

Chapter 4: Decision-making structures⁷⁷

The Main Issues

At the heart of any governance arrangement is the design of decision-making structures. Human factors will always remain important to outcomes, but human behaviour is subject to influence by structural and procedural aspects of the environment. Here are the main issues for central banks:

- Should decision authority be given to individuals or to groups? And if the latter, what degree of specialisation of the groups is appropriate – ie how many boards should be formally constituted, and how should their roles relate to each other?
- Should board members have individual or collective responsibility for decisions? And what determines whether decision-making is by voting or by consensus?
- When is it valuable to bring in outsiders to sit on boards?
- Is there an optimal size for a board? What are the relevant considerations?

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1. Decision-making by an individual or a group?

If central banks simply implemented the government's policy instructions, the preferred arrangement might be to have a single chief executive responsible for running the institution – the model for government departments. Attractive though the clarity of such an arrangement might be, central banks have become increasingly characterised by group decision-making, especially in relation to monetary policy (Table 7). As more decision-making authority has been delegated to the central bank, group decision-making has become more common.

Group decision-making is thought to lead to better, more accurate decisions – an idea that has both theoretical and empirical support. Different individuals may have different mental “frames” through which they interpret information and options. Combining those interpretations through discussion, followed by consensus forming or voting, effectively allows a group to base its decisions on a set of concerns, information and judgments that is much larger than would be available to an individual.⁷⁸

More generally, society is reluctant to delegate state power to a single individual. One reason is probably a perception that groups will be better at understanding and representing society's interests. Policy objectives are sometimes difficult to specify precisely, and their pursuit might involve trade-offs or conflicts between different interest groups. And as circumstances evolve, they might have to be reinterpreted in ways that were not foreseen when they were initially formed. Group decision-making might therefore have greater legitimacy in the eyes of the public.

Nonetheless, groups might also have some disadvantages as decision-makers. If individual members' sense of accountability is weakened, it might weaken incentives.

⁷⁷ This chapter was prepared mainly by David Archer.

⁷⁸ Vandebussche (2006) provides a summary of the relevant literature. Sibert (2006) also reviews the literature and focuses on two important features of committees: the effect of size on performance and whether group decision-making is more moderate than the individuals forming the group. Blinder and Morgan (2005) report experimental work on individual versus group decision-making.

Groups might end up making compromise decisions that lack logical cohesion. Group decision-making can be inefficient (especially where consensus building is necessary but difficult to achieve).⁷⁹

Numerous examples of group decision failures, especially in stressful circumstances, have been explored by social psychologists. And groups can be prone to ignoring information that does not fit with the group's view.

Table 7
**Who has the authority to make monetary policy
and general management decisions?**

Per cent of 47 central banks

Type of monetary policy authority:	Location of authority for monetary policy decisions			Location of authority for management decisions		
	Governor	Board	Euro-area NCB	Governor	Board	Other
Goal or target autonomy	6	45	23	34	36	2
Instrument autonomy	6	17	0	15	6	2
Limited autonomy	2	0	0	2	0	0
Total	15	62	23	51	43	4

Note: The classification by type of authority is based on Lybek and Morris (2004), updated and amended by the BIS. Lybek and Morris define *goal autonomy* as the independent authority to determine primary objectives from among several included in the central bank law, and *target autonomy* as the independent authority to determine the policy target against the background of a single legal primary objective. They define *instrument autonomy* as central bank authority to select and set policy instruments against the background on government or legislature involvement in setting the policy target.

Source: BIS (2008b), BIS analysis of central bank laws.

These considerations suggest that group decision-making would be more prevalent where central banks have more authority (eg goal or target autonomy in addition to instrument autonomy). Table 7 shows that while the great majority of central banks nowadays use boards to make decisions on monetary policy implementation, most central bank laws still provide for the governor to have sole responsibility for management. In both areas, where policy autonomy is weaker, the ratio of governor focused to board focused central banks is higher.

2. Legal framework for decision-making

In many countries, the legal statute of the central bank specifies the decision-making body or bodies of the institution, how these bodies are constituted, and what they are responsible for. The types of decisions that the central bank makes fall broadly into

⁷⁹ Blinder and Morgan's (2005) experimental work failed to confirm the findings from other disciplines that group decision-making has more inertia than individual decision-making.

three categories. These categories, and the names of the boards in charge of them as used in this chapter, are as follows:

<i>Responsibility</i>	<i>Name of board in this report</i>
1. Policy formulation and implementation	Policy board
2. Management and administration	Management board
3. Oversight of the institution's performance	Supervisory board or committee ⁸⁰

To the extent that the central bank has more than one major policy responsibility – for example, it operates the domestic payment system and it participates in bank supervision – the policy board may be responsible for more than one type of policy, or there may be more than one policy board (Table 8). Finally, there may be yet other boards or committees that are separately responsible for employee compensation, auditing, risk management, investment of assets or staff disciplinary issues if these activities are not assigned to the management or supervisory boards.

In several central banks, important boards or committees have been established without grounding in the law. In some cases the legally designated authority has effectively (though not legally) delegated its decision-making rights to a group by undertaking to be bound by the collective decision. The Bank of Canada's Governing Council – which is not a creation of statute – makes monetary policy decisions in this way, under a resolution of the Bank's Board of Directors. In this case, the Governor remains formally responsible, but for all intents and purposes the decision is that of the Council. Likewise, in Malaysia and South Africa, monetary policy committees play important decision-making roles, notwithstanding the fact that they are not specifically required by law.

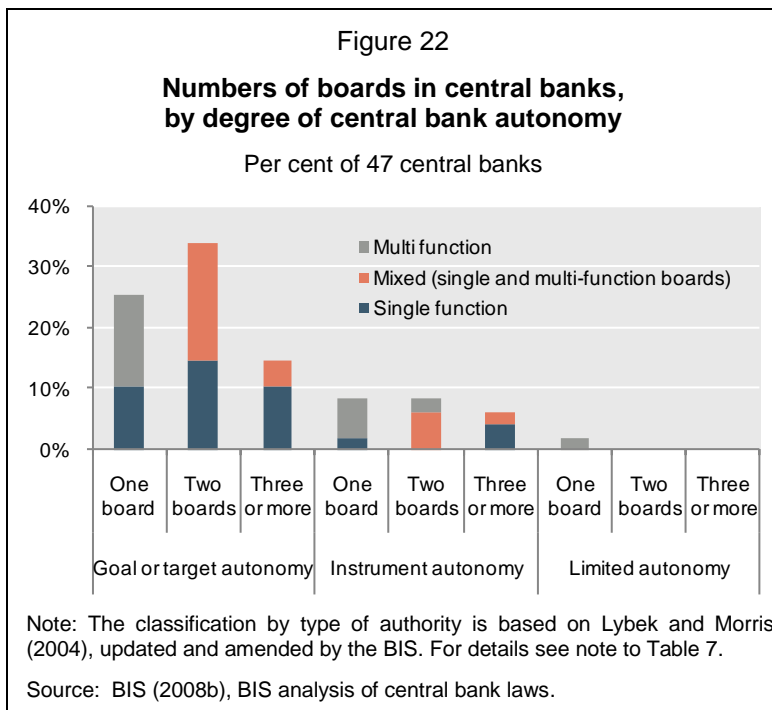
Virtually without exception, the governor, by law, chairs the policy board and the management board (Table 8).⁸¹ Because the governor's role usually includes that of "chief policymaker" and thus bears the greatest responsibility for the policy outcome, it makes sense for the governor to chair the policy board. In the case of the management board, having the governor as chair is consistent with his or her role in the day-to-day management of the central bank. When the policymaking and administrative functions are combined into a single board, it is likewise typical for the governor to chair that committee. In contrast, the law with regard to chairing the supervisory board varies across central banks. Where the central bank has such a board, the governor chairs it in a little over one third of the cases (an issue which is taken up later). Again, practice may differ from what is called for in the law. If relevant aspects of the legal code have not been revised for some time, the law might not reflect current thinking about governance matters, and more appropriate workarounds have been established.

⁸⁰ Despite the potential for confusion with policy boards for banking supervision, we continue to use the label "supervisory board" for the internal oversight board, given that that is the common usage.

⁸¹ For the national central banks of the Eurosystem, the policy board has no responsibility for the formulation of monetary policy.

3. Many roles ... how many boards?

Many central banks have a singular (“main” or “principal”) board discharging several functions; others have several boards, each with a separate function. The issues involved in designing the particular arrangement include the impact on efficiency of decision-making, the management of potential conflicts amongst objectives, the effectiveness of accountability and the availability of suitable personnel. This section discusses the ways in which these issues are typically addressed by central banks.



The standard governance structure in the English-speaking corporate world involves a single board, setting strategy and overseeing the actions of the chief executive. In parts of continental Europe, the standard structure features two boards, with a supervisory board overseeing an executive board. In the central banking context, around one third of institutions have a single board (Figure 22), with a significant proportion of boards having multiple functions. As shown by Table 8, boards with policy and management

functions are more likely to have multiple functions than are supervisory or advisory boards.⁸²

As single boards represent a less complicated organisational structure, what circumstances justify a multiboard structure? Frisell et al (2008) suggest that key central bank functions may differ from each other, or in some cases conflict, to such a degree that specialised governance arrangements are needed. The specialisation of boards in such arrangements allows an alignment of expertise and focus with the task. Thus, a dedicated policy board may call for different skill sets, and hence a different composition, than an executive or management board. For example, economists who may be valuable for a monetary policy board may have little management expertise, while good managers might not have any experience in economic policymaking.

The specialisation of governance arrangements also allows relationships with other public sector entities to differ by function. An important example is the common preference for an arm's length relationship between the central bank and the government with respect to monetary policy decisions, and the similarly common preference for joint or consultative decision-making on lender of last resort operations.

⁸² The numbers in this table differ substantially from those in Lybek and Morris (2004). They are based mainly on central banks' own classification; Lybek and Morris' numbers are based on their interpretation of legal codes. And the samples differ, which can sometimes introduce substantial differences.

Another example relevant for central banks that are charged with banking supervision responsibilities might be a preference for an independent monetary policy board and another board for banking regulation and supervision that includes ex officio representatives of other public sector agencies; the new arrangements at the Bank of England follow this model.

Table 8
Selected types of central bank boards, and their frequency

Board function specified in the law	Per cent of central banks		Median number of board members	Per cent of boards	
	One board of this type	More than one board of this type		Multiple functions	Governor as chair
Supervisory	66	2	10	21	39
Monetary policy	64	0	8	83	97
Other policy	43	9	7	82	89
Management	66	4	7	60	97
Advisory	17	2	11	20	30

Note: Data are drawn from a survey of the central banks in the Central Bank Governance Network. The 12 national central banks of the Eurosystem which are in the Network are not counted as having monetary policy boards, given the centralised nature of decision-making in the euro area; nor are those 12 central banks counted as having a formal advisory role on monetary policy.

Source: BIS (2008b), and BIS analysis of central bank laws and websites.

A multiboard governance structure can also provide a system of checks and balances involving internal accountability. The potential role of supervisory boards in holding central bank management to account is discussed further below.

These considerations – specialisation benefits, internal accountability structures, operational efficiency and availability of suitable board members – would be expected to be weighed differently in different situations. Some examples help to illustrate the range of central bank arrangements.

In Mexico, a committee that is not chaired by the Governor and is stipulated in the central bank law provides guidance on salaries for members of the board of the Bank of Mexico. In contrast, in Canada, the Governor chairs the principal board and thus has relatively broad powers. However, the range of functions performed by the Bank of Canada, whose statute dates from the 1930s, is smaller than in many countries; and in some of its major operations, the Bank of Canada acts as an agent for the Government, which oversees its operation. According to the Bank of England Act of 1998, the Governor chaired the Court of Directors, a board responsible for both management and supervision of the central bank – excluding decisions of the Monetary Policy Committee. Oversight of the central bank was performed by a subcommittee (NedCo) composed entirely of non-executive directors and chaired by one of them. The Banking Act (2009) changes this arrangement to one in which a smaller Court is chaired by a non-executive director.

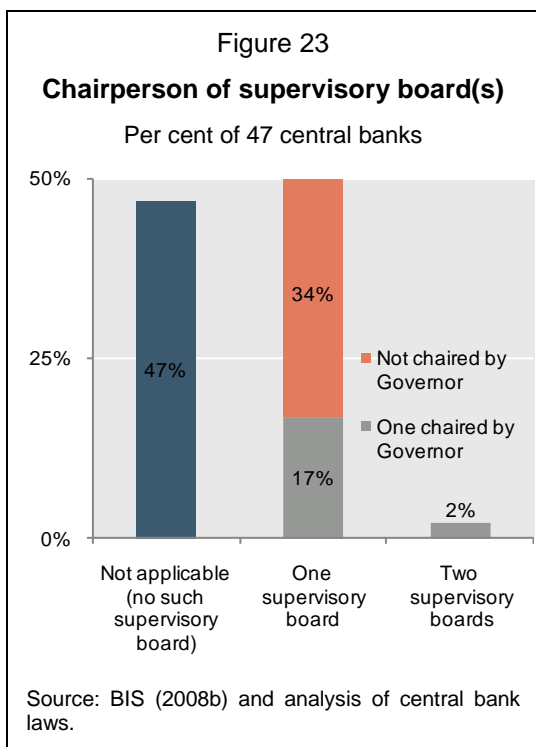
Different sorts of procedures govern the mix of public and quasi-private institutions that constitute the Federal Reserve System. The Board of Governors of the Federal Reserve System is subject to an external audit but does not have an internal

supervisory body of its own. Each of the 12 Federal Reserve Banks, however, has a board of directors that is chaired by a non-executive.

The supranational ECB provides yet another approach. The voting rule of the Governing Council gives each member an equal vote; but when the Governing Council decides on financial matters of the institution, it uses a special procedure set out in the statute in which the vote of each national central bank is weighted according to its share in the subscribed capital of the ECB. Although members of the Executive Board may participate in the discussions regarding these decisions, their votes count as zero.

4. Supervisory boards

A little under two thirds of BIS member central banks have boards that the central banks themselves identify as having significant supervisory responsibilities (Table 8).⁸³ About half of BIS member central banks have at least one board whose prime purpose is to supervise the central bank in whole or part (Figure 23).



One of the main functions of supervisory boards is to hold management to account on behalf of the principals. In the corporate world, a supervisory board acts for shareholders whose ownership rights may be widely spread, reducing the ability and incentive of each principal to contract with and monitor management. In the central banking world, the motivation for a supervisory board may be different. Because the legislature or the government are themselves agents for the principals (the wider public, including future generations), monitoring need not be delegated in order to overcome dispersion and associated free rider problems. Monitoring can thus be concentrated where there is also power to act, making for a strong base for accountability. But, as discussed in Chapter 7, politicians might not be the best agents for the public in the monetary (and other) spheres at the core of central banking. Inserting some distance between

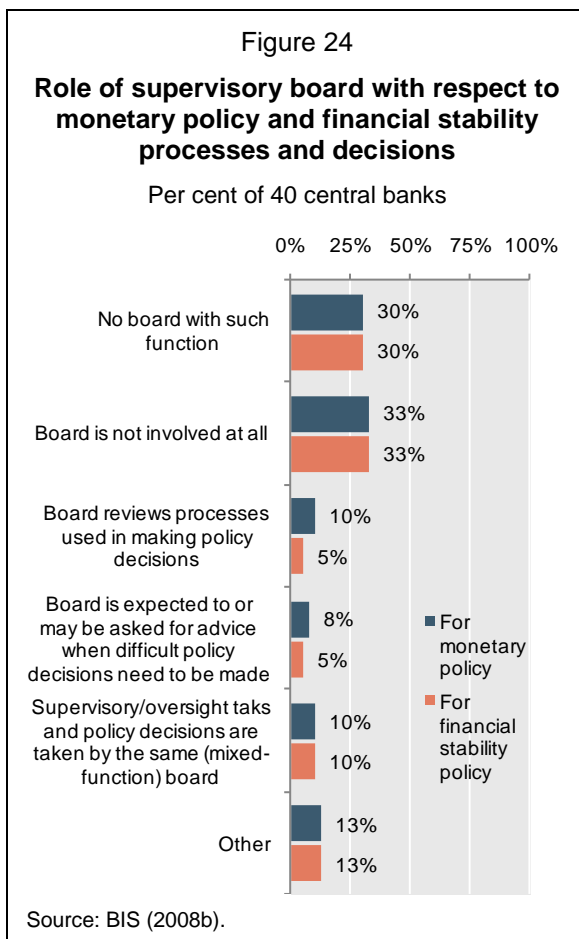
politicians and the central bank may be desirable, leading to the need for another monitoring mechanism. A supervisory board can provide such a mechanism.

Different countries see this issue differently. As noted, around half of the central banks in our sample do not have a dedicated supervisory board. In Finland, for example, the central bank operates under the supervision of Parliament (which elects the members of the Parliamentary Supervisory Council); in the United States, supervision is

⁸³ In contrast, Lybek and Morris (2004) count nearly all central banks in their sample of central bank laws as having a board with supervisory responsibilities in some form. Besides the differences that can be produced by samples of differing sizes (47 central banks in the table, 101 in Lybek and Morris), it is likely that the definition of "supervisory responsibilities" used by Lybek and Morris to evaluate legal codes differs from that used by central banks themselves in assessing whether boards have a significant supervisory role.

conducted by congressional committees. Aspects of oversight are also delegated to public auditors in some cases, including at the ECB and the Federal Reserve, where external control functions are performed by, respectively, the European Court of Auditors and the Government Accountability Office (an arm of the US Congress).

One of the issues surrounding central bank supervisory boards is that they might be no better (or worse) than politicians at representing the public's interest. Whereas the political process can reach deeply into society for the selection of representatives and can achieve legitimacy through broadly based electoral procedures, a central bank board is small and appointed rather than elected.⁸⁴ A risk arises that, by creating a supervisory board, one problem in the construction of the monetary policy decision-making framework (how to move away from direct political oversight) is simply replaced by another one. That is, concerns about the consequences of allowing the government of the day to alter the monetary policy target at will – concerns relating to the issue of whose interests the relevant politicians are serving – would potentially be magnified if a much less representative group, such as the central bank supervisory board, were charged with that task.



For this reason central banks that have supervisory boards have statutes and bylaws that often pay particularly careful attention to defining the role of the supervisory board vis-à-vis the central bank's policy responsibilities. Essentially, three approaches are available.

The first is to attempt to ensure that the supervisory board is both capable of understanding the issues and representative of society. Much depends on the appointment process (discussed in Section 8 of Chapter 3).

A second approach is to exclude oversight of monetary policy decision-making from the responsibilities of the supervisory board, relying instead on other mechanisms to hold the central bank's policymakers to account. Figure 24 suggests that the majority of supervisory boards are excluded from active involvement in policy or the review of policy decisions – with respect to both monetary policy and financial stability policy. At the Bank of England, the supervisory board (the Court of Directors) has oversight of the process used by the MPC to make monetary

⁸⁴ The selection process will be discussed later. In general, however, supervisory boards are made up of individuals selected from a broad range of backgrounds, sectors and locales. Selection for expertise in monetary economics is the exception.

policy decisions but no right of review of those decisions themselves. At several central banks, policy boards include significant numbers of outside appointees, and their presence may provide a form of external supervision.

A third and largely complementary approach is for the respective roles of the policy and supervisory boards to be conditioned by a predetermination of policy goals and even of specific targets. Predetermination of targets reduces room for discretion on the part of central bank decision-makers. Predetermination also makes it more difficult for supervisory bodies to impose its own interpretation of appropriate trade-offs in the course of holding the decision-makers to account. An example of such an arrangement is New Zealand, where the supervisory board is constructed as a monitoring agent of the Minister of Finance – who participates in setting the specific policy target. Use of such a monitoring agent follows from the understanding that the intent behind policy actions is not always directly observable, in part due to long lags between action and effect. A monitoring agent within the central bank, such as a supervisory board, may be better placed to infer intent than would be outside observers.

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Principles of corporate governance tend to favour the separation of the roles of chairman of the board and chief executive officer to ensure appropriate checks and balances. Figure 23 showed that the governor is the chairperson in about one third of the boards with predominantly supervisory functions.⁸⁵ Supervisory boards in central banks may review the central bank's operation and management, oversee audits, determine risk management strategies and set the governor's salary. These are all areas in which the governor has a personal responsibility or stake. Risk of conflicts of interest in these cases will be minimised if the supervisory board is chaired by someone other than the governor.

Where conflicts of interest arise, the relevant functions are often performed by a subcommittee of the board that is chaired by a non-executive director – such arrangements are often adopted by central banks even though not required by the law. Of course, if the main function of the supervisory board is to give the central bank strategic direction and oversee its administration in a general sense, it is less contentious for the governor to act as chair. Also, following standard practices of corporate governance, central bank supervisory boards have a majority of external members (see Table 9). It is sometimes the case that these external members represent certain parts of the community, sectors of the economy, the government, or legislature (Table 6 in Chapter 3).

It is worth noting that several central banks with recently amended central bank laws have split the post of the governor from that of the chairman of the supervisory board (Iceland, New Zealand, Switzerland and the United Kingdom).

A choice also needs to be made between a board of experts or a board comprising members with wide experience in different fields. The first option – experts – can place considerable stress on the available talent pool. Central banking is a highly specialised subject. Having experts supervise experts carries a risk of battles of egos unless roles

⁸⁵ Lybek and Morris (2004) reported that a substantially higher proportion (74%) of boards with supervisory responsibilities are chaired by the governor. The differences are partly attributable to the fact that the Lybek and Morris survey count boards with supervisory attributes rather than supervisory boards. Thus “main” or “principal” boards – which are normally chaired by the governor, may be included, even though the supervisory responsibilities of main boards are typically more limited than those of specialist supervisory boards. In addition, with 101 countries in the Lybek and Morris sample, more boards from developing economies are included. Typical practice may be different in developing versus advanced and emerging economies. (See also Footnote 82).

are very clearly defined, which is difficult. The second option – generalists – inherently runs afoul of gaps in understanding between the expert with delegated authority and the generalists with the responsibility to monitor but without the necessary training. A further risk with groups of generalists is that the members may feel that they have an obligation to represent particular interest groups (be it businesses, unions or others), leading to efforts to reinterpret imperfectly defined objectives in terms that give preferential treatment to some sectors or groups over society at large. As already noted, the mandate of supervisory boards in a number of countries does not extend to include oversight of decision-making on policy objectives, in part for this reason.

5. Policy boards

Boards or committees for decision-making on interest rates are now very prevalent and have become the focus of a mushrooming field of research.⁸⁶ In only a handful of countries is the governor still legally and practically responsible for interest rate decisions (Aruba, Israel, Madagascar, Malta, New Zealand and Papua New Guinea). In some other cases, the governor remains legally responsible, but decisions are made within the context of committee meetings that entail a vote or consensus forming (Canada, India, Malaysia, South Africa).

In almost all cases, the board that makes interest rate decisions is also responsible for other functions, including decisions in relation to other policy functions and on the management of the bank. There is only a small (but growing) number of dedicated monetary policy boards. The best known examples of dedicated policy boards are the Bank of England's Monetary Policy Committee and more recent equivalents in Hungary, Poland, Thailand and Turkey. The Federal Open Market Committee of the Federal Reserve System is also a dedicated committee, responsible for open market operations, although the Board of Governors has sole responsibility for some other aspects of monetary policy. In a few central banks, a multifunction board formally reconstitutes itself as a specific monetary policy board for the monetary policy task. The Bank of Japan's Policy Board has formal monetary policy meetings, as does the Central Bank of Brazil's COPOM (although the latter is not a creation of the law). For the majority of cases in which the policy board is a multifunction board, the meetings at which the board considers monetary policy decisions have no other item on the agenda, although the formal differentiation between monetary policy business and other business of the boards is a little less distinct than in the cases of Brazil and Japan.

There are a few cases in which the board is advisory rather than decision-making when it comes to monetary policy. For example, the Board of the People's Bank of China advises the Governor of the People's Bank; the Governor in turn advises the State Council, which is the decision-maker. Boards of the national central banks of the Eurosystem may informally play some role in advising their governor on monetary policy matters, although these governors participate in monetary policy decision-making at meetings of the ECB's Governing Council in a fully independent personal capacity – not as representatives of their national institution or country. At the Bank of Israel, the law established two levels of advisory committee – both of which comprise a majority of members drawn from outside the central bank – to advise the Governor, who is the sole decision-maker. At the Reserve Bank of New Zealand, an internal advisory committee has been established to advise the Governor, who is also the sole

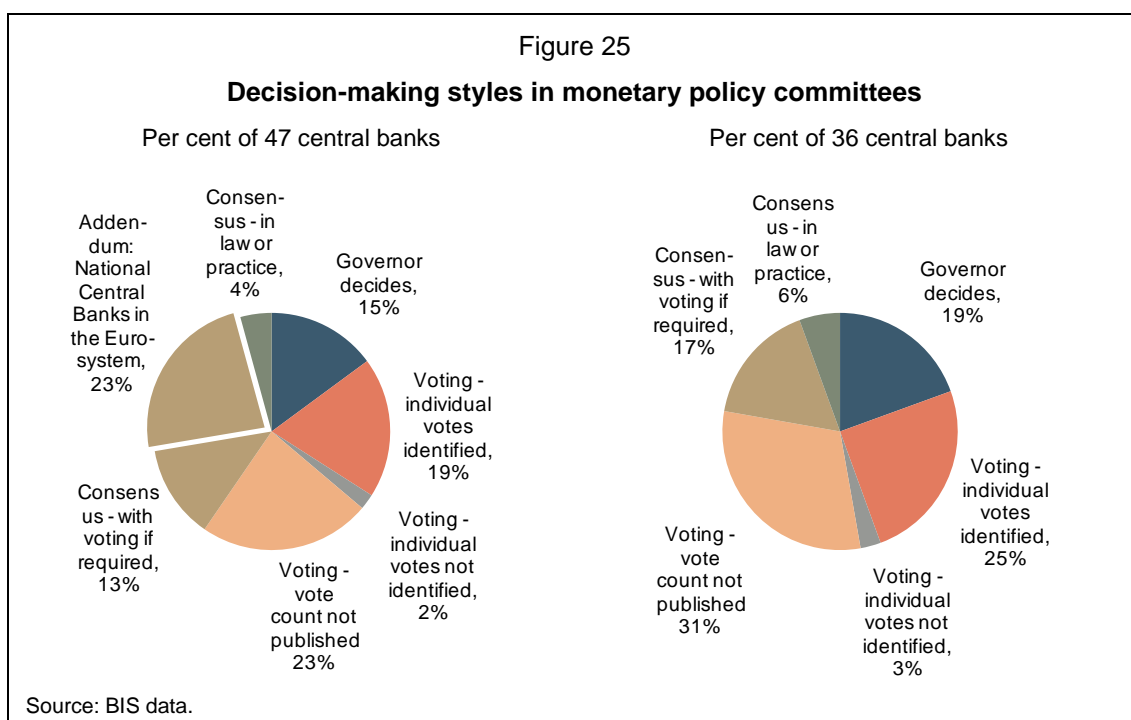
⁸⁶ Prominent examples of the research are Blinder (2007); Maier (2007); and Sibert (2006). See Blinder et al (2008) for a survey of the theory and evidence.

decision-maker. In the New Zealand case, there are also members drawn from outside the central bank, but they are in the minority.

The sections that follow focus mostly on the issues to be addressed in the design of policy boards, though they also apply to other instances of group decision-making in central banks.

6. Individual or collective responsibility; voting or consensus

With group decision-making, a choice needs to be made between individualistic or collective decision-making protocols. Few central banks release vote counts or the voting record. If minutes are released within a short time of the decision having been made, attribution of views is rare.⁸⁷ Collective decisions – whether determined by private voting or consensus – are strongly favoured (Figure 25).



Such arrangements are in keeping with those used for some other appointed agencies, such as those dealing with public health and safety issues. They are also in keeping with arrangements for executive government in many countries. Cabinets usually debate issues behind closed doors, record individual contributions and votes in secret minutes, then present a united front behind the final decisions. Common to executive government and central bank decision-making is the presence of pervasive uncertainty. In such circumstances, the exploration and testing of alternative ideas has particular value, and such exploration may be more wide-ranging when out of the public eye. Differences in views can dominate the attention of observers and thus obscure the sometimes more important common ground.

The balance of these considerations is difficult to assess outside of the context of the whole structure. For example, decision-making in private might motivate more

⁸⁷ Chapter 7 discusses the public release of information on central bank decisions and decision-making.

abundant disclosure of collective reasoning. (A discussion of the disclosure of collective reasoning via the release of minutes is contained in Chapter 7.) Decision-making in private might also suggest the need for monitoring by supervisory boards, of process if not of content. And it might also warrant the use of external appointees to the decision-making board – as discussed next.

7. External board members: when to include, what roles to assign

Decision-making groups made up of experts commonly face two problems: a tendency to “group think”, especially when the world is uncertain; and an attraction to technocratic solutions for human problems.

Bringing outsiders into the group may counterbalance those tendencies. The essential contribution of outsiders is diversity of life experience and of day-to-day contacts. With that greater diversity of background, they may ameliorate the expert group’s problem tendencies. Also, the democratic legitimacy of the decision-making group, which is particularly important in some jurisdictions, can be enhanced by members from a larger cross-section of society. In a similar vein, as previously noted, the presence of outsiders may have the effect of making insiders behave as if they were under supervisory scrutiny. The presence of external members on policy boards is in fact quite commonplace; within the central banking community, one finds a wide range of arrangements for external members, from their being in the majority to being in the minority, and from having full-time duties to being only part time (Table 9).

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Table 9
Composition of central bank boards
Per cent of boards in the sample

	With majority of internals	With majority of externals	With external ex officio members		With part-time external members
			who vote	who observe	
Policy boards	63	31	23	37	43
Supervisory boards	9	91	39	27	79

Notes: 1. Based on a sample of 47 central banks covering members of the Central Bank Governance Network. The sample contains 35 policy boards (including policy boards with mixed functions) and 33 oversight boards. 2. External members are defined as limited-term non-executive members selected from outside the central bank. 3. Ex officio members serve on the board by virtue of their occupation of a specific office.

Source: BIS analysis of central bank laws and websites.

Yet the mechanism is not without its complications. If policy objectives are not clearly articulated in the bank’s or policy group’s mandate, diversity can be a disruptive force, especially if external members are affiliated with particular sectors of the economy or society; and the disruption can be even more pronounced if such an affiliation plays a (formal or informal) role in their appointment. Although the majority of central bank laws do not provide explicitly for geographic or sectoral characteristics as a basis for

appointment (Table 6 in Chapter 3), the weight placed on representation may be higher in practice. The essential problem concerns disagreement over objectives – geographic and sectoral interests can be at odds with the interests of society at large.⁸⁸ Clearly stated objectives reduce the potential for such disagreements to disrupt decision-making, but they may be reflected in arguments over policy implementation. For small countries, the availability of a pool of external members with sufficient expertise to engage successfully with the technical aspects of the task is a perennial issue. Even quite large countries have found the availability of appropriate outsiders to be an issue after a period of years, given that limited terms are necessary to preserve diversity – over time, outsiders tend to become insiders, and more rapidly so if the appointment is a full-time one.

The numerous practical choices to be made in appointing outsiders also present complications. What role should full-time members have? Full-time policy work may be too narrow an assignment to be attractive for external policy board members, but to attempt enriching the assignment with an executive role can disrupt the career paths, and hence the motivation, of long-term central bank employees. Assigning executive roles to external policy board members may also be less efficient because it does not take advantage of best-fit appointment procedures.

Will part-time members face a conflict of interest? After all, few private businesses are not influenced in a material way by central bank decisions. And will part-time members have sufficient preparation time and resources to permit them to effectively counterbalance full-time internal members?

Finally, for or both full- and part-time outsiders, getting access to information and expert advice can be difficult: for confidentiality reasons the information and advice may need to come from bank staff, yet bank staffs' use of time is properly a matter for bank management to determine.

8. Board size

Table 8 indicates that the median board size in central banks is in the range of seven to nine members; a little smaller for boards with management functions and a little larger for boards with advisory functions. Much has been written on the subject of the optimal size of groups that make decisions. The literature tends to see an optimal size for monetary policy committees in the range of five to nine members, but central banks and other institutions proffer numerous examples of both smaller and larger boards working successfully. The Swiss National Bank, for example, has a three-member board, while the Federal Reserve System's Federal Open Market Committee numbers 19 (although only 12 have a vote at any one time) and the ECB's Governing Council numbers 22 (at present).

The Federal Reserve and ECB examples point to the influence of regional makeup and country size on board size – boards are large in these federal and multistate examples to ensure representation. In general, regions with larger populations tend to have larger boards. Some researchers ascribe that pattern to the notion that larger economies are

⁸⁸ The potential importance of this issue has been recognised in the design of the monetary union in Europe. The multistate structure of the ESCB is reflected in the geographical basis for appointments to the decision-making bodies of the ECB. However, over-arching principles of personal independence and of policymaking apply to the euro area as a whole. These principles make membership on such bodies incompatible with the exercise of other functions that may influence members' activities, such as holding an office in the executive or legislative branches of the state or involvement in a business organisation. See ECB (2008), p 20, which deals with safeguards against conflict of interests.

more complex and thus require a larger team of decision-makers to pool the relevant information.⁸⁹ The reasoning is suspect on two grounds. First, because of their limited diversification, smaller economies are usually less stable, and thus more difficult to read, than larger economies. Second, the task of board members is not usually to contribute raw information about the current performance of sectors and regions. That task is usually performed by national statistical offices – with substantially more completeness and accuracy than a small group of individuals could hope to achieve – coupled with the central bank’s own professional staff, who further analyse such information. The task of board members relates instead to interpretation. More likely, the empirical relationship between the size of economic regions and the size of boards has to do with the influence of federal and multistate systems (as noted), the “tax” (seigniorage) base available to pay for the board’s functioning, and the number of suitable candidates.

The most suitable board size is likely to be a function of several considerations, including group dynamics, a subject that is picked up in the next section. Some considerations also interact with each other. For example, the preferred decision-making procedure may influence choice of board size; smaller groups might work better if consensus decision-making is preferred; however, the experience of the ECB, which has a large board that reaches consensus decisions in meetings that are shorter than those of many other central banks, suggests that this is not always the case. Public disclosure of individual arguments and votes may create incentives for individuals to be seen to be making an active contribution, and their doing so takes up meeting time. In such a context, large boards could be less practical.

9. Committee dynamics

A large literature in social psychology considers the effect on group dynamics of factors such as decision procedure, the presence and backgrounds of external members and the extent of public disclosure of proceedings. The literature suggests, for example, that the beneficial averaging of views that occurs when people come together may be offset by a tendency for individual views to become more extreme if they are shared by the majority or by others with big reputations.⁹⁰ The less diverse the group’s views are, the greater the risk of polarisation. A second example from the literature concerns the effect of group size on group dynamics. When the group is large, speaking time tends to become more unevenly distributed, again raising the risk of undermining the gains from apparent diversity. Larger numbers bring diversity – assuming that the selection procedures seek diversity – but also a risk that individual members feel that they need to contribute only a piece of the puzzle rather than evaluate all the information available.⁹¹ Larger boards may also be more prone to coalition-forming within the group, also reducing effective diversity; and to the influence of information and decision “cascading”.⁹²

⁸⁹ See, for example, Berger et al (2006); and Erhart and Vasquez-Paz (2007).

⁹⁰ For a discussion of when the views of the group are better than those of individuals, see Surowiecki (2004). Blinder and Morgan (2005) provide experimental evidence for the superiority of groups in the context of decision-making on monetary policy. For a discussion of group polarisation, see Brown (1989).

⁹¹ Such behaviour is called “social loafing” or “shirking” in the literature.

⁹² See Caillaud and Tirole (2007) for a discussion of the use of speaking and voting order to create a “cascade” effect on opinion formation (especially when some individuals carry strong reputations).

Very little research has been conducted on these issues of group dynamics in the specific context of central banking. A small number of case studies of a somewhat anecdotal nature are available in the published histories of particular central banks and in the memoirs of retired decision-makers. As an example, more than one ex-insider's retrospective view of Chairman Greenspan's management of the Federal Open Market Committee points to the importance of pre-meeting lobbying and of speaking and voting order. Similarly, informal reports indicate that in most central banks conventions have evolved to guide the expected behaviour of committee members. Although the anecdotal information supports the relevance of social psychology research in the case of central banking, it remains to be demonstrated by structured studies.