Chapter 7: Accountability, transparency and oversight[130]

The Main Issues

Important state powers have been delegated to the central bank, powers that may affect the distribution of income in society and across generations. Safeguards are needed to shield the proper exercise of those powers from political threat, but insulating the central bank entirely from oversight of elected representatives would have the effect of making central bankers unaccountable. The key issue is to strike the right balance between protecting the independence of the central bank and preserving its accountability. To strike that balance, several issues need to be confronted in the design of accountability arrangements:

- How can objectives be made sufficiently measurable and precise so that policy success and failure can be attributed to the relevant decision-makers?
- How can central bankers be held accountable to elected representatives for actions taken independently of those representatives?
- Where group decision-making is used to reduce idiosyncratic risk, how can the individuals involved be held to account?
- How much can openness and transparency fill any gaps in accountability to elected representatives by providing accountability to the wider public? Should obligations to be transparent be formalised and detailed?

1. Introduction

Central banks have a number of responsibilities (see Chapter 2), a considerable degree of autonomy (see Chapter 3) and a significant amount of resources (see Chapter 6). Thus, the delegation of tasks to the central bank should be accompanied by accountability to ensure appropriate democratic control and good governance. Accountability pertains to the functions and objectives of the central bank as well as to its use of resources.

In general, accountability has three characteristics:

1. scrutiny by others;
2. regular accounting for one's actions; and
3. the risk of negative repercussions, if performance is considered unsatisfactory.

All in all, accountability centres on an evaluation of performance. Suitably designed, mechanisms can play a critical role in aligning objectives and incentives so that objectives are met and the central bank's operations are conducted effectively and efficiently.

However, in the central banking context, laying down effective accountability mechanisms encounters special challenges with respect to describing the performance yardsticks that central bankers are measured against. First, it may be hard to clearly define the objectives, or there may be multiple objectives that are potentially conflicting.

[130] This chapter was prepared mainly by Petra Geraats.

Without a precise specification and prioritisation of the central bank's goals, it can be difficult to evaluate its achievements. Second, it may be hard to identify appropriate and verifiable performance criteria with respect to the objectives that are defined. For many central bank functions, and especially the most critical ones, the central bank's actions are only one out of many influences on the outcomes. It may require a specialist's expertise and a lot of judgment to relate specific actions to intended outcomes and to assess their contribution to the achievement of objectives. Third, the formal and informal delegation mechanisms may leave somewhat vague how much responsibility for decisions rests with the central bank, or the central bank may not be given the powers needed to achieve its objectives.

These issues make it far from straightforward to hold central banks accountable. Nevertheless, developments during the past two decades have greatly facilitated accountability. The main gains have perhaps been in relation to monetary policy, where operational independence with a primary objective of price stability and numeric targets has become increasingly prevalent.

The key questions in the design of accountability arrangements are to whom is the central bank accountable, for what is it held accountable, and how is accountability accomplished? Because central banks supply public goods, they are ultimately accountable to the public. Formally, central banks are accountable to the state, from which they derive their statutory authority. In practice, they are typically made accountable to legislative committees, ministers of finance, or supervisory boards. The choice of accountability mechanisms generally depends on the nature of the central bank's responsibilities. The mechanisms used for easily observable and quantifiable objectives, such as price stability, are different from those for objectives that are hard to measure, such as financial stability, or not easy to observe, such as the stewardship of resources.

After analysing the main challenges to creating effective central bank accountability, this chapter takes stock of current accountability practices, both formal and informal, and the critical role of transparency with regard to informal accountability. It also addresses potential tensions between central bank accountability and independence.

2. Central bank accountability

Accountability with respect to functions and objectives gives rise to a host of issues that are specific to central banking. Accountability for monetary policy is usually further developed than accountability with respect to the central bank's financial functions and objectives. Accountability with respect to the central bank's use of resources is in many ways similar to that of private and other public institutions, although several challenges arise because of inherent conflicts between the central bank's functions and objectives on the one hand and its financial stewardship on the other.

2.1 Accountability with respect to monetary policy

Typically, one of the main objectives of monetary policy is price stability. Although different views exist about what price stability means in practice, it is amenable to quantification, and its achievement is to a certain extent publicly observable. A large number of central banks nowadays publish a numerical inflation target, which provides a concrete criterion against which to judge the central bank's success in achieving price stability. Other central banks have an explicit target or monitoring range for the exchange rate or for monetary aggregates as intermediate targets in the pursuit of price stability.

Explicit quantitative targets or monitoring ranges for one or more of three variables – inflation, the exchange rate and a monetary aggregate – have played an increasingly prevalent role in monetary policy over the last two decades (see Table 16). In particular, there has been a notable shift since the early 1990s away from exchange rate and monetary targeting towards inflation targeting. In 2006, 64% of central banks in a sample of 36 monetary authorities were operating with quantified price stability objectives. In contrast, in 1990, only 3% of central banks had numerically explicit inflation objectives. An important contributor to this overall evolution was the creation of the Eurosystem, which led member central banks to move from various exchange rate targeting schemes to a common framework based on a single quantified price stability objective. Such transparency about main objectives provides an important means for holding central banks accountable.

Table 16

Explicit targets and monitoring ranges for monetary policy

Per cent of central banks (Eurosystem central banks counted as a single institution in 2006)

	1990	1998	2006
Single target			
Inflation	3	20	56
Other quantified price stability objective	0	0	8
Exchange rate	39	35	11
Monetary aggregates	21	13	3
Multiple targets	11	26	6
No explicit target or monitoring range	26	7	17

Source: Fry et al (2000), updated by BIS. Sample of 38, 46 and 36 central banks in 1990, 1998 and 2006 respectively.

During the 1990s it also became common for central banks to have explicit targets for more than one of the three variables. For instance, monetary targets have often been used to monitor progress towards an inflation target. But multiple targets could give rise to conflicting signals and complicate accountability. Their use has become less popular during the past decade with the advance of fully fledged inflation targeting schemes, which centre on one explicit target for inflation.

In about 70% of countries, the government has a role in setting explicit targets for monetary policy, which provides a yardstick that facilitates accountability. The government plays such a role in about 70% of countries with an inflation target, 80% with an exchange rate target, and 30% with a monetary target (which is often not primary). Typically, targets are set jointly by the government and the central bank, although in about 30% of countries with inflation targets and 30% with exchange rate targets, the goals are set solely by the government.

The evaluation of an exchange rate target is quite straightforward because the exchange rate can in principle be directly and immediately controlled. However, as discussed in Chapter 2, evaluating performance against monetary and inflation targets is complicated by the fact that the central bank typically has only imperfect control over broader monetary aggregates and inflation.

Another important challenge for accountability is that monetary policy actions tend to take a long time to affect macroeconomic outcomes (typically around two years for inflation). Therefore, targets are usually specified for a suitably long horizon, which is often indefinite for inflation targets. These same lags in monetary policy transmission imply that ex post accountability based on a comparison of realised outcomes with targets actually evaluates the central bank's actions in the (distant) past. It also uses the benefit of hindsight, which may not be fair. These anachronisms can be avoided by taking into account the effect of unanticipated transmission disturbances and relying on the real-time information available to the central bank. The latter also allows for real-time accountability based on an assessment of the anticipated effects of the current actions of the central bank. But monetary policy actions are generally clouded by economic uncertainties that make it hard to divine the central bank's intentions. This murkiness can be lifted by the central bank through the disclosure of relevant information. Thus, transparency facilitates accountability.

2.2 Accountability with respect to financial functions and objectives

As discussed in Chapter 2, it is generally hard to identify appropriate quantitative performance targets for the central bank's financial functions (such as financial supervision and regulation) and objectives (such as an "efficient" payment system, a "sound" financial system and "financial stability"). Furthermore, the effects of regulatory actions may be hard to distinguish, even with the benefit of hindsight, while counterfactual outcomes (based on what otherwise might have happened) are generally subject to so much uncertainty as to be unreasonable bases for accountability. To complicate matters, measures to thwart a systemic crisis (eg bailouts) may contribute to growing financial imbalances, as it could encourage financial institutions and investors to pursue highly risky strategies.

For reasons like these, the central bank's financial functions and objectives usually have no formal targets. Instead, the adherence to appropriate procedures is generally used as a performance criterion for accountability.

Such procedures naturally include the legal requirements and external regulations that the central bank is subject to, and formal accountability in this respect takes place through the court system. However, whether procedures are appropriate as performance criteria and adhered to is often hard to evaluate without an intimate knowledge of the central bank's operations. Hence, solely relying on external monitoring may not suffice. In practice, this problem is often addressed by assigning responsibility to a supervisory board to monitor procedures for internal control and the achievement of the central bank's functions and objectives.

For central banks involved in financial supervision and regulation, there is an additional reason for accountability besides the usual argument in the case of public policy. A supervisor or regulator is often able to require certain actions to be taken and to alter property rights by (controlling access to markets through licensing and by imposing financial penalties. Those powers may make it desirable to allow claims for redress from affected individuals and companies. A system with checks and balances that is perceived to be fair is also likely to engender greater support from the institutions under the central bank's supervision or regulation, thus enhancing its effectiveness.

2.3 Accountability with respect to resources

As discussed in Chapter 6, the central bank manages a considerable amount of physical, human and financial resources, including any official reserves it may hold. Although use of resources is easier to measure than achievement of financial functions and objectives, it is nevertheless challenging to choose appropriate performance criteria. This holds in particular for financial asset management because of potential conflicts with the achievement of the central bank's policy objectives. These can be delicate issues, especially in developing countries. In the event of definitive conflict, modern central banks generally agree that public policy interests take precedence over commercial interests, but in other cases it is not always easy to strike the right balance.

In contrast to profitability, efficiency in the central bank's operations and cost effectiveness in its use of resources are increasingly considered to be important by governments. Accountability with respect to financial resources involves the adherence to rigorous accounting and auditing standards and the publication of regular financial reports. The most prominent publication in this respect is the central bank's annual report, which seem to be paying increasing attention to the central bank's management of resources. Although this may be partly due to the rising popularity of separate reports for monetary policy and financial stability, it also appears to reflect the growing weight that central banks attach to their accountability for their use of resources.

A cornerstone of public accountability with respect to resources is the integrity of external financial reporting. External auditors establish whether the financial statements published by the central bank provide a "true and fair view" of the central bank's financial situation. In some cases, the external auditor is the public sector auditor, working directly for the legislature. The internal audit, which checks whether internal management and accounting procedures are being followed, is also important for good stewardship. The auditing process could be reviewed by the central bank's supervisory board, but many central banks (especially those with a single board) nowadays have a separate audit committee.

3. Accountability arrangements and mechanisms

Central banks are subject to a number of formal accountability arrangements. However, de facto central bank accountability is typically much more extensive and relies on more informal, yet arguably more effective, mechanisms.

3.1 Formal accountability arrangements

The legal foundations for central bank accountability tend to be specified in the constitution and the central bank statutes. In addition, several countries use separate regulations, formal letters, or agreements to clarify the central bank's objectives and responsibilities, especially for monetary policy. Examples include the Regulation on Monetary Policy in Norway, remit letters from the Chancellor of the Exchequer for the Monetary Policy Committee of the Bank of England, and the Policy Targets Agreement between the Governor of the Reserve Bank of New Zealand and the Minister of Finance.

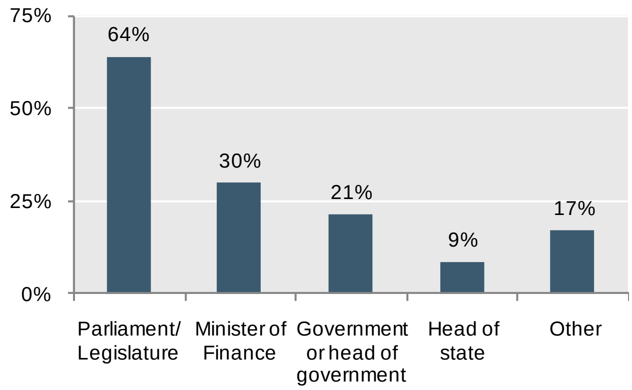
Generally, central banks are formally accountable to the legislative or executive branch of government, depending on the constitutional delegation of responsibilities. In federal and unitary states, the central bank is in general accountable to federal or central bodies. For instance, in the United States, the Federal Reserve is accountable to the Congress (the federal legislature). However, in some cases the central bank is also accountable to lower levels of government (eg cantons in Switzerland) or, to a lesser extent, to private shareholders (eg Belgium, Italy, South Africa and Turkey). In a monetary union, the supranational central bank can be accountable to national authorities (as is the case with the Central Bank of West African States) or to the union-wide authorities (as is the case for the ESCB, in which the ECB is exclusively accountable to the European Parliament and the national central banks are accountable to bodies specified in their national laws).

For monetary policy, central banks have traditionally been formally accountable to the executive branch, in particular to the ministry of finance. Although this is still the case for a number of countries, central bank laws increasingly make the central bank accountable to the legislature (see Figure 41). However, the parallel use of different legal texts and extra-statutory statements can give rise to multiple accountability structures. For instance, the Bank of England is accountable to Parliament, but with respect to the Bank's inflation target set in the remit letter, also to the Chancellor of the Exchequer.

Figure 41

Structure of de jure accountability

Per cent of 47 countries



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

Central bank accountability for financial functions is often similar to monetary policy, although the government sometimes plays a stronger role in accountability with respect to resources, especially when it is the formal owner of the central bank.

In some countries (eg Canada, Israel and New Zealand), the central bank governor is legally the sole decision-maker, which makes it especially clear whom to hold responsible. But for most central banks, decisions are made by a board, committee or council, which gives rise to the issue of collective versus individual responsibility. For instance, the members of the Governing Council of the ECB bear collective responsibility, whereas each member of the MPC of the Bank of England is held individually accountable. As discussed in Chapter 4, this is likely to affect the decision-making and communication practices of the central bank.

There are several formal mechanisms through which central banks are held accountable for their activities:

Table 17

Frequency of official reviews of the central bank by the legislature

In per cent

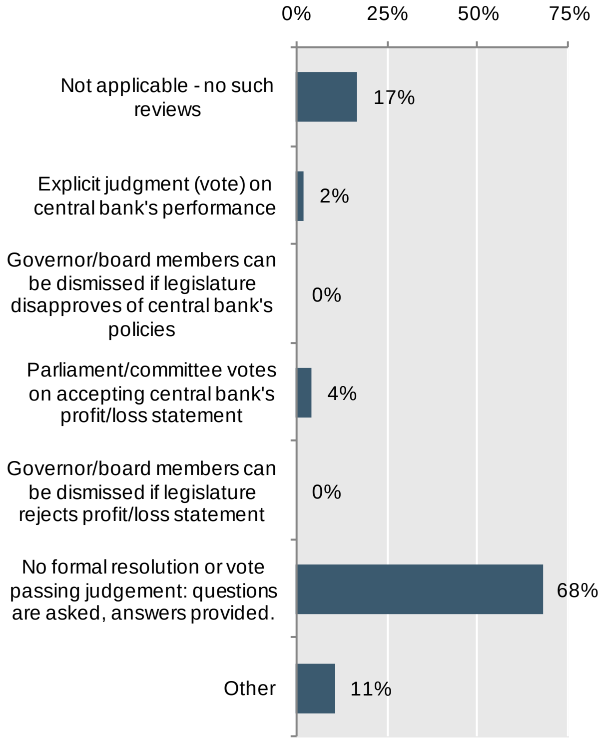
	Regularly scheduled reviews			Reviews on special request	No reviews
	Total (includes "other")	More than annually	Annually		
All (47 central banks)	43	28	13	51	15
Industrialised economies (22)	36	32	5	64	9
Emerging market economies (25)	48	24	20	40	20

Source: BIS (2008b).

Figure 42

Actions taken at official reviews of the central bank by the legislature

Per cent of 41 central banks



Source: BIS (2008b).

(1) Monitoring by the government or legislature. Many countries have legal provisions for the exchange of information between the central bank and the government, often in the form of regular meetings or consultations, in particular with the minister of finance. For a considerable number of central banks, a government representative is allowed to participate in board meetings, but without the right to vote. Moreover, many central banks are subject to official reviews by the legislature. Typically, there is no mandatory schedule and the reviews take place on special request, although a significant fraction of central banks are subject to regularly scheduled reviews at more than annual frequency (see Table 17). The reviews, which could involve testimony by central bank officials, are usually in open committee sessions rather than in closed or plenary sessions of the legislature. But a vote based on the official review is uncommon, and generally no formal sanctions are imposed (Figure 42). Some central banks, for example, the Bank of Mexico, are also subject to the auditing and supervision of a congressional auditing body.

(2) The publication of regular central bank reports. The vast majority of central banks are required to submit a written report to the legislature, usually each year (see Table 18). The report generally covers central bank operations and externally audited financial accounts. Sometimes the central bank is required to issue a monthly or even weekly financial statement, such as a summary balance sheet. In addition, many central banks nowadays have to publish a monetary policy report, often quarterly.

Table 18

Frequency of statutorily required written central bank report to legislature

In per cent

	More than annually	Annually	None
All (47 central banks)	30	57	11
Industrialised economies (22)	18	64	9
Emerging market economies (25)	40	52	12

Note: Some rows sum to more than 100 because a central bank may be required to report both annually and more than annually.

Source: BIS (2001, 2008b).

(3) Repercussions when central bank actions or outcomes are considered unsatisfactory, especially when performance criteria are not met. In particular:

About 20% of central banks are subject to formal procedures when targets are missed. Typically this involves additional reporting requirements to explain the reasons for missing the target as well as the measures and time frame needed to meet the target. An example is the open letter that the Governor of the Bank of England is required to write to the Chancellor of the Exchequer if the inflation target is missed by more than 100 basis points.

Although central bank officials are usually legally liable in case of misconduct, financial penalties or bonuses based on performance are rare. Remuneration contingent on the central bank's profits is actually prohibited in some countries (eg Botswana, Canada and Switzerland), as it is seen to be at odds with the central bank's policy objectives. But salaries may be fixed in nominal terms or increase in line with the central bank's inflation target (eg for the Bank of England), so that officials are disadvantaged if inflation is higher than the target. Another potential sanction is no reappointment (in case of renewable terms) or even dismissal. But often, central bank officials can be dismissed only in cases of serious misconduct or incapacity and rarely because of poor performance. An exception is the Governor of the Reserve Bank of New Zealand, who could be dismissed if the inflation target specified in the Policy Targets Agreement is missed.

(4) Tacit endorsement. As noted in Chapter 5, Section 3.1.1, the government or parliament in about one fifth of countries has explicit power to provide formal directives to the central bank, to override decisions or otherwise change the course of policy. And in all countries, governments have the ability to publicly criticise the central bank's choices. A government that does not use those powers could be regarded as tacitly endorsing the central bank's actions. It might also be argued, however, that the use of those powers carries such a high cost – they might be described as "nuclear bomb" options, given the likely effect on policy credibility – that the endorsement value is negligible.

The actual frequency of written reports to, and reviews by, the legislature is illustrated in Figure 43; a broader range of accountability arrangements is presented in Table 19. The vast majority of central banks have published targets (in particular, for monetary policy), but only a limited number – mostly in industrialised countries – are subject to formal procedures when targets are missed. Most central banks, and nearly all in emerging market economies, are regularly monitored by the legislature.

The operation of de jure accountability depends, of course, on an interpretation of the legal framework and enforcement mechanisms. But there are also other reasons why the effectiveness of formal accountability arrangements may be hampered. Central bank reports to the executive may be interpreted from political rather than policy perspectives. Scrutiny of reports to the legislature may be distracted by political point-scoring by various political parties. Furthermore, effective monitoring requires specialised expertise.

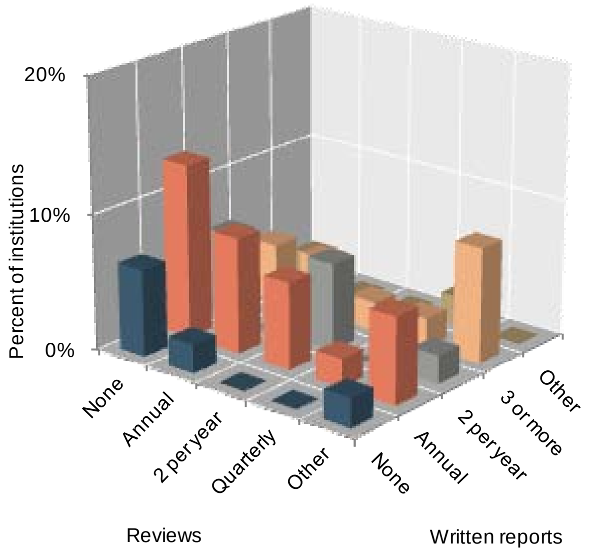
In some countries, the relevant legislative bodies have addressed the problem of expertise by formally consulting external experts on monetary policy matters. In Norway, the Ministry of Finance funds an annual independent review of policymaking, *Norges Bank Watch*, that is conducted by experts who often include international academics. The Reserve Bank of New Zealand and the Bank of England have occasionally invited overseas central bankers or leading academics to review the policymaking process and report their findings to the supervisory board. In addition, the reports of external agencies are often available to those charged with monitoring central bank performance. An example of such an external agency is the International

Monetary Fund (IMF), which usually comments on monetary policy in its regular Article IV consultations. The IMF also publishes *Reports on the Observance of Standards and Codes (ROSCs)* that summarise the extent to which certain internationally recognised standards and codes are observed in areas such as monetary and financial policy transparency, banking supervision and payment systems.[131]

Figure 43

Actual frequency of written reports to, and reviews by, the legislature

Per cent of 47 central banks



Source: BIS (2008b).

The repercussions under de jure accountability are also somewhat constrained. As noted in Chapter 3, Section 8, most central bank legislation prevents the dismissal of governors and other key officers for policy failures (real or imagined).

The limitations of de jure accountability to external parties may be partly overcome by strong internal mechanisms for monitoring and control. As discussed in Chapter 4, many central banks have a supervisory board responsible for overseeing the achievement of the central bank's mandate and its use of resources or a separate audit committee that reviews the auditing process. The appointment of non-executive, external members with relevant expertise to such bodies could help to enhance central bank accountability.

Table 19

Central bank accountability arrangements

In per cent

	Total (47 central banks)	**Industrialised countries (22)**	**Emerging markets (25)**
Publication of specific targets	55	36	72
Regular monitoring by legislature	62	64	60
Formal procedures to overrule decisions	19	23	16
Formal procedures when targets missed	15	9	20

Source: Fry et al (2000).

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[131] Furthermore, the Financial Action Task Force (FATF), an international intergovernmental body, issues a list of countries and territories that are considered to be non-cooperative in international efforts against money laundering and terrorist financing. Although such FATF opinions are not legally binding, they carry some political weight.

3.2 Informal accountability mechanisms

Informal mechanisms are important complements to de jure accountability. Some operate through the executive and legislative branches and the attention of external experts. But perhaps the most powerful informal mechanisms are reports to financial markets and the general public.

Formal arrangements associated with executive or legislative review can be a fulcrum for additional disclosure. Central banks often take initiatives involving additional reporting or testimony before the legislature to generate goodwill, to increase credibility, and sometimes pre-empt the imposition less well-suited mandatory measures. For example, the ECB decided early on to go beyond the already stringent reporting requirements stipulated in the EU Treaty (Issing (1999)). The Riksbank publishes the material on which it bases monetary policy assessments – including relevant in-house analyses – in response to requests from the Riksdag's Committee on Finance, but it goes beyond the required minimum.

Another device that helps to hold central banks accountable is external monitoring by financial market experts. Most central banks are nowadays closely scrutinised by the financial press and central bank watchers. For example, lack of confidence of financial markets in the sustainability of a currency peg often incites powerful speculative attacks that force the central bank to abandon the peg. In this way, financial markets can have a tremendous disciplining effect on central banks. The reaction of financial market participants to monetary policy actions and strategy is probably one of the most effective (real-time) accountability mechanisms that central banks face.

Accountability extends beyond financial markets, in particular through the actions of firms and employees in the real economy. A central bank that lacks credibility for achieving price stability can generate price increases and higher wage demands, which make it harder for the central bank to reach its objectives. In the extreme, there may be a flight from money whose value is very uncertain.

Informal mechanisms of central bank accountability are greatly facilitated by the public availability of information with which to evaluate the central bank's performance. Thus, greater central bank transparency enhances de facto accountability.

4. Transparency

For the purpose of de jure accountability, central banks are generally subject to some disclosure requirements. But the transparency of many central banks nowadays goes far beyond these mandatory information disclosures. The current practices and trends in central bank transparency greatly contribute to de facto accountability. As a result, central bank accountability and transparency are intrinsically related.

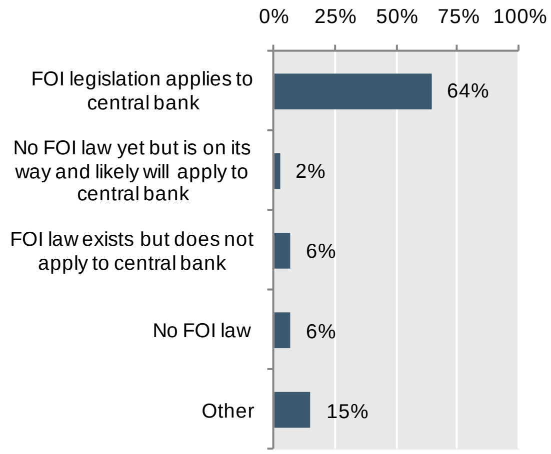
4.1 Disclosure requirements

Central banks are generally required to publish regular reports as part of formal accountability arrangements. Typical disclosure requirements involve the publication of an annual report, including financial accounts and regular (often quarterly) monetary policy reports. About a dozen central banks (including the Bank of Japan, the Sveriges Riksbank, the Bank of England, and the Federal Reserve) are also required to publish substantive minutes of their monetary policy board meetings.

Figure 44

Freedom of information (FOI) legislation and central banks

Per cent of 44 central banks



Source: BIS (2005b, 2008b).

Usually, the formal reporting requirements indicate the frequency of disclosure without being specific about the information that must be released. However, a number of central banks (in particular those that have adopted inflation targeting) are explicitly required to provide an explanation of target misses. In addition, many central banks are subject to freedom of information legislation that requires them to disclose specific information records requested by the public (Figure 44), although there may be exemptions, for instance, for supervisory and regulatory information.

It is important that transparency requirements do not interfere with the achievement of the central bank's functions and objectives. Whenever confidentiality is desirable, selective disclosure, such as testimony in a closed session of a legislative committee (as is the practice in Israel and Switzerland), could be used to achieve accountability. However, hearings hidden from public view may make the central bank more vulnerable to political pressures.

In general, however, as discussed below, central bank transparency exceeds that mandated by formal disclosure requirements.

4.2 Transparency practices and trends

Central bank transparency has increased remarkably during the past decade, especially for monetary policy. This is partly in response to the growing popularity of central bank independence, which gives rise to political and public pressures for greater openness. In addition, information disclosure has become more important for central bank accountability as part of the movement from exchange rate targeting to targets aimed directly at inflation control (including "inflation targeting" per se, but also other policies aimed at price stability such as those practised by the ECB and the Bank of Japan). The reason is simple – to be accountable, the specific objective needs to be known. Furthermore, the vital role of financial markets has made central bank communications a critical component of policy that allows the central bank to influence expectations of inflation and interest rates, thereby enhancing policy effectiveness. In fact, many central banks have a communication strategy to help them achieve greater transparency –without a strategy, simply putting more information in the public domain generally does not suffice given limits on the type and quantity of information that the public can process effectively.

Transparency of monetary policy is widely thought to be beneficial.[132] The reduction of asymmetric information between the central bank and the public reduces

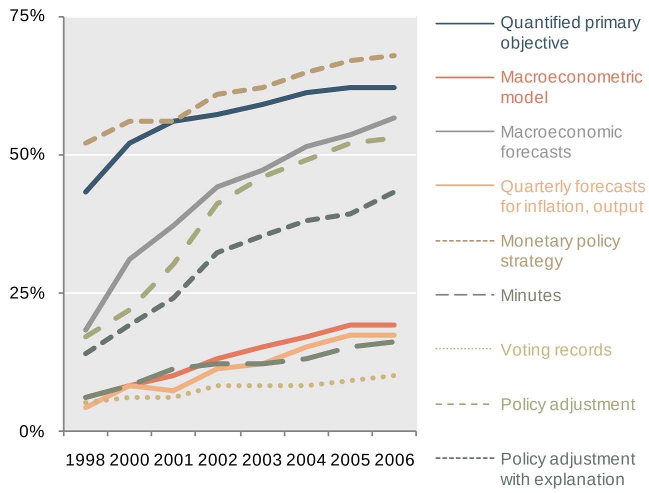
[132] Empirical studies suggest that greater monetary policy transparency has helped increase the predictability of policy decisions, reduce average inflation, lower the output cost of disinflation, and stabilise inflation expectations. See Dincer and Eichengreen (2007).

macroeconomic uncertainty. This allows the private sector as well as other public sector institutions to make better informed decisions. Moreover, greater transparency shapes the behaviour of the central bank, as it can be held accountable more effectively by the wider community.

Figure 45

Information disclosure about monetary policy

Per cent of 100 central banks



Source: Dincer and Eichengreen (2007), with updated data supplied by Dincer.

Monetary policy transparency has increased in many ways (see Figure 45 and Table 20). As discussed earlier, a large majority of central banks have quantified primary objectives. There has been an even more impressive advance in the publication of numerical macro-economic forecasts made by central banks, from less than 20% to more than 50%. These are often staff projections, but in some economies they are specifically endorsed by policy-makers. This helps the public understand the reasons for policy decisions, which reduces macroeconomic uncertainty, in-creases real-time accounta-bility, and has the potential to improve credibility. In some countries (eg New Zealand, Norway and Sweden), macroeconomic projections are provided under alternative scenarios. But the most popular way to convey uncertainty is to present the central bank's forecasts (especially for inflation and output) graphically with statistical confidence bands (following the Bank of England). The central bank's forecasts are usually discussed in a monetary policy report that explains monetary decisions and analyses medium-term macroeconomic developments. However, the number of central banks that publish medium-term numerical forecasts for inflation and output remains small.

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A large majority of central banks use structural macroeconomic models for policy analysis and forecasting, and an increasing number publish their policy model. Some of them, such as the Bank of England, go so far as to publish the equations of its main macroeconometric model. This allows the public to evaluate the construction of the central bank's forecasts, including the role of judgment.

Most central banks publish an explicit monetary policy strategy that describes their policymaking framework. Usually it explains in general terms how economic information is used to set the policy instrument and reach the central bank's objectives. For instance, the typical monetary policy strategy of inflation targeters involves adjusting the policy rate when the two-year-ahead forecast for inflation differs from the inflation target. The publication of a monetary policy strategy helps to reduce private sector uncertainty about the policymaking process, thereby making monetary policy reactions more predictable. At least five central banks (the Czech National Bank, the Central

Bank of Iceland[133], the Reserve Bank of New Zealand, the Central Bank of Norway and the Sveriges Riksbank) publish an interest rate path that is consistent with their macroeconomic forecasts and their monetary policy strategies. This provides an additional piece of information about their policy strategy (albeit in a form that – in the opinion of many central banks – suggests too much certainty about the future of policy rates).

Table 20

Information disclosure about monetary policy

Per cent of 36 central banks

	1998	**2006**
Quantified primary objectives	50	78
Macroeconomic model	17	50
Macroeconomic forecasts	28	81
Quarterly, for inflation and output	11	39
Monetary policy strategy	64	81
Minutes	14	28
Voting records	11	22
Policy adjustment	42	78
With explanation	36	75

Note: In this sample, the Eurosystem is represented by the ECB.

Source: Dincer and Eichengreen (2007); updated to assign zero score for "minutes" and "records" at central banks with a single decision-maker.

Although they remain distinctly in the minority, an increasing number of central banks release the minutes of the monetary policy meetings, published with lags that have typically been decreasing in length. A few central banks, such as the Central Bank of Brazil, place the minutes at the centre of their policy communications strategy. Minutes usually provide a summary of the discussion, including the arguments that were raised, but are generally unattributed. An exception is the Bank of Japan, which identifies the comments of government representatives at the meeting, and the Sveriges Riksbank, which has recently started publishing attributed minutes. The publication of essentially verbatim transcripts of monetary policy meetings is rarer. The Bank of Japan and the Federal Reserve release them with a ten- and five-year lag, respectively. Two reasons are prominent among those usually mentioned for not publishing minutes or transcripts. First, such reports are generally thought to run the risk of inhibiting an open, interactive policy discussion. Second, by providing several lines of argumentation for and against policy decisions, the published record can make the central issues harder to detect – hiding them in what one writer has described as a "cacophony" of voices. It is more useful, in this view, to provide structured analyses of the issues and options by way of reports that represent the agreed view of decision-makers.

[133] The Central Bank of Iceland stopped publishing a projection of its policy interest rate after the July 2008 issue of its *Monetary Bulletin*.

A few central banks also disclose attributed voting records. These may be published together with the minutes or with the policy statement released immediately after the policy meeting (eg in the United States). The attribution of votes (Japan, Sweden, the United Kingdom, the United States) may facilitate individual accountability, although potentially at the risk of reduced collegiality.[134]

The dates of monetary policy meetings are typically publicly announced well in advance, which helps to reduce volatility in financial markets. A majority of central banks promptly communicate policy adjustments, although this is a relatively recent phenomenon. The policy decision is announced in a press release, typically together with a brief explanation. Some central banks also hold regular press conferences, often by the governor or other committee members. This allows the central bank to clarify any confusion that may arise from prepared policy statements, while press scrutiny also contributes to accountability.

Although the increase in monetary policy transparency has been widespread, there remain considerable differences in the degree of transparency across countries and policy frameworks. In particular, central banks in industrialised countries tend to be more transparent than those in emerging market or developing economies. In addition, central banks with inflation targeting usually disclose significantly more information than others. For instance, 60% of inflation targeters publish minutes and 20% release voting records.[135] Inflation targeters also tend to publish more frequent and detailed forecasts, and they are more likely to provide explanations of policy decisions. In contrast, exchange rate targeters tend to disclose less information than others, which could reflect the less stringent information requirements to achieve accountability under such a policy framework.

Relative to the monetary policy area, financial functions and objectives are generally an area in which central banks are less forthcoming, and less able to be forthcoming. Many central banks publish a sizeable financial stability report, typically at semiannual frequency (see Table 21). The publication of such a report is very common in industrialised economies but less widespread in emerging market economies, although most central banks in the latter have a major involvement in financial supervision. Central banks without a separate report may discuss financial stability issues in their annual report. But such reports do not usually present detailed information on specific central bank actions in the financial stability area, especially with respect to individual financial institutions.

Indeed, any public discussion of financial supervision and regulation is affected by confidentiality of information about individual financial institutions, in particular when the information is commercially sensitive or could lead to instability. For instance, the disclosure of liquidity problems could trigger a bank run, as occurred recently in the United Kingdom: certain banks there were stigmatised when their use of standing liquidity facilities at the central bank became common knowledge. In addition, for the central bank's function as lender of last resort, constructive ambiguity has been considered important to prevent institutions from becoming reliant on the central bank – although more are now adopting transparency guidelines, and in recent instances of blanket guarantees of sufficient liquidity, ambiguity has disappeared altogether.

[134] Chapter 4 discussed issues around individualistic versus collegial decision-making.

[135] This is based on Geraats (2006), using the Fry et al (2000) survey data. A 2007 BIS survey (BIS (2007a)) also confirms this point.

Table 21

Frequency of publication of financial stability report

In per cent

	Semiannual	Annual	Other	None
All (47 central banks)	45	34	2	19
Industrialised economies (22)	50	41	0	9
Emerging market economies (25)	40	28	4	28

Source: BIS (2008b).

Although the disclosure of certain information could trigger financial instability, financial institutions are also likely to become more prudent when they know that particular data about them are going to be publicly available, thereby exposing those that act irresponsibly. In addition, greater transparency helps individual investors make better-informed decisions, which could also contribute to preventing financial imbalances. And greater transparency may in some circumstances be crucial to maintaining public backing for government funded rescues of systemically important financial institutions. This is one of the prime motivations behind the development of www.FinancialStability.gov, a website of the US federal government that provides specific, bank-by-bank details of rescue packages, including related actions taken by the Federal Reserve.

In general, central bank transparency creates the prospect of public scrutiny. This could also contribute to high-quality decision-making by the central bank. For instance, the publication of forecasts is likely to make a central bank care more about the reliability of those forecasts. Furthermore, because central bank transparency affords greater accountability, it helps to strengthen public support for central bank independence and credibility.

5. Central bank accountability and independence

Accountability is generally considered more important when central banks enjoy a greater degree of autonomy. However, some accountability measures could potentially impinge on the independence of the central bank. Regular meetings between the central bank governor and the minister of finance may serve accountability but could also be used to exert political pressures, depending in part on the nature of legal protections against taking instructions. For instance, the Sveriges Riksbank must inform the Government in advance of monetary policy decisions but may not take or seek instructions from the Government. Similarly, an override procedure allows the Government to take control of policy, but its careless use could be largely avoided by, for example, (1) the imposition of stringent requirements (eg extraordinary economic circumstances) for invoking the procedure, as is the case for the Bank of England; and (2) requirements that any override be public.

The threat of reappointing only compliant central bank governors could be eliminated by giving them long non-renewable terms of office (see Chapter 3). The tenure of central bank governors could be further protected by permitting their dismissal only in exceptional cases or under well-specified circumstances.

Although public oversight of the use of resources may make the central bank vulnerable to political manipulation of its budget, the central bank in most countries is not subject to appropriation procedures.

Accountability requirements in the form of the publication of reports and open testimony in principle create no conflict with central bank independence. By virtue of their open public nature, both formal and informal accountability mechanisms based on central bank transparency pose no problem for the independence of the central bank.

In sum, there need not be any conflict between central bank accountability and independence. Indeed, for modern central banks, independence and accountability go hand in hand. Accountability legitimises the independence of the central bank, thereby buttressing public support for its autonomy and strengthening its public credibility.