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Why and How?**

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# Monetary Policy by Committee: Why and How?

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## Abstract

Among the most notable, but least discussed, hallmarks of what I have called the “quiet revolution” in central banking practice (Blinder, 2004a) has been the movement toward making monetary policy decisions by committee. Until about a decade ago, most central banks had a single governor, who might or might not have been independent of the rest of the government. But since then, the United Kingdom, Japan, Sweden, Norway, Switzerland, and Brazil, to name just a few, have opted to establish monetary policy committees (MPCs). In addition, the committee-based ECB replaced 12 central banks, most of which had previously been run by individual governors. Thus the existence of a pronounced worldwide trend is clear. In this paper, I discuss two questions. The first question is why. Why have so many central banks switched from individual to group decisionmaking? The second question is how. How should central banks make decisions and how should they communicate with the public, the government, and the markets?

Key words: central banks, committees, voting, communication

JEL codes: E58, D71, D78

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## **I. Introduction**

Among the most notable, but least discussed, hallmarks of what I have called the “quiet revolution” in central banking practice (Blinder, 2004a) has been the movement toward making monetary policy decisions by committee. Until about a decade ago, most central banks had a single governor, who might or might not have been independent of the rest of the government. But since then, the United Kingdom, Japan, Sweden, Norway, Switzerland, and Brazil, to name just a few, have opted to establish monetary policy committees (MPCs). In addition, the committee-based ECB replaced 12 central banks, most of which had previously been run by individual governors. I am unaware of any case in which a country replaced an MPC by a single decisionmaker. In fact, a recent survey by Pollard (2004) found that 79 out of 88 central banks made monetary policy by committee. Thus the existence of a pronounced worldwide trend is clear. So the first question for this paper is why. Why have so many central banks switched from individual to group decisionmaking?

But simply deciding that decisions should be made by committee does not provide a how-to-do-it manual that a central bank can follow. So the rest of the paper focuses on a few selected aspects of the “how” question. Should an MPC make decisions by majority rule, with each member voting for his or her preferred policy, as is the case at the Bank of England? Or is it better to insist on something approximating unanimity—whether the unanimity is genuine or contrived? And given this decision, how should the central bank communicate with the public, the government, and the markets? A central—and heretofore ignored—point of this paper is that the most appropriate forms of

communication depend on the nature of the monetary policy committee. There is no one “right way” to communicate.

## II. The Presumed Advantages of Group Decisionmaking

Theorizing about *why* central banks might want to make decisions by committee is a relatively young intellectual industry—and still a small one. One of the reasons for the trend is institutional—and obvious. In a number of countries, the movement toward committees went hand-in-glove with the spread of central bank independence. When the central bank was just following orders communicated by the government, there was not much reason to have a committee on the other end of the phone. An individual governor sufficed—and also limited the phone bill. But as central bank independence was granted in one country after another, the choice between an individual and a committee became a live one—both in theory and in practice.

In this case, practice ran well ahead of theory. By the time economic theorists turned their attention to the question, many central banks had already made the switch from individual to group decisionmaking. We have thus witnessed a graphic illustration of the old saw: “It works in practice; now let’s see if it also works in theory.” Does it?

As soon as you start thinking about the choice between individuals and committees as a theoretical problem, one major stumbling block arises: If every member of an MPC behaves like *homo economicus*, it cannot matter whether monetary policy decisions are made by an individual or by a committee. Since every member of a committee of well-informed *homines economici* will see the same data and process it in the same way, they will all reach the same conclusion. Every committee vote should therefore be unanimous,

and the committee's decisions should be identical to what any single member, acting alone, would do.<sup>1</sup> That, of course, is not a promising starting point for developing a theory of the choice between individuals and committees. We had better look elsewhere.

*Different information: Homo economicus* notwithstanding, members of real monetary policy committees frequently do reach different conclusions—for several reasons. One is a particular favorite of economic theorists: People receive different, somewhat idiosyncratic, information. A number of papers have sought to derive the virtues of committee decisionmaking from the virtues of information pooling. In some contexts, differential information is essential. But in the case of monetary policy virtually all the data that matter are common knowledge, making differential information a weak foundation on which to build a theory.<sup>2</sup>

*Different preferences:* However, committee members may and probably do have different preferences; some (the “hawks”) may be far more concerned with inflation while others (the “doves”) put more weight on unemployment. Differing social welfare functions would seem to be an obvious source of disagreement within an MPC—both in theory and in practice. But should it be? At least in principle, different *personal* judgments about the relative social costs of inflation versus unemployment should be irrelevant because the central bank's legal mandate ought to *tell* committee members what their loss function is, not *ask* them.

So, for example, the British chancellor embeds an implicit loss function within the Bank of England's policy remit when he instructs it to achieve 2% inflation within, say,

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<sup>1</sup> There is one exception: Standard economics allows for different preferences across committee members. More on this just below.

<sup>2</sup> However, Morris and Shin (2002) argue that the existence of *public* information (such as central bank announcements) may influence the way *private* information affects markets.

two years. In principle, steering the economy then becomes a technocratic operation that can be carried out by a team of Keynesian dentists whose value judgments are irrelevant to their decisions. (After all, we don't generally wonder about our dentists' ideology.) But when the central bank's legal mandate is less precise, such as the Federal Reserve's vague instructions to pursue both "stable prices" and "maximum employment," committee members have much more scope for interpreting their mandate differently. And they do. Thus disputes at the Fed and other central banks often pit hawks against doves—a fact that has not entirely escaped the attention of economic theorists.

In one of the earliest theoretical contributions, Christopher Waller (1992) modeled the way in which two political parties—think of one as more dovish, the other as more hawkish—might bargain over appointments to the MPC. His focus was *not* on why monetary policy is made by committees rather than by individuals. But his model nonetheless contains an implicit answer to our question: A committee structure with staggered terms of office creates checks and balances that moderate political influences on monetary policy.

Jon Faust (1996) also *assumed* that MPC members have different preferences. He then asked why the FOMC was designed as such a strange amalgam of district bank presidents and politically-appointed governors. His answer was that the peculiar voting structure was meant to serve as a bulwark against inflation.<sup>3</sup> But Faust did not address a more basic question: If the concern is to make sure that the central bank is sufficiently hostile to inflation, why not just follow Rogoff's (1985) suggestion and appoint a single,

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<sup>3</sup> There is some evidence that the district bank presidents are, on average, more hawkish than the Washington-based governors, who are political appointees. See, for example, Meade and Sheets (2005) and a number of the references therein.

conservative central banker? Paul Volcker acting alone will give you about as much anti-inflation zeal as you are likely to want.

Anne Sibert's (2003) model focused on reputation. A reputation for being hawkish is valuable to a central bank because it holds down inflationary expectations. The key question for Sibert was how the *collective* reputation of an MPC is determined by the *individual* reputations of its members. But her model gave an equivocal answer to our question: Either group or individual decisionmaking could be superior on average, depending on the discount rate.

Most recently, Lars Svensson (2005) has suggested that MPCs composed of people with different preferences can and should *vote* on the relative weights of inflation and output, and then proceed just as an individual maximizer would. Of course, no central bank committee has ever done this; and some of us wonder if it is even possible.

*Different models:* Members of a monetary policy committee could also have different (explicit or implicit) models of the economy. Such differences might be as minor as disagreeing over point estimates of the same parameters, or as basic as holding entirely different conceptions of how the economy works. In the real world, different decisionmakers surely believe in different models of the economy. But modeling a world in which different people have different models is a tricky theoretical business.

Petra Gerlach-Kristen (forthcoming) took a step in this direction by supposing that the macroeconomic model of each MPC member differs in only one dimension: the estimate of potential output,  $y^*$ , which is, of course, relevant to the outlook for inflation. Her answer to the question "Why use committees rather than individuals?" was both

straightforward and reasonable. Each committee member receives a noisy signal of  $y^*$ .<sup>4</sup> By pooling these estimates, a committee can derive an estimate of  $y^*$  that is more precise than any individual's. One clear implication of her model is that larger committees are better than smaller committees, which should give some comfort to the 19-member FOMC and the 18-member (so far!) ECB Governing Council. Less obviously, Gerlach-Kristen showed that committees will be *less* inertial than individuals in adjusting interest rates—a highly counterintuitive result for which there is some impressive recent experimental support (Blinder and Morgan, 2005).

*Different forecasts:* Given the uncertainties surrounding any forecast, it is certainly plausible that members of a monetary policy committee might have different forecasts, perhaps generated by different forecasting techniques. I do not know of any models of monetary policy based on this simple notion, but the Gerlach-Kristen model just mentioned can be reinterpreted that way. After all, it is the *gap* between actual and potential GDP that drives inflation and therefore policy. Estimating  $y^*$  high is a lot like estimating  $y$  low.

There is in fact empirical evidence that predictions can be improved by combining a number of forecasts generated by different methods. For example, Scott Armstrong's (2001) survey of studies covering a wide variety of forecasting applications concluded that forecasting is normally improved by combining five or more *different* methods. It is just possible that MPCs perform such a function.

*Different decisionmaking heuristics:* There is a final important dimension of differences across a committee that economists almost never mention. *Homo economicus*

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<sup>4</sup> This assumption brings us pretty close to the case of different information, which I earlier rejected as empirically unimportant. The difference is that potential GDP is not an observable piece of data, but rather a concept that must be estimated using some model.

is an efficient calculating machine with unlimited ability to handle huge amounts of data and to perform difficult computations.<sup>5</sup> But *homo sapiens* are not, and the implicit optimization problem facing a monetary policy committee is far too hard to be solved explicitly. It may not even be well defined.<sup>6</sup> So different people bring to the table different decisionmaking methods, sometimes called *heuristics*.

Economists sometimes lose sight of the fact that, just as most billiards players do not understand physics, our standard assumption that people solve incredibly complicated optimization problems is metaphorical, not literal. Real people cope with these difficult problems as best they can—and in a wide variety of ways. The empirical question is whether their decisions approximate optimization. In a fascinating theoretical paper, Lu Hong and Scott Page (2004) demonstrate that what they call “diverse” groups can outperform individuals or more homogeneous groups in solving complex problems. Their operational definition of diversity is that the members of the group employ different decisionmaking heuristics. As Hong and Page observe, this finding is widely accepted among specialists in organizational behavior.

So what lessons do we take away from this brief excursion into theory? At least three reasons to prefer committees over individuals emerge. First, group decisionmaking provides some insurance against the possibly extreme preferences of an individual central banker—for example, a person who might be obsessed with either low inflation or low unemployment. Second, pooling knowledge in an uncertain world should lead to better analysis and forecasts—and, therefore, to better decisions. Third, a group of people who

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<sup>5</sup> Economic theory does include a literature on “bounded rationality” that recognizes such limits. But there have been few applications of bounded rationality to monetary policymaking. See, for example, Sargent (1999) and some of his subsequent work.

<sup>6</sup> Blinder and Reis (2005) argue that the Federal Reserve under Alan Greenspan has followed a “risk management” process rather than trying to optimize.

process information and reach decisions differently may outperform even highly-skilled individuals when it comes to the execution of complex tasks.

Each of these theoretical considerations rings true. Hawk-dove differences are common in practice. In principle, they should be irrelevant because the central bank's objective function should be given to it (perhaps implicitly) by the political authorities. In practice, they are not. And having a spectrum of opinion on a committee is one useful way to buy insurance against the possibly extreme views of a lone-wolf central banker. It is very hard (though not impossible) for a sizable committee to be captured by an odd or highly idiosyncratic economic theory, or even to adopt a forecast that is wildly at variance with the consensus. There is also no doubt that members of an MPC often reach different policy conclusions even though all of them see the same data. Some of these differences may stem from different loss functions. But others surely stem from different models and different ways of processing the same information. Thus I believe that theorists studying the choice between individuals versus monetary policy committees have been barking up many of the right trees.

Some might argue that the benefits of diversity can be obtained without the cumbersome apparatus of a committee. It is at least possible that a methodologically diverse central bank *staff* might capture many of the benefits for a *single* central bank governor. To some extent, this may happen now in real-world central banks. But the tendency toward group-think can be strong inside an entrenched and self-confident bureaucracy. So I do not believe that a diverse staff is anywhere close to a perfect substitute for a diverse decisionmaking body.<sup>7</sup>

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<sup>7</sup> An intermediate institutional arrangement might be a committee that is purely advisory to the central bank governor, as in New Zealand or Canada.

All this said, it must be admitted that committee decisionmaking also has its downsides—as a nice recent paper by Sibert (2005) points out. She is concerned, in particular, about (a) the danger of group-think, and (b) the tendency of members of a group to “loaf” by free-riding on the efforts of others. I do not believe that loafing is a serious concern in the context of monetary policy committees, where the decisions are probably the most important things that members do in their lives. (This stands in sharp contrast to many other committees on which all of us serve!) But group-think is an ever-present danger that committee structures should be designed to avoid or minimize. (More on this below.)

### **Is it a committee or an individual?**

It should also be noted that the distinction between individual and group decisionmaking, while clean in theory, can be fuzzy in practice. Many central bank policy boards do not reach decisions by literal majority vote.<sup>8</sup> Committees have chairmen, who may dominate the proceedings. This fact is most obvious at the Fed, where it has often been believed—more or less correctly in recent years—that only one vote really matters. On paper, the FOMC was always a pure committee that reached decisions by majority vote. In practice, each member other than Alan Greenspan had only one real choice when the roll was called: whether to go on record as supporting or opposing the chairman’s recommendation, which was certain to prevail.<sup>9</sup> It therefore was (and still is) quite possible for the Fed to adopt one policy even though the (unweighted) majority favored another.

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<sup>8</sup> In Pollard’s (2004) survey, only 36 of the 79 monetary policy committees took formal votes and only six published the results.

<sup>9</sup> Alan Greenspan chaired the FOMC for over 18 years and was never on the losing side of a vote. Nor did he ever eke out a close victory.

A particularly clear example came at the February 1994 meeting of the FOMC, when the Fed began a cycle of interest-rate increases by moving the Federal funds rate up 25 basis points. The transcript of that meeting shows that a clear majority of the committee favored raising the funds rate by 50 basis points. Greenspan, however, insisted not just on 25 basis points, but on a *unanimous* vote for that decision. He got both. Another example arose about two years later. As unemployment fell in the late 1990s, it was widely believed (and amply reported in the media) that the more-dovish chairman was holding back a more more-hawkish majority that wanted to raise rates.

This tradition of dominance by the chairman was probably as strong by late 2005 as it ever was or will be, owing to Alan Greenspan's long tenure on the job, his evident success, and his august reputation. But the tradition did not originate with Greenspan. Paul Volcker's dominance was also legendary. And a fascinating empirical study of FOMC decisions under the chairmanship of Arthur Burns found that Burns's opinion counted roughly as much as all the rest of the committee members put together.<sup>10</sup> However, the authors did reject the hypothesis that Burns, in essence, decided policy unilaterally. Empirically, the opinions of other FOMC members had some explanatory power for the committee's decisions.

### **Do committees make better decisions?**

*A priori* reasoning is nice, but do monetary policy committees actually outperform individual decisionmakers in practice? This question is extremely difficult to answer econometrically. To begin with, it may not be easy to tell whether a given central bank uses group or individual decisionmaking. The Greenspan Fed was a good example, as

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<sup>10</sup> See Chappell, McGregor, and Vermilyea (2005), especially Table 4. Their regressions attribute roughly 50% of the decisionmaking weight to Burns, leaving the other 50% for the other 11 FOMC voters.

just mentioned. Furthermore, the criteria that distinguish between “better” and “worse” monetary policies are a lot clearer in theory than they are in practice. A real-world central bank’s objectives probably go beyond minimizing a weighted average of the squared deviations of inflation and unemployment from target. In addition, even if we could somehow agree on a simple objective function, we cannot just use this objective function to rank the performances of different central banks because *ceteris are not paribus*. Each country faces different circumstances, constraints, and external shocks.

For these and other reasons, John Morgan and I (2005) were led to create an experimental laboratory environment in which we could hold all other influences constant, create an unambiguous success criterion, and test (using student subjects, to be sure) whether or not groups outperform individuals in making monetary policy. Our answer was that they do: Groups did modestly better than individual decisionmakers, and the margin was statistically significant.<sup>11</sup> Surprisingly, we even found that groups made decisions as fast or faster than individuals—a highly counterintuitive result.

Morgan and I have just begun a second stage of this research program, in which we are investigating two aspects of committee decisionmaking that are potentially of practical importance to the design of monetary policy committees. Our first question is whether smaller or larger committees perform better. (Real world MPCs vary in size from three to nineteen.) In our original paper, each synthetic MPC had five members. In the laboratory work now going on, we experiment with both larger and smaller committees. Thus by merging the two sets of experimental data, we will be able to appraise the relative performances of committees of three different sizes. Second, we are looking into whether committees do better when they have a clear leader (representing the central

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<sup>11</sup> Lombardelli *et al* (2005) subsequently replicated our findings (qualitatively).

bank chairman, governor, or president). In our original experimental setup, all members of the committee were equal.

### **Are committees more transparent?**

Apart from achieving better macroeconomic outcomes, it is sometimes argued that group decisionmaking has another important advantage over individual decisionmaking: It is inherently more transparent. After all, it is hard to get inside a person's head. Since central bank transparency has numerous advantages,<sup>12</sup> a positive association between committee decisionmaking and transparency would constitute another significant argument in favor of making monetary policy by committee. But is there such a correlation—either in principle or in practice?

The Bank of England and the Bank of Japan are often held up as examples: Both became vastly more open when they adopted formal monetary policy committee structures. But the BoJ is still not a leader in terms of transparency, whereas “one-man shows” such as the Reserve Bank of New Zealand are. Similarly, the group decisionmaking processes at the FOMC and the ECBs Governing Council are far from models of transparency. So a casual look reveals no strong association between transparency and group decisionmaking.

Is there any systematic empirical association? That is a hard question to answer because neither transparency nor the nature of the central bank's decisionmaking comes with any natural quantitative metrics. Look at Figure 1, which comes from Blinder (2004a). On the vertical axis, I have recorded the rankings of nine major central banks on transparency created by Eijffinger and Geraats (2005). On the horizontal axis, I have ranked the same nine banks on their degree of “democracy” in making monetary policy

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<sup>12</sup> On this, see Blinder *et al.* (2001), and Blinder (2004a).

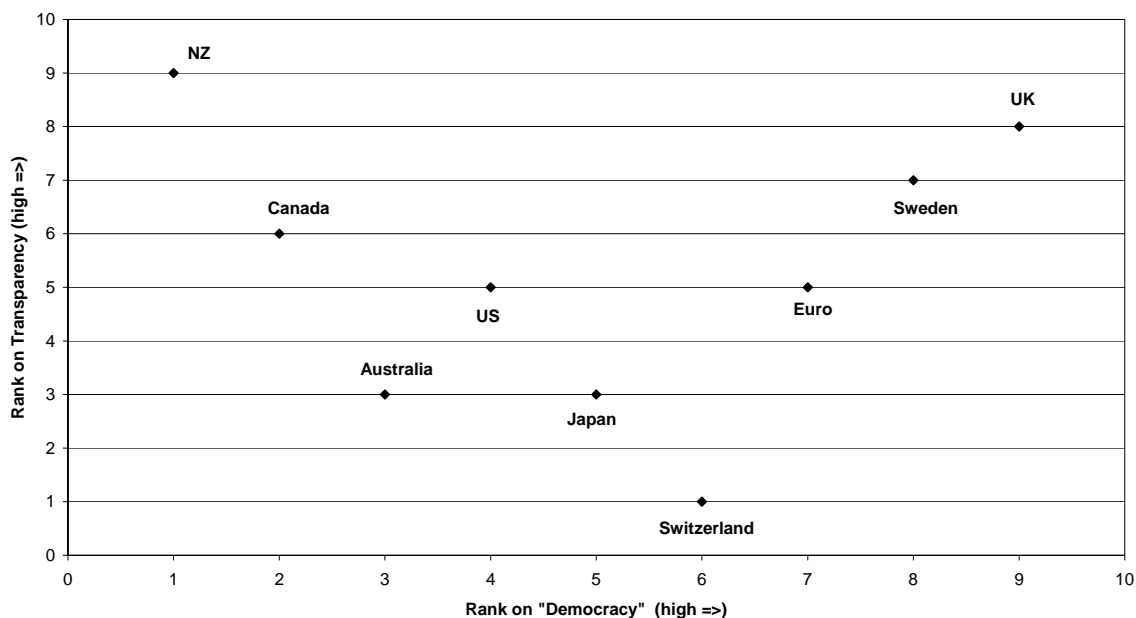
decisions—ranging from the individual governor in New Zealand to the Bank of England’s highly-democratic Monetary Policy Committee. This ranking is admittedly subjective, but I checked it with several colleagues and made some modifications of my original views—an ersatz Delphi method. Eyeballing this scatter plot suggests little correlation between transparency and whether decisions are made by a group or by an individual. The rank correlation is just +0.11. In fact, for what it is worth, the diagram displays a distinct U-shaped pattern, with both the least democratic (New Zealand and Canada) and the most democratic central banks (the UK and Sweden) more transparent than the intermediate cases.<sup>13</sup>

Thus the conclusion seems to be twofold. In principle, a single central bank governor can be extremely transparent if he chooses to be (or if the law directs him to be), and a committee can be opaque. In practice, there are real-world cases of both.

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<sup>13</sup> Both rankings were done in 2002. It has been suggested to me that decisionmaking at the Bank of Japan is more democratic than indicated here. Moving the data point for the BoJ to the right would not affect the basic picture, however.

**Figure 1**  
**Are More "Democratic"**  
**Central Banks More Transparent?**



### III. A Typology of Monetary Policy Committees

Up to now, I have spoken of a “monetary policy committee” as if that term connotes a specific, well-defined organizational structure. In fact, it does not; committees come in a wide variety of shapes and sizes. Blinder *et al.* (2001) and Blinder (2004a) offer a typology for thinking about what sort of MPC a particular central bank has or should have. Think of these stereotypes as points along a continuum (as in the horizontal axis of Figure 1), ranging from the most “democratic” to the least.

*Individualistic committees:* Members of an individualistic committee not only express their own opinions verbally, but probably also act on them by voting. The group’s decision is made by literal majority vote. At MPC meetings, positions are offered, the pros and cons are debated, committee members weigh the equities of the case, and then

they vote. Unanimity is not necessarily expected; it may not even be sought. The Bank of England's MPC is a prime example of such an individualistic committee.

The internal proceedings of an individualistic MPC may be quite messy because the group process thrives on differences of opinion. It therefore must welcome internal disagreements and learn to manage them. Indeed, the potential strength of such a committee lies precisely in weighing the different views and methods of analysis that its members bring to bear on an issue—and in the consequent resistance to group-think. The individualistic structure also builds in strong safeguards against capture by an idiosyncratic theory, methodology, or ideology—which is redolent of Waller's (1992) model in which policymaking by majority vote moderates partisanship. That analysis points strongly toward individualistic committees in which each member votes for his or her preferred monetary policy.

Of course, such a freewheeling group may sometimes find it difficult to agree on what to do. For example, the Bank of England's MPC reaches decisions by narrow 5-4 votes about ten percent of the time. Alternatively, a highly individualistic committee may manage to reach a decision, but then find it difficult to agree on the analysis and reasoning behind it. In the latter case, the committee has a communication problem on its hands. For example, the admirably transparent British MPC used to find it so difficult to agree on a post-meeting statement explaining its decision that it did not even issue one.<sup>14</sup> On the other hand, the vote of an individualistic committee conveys genuine information—in the way that the vote of a more consensus-oriented committee does not.

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<sup>14</sup> However, the MPC did (and still does) make its reasoning clear in the minutes, which have followed less than two weeks after each meeting.

That said, a series of badly-split votes may not inspire confidence that the central bank knows what it is doing, especially if its disputes are aired in public.

In my view, the policy-effectiveness argument for central bank transparency largely boils down to teaching the markets to “think like the central bank”—for doing so will enable the central bank to manage expectations of future monetary policy better and, in particular, to keep them in line with its own thinking. These lessons, however, may be extremely difficult to convey if outside observers hear conflicting weighing of pros and cons instead of coherent explanations of the decisions taken. A central bank that speaks with a cacophony of voices may, in effect, have no voice at all.

*Collegial committees:* By contrast, members of a collegial committee agree in advance that their individual differences of opinion must be subordinated to the common good, lest the authority of the group be undermined. Such a committee arrives at a group decision that somehow springs from the collective wisdom of the group as a whole and is embraced by all of its members. There may or may not be a formal vote at each MPC meeting. But if there is one, it is expected to be—and normally is—unanimous or nearly so. A dissenting vote is likely to be seen as noteworthy, as is the case on the FOMC today.<sup>15</sup>

A collegial committee can reach agreement in a variety of ways. I limit myself to two polar cases. On what I call a *genuinely-collegial committee*, members may argue strenuously for their own points of view behind closed doors. But they ultimately compromise on a group decision, and then each member takes ownership of that decision.

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<sup>15</sup> Over the six-year period 2000-2005 inclusive, there were 51 FOMC meetings, but only seven dissenting votes.

There may or may not be a formal vote; but regardless, there are no (or negligible) public disagreements. The ECB's Governing Council appears to function as such a committee.

In what I call an *autocratically-collegial committee*, by contrast, the chairman more or less dictates the group "consensus." He may begin the meeting with the decision already made and simply inform the other members. Or he may listen to the debate and then announce the group's consensus, expecting everyone else to fall in line. But in either case, the group's decision is essentially the chairman's decision, hopefully informed by, and perhaps even influenced by, the views of other committee members. The Federal Open Market Committee under Alan Greenspan was such a committee, although Greenspan was always a gentle autocrat who persuaded and cajoled other members rather than browbeat them.

In the best cases, the *internal* proceedings of a genuinely-collegial committee may resemble those of an individualistic committee, including a vigorous but confidential internal debate. By contrast, the decisionmaking process of an autocratically-collegial committee may be more like that of a single decisionmaker—in substance, if not in form. FOMC meetings under Greenspan, for example, were highly formal and polite affairs, very much controlled by the chairman. Although alternative views were aired, no one would realistically call what went on "debates." In both sorts of collegial committees, the danger of group-think is real

When it comes to policymaking, however, the leader of even an autocratically-collegial committee is still not in quite as dominant a position as an individual central bank governor—precisely because of the aforementioned tradition of collegiality. The collegiality rubber hits the policy road in at least two places. First, the chairman knows

that, if push ever comes to shove, rebellion is always possible if he tries to steamroll his committee into doing something it finds repugnant. As a formal matter, he lacks the *de jure* authority to *force* his committee members to accept his position. The strong desire for *de facto* consensus therefore empowers the rest of the committee to serve as a kind of check on the chairman, who cannot easily pursue extreme policies, follow highly idiosyncratic procedures, or base policy on controversial theories that the rest of the committee does not accept.<sup>16</sup>

Second, the desire to maintain the *appearance* of unity will sometimes force even a dominant chairman to tack in either the hawkish or dovish direction in order to keep wavering committee members on board. Alan Greenspan was about as dominant a chairman as you are ever likely to see. Yet even he occasionally modified his position slightly (I emphasize the word *slightly*) in order to minimize dissent. He might do so by wording the statement in a way that would placate some potential dissenters. Or he might do so by offering the so-called “bias” as a consolation prize to the losing side. (He sometimes even allowed the committee a free vote on the bias.) Or he might do so by shading his policy recommendation just enough to pick up a wavering voter or two. (Example: by moving the interest rate 25 basis points at the meeting instead of 50, with a presumption that there will be another 25 basis points between meetings.) But whatever his chosen method, Greenspan led the FOMC with a velvet glove, not with an iron fist.

When things are functioning smoothly, the communications that emanate from the two types of collegial committees may sound alike—and they may be quite similar to what you would hear from a single decisionmaker. In particular, a collegial committee should

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<sup>16</sup> The key word here is “easily.” In the 1996-1998 period, Alan Greenspan, believing in a productivity acceleration that few other FOMC members saw, held the rest of the committee back from raising interest rates.

be able to speak with one voice most of the time. Naturally, that will be easier for an autocratically-collegial committee, where the chairman is the obvious spokesman, than for a genuinely-collegial committee, where each member may feel entitled to express his or her nuance of difference. But even a nearly-dictatorial chairman may find disaffected members “sounding off” in public, if they feel that their views did not receive a fair hearing at the meeting. This has been known to cause problems for the FOMC on occasion.

Thus ranked in terms of proximity to the classic decisionmaker of economic theory, the four prototypical central bank decisionmaking systems (with a real-world example of each) are:

1. individual central bank governor (e.g., Reserve Bank of New Zealand)
2. autocratically-collegial MPC (e.g., Federal Reserve System)
3. genuinely-collegial MPC (e.g., European System of Central Banks)
4. individualistic MPC (e.g., Bank of England)

#### **IV. Committee Structure and Communication Policy**

Having mentioned transparency and discussed the various types of monetary policy committee, I now want to bring these two strands of thought together in order to make an important, but oft-ignored, point: that *the appropriate volume and style of central bank communication depend sensitively on the type of decisionmaker.*

The major items that any central bank might think about disclosing or keeping secret are:

- *The monetary policy decision.* It may seem ridiculous even to put this item on the list, but until February 1994 the FOMC did not publicly disclose its interest-rate decisions. Now, however, I believe this basic aspect of transparency is entirely non-controversial, and so I will not mention it further.
- The *statement* that accompanies the decision and, presumably, explains it. What should or should not be said in these statements is a matter of continuing controversy, practices differ enormously across central banks, and these practices are constantly evolving.
- *The vote.* Voting, of course, is relevant only when a committee makes the decision. MPCs around the world vary greatly in whether they take an explicit vote on the interest rate decision, whether they announce the results of the vote, whether the announcement is made promptly or with a long delay, and whether, in doing so, they name names.
- *Important inputs to and reasons for the decision,* such as forecasts of the economic outlook, major factors germane to the decision, models (econometric or otherwise) used for supporting analysis, and so on. I think it is fair to say that most central banks have been loathe to reveal much in this domain.
- *What is said at meetings.* Here there is a wide variety of choices, and practices are very diverse—ranging from nothing (at the ECB) to verbatim *transcripts* (at the FOMC, though released only after five years). Many central banks release *minutes* of their MPC meetings, which may or may not be heavily sanitized and which may or may not attribute specific comments to individuals.

- *Plans for the future*, especially intentions for interest rates. As far as I know, the RBNZ and, very recently, the Bank of Norway are the only central banks that, in a sense, forecast their own future behavior by publishing conditional projections of the future path of their own policy rates. But many more central banks, including both the Fed and the ECB, give some indication, whether explicit or implicit, of the “tilt” or “bias” in their policy stance going forward. Because the major purpose of communicating with the markets (as opposed to communicating with the public) is *to condition expectations about future monetary policy*, I see this aspect of transparency as not just appropriate but essential.

So what, then, should a central bank say? I summarize my answers to this question in Table 1, and discuss them in the following paragraphs. The table lists the four types of decisionmaking bodies horizontally across the top and the five types of information that might be provided down the lefthand margin. There are thus twenty cells in the table, though two of them are empty since there is neither a meeting (and hence no minutes) nor a vote when monetary policy decisions are made by a single individual.<sup>17</sup>

The simplest case to deal with is that of a single central bank governor acting alone. With no monetary policy meeting, the burden of explaining the reasoning behind the decision falls squarely on the explanatory statement—whether written or verbal—that is released with the policy decision. So releasing a substantive statement that goes well beyond mere boilerplate is probably the most critical aspect of transparency in this case. If necessary, a more detailed report can come later—with further elaborations and

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<sup>17</sup> Actually, the Reserve Bank of New Zealand’s policy committee, which is advisory to the governor, takes recorded votes and keeps minutes of its meetings. But these are for internal purposes only. They are not released to the public.

clarifications, if needed, provided in subsequent speeches. But a single mind ought to be able to make up his or her mind—and then explain the reasoning more or less immediately.

**Table 1**  
**Central Bank Transparency Matrix**

	<i>Individual decisionmaker</i>	<i>Autocratically-collegial committee</i>	<i>Genuinely-collegial committee</i>	<i>Individualistic committee</i>
<i>immediate statement</i>	most detailed	detailed	may need to be terse	may need to be very terse
<i>minutes</i>		least detailed	detailed	most detailed
<i>vote</i>		desirable, but may not be very informative		critical, with names
<i>inputs</i>	approximately the same for all; all should say more			
<i>Future r's</i>	Can project $r_{t+j}$	Can it project $r_{t+j}$ ?	bias only	Can it agree on bias?

The choices for a committee are both more numerous and more subtle. Remember that a collegial committee wants to project an aura of agreement in its communications. If doing so masks disagreements within the committee, that in itself might be deemed to constitute a certain lack of transparency. But I view that particular bit of non-transparency as quite permissible as long as (a) the committee has decided to make decisions collegially, and (b) the group's reasoning is clearly explained. Where there are disagreements, a truly transparent MPC can, and probably should, present dissenting views (e.g., those that failed to win the internal argument) as arguments that the committee considered but rejected. Doing so would help the market to think more like (the majority of) the central bank committee. The situation is different on an

individualistic committee, however, where differences of opinion are an essential part of the information that needs to be conveyed to the markets. So let us consider each type of disclosure separately.

*The statement and the minutes:* I group these two types of communication together because there is a tradeoff, apparent in Table 1, between providing information in the immediate statement versus in the subsequent minutes. Committees have a choice, as if the “production function” for transparency had two inputs that are strong substitutes: information in the statement and information in the minutes. If the statement is very terse and/or cryptic, much of the burden of explanation falls on the minutes, which must therefore convey a great deal of information—which is the FOMC’s practice. But if the immediate statement is sufficiently clear and detailed, no one but historians will be much interested in the minutes, which become available only weeks or months later, if ever. This may approximate the model of the ECB, which issues no minutes but whose president holds press conferences directly after meetings.

The three types of committee can and, in my judgment, should choose different “optimal” points along the imaginary production-indifference curve for information. A *genuinely-collegial committee*, having just argued things out, may find it difficult to agree on a detailed statement in real time. So it may prefer to limit itself to a terse statement, with fuller explanations provided later in the minutes.<sup>18</sup> The problem of producing an immediate statement is even more acute for an *individualistic committee*, which (unlike a collegial committee) may not even have carried the argument through to a consensus. Such a committee may find it difficult to produce any real-time statement at all (as was the case at the Bank of England). An *autocratically-collegial committee*, however, should

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<sup>18</sup> But maybe not, as the ECB president’s press conferences illustrate.

find it much easier to prepare a detailed statement to be issued at the end of the meeting. Indeed, the chairman may walk into the meeting room with a draft of the statement in his pocket, as Alan Greenspan did for years at the FOMC.<sup>19</sup> Since sooner is better than later where market-sensitive information is concerned, such a committee should rely more on the statement and less on the minutes. Thus, for example, I believe the FOMC should issue much fuller statements than it does at present.<sup>20</sup>

*The vote:* As previously mentioned, the vote on monetary policy is an essential piece of forward-looking information when decisions are made by an *individualistic committee*. Therefore, such a committee should always announce its vote promptly, probably naming names. I say this for two reasons. First, members of an individualistic committee have individual accountability, not just group accountability. So the public and its political representatives have a right to know the views of each committee member. Second, naming names and acquiring some understand of the group dynamics should improve market participants' abilities to forecast the committee's *future* decisions.<sup>21</sup>

The case for announcing votes and names is more equivocal on collegial committees. Obviously, if there are any dissenting votes, announcing them will impair the committee's ability to project the aura of consensus that it desires. If doing so is considered extremely important, as it is for example at the ECB, there may be a case for keeping the vote secret—or even for not having a vote.<sup>22</sup>

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<sup>19</sup>Toward the end of Greenspan's chairmanship, candidate drafts of the statement were vetted by FOMC members prior to the meeting. In earlier years, only Greenspan saw these statements prior to the meeting.

<sup>20</sup> But the trend is clearly in the right direction. FOMC statements are both more frequent and more informative now than they were a decade ago, when they were rare and typically asserted that the purpose of the rate change was to "sustain non-inflationary growth" regardless of whether the funds rate was raised or lowered.

<sup>21</sup> For some evidence that this is the case for the Bank of England, see Gerlach-Kristen (2003).

<sup>22</sup> As a supranational institution, the ECB has a special reason for suppressing voting: It might highlight disagreements among nations. That, however, is a step away from transparency.

Perhaps more important, the formal vote may be a poor indicator of the actual amount of disagreement on a collegial MPC that prizes—or, in the limit, forces—consensus. According to longstanding FOMC tradition, for example, a member is expected to vote in favor of the chairman’s policy proposal unless he or she disagrees with it fundamentally—which is a much sterner test than merely preferring an alternative.<sup>23</sup> So a unanimous FOMC vote does not necessarily indicate 100% agreement, and the markets know that. More generally, the number of dissenting votes clearly *underestimates* the amount of disagreement. Still, some information, even if imperfect, is better than no information. So, on balance, I am inclined to believe that even collegial committees should normally take a vote and make the result public.

*Inputs to the decision:* When it comes to discussing the considerations that enter into monetary policy decisions, an MPC is in a position that is more similar to than different from that of an individual decisionmaker. Both, I believe, should reveal quite a lot more than most central banks do at present about their internal forecasts, the models they use to appraise policy effects and/or to generate forecasts, and so on. Frankly, I have long been baffled by why some central banks, including the Federal Reserve, treat their internal forecasts like state secrets when revealing them would not only help the central bank explain its decisions better, but would probably also get the financial markets thinking more like the central bank. So I believe that nearly-complete disclosure in this domain is

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<sup>23</sup> For a fascinating attempt to model this behavior, see Chappell *et al.* (2005), especially Chapters 4 and 6. As noted above in footnote 15, the rate of *dissent* on the FOMC over the past five years has been barely above 1%. We can be sure that the rate of mere *disagreement* was higher. The minutes, for example, make this clear. As do some results in Meade and Sheets (2005).

probably the preferred policy,<sup>24</sup> and there does not seem to be much difference across types of decisionmaking bodies.

One frequently-raised objection is that an MPC composed of  $n$  members may have  $n$  different forecasts. Should it reveal them all? I am tempted to answer yes, but that may be neither practical for the central bank nor useful to the markets. Failing that, I would recommend that central banks release their *staff forecasts* as frequently as they are made. Markets will quickly learn (provided they are told) that these staff forecasts are not necessarily accepted by all members of the MPC. Alternatively, if the MPC itself takes the time and effort to reach a consensus on its own forecast, then that forecast should be revealed instead, for it will embody uniquely some of the key assumptions and debate behind the decision. If there is useful information about the *uncertainty* that surrounds the forecast (e.g., as in the Bank of England's fan charts), then that should probably be released, too.

Finally, the bottom row of Table 1 indicates that revealing (conditional) forecasts of its own behavior is quite possible for a central bank with an individual decisionmaker, rather more difficult—but perhaps still possible—for an autocratically-collegial MPC, and probably out of the question for the other two types. I suggest that a genuinely-collegial MPC may have to content itself with a statement of its “bias” or “balance of risks,” while a truly individualistic MPC may have troubles doing even that. (In compensation, the vote of such a committee may reveal its bias reasonably well.)

Having written in detail about *what* should be said, let me now briefly consider *who* should say it. The key question here is whether the chairman should be the only person

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<sup>24</sup> Exceptions need to be made for confidential information provided to central banks by, e.g., foreign governments or private businesses. But this is a minor detail that is easy to handle.

who speaks about monetary policy, or whether other members of the MPC should also speak publicly.

I start with an obvious point. A single spokesperson for an *individualistic committee* will certainly *not* suffice because intra-committee disagreements, including some indication of their intensity, are part of the essential information set that markets and the public should have. Multiple voices help convey that information, and so should certainly not be suppressed. Of course, they also raise the danger mentioned earlier: that transparency may degenerate into cacophony. That is a genuine hazard that individualistic MPCs must take pains to avoid.

That said, the talk that emanates from the Bank of England's MPC certainly comes from many voices, and yet does seem to inform markets much more than it confuses them—although it took a while for markets to get used to all the chatter. Similarly, the Swedish Riksbank's individualistic MPC seems to have coped with its potential cacophony problem pretty well. So I view the problem of multiple voices from an individualistic MPC as manageable—something that requires some thought and perhaps a bit of coordination, but certainly not something that justifies any serious retreat from transparency.

The single- versus multiple-voice issue is more complicated for *collegial* committees. If a collegial MPC is highly *autocratic*, it would seem easy to get by with a single spokesperson (the chairman) without sacrificing much in the way of transparency. After all, the committee's views are, in essence, the chairman's views. But suppose the autocratic nature of the decisionmaking process suppresses dissenting votes, giving a superficial (but false) appearance of unanimity. In that case, disparate talk may be the

only way for markets to learn about disagreements within the committee.<sup>25</sup> And if there are dissenting votes, the dissenters ought to explain their reasons for disagreeing with the chairman. So perhaps multiple voices are appropriate for even an autocratically-collegial committee. But, unlike the case of an individualistic committee, markets need to understand that, when it comes to forecasting the committee's likely future actions, only one voice really counts: the chairman's. The others merely convey information on the strength or weakness of the consensus supporting him.

Ironically, it seems to be the *genuinely-collegial committee* that may sacrifice the least in terms of lost transparency by speaking with one voice. If a true consensus has been reached, the chairman will presumably convey that consensus to the public faithfully, rather than express his personal views if they differ from those of the group. If other members also talk, they will presumably adhere to “the party line”—a line to which they have all agreed. Thus we seem to have the following non-monotonic ranking of the appropriate number of public voices on a monetary policy committee:

Individualistic MPC: definitely requires multiple voices

Autocratically-collegial MPC: may benefit from multiple voices.

Genuinely-collegial MPC: a single voice may suffice

## **V. Toward an Optimal Monetary Policy Committee**

So what kind of decisionmaking body for a central bank seems best? Two main strands of argument point us in the direction of a monetary policy *committee* rather than a lone-wolf central banker. One is the economic and psychological evidence that

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<sup>25</sup> And similarly, disparate talk may be the only way for committee members other than the chairman to make their views known.

committees, on average, outperform individuals in performing complex tasks. The other is diversification, broadly construed. We do not put all our financial eggs in one basket. Why, then, should we put all our monetary policy eggs in one basket? Compared to a single individual, a monetary policy committee seems to offer the classic benefit of diversification: a higher mean with a lower variance.

However, if the chairman is extremely dominant, an *autocratically-collegial* committee may not diversify the nation's monetary policy portfolio much more than a single decisionmaker would. So the same lines of reasoning that favor committees over individuals appear to favor genuinely-collegial or individualistic committees over autocratically-collegial ones.

At this point, you may be wondering: Didn't Alan Greenspan do a pretty superb job of leading the FOMC? Do you really want us to believe that a more egalitarian organizational structure at the Fed would have produced better results than benign dictatorship under Greenspan? No, I do not. The Greenspan record is remarkable.<sup>26</sup> But it is also true that your portfolio would be worth a lot more today if you had invested it all in Microsoft twenty-five years ago instead of, say, buying the S&P 500. Yet that fact does not belie the wisdom of portfolio diversification. After all, you might have bet the family farm on Enron instead. We can only identify the big winners *ex post*, not *ex ante*—which is precisely why the first three rules of investing are: diversify, diversify, diversify.

Similarly, putting all the national eggs in the Greenspan basket served the United States extremely well. But that was not so obvious when he was first appointed in 1987.

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<sup>26</sup> See Blinder and Reis (2005) for a mostly laudatory examination and interpretation of the Greenspan legacy.

And in the 1970s, we put all our eggs in the Arthur Burns basket, with rather less favorable results. The point is that picking an individual central bank head is a bit like investing your entire portfolio in a single stock. There is simply no guarantee that the nation will always, or even normally, hit the jackpot. Hence I am drawn back to the same simple principle: It pays to diversify your central bank portfolio.

There is a parallel political argument. Forgive me for saying so, but benign dictatorship is the most effective way to govern a large organization. It is certainly far more efficient than a messy, slow-moving, and highly political democracy, for example. Thus well-run universities are almost always organized as benign dictatorships. I shudder to think about how they would operate as true democracies. Fortunately, however, few political philosophers have seen fit to apply this “lesson” to the governance of nation-states, and for a very good reason: It is highly *risky* to rely on the kindness of dictators, who have a way of not remaining benign.

You may have noticed that, as I proceeded through the catalogue of reasons to prefer a monetary policy committee to a single individual, most of the reasons also pointed to an *individualistic* committee structure, rather than to a collegial one. Except for one. A monetary policy committee that is too egalitarian runs the aforementioned danger of speaking with too many voices. If the result is a cacophony rather than clarity, that may confuse rather than enlighten the markets and the public—thereby turning transparency into noise. And that, in turn, can hamper the operation of monetary policy.

Furthermore, the citizens of a democracy have a right to understand what their central bank is up to, *and why*. A bank that is incapable of explaining *why* it does what it does is failing to perform one vital aspect of its duty. Someone, presumably the chairman, must

therefore speak definitively for the committee, or else somehow ensure that all the committee members sing from the same page. In that limited sense, too much democracy inside the central bank could be a mixed blessing.

There should, in principle, be a kind of “interior maximum” where a monetary policy committee is individualistic enough to reap the benefits of diversity and yet collegial and disciplined enough to project a clear and transparent message. Such a committee might look fractious and argumentative from the inside, but united and like-minded from the outside. That is an elusive goal, to be sure, but it is one worth pursuing. And I believe it will take place us somewhere between the stereotypes of an individualistic committee and a genuinely-collegial committee (albeit one with a clear leader)—probably closer to the former.

## **VI. Conclusions**

The main points of this paper can be summarized easily.

- When it comes to making complex decisions, committees have several presumed advantages over individuals, including a larger and more diverse knowledge base, different decision heuristics, and a built-in system of checks and balances.
- Committees can reach decisions either individualistically (i.e., through voting) or collegially. In the latter case, the group decisionmaking process can be either autocratically or genuinely collegial.
- Committees are neither inherently more nor less transparent than individuals.
- Most of the presumed advantages of group (versus individual) decisionmaking point to the superiority of genuinely-collegial or individualistic committees.

- One potential disadvantage of an individualistic committee, however, is that it may confuse outside observers by speaking with too many voices.
- The best ways of communicating with markets and the general public differ between individual central bank governors acting alone and formal monetary policy committees, and across different types of committees. When it comes to transparency, one size does *not* fit all.

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