparency is optimal. We first discuss transparency in terms of public speeches and then in terms of the publication of meeting minutes.

7.1 Speeches

Where monetary policy is set by a single governor, it is clear that his speeches carry the most weight of all the verbal central bank communications. But who should speak to the public in an MPC, and how, if at all, should speeches be coordinated? Blinder (2007, p. 114) writes: "A central bank that speaks with a cacophony of voices may, in effect, have no voice at all."

To learn about how the two groups of MPC members view the relevance of the "cacophony problem," we asked them if they thought the following statements about individual communication applied:

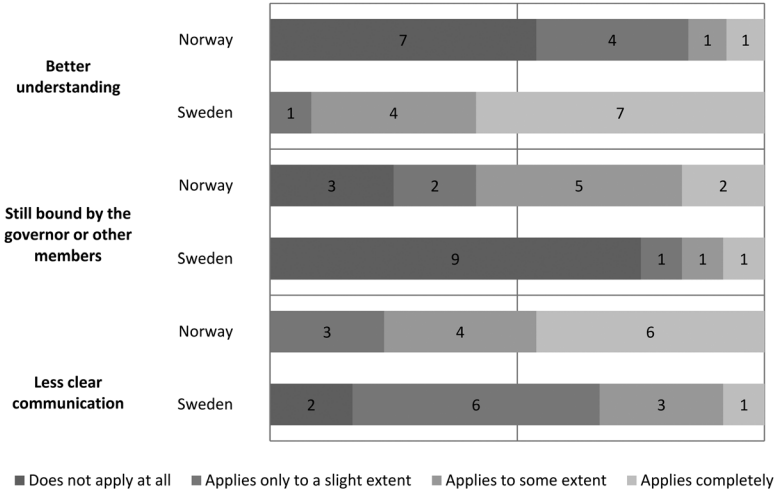
- *Less Clear Communication:* If all members of the Executive Board can express their own views publicly as individuals, the Bank's communication is less clear.
- *Still Bound by the Governor or Other Members:* When expressing my own views publicly, I feel bound by the governor's or other members' statements.[23]
- *Better Understanding:* When each member describes his or her views in public (e.g., in speeches and the minutes of meetings), agents better understand the bank's policy ("the way we think").

The responses are represented in figure 12. There are considerable differences between the two groups of policymakers, basically

[22]For reviews of the literature on transparency, see, e.g., Blinder et al. (2008), Crowe and Meade (2008), and Geraats (2002, 2006). See also Chahrour (2011).

[23]The exact wording was "the governor's/deputy governor's statements" for Norges Bank and "other members' statements" for the Riksbank.

Figure 12. One Voice vs. Many Voices



following the collegial vs. individualistic setup of the two committees. The Norges Bank MPC members tended to believe in Blinder's "cacophony problem," while the Swedish respondents thought publishing the different views improves agents' understanding. The contrast was particularly stark regarding the question of whether such information makes economic agents understand the bank's policy better, which was a view strongly supported in Sweden. There was also a difference in how the members would feel bound by the governor's or other members' statements, where the median Norges Bank MPC member felt more constrained than his or her counterpart at the Riksbank.[24]

There is thus a strong tendency to defend the respondent's own system, i.e., a status quo bias. Apparently, members of both MPCs think that their way of communicating works satisfactorily and need not be adjusted. This implicitly suggests the exact communication strategy is not crucial, which would support the finding in Ehrmann and Fratzscher (2007) that the predictability of policy decisions is

[24]We should add, however, that there was considerable disagreement within each committee on this issue, where the responses varied from "does not apply at all" to "applies completely" in each group.

equally good for the Federal Reserve and the ECB, even though these banks have chosen an individualistic and a collegial communication strategy, respectively.

7.2 Minutes

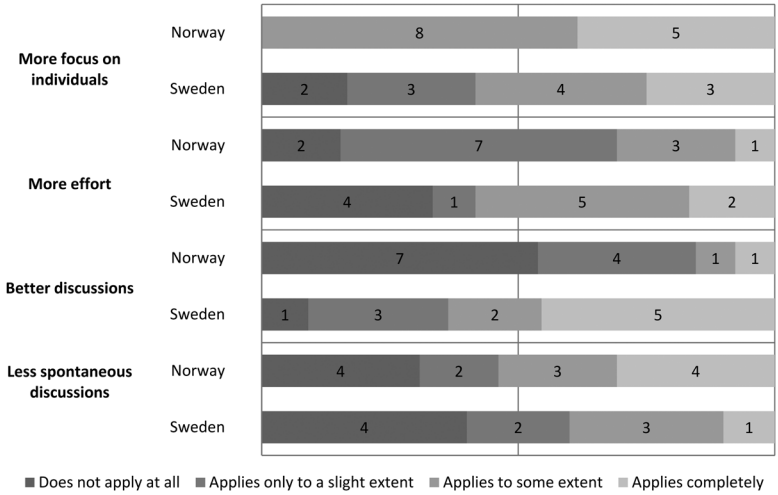
Whether or not minutes and the voting results of the monetary policy meeting should be published is a controversial issue. The pros and cons of revealing information about the deliberations of individual MPC members—for example, by publishing individual voting records—have been explored in a number of theoretical papers (see, for instance, Gersbach and Hahn 2008, 2009, and Weber 2010).

Empirical results suggest that publishing voting records makes it easier to predict future policy decisions (see, e.g., Gerlach-Kristen 2004, 2009). Also, publishing voting records and attributed views could give incentives to prepare better for meetings, particularly if this increases the probability of reappointment.

However, as with verbal communication, the concern with written communication is that publishing minutes and voting results may just confuse matters. Issing (2005), for example, fears that economic agents will attach more importance to MPC members' individual opinions than to the relevant economic arguments. A second argument against publishing voting results and minutes—in particular, attributed minutes—is that it might have the effect of making the discussion at the policy meeting less honest and frank, and more limited and "tied to script." Meade and Stasavage (2008) provide some evidence from the Federal Reserve's Federal Open Market Committee that publishing verbatim transcripts of the FOMC meetings made members more reluctant to offer dissenting opinions.

Yet another possible consequence of publishing minutes that has been explored in one strand of the literature is that MPC members worry that the public might interpret disagreement as a sign of incompetence. In this case, committee members may want to meet to discuss—and possibly settle—things before the monetary policy meeting, away from the public eye (see, e.g., Swank, Swank, and Visser 2008 and Swank and Visser 2008).

Figure 13. Attributed Minutes



To investigate how actual MPC members view some of the possible consequences of publishing this information for the quality of the deliberations, we asked them to rate the following statements:

- *Less Spontaneous Discussions:* The discussion at monetary policy meetings is probably less spontaneous or in some other way poorer when the minutes are attributed.
- *Better Discussions:* The discussions at monetary policy meetings are probably better when the minutes are attributed.
- *More Effort:* The members probably invest more time and effort in monetary policy preparation work when the minutes are attributed.
- *More Focus on Individuals:* There is probably more public focus on the individual members when minutes are attributed.

Figure 13 shows the responses. Although there was substantial disagreement within each committee, there was a tendency for members to defend the status quo. That is, members from the Riksbank, which has attributed minutes, were sympathetic to the argument that attributed minutes make the discussions better and that members invest more time and effort. Members from Norges Bank, which

does not have attributed minutes, did not think that discussions would be better if they were provided. At the same time, they acknowledged that attributed minutes would make members prepare better.

In sum, the survey respondents' views on how much transparency is desirable are mixed. As regards verbal communication, the members of the individualistic MPC at the Riksbank think that if all members express their views, this helps the public understand monetary policy better, whereas the collegial MPC members in Norway do not hold this view.[25] Nor is there a common view on whether publishing minutes would be beneficial. Generally, members preferred the status quo in their respective committee.

8. Discussion and Conclusions

The literature on MPCs is continually expanding. In this paper we contribute to this literature by using a survey method to obtain information on how MPCs work in practice.

We find that many assumptions and results in the previous literature are confirmed by actual MPC members' experience: a committee is preferable to a single policymaker but it should not be very large, MPC members do indeed have heterogeneous preferences, and the chairman seems to have more influence in a collegial than in an individualistic committee.

However, there are also results that are less intuitive and quite at odds with the conventional, stylized view of monetary policymaking by committees. One striking finding is that there seems to be only limited pooling within the committee, in the sense that members do not seem to get much input from, nor are they influenced by, each other. This result was found in the main survey where we asked about pooling of three types of information, and confirmed in the follow-up study where we asked about pooling more generally.

[25] As suggested by a referee, this is an issue where there may be a certain non-response bias, as the four (out of seventeen) members who did not respond at Norges Bank may be less sympathetic to transparency than the average member (as they refrained from responding). If so, the aversion to transparency is somewhat under-estimated. Unfortunately, we have not been able to investigate this further.

We draw two conclusions from this. One is that the benefits of committee decision making that members do report are more due to "pooling by voting" than to "pooling by talking." The other is that the limited amount of pooling is likely to be related to the institutional features and traditions of the two banks. In neither bank do MPC members have their own dedicated staff. The work on collecting new information, analyzing this information, doing research, building models, producing a majority forecast, etc. is conducted by the bank's staff. Thus, there might simply not be much scope for pooling left. Indeed, the crucial role of the bank's staff was confirmed by the respondents. It would be an interesting issue for future research to see if there is more pooling among MPC members in committees with individual staff and/or no common forecasts.

Another finding is that there is a preference for the status quo in several areas where the institutional setups of the two banks differ—for example, the choice of communication strategy and whether or not voting records should be published. This does not come as a surprise, as it is largely up to the committees themselves to decide how to communicate and how transparent they should be. These are also issues where the literature is inconclusive.

The two MPCs also had different views on whether or not the committee should include external members. The Swedish respondents tend to favor a fully internal MPC whereas the Norwegian respondents advocate an MPC including external members. Even if it cannot be ruled out that the Riksbank's members under-estimate the risks of groupthink, a more plausible explanation for the diverging results is once again that they are affected by the practices and prevailing institutional frameworks in the two banks. The Riksbank's MPC members have with few exceptions been recruited from outside the bank, typically from the financial sector or academia (the same holds for Norges Bank). In addition, many members spend only one term (six years) on the MPC. Thus, they might keep much of the outsider's perspective while serving on the MPC. Moreover, the Riksbank has quite high ambitions regarding transparency, manifested in the publication of attributed minutes and voting records. A high degree of transparency, where individual MPC members' arguments and reasoning are continuously exposed to public scrutiny, is a further safeguard against groupthink. In this type of setup, there may be little to gain by bringing external members onto the MPC.

At Norges Bank, the setting is different with collegial accountability and less openness. It could be argued that the lesser degree of openness makes external members more important. In a sense, external members may fulfill the same function as transparency—as a check and balance against an MPC getting carried away, because of groupthink or for other reasons. Thus, considering the differences in the respective frameworks, the different views on external MPC members in Norway and Sweden do not appear very surprising either.

The tendency to support the status quo in their respective committee indicates, of course, that members are content with the present institutional setup and think it works satisfactorily. This, in turn, implicitly suggests that there is no one obviously preferable choice in these matters.[26]

To conclude, the pivotal idea in this paper is to get information on monetary policy decision making "straight from the horse's mouth" by asking present and former MPC members about their experiences and views. The kind of information yielded would have been difficult to obtain in other ways and provides insights into the inner workings and thinking of MPCs. Although surveys have possible shortcomings, we believe that the results in this study add to the knowledge about decision making in monetary policy committees and we hope that they will inform future research.

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[26]If the Swedish MPC members differ systematically from their Norwegian counterparts, it could be wrong to attribute different survey answers in the two countries to the MPC design or institutional differences in the two countries. However, we have no reason to believe that there are systematic differences in the characteristics or personalities of the members of the two groups.

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