Geneva Reports on the World Economy 3

# How Do Central Banks Talk?

Alan Blinder, Charles Goodhart,
Philipp Hildebrand, David Lipton
and Charles Wyplosz

ICMB INTERNATIONAL CENTER
FOR MONETARY
AND BANKING STUDIES

CEPR

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**International Center for Monetary and Banking Studies**

International Center for Monetary and Banking Studies
11 A Avenue de la Paix
1202 Geneva
Switzerland

Tel +41 22 734 9548
Fax +41 22 733 3853

Email: secretary.icmb@hei.unige.ch
Website: http:\\www.icmb.org



**Centre for Economic Policy Research**

Centre for Economic Policy Research
90–98 Goswell Road
London EC1V 7RR
UK

Tel: +44 20 7878 2900
Fax: +44 20 7878 2999

Email: cepr@cepr.org
Website: http:\\www.cepr.org

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**Alan Blinder**
*Princeton University*

**Charles Goodhart**
*London School of Economics*

**Philipp Hildebrand**
*Union Bancaire Privée, Geneva*

**David Lipton**
*Moore Capital Strategy Group*

**Charles Wyplosz**
*Graduate Institute of International Studies, Geneva and CEPR*

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FOR MONETARY
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# About the Authors

**Alan S Blinder** is the Gordon S Rentschler Memorial Professor of Economics at Princeton University, a partner in the Promontory Financial Group and Vice Chairman of The G7 Group. From 1994 to 1996, he was Vice Chairman of the Board of Governors of the Federal Reserve System. He is the author of many books and articles, including *Central Banking in Theory and Practice* and the best-selling textbook (with William Baumol) *Economics: Principles and Policy*.

**Charles Goodhart, CBE, FBA**, is Professor of Banking and Finance at the London School of Economics. He had earlier been a Chief Adviser at the Bank of England and more recently served on its newly created Monetary Policy Committee. He has written numerous articles and books on monetary history and policy, including a graduate textbook, *Money, Information and Uncertainty*.

**Philipp M Hildebrand** is Managing Director and Member of the Executive Committee of Union Bancaire Privée, Geneva. He has previously been a partner at Moore Capital Management and Chief Investment Officer of the Vontobel Group, and a member of the Executive Board of the World Economic Forum. The author of numerous articles and editorials, he is a member of the Economic Policy Commission of the Swiss Banking Association.

**David A Lipton** is Managing Director of the Capital Strategy Group at Moore Capital Management and is based in Washington D.C. He served in the Clinton administration at the Treasury Department from 1993 to 1998 as Under Secretary of the Treasury for International Affairs and before that as Assistant Secretary. Before joining the Clinton administration he was an economic advisor to the governments of Russia, Poland and Slovenia, and served on the staff of the International Monetary Fund.

**Charles Wyplosz** is Professor of International Economics at the Graduate Institute of International Studies in Geneva, Director of the International Center for Monetary and Banking Studies and Co-Director of CEPR's International Macroeconomics Programme. He currently serves on the French Prime Minister's Conseil d'Analyse Economique. He has written and edited several books on monetary and exchange rate policies and is the author (with Michael Burda) of a textbook, *Macroeconomics: A European Perspective*.

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# List of Conference Participants

| | |
|---|---|
| Jeanne Barras-Zwahlen | Senior Economist<br>Credit Suisse Private Banking, Geneva – Switzerland |
| Gavin Bingham | Head of International Liaison<br>Bank for International Settlements, Basel – Switzerland |
| Alan Blinder | Professor<br>Princeton University, Princeton – USA |
| Henk J Brouwer | Executive Director<br>De Nederlandsche Bank, Amsterdam – The Netherlands |
| Marc Büdenbender | Economist<br>UBS AG, Zurich – Switzerland |
| Andrew Crockett | General Manager<br>Bank for International Settlements, Basel – Switzerland |
| Jean-Pierre Danthine | Professor<br>University of Lausanne – Switzerland and CEPR, London – United Kingdom |
| Alexandra Deruaz | Journalist<br>*Le Temps*, Geneva – Switzerland |
| Robert Dugger | Managing Director<br>Tudor Investment Corporation, Washington – USA |
| Joachim Fels | Managing Director, European & Currency Economics<br>Morgan Stanley Dean Witter, London – United Kingdom |
| Benjamin Friedman | William Joseph Maier Professor of Political Economy<br>Harvard University, Cambridge – USA |
| Bruno Gehrig | Vice Chairman of the Board<br>Swiss National Bank, Zurich – USA |
| Hans Genberg | Professor<br>Graduate Institute of International Studies, Geneva – Switzerland |

| | |
|---|---|
| Yves Genier | Rédacteur<br>AGEFI, Geneva – Switzerland |
| Svein Gjedrem | Governor<br>Norges Bank, Oslo – Norway |
| Charles Goodhart | Professor<br>London School of Economics – United Kingdom |
| Stephen Grenville | Deputy Governor<br>Reserve Bank of Australia, Sydney – Australia |
| Lars Heikensten | First Deputy Governor<br>Sveriges Riksbank, Stockholm – Sweden |
| Philipp Hildebrand | Managing Director<br>Union Bancaire Privée, Geneva – Switzerland |
| Thomas Hoenig | President<br>Federal Reserve Bank of Kansas City – USA |
| Tetsuya Inoue | Manager<br>Bank of Japan, Tokyo – Japan |
| Paul Jenkins | Deputy Governor<br>Bank of Canada, Ottawa – Canada |
| Karen Johnson | Director<br>Board of Governors of the Federal Reserve System, Washington – USA |
| Giles Keating | Managing Director<br>Credit Suisse First Boston, London – United Kingdom |
| David Lipton | Managing Director<br>Moore Capital Strategy Group, Washington – USA |
| David Mayes | Advisor to the Board<br>Bank of Finland, Helsinki – Finland |
| Carlo Monticelli | Co-Head of European Economics<br>Deutsche Bank, London – United Kingdom |
| Hiroshi Nakaso | Visiting Senior Advisor<br>Bank for International Settlements, Basel – Switzerland |
| Tommaso Padoa-Schioppa | Member of the Executive Board<br>European Central Bank, Frankfurt am Main – Germany |
| Lucas Papademos | Governor<br>Bank of Greece, Athens – Greece |
| Michel Peytrignet | Director and Head of Economic Studies<br>Swiss National Bank, Zurich – Switzerland |
| Jan F Qvigstad | Chief Economist and Executive Director<br>Norges Bank, Oslo – Norway |
| Klaus Regling | Managing Director<br>Moore Capital Strategy Group, London – United Kingdom |

| | |
|---|---|
| Jean-Jacques Rey | Honorary Executive Director<br>National Bank of Belgium, Brussels – Belgium |
| Märten Ross | Deputy Governor<br>Bank of Estonia, Tallinn – Estonia |
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| Gerhard Schwarz | Leiter Der Wirtschaftsredaktion<br>*Neue Zurcher Zeitung*, Zurich – Switzerland |
| Claudio Segré | Chairman<br>Argus Fund, Genthod – Switzerland |
| Marc-Olivier Strauss-Kahn | Deputy Director General – Economics and International<br>Banque de France, Paris – France |
| Lars Svensson | Professor<br>Princeton University, Princeton – USA and CEPR, London – United Kingdom |
| Alexandre Swoboda | Professor<br>Graduate Institute of International Studies, Geneva – Switzerland |
| Jens Thomsen | Member of the Board of Governors<br>Danmarks Nationalbank, Copenhagen – Denmark |
| Oreste Tristani | Senior Economist<br>European Central Bank, Frankfurt am Main – Germany |
| Kazuo Ueda | Member of the Policy Board<br>Bank of Japan, Tokyo – Japan |
| Bernhard Winkler | Economist<br>European Central Bank, Frankfurt am Main – Germany |
| Martin Wolf | Chief Economics Commentator<br>*Financial Times*, London – United Kingdom |
| Pam Woodall | Economics Editor<br>*The Economist*, London – United Kingdom |
| Charles Wyplosz | Professor<br>Graduate Institute of International Studies, Geneva – Switzerland and CEPR, London – United Kingdom |
| Marco Zanchi | Editor<br>Finanz und Wirtschaft, Zurich – Switzerland |
| Jean Zwahlen | Vice Chairman<br>Union Bancaire Privée, Geneva – Switzerland |

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# Acknowledgements

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The views presented in this report are entirely those of the authors, and should not be taken to represent those of their employers, past and present, or of the individuals mentioned above.

# Foreword

Over the last decade, many central banks have become formally independent. As they quickly moved to design their tasks and establish their reputations, they soon realized that they also had to make themselves independent and accountable.[1] This trend happened to coincide with another one, towards more government transparency. Much of the old mystique of central bank secrecy has now been shed. Are we at the end of the road?

The third *Geneva Report on the World Economy* has been written by a distinguished team of monetary economists internationally known for their work in this area, some with extensive central banking experience. The report reviews the process and lays down the principles. It argues that full transparency ought to be the presumption, with a few conspicuous exceptions. It explores the complexities of central bank communication and explores the complex relationship between the communication strategy and the decision-making process, in particular the nature of the policy-making committee. It concludes that some banks have by now achieved a high degree of transparency while many others still have some way to go. This leads to several policy recommendations.

These issues were discussed in detail at the conference 'How Do Central Banks Talk?' which was held in Geneva on 4 May 2001 and organized by the International Center for Monetary and Banking Studies (ICMB) and the Centre for Economic Policy Research (CEPR). A summary of the discussion at this conference can be found at the end of this report.

The annual series of *Geneva Reports on the World Economy* was launched by ICMB and CEPR in 1999. The previous reports, *An Independent and Accountable IMF* and *Asset Prices and Central Bank Policy*,[2] attracted a great

1 An early statement of the link between independence and accountability is in: Roll, Eric et al., *Independent and Accountable, A New Mandate for the Bank of England*, London, Centre for Economic Policy Research, 1993.

2 Eichengreen, B., J. De Gregorio, T. Ito and C. Wyplosz, *An Independent and Accountable IMF, Geneva Reports on the World Economy 1*, London, Centre for Economic Policy Research, September 1999.
Cecchetti, S.G., H. Genberg, J. Lipsky and S. Wadhwani, *Asset Prices and Central Bank Policy, Geneva Reports on the World Economy 2*, London, Centre for Economic Policy Research, September 2000.

deal of interest amongst policy-makers and have already established the series as an important forum for discussion on the reform of the international financial and economic system.

We would like to thank Aileen Lotz, assisted by Ahmet Atil Asici, Aurélie Martin and Sébastien Wälti, for her effective work in organizing the conference; Jane Linekar and the publications team at CEPR for producing this report, as well as other staff at CEPR whose patience and professionalism have been most helpful. We would also like to extend our special thanks to Charles Wyplosz, Director of ICMB, for the initiative and enthusiasm he has given to this project.

Richard Portes
CEPR

Tommaso Padoa-Schioppa
ICMB

18 July 2001

# Executive Summary

Secrecy is no longer the byword in central banking circles. Now central banks are trying to make themselves understood, and the trend is towards greater openness and transparency. This report describes and evaluates how central banks talk to the markets, to the press and to the public.

The case for transparency is based on both policy effectiveness and democratic accountability. Monetary policy is more effective when the central bank is better able to condition the market expectations that are so critical to the transmission of monetary policy. Transparency and accountability go hand in hand with central bank independence – a kind of exchange for the broad grant of authority.

The essential message that any central bank must convey to the public is its *policy regime*: what it is trying to achieve, how it goes about doing so, and its probable reactions to likely contingencies. Of course, no central bank can spell out in advance its reaction to every conceivable contingency; nor is it necessary to reveal every detail of its operations.

Two guiding principles apply. First, the bank should reveal enough about its analysis, actions, and internal deliberations for interested observers to see the logic behind each policy decision. Second, the burden of proof should be on those who would withhold information. There are valid reasons for secrecy, but they are the exception not the rule.

What should central banks talk about? First, they need to spell out their long-run objectives clearly. This is a simple task for banks with a single target, such as the inflation rate or the exchange rate, a more difficult one for central banks with multiple goals. But they should articulate their aims as best they can.

Central banks should also reveal a great deal about their methods – including their forecasts, the models used to derive them and to explore alternative policies, and the precise methods of implementing policy changes.

We recommend that central banks reveal *at least* the broad contours of their forecasts as often as they are made. We reject the old conventional wisdom that central banks should never give 'forward-looking' information. Should the central bank publish a *conditional* forecast predicated on *unchanged* monetary policy, or base its published forecast on its actual projections of *future* monetary policy *changes*? Our pragmatic view is to

acknowledge that central banks typically do not formulate explicit plans for future monetary policy, and so cannot reveal future policy changes.

Central banks should provide more information about their internal models than they have historically done. Most central bank watchers only care about the bank's basic view of how the economy works, however, so well chosen words supplemented by a few key numbers may suffice.

When they intervene in foreign exchange markets, the authorities almost always try to catch market participants by surprise, and they rarely reveal how and when sterilized interventions have taken place. Lack of sufficient ammunition (foreign exchange reserves) to affect market behaviour can justify this departure from transparency.

By contrast, all decisions about *domestic* monetary policy should be publicly announced as soon as they are made, with no informational advantage to select 'insiders.' Central banks should also provide indications about their tentative future plans, perhaps through statements about which way they are 'leaning.'

The precise ways in which a central bank communicates will vary, depending on whether monetary policy decisions are made by a single individual or, as is increasingly the norm, by a committee – and, if by a committee, whether decisions are presented as achieved by consensus (a *collegial* committee) or by individuals voting their own preferences (an *individualistic* committee).

Policy decisions are usually announced with a brief statement. In the case of a single decision-maker, the statement must explain the reasoning behind the decision. A highly individualistic committee may find it difficult to agree on a statement in short order, but detailed minutes – including the vote – should then be released as soon as possible. In collegial committees, there is room for choosing how much to explain immediately (in the statement) or later (in the minutes).

Conflicting signals emitted by committees confuse markets and get in the way of transparency. Committees must strive to convey a consistent message even though transparency of individualistic committees requires that differences of opinion be aired in public.

How do central banks actually talk? The report looks at a few prominent cases.

- The US Federal Reserve System has changed its communications policies dramatically since 1993 and, while perhaps still lagging behind other central banks, it is clearly moving towards greater transparency. We recommend that the Fed state its objectives more clearly, publish its forecasts and clarify their nature, and offer fuller statements to explain its policy decisions.
- The new European System of Central Banks' (ESCB) much criticized communications policy is complicated by its short history, its multi-national nature and its confusing 'two pillar' monetary strategy. Nonetheless, it is already more transparent than the Bundesbank ever was. We recommend that the ESCB clarify the time horizon for its inflation target, improve its published forecasts and publish minutes.

- The Bank of Japan (BoJ), having been made independent in 1998, has become much more open than it used to be. We recommend that the BoJ clarify its inflation objective and better explain the reserve-targeting policy regime that it adopted this year.
- The Bank of England (BoE) adopted inflation targeting in 1992 and became independent in 1997. Both events led to dramatic increases in transparency which, by now, place the BoE near the vanguard. We recommend that the Monetary Policy Committee issue a statement immediately after each meeting and try to limit the multiplicity of alternative viewpoints.
- The Reserve Bank of New Zealand has been leading in central bank transparency since its 1989 reform. It now even publicly projects its own future behaviour. We can recommend no further steps toward transparency.

# 1 Central Banks' Communication Strategies: Summary and Conclusions

## 1.1 The times, they are a changin'…

Attitudes and policies toward central bank communications have undergone a radical transformation in recent years. Not long ago, secrecy was the byword in central banking circles. Now the unmistakable trend is toward greater openness and transparency. Increasingly, the central banks of the world are trying to make themselves understood, rather than leaving their thinking shrouded in mystery.

In part, this new – and we believe salutary – trend reflects broader societal changes. Greater openness seems to be part of our age. Transparency is certainly facilitated, and may be even demanded, by modern communications. Besides that, central banks may have become more open because of new thinking about how monetary policy is best conducted.

This report describes and evaluates some of the changes in how central banks talk to the markets, to the press and to the public. It is both descriptive and prescriptive. We do not hesitate to offer our views on what has been done and what is left to do, for we firmly believe that the trend toward more open central banking has not yet run its course. But we try to draw a strict line between *communications* policy, which is our chosen task, and the conduct of *monetary policy*, which is not.

The report is organized into five substantive chapters. The present chapter offers a bird's eye view of the report, detailing the arguments behind the short statements presented in the Executive Summary. The next three chapters take up in turn the *why*, the *what*, and the *how* of central bank communications. We focus on principles and, to some extent, on practices. The final chapter is a series of 'case studies' of five central banks: the US Federal Reserve, the European Central Bank (ECB), the Bank of Japan (BoJ), the Bank of England (BoE), and the Reserve Bank of New Zealand (RBNZ). We summarize the evolution of communications policy at each and offer our recommendations for change.

## 1.2 Why do central banks need to talk?

There are two main rationales for openness. We concentrate on the *effectiveness of monetary policy*. With a more transparent central bank, we argue, market expectations that are so critical to the transmission of monetary policy – e.g. through the term structure of interest rates, the reactions of stock markets and exchange rates, and wage and price setting – will reflect policy changes better and faster. We examine a number of the modern academic arguments for 'creative ambiguity' – and find them wanting. If the central bank is both open and honest, we conclude, the arguments for obfuscation melt away.

A philosophically different argument for openness derives from the need for *democratic accountability*. As a public institution operating on delegated authority, a central bank must be fully accountable to the elected representatives of the people. Thus transparency can be thought of as an implied corollary of central bank independence: in exchange for its broad grant of authority, the central bank owes the public transparency and accountability. Communication is at the heart of both.

The essential message that any central bank ought to convey to the public is its *policy regime*: what it is trying to achieve, how it goes about doing so, and its probable reactions to the contingencies that are likely to occur. Of course, no central bank can spell out in advance its reaction to every conceivable contingency; nor is it necessary to reveal every detail of its operations. The guiding principles should be two.

First, the bank should reveal enough about its analysis, actions and internal deliberations so that interested observers can understand each monetary policy decision as part of a logical chain of decisions leading to some objective(s). Our view is that central banks need to communicate with at least four constituencies whose needs may be somewhat different – the markets, the media, the politicians and the broad public – but that the messages communicated to each must be consistent. This is a challenge, but not an insurmountable obstacle.

Second, we believe the arguments for transparency are so strong that the burden of proof should be on those who would withhold information. There are valid reasons for a central bank to be secretive, e.g. the protection of proprietary information. But that is not the norm, and this report proceeds with the presumption of openness.

## 1.3 What should central banks talk about?

### 1.3.1 Talking about objectives

First, and perhaps foremost, central banks need to make clear their long-run objectives. This should be a relatively simple task for a bank with a single target, such as the inflation rate or the exchange rate. The job is more difficult for central banks with multiple goals, such as the Federal Reserve

and the Bank of Japan. But they must have some notion of what they are trying to accomplish, and they should articulate it as best they can. What might be called (tacit) *short-run objectives* – e.g. the desired paths for output and prices as some ultimate target is approached – pose a thornier issue. We examine arguments both for and against revealing such information, but ultimately come down on the side of revelation.

### 1.3.2 Talking about methods

We argue that central banks should reveal a great deal about their methods – including their forecasts, the models used to derive them and to explore alternative policies, and the precise methods of implementing policy changes.

### 1.3.3 Forecasts

The issue of how to treat macroeconomic forecasts illustrates well the (somewhat fuzzy) boundary between essential information and unnecessary detail. We recommend that central banks reveal *at least* the broad contours of their forecasts (e.g. the paths of major variables like output, employment and prices) as often as those forecasts are made. We do not accept the objection that since those forecasts will often be wrong, releasing them will drain the central bank's well of credibility. Also, we emphatically reject the old conventional wisdom that central banks should never give 'forward-looking' information. Indeed, they must do precisely that if they are to condition market expectations. It is not necessary, however, for a central bank to publish, say, the projected quarterly paths for hundreds of variables. This information is not needed to understand or appraise the central bank's behaviour.

One 'detail' about the nature of these forecasts is important enough to merit special attention. Should the central bank publish a *conditional* forecast predicated on *unchanged* monetary policy, or should it base its published forecast on its actual projections of *future* monetary policy *changes*? There are strong arguments on both sides. We review them, but ultimately fall back on a practical consideration: since hardly any central banks formulate explicit plans for future monetary policy, there is nothing to reveal. The constant-interest-rate path wins by default.

### 1.3.4 Models

Central banks have historically been less than eager to reveal their internal models, and we believe much more information could and should be provided. Again, it is not the details that matter. Rather, most central bank watchers will care only about the bank's basic view of how the economy works and how it thinks monetary policy affects output and prices. Well-chosen words supplemented by a few key numbers may suffice. In fact, they may convey the relevant information better than masses of equations – which are often far from transparent.

### 1.3.5 Tactics

Central banks are generally quite transparent about how they go about putting a monetary policy decision into effect – as they should be. But there is one main exception to this rule. When they intervene in foreign exchange markets, the authorities almost always try to catch market participants by surprise.[1] Also, they often maintain a steely silence over how and when sterilized interventions have taken place – even well after the fact. Although we are decidedly 'hawkish' on the subject of openness, we endorse this departure from transparency because governments are unlikely to have enough ammunition (foreign exchange reserves) to force the market to bend to its will. So the element of surprise, and some creative ambiguity about when and where the authorities are likely to strike next, may be essential to the success of sterilized foreign exchange operations.[2]

### 1.3.6 Talking about decisions

We take it for granted that all decisions should be publicly announced as soon as they are made,[3] with no informational advantage to select 'insiders.' A far more difficult question is what, if anything, central banks should say about their tentative *future* plans. The old answer to this question was: nothing. But nowadays more and more central banks are making relatively straightforward (though often highly stylized) statements about which way they are 'leaning.' We applaud and encourage this trend. The next step down this road would be to publish *conditional* plans for *future* monetary policy, as the Reserve Bank of New Zealand does. As noted earlier, however, hardly any central banks formulate such plans, even for internal use, so they certainly cannot announce them publicly.

## 1.4 How should central banks talk?

The precise ways in which a central bank chooses to communicate will depend on many factors. But perhaps the most important is whether monetary policy decisions are made by a single individual or, as is increasingly the norm, by a committee – and, if by a committee, whether decisions are presented as achieved by consensus (which we call a *collegial* committee) or by individuals voting for their own preferences (which we call an *individualistic* committee). The distinction is clearest when discussing how to communicate the results of monetary policy committee (MPC) meetings.

### 1.4.1 Decisions and proceedings of monetary policy meetings

We are happy to endorse what seems to have become standard practice: announcing each policy decision with a brief *statement*,[4] issued shortly after the meeting and followed some weeks later by a fuller explanation in the published *minutes*. There are, however, some obvious but rarely discussed trade-offs.

Clearly, a single decision-maker has no meeting, no minutes and no vote to report. The statement therefore carries the burden of explaining the reasoning behind the decision. It should therefore be full, intelligible and promptly issued.

At the other pole, a truly individualistic committee may find it quite difficult to agree upon a statement in short order. So, for example, the Bank of England's MPC normally issues no statement at the close of each meeting. In such cases, transparency calls for detailed minutes to be released as soon as possible. With individual responsibility, the minutes might or might not attach names to specific arguments and positions – but it should certainly record the vote of each committee member or, at least, the number of votes cast for each proposal.

In between these extremes, collegial committees have a choice of how much to explain immediately (in the statement) versus later (in the minutes) – and we do not presume to make this choice for them. Statements issued immediately after a meeting probably must be drafted in advance, which may limit their length. The ESCB's Governing Council 'solves' this problem by issuing a supporting statement followed by a news conference by its President. There are no subsequent minutes. The Federal Open Market Committee (FOMC), by contrast, normally issues a brief statement at the conclusion of each meeting, followed by copious minutes 6–8 weeks later. Because of the long lag between the meeting and the minutes, the FOMC minutes draw little press or market attention when they are published. By contrast, the statements are scrutinized like holy writ.

The ESCB and the Fed also illustrate different approaches to revealing the committee vote. The ESCB Governing Council announces no votes and, in fact, states that votes are usually not taken. The FOMC publishes its votes in the minutes, naming names. As a rule, we do not favour the ESCB practice – which is less than transparent. But as a new, multinational, institution it has special reasons for avoiding votes, and we are not inclined to challenge the ESCB's judgment in this matter.

### 1.4.2 Views on future developments

Once outside observers know what happened at the last MPC meeting, their attention turns to the future. Outsiders need to understand the bank's underlying logic and strategy, if they are to comprehend and anticipate its actions.

Two methods for conveying forward-looking information are discussed in Chapter 3: publishing *forecasts*, and publishing *'bias' statements* of some sort. The bank's official forecast should, in principle, represent the views of the decision-maker(s). But in fact, it is typically produced by the staff – and members of the MPC may not agree with it. This is a departure from transparency (and accountability) since the published information may not represent the committee's true views, so central banks should take pains to minimize it. But they will not be able to eliminate it because a group cannot generate a detailed forecast. The 'bias' or 'balance of risk' statement is

another matter, however. Here it is quite reasonable for the committee to reach and state a collective view, whether by voting or by consensus.

The differences between collegial and individualistic committees come to the fore in thinking about *speeches and statements* by MPC members. The main purpose of such speeches ought to be to enlighten, rather than to befuddle. But there are hazards.

Collegial committees should strive to convey a consistent message, even though they speak with many voices. Achieving such consistency may not be easy, however, when a committee has strong-willed and independent members. A committee that emits conflicting signals may confuse markets, which makes the central bank less transparent. Part of the art of good communication is to minimize conflicting signals, so that outsiders 'get the message.'

For individualistic committees, however, transparency *requires* that differences of opinion be aired in public. In part, this is a corollary of individual accountability. But airing differences of opinion also helps outsiders understand the nature of internal deliberations. Hearing conflicting views may, of course, confuse central bank watchers. But, in an individualistic setting, the cacophony of voices is part of the underlying reality.[5]

## 1.5 How do central banks actually talk?

The traditionally secretive Federal Reserve System has changed its communications policies dramatically since 1993 – almost without people noticing. While perhaps still lagging behind other central banks, the Fed is clearly moving toward greater transparency. We recommend that the Fed states its objectives more clearly, publishes its forecasts and clarifies their nature, and offers fuller statements to explain its policy decisions.

The new European System of Central Banks inherited the mantle of the Bundesbank – including its tight-lipped tradition. The ESCB's much-criticized communications policy is complicated by its short history, its multinational nature and its confusing 'two pillar' monetary strategy. Nonetheless, it is already more transparent than the Bundesbank ever was. We recommend that the ESCB clarify the time horizon for its inflation target, improve its published forecasts and publish minutes.

Since the Bank of Japan was reinvented as an independent central bank in 1998, it has struggled with deflation and its zero interest rate policy. But communications and openness have increased tremendously. For example, its individualistic Monetary Policy Board releases detailed minutes attributing specific views to specific members. We recommend that the BoJ clarify its inflation objective and better explain the reserve-targeting policy regime that it adopted this year.

The Bank of England has been reborn twice in the past decade – in 1992 as an inflation targeter, and in 1997 as an independent central bank. Both events led to dramatic increases in transparency which, by now, place the BoE near the vanguard. So, with the possible exception of issuing a statement

immediately after each meeting, we cannot suggest that it go much further. Its highly individualistic Monetary Policy Committee has been criticized, however, for sowing confusion by speaking with too many voices.

Last but, where communications policy is concerned, most comes the Reserve Bank of New Zealand, which has been leading the world in central bank transparency since its 1989 reform. As noted in this report, the bank even publicly projects its own future behaviour. We can recommend no further steps toward transparency; the RBNZ seems to get there first.

# 2 Why do Central Banks Need to Talk?

## 2.1 Introduction

We take it as given that the central banks' mandate is first and foremost to achieve price stability. The mandate is not always spelt out as clearly as that, but there is little disagreement that this is indeed what they should do. While those central banks whose mandate was set in earlier times often put less emphasis on the price stability objective, wherever the mandate has been (re)defined, there is little ambiguity left. The process started with the Reserve Bank of New Zealand in 1989 and has spread to countless central banks: the Bank of Canada, the Bank of England, the Swedish Riksbank, the Bank of Israel, the Bank of Japan and the European Central Bank, to name a few.

This is not to deny that central banks may at times pursue other objectives. Typically, their mandate refers to 'broader objectives' of economic policy, as well. For example, it is generally understood that because monetary policy has real effects in the short to medium run, the authorities have to take into account the impact of their actions aimed at maintaining price stability. It is also generally accepted that central banks may use monetary policy to affect the real economy, provided such action does not jeopardize the fundamental objective of price stability. Even though there remains some debate about how exactly to balance these objectives, and what precisely central banks ought to be concerned with in the short-to-medium run, we simply accept this conventional wisdom.

Our focus is on how central banks share their knowledge and intentions with the broader public. There is mounting evidence that a more predictable monetary policy – better understood by the private sector which ultimately sets prices – is also more effective in achieving its inflation objective.[6] The ability of central banks' 'talk' to move financial markets – and thus affect the whole economy – is familiar to even casual newspapers readers.

Why can communication matter so much? The reason is quite simple. Central banks can control interest rates only at the shorter end of the maturity spectrum, but monetary policy affects the economy through its

impact on longer-term interest rates as well as on asset prices and exchange rates. The link is market expectations working through the term structure of interest rates. The link from short rates to long rates acts like the dog's leash, transmitting the owner's (the central bank's) command to the dog (the economy). And, of course, accountability starts with communication.

Does communication really matter? To date, there is no research to report on, so we can only call upon casual experience to back our claim that it does, and quite a lot. One case in point is the period from early 1996 to mid 1999 in the United States. This period provides a good illustration of the symbiosis that can develop between a central bank and the markets. Largely, we believe, because of the Fed's greater openness, the bond market began to anticipate the central bank's actions better than it had in the past. In fact, apart from its reaction to the international financial crisis in the Fall of 1998, the Fed left the federal funds rate virtually unchanged throughout this period. But bond rates moved up (when it looked like the economy was in danger of overheating) and down (when it looked like there was little such danger) nonetheless. It was said at the time that that bond market was 'doing the Fed's work for it' – that is, acting as a macroeconomic stabilizer. As a counterpoint, the ECB's experience throughout much of 2001 illustrates the opposite case of a misunderstanding between a central bank and the markets. During this period, the ECB has repeatedly refused to endorse market anticipations that it would cut its interest rate. By the time it did shave 25 basis points in May, the markets had given up any hope and were accepting the wisdom of keeping the rates unchanged. In such a climate, the markets certainly do not do the ECB's job.

This chapter looks at what can be achieved by talking. Why is talk beneficial? Is it always the case that the more central banks talk, the better? Or, conversely, is it possible for a central bank to talk too much? Answering these questions implies looking at the economic effects of central bank communication. It also requires asking the question of how such communication can best be conducted. Two very different rationales emerge: monetary policy effectiveness and democratic accountability. These two rationales are not completely independent of each other, but are better treated separately. Policy effectiveness is taken up in Sections 2.3 to 2.5 (the cases for and against full transparency and the implications for communication), while accountability is the topic of Section 2.7. To start with, however, it is useful to emphasize that outsiders are essentially interested in the policy regime. This is the issue taken up in the following section.

Our report is primarily aimed at central banks in developed countries, those that operate under democratic conditions, face demanding public opinions and deal with sophisticated financial markets. We believe that as they integrate themselves into international markets, developing countries will find our recommendations increasingly relevant, at least at some point down the line.

## 2.2 Communication: transparency of the policy regime

Communication can be an exercise in obfuscation. Alternatively, it can aim to achieve maximum transparency. Section 2.3 examines the arguments for both obfuscation and transparency, here we start by defining transparency. A central bank is transparent when it provides at all times sufficient information for the public to understand the policy regime, to check whether the bank's actions match the regime and to pass judgment on its performance.

Indeed, the most basic choice of a central bank is the policy regime. It is also what matters most to the public. Inevitably communication involves a large amount of detailed information on the central bank procedures, data, decision-making process, etc., but for outsiders these are mostly hints about the underlying policy regime. Possible policy regimes range from a tight rule to complete discretion, as represented in Figure 2.1.

- At one extreme, a simple automatic rule fully determines the bank's everyday actions. This is the case of a currency board.
- A pegged exchange rate regime provides more room for manoeuvre, if only because realignments provide an escape clause from the implied day-to-day commitment. Crawling pegs offer yet more flexibility as they allow for the occasional choice of trend inflation.
- Inflation targeting provides a rule for the medium run. The central bank's commitment to achieve an inflation target over a one to two-year horizon allows for considerable leeway in day-to-day or even month-to-month decisions. A further source of flexibility exists if the central bank is goal-independent and willing to change its target. Central banks which are only instrument independent are duty-bound to deliver the inflation decided by the political authorities. On the other side, instrument independence may allow for more flexibility for monetary policy as a whole – as opposed to the central bank – as the target can be

***Figure 2.1*** Policy regimes and communication

changed without affecting the central bank's own credibility. It also matters whether the target is specified as a point or as a range.

- Maximum flexibility occurs when the central bank operates with a multiple mandate, for example being asked to care for both inflation and growth or unemployment.

Clearly, the more rule-based the monetary policy regime, the easier it is for the central bank to communicate. A currency board only needs to announce its peg and its legal statutes. At the other end of the spectrum, central banks which operate multiple mandates will naturally have shifting priorities, e.g. aiming at inflation when the output gap is positive and at growth in the opposite case. Forecast inflation conveys nearly all the required information for inflation-targeting central banks even if, like banks with wider mandates, they still need to assess the current state and likely evolution of the economy.

The link between the policy regime and transparency matters for both effectiveness and accountability. Policy effectiveness is enhanced when the broad public can confidently anticipate the bank's actions over its own planning horizon. Transparency reduces uncertainty and limits the costs associated with decisions which turn out to have been based on mistaken expectations. With already much unavoidable uncertainty lurking around, central banks need not add more uncertainty. Transparency is also essential for accountability, for how can a central bank's actions be judged in the absence of a yardstick?

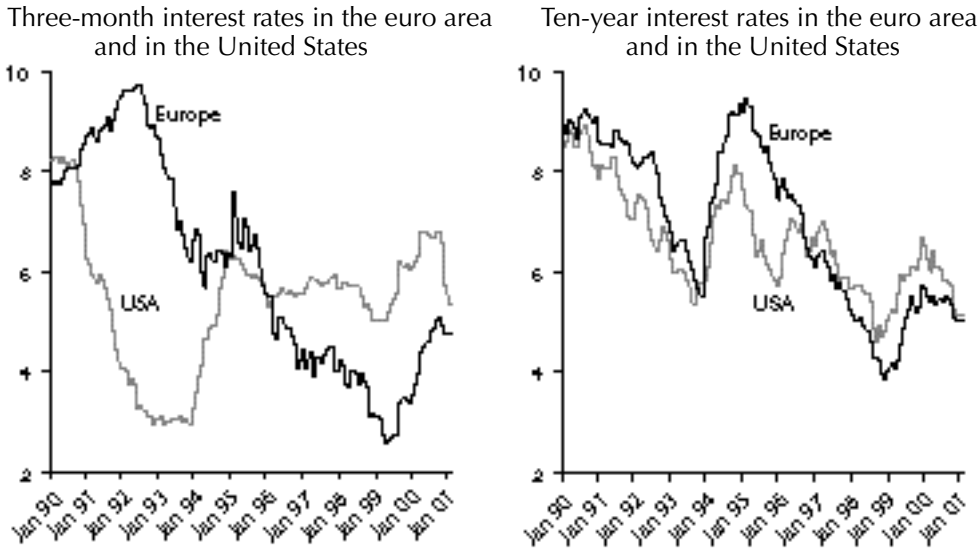
## 2.3 Economic effectiveness arguments for transparency

Economists tend instinctively toward the view that there can never be too much provision of information. Arguably, policy-makers' instincts work in the opposite direction. Indeed, until quite recently, secrecy was a characteristic of central banks, which permeated both their internal operations and their external communications. Now that the economists' preferences seem to be prevailing over a century-old tradition, it may be a good time to pause and examine the case for and against transparency.

The fundamental economic case for full transparency is that monetary policy is most effective when the markets correctly anticipate it. The case rests on three features of effective monetary policy signalling:

1 Monetary policy mostly acts through variables that are driven by market expectations. As noted by Blinder (1998), the very short-term interest rates that central banks control have, in most countries, a trivial impact on the economy while longer-term interest rates, asset prices and the exchange rate exert powerful and pervasive influences. The link from the short-term interest rate to these financial variables involves expectations. As an illustration, Figure 2.2 depicts the evolution of the short (three month) and long (10 year) interest rates in the euro area (proxied by German rates prior to 1999) and in the United States. Over

***Figure 2.2*** Interest rates in Europe and the United States




*Sources*: ECB and *International Financial Statistics*.

the period 1990–2000, despite considerable differences in the short-term rates, the long rates have largely remained in step – the similarity characterizes stock prices as well. The figure illustrates the gap between what central banks do with the short-term interest rates and what the markets deliver at the longer end of the spectrum. Expectations, which lie in between, do make a difference.

The less volatile are these expectations, the more stable and predictable is the link between monetary policy and its effect on the economy. Since market expectations are partly shaped by the future course of action of the central bank, monetary policy is more effective the more accurately it is anticipated by the markets.

2 The channel from interest rates to the real economy and inflation involves price and wage setting. Monetary policy's influence comes partly from its impact on economic conditions – the traditional backward-looking Phillips curve channel, e.g. Gordon (1998) – and partly through expectations – the forward-looking Phillips curve channel, e.g. Clarida, Gali and Gertler (1998). The former is both slow and disruptive, the latter faster and largely painless. Transparency is likely to enhance credibility and credibility is likely to strengthen the second channel – and thus improve the effectiveness, acceptability and speed of monetary policy. Indeed, if price and wage setters are uncertain of what the central bank is aiming to achieve, they are likely to adjust their behaviour slowly. The full effect of monetary policy will only occur after the public has become convinced of the central bank's determination.[7]

3 Transparency also reduces the cost of policy changes. When economic conditions change or turn out to differ from what was anticipated, the

> stance of monetary policy may have to be promptly reversed. Central bankers are understandably wary that policy reversals confuse the public and harm their credibility. Staying the course, on the other hand, may result in ill-adapted policies. It is essential, therefore, that the public clearly understands the policy regime. It will then understand, and quite possibly anticipate, the policy reversal at no cost to the central bank's credibility.

The financial and price/wage setting channels represent the hurdles that any central bank must deal with. It is interesting to observe a difference between the United States and possibly the United Kingdom on one hand, and continental Europe on the other. Price and wage setting seems more fluid in the former than in the latter. This stands to affect the communication strategy. Indeed, European central bankers typically attempt to influence price and wage setting more often than their American or British colleagues who are more focused on financial markets. While financial market participants tend to reason closely like the central bankers, price and wage setters often do not share the same purview which may seriously complicate communication.

We conclude that the case for transparency is strong. At the fundamental level, the case is based on a pervasive and well-accepted phenomenon, the presence of an information asymmetry: the central bank knows more about itself, its instruments, and its intentions than the public does. This leads to 'misunderstandings,' a source of ineffectiveness, as explained above. Central bank watchers try to clear up such misunderstandings. But unless the bank fully reveals its intentions and its own knowledge of the economic situation, there will always remain a zone of harmful obscurity. There is no shortcut: central banks are better off by revealing, as completely and truthfully as humanly possible, their chosen policy regime and the procedures put in place to enforce that regime. This creates the strong presumption that everything ought to be communicated to the broad public unless a case can be made that some confidentiality is desirable under the particular circumstances that prevail.

## 2.4 The case for creative ambiguity

Why then, given the strength of the case for full disclosure, have central banks been attached for so long to a high degree of opacity? One interpretation, quoted by Faust and Svensson (2000a), has been offered by Milton Friedman: 'avoiding accountability on the one hand and achieving public prestige on the other.' Could there be other, economic arguments? This section presents and evaluates the economic case for limited transparency.

### 2.4.1 Only unanticipated monetary policy is effective

The seminal argument for limited transparency, due to Cukierman and Meltzer (1986), rests on the assumption that anticipated monetary policy is

ineffective. This assumption, which lies at the heart of the rational expectation revolution, holds that rational markets see through the veil of money and promptly adjust all prices (in goods, labour and asset markets) leaving money to be neutral in the short run. Under that view, to be effective, monetary policy has to be unanticipated. Central banks need to be ahead of the pack, which means that they need to pull off surprises.

Despite its considerable weight in theoretical work, the empirical evidence does not support the assumption that only unanticipated money matters. Nor do central bankers report trying to create surprises.

### 2.4.2 The inflation bias

A variant of the unanticipated money assumption is the inflation bias view (Kydland and Prescott, 1977). This view requires that the central bank's opinion on what is the desirable level of output or unemployment differs from the public's preferences. If the central bank is interested in raising the output level, or in reducing unemployment, from time to time it will engineer an inflation surprise. A related argument is that by springing an inflation surprise, a central bank imposes a tax on nominal asset, thus providing the government with easily collected resources (Fischer, 1980). Full transparency would reveal the central bank's intentions and limit the ability of the central bank to indulge in such an inflationary bias.

In this view, the need for transparency declines with the credibility of the central bank. Central banks that have achieved a high reputation are less constrained by transparency, but need it less. Their credibility ensures that the motives of their actions go unquestioned, and they do not need to be disciplined since they stand to lose hard-won reputation by engaging in lax policies. Central banks that have less well-established credibility will prefer some degree of opacity. This allows them to carry out policies that may be opposed by the public and possibly undermined by transparency.[8]

In most developed countries, there is plainly no evidence of an inflationary bias at the central bank. To be sure, some central banks have conducted inflationary policies but, in nearly all cases, this has been the result of pressure from their financially hard-pressed authorities. Central bank independence goes a long way towards removing this particular inflation bias.[9] Independent central bankers are not known to cherish inflation surprises. They have nothing to hide here.

It is true, however, that in spite of being ultimately responsible for inflation, central banks cannot disregard shorter run fluctuations in the level of activity and employment, if only because the public cares.[10] Does this mean that central banks have a systematic tendency to favour more output and less unemployment than the public at large, as claimed in the inflation-surprise literature?[11] It remains to be seen whether there is any such thing as a publicly held view of what monetary policy should be doing. In any case the public is usually even more myopic than politicians, let alone central bankers. Debtors, homeowners, industrialists and equity holders routinely welcome interest rate cuts and abhor increases, almost

independently of the prevailing conditions. We return below to democratic accountability, here we simply note that a central bank can only hope to generate a constituency in favour of price stability.

### 2.4.3 Asymmetric information

As noted, the presence of an information asymmetry between the central bank and the public is the basis of the case for full transparency. Yet this argument can be turned on its head. Because the public can never be sure that it fully knows the policy regime, it needs to scrutinize every signal that the central bank emits. To suspicious observers, signals are always ambiguous. Once doubt exists – and how can it be fully removed? – it irremediably pervades every central bank pronouncement, no matter how hard the central bank tries to be transparent. Its signals stand to be misinterpreted or exaggerated. The public may read too much in the information released by the central bank, and get confused. Two main implications follow:

- The more transparent the central bank, the more signals it sends and, under this view, the more volatile are the financial markets.[12]
- The central bank may become hostage to market sentiment because every one of its utterances or actions produces strong reactions with potentially powerful effects on inflationary expectations. The result could be a very conservative approach to policy with small, possibly delayed, actions.[13]

The view that less information could help to deal with the information asymmetry – the public does not know as much about the central bank preferences and intentions as the central bank itself – is surely paradoxical. The results referred to above rely on some peculiar features of financial markets which result in such phenomena as herding behaviour or panics. These phenomena involve a large number of imperfectly informed participants who draw wrong inferences from each other's behaviour or 'cheap talk'. There is no doubt that these things exist, and occasionally result in serious disruptions, even crises, as documented by Shiller (2000).

Central banks sensibly fear becoming hostage to market sentiment. Because their business is inherently uncertain, they need to stand ready to react to numerous contingencies and cannot be tied down by earlier pronouncements or by market expectations. One solution is to shun pronouncements altogether. While this may alleviate the hostage-to-markets problem, it runs again the grain of the case for transparency: the costs in terms of effectiveness – not to mention accountability – are likely to largely outweigh the benefits. A better solution, we believe, is to consider carefully the channels of effect from short-term interest rates to stock and bond prices and see what can be done:

- For stock markets, one argument is that communicating intentions on the future path of interest rates could go a long way toward stabilizing

expectations. The fear is that such detailed information about intentions, which remain highly tentative and will typically change as new information flows in, could backfire because of markets' tendency to go to extremes. Hence, noting that central banks do not really have any information advantage over markets, we remain agnostic on the desirability of communicating such intentions.

- For bond markets, central banks hold the key to current and future interest rates. This gives them the ability to strongly influence the markets and, therefore, they need not be overly concerned to go against them.

The root cause of all this is that individual financial market participants fail to agree among themselves when interpreting the central bank signals. It stands to reason that a complete public disclosure of the bank's intentions should help coalesce heterogeneous opinions and drive financial markets towards the 'correct' view (Tarkka and Mayes, 1999, Winkler 2000). In contrast, if market participants are inherently suspicious that central bankers do not always speak their minds, more information will not always deliver a better understanding. The only sensible solution is for central banks to be fully open. The risk is that trust will never be complete and, on occasions, more information may not be better. But it remains the case that in most instances openness will eliminate costly misunderstandings.

### 2.4.4 Transparency and independence

We have noted that central banks that lack independence may be subject to an imposed inflation bias. What then is the effect of the independence status on the communication strategy? Section 2.5 argues that independence requires accountability and that accountability requires transparency. Here we focus on the economic efficiency aspect of the relationship, asking whether the precise form of independence matters for transparency.

Central banks which are goal-independent with a broad mandate may well have, at least from time to time, a different view of what ought to be done than the public at large. If that is the case, the central bank will want to protect some privacy while the public will ask for total transparency. Faust and Svensson (2000a) observe that this may explain the Fed's approach to limited transparency. If this aspect is deemed important, we believe that the proper response is not opaqueness but a shift to instrument independence with full transparency.

### 2.4.5 Assessment

We conclude that the case for limiting transparency is very weak. We have endeavoured to give the case a fair hearing, and come out generally unconvinced. The surprise-inflation bias is remote from current practice. While the general answer to the information asymmetry problem is unlikely

to be less information rather than more, we accept the view that complete transparency is unlikely ever to be achieved, hence the possibility that markets may occasionally react incorrectly. The likely solution to this problem lies less in the provision of detailed information on every internal debate than in the disclosure of the policy regime and its precise guiding principles. The goal of a fully trusting relationship between monetary authorities and financial markets is likely to remain elusive, and misunderstandings are bound to occur from time to time. Such occasional setbacks ought to be seen as unfortunate, not a reason to reject a high degree of transparency.

## 2.5 Contents of communication

### 2.5.1 The aim of transparency

The guiding principle is that transparency should allow the public to understand, and possibly anticipate, the central bank's decisions, to see each of them as the logical conclusion of a chain of past and future decisions aimed at a clear set of targets, possibly but not necessarily one target. In order of importance, transparency should aim at providing outsiders with the following information:

- ***Objective(s)*** The central bank must fully reveal what it is trying to achieve. Observers understand that setting any objective is inherently conflictual and political. Outsiders will always pass judgment on the central bank's action, so opacity at best buys time, but at a cost. There is no shortcut to fully revealing the policy regime. Even though the policy objective(s) change along with circumstances (economic and political) or as new knowledge is acquired, central bank's actions are guided by a limited number of fundamental principles: keeping inflation below some threshold, avoiding large output gaps, smoothing interest and exchange rate changes, containing asset price volatility, etc. The central bank may not set precise numbers or weights on these objectives, but it must develop its own understanding of where warning signals start ringing and how to deal with conflicting aims. It cannot, and should not, be more precise *vis-à-vi*s the outsiders than it is internally, but it should not be less precise either. Transparency is about sharing certitudes as well as doubts and promptly revealing shifts in the priorities when they occur.
- ***Methods*** Each central bank relies on a large set of methods of analysis. This includes selecting data and deciding on how to interpret them. It also involves using models, large and small, to produce forecasts and policy simulations. Outside observers, in particular professional economists, peruse similar data and use similar models as they attempt to deal with the same issues. There is no reason to believe that the central bank's methods are systematically superior or inferior to those of outsiders, but they may often lead to different conclusions. Only time

can tell who was right and who was wrong, and there is no shame in being occasionally wrong. But the bank's actions will not be intelligible unless the methods and the conclusions of the analysis are disclosed. Full disclosure does not only allow for professional exchanges, it is a precondition for outsiders to understand the central bank's actions by relating them to the stated policy regime. Revealing the policy regime without disclosing the internal methods is like providing a car without the engine, it goes nowhere.

- ***Decision-making*** Outsiders understand that policy-making is more of an art than a science. Some even call it a gamble. At times, several reasonable options may coexist and the task of the policy-maker is to choose one. Monetary policy committee meetings are, therefore, likely to be occasionally contentious and the decision finally reached will reflect internal debates. The debates themselves, and who said what and when, belongs more to the gossip column than to the financial pages. On the other hand, which argument carried the day – and how convincing it was within the decision-making committee – matters a great deal for outside observers. It helps them relate the bank's methods to the declared objective(s) – the policy regime – and it reveals the degree of uncertainty surrounding the current and expected situation. After all, finely balanced decisions best illuminate the way priorities are set. The decision-making process is a reality check on the principles set forth. Revealing this process is the only way a central bank can make its policy understandable and predictable.

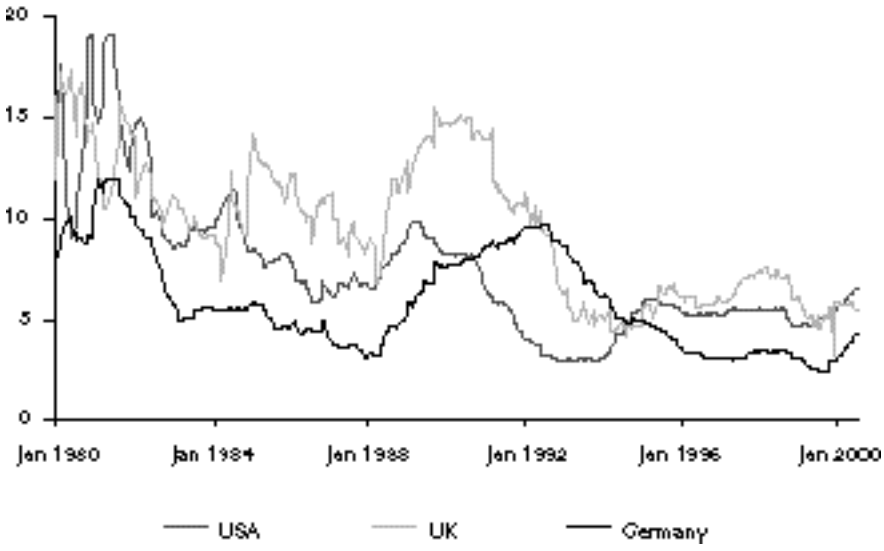
The remaining chapters will explore in detail what has to be revealed (Chapter 3), how it can be done (Chapter 4), and how it is done (Chapter 5).

## 2.6 Interest rate smoothing

A particular aspect of transparency is how central banks vary the interest rate when it is their instrument, as is generally the case nowadays. This question might seem to be part of policy-making proper, not its communication strategy. In fact, it belongs to both. Figure 2.3 illustrates how central banks typically steer the interest rate through increasingly smooth cycles that typically extend over several quarters, years even. Over some periods the interest rate is continuously increased, over others it is continuously lowered, always in small steps. Why not move the interest rate promptly to its ultimate destination for maximum and faster effect? This question matters for transparency, both because it is one aspect of the policy regime – are small steps part of the normal operating procedure? – and because it is a focal point for market expectations.

One obvious reason is economic and model uncertainty. The monetary authorities do not have a clear view of current conditions and forecasts are often hazardous, nor is it well known how a given change in the interest rate will affect the economy. Goodhart (1999) reports estimates of 'optimal' interest changes in the United States and the United Kingdom, where

***Figure 2.3*** Money market interest rates




*Source*: IMF

optimality allows for uncertainty. For the United States over the period 1984(Q3)–96(Q4), based on Sack (1998), optimal policy would have called for 55 changes of at least 50 basis points, when the Fed acted that way only 23 times. For the United Kingdom over the period 1981(Q3)–98(Q2), the Bank of England changed the interest rate by 50 basis points or more 17 times, tantalizingly close to the 18 times called for by the estimated optimal policy.[14] This assumes that uncertainty comes in the form of isolated one-time shocks (additive uncertainty). But if uncertainty comes in the form of a permanent change (multiplicative uncertainty *à la* Brainard), prudence becomes considerably more desirable. In that case, relative to the estimated optimal policy, the Fed had it exactly right and the Bank of England is found to have been too active.

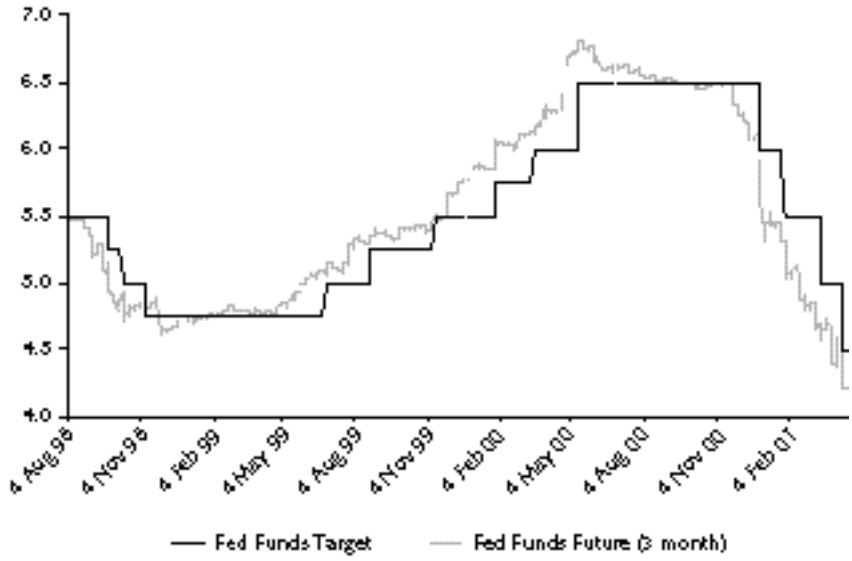
If uncertainty is a key reason for interest rate smoothing, the desire to enhance financial stability is another one. Other reasons that come into play are directly related to the communication strategy. Central bank statements, analyses, forecasts are words. Setting the interest rate is the ultimate deed of a central bank. If central banks were fully transparent, interest rate changes should merely be the confirmation of all the other signals previously issued, to the point of being a non-event. In fact, it often is a non-event as Box 2.1 documents in the case of the United States.

Yet interest rate changes are far from systematically anticipated correctly, especially regarding the timing. For shrewd market players, interest rate changes represent a source of sizeable profits. Consequently, they are the object of intense scrutiny and, when they occur, are often followed by strong reactions in asset prices and exchange rates. Such reactions are simply

### *Box 2.1* How predictable is the Fed?

Figure B2.1 reports the Fed's target for the Federal Funds along with the Fed Funds futures (3 month). Out of the 14 changes decided by the FOMC over the period 4 August 1998 to 19 April, 2001, ten were predicted within a three-month window (one was over-predicted) and four came as a surprise.

***Figure B2.1*** Federal Funds Rates




*Source*: Barclays Capital

the consequence of the forward-looking nature of financial markets. As some uncertainty gets resolved, the markets reassess their expectations and discount back to the present long streams of future incomes. Interest rate smoothing can be seen as the central banks' way of filtering the impact of their own actions, present and future.

Over-reactions could be the symptom of financial market inefficiency, possibly rooted in less than rational behaviour of market participants who often react to 'silly signals' (Shiller, 2000). In that case, the monetary authorities are forced to adopt small steps, to filter their actions more heavily than they would otherwise prefer. This can be seen as a pedagogical role of central banks, but how does it relate to their communication strategy? Obfuscation, emitting fewer signals possibly interpreted in a 'silly' way, could be defended as an effort to limit the extent of over reaction. The down side is that limited transparency makes words unconvincing. The only remaining pure signal, deeds, are then bound to trigger even stronger reactions because they contain more information and may lead to deeper reassessment by the markets. Here again, more transparency is better than less.

Over-reactions may intimidate central banks, which might lead to inefficiently small, and possibly delayed, steps. The logical response is more transparency to enhance predictability. This observation contradicts and, in our view, sharply reduces the power of the argument that some opacity helps the monetary authorities to carry out their preferred policies.

Small steps may also be a way of testing the political acceptability of the contemplated policy. Revealing its intentions in small increments may make the news (bad or good, but almost always controversial) more politically acceptable. For example, between April 1988 and August 1989, the interest rate had risen by more than 700 basis points in the United Kingdom. Assuming that it was expected, a one-time increase that large could have been more efficient, but it would have undoubtedly raised massive opposition. In fact, during the 1960s and 1970s, the Bank of England is known to have had an asymmetric strategy: raising the interest rate sharply to get the bad news out and bringing it down in small instalments to keep markets happy. By the late 1980s, the size of movements became symmetric on the way up and down.

Yet in the end, small steps should not be seen as a substitute for an open debate. Letting it out in small, unpredictable doses to test public opinion must be clearly inferior to a fully informed debate, not just on the direction of change but on its eventual magnitude as well as on the timing. This is where economic and procedural transparency becomes crucial.

Finally, interest smoothing can be interpreted as a way of avoiding embarrassing about-turns. In the presence of significant uncertainty, small changes make early reversal less likely to be needed and, at any rate, less economically and politically costly. Indeed, central banks seem to be fearful of acting too strongly and of having to reverse gears soon thereafter, thus giving the impression of an erratic process. In the previously mentioned study, Goodhart (1999) observes that reversals are very rare in practice, and much rarer than implied by an optimal policy, in fact by a factor of four. Fear of such criticism may lead central banks to purposefully act too little, too late.

There seems to be two main reasons for central banks to prefer a continuation of small steps to the risk of reversals. First, if central banks are known to follow a strategy of small steps, the markets can easily anticipate further moves. As a result, the expectation-driven variables that form the channels of monetary policy (long-term interest rates, asset prices and the exchange rate) actually move in advance of future policy changes. The timing of central bank moves actually matters little provided they are seen as consistent.

Second, reversals are hard to explain, even if they are fully justified. Goodhart (1999) notes:

> 'There is … the general perception of non-economist outsiders that reversals of policy, changes of mind, are to be deplored and castigated as evidence of error, irresolution and general incompetence.' (p. 256)

What all this means is that central banks occasionally carry out sub-optimal

policies because they fear not to be understood and care for their credibility to the point of affecting their actions. Policy, therefore, becomes hostage to insufficient communication. Why do central banks seem to believe that the public cannot be educated to the point of accepting large interest rate changes, possibly followed by reversals, if that turns out the best that they can do under highly uncertain circumstances?

In theory at least, one could envisage central banks sharing their doubts with the outsiders. They could take action while indicating that there exist a possibility that it will be reversed under contingencies which can be specified. Most central bankers will doubt that such an approach is actually possible. They will argue that markets will be confused and policy could become too activist for its own good. The former argument assumes that markets are unable to understand and cope with uncertainty, but financial markets exist partly to deal with and price uncertainty. It is hard to imagine that they lack understanding and instruments. As for the risk of activism, transparency offers the best possible device to enforce discipline.

Indeed, outsiders harbour the impression that opacity is often seen as a way of concealing policy mistakes. Mistakes are all too human and small mistakes can easily be presented as the result of changes in (undetectable) economic conditions. Acknowledgement that a mistake was made, and explaining why, does not have to provoke a loss of reputation. But then, maybe it does.

## 2.7 Democratic accountability

A central bank is a public institution and as such it must be fully accountable for all its actions and procedures. This broad and uncontroversial principle establishes the basic presumption that all information ought to be released, unless a good case can be made to the contrary. Such a case can be and usually is made regarding proprietary information on financial institutions that central banks routinely collect, or receive in periods of financial instability. More generally, market-sensitive information requires particular care to ensure a level-playing field among competing financial institutions. With these exceptions in mind, we do not see other generic information that central banks ought to conceal from the public domain. How in practice do central banks cope with this principle?

We note first that the force of the principle is felt differently from one democratic country to another. In several countries, the culture of government openness is not solidly entrenched. In these countries government and government-related activities have long been, and still are, perceived as deserving some degree of secrecy. This historical heritage is gradually giving way to the trend towards openness. For instance, legislative and legal avenues have been actively pursued in countries such as France and Italy, and will no doubt continue to crack the instinctive tendency of bureaucracies to protect themselves from the full light of public scrutiny. It is interesting to note that the multinational Eurosystem – and the European

Commission as well – is struggling to mesh these different cultures into commonly accepted norms.

Communication is at the heart of accountability. Whatever the legal process through which they fulfil their obligations, central banks cannot operate successfully unless they enjoy broad support among their various constituencies. They occasionally have to enforce policies which impose hardship on broad segments of the population. Hardships are only tolerated if the central bank has won the trust required to lead. In addition, as noted earlier, a central bank will be more efficient the better its motives and procedures are understood. This is why, in good as in bad times, central banks must talk to their various constituencies. Chapters 3 and 4 examine how this can be done. Here we set the stage.

### 2.7.1 Citizens and the media

It is fair to note that most citizens care little for monetary policy.[15] The average citizen typically does not understand monetary policy, and they make little effort to grasp what they perceive as an arcane world which speaks mostly unintelligible words. The average citizen does care about price stability, however, and would react strongly to a return of high inflation. They routinely care about interest rates, but would not seriously feel a difference of 50 basis points. In small open economies, they are keenly aware of the exchange rate. In the end, they typically see central banks as affecting growth and employment, which may explain why most central banks try to distance themselves – mostly unsuccessfully – from the real economy.

This lack of interest and monitoring ability does not result in a *carte blanche* being handed to the central bank. Even very independent central banks are unlikely to overlook public sentiment, and in many countries their very independence is at stake. They must create and maintain an impression of competence and of understanding that generates quiet acquiescence. The high degree of acceptance of the Bundesbank is widely linked to its successful efforts at finding ways of talking to and being understood by the broader public.

To that effect, central banks need to use all available communication channels. They often publish pedagogical brochures, for instance. But the main effort is clearly in the direction of the media, in particular those that appeal to the educated public. Central bankers routinely make themselves available for press conferences, interviews and background briefings. They usually freely provide data and analyses. All central banks now have websites with a rich, often nearly exhaustive content.

A particular challenge is that some media are specialized in financial affairs but are mostly read by an educated public, while most citizens receive their information from non-specialized media. Communication with the specialized media comes naturally, and is often more than adequate. Communication with the non-specialized media, and therefore with the majority of citizens, is considerably more difficult.

In dealing with monetary policy the media face two problems. First, they need to create and maintain interest in a technical subject. Simplification and pedagogy are essential ingredients here, but the risk is to lose nuance, a key ingredient in central bank communication. This is especially the case with television, the most influential of all media, where a few minutes, often seconds, are devoted to any piece of news, leading to the search for 'sound bites.' Central bankers naturally fear this form of communication, which can easily lead to misquotation. The resulting vicious circle – from rarefied communication to lack of interest and understanding, back to scarce information – is obviously hard to break. Much as politicians have honed their communication skills over the last decades, policy-makers and central bankers will also need to learn the trade. The current situation is unsustainable.

Second, the central bank is a monopolist in the production of monetary policy, but it should not enjoy monopoly in discussions of monetary affairs. The media need to diversify their sources of information and analysis. Much the same concerns government, but there the media can always turn to opposition politicians. Because the media will always seek contrarian views, central banks need well-informed critics who challenge their words and their deeds. In some countries there exist self-appointed shadow monetary policy committees. In general, central banks would be well-inspired to feed with as much information as possible a wide group of experts, if only to avoid debates born out of ignorance of what they do and think. We discuss the role of central bank watchers below.

### 2.7.2 Governments and parliaments

Governments and parliaments represent the citizens. But they may also have their own agenda, precisely because of the limited interest of citizens for monetary affairs. Governments are keenly interested in monetary policy because of shared responsibilities (e.g. the exchange rate) and shared impact on both inflation and economic activity. Most crucially, economic conditions often play a decisive role in elections, so governments – and their oppositions – have a clear view of what they would like the central bank to do over the preceding period.[16] Conflicts of interests are the norm and this is why independence is crucial.

Independence, now the norm rather than the exception, slightly complicates matters. On the one hand, independence carries responsibility for central bank unelected officials. With responsibility comes accountability to elected officials. Central bank accountability is generally established in its statutes. In most cases, the central bank is formally accountable to the parliament. On the other hand, independence requires an arms-length relationship between central banks and politicians. Some central banks are both goal and instrument independent, and forbidden by law to take instructions from any outsider. In that case, accountability must balance independence and democratic control. Chapter 4 examines the various solutions which have been put in place to achieve such a balance. In

other countries, the central bank is only instrument independent. In that case, the minister of finance formally sets its policy objective, and the minister's right to influence the central bank stops there.

Parliaments are usually the custodians of central bank behaviour, implying formal reporting. In some countries (e.g. the United States and the United Kingdom) parliamentary oversight is backed by the right to amend the statutes and/or the procedures of the central bank. This gives weight to parliamentary control and provides an effective tool of communication between the central bank and the elected representation. In others, the euro-area being a good example, the parliament can only engage in a 'dialogue' with central bank officials, but cannot affect its statutes and objectives. Unless the relevant committee is equipped with a strong supporting staff (which the Euro-Parliament is not), auditions of central bank officials are an exercise in formalism. This leaves the central bank free to decide whether the formal reporting is a useful tool of communication.

Whatever the institutional set-up, transparency greatly enhances central bank independence *vis-à-vis* politicians while furthering the goal of accountability. The more open the bank is, the less can it be amenable to government political pressure. Greater transparency also contributes to lessening the impact of institutional shortcomings, be it excessive or insufficient power of parliaments.

### 2.7.3 Financial markets[17]

Financial markets have an intense interest in money matters. Monetary policy represents the single most important parameter affecting their performance. Financial institutions retain on their staff people well aware of the technical details of monetary policy, indeed personnel often move freely from one to the other, at all levels of responsibility. Crucially, the financial markets constitute the channel through which monetary policy actions are transmitted to the economy, and ultimately achieve its goals. Since this channel is dominated by expectations, 'convincing the markets' is part and parcel of monetary policy-making. It is not surprising, therefore, that central bank communication is largely, sometimes almost exclusively, directed at the financial markets. A few observations are warranted.

The health of the financial system is a key responsibility of central banks. When they design their policies, central banks can never overlook their impact on financial markets. There may even be instances where threats to financial stability lead central banks to modify their policies, as was the case during the 1998 crisis. On such rare occasions, central banks are usually highly reluctant to recognize such a state of affairs. They feel that their carefully designed strategy, the focal point of their communication efforts, would lose credibility if they were seen as responding to the whims of the markets. But credibility is most hurt whenever words and deeds conflict. We believe that in the rare circumstances where concern for financial stability lead them to adjust their policy, central banks ought to make it publicly known. Suspending a strategy for good reasons cannot hurt.

What is good for markets is not necessarily good for the public. The markets thrive on volatility while the public dislikes it quite intensely. The markets operate on a very short-term horizon, from a few seconds to a few months, while the public's limited interest in monetary affairs starts with the time it takes for monetary policy to have real effects, i.e. several quarters. The markets ultimately see monetary policy as affecting their bottom lines, but monetary policy has wider redistributive and therefore political implications.

The danger, then, is that central banks become too pre-occupied with their communication to the financial markets and occasionally overlook their other constituencies. This danger diminishes the more open the central bank – for two main reasons. First, transparency reduces the market value of central bank information, which allows for a more arms-length relationship with the financial markets. Second, transparency allows outside, reasonably neutral observers to interfere if the relationship were to become too cosy.

### 2.7.4 Central bank watchers

Central bank watchers can be found in financial market institutions, the media and academia. Their expertise lies either in sharing with central bankers the same technical background or in having developed a sense for interpreting official pronouncements. They play an important role in interpreting central bank actions, disseminating and deciphering for the broad public the information released by central banks. They provide alternative opinions, lessening the monopolistic power of central banks. They often earn a living in anticipating future decisions, thus contributing to the transmission role of financial markets. In brief, they are part of the communication system of central banks.

For a central bank, its dedicated watchers are both friends and foes. They are friends since they disseminate, clarify and sometimes justify its actions. Their reactions can also serve as a useful sounding board. They are foes because they can be critical, or because they can outguess actions that the central bank would rather not divulge, at least not yet. Thus central banks wish to establish good relationships with their watchers, while keeping them at arm's length.

Transparency is a mixed blessing for central bank watchers. Those more adept at interpreting nuances stand to lose from openness. The others stand to benefit to the extent that their role is not limited to deciphering ambiguous signals, but extends to interpreting and commenting upon policy choices. From the central bank's viewpoint, transparency helps reduce the risk of misinterpretation. It allows for better feedback once the watchers are not seeking to extract secrets. The downside is that it prevents central bankers from co-opting friendly watchers by feeding them with privileged information. But t he benefits of such a strategy are dubious since, for every co-opted friend there must be a disgruntled foe. Here again transparency is beneficial, to both the central bank and its best and most disinterested watchers.

# 3 What Should Central Banks Talk About?

Having discussed the rationale for greater central bank transparency and communication, we turn in this chapter and the next to more operational matters. It is one thing to enunciate a principle – that more communication is normally better than less – but quite another to put that principle into practice. We therefore devote the next two chapters to a discussion of precisely *what* it is that central banks should be communicating (Chapter 3) and *how* they should go about doing so (Chapter 4). While the actual communication practices of several central banks will be mentioned from time to time as examples, most of the detail is reserved for Chapter 5. Our focus in this chapter is squarely on the normative issues – what subjects *should* monetary authorities be talking about?

As a way of framing the discussion, we begin by restating succinctly the basic philosophical predisposition that emerges from Chapter 2 – we would not call it our *prejudice* because this judgment is the product of considerable deliberation. Our strongly- and unanimously-held view is that the burden of proof should be on those who advocate withholding information. There *are* valid reasons for secrecy, such as preserving the sanctity of confidential discussions with others (e.g. other central banks) and of proprietary information that banks provide to their supervisors. But beyond these and related exceptions, we believe the circle of secrecy should be drawn tightly. A modern central bank should reveal nearly all information that is relevant to its monetary policy decisions. Most of this chapter can be thought of as repeated applications of that basic principle.

## 3.1 Preliminary

We organize the discussion into three main parts: communication about the *objectives* of monetary policy, communication about the *methods* the central bank uses to formulate and carry out monetary policy, and communication about the policy *decisions* themselves. Before doing that, however, we must dispose of one preliminary.

As already noted in Chapter 2, the content and nature of central bank

communication will inevitably be strongly coloured by the policy regime. At one extreme, a currency board,[18] as long as it is honest, leaves little for the 'central bank' to communicate (apart from the pegged rate itself, the level of foreign currency reserves and the mechanics of exchanging currencies.) There is, after all, no real monetary policy in such a regime. So we will not discuss currency boards further in this report. Nor will we spend much time on central banks that are locked into a fixed-exchange-rate regime. In such cases, monetary policy is totally subordinated to exchange rate policy and the central bank should state its exchange-rate objective clearly. The continuing existence of the regime, however, still requires information about credit to government, possible lending-in-last resort, or the volume of foreign exchange reserves.

We concentrate our attention on central banks whose objectives include – and may indeed be limited to – domestic macroeconomic variables like inflation and the GDP gap. Within this broad category, which nowadays includes all the major central banks of the world,[19] there are many variants. For example, the bank may or may not have an explicit inflation target, it may or may not try to influence the exchange rate, and so on. Each of these different policy regimes may give rise to its own, distinct communications needs. One size does not fit all.

## 3.2 Talking about objectives

### 3.2.1 Long-run objectives

With due apologies to Einstein, a central bank's *long-run objectives* should always be spelled out as clearly as possible, but not more so.[20] That should be a straightforward task for a central bank that pegs its exchange rate. The currency peg itself, be it a number or a range, is the primary (and perhaps the only) objective, and we believe the central bank (or the government) should make the target clear. Much the same can be said of an inflation-targeting central bank. A more or less precise inflation target may be set either by statute or by the government (e.g. the finance minister), in which case the objective of monetary policy is clearly and unambiguously in the public domain – perhaps after some technical clarification by the central bank. Alternatively, the precise numerical objective might be set by the bank itself, in which case its target inflation rate (or target inflation range) should certainly be made known to the public, as the ESCB has done. Indeed, full knowledge of the central bank's goal by citizens and market participants is one of the hallmarks of inflation targeting regimes.[21]

The case is a little less clear, and the communications problem more difficult, for central banks that have a more vaguely defined inflation objective, such as the Bank of Japan, or multiple objectives, such as the Federal Reserve. The Bank of Japan's legal mandate is for 'price stability, contributing to the sound development of the national economy,' and US law directs the Fed to pursue both 'maximum employment' and 'stable

prices.' Neither legal mandate comes anywhere close to specifying a numerical target for any particular measure of inflation.

Recently, CPI inflation rates have been around 3.5% in the United States and around –1.5% in Japan. Since these two numbers are so far apart, either the Fed and the BoJ have very different conceptions of what constitutes 'price stability' or one or both of them are failing to achieve it. In any case, when no numerical target is given to the central bank, an obvious question arises – should the bank formulate its own inflation target and reveal that target to the public?

Our view is that the benefits of revelation strongly outweigh its costs. But this report is limited to *communications strategies*. The optimal design of monetary policy is beyond our remit. So we will not enter into the debate over the pros and cons of inflation targeting versus other monetary policy strategies. The fact is that some central banks do not have an explicit inflation target, even internally (the Federal Reserve is a prominent case in point). In such cases, there is no number to disclose.[22]

But even a central bank that lacks an explicit inflation target must have *some* notion of what it is trying to accomplish. If not, how does it decide what to do? We believe that such a central bank should articulate its long-run objectives as clearly as it can – and then state them publicly. In particular, if it decides to adopt a numerical inflation target for internal use, it should reveal that target to the public. In economists' jargon, central banks should strive to reveal – at least in a rough way – the nature of their 'loss functions,' for unless outsiders know what the central bank is trying to achieve, there can be no *ex post* accountability. Without *ex post* accountability, an (operationally) independent central bank will potentially suffer from what has been called a 'democratic deficit.'

Merely disclosing the bank's long-run inflation target invariably leaves much unsaid. Because inflation is a highly inertial process, it will take some time to achieve any inflation target that differs from the current inflation rate. So one highly relevant policy question is: how long is the central bank prepared to wait to reach its inflation target? More germane to this report, however, is the related *communications* question: should the bank make its time horizon explicit?

Our answer is yes. Revealing the time horizon is, under certain circumstances, equivalent to revealing the relative weights that the monetary authorities place on inflation and the output gap (or the unemployment rate).[23] That particular piece of information is germane to both understanding and appraising the conduct of monetary policy. For example, a few years ago the Reserve Bank of New Zealand, a pioneer in inflation targeting, explicitly decided to put more weight on output stabilization by lengthening the time horizon for hitting its inflation target. That decision amounted to a change in the RBNZ's objective function and, as such, it should have been publicly announced (as it was).

If we look at what central banks actually do, we find that most, but not all, inflation targeters are reasonably explicit about their time horizons. The Bank of England, for example, is pretty clear that it seeks to hit its target

***Box 3.1*** **Emerging market multi-year inflation targets**

Inflation targeting is gaining adherents in the emerging market world, including among others Brazil, Chile, Czech Republic, Israel, Mexico, Poland, and South Africa. Multi-year inflation targets have emerged as a technique to achieve disinflation where convergence to or towards industrial country inflation rates is a goal.

Mexico's monetary policy regime has evolved over the past few years from a novel form of reserve targeting to inflation targeting. In 1999, when its inflation objective was 13% in the context of its old regime, the Bank of Mexico put forward the broad goal of bringing inflation into line with its major trading partners toward the end of 2003, without specifying a numerical target. Most observers interpreted that goal as the range of 3–4%. By early 2001, the Bank had formally adopted an annual target for that year of 6.5% inflation and adopted the multi-year target of 3% in 2003.

Brazil's central bank adopted inflation targeting in June 1999, some months after abandoning its crawling exchange rate peg regime. Now, by June of each year, it publishes an inflation forecasts for two years. Central projections for each year are accompanied by a fan chart, with 50%, 30% and 10% probability intervals. Moreover, an explicit, constant, nominal interest rate assumption and other baseline scenario assumptions are stipulated. In its June 2001 inflation report, the Bank forecast 5.8% inflation in 2001 and 3% inflation in 2002.

The National Bank of Poland adopted inflation targeting when it widened its exchange rate band in March 1999. The objective was to lower inflation to a range that would facilitate entry into the European Union. The Bank sets an annual inflation target each year, but since September 1998 has maintained the medium-term goal of lowering inflation to 4% by 2003.

within two years. Some inflation-targeting central banks, such as the Bank of Mexico and the Brazilian central bank, even provide an explicit multi-year glide path for moving inflation down to the target.

Whether the ESCB should be classified as an inflation targeter is a matter of definitional debate. On the one hand, the ESCB does post an explicit inflation target: between zero and 2% for the harmonized index of consumer prices (HICP). Also it has recently started to publish its forecasts. But on the other hand, it follows a complicated 'two pillar' strategy that accords a special status to money supply growth. In any case, the ESCB is vague about the length of its 'medium term' horizon, and critics have argued that its monetary policy is far from transparent for that reason.[24]

### 3.2.2 Short-run objectives

The main policy instrument of most central banks – some very short-term interest rate – affects inflation only through a series of intervening variables such as long-term rates, real activity and economic slack. In consequence, policy-makers are more or less forced to formulate some short- and medium-term expectations for the time paths of these other variables – signposts

along the way, so to speak. For example, while the Fed was raising interest rates in 1999–2000, it was widely believed that its interim goal was to slow real GDP growth down approximately to trend. As we just mentioned, the central banks of Brazil and Mexico have posted target glide paths toward their ultimate inflation objectives. The general question is: when a central bank formulates such interim or transition paths (and how can it avoid them?), should it make that information public? That is, should the authorities make known their short- and medium-run projections?

There are arguments on both sides.[25] On the one hand, Chapter 2 offered a number of reasons why informing markets and conditioning expectations might improve the efficiency of monetary policy. These arguments apply directly here and would seem to imply relatively complete disclosure of short-run expected paths. On the other hand, however, a central bank that states an explicit preference for, say, slower growth and rising unemployment may leave itself open to a tsunami of criticism – which may carry in its wake the potential for political interference. In addition, normal uncertainties and random events mean that monetary policy will typically miss many, if not indeed most, intermediate projections – which may drain the central bank's well of credibility. Finally, there is some concern that posting intermediate goals might constrain future policy decisions in undesirable ways – an attitude that contrasts sharply with academic economists' emphasis on the virtues of 'commitment,' that is, of tying one's hands.[26] All this argues for keeping mum on short- and medium-run objectives.

In practice, it seems that few central banks announce their short- and intermediate-run targets for real variables like output and unemployment. The central banks of the United Kingdom and New Zealand, which are clearly in the vanguard on matters of openness and transparency, are two prominent exceptions.

On balance, although we recognize and place some weight on the arguments for keeping interim projections secret, we come down on the side of those who argue for fuller disclosure. This greater candour can be accomplished without having to resort to blunt language like, 'The Bank of X wants the unemployment rate to go higher.' More polite euphemisms have always sufficed in the past and they will continue to do so in the future. They are readily and instantly translated by market participants and the press. We also believe that markets will quickly become accustomed to the fact that projections, like forecasts, are frequently wrong – and that this fact does not undermine the credibility of the central bank.

## 3.3 Talking about methods

Questions also arise – and central banking practices also differ – over how much information the authorities should provide about the *methods* they use to make monetary policy decisions and then to execute them.

### 3.3.1 The forecast

Monetary policy is always made in the context of a multi-period forecast. Given the long lags, there is simply no other choice – even though all central bankers realize that economic forecasts are inaccurate. In policy-making regimes that feature a single, sharply defined objective – such as a precise, numerical inflation target – the forecast may assume primacy. For example, if the Bank of England's now-famous 'fan diagram' shows a high likelihood that inflation will be above (below) the 2.5% target at the two-year horizon, the BoE is almost duty-bound to raise (lower) interest rates. Even in regimes with less tightly defined objectives, the central bank's forecast, while not dispositive, is certain to play a key role in the deliberations. For example, much of the time at each FOMC meeting in the United States is devoted to analyzing and discussing the staff's 'Greenbook' forecast.[27]

That forecasts must be *made* is axiomatic. The question is: should they be *disclosed* to the public? In the United Kingdom, the Bank of England's inflation forecast is a central component of its *Quarterly Inflation Report*.[28] Other inflation-targeting central banks (e.g. New Zealand, Australia, Canada, Brazil) are also relatively forthcoming about their forecasts.

In the United States, however, the Federal Reserve treats its detailed staff forecast – which is made eight times a year, once for each FOMC meeting – as if it were a state secret. In fact, the staff do not even allow FOMC members to witness the process by which the forecast is derived! One consequence of this internal veil of secrecy is that the forecast is clearly the staff's, not the FOMC's, and FOMC members frequently take issue with it at meetings. The Fed does, however, publish the range and 'central tendency' of forecasts made by individual FOMC members twice a year in its semi-annual monetary policy report to the United States Congress.[29] But this ersatz consensus forecast covers only three variables – inflation, GDP growth, and unemployment – and a short time span. And Alan Greenspan *never* reveals his own forecast – which, in the view of most Fed watchers, is the one that really counts.

The issue of whether the central bank's forecast should be disclosed has recently been debated intensely in both Europe and Japan, and changes in the direction of greater transparency have been made. Since December 2000, the ECB publishes a short version of the forecast prepared by the staff and presented to the Governing Council. The Bank of Japan reluctantly published its forecast for the first time in October 2000. But it was criticized for covering only the six-month period through March 2001 and has promised to improve its disclosures in the future. It is obviously far too early to appraise the experience of the ECB or and BoJ with their new procedures.

We recommend that central banks release at least the broad contours of their internal assessments of the outlook as often as forecasts are made. By limiting the disclosure to 'broad contours,' we do not mean to provide an excuse for obfuscation. But neither do we deem it important for the central bank to publish every last detail of its forecast. For example, the authorities

need not reveal their quarter-by-quarter forecasts of automobile sales, housing starts and retail inventories. We do believe it is important, however, for the bank to indicate its expectations for major variables like real growth and inflation going forward. One especially important 'detail' in this regard is the assumption about future monetary policy. We deal with this delicate question separately below.

Since central banks have traditionally been extremely reluctant to disclose even this much information, our recommendation needs some defence. We offer three reasons.

One is just the general presumption that suffuses this report: information should be revealed unless there is a persuasive reason to withhold it. We see no such reason here. In particular, we do not accept the objection that since forecasts are inevitably wrong, making them public will undercut the central bank's credibility. Markets are surely sophisticated enough to understand that forecasts will err.[30] Besides, knowing that the central bank acted on an erroneous forecast may at times help explain monetary policy decisions that look wrong with the magnificent wisdom of hindsight.

Another reason is the argument made in Chapter 1: monetary policy is apt to work better if the central bank keeps markets better informed. Publishing the forecast is one obvious and important way to do that. We emphatically reject the traditional dictum that the central bank should avoiding giving out 'forward-looking' information. On the contrary, when we speak of the desirability of *conditioning expectations*, it is precisely forward-looking information that we have in mind.

A third, and related, reason is educational: the central bank can explain its actions to the public better by using the forecast as a backdrop for its decision. For example, telling the public that it believes that unchanged monetary policy will lead to rising inflation provides a legitimate rationale for tightening policy.

This last remark brings us back to the crucial subsidiary question raised earlier: should the central bank publish a *conditional* forecast based on *unchanged* monetary policy, or should it embed projected future policy changes in its published forecast? Alternatively should it publish multiple forecasts based on different policy assumptions? One example of the latter would be to publish three forecasts: one with unchanged policy, a second with an easier monetary policy, and a third with a tighter policy.

We find this a vexing issue. On the one hand, we are strongly predisposed toward full disclosure. If the central bank truly expects to be changing interest rates in the future, then publishing a forecast based on a constant nominal interest rate might be criticized as misleading[31] – as an example of miscommunication rather than communication.[32] A forecast that embodies the central bank's own expectations about future monetary policy (*if* things turn out as expected) is obviously more honest.

Such a forecast would also condition market expectations better than a mechanical extrapolation of the current nominal interest rate. After all, market expectations will *not* normally embody an assumption of constant nominal interest rates when that behaviour seems implausible.[33] A constant

interest rate assumption even complicates the bank's own forecasting exercise because market expectations about the bank's future actions influence medium- and long-term interest rates and hence the economy. Also these market expectations often deviate from the constant interest rate assumption.[34]

On the other hand, a central bank cannot disclose its own forecast of future monetary policy decisions if it has not made any such forecast – and most central banks do not (see below). Furthermore, financial markets – especially stock markets, but also bond and foreign exchange markets – are jumpy creatures that react strongly, sometimes hysterically, to utterances from central banks.[35] So market participants might attach unwarranted significance to the publication of policy options, even if the central bank were simply exploring options it had no intention of carrying out.

It is possible – indeed, we think it is probable – that the markets' extreme reactions to the central bank's words and numbers would become modulated as those words and numbers grew more numerous and frequent. Indeed, this is virtually a corollary of the principle that scarcity creates value. But, for now, we suspect that most central banks may be best served by publishing not their actual forecast of the economy (including their forecast of monetary policy), but rather their forecast conditional on unchanged monetary policy. Studying that forecast should enable observers to understand the backdrop of policy-making and to make well-educated guesses about future monetary policy. For example, a forecast that GDP growth will slow and inflation will fall under unchanged monetary policy will likely create a market expectation that policy will be eased. Indeed, in an operational sense, the two alternatives may not be as different as they appear. That, at any rate, is the view of the Reserve Bank of New Zealand, which has been publishing what it calls 'conditional forward interest rate tracks' since June 1997.[36]

### 3.3.2 The model(s) of the economy

The question of whether the central bank's published forecast should embed changes in monetary policy is subtly tied to the next issue: how much information should the bank reveal about its internal model(s) of the economy? All central banks use one or more models, both formal and informal, to guide their decision making. After all, how can policy-makers address counterfactual questions like 'What would happen if we raised interest rates by 50 basis points?' without some sort of model linking contemplated policy actions to outcomes?

In general, central banks have been less than eager to make their models public. Two notable exceptions are the Bank of England and the Reserve Bank of New Zealand. The BoE published its main econometric models of the UK economy in April 1999 – they were largely ignored. The RBNZ's model even includes a monetary policy reaction function – the bank thus models its own behaviour!

In principle, being secretive about the models runs counter to the general

thrust of this report. But it may not be quite as paranoid as it appears. After all, any reasonable monetary policy-maker will want to consider the outputs of several models and not adhere too religiously to any one. Given the pervasive uncertainties surrounding the 'true' model of the economy, any other approach to using models would be irresponsible. But in such a world, publishing the details of, say, the bank's large-scale econometric model of the economy (if it has one) might imbue that particular model with more importance to the policy-making process than it actually has – thereby inadvertently misleading markets rather than informing them. That certainly would be the case at the Federal Reserve, where the Board's FRB-US model – an impressive piece of work – is just one among many inputs, and by no means the most important one.[37] This is also the case for the ESCB which uses a variety of models, some built by the ECB and others by the national central banks.[38]

One obvious response to this perceived difficulty would be to reveal the details of *every* model the bank uses in its forecasting exercises and let interested observers sift through them. That may well be the best solution, but a potential problem should at least be recognized. If the monetary authorities employ a multiplicity of models, reporting every detail of every model might prove burdensome to the central bank (especially if the models are constantly changing) while at the same time conveying little useful information to the market – a kind of 'lose–lose' situation. Nonetheless, the costs of publishing all this detail can be made pretty minimal by offering updates of the models only at stated intervals and posting them on the bank's website. So, even if the benefits of revelation are quite small, as we suspect they are, the costs may be even smaller.

In the end, our *minimal* recommendation on models is similar to our recommendation on forecasts.[39] The gory details of model construction and estimation are probably far less important and informative than explaining the bank's basic view of how the economy works and how it thinks monetary policy affects output and prices. The markets want to know what the central bank believes about the monetary transmission mechanism, the Phillips curve trade-off, the trend growth rate and a few other matters of crucial importance to monetary policy. They probably do not care very much about the estimated coefficient on GDP in the equation for sales tax receipts. Well-chosen words supplemented by a few key numbers may convey the relevant information as well as or even better than masses of equations – which are often far from transparent! Such words, we believe, can be provided without undue effort by a central bank that wishes to be communicative. Once the markets have been provided with this information, they will likely become pretty skilled at interpreting incoming data in more or less the same way the central bank does.

### 3.3.3 Tactical methods

Once the central bank has made a monetary policy decision, it must put that decision into effect – generally by intervening (e.g. buying or selling) in

some market. Typically, this will be done almost immediately, so there is no need to keep the decision under wraps for long.[40]

With the prominent exception of foreign exchange operations (see below), central banks are generally quite transparent about *how* they intervene. Market participants generally know in advance whether the authorities will intervene in the market for overnight repos, one-month bills, or two-year bonds; whether tenders will be at fixed or variable rates; whether open-market operations will take place at 10 a.m. or 1 p.m.; and so on. This is as it should be. When tactical procedures are changed, as they will be from time to time, the monetary authorities should, and normally do, announce the changes in advance and explain their rationale.

The purpose of all this procedural transparency, we presume, is to minimize market disruptions that might otherwise emanate from central bank behaviour – other than the disruptions the bank is deliberately trying to create, that is, interest-rate changes. A central bank that habitually enters the overnight repo market every day at 11 a.m. can cause quite a bit of (localized) chaos by instead entering the Treasury bill market at 2 p.m. without warning. And financial market chaos, even if short-lived, is not what central banks normally seek.

There is one main exception to this rule, however. Monetary authorities almost always try to catch foreign exchange markets by surprise and they often maintain a steely silence over how and when foreign exchange operations ('sterilized interventions') have taken place, even well after the fact. Reasons for this practice are discussed below in Section 3.5.

## 3.4 Talking about decisions

### 3.4.1 Past decisions

As we have noted already, central banks typically announce changes in their target for the short-term interest rate immediately after reaching a decision. We take it as axiomatic that such information should be revealed promptly, a view that now seems to be received wisdom in central banking circles. But things were not always this way. For example, until February 1994 the Federal Reserve kept such information under wraps – or at least did not officially acknowledge that it had changed its short-term interest rate target until well after the fact. Instead, the Fed left it to Wall Street's professional corps of 'Fed watchers' to read the market tea leaves in order to figure out whether or not monetary policy had been changed.

Central bank thinking and practice on immediate disclosure of monetary policy decisions have evolved considerably in just a few short years. We applaud this new direction and we urge the more hesitant central banks to get on board. It is both patently unfair and profoundly undemocratic to give certain market insiders an edge in learning about changes in central bank policy. It may also undermine the effectiveness of monetary policy. We return to the issue of privileged communication in Chapter 4.

### 3.4.2 Future decisions

A far more difficult question is what, if anything, the authorities can or should reveal about their tentative plans for *future* monetary policy. Here again there has been substantial evolution in mainstream central bank thinking in recent years.

The traditional view was that any forward-looking information was strictly taboo – the central bank should scrupulously avoid tipping its hand in any way. In part, this attitude was justified – after all, it would be misleading to 'inform' markets about decisions that have not yet been (and might never be) taken. So, for example, until May 1999 the Federal Reserve kept the 'bias' in its directive secret until after the *following* FOMC meeting; it still keeps its minutes secret until that point. The Bank of England adopted a similar delay in releasing minutes in the early days of its current policy regime, but now publishes them after approximately two weeks. To this day, there are still those who believe it is inappropriate for the central bank to signal its intentions in advance.

But an alternative view holds that the central bank ought to tell markets, politicians, and the general public which way it is 'leaning.' As just noted, the Fed has been doing this in a formal way since May 1999. The ESCB has been indicating its view of the 'balance of risks' a little less formally – normally at the president's press conferences which follow meetings of the Governing Council.[41] As discussed in the next chapter, even where there is no explicit 'bias' announcement, revelation of the monetary policy committee's vote may carry a strong hint about where interest rates may be heading in the future.[42] The Bank of England is a prominent example. A 5:4 vote, say, to maintain the current interest rate, with four MPC members voting to reduce it, conveys different information than a 9:0 vote to maintain the *status quo*.

Is it possible – and advisable – to go even further? As mentioned earlier, the Reserve Bank of New Zealand may be the only central bank that does so. Since June 1997, it has published a contingent plan for *future* monetary policy over a three-year projection period. The RBNZ emphasizes that only the current policy setting is 'desired,' while the rest is merely 'projected' – and conditional on evolving circumstances. Should other central banks follow New Zealand's lead and offer more explicit guidance about the likely future path of interest rates? There are cogent arguments on both sides.

On the one hand, we have argued repeatedly that the monetary authorities ought to reveal as much as possible and keep market participants better informed. These arguments certainly apply to *future* as well as to *present* monetary policy. Announcing the bias in the central bank's current policy stance and explaining the concerns that led to that bias (as the Federal Reserve does in part), is one way to achieve this objective. But announcing the bank's current beliefs about what future monetary policy might be, provided things go according to plan (as the RBNZ does), would give the market even more relevant information.

In fact, while the idea is unfamiliar and may seem rather revolutionary at

first, it may not actually be such a colossal leap to go from announcing a bias – which is, after all, forward-looking information – to announcing a contingent plan for the future. The Reserve Bank of New Zealand, the only central bank with experience in this regard, believes that markets do not misinterpret their conditional 'forward tracks' for interest rates as policy commitments.[43] When it added this new forward-looking information to its procedures in June 1997, however, it also changed several other aspects of its way of doing business. So it is impossible to test the bank's belief by untangling the separate market effects of the new interest-rate pronouncements.

There are also powerful arguments on the other side. Most important, we cannot ask central banks to reveal information they do not themselves have. Many, indeed probably most, central banks do not formulate any contingent plans for future monetary policy – not even for their own internal use.[44] The Federal Reserve, the ESCB, the Bank of Japan, and the Bank of England are all in this camp.

If the central bank does formulate such plans, it should probably reveal them. Nonetheless, is all but certain that the future will *not* unfold as anticipated – that is, that random errors will not come in at zero. As suggested earlier, many central bankers do not relish repeated displays of forecasts that go astray. Documented errors, after all, undermine the doctrine of central bank infallibility! More important, the monetary policy that is actually followed in the future will almost certainly differ from the announced (contingent) future policy path. So one might legitimately question whether announcing a future plan actually conveys much useful information to the public.

Perhaps the best a central bank can do is to 'teach' the market its model. Then market participants can process incoming data in more or less the same way as the central bank does, and adjust their own forecasts of central bank behaviour accordingly. As suggested earlier, a forecast that inflation will rise if nominal interest rates are held constant may 'look and feel' like an implicit forecast that the bank will raise rates.

### 3.4.3 Disagreements and debates at meetings

Most central banks these days make decisions by committee, normally at formal meetings. For completeness, we therefore need to add one other class of information that the central bank might (or might not) make public: the nature of the debate at policy committee meetings, and who said what – including the vote, if there is one. Chapter 4 expands on this important aspect of central bank communications.

Our general attitude is surely predictable from what we have said already: we believe the central bank should reveal most of what is discussed at its policy committee meetings. We do, however, wish to avoid a *reductio ad absurdum*. Our recommendation should *not* be interpreted as extending all the way to allowing cameras into the committee room – nor even necessarily to the Federal Reserve and BoJ's practice of publishing verbatim

transcripts (with a 5- and 10-year lag, respectively). Either has the potential to stultify debate, the former more than the latter.

Our general view is that the public, politicians and market participants have a legitimate interest in, and therefore a right to know about, the substantive content of the discussion/debate that takes place within the monetary policy committee – or, in the case of an individual decision-maker, the factors that led him or her to the decision. They do not need to know about private conversations, positions taken to play 'devil's advocate,' flippant remarks (which happen in any meeting), and so on. While we firmly believe that central banks should open a fairly wide window on the substantive nature of their deliberations, the precise modalities for delivering this information will differ – and are discussed in the next chapter.

Turning to procedural (as opposed to substantive) matters, it seems natural – and not at all intrusive – for the central bank to explain how, in broad outline, the discussion/debate (if there is one) is conducted.[45] For example, FOMC meetings are generally divided into two 'rounds.' In the first, members state their views on the economy. In the second, they offer their recommendations on monetary policy – with the chairman going first. While this procedure is clear enough in the published transcripts, it is probably known only to the Fed's true aficionados (virtually no one reads the transcripts). The Fed could easily make it better known. The ESCB reveals much less about how its policy meetings are conducted. But that bit of mystery may, in part, reflect the fact that it is a multinational and new organization still finding its way. We hope and suspect it will reveal more about its internal proceedings as time progresses and the institution matures.

One important question of keen interest to central bank watchers is whether a formal – and genuine – vote is taken on the monetary policy decision. Relatedly, when the committee votes, does the chairman vote first or last?

Most monetary policy committees do take a formal vote which is subsequently made public, although the votes of specific individuals may or may not be revealed.[46] In the case of the United Kingdom's MPC, decisions appear to be based on the one-person, one-vote principle – individual voters are named and the majority rules. The ESCB reports that it makes its decisions by consensus and that it almost never takes a vote. The Fed's FOMC does vote in a formal sense, but it is widely known that individual members often do not vote their true preference. Instead, each committee member decides whether to support or oppose the chairman's policy recommendation, which is almost always made first. And Fed traditions dictate that a member should 'dissent' only if they find the majority's (that is, the chairman's) opinion unacceptable.[47] All this is publicly known, as it should be.

## 3.5 Communicating exchange rate policy: what is different?

Communication in the area of exchange rate policy deserves special attention for three reasons. First, while interest rate policy is now typically

firmly in the hands of central banks, governments in many cases have full or joint responsibility for exchange rate policy. Second, certain extreme exchange rate regimes, such as pure pegs and pure floats, all but eliminate the need for central bank communication. Third – and this is the most controversial claim – in the rare instances where central banks decide to intervene in the foreign exchange market in pursuit of a monetary goal, secrecy may be defensible on the grounds of effectiveness.

### 3.5.1 Shared responsibility

All major central banks have the independence to set interest rate policy, each within its particular monetary policy framework. In most cases, statutory and operational interest rate independence does not extent itself to exchange rate policy. As we shall see in Chapter 5, most major central banks operate under a monetary arrangement that divides foreign exchange rate responsibilities between the central bank and the government. In some cases, exchange rate policy is squarely in the hands of the government.

Shared responsibility between the central bank and the government in the area of exchange rate policy raises special communication challenges. Central banks are either not the sole communicators, or have no jurisdiction at all. In the latter case, central bank communication regarding exchange rates is typically limited to the assessment of the exchange rate on the proper conduct of monetary policy. In Europe and in Japan there have been frequent conflictual statements on the exchange rate between central bank officials and members of the government in recent years, with arguably adverse effects on monetary policy.

A certain amount of conflict between governments and central banks with regard to exchange rate policy is inherent and unavoidable. Governments are unlikely to grant their central banks full control over exchange rate matters anytime soon. Consequently, where governments have control over exchange rate policy, they should communicate on objectives and actions, and central banks should make clear that their views pertain to the impact of exchange rate developments on the conduct of monetary policy.

While shared responsibilities between the central bank and the government affects communication within a particular exchange rate regime, the nature of the regime itself inevitably colours the content and nature of central bank communication. We have noted earlier that in extreme regimes (currency boards, dollarization) monetary policy is non-existent and communication boils down to clearly stating the exchange rate objective.

In the case of a fixed exchange rate regime and, at least in theory, in the case of a currency board, central bank communication can be crucial in the run up to a potential crisis when the market entertains the possibility of a change in the peg or even the possibility of abandoning the currency board. The question that immediately imposes itself is whether central banks should be entirely transparent in such instances or whether they should be allowed to judge that secrecy might increase the probability of achieving the desired outcome to the crisis (let us assume to maintain the peg) and thus

decide not to reveal to the market that the option of changing the peg is being entertained.

Such a scenario challenges our predisposition towards openness. With some discomfort we revert back to Einstein and say that in such a case, communication should go as far as possible, but no further. The guideline for any central bank in such a position should be to communicate as truthfully as possible without jeopardizing its legislated mission. Ultimately, how far it will go in communicating its policy deliberations will depend on the nature of its legislated mission and its ability to read market psychology successfully. Unfortunately, in such a scenario it will always be difficult, if not impossible *ex ante*, to determine the exact point on the communication spectrum beyond which the legislated mission gets jeopardized.

### 3.5.2 Foreign exchange market interventions

Central bank interventions are the third area where exchange rate policy poses a separate set of communication challenges. Monetary authorities almost always try to catch foreign exchange markets by surprise and they often maintain a steely silence over how and when foreign exchange operations have taken place even well after the fact. Is this secrecy justified, in spite of our predisposition towards transparency? We think that in the end, the answer to this question comes down to important distinction between sterilized and unsterilized intervention efforts.

#### *Sterilized interventions*

One common view is that in the case of sterilized intervention, the transparency debate is moot because they do not work. Central banks should simply not do it, secrecy or no secrecy. Despite empirical evidence in support of this view,[48] we take issue with it. We share the view that sterilized intervention can work, either as a signalling device or to coordinate expectations at times of misalignments. Given the relative forces present, the central bank has to inflict losses on traders with large positions, hence the need for surprise. Once they are done, interventions should be revealed, though perhaps not the precise magnitude. It is conceivable that central banks with an exceptionally strong reputation could enhance the signalling effect without losing effectiveness by revealing their intentions to intervene in principle *ex ante*.

A distinction needs to be made between sterilized intervention efforts directed at strengthening a currency and those aiming to weaken it. The size asymmetry problem exists in both cases, though it is much more acute in the event of a central bank aiming to strengthen its currency. Any sterilized intervention effort in support of a currency is constrained by the size of a central bank's existing reserves or, possibly, the collective reserves of several central banks intervening in a coordinated manner. Even the world central banks' total foreign exchange reserves pale in comparison to the global foreign exchange market, however. A central bank trying to support its exchange rate therefore has only limited 'ammunition'. This stands in

contrast to domestic open market operations where, at least in theory, a central bank can create infinite amounts of its own currency and sell it against foreign reserves. Much as in the case where an information asymmetry in the money market is deemed to justify the conclusion that 'only unanticipated money matters', the size asymmetry in foreign exchange markets supports the view that in an attempt to strengthen a currency, only unanticipated interventions matter. The element of surprise, i.e. catching traders off guard, is therefore particularly important any time a central bank engages in foreign exchange interventions to bolster its currency. In an effort to weaken a currency, it might in fact be in the interest of the central bank to indicate to the market that it is considering intervention. Provided its commitment is credible, market participants – realizing that central bank reserves are not an issue – will be tempted to front run the intervention and thus amplify its desired effect. In principle, intervention efforts with the aim of strengthening a currency should therefore be characterized by greater efforts to maintain secrecy than in the opposite case where a central bank intervenes to weaken its currency.[49]

***Unsterilized intervention***

The question of unsterilized intervention is more complicated. If a central bank decides to engage in unsterilized intervention, its monetary policy becomes dependent on the exchange rate objective. In other words, the central bank accepts a change in interest rates in support of a desirable exchange rate. Such a step effectively amounts to a regime change – albeit perhaps temporarily – because the central bank abandons the interest rate instrument to achieve its inflation (or other) target. Instead, it employs the exchange rate as its policy instrument. All other variables (notably the interest rate) thus become endogenous. In the event of a central bank wanting to engage in unsterilized intervention, we strongly argue for transparency on the ground that it amounts to a regime change and that transparency would enhance the effect of unsterilized intervention because it underlines the commitment of a central bank to achieve its exchange rate objective.

The key difference between sterilized and unsterilized intervention is not really about the technique of interventions but about the policy regime. Our predisposition towards transparency calls for revealing fully the regime and both the degree of commitment to an exchange rate objective and the intention and existence of interventions. This predisposition is challenged on two grounds, however. First, even with full transparency, the size asymmetry implies that interventions, sterilized and unsterilized, may ultimately fail. Preserving credibility calls for limiting the commitment to a possibly unattainable goal. Second, pure logic implies that a central bank cannot simultaneously pursue two objectives, so the secrecy about interventions conceals doubts about the wisdom of a particular exchange rate level. Given the general uncertainty that characterizes our understanding of where the sustainable equilibrium exchange rate level lies, such doubts are understandable. Pretending to have a hard commitment to

a level that is imperfectly ascertained stretches existing wisdom too far. Secrecy, then, provides the creative ambiguity that uncertainty calls for.

## 3.6 Maintaining confidentiality

While we are 'hawks' on the question of transparency, we recognize that central banks routinely receive a variety of confidential information that must of necessity be kept secret. Some of this information derives from private conversations with, or communications from, foreign central banks and governments (and from international financial institutions like the IMF and BIS). Much of it comes from confidential reports filed by banks (or even by non-banks), especially if the central bank also serves as the country's bank supervisor.[50] There can be no question that the authorities are obligated to respect the sanctity of proprietary information – even if some of that information may be relevant to the conduct of monetary policy. In such cases, transparency must take a back seat to confidentiality.

Fortunately, almost all information relevant to monetary policy is in the public domain. So respecting confidentiality does not normally pose much of a dilemma for a central bank. On certain rare occasions, however, critical monetary policy decisions may ride on confidential information. One example was the possible collapse of the hedge fund Long Term Capital Management during the world financial crisis in the fall of 1998, which probably influenced the Fed's monetary policy decisions (see Box 3.2). Another was the Bank of Japan's privileged access to information on the health of Japan's banks in 1998 and in other years. In such cases, the central bank's obligation to explain its actions to the public may clash with its duty to maintain the confidentiality of proprietary information. In those rare instances, the central bank must navigate its way around this conflict as best it can on a case-by-case basis without violating confidentiality. We cannot enunciate any hard and fast rules – except to say that the authorities should not cast the shroud of secrecy further than absolutely necessary. Most important, we do not view this as a frequently encountered problem – it is more like the proverbial exception that proves the rule.

## 3.7 Conclusion

Our basic conclusion is that while central banks cannot tell everything they know, most of them are a long way from reaching this limit. Many still do not reveal their objectives explicitly. Only a few are very forthcoming about their forecasts and the methods and models used to derive them. And the reasoning behind monetary policy decisions is still normally revealed cryptically – in a few artfully-composed sentences – if at all.

The trends toward greater transparency and disclosure of more information are clear, however. A review of central bank communications practices only 5–10 years ago would surely have discovered that

considerably less information was in the public domain than is true today. Compare, for example, the communications of the taciturn Bundesbank a few years ago to those of the more talkative ESCB today, or the Fed in 1993 to the Fed today. Changes at such leading (in terms of transparency) institutions as the Bank of England and the Reserve Bank of New Zealand have been far more dramatic. (This is discussed at length in Chapter 5.)

We firmly believe that a survey conducted 5–10 years from now will find that even more extensive disclosures have become routine. Furthermore, we believe that the trend toward more open central banking is both irreversible and salutary. If our arguments are correct, it will make monetary policy in the future both more accountable and more effective than it is today.

### *Box 3.2* The Long Term Capital Management crisis

By 1998, Long Term Capital Management (LTCM) was the world's largest hedge fund specializing in relative value trading. Looking for anomalies in securities prices, LTCM used its considerable capital and large borrowing capabilities to acquire huge leveraged positions in equities, bonds and currencies, betting large amounts that small pricing anomalies would be eliminated. By maintaining a diversified portfolio, the firm aimed to limit to very low levels the risk inherent in its highly leveraged positions. With that strategy, LTCM had an impressive record of returns, including topping 40% in 1995 and 1996.

In 1998, LTCM decided that the increase in credit spreads for corporate, high-yield and emerging market debt represented an investment opportunity and positioned its portfolio in expectation that spreads would narrow. On 17 August 1998 Russia devalued the ruble and declared a moratorium on domestic ruble-denominated debt. In the wake of that action, confidence was shaken across international capital markets. While equity price declines were modest and had been anticipated by many market participants, very few were prepared for a global widening of credit spreads. Certainly, LTCM was not.

On 2 September the partners of LTCM wrote to investors notifying them of a 52% loss for the year to date and seeking an injection of capital. Those efforts proved unsuccessful, and with concerns about the implications of an LTCM default, the New York Fed became involved on 18 September. William McDonough, President of the New York Fed, in consultation with Fed Chairman Alan Greenspan and Treasury Secretary Robert Rubin, consulted LTCM's counterparties, the firms that were the creditors who provided the leverage. They decided that the failure of LTCM might jeopardize US and global financial markets and that Fed involvement was appropriate.

The risk they perceived was that given the state of financial markets in the wake of Russia's crisis, the failure of LTCM could lead to a rush to close out the firm's huge positions, exaggerated price declines, damage to the balance sheets of LTCM's counterparties (who were some of the world's largest financial institutions) and dangerous reverberations throughout the world's securities markets. In a Sunday visit to LTCM's Greenwich, Connecticut headquarters, Fed and US Treasury staff participated in a meeting with LTCM and its counterparties which led to an agreement among the counterparties to recapitalize the firm and avoid a rapid unwinding of positions. Neither the Fed nor the US government had any financial involvement in the workout.

This episode led to many questions and concerns, in markets and the policy world. Was there a compelling public interest in this modest, but conspicuous intervention? Would a phone call to the counterparties urging them to execute a workout have sufficed? Was the Fed signalling in the midst of crisis that some institutions were too big to fail and that in such circumstances public support would be forthcoming? Would the Fed use this form of intervention or monetary policy instruments to cope with financial market distress?

On 29 September 1998, the Fed's Open Market Committee unexpectedly lowered interest rates by 25 basis points, the first of three such moves in rapid succession. The minutes of the meeting make no mention of LTCM in connection discussion of the monetary policy decision. A brief paragraph explains that the FOMC discussed the 'limited role of the Federal Reserve Bank of New York in facilitating" the LTCM workout.

# 4 How Should Central Banks Talk?

In this chapter we discuss the modalities of central bank communication. We divide the channels of communication into three. The first concerns the provision of detailed information on the proceedings and decisions reached during monetary policy meetings. The second concerns the provision of information on past and prospective economic developments, and an assessment of their implications for future monetary policy developments. This ranges from purely backward-looking commentary to forward-looking forecasts. It also ranges from informal hints in speeches about the future direction of policy (e.g. 'the risks are on the deflationary side') to projected future paths for interest rates, as in the RBNZ forecast. The third concerns reports to, and reviews by, the legislature. The more extensively all such channels are used the greater the transparency. We tend to equate the second channel, the provision of information on expected future developments, with *ex ante* accountability, and the third channel, reports to the legislature, with *ex post* accountability, but all such taxonomic orderings are slippery.

## 4.1 The trend towards monetary policy committees

One clear feature of recent years has been the transfer of decision-making powers from a single individual, usually the minister of finance or central bank governor, to a monetary policy committee (MPC).[51] This trend has accompanied the move towards operational independence and inflation targeting, but the concordance is far from exact. Indeed, one reason for the widespread adoption of such a committee structure has been the successful aura of the Bundesbank and the Fed where decisions were made in the Council and FOMC. In some of the countries which shifted early towards operational independence and inflation targeting, e.g. New Zealand and Canada, however, the ultimate responsibility for the interest rate decision remained with the governor alone.

One reason for the prior tendency towards the centralization of decision-making within the central bank, i.e. in the person of its governor, had been

its subservience in monetary policy to the minister of finance, as used to be the case in the United Kingdom, France, Spain and many other European countries apart from West Germany. This meant that there were two sources of advice and influence for the relevant minister, the bank and the ministry (treasury). Relationships between the bank and the treasury were always somewhat adversarial. Moreover, when a central bank came to present its advice to the minister it was always playing an away match, on the other's ground. Naturally then, a central bank would work out any internal disagreements beforehand and present an agreed uniform position both before the minister and in public, and that position had to have the governor's imprimatur and was most often expressed by him (there were few female governors before the 1980s).

Although operational independence may relax the need for a united front, it does not, of itself, require any shift in the process of decision-making. Of course, even when decision-making remains entirely internal within a central bank, and the results are expressed through the person of the governor, that process will normally work through a system of internal committees. That process, along with the internal papers and argumentation, are normally shrouded by secrecy until the governor is ready to communicate *ex cathedra*. The grant of operational independence is not systematically accompanied by more openness as witnessed by the cases of New Zealand, Canada, Australia, Mexico or Israel. Box 4.2 (page 60) overviews the recent Kohn and Svensson reports on the internal processes adopted by the Bank of England and the Reserve Bank of New Zealand, respectively.

What is the link between the decision-making process and communication? Giving decision-making responsibilities to a committee, rather than to an individual president/chairman should help to ensure that a wider variety of arguments are taken into consideration, and may provide some (limited) protection against the adoption of idiosyncratic policies by autocratic presidents. By the same token the fact that the decision is taken by a committee may provide some (limited) protection for a president from personalized criticism.[52] When the final decision was the responsibility of a single minister or governor, the internal decision-making process, and the argumentation and disagreements arising, was normally kept confidential and not revealed in public. The shift to a process of decision-making by committee sharpens the question of what public light, if any, should be cast on the committee's own internal argumentation and disagreements.

In Section 4.2 we review the extent to which central banks reveal information on the proceedings and decisions of their monetary policy meetings. In Section 4.3 we discuss how far central banks provide an outline of their expectations of future economic developments and of their own prospective reactions. In Section 4.4 we briefly outline the nature and form of central bank *ex post* accountability to the legislature. In Section 4.5 we turn to a fuller discussion of the pros and cons of revealing internal argumentation and disagreements

## 4.2 Communicating the decisions and proceedings of monetary policy committee meetings

The key decision of policy committees – other than those with hard exchange rate pegs – is what short-term interest rate to set. The essential minimum information is what official rate has been established. This minimum hurdle is now passed by most central banks, as Table 4.1 indicates for a few selected banks. The previous main outlier and backslider in this respect was the Fed which until 1994 did not report its decisions, but left the market to deduce them from its actions.[53] This decision, along with a brief statement setting out the key reasons for the move, is now reported electronically, and hence simultaneously, to all in the markets and to financial journalists, etc. Although purists will argue that 'no change' is a decision requiring as much justification as any 'change' decision, the norm (apart from the Fed which changed in 2000) is not to give any supporting statement for a 'no change' decision, except perhaps when financial markets/the public had clearly been expecting some change, so that a 'no change' decision might confuse, unless explained.

Furthermore, the dates on which the policy committee meets to decide interest rates are now in most cases fixed and publicly reported in advance. This both increases transparency and helps to focus attention on the relevant considerations likely to affect such decisions. While policy

***Table 4.1*** Provision of information on monetary policy meetings

| | *Fed* | *ESCB* | *Bank of Japan* | *Bank of England* | *Bank of Canada* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|
| Interest-rate decision immediately announced | Yes (after 1994) | Yes | Yes | Yes | Yes | Yes | Yes |
| Supporting statement giving some rationale for a change | Yes | Yes | Yes | sometimes | Yes | Yes | Yes |
| Release of minutes | 5–8 weeks[a] | No | 1 month | 13 days | NA | 2–4 weeks | NA |
| Official minutes provide full details of | | | | | | | |
| – internal debate | Yes | No | Yes | Yes | NA | No | NA |
| – individuals' views | No | No | No | No | NA | No | NA |
| – individuals' votes | Yes | No | Yes | Yes | NA | Yes | NA |
| Verbatim records of MP meetings are kept | Yes | No | Yes | No | No | No | No |
| Verbatim records released to the public after: | 5 years | NA | 10 years | NA | NA | NA | NA |

*Sources:* *Guide to Central Bank Watching*, JP Morgan, March 2000; consultations with the Bank for International Settlements; and own observations.

*Notes*: NA – not available

a The minutes are released after the following FOMC meeting.

committees may change interest rates in-between meetings, few have availed themselves of this option in recent years. The Fed is an exception in this respect, and its record suggests that this option may have some value. The January 2001 cut was a reminder of an earlier inter-meeting cut in the fall of 1998, when the world financial crisis was at its peak. This small change (25 basis points) has been credited, possibly with some exaggeration, with 'saving the world.' It served the purpose of showing everyone that someone was 'in charge.' It may be that unexpected inter-meeting changes have a larger 'surprise' effect, at least initially, on markets, but this is likely to erode quite rapidly with use while diminishing the transparency and predictability of regular meetings.[54]

Partly in order to lessen the likelihood of leaks about market-sensitive decisions, the gap between the final decision being taken and its public release is kept short, an hour or two. Consequently, outline drafts of any supporting statement have to be prepared in advance. Pre-drafted statements can be, and are, revised in the light of the ensuing discussion and decision. But the very short space of time can lead to difficulties in reaching agreement on how to present succinctly the key points. Such difficulties are greater in more individualistic than in more collegial committees, as discussed in Section 4.5.[55] The Bank of England has found it so hard to draft an agreed statement that most of the time now it simply records the decision without any accompanying supporting statement, except when the policy committee is concerned that the absence of any such statement might mislead markets and/or outside commentators. But if the main problem is shortage of time, a better solution is either to advance the start time of the meeting, or to delay the announcement, in order to give sufficient breathing space to discuss, amend and agree a supporting statement.

In contrast the ESCB provides the fullest and most detailed supporting statement made by its chairman, followed by an on-the-spot Q&A session with the assembled journalists. Immediately following a quite lengthy, often complex, perhaps sometimes heated and, therefore, tiring meeting of the Governing Council, this must be a daunting ordeal. Not all future chairmen/presidents would be able to handle this well. It is, therefore, desirable for each incoming chairman to have the chance to adjust some of the details of the communication process to fit their own strengths. There is a danger that central banks, when faced with the need to justify their current procedures, will by the same defensive token come to regard them as optimal. The very fact that such procedures vary between central banks suggests that it is hard to make a strong case for the optimality of any one set of procedures.

### 4.2.1 Minutes

One reason why the Bank of England has been more willing to omit a supporting statement is that it quickly provides comprehensive minutes of the policy committee's meetings. Financial markets and commentators do not have long to wait for a more detailed account. The fact that financial markets do jump (at least slightly) in response to the publication of the minutes, (plus

the detailed individual voting records), indicates that these do contain significant extra information for markets (Clare and Courtenay, 2000).

Minutes, which provide the formal statement of what transpires during policy committee meetings, can be a central component of making the proceedings transparent. Certainly, the more complete is the immediate supporting statement accompanying the announcement, the less is the need for subsequent minutes. Yet, such a statement has to be largely prepared in advance, and can only be partially revised on the spot to take account of the actual discussion. It may therefore seem surprising that only four of the seven central banks in Table 4.1 publish minutes. The RBNZ does not have a formal committee since the governor has sole personal responsibility, hence there cannot be any formal minutes (but see Box 4.2, page 60, for a suggestion to change to a formal committee procedure). That leaves the ESCB as the main central bank that does not publish minutes of its policy meetings.

To some extent the adoption of a specific inflation target is a commitment device, intended to constrain the actions both of politicians and of the central bank itself. Its adoption may, therefore, imply some dissatisfaction with prior, perhaps more discretionary, monetary regimes. In so far as inflation-targeting countries begin with relatively little inherent credibility, transparency may be a necessary concomitant in order to persuade outsiders that inflation really will be controlled. It is, therefore, no surprise that two of the leading inflation-targeting countries, the United Kingdom and Sweden, are among those that publish minutes, both after only a short delay.

### 4.2.2 Votes

In all the four cases in Table 4.1 where minutes are provided, the individual votes are also recorded. This does not have to be so. It is possible to report the votes, either by name or just anonymously in total, alongside the supporting statement without subsequent publication of minutes. Equally the minutes could record a range of arguments without having to report in detail either the name, or number, of those supporting each argument.

The ESCB has an unusual, if not unique, position strongly against the publication of individual voting records. It is attempting to establish a euro-wide, federal body on the basis of a newly established Governing Council consisting primarily of national central bank (NCB) governors, with a mandate to take decisions on a euro-wide basis. In this position, the ESCB believes that publication of individual votes could put undue pressure on exposed NCB governors.[56] While contrary arguments have been expressed (Buiter, 1999), we would not want to challenge the ESCB's judgment in this respect.

While we accept the ESCB's argument against the publication of individual, named votes, that does not of itself justify a refusal to publish the overall voting pattern (without names), or a reluctance to hold a formal vote. There may, of course, be a fear of leaks. Indeed, the publication of votes, or even of arguments and viewpoints, without supporting names may be taken as a challenge, a red rag to a bull, to journalists to tie specific names to such unspecified votes/viewpoints. But that surely must be a

minor issue. If policy committee colleagues and attendant officials are unable to maintain a confidential reticence, no communication structure will be proof from embarrassing disclosure. Instead, the main issue is how and whether internal dissent and disagreement should be communicated, if at all. We defer discussion of this to Section 4.5.

One argument is that 'too much' information on individual arguments and votes may adversely affect the conduct of the policy committee meetings themselves. 'Too much' transparency, it is feared, might alter, rigidify and perhaps emasculate the recorded discussion, possibly leading to a transfer of the real discussions and decision-making process behind the scenes, 'in the corridor'. Most of those involved in such exercises believe that this would follow from a full recording of the committee process, especially if this is to be done on a current real-time basis. Indeed, even with the release of the FOMC transcripts delayed for five years, there has still been a tendency for FOMC members to present prepared statements rather than engage in unscripted discussion. The claim that a summary of statements of arguments, with (Bank of Japan) or without attribution (Bank of England), prevents open exchanges has been made by the more collegial ESCB, but rebutted by those actually involved in the more individualistic BoJ and BoE. It is not clear how such effects could be tested for. Other disciplines (e.g. psychology and sociology) may be able to help, but, if so, most central bankers and monetary economists remain blissfully unaware of any such work.

It is true that the recording of individual votes provides outsiders with a relatively simple guess of who supported which arguments, even when these are not attributed. But the supporters of a more individualistic approach tend to draw a line against having $n$ (where $n$ is the number on the committee) separate statements incorporated in each policy committee publication. At any rate, those collegial authorities that are concerned that the deliberation process may be harmed, or commentators and public misguided by 'too much' information, should release after some appropriate delay a fuller, perhaps complete record of the discussions (and votes). This is presumably why the FOMC is releasing its transcript after five years and the BoJ after ten.

Two points can be made here. First, those who have seen an unedited transcript of a real, unscripted, tough discussion know what an ungrammatical, disjointed, often almost incoherent, mess it looks. Second, common knowledge and assumptions, body language, etc., mean that the words alone make it hard to identify what was 'really' going on. To be usable, transcripts require editing. Edited transcripts add little to a reasonably lengthy, carefully crafted and coherent set of minutes.

If transcripts are kept, but not released because of 'confidentiality' problems, there is a risk of inadvertent leaking. But what exactly are these confidentiality problems? If it is the revelation that committee member X took a position on some issue – perhaps even as devil's advocate – that might appear foolish with hindsight, then the appropriate period is the normal expectation of X's tenure on the committee. If, however, a person could be on a policy committee for longer than ten years, we regard such a long delay as not seriously defensible. For example, two of the current five

members of the FOMC members have been there almost 14 years and yet the minutes are released after a delay of five years. Overall we find that the monetary authorities are too often less than clear about exactly what are the dangers that the delay in publication will mitigate, and hence have not paid much attention to the question of the optimal extent of such delay.

How soon should transcripts or minutes be released? Our presumption is that the quicker this can be done, the better. There are, however, a number of qualifying provisos. Both the FOMC and BoE used to delay issuing the minutes until the next meeting was held. One reason was that it was felt that commentators and the market would concentrate unduly on what it could imply for the next meeting's decision, paying less attention to the economic arguments. Views have shifted, however, and the BoE now aims at conditioning market expectations. Moreover, with an earlier publication, committee members are less likely to find themselves justifying positions which they no longer hold (e.g. because of changing economic conditions). The BoE has advanced the publication of their minutes to within a couple of weeks after the meeting, the same time lag as the Riksbank.

Finding the right word and giving indications of possible future risks and decisions is difficult, especially under time pressure. As a result, the tendency is to settle on some standardized phrases and to repeat again and again those that seem to work well. While understandable, this can sometimes lead to exaggerated public reactions to minor changes in well-known phraseology. It can also lead to charges of 'code-talking'. Standardized talking may be the easiest line of least resistance, but it can have longer term disadvantages.

## 4.3 Communicating the central bank's views of future developments

Once financial markets and commentators have learnt the outcome of the latest policy committee meeting, their immediate concern becomes: what will happen next? Outsiders can try to infer future decisions in at least three ways. The first is to examine what the central bank has written and said about current and past economic and monetary developments. After all, forecasts and the general assessment of future developments are largely derived from analysis and interpretations of current and past historical events. If an outsider knows how the central bank interprets the past, they can infer how it may respond to future events.

Second, the policy committee, or one of its members, may give some direct indication on how the future is foreseen (e.g. 'the risks' or 'the bias'). Since no committee member can commit their colleagues to a future course of action – though some committee members, e.g. the governor, may carry more weight than others – the question is: who should talk, to whom and how explicitly?

Third, central banks can publish a forecast. Besides additional transparency, forecasts give a quantified indication of the way they see the economy developing, and hence of the direction and extent of adjustment in interest rates necessary to achieve their objective(s). In doing so, the central bank

opens itself to *ex ante* accountability. For example, is its forecast as good as can be undertaken, and does it present a prospective path for interest rates that can credibly achieve such objectives? Many features of forecasts (such as frequency, ownership, coverage, conditional assumption on interest rate and quantification of uncertainty), however, affect their information content.

### 4.3.1 Publications

Virtually all central banks now issue monthly or quarterly bulletins. They often contain reports of research on economic and monetary relationships carried out by the research staff. Internal academic-type research has become widespread in most developed countries and is published in a variety of outlets including Working Paper series. This combination of products provide general insights into central bank thinking but usually are too distant from the decision process to be a direct guide to observers.

### 4.3.2 Speeches

Policy committee members could delude themselves into thinking that their outside audience is listening attentively because of the analytical insights and wisdom that they are conveying. Much of the time, however, the interest in their presentation derives from their position as a voting member of the policy committee. Their words might provide a clue how they and their colleagues might vote at a forthcoming meeting. This raises several problems, particularly of revealing, or of appearing to reveal, information to a limited set of listeners, e.g. to a particular journalist, and therefore giving rise to a potential for insider trading and accusations of favouritism. We take up this issue in the following section.

It is largely for such reasons that several central banks impose non-communicating, 'black-out' or 'purdah' periods on members of their policy committees, usually from shortly in advance of their meetings until after the release of statements or minutes. In general, the role of governor is such that some form of statement and/or press Q&A are unavoidable – e.g. while attending international meetings – that the black-out period does not apply to them.[57] Even when a blackout is not in force, there remains a question about how far a member of a policy committee should go to express an opinion about future developments that has not been agreed collectively. While there is no clear line, it is generally accepted that policy committee members can, indeed should, express their personal opinions about macro-economic trends, e.g. the prospective course of productivity, the impact of the 'New Economy', labour market developments, etc. The nearer the subject approaches to the appropriate monetary policy reaction to such developments, i.e. prospective interest rate changes or exchange rate intervention, however, the more cautious and reticent should any member, other than the governor, become.

This raises a delicate question. Can different policy committee members give views that are not in full agreement? One view is that divergences of opinion confuse markets and can put individual policy committee members

in considerable difficulties if they had *ex ante* intimated a different course of action from that ultimately chosen. This view is often seen as applying more forcefully to the more collegial policy committees which seek to present their actions as unified decisions than to more individualistic committees where personal votes and accompanying viewpoints and arguments, are revealed. In the latter case, a policy committee member can indicate their own attitude towards economic developments without pre-committing anyone else on the policy committee, while in collegial policy committees individual opinions may be seen as attempts to influence the outcome of a difficult decision.

Another view is that compromise is part of the very nature of group decision. If the process is fair, and the 'losers' believe their views got a fair hearing, they will gladly sign on to the majority's statement – which will probably be worded in a way that accommodates minority concerns. Furthermore, people are likely to be less outspoken about their individual, possibly idiosyncratic, views if they know that a group decision will be reached – and they will eventually sign up to it. Observers, markets in particular, need not be confused. They have to learn how to hear the music behind the cacophony that policy committees sometimes emit. After all, if disagreements exist, they will materialize one way or another, possibly even in the form of time-inconsistent decisions.

The key point is that there is a direct link between communication and the inner workings of policy committees. Committees which openly and fairly deal with dissenting views are likely to be more open to allowing individual members to speak their minds. The knowledge that an agreement will be worked out provides discipline. The worst system is when minority views are disregarded. Then, policy committee members may feel that a decision has been forced upon them and may not resist going 'off the reservation', possibly even leaking.

In the end, the constraints on public utterances about future prospects, and the need to hammer out in advance a common-line of statement, have to be somewhat tighter in a more collegial policy committee. For instance, there have been more external complaints about members of the ESCB talking at cross-purpose, e.g. on the implications of the depreciation of the euro, even when it has appeared that they have taken care to coordinate their response, even some of their phrases, such as 'room for appreciation.'

In more individualistic banks such as the Bank of Japan or Bank of England, individuals seem to have a greater license to expose their idiosyncrasies without confusing onlookers. With individual viewpoints and votes exposed, the shifting balance becomes more transparent and can help outsiders predict future moves. The casual evidence is that commentators do use the balance of policy committee votes in the the United Kingdom as a guide to the future change in interest rates. The expression of a variety of viewpoints, and the revelation of individual votes, gives more individualistic policy committees an ability to signal possible future changes. Such ability is available to a much lesser extent to more collegial banks, such as the Fed or the ESCB, which need to find other communication channels. This is sometimes done through a 'bias' comment attached to the Statement issued

after each policy committee meeting. There are, however, conflicting views on how to interpret the 'bias' statement issued by the FOMC, see Thornton and Wheelock (2000), and on whether it has proved to be a good predictor of future interest rate changes. Perhaps now more commonly, indications of future intent are provided in the speeches of leading members of the committee.[58] This carries some dangers, e.g. the market may misinterpret the speech, or events, and colleagues who dissent may make the (correctly interpreted) speech subsequently invalid.

### 4.3.3 Individual contacts

Personal contacts are difficult to handle and monitor (especially for the press officer of a central bank). What a bank official sees as an innocuous comment can be interpreted, or misinterpreted, as conveying special information. It is neither possible, nor desirable, to immure central bank officials and policy committee members behind closed doors as if in a monastic order. Central bankers need to collect qualitative information about trends in the economy, beyond official statistics. This can easily be obtained – or at least thought to be so obtained – from conversations with relevant businessmen and financial market participants.

The nuances of an economic argument are often lost in a public speech or a press conference. One-on-one background briefings with a single informed and influential commentator, often a chosen member of the press,[59] are quite valuable for senior officials of the bank (e.g. the governor, deputy governor or the chief economist) or policy committee members who wish to convey their position. But such a course may also be followed by dissenting committee members who wish to garner support for their own separate viewpoints, with or without the knowledge and consent of their own presidents. This may be more likely in collegial committees, where dissent from the final 'consensus' is kept hidden from the public, than in individualistic committees.

Use of such private channels of communication is, however, fraught with a variety of dangers. The counterparty from the private sector also has a private agenda. The businessman, or market participant, will be looking for some extra insight or information into central bank thinking and likely future actions, and this can easily verge upon the transfer of 'inside' information. Journalists look for 'scoops', which can fuel resentment amongst less favoured colleagues and give rise to accusations of favouritism. Generally, the more transparent the monetary policy is, the less are the dangers and discrimination arising from individual contacts. Inevitably the particular context is an important element in informal communications and no general course of conduct can be set down in advance. Caution must be the watch-word.

### 4.3.4 Forecasts

A much more transparent, and coherent, way to present views about future economic developments is to do so in the context of a quantified forecast, and indeed an increasing number of central banks, especially those that

target inflation, are now doing so, as explained in Chapter 3. Publishing an inflation forecast additionally provides a degree of *ex ante* accountability by revealing quantified estimates of future developments which are of course subject to be proven incorrect. Some of the evidence of central bank practices is presented in Box 4.1, as well as Tables 4.2 and B4.1.

Before central banks were given independence, the treasury would often argue that the internal forecast should not be published since commentators' attention would focus on differences and inconsistencies between them. After the grant of independence this apparent problem has largely disappeared. The treasury assumes that the central bank will achieve its medium-term inflation target at the (conditional) level of interest rates incorporated in the bank's forecast, and the bank usually assumes that the ministry's public expenditure plans and associated tax rates will be fully met. The forecasts have become complementary.

***Table 4.2*** Provision of information on economic developments and monetary policy. (M, monthly; Q, quarterly; SA, semi-snnually)

| | *Fed* | *ESCB* | *Bank of Japan* | *Bank of England* | *Bank of Canada* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|
| Bank publishes analytic report on economic conditions and monetary policy | 8 per year, SA[a] | M | M | Q | Q | Q | Q |
| Bank publishes macro forecasts | SA | SA | SA | Q | Q | Q | Q |
| Coverage of forecast | Major Items | Major Items | Major Items | Major Items | Broad Terms | Detailed Scenarios | Detailed |

*Sources:* Consultations with the Bank for International Settlements (BIS) and own observations.

*Notes*: a The Beige Book is published eight times per year; the Monetary Policy Report is provided semi-annually.

### *Box 4.1* Bank of England survey

In late 1998 the Bank of England surveyed 94 central banks on a variety of issues relating to their status, role and operations (Mahadeva and Sterne, 2000). Part of their questionnaire related to transparency. Since the survey was sent out in late 1998, there is no entry for the ECB/ESCB. We reproduce in Table B4.1 below the responses reported by the Bank for the eight countries. In two cases the survey adopts a broader interpretation than in Table 4.1: it interprets a published statement of the reasons for an interest change as 'similar' to policy committee minutes (which affects the

*continued*

*Box 4.1 continued*

classification of the Bank of Canada and of the Reserve Bank of New Zealand); for key input into interest rate decisions it uses the wider concept of forward-looking analysis rather than that of a coherent model-based forecast, which affects, for example, the Bundesbank, which set out the main factors likely to influence monetary growth over the following year but did not publish forecasts.

***Table B4.1*** Bank of England survey responses (1998–9): policy explanations

| | *Fed* | *Bundes-bank* | *Banque de France* | *Bank of Japan* | *Bank of England* | *Bank of Canada* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|---|
| Total score for explaining policy | 95 | 70 | 53 | 89 | 94 | 79 | 95 | 92 |
| Unweighted total (% of maximum) | | | | | | | | |
| Explaining policy decisions | 94 | 66 | 66 | 94 | 83 | 88 | 85 | 85 |
| Weighted sub-total (% of maximum) | | | | | | | | |
| 1. Explanations on day policy changed | 100 | 100 | 100 | 100 | 50 | 100 | 100 | 100 |
| 2. Explanations when policy-makers meet and make no change | 0 | 0 | 0 | 0 | 50 | 50 | 0 | 0 |
| 3. Policy decisions discussed in publications | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 4. Minutes of policy meetings published (or similar) | 100 | 0 | 0 | 100 | 100 | 100 | 50 | 100 |
| 5. Voting patterns published | 100 | 0 | 0 | 100 | 100 | 0 | 100 | 0 |
| Explanations in forecasts and forward-looking analysis | 91 | 50 | 0 | 73 | 100 | 50 | 100 | 91 |
| Weighted total (% of maximum) | | | | | | | | |
| 1. Forward-looking analysis in bulletins | 100 | 100 | 0 | 100 | 100 | 50 | 100 | 100 |
| 2. Form of publication | 100 | 50 | 0 | 100 | 100 | 50 | 100 | 100 |
| 3. Risks to forecast published | 50 | 0 | 0 | 0 | 100 | 50 | 100 | 100 |
| 4. Discussion of past forecast errors | 100 | 0 | 0 | 50 | 100 | 50 | 100 | 50 |
| Explanations in published assessments and research – Weighted total (% of maximum) | 100 | 93 | 93 | 100 | 100 | 100 | 100 | 100 |
| 1. Analysis in published bulletins | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2. Speeches | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 3. Working papers and other research | 100 | 67 | 67 | 100 | 100 | 100 | 100 | 100 |

*Source:* Mahadeva and Sterne, 2000, Appendix 2, pp 171–3

The weight attached to forecasts varies considerably between central banks. One issue is *whose* forecast is published and *how*. It can be the staff's or the governor's, but it can also be agreed upon by the policy committee as a whole. A staff forecast that policy committee members have no hand in preparing and can take or leave, is much less influential, intentionally so. In more federal systems, such as the Fed or the ESCB, there is probably no alternative to having a staff forecast, since the individual Reserve Bank Presidents and National Central Bank Governors will often come with their own separate staff forecasts for the United States and euro area respectively.[60] Here again, the nature of the decision-making process matters a great deal. In more individualistic policy committees, the members are unlikely to agree easily to a single collective forecast. The tensions that this has caused in the United Kingdom were the main subject of the Kohn Report, as described in Box 4.2 and in Goodhart (2001a). It is somewhat curious that the two federal central banks, the ESCB and the FOMC, which are relatively collegial in communication, are at the same time more individualistic in forecasting.

## 4.4 Communicating the central bank's views to the legislature

A key audience for any central bank is its own legislature. The need to justify its actions and decisions before a body that in most cases has the formal ability to change the central bank regime, is a crucial part of the overall communication exercise. It is also a central aspect of *ex post* accountability. It helps to limit what has been termed the 'democratic deficit', whereby executive powers are delegated to an unelected body. In New Zealand, for instance, the legislature can dismiss the governor for failing to meet the terms of his contract to hold inflation within certain stated limits, but this seems to be the exception rather than the rule in the developed countries.

The frequency and nature of central bank reporting to the legislature is reported in Table 4.3. In general, the form and design of a central banks communications to, and appearances before, the legislature are determined by the legislature itself, not by the central banks themselves. While the formal nature of the communication process in this respect belongs almost entirely to the legislature, central banks can use this forum as 'neutral ground'. For instance, the Fed has made its Chairman's appearances in the US Congress an important fixed point. Table 4.4 further reports answers to questions on accountability.

We have discussed in Section 4.2 the potential dangers that arise when any member of the policy committee, even the governor, talks privately with individual members of the public. Here we note that there may be quite common, often regular, occasions when a governor, or more rarely another member of the policy committee, needs to talk in private with the minister offinance or the chair of the relevant legislative committee. This is a different matter.

***Table 4.3*** Communications with the legislature

| | *Fed* | *ECB** | *Bank of Japan* | *Bank of England* | *Bank of Canada* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|
| Annual frequency of statutorily required written reports | 3 | 1** | 2 | 5 | 1 | 3 | 2 |
| Annual frequency of regular reviews or presentations | 2 | 5 | | 3 | 3 | 2 | 4 |
| Reviews or presentations in legislature held in plenary session (P) or in committee (C) | C | P,C | P,C | C | C | C | C |
| in open (O) or closed (C) session | O | O | O | O | O | O | O |
| At review, Bank is represented by Governor (G), or Governor and other senior officials (GO) | G | GO | GO | GO | GO | GO | GO |
| Legislature (or committee) renders explicit judgement (votes) on CB's performance | No | [a] | No | Yes | No | No | [b] |
| Governor and/or Board members can be dismissed if legislature disapproves of CB policies | No | No | No | No | No[c] | No | [b] |

* The European Community institutions are not comparable to the organs of national states and the entries for the ECB in this table are, therefore, not directly comparable to those for the other central banks in the table.

** In addition the ECB is required to publish a report on its activities at least quarterly, and has decided to publish at monthly frequency.

*Notes*: a The European Parliament can choose to hold a general debate on the basis of the Report to them of the President of the ECB.

b The Governor signs an explicit contract with the Minister of Finance and there is a procedure for dismissing the Governor if that contract is broken.

c The Minister of Finance can issue public overriding instructions to the Governor and this has been interpreted as triggering effective dismissal.

*Sources*: *Guide to Central Bank Watching*, JP Morgan, March 2000, consultations with the Bank for International Settlements, and own interpretations.

***Table 4.4*** Statutory accountability

| | *Fed* | *Bundesbank* | *Banque de France* | *Bank of Japan* | *Bank of England* | *Bank of Canada* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|---|
| Parliamentary monitoring | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Override procedures | No | No | No | No | Yes | Yes | Yes | Yes |

### *Box 4.2* The Kohn and Svensson Reports

The Court of the Bank of England and the Ministry of Finance of New Zealand recently commissioned reviews of the monetary policy procedures followed by their respective central banks. The outside experts were Don Kohn from the Federal Reserve Board in the case of the BOE,[1] and Professor Lars Svensson from the Institute for International Economic Studies, Stockholm University in the case of RBNZ.[2]

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Kohn was asked to assess the materials being made available to the MPC, including the staff briefings; the inflation forecast process and the quarterly *Inflation Report*; and the work of Monetary Analysis (MA), the staff group providing most of the material to the MPC. On the whole, Kohn found that the BoE's procedures accorded with best practice. The most problematical and difficult issues related to the forecast process, where Kohn commented as follows:

> 'But in my discussions, both MPC members and staff saw a number of difficulties in the current process and outcome, which my observations tended to confirm. In brief, the process was very time consuming and in the view of some, the time not always well allocated to the most important issues. In addition, the outcome was not precisely defined or clearly understood by the MPC and the public. Consequently, the forecast round and *Inflation Report* perhaps may not be as helpful as they might be to the Committee, or to the public, the Parliament, and the markets in understanding, predicting, and judging policy actions page 14.

Nevertheless the question of how to improve the current forecasting process, notably the question, 'who owns the forecast?' is by no means clear-cut. Kohn offers five alternatives, all of which have their advantages and disadvantages. Goodhart (2001b) has also produced a similar list of alternatives.

The Bank notes in its response, pp 50 and 51, that

> 'on many of the questions raised in the Report, Mr Kohn notes that there are no simple answers. This is particularly true of one important theme which runs through the Report, namely the problem of reconciling individual accountability of MPC members with the need to present a collective message to the public that explains the decisions of the Committee.'

and that

> 'Many of the substantive issue identified in the Report revolve around the forecast process. There is one common theme that runs through all the suggestions in this area. It is the need for the MPC to explain clearly both the nature of the forecast – described in the *Inflation Report* as the 'best collective judgment' – and how it is constructed. In what way is the forecast representative of the view of a majority of the Committee? Is it that of the median voter on the Committee? In other words, what is the relationship between the views of the nine individual members of the Committee and the published forecast?'

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*continued*

*Box 4.2 continued*

Svensson rates the RBNZ success in hitting its inflation targets as mostly good. His main concerns, however, relate to the decision-making process and to accountability. He advocates a shift of formal responsibility for the interest rate decision from the Governor individually to a Monetary Policy Committee made up entirely of other senior RBNZ officials. The proposed restriction for the NZ MPC is due to Svensson's views that monetary policy committee members in a country with operational, but without goal, independence should be technical experts (Sections 1.4 and 4.1), and that there is a `limited supply of [outside] competent experts without serious conflicts of interest' in New Zealand (p. 53). But, as do most other central banks in which the Governor is individually responsible *de jure*, the RBNZ already has an internal policy committee. Transferring formal responsibility to it is likely to enhance the transparency of the process, but will probably only alter the substance of the decision in those cases when the Governor cannot persuade the majority of his colleagues of the validity of his own views. In this respect it may lessen the potential danger of some future Governor with highly idiosyncratic views taking charge by raising the possibility of a palace coup.

Regarding communications, Svensson commends the Bank for its long forecast horizon, (three years rather than the more common two-year span), and its projected, time varying, interest rate path, but he is critical of the way in which the RBNZ conveys the uncertainty of its forecasts (rounding to 0.5%).

The RBNZ has, however, rejected Svensson's proposal to establish a formal, vote-taking, but internal, monetary policy committee. It argues that this would dilute the personal responsibility of the Governor. Several outsiders, however, believe that a deeper reason is that Svensson's proposal would have required a revision of the original RBNZ Act, and that given the vagaries of legislative initiatives, the potential risks of re-opening the Act, outweighed the limited benefits that might accrue from Svensson's proposed reforms.

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1 The Kohn Report, available on the BoE's website http://www.bankofengland.co.the united kingdom, has been published, along with the Bank's response, in the *Quarterly Bulletin* 41 (1), Spring 2001, 35–54.

2 The Svensson Report is available from http://www.iies.su.se/leosven or from http://www.monpolreview.govt.nz.

## 4.5 How to handle disagreement: collegial versus individualistic policy committees

A recurring theme in this chapter is that the way central banks communicate their views and intentions is deeply related to the manner in which policy committees deal with internal disagreements. This, in turn, is likely to be influenced by the size and composition of the committee. If the committee is below a certain size, say four or five persons (as in the case of the Swiss National Bank where the Board has a membership of three),

internal pressures to show a common united front are likely to be stronger than in the case of a much larger committee. Similarly, a committee consisting of 'insiders' who regularly work together, not only on monetary policy but also on other central bank business, is probably more likely to act in a collegial fashion[61] than one with 'external' members, especially if the latter are not co-opted to participate in the regular administration of central bank business.

### 4.5.1 Revealing close calls

Arguments for changing interest rates, and by how much, are usually finely balanced. The future is so uncertain that no one can be sure what to do for the best – even though psychologists suggest that most people overestimate their own abilities to do so. Moreover, for reasons that remain somewhat unclear, central banks seem to have adopted the convention of changing interest rates in multiples of 25 basis points, one quarter of one percent (except in Japan where rates have fallen so low that several recent changes have been for 10 or 15 basis points).

A change of 0.25% has relatively little effect, even after the lags have unwound to give it its full impact, on either output or inflation.[62] When he was a member of the Bank of England's Monetary Policy Committee, and being chided for having voted for a 0.25% increase in interest rates, Willem Buiter described such an increase as 'chicken-feed.' No one can be sure whether or not a change in policy, whose outcome is itself 'chicken-feed' is, or is not, called for in a context of uncertainty and fog, not only about the future, but even about the present.[63] So, the normal condition is one of debate as well as analysis, of argument and counter-argument, of often strongly expressed beliefs about likely economic developments and dissent by others from such beliefs. Yet at the end of the day a decision has to be taken, and some sub-set of arguments have to come to dominate. How can this uncertainty be revealed? The answer depends much on the decision-making process.

When the policy committee is collegial, free and frank discussions must aim at eventually building up a consensus. This process may be strongly influenced by the views of the chairman. In that case, everyone falls in behind the agreed decision and supports the official line in public. This is not unlike central banks where the sole responsibility lies with the governor who, having listened to the advice proffered, makes up his mind and communicates his final decision. The other officials close ranks behind the governor and, unless the governor specifically wishes otherwise, little or nothing of the prior discussion is revealed. In an individualistic committee process, the separate arguments, viewpoints and votes of each of the committee members are publicized, resulting in more transparency.

Could it be that an individualistic committee provides 'too much' information? This might lead to the recitation of prepared statements and make participants less flexible in revising publicly known positions, as noted in Section 4.2. Members of such individualistic committees (e.g. BoJ and

BoE) deny that this has happened. It might also confuse rather than enlighten markets and the public. Even an individualistic body such as the Bank of England has shied away from the idea of issuing nine separate forecasts, believing that the informational and educative purposes of the inflation forecast would be compromised if multiple forecasts were on offer. On the other hand, we do not feel that the identification of individual arguments and votes is confusing and misleading.[64]

### 4.5.2 Predictability

Outsiders are not really interested in the details of votes or myriad of arguments. They want to understand the logic behind the central bank's strategy to better foresee future policy moves. Clear guidance about the policy regime may be more informative than the minutiae of who said what to whom. Moreover collegial central banks' actions may be easier to predict than those of the more individualistic ones. This could be explained by 'better' communication, but also by more gradual policy changes. It could also be that a consensus decision carries more weight than a decision revealed to have been taken on a 5:4 majority, suggesting that the decision-makers are 'not singing from the same hymn sheet.'

### 4.5.3 Accountability

Presenting its Monetary Policy Strategy, the ECB states:

> 'There are, however, no simple short-cuts to ensure accountability of a monetary policy Council and concerns over individual incentives must be balanced with the need for effective collective decision-making. Decisions are the outcome of a process of collective reasoning which is more than a mere exchange of views. This collective process can shape the final outcome (the decision) more than each single vote. Once this feature of councils and committees is recognized, the case for individual accountability becomes debatable.
>
> First, it is not clear what public advantages would derive from the knowledge that, after a certain decision was taken, a particular member of the Committee or Council was against it, but also unable to convince the other members of his or her opinions. Accountability ultimately means bearing the consequences of *decisions*, not *intentions*. Since choices are made collectively when a Committee or Council is the decision-making body, collective accountability appears to be the natural choice.'
>
> Angeloni et al. (2001).

It is, perhaps, at this fundamental level that the greatest gap opens up between the collegial and the individual schools. The individualistic approach is more transparent since differences of view inevitably exist much, or most of the time.

A collegial central bank will try to give an account of the differing arguments but, given the need to justify the eventual decision, the weight attached to the arguments for that decision are likely to be given more emphasis than the contrary arguments, more so than the uncertainty of the situation actually justifies. In the absence of information on the breakdown

of the vote, (e.g. 11:7 or 18:0), outsiders cannot use the vote structure to assess the situation. Collegiality is also susceptible to breaking down in the face of strongly held dissenting views, especially if the dissenter has a separate power-base.[65] Whatever may be said in the formal description of the deliberation outcome, dissenters prevented from having a public platform there may revert to speeches, authorized or not, and/or 'leaks'. Collegiality riven by behind-the-scenes wrangling is the worst possible outcome.

In principle, the interaction of argument and vote enables outsiders to observe which issues sway the votes. Ideally it would be possible to match up individual votes and arguments so as to construct 'reaction functions' for individual members, rather than for the committee as a whole. In practice, this has proved difficult. Moreover, the shifting pattern of votes gives an *ex post* indication of the 'bias' of the committee, publicly observable and with supporting argumentation. This is in many respects easier to present and, perhaps, less liable to market misinterpretation than a 'bias' statement, as noted in Section 4.4.

The question of which is 'better', a collegial or individualistic committee, cannot be taken in isolation. Account must be taken of traditions, history and the politico-economic context. Views on this question are often strongly held, see the interchange between Buiter (1999) and Issing (1999). While we do not make any recommendation, we note some of the implications of such a choice.

Individualistic committees face a problem when they want to provide a unified assessment (e.g. in a forecast) as noted earlier. On the other side, collegiate committees may face difficulties in reconciling differences publicly expressed *ex ante* with the *ex post* unanimity of a collective decision. In general, more individualistic committees are inherently more transparent. Transparency and accountability come even more naturally when complemented with an externally agreed, and clearly quantified, objective (e.g. an inflation target) as in the case of the Swedish Riksbank, RBNZ and Bank of England. This does not mean that collegial committees are any worse, simply that they will have to work harder at developing and managing their communication skills. They will have a more difficult task, and will need to put more effort into the exercise.

# 5 How Do Central Banks Actually Talk?

In the preceding chapters we have presented our views on how central bank ought to talk. Here we present our interpretation of how they actually do it. We focus on a limited number of central banks, those that are both most important and/or the most representative of the various styles of communication currently observed. Our aim is to relate the reality of communication to the principles previously set out, to understand the logic and to make suggestions for improvement. Clearly, central banks have devoted an increasing amount of attention to their communication strategies lately, at least in contrast to earlier years of secrecy and mystique. Accordingly, our presumption is that their approach to communication is now well thought out, and our goal is to understand and interpret.

## 5.1 The Federal Reserve of the United States

The attitude of the world's pre-eminent central bank, the US Federal Reserve, toward communication is somewhat schizophrenic. In a real sense, the Fed's transparency glass is both half full and half empty. But the trend toward greater openness, if gradual, is also unmistakable.

### 5.1.1 Is the Fed transparent or opaque?

At some level, the Fed certainly communicates quite a lot. It provides lengthy semi-annual reports on monetary policy to the US Congress, accompanied and amplified by written and verbal testimony from its chairman. These testimonies are often major market events, and are sometimes major political events as well. The chairman also testifies before Congressional committees on numerous other occasions, almost always taking questions from legislators in open session with cameras rolling. Both he and other members of the FOMC deliver frequent speeches to a wide variety of audiences and many FOMC members grant both on-the-record and off-the-record interviews to journalists.[66] The Fed publishes fairly detailed, though highly stylized, minutes of each FOMC meeting a few days after the *following* meeting (thus, with roughly a six-and-a-half week lag). These minutes

include the committee's vote, naming names. After a five-year lag, the Fed even publishes a verbatim transcript of every FOMC meeting, redacting only confidential materials – something almost no other central bank does.[67]

And yet the Fed has traditionally been portrayed as tight-lipped, secretive, and cryptic.[68] Arthur Burns and Paul Volcker, its chairmen for much of the 1970s and 1980s, were famous for blowing smoke – both literally and figuratively – whenever they appeared before Congress, and on other occasions as well. Each of them spoke a turgid dialect of English that came to be known as 'Fedspeak', a term which seems to connote the use of numerous and complicated words to convey little if any meaning. As chairman since 1987, Alan Greenspan is credited with raising Fedspeak to a high art. He used to take pride in the resulting obfuscation – even characterizing his own way of communicating as 'mumbling with great incoherence.' In a famous incident, he once told a US senator, who claimed to have understood what the famously obscurantist chairman had just said, that 'in that case, I must have misspoken.'

Yet, somehow, the Fed manages to convey its meaning to the markets – less regular followers of the Fed sometimes have trouble deciphering the code, however. *The Economist* recently pointed out, with more than a hint of irony, that the ESCB is more transparent than the Fed – at least on paper:

> 'Its president, Wim Duisenberg, holds monthly press conferences. The bank has an inflation target. It has set out the theory on which its policy is based. Contrast this with America's Federal Reserve, which unlike the ECB has no inflation target and no clear policy framework (or at any rate, none that has been published). The oracular word of its chairman, Alan Greenspan, is all that matters. Yet financial markets seem, most of the time, to understand what the Fed is doing.'
>
> *The Economist*, 31 March 2001, page 70.

A paradox? But remember, a paradox is only an *apparent* contradiction. Part of the resolution of this particular paradox is to recognize that attitudes toward and policies on openness and communications have changed substantially at the Federal Reserve since the early 1990s. In a real sense, the truly mysterious institution that was portrayed in *Secrets of the Temple* no longer exists. And virtually all of the changes were instigated by the Fed itself – they were not forced on the central bank by the US Congress.

Unlike the Bank of England, the Bank of Japan, and other central banks that have undergone major institutional changes – not to mention the ESCB, which started from scratch – the changes made at the Fed were subtle. Its legal mandate has not been altered in any way over the last decade – it remains the promotion of both 'stable prices' and 'maximum employment.' Nor has the structure or functioning of the FOMC been changed. In fact, it still has the same chairman! Congress has not infringed upon the Fed's independence one iota. Nor, with one minor exception (noted below), has it imposed greater requirements for accountability on the Fed. Minutes of FOMC meetings have about the same level of specificity as they did a decade ago. Thus, superficially, things seem much the same. But, in fact, a great deal has changed. Here are the main examples.

***Announcement of monetary policy decisions***

Prior to 1994, the Fed did not announce its target for the federal funds rate – the principal decision made at each FOMC meeting – even after the decision was made. Instead, it would normally enter the money market unannounced, leaving it to professional Fed watchers to figure out whether it was deliberately changing the funds rate or simply carrying out a technical ('defensive') open-market operation. Only the largely symbolic changes in the discount rate were publicly announced, and they were consequently treated as momentous events – 'ringing the gong,' they were called.[69]

In stark contrast with the view we expounded in Chapter 1, the Fed vigorously defended this policy of secrecy as an integral part of effective monetary policy. For example, Chairman Greenspan told a Congressional committee in 1989 that 'it would be ill-advised and perhaps virtually impossible to announce short-run targets for reserves or interest rates when markets were in flux.' Even in more placid times, he insisted, 'a public announcement requirement also could impede timely and appropriate adjustments to policy.'[70]

But the Fed made a 180° turn in this policy, at least *de facto*, when Greenspan immediately announced the FOMC's February 1994 decision to raise interest rates. The decision to announce the policy change was made by the FOMC, on a strong recommendation from its chairman – it was not demanded by Congress. But the transcript of the meeting makes it clear that the Fed felt itself under some pressure to be more forthcoming as a result of controversies that had swirled in the fall of 1993 (see below). One year later, in February 1995, the FOMC adopted the policy of immediate announcement of policy changes *de jure*, and it has never had cause to reconsider that decision. The Fed, the markets, and the politicians all seem quite pleased with the change.

***Statements explaining policy decisions***

Until 1999, the FOMC made only brief, and often cryptic, explanations when it changed policy, normally saying something like that it had changed interest rates to 'sustain economic growth' – regardless of whether it was raising rates or lowering them! For example, the Fed justified its 50 basis point *increase* in the federal funds rate in August 1994 by saying that it was 'intended to keep inflationary pressures contained, and thereby *to sustain solid economic growth*.'[71] Similarly, it explained that its 25 basis point rate *hike* in March 1997 'affords greater assurance of *prolonging the current economic expansion* by sustaining the existing low inflation environment.'[72] (Emphasis added in both cases.) On occasions when it left interest rates unchanged, the FOMC always said nothing.

In 1994, an FOMC subcommittee on disclosure policy, headed by one of the authors of this report (Blinder), suggested that the Committee offer an explanatory statement after *each* meeting (or at least most of them), even when the decision was to leave rates alone. That and other disclosure recommendations were debated at an FOMC meeting in early 1995.[73] But the debate was rather one-sided. The FOMC was divided into two main camps:

one favoured extremely terse statements when policy was changed (and none when it was not changed), and the other favoured saying nothing at all. The committee's recommendation for fuller, more frequent statements received little support and was emphatically rejected. Nonetheless, since May 1999, that is more or less what the Fed has been doing. Plainly, attitudes toward communication changed between 1995 and 1999.

***he 'bias' policy***

Up until May 1999, the Fed would announce the 'bias' in its policy stance only when the minutes were published – a few days after the next FOMC meeting. So the bias could not possibly serve as a signal of the Fed's thinking – except perhaps internally. Even inside the FOMC, there was confusion about precisely what having a bias – or in the Fed's terminology, issuing an asymmetric policy directive – actually meant, as Box 5.1 exemplifies.

Since that time, the FOMC has changed its 'bias' policy twice. In May 1999, it started announcing the bias immediately after each meeting, thereby making it an effective forward-looking market signal. And since February 2000, it has clarified the meaning of asymmetric directives in a new 'balance of risks' sentence. (The Fed now officially eschews the term 'bias.') The Committee now states whether it is more concerned about 'heightened inflationary pressures' or 'economic weakness' (or neither) in 'the foreseeable future.' The time frame implied by that last phrase clearly extends well beyond the next FOMC meeting (which is normally 6–8 weeks away).

***Release of transcripts***

In none of these cases did Congress force the Fed to become more open. But there was one instance in which it did – in a way. At a remarkable hearing of the Banking Committee of the US House of Representatives in October 1993, Greenspan revealed that the Fed had been taping FOMC meetings for years and retaining the tapes in its archives. This revelation created something of a furore, as even most members of the FOMC were apparently unaware of the taping system.[74] The hearing intensified Congressional pressure on the Fed to disclose more information about its deliberations and the Fed realized it would have to yield somewhat to this pressure. After lengthy internal discussions and negotiations with Congress, the FOMC decided to release verbatim transcripts of its meetings with a five-year lag, redacting only highly confidential information. This practice remains unchanged since that time. For example, transcripts for the 1995 FOMC meetings were released early in 2001. The five-year lag seems long enough so that the release of each year's batch of transcripts attracts minimal press attention.

In addition to these formal, institutional changes, close observers of the Fed have noticed an unmistakable change in the tone and apparent intent of Alan Greenspan's rhetoric. Nowadays, he never prides himself on 'mumbling with great incoherence.' Nor does he tell his audiences that he intended to be obscure. Greenspanian prose is by no means a model of clarity – no Hemingway he. But by common consent, the Fed chairman now

### *Box 5.1* Confusion over the Fed's 'bias' policy

The following entertaining excerpts from the transcript of the FOMC's July 1994 meeting illustrate that even Fed insiders were confused about – and could not articulate – what it meant to issue an 'asymmetric' policy directive.

> MS. MINEHAN:[1] … Just being new to this whole business, if we go asymmetric, what does that really mean?…
> CHAIRMAN GREENSPAN: We don't have a specific formulation. Asymmetry merely means a general sense of the Committee's disposition or the direction of our bias.
> MS. MINEHAN: How long should we expect you to wait before making a change?
> CHAIRMAN GREENSPAN: No, I have tried to articulate this and I have been much too specific, so I'll call on Don Kohn. [Laughter]…

Donald Kohn, the director of the Fed's Division of Monetary Affairs, and Greenspan then both tried to explain the meaning of asymmetry. After some confusing discussion, William McDonough, President of the Federal Reserve Bank of New York, interjected a question:

> VICE CHAIRMAN MCDONOUGH: Is that fully clear to you?
> MS. MINEHAN: Yes, I am really clear on this. [Laughter]

Later in the meeting, Governor Edward Kelley, a veteran FOMC member, returned to the confusion over what the bias meant:

> MR. KELLEY: … I would like to add that I don't think it's desirable to tie ourselves into knots here trying to define asymmetry. It's not necessary for us to achieve precision there. To me, it's just a broad indication of a bias, or a leaning, or a concern… and that is quite adequate…

Was it adequate? The meeting ended with a 9:2 vote to keep interest rates unchanged, but with a bias toward tightening. One of the two dissenters was Governor Lawrence Lindsey, who is now the chief economic adviser to the President of the United States. The secretary of the FOMC appended the following fascinating note to the transcript:

> 'At the end of the meeting, Mr. Lindsey indicated to Chairman Greenspan that his dissent … was based on a possible misunderstanding of the implications of the bias in the directive. His dissent was from a directive that he perceived as calling for a more or less automatic tightening of policy during the inter-meeting period. On the understanding that any tightening during the inter-meeting period would depend on further indications of inflationary developments, Mr. Lindsey requested that his vote be recorded in the minutes as in favour of this policy action. Chairman Greenspan agreed that his request was appropriate.'

Notice the word 'automatic' in the preceding passage. Lindsey had been on the FOMC for almost three years at the time, and yet he harboured the misconception that a bias virtually implied an inter-meeting move. Thus even experienced Committee members were apparently confused about what it meant to issue an asymmetric directive.

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1 Cathy Minehan, President of the Federal Reserve Bank of Boston, was attending her first meeting as a member of the FOMC.

intends his speeches and testimonies to be understood, not *misunderstood*. And, as the earlier quotation from *The Economist* suggested, the markets seem to be getting the message.

Each of the changes listed here was incremental, not revolutionary. Yet, together, they constitute a quantum leap in the amount of information the Fed provides to the public and to the markets. There can be little doubt that the Fed is communicating far better than it did a decade ago – and it is not an accident.

### 5.1.2 Suggested improvements

How do the Fed's current communication practices stack up against the criteria elucidated in earlier chapters?

On *talking about objectives*, the Fed seems woefully deficient by the standards of contemporary central banking. As we noted earlier, its legal mandate – for 'stable prices' and 'maximum employment' – is vague. But the Fed is perfectly free to make it more concrete, and has chosen not to do so.[75] The Fed could easily translate the phrase 'stable prices' into a specific target number or range, if it wanted – just as the ECB has done. That idea has been debated within the FOMC more than once, but rejected. The term 'maximum employment,' in conjunction with the price stability objective, invites the interpretation that the Fed should strive to hold the unemployment rate around the NAIRU. Also the Fed's rhetoric, though decidedly vague, is consistent with that interpretation. So many observers have concluded that that is what the Fed actually tries to do. But Alan Greenspan frequently denies the utility of the NAIRU concept, or even of the basic NAIRU theory. And he has never offered his own estimate of the NAIRU. Nor has the FOMC as a collective body. The Fed staff's estimate of the NAIRU, which is updated regularly, is a closely guarded secret. Our criticism is not of the Fed's dual mandate, even though that does complicate the job of communication.[76] Our remit is not to evaluate alternative ways of conducting monetary policy, but simply to evaluate how central banks should and do talk. It is on this criterion that the Fed scores poorly.

Regarding *talking about methods*, the Fed reveals very little information about its forecasts of the economy. In this respect, it is not out of line with the practices of many other central banks, but these leave much room for improvement! We recommend that the Fed publish the broad outlines, but not necessarily all the details, of the staff forecast that informs each FOMC meeting. As another step toward greater transparency, the Fed's minutes might say a bit more (without naming names) about whether FOMC members agreed or disagreed with the staff forecast. (This information is revealed in the transcripts five years later.) We also recommend that the Fed clarify the nature of its semi-annual 'FOMC consensus' forecast. How, for example, is the committee's 'central tendency' established?

Regarding *talking about decisions*, the Fed's procedures seem to be a work in progress. They are gradually moving in the right direction – toward greater openness – and our advice is: 'keep going.' The Fed now discloses its

decisions immediately after each meeting and, at the same time, indicates its assessments of the 'balance of risks' going forward. But the statements that accompany most FOMC decisions are too terse and, therefore, open to too many disparate interpretations. The Fed's apparent preference to have its words interpreted by Fed watchers, rather than doing the job itself, is baffling. It would not be very onerous to the FOMC to shoulder this task itself. In general, the minutes that the FOMC produces after each meeting seem satisfactory. But their value to outsiders would be enhanced if the minutes gave readers some sense of the back-and-forth during the meeting.[77] BoE and the BoJ minutes strike us as superior in this regard.

These recommendations are unlikely to be adopted during the reign of Alan Greenspan. Greenspan's performance as a monetary policy-maker has been so superb, and (partly for that reason) his control of the FOMC is so complete, that the Federal Reserve is effectively on the 'Greenspan standard' in all respects – including its communications strategy. And as the earlier quotation from *The Economist* indicates, the markets understand the Greenspan standard pretty well. The Fed is not going to choose a numerical inflation target, nor an estimated NAIRU, nor reveal more about its forecasts and models, nor give more frequent and fuller statements unless and until Alan Greenspan wants to do so.

Given his spectacular success under the *status quo*, it is hard to argue that Fed policy would have been even better if he had been more transparent.[78] But, contrary to financial market mythology, Alan Greenspan is neither infallible nor immortal. Someday, the Fed will have a different chairman. Then the points raised in this report will assume greater importance. More transparent and less personalized Federal Reserve procedures, including better-defined targets, may help the post-Greenspan Fed continue to do what the current chairman seems able to do instinctively.

## 5.2 The European System of Central Banks

### 5.2.1 Recent history

The ESCB formally came into existence in June 1998, shortly after the decision on which countries would initially be part of the monetary union. The ESCB includes the fifteen national central banks of the European Union and the newly created European Central Bank (ECB), while the Eurosystem includes the EMU member-country national central banks and the ECB. Its short history presents obvious difficulties in assessing the degree to which attitudes towards openness as well as actual monetary communication practices have changed. To get around this problem we exploit the strong historic and institutional link between the ESCB and its most important predecessor, the Deutsche Bundesbank. The exclusive focus on the Bundesbank is justified on the grounds that at least since the creation of the European Monetary System (EMS) in March 1979, the Bundesbank has provided the system, and thus Europe, with its monetary anchor.[79]

***The Deutsche Bundesbank***

The Deutsche Bundesbank was established in 1957 as a successor to the Bank Deutscher Länder set up by the Allied forces in 1948 to coordinate monetary decision-making in post-war Germany. The Bank's structure was at least partly modelled on the Federal Reserve System. It was owned jointly by West Germany's regional central banks (Landeszentralbanken) but enjoyed considerable statutory independence, though the Allied Bank Commission formally controlled it. Article 3 of the Law on the Bank Deutscher Länder stated explicitly that it 'shall not be subject to the instructions of any political body or public non-judicial agency.' This is a direct forerunner of Article 108 of the Maastricht Treaty which protects the ESCB from political influence. The Bundesbank Law confirmed the Bank's independence and required it to give priority to the achievement of price stability in its conduct of monetary policy by giving it a mandate of 'safeguarding the currency.'

Unlike the Maastricht Treaty, the Bundesbank Act imposed virtually no statutory obligations on the Bundesbank to provide the public or the government with a formal account of its deliberations or its policy. Section 13 of the Act merely states 'the Deutsche Bundesbank shall advise the Federal Cabinet on monetary policy issues of major importance, and shall furnish it with information upon request.'[80] Section 18 states that the Bundesbank may at its discretion publish the monetary and banking statistics that it collects. Section 33 contains the only formal communication request by requiring the Bundesbank to publish their interest rate decisions in the *Federal Gazette*. At least as far as communication goes, the Bundesbank's hallmark legitimacy, therefore, derived primarily from the Bundesbank providing voluntary communication to the public and the government. The Bundesbank made extensive use of such voluntary communication, much of it inherited in one form or another by the ESCB. The Bundesbank never published any of its internal forecasts, however.

The key ingredient to its remarkable success was its monetary policy strategy that allowed it to conduct and communicate a monetary policy that was characterized by both discipline and flexibility. The Bundesbank's monetary targeting strategy was put in place after the breakdown of the Bretton Woods System in 1975.[81] Contrary to superficial impression, the Bundesbank's monetary policy strategy was never a precise rule-based and deterministic strategy. The Bundesbank sought greater flexibility to respond to the challenges of monetary policy without ever appearing rudderless or operating without reference to a basic framework, thus avoiding becoming hostage to the markets. It consistently explained its policy decisions with reference to the basic strategy, even when the explanation was far from obvious. According to Issing (1995), 'one of the secrets of the success of the German policy of monetary targeting was that … it often did not feel bound by monetarist orthodoxy as far as its more technical details were concerned.' Laubach and Posen (1997) have characterized this strategy as 'disciplined discretion'. As in the case of the Fed – and in contrast with the Bank of England – the Bundesbank's experience suggests that effective

communication need not be based on rigid rule-based monetary policy strategies such as inflation targeting. It also shows that the choice of a monetary policy regime need not be black and white, between discretion and discipline.

The Bundesbank's history also contradicts the view that monetary strategies that are not strictly rule-based are inevitably dependent on the Chairman or the President, a criticism often directed at the Federal Reserve under Chairman Greenspan. As noted in Chapter 1, when the central bank mandate aims not only at price stability but also at output stabilization, 'disciplined discretion' may be preferable (Jensen, 2001). The problem with 'disciplined discretion' – the ESCB's core problem – is that communication is more demanding than in a strictly rule-based monetary framework.[82]

***The Eurosystem's statutes and procedures***

Both the discipline and the discretion dimension of the Bundesbank's monetary framework have been passed down to the statutes and the operations of the ESCB. The ESCB is arguably the most independent central bank in the world. Its formal statutes are embedded in the Treaty of the European Union – the Maastricht Treaty – which can only be changed if ratified by all member countries, an unlikely event. Its statues establish clearly that the ESCB must pursue the goal of price stability and allows for other concerns only inasmuch as they do not represent a 'prejudice' to its primary goal. Its officials are explicitly forbidden to take instructions from member governments or European institutions. Thus the bank is both goal and instrument independent.

Price stability has been defined by the ESCB as 'a rate of price increases of less than 2% over the medium run.' It also publishes its monetary policy strategy which rests on two 'pillars.'[83] The first pillar is the rate of money growth. In December each year, the ESCB publishes its 'reference value' for the following year. The second pillar includes all other information relevant to price stability, including production costs, the state of the economy, the exchange rate, etc.

The ESCB does not yet seem to have acquired the Bundesbank's skill in embedding its monetary policy in a 'disciplined discretion' framework. This is not surprising. First, time and experience matter. Second, the ESCB's communication task has to incorporate the potentially conflicting two-pillar strategy. All formal communications of the ESCB invariably start with a discussion of the two pillars. So far, money growth has continuously exceeded its reference value.

The only limit to the ECB's independence concerns the exchange rate. According to Article 109,

> 'the Ecofin Council may, acting unanimously on a recommendation from the ECB or from the Commission, and after consulting the ECB, adopt, change or abandon formal exchange rate agreements between the euro and other non-Community currencies'.

The article further stipulates that absent an

> 'exchange rate system in relation to one or more non-Community currencies [...] the

> Council, acting by a qualified majority, either on a recommendation from the Commission and after consulting the ECB or on a recommendation from the ECB, may formulate general orientations for exchange rate policy in relation to these currencies. These general orientations shall be without prejudice to the primary objective of the ECB to maintain price stability.'

The most common interpretation is that this clause concerns international regime agreements, leaving the bank free to deal with the exchange rate as it wishes on a day-by-day basis. Occasionally, some member governments have suggested that 'arrangements' can cover such items as foreign exchange market interventions. A secret gentleman's agreement seems to have been reached, whereby the Council of Finance Ministers of the euro-area – the so-called Eurogroup – decides on the principle of intervening but leaves the Bank with complete freedom as to when and how.[84] We have agreed in Chapter 2 that less than full transparency is justified in the area of foreign exchange interventions as long as it does not concern the policy regime. In the present case, secrecy is rooted in the ESCB's 'fears that the Ecofin Council could function mainly as a political counterweight to the Governing Council, i.e. as a sort of control mechanism.'[85] clearly a policy regime issue.[86]

Interest rate decisions are taken by the Governing Council of the ESCB, which meets twice a month. The Council is made up of two groups of officials. The first group consists of the six members of the Executive Board of the ECB appointed by consensus by the member governments. The Treaty stipulates eight-year terms, though the initial terms were staggered to provide continuity. Executive Board members cannot be dismissed (though one of them, the President, apparently accepted at the time of his appointment to resign when he reaches half of his term, the diplomatic result of a continuing Franco–German rift). The Executive Board is responsible for the implementation of the monetary policy as formulated by the Governing Council. The second group consists of the twelve Governors of the central banks of the member countries of the European Monetary Union. The Governors themselves are appointed by their own governments for various, non-revocable terms.

Formally, the Governing Council members vote: one person, one vote. During the meetings of the Governing Council, each Governor is accompanied by one deputy. A member of the European Commission has the right to attend – without voting right – the meetings of the Governing Council, as does the President of the EU Council who may put forward a motion for discussion in the Governing Council.[87] Since the minutes are not published, little is known of how discussions are conducted. In practice, Council members publicly report that they decide by consensus, not by voting. Following each meeting, the President and the Vice-President hold a press conference, at which they read a short, prepared statement and then answer questions. These statements, and the answers that follow typically provide little information, and are reproduced in the subsequent *Monthly Bulletin*. The same is true regarding the President's testimony to the European Parliament.

### 5.2.2 How Transparent is the ECB?

The vagueness of the ESCB's definition of price stability (how long is the medium run?) and the lack of precision in the monetary policy framework – two possibly inconsistent pillars, the second too wide to invite any definition – have been widely seen as an attempt at opacity. The ESCB strongly denies this view, arguing instead that this is a truthful indication of its decision process. Similarly, criticism of the refusal to publish the minutes of the Governing Council's meetings has been rejected by the ESCB, which claims that national sensitivities could easily lead to a harmful misrepresentation of the consensual decision-making process.[88]

***Accountability***

Accountability takes the form of quarterly evidence presented by the President to the European Parliament. The Parliament can only issue an opinion and has no power to alter the bank's objectives and independence. The Parliament can also invite other officials of the ESCB, who may or may not accept the invitation. In practice, they do accept, usually at the request of the Economic and Monetary Affairs Committee. Some national parliaments have also invited members of the Executive Board who have so far declined, arguing that national parliaments can invite only their national governors.

In addition, the ECB publishes weekly-consolidated financial statements of the Eurosystem as well as reports on the activities of the ESCB at least once every quarter. Its statutes also require it to publish an *Annual Report* on the activities in the ESCB, as well as on the monetary policy of the previous and current year, to the European Parliament, the EU Council, the European Commission and the European Council.

Beyond this mandatory accountability duty, the ECB communicates with the public on a number of fronts. Its core monetary policy communication tool is the *Monthly Bulletin*. It publishes around the middle of each month in all EMU languages. From a monetary perspective, the most important component of the monthly report is the editorial. The editorial – often ignored by ECB critics – contains a detailed analysis of monetary and economic developments throughout euroland. Compared to other major central banks, the ECB's monthly editorial goes a long way to providing a formal guide to the Council's assessment and its monetary policy bias.

For now, the ESCB has further committed itself to sending the President and the Vice-President to a press conference, held immediately after the first meeting of the Governing Council every month. During the press conference, the President reads a statement on the ESCB's macro-economic assessment and its monetary policy stance. Typically, the statement closely follows the monthly editorial. The Vice-President informs the public about other activities of the ESCB. The President then opens the floor to questions from the assembled financial journalists.

***Communications Strategy***

Like their colleagues in other central banks, most members of the Governing Council give frequent public speeches on various aspects of the ESCB's monetary policy. Some also make extensive use of various media appearances to comment on a broad range of economic and monetary issues, including statements regarding the likelihood of future monetary policy action.

With one exception, there has been no change in the way the ESCB formally communicates since the launch of European Monetary Union. The exception pertains to the publication of internal forecasts for economic developments in the euro-area. With the growing popularity of inflation targeting, the ESCB – itself a sort of inflation targeter given its definition of price stability – has come under growing pressure to release its internal inflation forecast. So far, it has done so twice, in the December 2000 and June 2001 issues of its *Monthly Bulletin*. This forecast assumes constant policy, but is not endorsed by the Council. Rather it is presented as the bank staff's forecast, based on several unpublished models,[89] and complemented by value judgment. The *Bulletin* also goes out of its way to warn that this forecast is one among many elements taken into account by the Council when reaching its decisions.

The published forecasts have been widely criticized on at least two fronts. First, critics have suggested they are far too imprecise to be of any practical use. The width of the forecast bands given are set at twice the mean absolute forecast errors made by euro-area central banks in the past. The second criticism is that these are staff forecasts. If the Governing Council does not claim the projections as its own, critics argue, how can the public and financial market participants judge to what extent the Governing Council feels constrained by them in their policy deliberation?

The publication of ECB staff projections is closely connected to repeated requests from the European Parliament as well as to wide-ranging complaints about the lack of openness from the media, academics and, in some cases, fellow monetary policy-makers. To the ESCB's credit, it should be pointed out that the Governing Council has created an annual forum for ESCB watchers with an opportunity for serious ESCB watchers and critics to share their concerns with members of the Governing Council. To what extent future changes in the ESCB's attitudes towards openness and communication practices will come about as a result of outside pressure remains to be seen. In the case of the Federal Reserve, changes in the Fed's communication practices were for the most part promulgated in house with no outside pressure to speak of. As one senior Fed official has pointed out to us, 'virtually all the changes we have made in recent years were aimed above all at improving the functionality and efficiency of our monetary policy.'

It is more difficult to discuss the informal changes of the ESCB's communication practices during its short lifespan. Much has been said about the nexus between inadequate communication strategies and the plight of the euro since its launch at the beginning of 1999. By their own accounts, the members of the Governing Council have had to learn a

number of painful lessons about the difficulty of effective, collective communication in the area of exchange rate policy.

As a result, the Governing Council has adjusted its informal communication practices with the public and with the foreign exchange market. Individual pronouncements on the euro have become less frequent, and what is being said appears to be rooted in some sort of a common message. In the future, stronger presidential leadership and more financial market expertise and savvy among Governing Council members would undoubtedly further improve the ESCB's informal communication practices, not only in the foreign exchange markets, but right across its monetary responsibilities. Meanwhile, the public and market participants need to continue to learn what and who matters when it come to monetary communication. Communication, after all, involves a communicator and a listener. Here again, the ESCB's youth is a disadvantage. Over time, markets and the public will become more sophisticated listeners. Why should anyone care what a Landeszentralbank President thinks about the ESCB's monetary policy stance or the level of the euro? Eventually, traders, journalists, wire services and householders will learn to distinguish the noise from the signals. This, in turn, will facilitate the task of those who do matter and who try to communicate in order to achieve their monetary policy objectives more effectively.

### 5.2.3 Suggested improvements

***The two-pillar strategy*** The Eurosystem's difficulties are largely rooted in the formulation of its monetary policy strategy. The paradox is that its mission is stated fairly tightly in the Maastricht Treaty which, as noted in earlier chapters, should make communication easier. The reason seems to us to be the vagueness imparted by the constant references to its two pillars, a problem compounded by the imprecision of the first pillar – what is a reference value? – and by the catchall nature of the second pillar. Central banks can, at best, achieve one objective, so one of the two pillars is redundant. Furthermore, it appears outdated, as more central banks have recognized that the road from monetary growth to inflation is uncertain and occasionally misleading. We believe that the ESCB would do itself a favour by cleaning up the formulation of its strategy or by abandoning its constant references to the monetary framework and discussing more directly its true target, inflation.

***The policy-making committee*** The ESCB's decision-making process affects communication. Currently, monetary policy decisions are taken by the eighteen-member Executive Committee, which meets every two weeks. Given the finely balanced natures of most decisions, such a large forum is unlikely to reach agreement easily. Compounding this difficulty is the collegial nature of the committee, which claims to be able to decide without formal votes, by consensus, but does not reveal the tenor of its debate. As argued in Chapter 4, collegiality works best when dissenters can be cajoled and convinced. This is more difficult to achieve the larger is the committee. If it does not occur, the risk is that disgruntled minority members release their frustrations outside the

committee's deliberation room. Indeed, contradictory statements have occasionally been heard. With enlargement of the European Union now under active preparation, the situation is likely to grow worse as the size of the Executive Board will expand. We believe that the ESCB should eventually reduce the size of its policy-making committee. Spacing out the meetings of the Governing Council from its current bi-monthly pattern could reduce its influence. Decisions would then be shifted to the six-member Executive Board of the ECB or to a European version of the FOMC.

## 5.3 The Bank of Japan

### 5.3.1 Recent evolution

The Bank of Japan gained effective independence with the entering into force of a new BoJ law on 1 April 1998. Prior to independence, BoJ policy-making involved consultation with the government and joint determination of policy objectives, with a dominant influence coming from government. During that period, the BoJ did not emphasize communication with the public. As one BoJ official put it, under the old system the BoJ only needed to be transparent with the Ministry of Finance. After obtaining independence, the BoJ greatly increased and systematized its public communications. Transparency has improved not so much with respect to goal objectives, which are specified in a general manner in the BoJ law, rather with respect to operational and intermediate objectives. This section will review BoJ communications, trace the evolution of transparency, (including in connection with the recent policy changes announced in March 2001) and then offer suggestions for further improvements in BoJ communications strategy.

The 1998 BoJ law created a policy board of nine members all appointed by the Prime Minister's cabinet, subject to Diet consent, and free from dismissal during their terms of service. The policy board consists of the Governor, two Deputy Governors, and six so-called deliberative members, 'selected from among those with academic expertise or experience including experts on the economy or finance.' The law also stipulates that the Bank shall ensure transparency by endeavouring 'to clarify to the public the content of its decisions, as well as its decision making process, regarding currency and monetary control.'

Since independence, the BoJ communicates with the public on a regular, scheduled basis. There are monetary policy meetings twice every month, with Ministry of Finance and Economic Planning Agency representatives (who can express opinions, but not vote) in attendance. The BoJ holds a press briefing after each meeting, and written press releases summarize economic assessments, views, and actions. Minutes are released after five weeks and are commonly sufficiently detailed that the financial press is able to identify individual advocates of views (more easily at the ends of the policy spectrum). Proposals put to a vote are spelt out in detail – and the member making the proposal is identified by name – along with the names

of members voting for and against. As a result, it has been clear which members have favoured shifts in goal objectives – such as the adoption of inflation targeting – as well as adjustment of intermediate interest rate targets. This provides considerable personal accountability, which has been viewed as factoring in recent reappointment decisions. Full Board transcripts will be made public after ten years.

In October 2000, the BoJ decided to begin publishing an outlook and risk assessment for the economy and prices, which includes a forecast of the policy board members regarding inflation and economic growth. The stated aim was to offer forecasts, but also information about the risks facing the economy, including those with low probability but large potential impact. While this step was welcomed, public reaction included a call for a longer time horizon than the six months provided. The April 2001 assessment extended the coverage period to the full fiscal year.

Regarding communication with the legislature, the Governor testifies before the Diet upon request, the BoJ submits two reports to the Diet per year, and the BoJ Policy Board publishes a monthly report.

### 5.3.2 How transparent is the BoJ?

On goal independence, the BoJ law sets out the policy objective as follows: 'monetary control shall be aimed at, through the pursuit of price stability, contributing to the sound development of the national economy.' While it has never been tested, the BoJ is presumed to have responsibility for defining price stability for the purpose of fulfiling that objective. The BoJ has, so far since attaining independence, decided not to quantify a price stability definition.

That decision has two dimensions. First, there is no stated inflation rate or range that the BoJ considers to constitute price stability. In a report issued in October 2000, the BoJ explained that there was no Board consensus on the matter at that time and decided to take up the issue again in the future.[90] Some Board members have said that in more normal times (meaning an absence of deflation and significant positive nominal interest rates) it may be more appropriate to specify a quantified definition of price stability. As a result of the present inexactness, the public and the markets have been left to interpret BoJ communications to assess what its price stability objective really means, and whether the BoJ judges that there is sufficient deflation to warrant a more expansionary stance or not.

Second, there is no single price index identified as measuring whether price stability, however construed, is being achieved. There are several goods and service price indices to look at, and their evolution has differed rather significantly, with the GDP deflator showing the greatest deflation, the CPI somewhat less deflation, and the WPI closer to price stability. These indices are all said to suffer from upward biases (e.g. not accounting for retail discounting practices). In addition, asset prices, including equities, real estate and land have shown significant declines. While it is not clear whether the mention of price stability in the BoJ law includes asset prices, the BoJ has made clear that it monitors asset price movements.[91]

Absent greater specificity on the definition of price stability, the BoJ communications strategy has been more forthcoming with regard to transparency about intermediate goals. From 1995 until the decision of 19 March 2001, the BoJ targeted the uncollateralized overnight call rate.[92] As the economy slowed in late 1998, that rate was guided lower. Then, in February 1999, the BoJ announced that it would guide the overnight call rate 'as low as possible,' and in April it stated that it would maintain that policy 'until deflationary concerns are dispelled.' That policy, dubbed the zero interest rate policy or ZIRP, was maintained until July 2000 when the target call rate was raised to 25 basis points.

Consequently, much attention during that period focused on the management of the call rate. At each monetary policy meeting, the Board agreed on a guideline or directive for market operations, which was publicly announced. That guideline indicated the BoJ's operating target in terms of a specific target level for the uncollateralized overnight call rate. Over the period until the next meeting, the BoJ's Financial Markets Department supplied and absorbed funds through a range of actions including: purchases and sales of securities under repurchase agreements; outright purchases and sales of securities; JGB repos; purchases and sales of commercial paper; and other operations. To execute this approach, the BoJ needed to gauge and then equilibrate at the desired interest rate the demand and supply of reserve balances of banks at the BoJ. Through a very transparent process, the BoJ provided daily information regarding its projection of the demand/supply reserve balance, and then four times each business day information regarding its open market purchases and sales.

Many in the market, especially during the ZIRP period, interpreted inter-meeting fluctuations in excess reserve balances as signals of the tenor of BoJ policy. The BoJ tried, without complete success, to convince market participants that the observed excess reserves had nothing to do with the tenor of BoJ policy, which they argued was fully reflected in the call rate. Rather, excess reserves were determined by the demands of financial institutions and brokers who choose to hold deposits at the BoJ.

Another important element of BoJ policy that affects its communications strategy is its cooperation with government. While this has several dimensions, two are worth identifying. First, the BoJ law prescribes close contact with the government to ensure that monetary policy and the government's economic policy will be mutually harmonious. The government representatives attending policy board meetings can offer views and make proposals. Before and after recent meetings, in the summer of 2001, the government has explained publicly the positions it is taking in policy board meetings. While the government cannot vote, it can be influential. Moreover, the government may request that a vote of the policy board be postponed until the next meeting. This arose last year during the consideration of the abandonment of the zero interest rate policy. A consequence of the government's role is that from time to time there can be a public airing of disagreements between the views of the BoJ and the government.

Second, the BoJ law requires foreign exchange reserve purchases and sales

in response to requests from the government motivated by the need for international cooperation in this area. This provision effectively gives control over exchange rate policy and foreign exchange reserve management to the government. In recent years, this has meant that intervention decisions are in the hands of the government, but the question of sterilization of interventions (in essence, whether monetary policy should be altered when interventions take place) remains in the hands of the BoJ. Some attention has been given from time to time over the past few years to communications aimed at reconciling government and BoJ views on this subject. In recent months, confusion has arisen from conflicts between statements made by the BoJ Governor and Board members and those of Ministry of Finance officials regarding the value of the yen. In particular, given the government's control over this policy, it remains unclear to what extent the views of the Governor and others on the policy board regarding the exchange rate matter for policy. More generally, the government in principle retains the ability to use its prerogative over foreign exchange reserve management to force more radical changes in the exchange rate regime, including some that might have consequences for the conduct of monetary policy. While that possibility has not arisen in practice, it is sometimes the subject of public attention, as it has been in recent months.

The lack of clarity, and hence transparency, regarding the price stability goal has had the effect of prompting public discussion about the choice of the policy regime itself. Discussion has focused not so much on transparency as the BoJ's choice of objectives and means of achieving those objectives. Interestingly, Japan's very difficult recent economic circumstances – economic stagnation and deflation – have led the BoJ to be more concerned and more forthcoming about transparency. This has been in an effort to pre-empt political attacks on its legitimacy and independence. At the same time, with interest rates near zero, the BoJ has been concerned that that the potency of further monetary policy expansion is limited. In that context, fear that failure to achieve a more specific objective would jeopardize independence has led the BoJ to be cautious in setting objectives that might not be met.

One consequence of the lack of a singular, quantified price stability objective is that greater weight attaches to BoJ Board members' public statements describing their views on the price environment. These statements have sometimes added to confusion. Some Board members have repeatedly asserted that Japan is not experiencing a deflationary spiral, with the implication that the BoJ would reconsider its stance in the face of a worsening of deflation, rather than a particular rate of deflation. In 2000, some Board members asserted that Japan's deflation was 'good' deflation, because it stemmed from the increased competition coming from deregulation and other positive supply factors. While this line of reasoning ignored the fact that demand was insufficient to enable those factors to increase output, rather than depress prices, these statements implied that Japan's deflation, while a departure from price stability, was not necessarily undesirable.

A further confusion has arisen from statements expressing concern that

lower interest rates, although stimulatory, would lessen the discipline on banks in dealing realistically with their balance sheet problems. This claim, whatever the merits, addressed regulatory and other concerns that were not directly related to price stability – and, in any event, the formal responsibility of the Financial Supervisory Agency, and not the BoJ.

More broadly, to assess the communications strategy of the BoJ in the period since its independence, it is important to acknowledge the constraints, or perceived constraints, posed by Japan's circumstances during that period: deflation; economic stagnation; and near-zero (or zero) interest rates. These constraints also provide the context in which the BoJ altered its policy in March 2001.

In Japanese political and economic circles, as well as outside Japan, there have been vigorous debates about the wisdom of numerous proposals to pursue a more expansionary monetary approach. These ranged from a return to zero rates, to liquidity creation via open market operations in commercial paper or JGBs, to inflation targeting, and to explicit efforts to depreciate the external value of the yen. Most BoJ Board members responded to this debate by asserting that with such low interest rates they had minimal leverage for affecting prices and economic activity.

Consequently, much of the BoJ communications effort in the past few years has been devoted to explaining that message and engaging in the public debate on the matter. Some BoJ Board members argued that some of the suggestions put forward by critics, such as inflation targeting, could be considered in more normal circumstances, i.e. when there is inflation, not deflation, and higher interest rates. This argument, whether wrong or right, exposes an important interaction between the choice of regime and the communications strategy chosen to accompany that regime. Economic doctrine about monetary policy in recent decades holds that monetary policy actions are more effective when executed in a framework where policy-makers make clear their medium- or long-term goals and intentions. This is because inflation expectations are shaped by a clear statement of and sustained adherence to such goals, and because in that setting any single policy step (such as an interest rate decrease) will be seen as part of a strategy.

The advocates of inflation targeting for Japan have argued that a specific, quantified definition of price stability would, in fact, help set expectations and make it easier for the BoJ to overcome deflation. At the BoJ, however, choosing such a strategy, and the communications that would go along with it – announcing a medium-term inflation target and inflation forecasts – has been viewed as too risky. The potential benefit that any monetary policy step might be more effective, is outweighed by the potential, or likely, cost that would follow a failure to reach such a stated inflation target. In essence, if there is a trade-off between a communications strategy aimed at setting expectations and a communications strategy aimed at minimizing threats to the legitimacy and independence of the BoJ, the latter has been considered of greater importance. This choice has not been viewed as final, but rather a consequence of two factors, the unique circumstances – deflation and low interest rates – and the youth and fragility of the independent BoJ.

A concrete example of how lack of specificity harmed the effectiveness of monetary policy came when the BoJ ended the zero interest rate policy in July 2000. When the BoJ took that action, the lack of a quantified target for inflation and a forecast of future inflation led many market participants to consider the possibility that this interest rate increase might not be the last. A clearer target and forecast could have limited that undesirable and unnecessary reaction.

As mentioned above, the BoJ took a step towards strengthening and creating a broader context for monetary policy with its decision on 19 March 2001. Signs that the economy had come to a pause in late 2000 and concerns that weak demand would increase the downward pressure on prices, led the BoJ to lower overnight interest rates to 15 basis points on 28 February, and then to change their target on 19 March. The operating target was changed from the overnight call rate to the outstanding balance of banks' current accounts at the BoJ. This change amounted to switching from interest rate targeting to reserve targeting. The BoJ pledged to provide ample liquidity to achieve its target and, while leaving the call rate to be set in the market, stated that the new policy should be expected to keep short-term interest rates close to zero.

Another novelty was a pledge to keep these new procedures in place until the national consumer price index (defined to exclude perishables) registers 0% change or a positive change on a year-on-year basis and in a stable fashion. This additional pledge has been taken to provide a longer-term and more quantified commitment on the part of the BoJ regarding the maintenance of the policy stance. That commitment is taken as an attempt to maximize the potency of the modest interest rate decrease brought about by the policy shift.

In particular, market participants have presumed that the new policy approach was also intended to lower longer-term interest rates as well and, by flattening the yield curve, to stimulate demand. The BoJ announced that banks' current account balances at the BoJ would be increased from four to five trillion yen. The BoJ also announced that it would increase outright purchases of JGBs as needed to provide liquidity smoothing. The impact of these steps remains uncertain. Many observers have been looking for indications of how reserves would be targeted and open market operations conducted while short-term interest rates remain at or near zero, presuming these policies would be utilized to affect the yield curve. So far, the BoJ has not clarified its announcement further.

### 5.3.3 Suggested improvements

For the future, there are three areas where the BoJ could take action to improve its communications strategy and transparency.

***Define price stability in a quantitative way*** Whether or not the formal adoption of inflation targeting is an appropriate policy regime for Japan at this juncture is debatable. Nonetheless, clarification of price stability would serve two important purposes. It would likely make any monetary policy action more effective, because market participants would understand more clearly the context of the policy step. It would add also to the accountability

of the BoJ by permitting clearer judgments about whether the institution was achieving its objectives.

***Specify more fully and quantitatively the new reserve targeting scheme*** While a target has been set for banks' current account balances held at the BoJ, there is less clarity about two important elements of the new policy. It is important to the markets' understanding of the monetary regime that the BoJ should explain whether balances will be expanded even if short-term interest rates are at or near zero – in essence, whether quantitative easing via this instrument might be attempted even at zero interest rates. It will be important also whether the BoJ aims to stimulate interest-rate sensitive spending in the economy by an attempt to flatten the yield curve via open market operations in JGBs or other instruments.

***Clarify that the Ministry of Finance speaks about the exchange rate*** The BoJ should make clear whether its views about the exchange rate relate to the impact of the yen on price stability or broader considerations. It should make clear also that while it may have views about the value of the yen, those views do not determine direct actions to alter the yen's value.

## 5.4 The Bank of England

### 5.4.1 Recent evolution

The Bank of England was granted operational independence to set interest rates by the Chancellor of the Exchequer, Gordon Brown, a few days after the incoming Labour government was elected in May 1997. The Bank was required to achieve a single, quantified target, which the Chancellor initially set as a rate of growth of 2.5%, as measured by the Retail Price Index (RPIX). So far that target has been reaffirmed each year, but the Chancellor can change it at any time of his own choosing. Thus, the Bank has operational independence, but no goal independence. The current regime was established by an Act of Parliament (The Bank of England Act, 1998) and can be revised and reformed by a subsequent Act. As would, for example, be needed if and when the United Kingdom should join the euro area.

The observed major changes in communication, transparency and accountability, have almost all derived from the change in regime. Although several Chancellors expressed an inclination towards greater independence,[93] the Bank of England remained strictly subservient until after the United Kingdom had been forced out of the ERM in September 1992. Until then, the Chancellor made the ultimate interest rate decision. While the Bank might have been able to criticize the Chancellor's decision in public, such criticism, it was feared, would alienate the Chancellor and the government, and lessen the (behind-the-scenes) influence of the Bank as adviser to and confidant of the Chancellor. Hence the Bank was careful to be supportive, as far as it felt possible, of past decisions and not to express its views about future policy so clearly as to constrain the Chancellor's discretion. By the same token, the Bank's internal forecast was not published, partly because it

might differ from the Treasury's published forecast. Public justification (e.g. in Parliament) both of the objectives of monetary policy and of the tactics for reaching such ends, lay with the Chancellor and the government. One persistent argument, deployed with great effect by the Treasury, was that monetary policy was but one arm of policy, alongside fiscal and trade policy for example, and that all arms of policy had to be coordinated. This is largely why the overall conduct of macroeconomic policy was primarily debated in Parliament at Budget times, leaving relatively few regular occasions[94] when monetary policy alone was the focus of Parliamentary attention.

That began to change in 1992 after the United Kingdom's exit from the ERM. Another anchor and regime had to be found. The example of the Bundesbank, transformed into a more formal, constitutional regime in New Zealand, suggested that the best target for a country with a floating exchange rate would be domestic price inflation, and this was duly adopted by Chancellor Norman Lamont in October 1992 in a letter to the Chairman of the Treasury Select Committee.

After the ERM debacle, there was bound to be public scepticism over whether a government, especially if under pressure to keep interest rates down in advance of elections, would stick to its commitments on monetary policy. Such scepticism is, of course, formalized in the time inconsistency literature. The government, on its own, lacked credibility.

The first step, taken by the Conservative government to augment their credibility, was to allow the publication of the Bank of England's *Inflation Report*, completly independently of any input or censorship from the Treasury. The first *Inflation Report* was published in February 1993. Since the Bank was perceived as a technically proficient forecaster, independent of government yet vitally concerned with inflation, the publication of its 'inflation forecast' was considered a credibility-enhancing step on its own. With the decision to change interest rates being reserved for the Chancellor, there was no real alternative but to condition the Bank's forecast on the assumption of unchanged policy – i.e. unchanged interest rates over the horizon of the forecast, which was in practice two years.

The Conservative government was not then, however, prepared to handle the credibility problem by delegating responsibility for the maintenance of price stability to an operationally independent central bank. Both Lamont, and later Kenneth Clarke, wanted to retain control of the interest rate decision.

The second step to augment credibility – adopted in April 1994 and made retrospective to January 1994 – was to publish the advice that the Governor of the Bank gave to the Chancellor about the interest rate. The step from publishing the inflation forecast to revealing the Governor's specific advice was not all that large since the advice was primarily conditioned by the forecast. In practice the Chancellor – who had additional, separate sources of advice, both in the Treasury and outside – did not always agree with the Bank's proposal. Such disagreements were, however, on the public record, since the Governor's (independent) advice – as represented by the Governor's prepared opening statement – was copied directly into the published minutes of the meeting without drafting changes. A Chancellor who decided

differently needed to be confident that he could publicly justify his alternative view. Chancellor Kenneth Clarke did not lack such self-confidence. This was the famous 'Ken and Eddie Show' (Kenneth Clarke and Eddie George).

The decision to delegate operational independence to a Monetary Policy Committee (MPC) of the Bank of England, including four members appointed by the Chancellor (from outside the Bank) was taken in the first week of the incoming Labour government's period of office in May 1997.

It had been known that Gordon Brown was considering granting operational independence to a Monetary Policy Committee. But an interim period (during which time Gordon Brown had, prior to the election, intimated that he would assess the quality of the Bank's advice) had been expected to last for years, rather than days. The Governor later commented, 'Although I knew what was in their minds, I was very surprised by the timing – the decision to move immediately on taking office.'[95]

As a result, there was little time for public debate about the modalities of the new system (notably including the forecasting process) and the role of the members of the new MPC. By then, however, the *Inflation Report* had been internationally admired as state-of-the-art in its genre. The Act, and the Letter from the Chancellor to the Governor, 6 May 1997, stated that the *Inflation Report* would remain the main channel of public communication between MPC and the outside world, Parliament and people. [96]

### 5.4.2 The current state of play

***The Inflation forecast***

The *Inflation Report* includes at its heart the forecast for inflation and output over the next two years. The conditioning assumptions[97] and the two-year horizon of the published forecast have been subject to criticism and discussion (Kohn, 2001; Goodhart, 2001b). The forecast is undertaken quarterly and published with a lag of about one week – a couple of days after the accompanying MPC meeting. The interest rate decision has, however, been taken monthly. Even prior to the 'Ken and Eddie Show,' which publicized and formalized the monthly decision-making process, there had been Bank–Treasury meetings on a regular (monthly) basis since the 1970s (though Governor–Chancellor meetings to discuss monetary policy had been on a more *ad hoc* basis before 1993). After the 'Ken and Eddie Show,' it was generally expected that all normal interest rate decisions would be announced immediately after the meeting.[98] Although special intra-meeting rate changes could (both then and with the MPC procedures) be implemented, none have so far been made. With the twelve monthly meetings already imposing a heavy burden on the staff, no formal attempt is made to update the forecasts intra-quarterly, but MPC members (and staff) can informally assess how current developments are deviating from those previously forecast. Whether during the formal quarterly forecast rounds, or informally in the off-forecast months, the MPC's forecast probably plays a larger role in the decision-making procedure in the United Kingdom than for most other monetary authorities.

***Minutes***

The second main channel of communication is the publication of the MPC's minutes. These record each individual's vote by name. The minutes give a considered discussion of the main arguments, which is much better structured and coherent than the actual discussion. The arguments are not attributed to individuals, but often it does not take too much reading between the lines to infer such attribution. The minutes are now published with a lag of about 2 weeks,[99] which is about as short a time as possible to fit in a process of careful drafting, discussion, redrafting and agreement. The actual announcement of the decision on the day can be accompanied by a press notice or even a press conference (though none have so far been held). Such notices have been issued only when it was thought that the absence of supporting comment might lead financial markets to mistake the MPC's purpose. Otherwise the difficulty of reformulating the many facets of a lengthy and complex process of argumentation is best left, so the MPC has felt, to the careful distillation available in the minutes.

***Parliamentary evidence***

Besides the *Inflation Reports* (4 per year) and minutes (12 per year), the other regular events in the MPC's calendar are appearances to give evidence before the Treasury Select Committee of Parliamentary MPs. This occurs three times a year,[100] just after the *Inflation Report* is published. There are also somewhat more occasional appearances before the equivalent Select Committee in the House of Lords. The TSC can choose, within reason, whatever line of questioning it wants, and its probing is informed by prior consultations with specialist economic advisors. The proceedings are public.

The Chancellor is informed of the proceedings and debates within the MPC by a Treasury observer, who sits in all MPC meetings, but does not have a vote and only speaks either on points of fact or when asked for an opinion, which is quite common when fiscal matters are being discussed. The Chancellor and the Governor also have private meetings and the senior members of the Bank on the MPC will meet their Treasury counterparts in their normal course of duty. When necessary HM Treasury brief the MPC on the macroeconomic outlines of future fiscal packages, but otherwise HMT and Whitehall leave the decision on interest rates entirely to the MPC. A decision to undertake (sterilized) intervention on the exchange market might need to involve more prior consultation, but, since the MPC was founded, none has been undertaken by the MPC itself.[101] In practice, and given their much larger reserves, most such intervention is undertaken by the Chancellor and Treasury – e.g. the G7 concerted intervention to support the euro in September 2000. While the Bank acts as the agent of the Treasury in conducting such sterilized intervention, the MPC as such would not expect to be consulted, though the Governor probably would. The Chancellor has been scrupulous in avoiding any attempt to influence the decision of the MPC on interest rates – full operational independence has been maintained.

***Speeches***

The other common channel of communication is via the speeches of the Governor and other members of the MPC. This is, in some respects, of lesser importance than in other monetary authorities. Both MPC members' votes, and to a large extent their arguments, are already available from the minutes, so their speeches often represent an academic extension and embroidery of previously known positions rather than new information. Moreover, the emphasis on individual responsibility, together with the accidents both of unforeseen news and the uncertainty of how other MPC members' views are changing, makes it quite hazardous for any member, even for the Governor himself, to hint too explicitly about the likely future decisions of the MPC. The market – and the public's – interpretation of the future decisions of the MPC has to rest primarily on their assessment of the individual members' reaction functions, gleaned from past information, rather than on any more explicit direct guidance.

### 5.4.3 Suggested improvements

Some problems remain. In particular, reconciliation between emphasizing the importance of individual judgment while at the same time giving a reasonably clear indication of how the MPC as a whole views future trends in the inflation forecast has not been easy to achieve (see Box 4.2 on the Kohn Report). Giving each individual member of the MPC their say has made it harder to construct an immediate agreed brief statement in the short time between the MPC meeting and when its outcome is announced. All in all, however, the new regime has been viewed as having worked well with respect to outcomes, procedures and communications, though only the latter are our focus here.

It has, however, been a short period (four years) since the new system was founded, and circumstances have been fortunate in a number of ways: an effective Governor who has enjoyed making the new system work; reasonably calm and successful economic conditions; and a supportive government, Parliament and press. There have been problems, notably the extraordinarily strong exchange rate of the pound, the hiccup in the autumn of 1998, (a short term collapse in confidence in primarily financial markets), and perhaps a period of worldwide weakness later in 2001. It remains to be seen how the system will cope with choppier conditions and a changing cast of characters.

## 5.5 The Reserve Bank of New Zealand

### 5.5.1 Recent history

An important trend in the last decade or so has been towards the adoption of a monetary regime combining operational independence and a quantified numerical inflation target for central banks. Of the four central banks whose

experience was discussed earlier in this chapter, two have followed this path (BoE in 1997; BoJ in 1998), and a third (ESCB in 1999) has a broadly similar remit, though with a few qualifications (e.g. the two pillars). The common blueprint is to be found in a small country, New Zealand.

The US Fed, Bundesbank and Swiss National Bank (SNB) have been widely admired for their relative independence and success in holding down inflation (in the Fed's case from the 1980s onwards). Their structures and organization, which remained largely unchanged between 1970 and 1999, did not, however, provide the blueprint for the widespread move to central bank operational independence during the 1990s.[102] Perhaps the key feature in New Zealand was that the 1989 Reserve Bank of New Zealand Act clarified the distinction between goal and operational independence (which had been fuzzy in the case of Fed, Bundesbank and SNB) as well as codifying that the Policy Targets Agreement (PTA) should establish a specific target, and that such a target be consistent with domestic price stability.[103] In practice, these agreements have established medium-term goals for the RBNZ in the guise of an agreed, quantified target for price inflation.[104] While this was implicitly agreed by the Bundesbank and SNB, the clarity of that message was, perhaps, obscured by the emphasis on intermediate monetary targets and the unwillingness to announce quantified inflation targets. The RBNZ Act makes three clear points: operational vs. goal *independence*; single vs. multiple medium-term *objectives*; specificity and transparency about the *target*.

New Zealand was the first to adopt a quantified inflation objective as its sole operational target. Such a step was in accord with the general strategy of the incoming Labour government under Lange and Roger Douglas. They reacted against the strongly interventionist policies of the previous government under Muldoon, with its centralized and direct controls, tariffs and grand projects, all leading to distortions in the economy. Instead, business and industry were to be subject to competition and private ownership. Where that was not possible (e.g. in the civil service) the objectives of each agency were to be clearly specified, incentives for achieving such objectives established and the managers left then to get on with their job, subject to clear accountability and transparency.

The new Act for the Reserve Bank fitted broadly, with a few adjustments, into that wider philosophy. A quantified inflation target, for the Governor's term (five years), was to be agreed by the Governor and the Minister of Finance. That established a relatively simple framework for *ex post* accountability, since the Governor (Don Brash) committed himself to keep inflation within pre-specified quantified limits. But this led on to three problems. First, there would be certain occasions (e.g. some supply side shocks including natural disasters) when it would not be optimal to keep inflation within the pre-set bands in the short-run. Second, given the lags in the transmission mechanism and uncertainties and shocks facing the economy, there would bound to be occasions when the Governor would make clearly the 'right' decision, given the information then available, and still transgress the limits. Third, partly in the light of the first two considerations, how could the government commit to imposing a penalty

discipline[105] on the Governor for *ex post* failure (a problem described by McCallum, 1997).

The first problem was partly addressed and mitigated by excluding certain categories of price change from the index of inflation by which *ex post* success was to be measured. Beside the direct effect of interest rates on mortgage costs, this included those prices most subject to supply shocks – e.g. indirect taxes and certain energy and raw material costs. The second and third concerns were partly addressed by specifying the RBNZ Board's role as monitoring the Governor's efforts to meet PTA targets and recommending dismissal if those efforts were regarded as inadequate. There have been two cases[106] where the Board has felt it necessary to write to the Minister to explain that breaches of the target were not situations that warranted dismissal.

### 5.5.2 The influence of the RNZ example

Even so, subsequent imitators did not adopt the dismissal threat present in the NZ structure. Perhaps the dismissal threat was felt to be too draconian, and if so, would not be implemented and would lose credibility. In the United Kingdom case, the Monetary Policy Committee is required to write a public letter to the Chancellor whenever inflation deviates more than 1% from target, explaining what has occurred and outlining its plans to return inflation to target. Of course, the deviation could be for reasons outside the MPC's control (e.g. a change in indirect taxes). So it has been stressed that the need to write such a letter (none has been written yet – surprisingly, given the relatively tight 1% bands) should not be automatically treated as a confession of 'failure.' Nonetheless in most cases, except in extreme circumstances, outside commentators will treat it as such.

In most cases, however, either no quantified target has been adopted, (e.g. Fed, BoJ) or, if adopted (ECB) there are no sanctions for failure. So the initial NZ idea of introducing specific overt incentives for the monetary authorities has not been more widely adopted. Central bankers claim that the implicit incentives of plaudits (blame) for being seen to do a good (bad) job are quite sufficient.[107]

A quantified objective for a single nominal target simplifies *ex post* accountability. But the lags in the transmission process imply that interest rate decisions now need to be based on expected inflation over some future horizon. Svensson (1997, 1999) and Svensson and Woodford (1999) argue that the best intermediate target in order to hit the final objective of controlling actual inflation is the inflation forecast itself. This line of argument has been challenged on various grounds, as noted in Chapter 2, primarily owing to the inherent shortcomings and limitations of such forecasting procedures. Still, both *ex ante* accountability and transparency require that the monetary authorities reveal the key forecasts, or at least their forecast of likely future developments, that (insecurely) inform their present judgment and forecasts.

Again this procedure was initially established by the RBNZ. The RBNZ presents full macroeconomic forecasts in the same Monetary Policy

Statements that announce policy settings, using those forecasts as an integral part of the explanation for why the policy settings are adopted. This aspect of the RBNZ operational procedures (unlike its specific incentives schemes) was copied and further extended by the Bank of England in its *Inflation Report*. The inflation report, incorporating a forecast of likely future inflationary developments (with more or less quantification) as a centrepiece for central bank communication, has now been widely adopted, certainly amongst all inflation targeting countries.

One respect in which the RBNZ approach differs from that in most other countries that subsequently adopted inflation targeting was that the contract about the quantified inflation target was set between the Minister and the Governor personally. This was done in large part because of the view that accountability implied that the senior decision-maker, i.e. the Governor, should be personally accountable. Most other inflation targeting countries instead followed the precedent of the FOMC and Bundesbank by allocating decision-making on interest rates to a Committee rather than to the Governor. We have briefly discussed the reason for this in Chapter 4, mentioning the recent proposal of the Svensson Report (2001) that formal responsibility should be shifted to an internal Monetary Policy Committee.

The allocation of the interest rate decision to the Governor personally makes it harder to provide minutes of a meeting to report on the arguments considered in reaching such a decision (but not impossible). In New Zealand the Monetary Policy Statement has played the role met by minutes elsewhere, by virtue of the integration in those statements of the discussion of the policy decision with the discussion of projections and the risks around those projections. In earlier times, these statements were a vehicle for affecting financial conditions, since the Bank did not fix an interest rate or actively adjust open market operations to change pressure on high-powered money, but instead relied on policy guidance through words. At times the words focused on the path of the exchange rate; at other times on the path of interest rates; and for a period (June 1997 to March 1999) on a Monetary Conditions Index (MCI) combining exchange rates and interest rates.

This approach was abandoned, in part because of problems with using MCIs this way, and the Bank started to set an overnight interest rate target. Nonetheless, the use of policy guidance through words was clearly effective in moving financial conditions in the intended direction, illustrating the power of signalling. Nowadays, the Bank both sets an overnight interest rate and signals the likely future path of interest rates in an unusually clear manner (we discussed the pros and cons of such indications of expected future movements at greater length in Chapter 3).

## 5.6 Conclusion

To each central bank, its own communication strategy, of course. Nonetheless a number of common features confirm the key results developed in the previous chapters. First and foremost, the trend is

unmistakable. The bad old days of central bank mystique are over. All central banks evolve, however grudgingly, towards more transparency and greater communication. The process, which reflects trends in other aspects of public life wholly apart from central banking, is far from over. Some central banks may still believe that can retain secrecy in particular areas (e.g. their forecasts, the substance of their internal deliberations, the models they use) indefinitely. But we are sceptical. Other central banks are acting as pioneers and showing, along the way, not only that transparency does not hurt, but that it increases the efficiency of monetary policy and enhances credibility, independence and public support.

Second, communication and decision-making procedures are deeply linked. The imperious governor is giving way to monetary policy committees where each single member is an influential player. This change in the decision-making body creates communication problems for central banks that seek to maintain less than full transparency, especially when responsibility is collegial. In such banks, communication is partly devoted to suppressing even the appearance of dissent – except in those happy cases where every member of the committee feels comfortable with the decision process. Such efforts are most likely to backfire when tensions are highest, which usually occurs at the worst of times. Individualistic monetary policy committees emit more noisy signals. But markets – and outsiders in general – seem to learn how to distil this information pretty quickly.

Finally, the fact that communications policy differs considerably from one central bank to another – and yet seems to 'work' – serves as a reminder that the outsiders care little for the details, no matter how important these details may look to the insiders. The outsiders are interested in the broad picture, which is the policy regime (the central bank's objectives, and the logic of its reaction to contingencies). The better the central bank reveals its thinking, the less the details (and who said what, when) matter. Federal Reserve Chairman Greenspan is said to have stated that price stability is achieved when businesses, in their planning, do not pay much attention to inflation anymore. Similarly, we might say that a central bank is communicating well and is transparent enough when it is so predictable that the public does not care about who runs it and how.

# Comments and Discussions

This chapter summarizes the debates that took place during the Geneva Conference on the World Economy on 4 May 2001. It comes in three parts: a general discussion on the Report, a panel debate on the art of communication and another panel debate on the future of central bank communication.

These are interpretative summaries, prepared by the conference organizers, of the statements made by conference participants. They do not in any way commit the participants. The conference organizers bear sole responsibility for the views ascribed to the conference participants and apologize to them for any error of interpretation.

## 1 Discussion of the Report

***Lars Svensson***
***Princeton University***

Lars Svensson appreciated that although the case for transparency is strong, the case for creative ambiguity gets a fair hearing and treatment in the Report before being dismissed, as it should be. The Report argues that transparency enhances economic efficiency for the following three reasons: it leads to a larger impact of monetary policy on financial markets' expectations, asset prices and the term structure of interest rates; it implies clearer and more credible objectives, which beneficially affect price and wage setting; and it reduces the costs of unanticipated policy changes. Svensson would have added that transparency also strengthens central banks' discipline and commitment to their objectives. Transparency also improves the public understanding of, and support for monetary policy. He cited, as an example, the case of the Sveriges Riksbank, which has been successful in explaining its policy to the general public.

Svensson addressed the issue of transparency of the central bank's internal forecasts. Price stability is now the main objective of all central banks, and an increasing number of them have an explicit inflation target, either a point or a range. Due to the existence of lags in policy implementation and assessment, the most efficient way to achieve price stability is indeed to

target forecasted inflation. The instrument rate is then set such that the forecasts of the targeted variables are consistent with the objectives of the central bank. Transparency about forecasts is therefore a crucial ingredient in inflation targeting.

Svensson pointed out that any forecast has to be conditional on some instrument rate path. One alternative is a constant instrument rate, corresponding to 'unchanged monetary policy.' The arguments in favour of that alternative are two-fold. First, it is an easy starting point and thus a natural default case. Second, it reveals the direction of the desirable change of the instrument (for example, if forecasted inflation is too high, the interest rate should be raised). The arguments against that alternative are that it provides a bad forecast because it does not reflect expected changes in the instrument; hence, it does not make sense to compare the forecast with the eventual outcome. The forecast will also be inconsistent, since it will in practice rely on some asset prices, which depend on expectations of a non-constant instrument rate.

The other alternative is to publish forecasts conditional on the best possible forecast of the instrument rate, which will normally not be a constant instrument rate. The argument in favour of that strategy is that this is the most transparent alternative. The forecast will then be consistent with asset prices as well as comparable with the eventual outcome. There are two main arguments against this solution. First, it might be difficult to agree on such a forecast inside the central bank. In Svensson's opinion, this is not a major problem because deciding on forecast paths is in any case an indispensable part of efficient policy-making. He also thought that aggregation is possible among the members of the policy committee. For example, it is always possible to get a majority forecast and, if needed, the minority can publicly dissent, as is the case at the Swedish Riksbank. A second argument against is that an announced instrument rate path might imply a commitment to the path that could make future policy adjustment difficult. Such a commitment may be good, however, as it may provide for 'optimal inertia,' something Michael Woodford has emphasized in his research. Such an instrument rate forecast would in any case not be principally different from other published forecasts. Indeed, Svensson pointed out that publishing forecasts conditional on variable instrument rate paths is already done in New Zealand and seems to work well. Any misunderstandings about the instrument rate path do not seem to be a problem.

***Giles Keating***
***Credit Suisse First Boston***

Giles Keating took the stand-point of financial market participants. He observed that there are different types of participants: those involved in trading activities and those who manage portfolios. The difference between these two categories used to matter a lot more in the so-called 'pre-transparency' era than today, where it tends to be more subtle. It now lies mostly in that some participants invest more resources in interpreting central banks' statements and actions than others.

Keating next noted that the Report does not put enough focus on informal discussion between market participants and central bankers, or former central bankers. As market participants actively search for informal contacts, they use different channels:

- One approach is the so-called Greenspan model. The Chairman of the Federal Reserve regularly briefs some journalists. While this approach makes it possible to present clearly the central bank's strategy and to remove much ambiguity, it implies some degree of discrimination with a perceptible echo of profit from insider trading. Such a strategy is not desirable, in his view. It may be noted that the economic context in which decisions are made matters. The interpretation that market participants make of the Chairman's talk may vary depending on that context.
- Another approach is the 'private variety', direct discussions between central bankers, or former central bankers, and market participants. The latter follow two goals. First, they want to acquire information on subsequent policy moves, even though not too much can be expected. Second, and more importantly, informal direct discussions allow participants to achieve a greater and finer understanding of central bank actions that goes beyond what participants can find in central banks' publications. In Keating's view, this approach is productive and useful. Central banks certainly cannot, and should not try to, stop informal discussions.

If central banks become fully transparent and everything is published, is it the end of personal contacts? Keating thought that there would always be some useful piece of information to scrape from personal contacts. Such contacts, he noted, cannot be stopped. The best approach is to recognize and accept personal contacts as a positive way for a central bank to communicate its views. To conclude, Keating agreed with the Report's main thrust that policy regimes should be clearly explained to market participants.

***Martin Wolf***
**Financial Times**

Martin Wolf said that, as a journalist, he could not disagree with the statement of the Report that central banks should be more transparent. He thought that the Report explains lucidly why we should have more transparency and how far it should go.

Wolf then noted that central banking is a rather boring topic for journalists. One way around the problem, numerous central banks have found, is to occasionally offer lengthy interviews with chosen journalists. These interviews offer a great opportunity to the happy few who are selected, but it raises a delicate issue: is this form of 'insider trading' appropriate? Wolf also observed that these interviews tend to perpetuate the mystique of the great man at the helm, which seems to run against efforts by central banks to shed the mystique of secrecy.

Wolf asked: can central banks really be transparent? He reviewed the arguments as to why full transparency could be a bad thing (too much precision reduces flexibility, the central bank may be 'trapped' when details of previous actions conflict with future actions, policy could be easier if people were to believe that central banks know things the public does not) to conclude that these arguments are not strong.

Wolf then considered the broader politics of central banking. He thought that the Report should focus more on the link between the structure of the policy-making committee and the ways that decisions are taken. In particular, if decision-making is easier in some regimes, he wondered, is this by itself a good argument to have one regime rather than another?

Wolf ended with a historical perspective on central banking and mentioned that the move towards greater transparency is relatively recent. He concluded that the move towards even greater transparency is irreversible.

***Karen Johnson***
***Board of Governors of the Federal Reserve System***

Johnson agreed with the Report that there have been moves towards greater transparency in central banking, and that this is a desirable change. Recent experience has shown that the 'bad old days' fears of transparency were unfounded or do not apply any more. Yet, she was far from endorsing the conclusion that full disclosure should be the norm. In order to buttress her view that the time is not yet ripe, she developed three arguments.

First, she noted that the consistency of the message sent by the central bank depends on its audience, which is diverse since it consists of the general public, the financial markets, wage-setters and politicians. Central banks need first to develop a communication language. Currently, they tend to use very few words, often seen as coded language. When these words seem to work with the target audience they are used over and again. But then, if the words differ only a little bit from one time to another, they may be mistakenly interpreted as a policy change. Coded communication, she concluded, is not communication, but the alternatives present problems as well.

The second argument concerns anticipation of future monetary policy actions. Is it really desirable that the market fully anticipates monetary policy? Is it efficient? Central banks try as much as possible to prevent market front-running. At the same time, full anticipation of monetary policy helps to reduce the volatility of financial variables.

Third, she discussed the release of the minutes of policy committee meetings. Is the timing important? In the past, the Federal Reserve did not release minutes until after the following meeting in order to prevent people from seeing the minutes announcing future decisions. The Fed wanted to remain free to make intermediate moves and wished to lengthen the time horizon of the audience. Nowadays, the Fed still delays the release of the minutes but also indicates how the FOMC sees the balance of risks in order to provide information on the thinking that will be behind future policy decisions. This tends to lead to the return of coded talk.

Finally, Johnson examined some of the pitfalls associated with the

forecasts. Why is a central bank different from other branches of governments which publish their growth and budget forecasts? The problem, she answered, is that forecast errors make it more difficult to change views. Central banks fear becoming hostage to market sentiment. The expectation that interest rates will be changed immediately affects asset prices, and central banks do not want policy to be constrianed by changes in asset prices, even though these indicators are used in making decisions. For instance, if the Federal Reserve had released its own forecasts in 1998–9, which failed to anticipate the ongoing changes in the economy, it would have had a hard time in carrying out its subsequent monetary policy. She also took issue with Svensson's view. While acknowledging his point about New Zealand, she observed that New Zealand is a small country whose monetary policy has a small worldwide impact.

In conclusion, Johnson quoted the Report: 'The Fed could easily translate the phrase 'stable prices' into a specific target number or range, if it wanted...'. She did not agree with the word 'easily'. In her view, the Federal Reserve would not decide to adopt an inflation target range soon. This is different from saying that it should not set an explicit target for inflation, but it will not, for three simple reasons: there are disagreements within the FOMC, there could be opposition from the Congress which might see that move as an attempt to usurp their role and the public needs first to be educated, which takes time.

***General discussion***

Andrew Crockett drew attention to four ways in which central banks are not transparent. First, central banks certainly have views on exchange rates but do not communicate them. Why? Because this would be seen as signalling future interventions. Intervention is a different issue which requires separate treatment. Second, the health of the financial system is considered to be confidential information. Do the Report's arguments in favour of more transparency also apply in this context? He thought that issues surrounding the lender-of-last-resort function require a lot of creative ambiguity, if mainly to reduce moral hazard. Third, central banks do not say clearly how they include asset prices and market expectations in the making of monetary policy. He reminded the audience of President Duisenberg's statement: 'I hear but I don't listen.' Finally, he noted the importance for central banks of not becoming hostage to the market.

Benjamin Friedman thought that the Report's focus on transparency is appropriate, but he questioned the view that the move towards greater transparency constitutes a radical departure from current practice. One reason central bankers are not willing to reveal their preferences is that in recent years the economics profession has continually emphasized the need for them to appear totally committed to fighting inflation, even when in fact they have other goals. That monetary policy operates with only one instrument means that there is no logical problem in linking policy to only one target, and that can just as well be inflation. Other variables are also of interest to central banks, however, and their implied paths, if revealed,

would reflect these preferences. In his view, inflation-targeting is actually a way of making monetary policy less transparent because it suggests to the public a zero weight on output and employment.

Hans Genberg pointed out that the domain of transparency needs to be described more precisely. One aspect is to communicate the objectives with clarity, stating what the central bank can and cannot do. This is both feasible and desirable since this increases the efficiency of monetary policy. On the other hand, the central bank cannot spell out in advance its reaction to every plausible contingency, nor should it try to do so.

Paul Jenkins was concerned by transparency in the area of exchange rate policy. He noted that comments by governments often generate confusion.

David Mayes discussed some aspects of the New Zealand experience. He observed that it took three years to explain the interest targeting policy to the public, from 1994 to 1997. When the RBNZ adopted an inflation targeting strategy, it soon realized that forecasts that do not incorporate expected changes in interest rates are a source of inconsistency. He also pointed out the difficulties that arise when the central bank and the government issue competing forecasts.

Jan Qvigstad asked whether central banks can become too introspective. He emphasized the importance of carefully listening to social groups and thought that the Report should look into two-way communication. He also thought that Svensson underestimated the difficulty for a central bank to make forecasts based on the future path of interest rates. He wondered whether market forward rates could help in that respect, but was concerned that markets could often be wrong.

Alexander Swoboda found creative ambiguity hard to defend and found it more useful to think in terms of believable ambiguity. He asked how explicit monetary authorities should be regarding their reaction to future events, drawing a distinction between communication and transparency.

Kazuo Ueda pointed out the importance of the time horizon. Because monetary policy works through expectations and with variable time lags, inflation objectives can be achieved within two years on average, but this average conceals a great degree of variability depending on circumstances. He also noted the existence of a trade-off between price and asset price stability.

The authors briefly responded to these comments. Charles Wyplosz agreed some information is confidential, especially concerning the lender-of-last-resort function. Regarding foreign exchange market interventions, he thought that the whole issue remains controversial. Alan Blinder expressed the view that central banks should reveal their objective functions. This does not necessarily imply that they should also publish quadratic equations, but that they should be open with respect to policy discussions. He observed that the Federal Reserve's ventures into greater transparency had been quite successful so far. Charles Goodhart noted that each member of the Monetary Policy Committee has a different loss function. He also disagreed with Karen Johnson in that forecasts are consistent. Philipp Hildebrand argued that exchange rates not only raise the question of intervention, but also are inherently difficult to forecast. Announcing

forecasts, he thought, is unwise. David Lipton argued that the Federal Reserve has a relatively obscure methodology, and that central banks in general should be more transparent with their methods. On exchange rates, Lipton said that the situation differs from one country to another, especially as a function of size, making full transparency difficult.

Bruno Gehrig concluded the discussion by saying that the core mission of any central bank is to get monetary policy right. The rest, including transparency, is of secondary importance. He thought it very important that communication does not stand in the way of policy-making, in particular that it does not threaten open discussions in collegial policy committees. Next, considering the deep changes in the macroeconomic literature, maybe there should not be a rush to conclude that the bad old days were bad, after all. Regarding communications strategy, central banks should admit what they do not know, that mistakes are always possible and indeed have been made. Such humility stands to enhance, not reduce, credibility. Gehrig also noted that the importance of the legal and political environment required more emphasis.

## 2 First panel discussion: the art of communication

***Svein Gjedrem***
***Norges Bank***

Svein Gjedrem opened the discussion by distinguishing four broad questions.

First, one important area of communication concerns (in academic language) the central bank's loss function. Monetary policy mandates are often formulated in a rather general fashion, for example as 'price stability.' Central banks must therefore define and interpret their mandate more precisely. What is the relevant price index? What horizon has the central bank for achieving the objective(s)? If there are objectives other than price stability, such as output and employment stabilization, how can the central bank communicate this?

A second, but related, area of communication concerns the monetary policy reaction function. How should the central bank respond to shocks that hit the economy, in order to achieve the objectives of monetary policy? How open should central banks be about their reaction function? Again, is there a trade-off between credibility and flexibility?

A third area concerns how analyses and projections are communicated. Many central banks publish inflation reports in which they analyse the economic developments that are relevant for monetary policy. One question this raises is what type of interest rate assumption should be applied in projections. The answer to the question of which interest rate assumption is appropriate is what tends to work in practice. If the market understands the signals the central bank wants to give, its communication is successful.

The last area is the communication after a decision on the interest rate has been made. As discussed in the Report, some central banks communicate a 'bias,' which indicates the direction of future changes. As the Fed found, this is challenging task, which led the Fed to change their communications

strategy from formulations concerning the future interest rate to formulations concerning the uncertainty associated with economic developments. An important question is whether central banks should indicate future actions? If so, how should this be communicated?

***Henk Brouwer***
***De Nederlandsche Bank***

Henk Brouwer first dealt with the issue of transparency. He agreed that a lack of clarity about objectives results in harmful interest rate volatility. When a central bank is transparent, financial markets and the public at large expect it to do what it says. Is there a trade-off between credibility and flexibility? Brouwer argued that it depends on the objectives of the central bank as well as on changes in the economic environment. Too much flexibility may lead to a loss of credibility, especially if the former is not carefully explained. He noted, however, that the Bundesbank had often missed its stated targets, at no cost to credibility. What matters is to have a clear strategy, which does not prevent a central bank from retaining some flexibility. In this respect, communication is really an art!

How to respond to economic shocks? Contingent plans are useful, Brouwer said, but guiding principles are essential, and central banks should stick to them. For example, the European Central Bank has a medium-term inflation target, which means that its two pillars are not really independent objectives.

Turning to the issue of forecasts, Brouwer argued against mechanical rules. He also cautioned against basing projections on market expectations, since the use of market expectations as a basis for monetary policy decision-making may actually lead to changes in the formations of these expectations.

Finally, Brouwer said that there is little to be gained by being explicit about future policy moves and indicating any bias. In particular, the timing of future policy moves may not be fulfiled. Also, financial markets learn how to interpret statements and actions. Where market expectations differ markedly from those of the central bank, however, it is better to be explicit about how the policy makers view the environment and its implications for policy.

***Stephen Grenville***
***Reserve Bank of Australia***

Stephen Grenville started by noting that the key idea is in the word 'art' – whether a picture or a novel, art does not work on the precept that more disclosure is always best. Central banks are not trying to amuse, trick, confuse or titillate their audience, but nor should we see photo-realism as our predominant or obligatory art form. Central banks want to artfully arrange the huge amount of information. What guides this artful arrangement? Grenville argues that it depends on the characteristics of the task.

- The decision-making process is complex, not only with multiple decision-makers but also with (just as important) multiple groups excluded from the decisions, representing vested interests and often

having idiosyncratic views. It cannot be assumed that a decision – no matter how rationally arrived at or cogently presented – will be greeted by head-nodding unanimity. *Ex post* point-scoring critics await.

- There is a real possibility that full transparency affects the decision-making process itself.
- There are policy overlaps and interactions, where central bank decisions impinge on other areas, with risk to central bank independence if not sensitively handled.
- Decisions are not continuous (this is not like steering a car), but are discrete, and so communication will not, usefully, be continuous.
- There are two related characteristics which are hard to explain:
  - policy does not aim to perfectly stabilize the rate of inflation (or, for that matter, any real variable) – some cyclical movement is the norm;
  - interest rate smoothing is the norm – central banks do not immediately move the policy instrument as far as seems likely to be required when the cycle changes direction.
- There is the age-old problem of uncertainty, about unfolding events and about the model itself, which changes over time. So no one uses models mechanically, and this needs to be accurately conveyed in a world in which some commentators will be overly influenced by mechanical model read-outs.
- Communication of forecasts can alter outcomes (unlike weather forecasts). This gives us pause when, for example, our forecasts are more pessimistic than the market.
- Exact timing of an interest rate increase is critical for financial markets, but not for good policy-making. So there will always be more demand for detailed day-by-day information than can usefully be given.
- We still have the age-old 'punch bowl' problem – it is easier to raise rates than to lower them.

Grenville then considered how this modifies the presumption of 'full-frontal' transparency and what are the justifications for certain artful arrangements?

- The basic policy regime – the structure of policy – should be clear and unambiguously set out, including some notion of the loss function, the reaction function, and the 'model.'
- But it is legitimate to have a period of 'purdah' or 'black-out' before decision meetings; it is legitimate to withhold voting results if revelation of these would distort the decisions; it is legitimate to tread warily and subtly on overlaps with other policy-making areas.
- Uncertainty is a key area, and it can be argued that there are two equally legitimate ways of handling uncertainty:
  - a precise forecast with probability distribution;
  - imprecise language, conveying the uncertainty – again, like the weather forecast, where the important thing we need to know is whether to carry an umbrella, not the forecaster's best guess of the exact time the rain may start.

Responding to the Chairman's outline, Grenville next considered the case of Australia, a pioneer of detailed, real-time statements and perhaps the first to give some notion of the loss function, in the form of the time horizon over which inflation is expected to return to its target. The Reserve Bank of Australia gives quarterly inflation reports and semi-annual Parliamentary appearances. Minutes are not published, and hence no voting is published. Notwithstanding an open mind on the question of minutes, revealing detailed voting would probably not fit the type of Board that Australia has, mainly to prevent transparency from distorting the decision-making process. Grenville stressed his view that one of the most effective forms of transparency is *ex post* analysis via speeches, which review what has happened and explore reforms to the basic model. Formal econometric models do not play a prominent role in the decision-making process, but they are available even if the Bank is 'economical in its comment' about likely future movements of key variables.

Summarizing, Grenville noted that central bankers have come a long way since Montague Norman thought it was normal to travel incognito, under the pseudonym of Professor Skinner, wearing a cloak and top hat. Few central banks have complete or full-frontal transparency, but this is rather rare in public and private decision-making – no matter how vigorous the question-time in parliament, the decision-making in cabinet is private and remains confidential. In moving towards greater transparency over time, central banks should not just respond to the demands of financial markets, which are insatiable. He ascribed a higher priority to identifying and correcting *misperceptions* – i.e. the need to *listen* and respond. Grenville observed that there may be parts of the broader public who need to be brought along in their understanding and acceptance of monetary policy processes, and that these may be more important than dotting the last 'i' and crossing the last 't' on the academic framework. He stressed that one area of unhelpful misperception that may have arisen is the near omnipotence that has surrounded central banking over the last decade or so. Rather than create the image of the 'central banker as hero,' what matters is to create an impression of competence.

***Paul Jenkins***
***Bank of Canada***

Paul Jenkins focused on three broad issues. He first described the approach of the Bank of Canada to the loss and reaction functions. Second, he explained in detail its communications strategy. Finally, he listed some of the challenges to the art of communication.

Regarding the loss and reaction functions, Jenkins said that the Bank of Canada looks at alternative policy rules which can stabilize inflation around its long-term reference value. The reaction function, he argued, is embedded in the forecasts.

Turning to the communications strategy, the Bank of Canada sees inflation control as a means to an end. The target is the total CPI inflation rate and the horizon is from six to eight quarters. Stabilizing inflation

implies that output is stabilized, working in part through stable inflation expectations. While monetary policy decisions formally rest with the Governor, de facto the bank's Governing Council (Governor plus Deputy Governors) work by consensus to come to decisions. Jenkins emphasized that the communications strategy should rest on a regular dialogue which allows for a consensus-building process. The Bank of Canada publishes semi-annual reports which present the views of the Governing Council on the evolution of the economy, including forecasts for inflation, growth and the output gap. Updates are published half-way in between. Also, the Bank of Canada has recently adopted a fixed date to announce its policy decisions. eight times a year. Along with numerous speeches, this adds up to an integrated communications strategy.

In Jenkins' opinion, the trade-off between credibility and flexibility should not be overstated. While credibility can provide some leeway to central banks in responding to shocks, it should not be overplayed. Jenkins also mentioned that publishing interest-rate forecasts could lead markets to expect a central bank to commit to its projections if they do not understand the conditional nature of the forecast. This may turn out to be counter-productive if it hindered the central bank's ability to respond to shocks. One example would be the reaction to the 1997–8 Asian crisis.

Finally, Jenkins discussed some challenges to the communications strategy. He emphasized the difficulty of dealing with different audiences whose concerns do not always overlap. This is one reason why the role of the media is crucial. The Bank of Canada organizes frequent briefings for the media. It has set up a lock-up facility which allows for in-depth briefing on decisions while preserving the ability of the Bank to issue its own information first.

***Marc-Olivier Strauss-Kahn***
***Banque de France***

Marc-Olivier Strauss-Kahn started by noting that central banks' comments on policy may actually be as important as the policy itself. He then made a distinction between rule-based and discretionary monetary policy, to suggest that the communications strategy should be rule-based, but not rule-bound.

He accepted the view that central banks should be accountable in terms of both the content of policy and the reporting process. Regarding content, accountability concerns the objectives as well as the means, which is the strategy used by the central bank to fulfil its mandate. For example, the European Central Bank's goals are precise while the two pillars are used as indicators. For this reason, the ECB cannot announce a simple rule and there is no simple interpretation of the monetary process. Put differently, Strauss-Kahn argued that the ECB is clear about the content of its policy but, as other central banks, faces fairly complicated signals. Although it disposes of a sophisticated framework, its communication is made difficult by the fact that monetary policy decisions cannot always be described in too simple ways. Communication does not boil down to transparency, and clarity requires that a simple message be issued to different audiences – a thankless task.

Regarding the reporting process, Strauss-Kahn drew attention to the extent and frequency of reporting. He observed that the ECB President appears in front of the European Parliament more often than required by law. He also pointed out that the ECB is unique in its practice of real-time announcements which, in his view, compares favourably in terms of transparencies to the release of minutes, given the unavoidable delay of the latter.

Finally, Strauss-Kahn discussed how predictable central banks should be. Full predictability is desirable, but it belongs to an ideal world characterized by full information. In practice, therefore, the key to predictability must be found in the continuity and consistency of policy decisions. Central banks should surprise markets if they believe it is necessary to re-orient the markets.

***Pam Woodall***
**The Economist**

Pam Woodall argued that central bankers must be good actors. As an example, she noted that in most respects the ECB has achieved greater transparency than the Fed, but that is not what the public seems to think. The ECB's two-pillar strategy is criticized, but the Fed has not even articulated a strategy. Inflation is higher in the US than in the euro-area. The ECB is accused of misleading the markets but, just this year, the Fed has twice taken the markets by surprise. The Federal Reserve's policy function is not even known. Why then does the Federal Reserve look good while the ECB look bad? She suggested three answers.

First, it is simply fashionable to criticize the ECB. The media like to play a scenario whereby Greenspan is the hero and Duisenberg is the villain. Second, the media only look at the short-term and journalists need simple stories. We know the existence of lags in monetary policy, but a large part of the media audience does not. Third, the media are hostage to their own terminology. They commonly portray central bankers as pilots or drivers – e.g. consulting their monetary compasses, steering the economy – as if there was no uncertainty in monetary policy. As long as the US economy was growing faster, it was interpreted as an indication that the Federal Reserve's monetary policy was better. Central bankers should be aware that what matters for their image is not only the decisions that they make but also how they are perceived by the public.

***General discussion***

Robert Dugger emphasized the role of politics. For example, the Humphrey–Hawkins Act, which has played a key role in shaping the Fed's disclosure policy, is deeply political. In many respects, as a result, the Fed's credibility is in the hands of the legislature. He also observed that the degree of support for the central bank depends on the economic conditions. If investors and households are dissatisfied with the information they receive, the central bank may lose support. What makes things even more complicated is that the range of the debate about monetary policy is very wide. Moreover, the fact that technology has improved means that disclosure must be deepened. Very often there is more information available than people think.

Andrew Crockett discussed the issue of forecasts, mentioning that they should be an integral part of the communications strategy since it helps to convey the direction of monetary policy. This is why forecasts should be unconditional on future policy.

A large part of the discussion then focused on the fact that there are different audiences. Martin Wolf argued that the financial press is not representative of the popular media, especially television. He thought that the Report does not emphasise sufficiently that only a minority of the public understands the information provided by central banks. His view is that the broader public hates economists, harbours prejudices about economics and monetary policy, and is prone to personalize policy actions. Dealing with such a daunting situation requires a carefully crafted strategy. Paul Jenkins acknowledged that when the level of understanding of the general public is low, the way in which information is packaged is very important.

## 3 Second panel discussion: the future of central bank communication

***Lars Heikensten***
***Sveriges Riksbank***

Lars Heikensten started the panel discussion by spelling out four reasons why transparency is more important today than in the past:

- financial markets are more forward looking
- central bank watchers and commentators are more sophisticated
- central banks have greater independence and the general public are better informed
- the less open central banks are seen as black sheep.

Heikensten accepted the case for maximum transparency, as advocated in the Report, but noted that there are costs and limits to transparency. Among the costs he underlined first the risk that information becomes redundant. Second, he observed that transparency is no free lunch. It has to be produced, meaning that resources will have to be drawn from elsewhere, possibly even from the policy analysis department. Third, he feared that transparency could trouble the functioning of monetary committees and might lead to the reading of pre-prepared statements, a fear commonly expressed during the conference. Finally, the involvement of the media might lead to a polarization of the monetary policy board, and that would have a negative impact on the management and credibility of the institution.

Uncertainty about the objectives, reaction function, forecasts and decision-making constitute limits to transparency, especially as the trade-offs faced by the policy-maker change over time. On the other hand, being more precise about the objectives may increase the public understanding of monetary policy, an aspect that is more important for those banks that start with a low level of credibility. Regarding the specification of the reaction function, Heikensten favoured sticking to simple rules like the Taylor rule, as

a way to signal that even if its goal is inflation, the central bank is concerned by other aspects of the economy. The communications strategy should consist of explaining such rules, but making sure that outsiders know from the beginning that deviations will be needed in case of unforeseen major events. Even then, some questions will always remain about the central bank's reaction – to asset prices for example. At the same time the definition of the reaction function should take tactical considerations into account: the central bank should indicate whether it favours a radical or gradual approach to policy. Obviously there will be situations in which debate will be needed, but these cannot be defined in advance. Heikensten also addressed the issue of forecasts. In order to improve the understanding of monetary policy, he favoured simple rules directly linked to the results of the forecasts. Finally, he observed that group decision-making complicates communication because of the disagreements inherent to the process.

Heikenstein concluded that transparency and clarity constitute an effective management tool for central banks. They reinforce the concern for adequate pedagogy and provide a useful incentive.

***Thomas Hoenig***
***Federal Reserve Bank of Kansas City***

Thomas Hoenig, as a member of the FOMC, sought to convey his views on the issue of communication and transparency of policy. He stressed that the Congress of the United States has assigned multiple objectives to the FOMC in the conduct of monetary policy. These include, for example, maximum sustainable growth and employment, price stability and financial stability. There is no definition in the statute of what these objectives mean in practice, however, nor does the statute assign relative weights to their importance. Complicating matters further is the fact that the United States has a large, diversified economy, which is subject to significant regional differences. Hence, the Fed must interpret and balance its assigned objectives, which cannot be sharply separated.

Some individuals suggest that while a single policy objective might not be feasible, the FOMC might use a single economic model to represent the Committee's forecast, and that such a forecast would be useful in communicating and explaining monetary policy. While this is appealing, the difficulty is that wide differences in views can occur among FOMC members and, therefore, very often such forecasts would reflect numerous compromizes. In the end, the forecast could fail to represent any individual or the FOMC's real outlook. The result would be detrimental to the goal of transparency.

Hoenig noted that the very assignment given to the monetary authority, with its multiple objectives, calls for flexibility. The US Congress delegated to the FOMC the ability to weight the relative priority of these objectives. Indeed, its 'balance of risk' statement recognizes that depending on circumstances, the FOMC may focus more on the level of economic growth versus price stability. And within the FOMC, of course, members might have different views on the exact weights to assign at each point in the business

cycle. Thus, with differing views possible regarding the economic outlook, compromises are required in the setting of policy. For these reasons, Hoenig thought that the FOMC would not be adopting a single model to forecast its economic outlook any time soon.

Hoenig then discussed the issue of disclosure of the contents of the FOMC meetings. He acknowledged that increased transparency is a worthy goal insofar as it informs and improves policy outcomes. Indeed, the FOMC has increased its flow of information significantly over the past decade. For example, FOMC transcripts are now released to the public after five years. He did not favour immediate release of verbatim transcripts because he saw a large cost attached to such a practice. In such an instance, the discussion within the meeting would be stifled as members' statements and declarations would be increasingly scripted in anticipation of immediate release and the potential for political 'fallout' from the their remarks. Moreover, the dialogue of the meeting would be reduced and the benefit from the 'give and take' of the meeting could be lost. The result would be worse, not better policy. Still, he agreed that the prepared minutes currently released to the public approximately six weeks after each FOMC meeting might be improved, and that comprehensive explanations of the decisions should be a goal in preparing the minutes.

***Jens Thomsen***
***Danmarks Nationalbank***

Jens Thomsen said that the debate during the recent Danish referendum had made it clear that the general knowledge of monetary policy is limited. Against this background it was important to discuss the communication from central banks to different segments of the population. He thought that many of the documents released by central banks were very complex. Traditionally, communication had been addressed to a very narrow community and the general public had very little knowledge about central banking. He saw the need for information of a better quality and quantity. The role of the media was essential for the transmission of the message of the monetary authorities. Thomsen expressed concern about the risk that the media might blur the image of the central bank when they formulate judgements. Monetary policy action could only be evaluated over a relatively long time horizon, but then the press loses interest.

He finally stressed that inflation targeting and exchange rate targeting required different information policies; one size does not fit all.

Another important question was the central bank's range of communication. For the central bank to maintain its authority in its core area, it should be careful not to try to be an expert on all economic questions. In many areas competent analysis is available from many sources.

***Kazuo Ueda***
***Bank of Japan***

Kazuo Ueda first described monetary policy in an ideal world. In this world, central banks have put together data, interpreted the economic situation

and worked out a policy framework complete with clear long-term goals. The markets have their own data (asset prices and short-term interest rates) and know the behaviour of the central bank well. The former carries out routine work, possibly with a big research department. The central bank sets the interest rate, possibly with full anticipation by market participants. The resulting situation is well described by game theory and its outcome is well understood. In such a world, society delegates monetary policy to the central bank on the basis of expertise and the expectation of monetary stability. Japan came close to this ideal world in the recent period in which interest rates were set at zero.

But, away from this ideal world, matters become more complicated. To start with, the information available to central banks and markets differ. The monetary policy committee may be riven by disagreements on both the aim of monetary policy and the model of the economy. Moreover, no central bank can foresee all contingencies and describe its responses in advance. In such a situation, it is no longer always optimal for the central bank to reveal all its information. Multiple equilibria become possible and might even have self-fulfiling features. For instance, in 1998 the Bank of Japan knew that many financial institutions had trouble raising funds. The situation would clearly have worsened had the Bank disclosed its information. It could even be that the central bank will not achieve its aims as long as it does exactly what it should do. For these reasons, Ueda was not convinced by the case for full disclosure.

***General Discussion***

Lars Svensson defended the publication of forecasts. Publishing forecasts is efficient because it allows scrutiny and discussion of the policy impact without having to wait the necessary two to three years to see the *ex post* impact. Also, *ex post*, targets will be missed for a variety of reasons, including bad luck with unanticipated shocks that occur during the lag between policy decision and realized impact. To truly evaluate the decisions of the central bank and to distinguish luck from skill, it is necessary to know its forecasts and the information available at the time of the decision.

Bernhard Winkler argued that transparency is a good thing, but wondered what transparency really is. He observed that at least four definitions had been given during the talks: 1) full disclosure of information, 2) clarity, meaning finding simple ways to understand information, 3) consistency; i.e. how what is said and what is done are related, 4) predictability. In addition to the debate over what constitutes information, there remains the question of how it is interpreted.

Lucas Papademos observed that there is general agreement on the need for a high degree of transparency and the fact that credible communication is important to enhance monetary policy effectiveness through expectations for interest rates, the exchange rate and wage setting. He also recorded the consensus view that full disclosure is not an optimal strategy especially regarding methodology, forecasts and decision-making. This is due to the inherent complexity of monetary policy, to a high level of uncertainty and to

practical difficulties in making forecasts. In addition, forecasts themselves can affect the outcome. Finally, he reported being unconvinced by the Report's critical assessment of the ECB's two-pillar strategy. The Report hardly mentions the second pillar when there should be no question about its importance. It describes the first pillar as both confusing and ineffective, but the first pillar is not an intermediate objective, it is an estimated indicator, crucial for medium term strategy. It gives a reference value. There is uncertainty on other indicators and variables such as the NAIRU, the exchange rate and inflation. More emphasis should be put on money, credit and inflation.

David Mayes made three points. First, central banks differ sufficiently from each other in tasks and approach to make it hard to apply a single paradigm. In addition, they face different constituencies. In New Zealand, the central bank tried to reach all components of society and to ra public awareness. Second, the Geneva Report only focuses on active communication. There is also passive communication, however, for example through the web sites of central banks. Third, the agenda of central banks has changed considerably in recent years, helping to explain their changes in approach.

Jan Qvigstad built on a previous comment from Pam Woodall about the fact that independent central banks have not really been tested by major recessions so far. The desire for independent central banks rests on the desire and commitment to stable prices. Will that still be the case, even during a major recession?

Cédric Dupont reminded the audience that the goal of transparency is to get rid of asymmetric information. It should be remembered that central banks are also political institutions. In such a setting, full information is never the best strategy, randomization is.

Andrew Crockett concluded the conference by emphasizing the progress achieved through the discussions. In particular, there was a general agreement that transparency is desirable and that central banks should not step back. There were still disagreements on the optimal degree of transparency, however.

# Endnotes

1 We switch to the term 'authorities,' rather than 'central bank,' here because, in most countries, the Treasury or Ministry of Finance controls exchange rate policy.
2 Of course, some critics would argue that sterilized forex operations are bound to fail anyway.
3 We do not mean to preclude the usual delay of an hour or two to prepare a statement, hold a press conference, or whatever.
4 Practice varies on whether a 'no change' is considered a decision which requires a statement. The Bank of England usually does not, but the Fed (since 2000) does.
5 The discussion raises many of the *pros* and *cons* of collegial versus individualistic committees. But is not our place to comment on the merits of either system.
6 This is one way of interpreting recent evidence on the role of expectations and policy rules, see Gali and Gertler (1999) and Gali, Gertler and Lopez-Salido (2000).
7 It has been recently suggested that monetary policy may have worked more quickly, for example, in bringing about the rapid recovery from the collapse of confidence in the autumn of 1998. But we are not aware of any well-attested econometric evidence to that effect.
8 These conclusions are reached by Faust and Svensson (2000a, 2000b) and Geraats (2001).
9 In fact, the inflation bias is turned on its head by Rogoff (1985) who shows that a central banker who is more conservative than the public opinion will act as a fully credible central banker. Vickers (1986) further shows that central bankers who harbour an inflation bias will elect to act conservatively – as if they had no such bias – for fear of losing credibility.
10 Taylor (1993) has shown that the Fed's behaviour is well explained by a simple rule which aims at stabilizing both inflation and output. Clarida, Gali and Gertler (1998) find the same evidence in the case of the Bundesbank.
11 This assumption, initially made by Kydland and Prescott (1977), and popularized by Barro and Gordon (1983), has become the workhorse of much of the macroeconomic literature which rarely questions its empirical relevance.
12 Cukierman (2000).
13 Jensen (2000)
14 Goodhart does not conclude that the Bank of England acted more wisely than the Fed. His conjecture is that it 'had to respond to larger shocks, more regime changes and perhaps worse policy errors' (p.242).
15 We do not consider here situations of acute monetary disequilibria (high inflation, exchange rate crises, etc.) when monetary policy is at centre stage of everyday life.
16 See, e.g. Alesina, Cohen and Roubini (1992) and Fair (1996).
17 Here we ignore the role of central banks as regulators and supervisors, for two reasons. First, not all central banks are in charge of regulation and/or supervision.

Second, the kind of communication involved in this activity is private and largely unrelated to monetary policy.

18 Dollarization (or euro-ization) is an even more extreme example.

19 As noted in Chapter 1, this report is mainly geared to, say, OECD central banks, although we believe the principles apply more broadly. Exchange-rate pegging, in one form or the other, is more common in developing nations.

20 Einstein allegedly said, ' Everything should be made as simple as possible, but not more so.'

21 See, for example, Bernanke et al. (1999).

22 The policy changes announced by the Bank of Japan in March 2001 in some sense commit it to an inflation target of at least zero. How that will work out in practice remains to be seen.

23 See, for example, Svensson (1997).

24 See Buiter (1999), Begg et al. (1998), Favero et al. (2000).

25 The issues of whether to reveal short-run objectives and whether to reveal forecasts, though conceptually distinct, are closely entwined in practice. We deal with forecasts below.

26 For extensive discussion of the academic perspective on commitment, and many references, see Clarida, Gali, and Gertler (1999).

27 This fact is evident from perusal of the verbatim transcripts, which are now available through 1995. The 'Greenbook,' named for the colour of its cover, is a lengthy explanation and defence of the staff's detailed forecast for the next 5–8 quarters, which is prepared prior to each FOMC meeting.

28 This is, of course, published four times a year – but note that the Monetary Policy Committee (MPC) makes decisions 12 times a year.

29 When it is at full strength, the FOMC has 19 members, seven of whom – the entire Board of Governors in Washington – are appointed by the President of the United States. The other 12 – the presidents of the Federal Reserve district banks – are appointed by their respective boards of directors, subject to approval by the Board of Governors.

30 For the same reason, we do not believe it is a major problem for the central bank that its forecast may differ from the government's. (It *is* a *minor* problem.) Everyone knows that forecasts are educated guesses. In the United States, for example, the administration and the Congress routinely produce different forecasts.

31 Extrapolating an unchanged *real* interest rate would probably be an improvement. Long-run modelling exercises are normally done this way because holding nominal rates constant in the face of changing inflation can lead to dynamic instability.

32 For example, Martijn and Samiei (1999) criticize the Bank of England's procedures for this very reason.

33 Precisely *why* constant interest rates often seem implausible is an interesting intellectual question – in the economic jargon, why do central banks practice *interest-rate smoothing*? In general, that *policy* (not communications) question is beyond the scope of this report, but we offered some thoughts on it in Chapter 1.

34 For this reason, the Bank of England also publishes a fan chart based on the market's expectations of actual future short-term interest rates (which may differ from the bank's forecast because of a different view of policy or of exogenous events). See Goodhart (2001a) p. 21 which has a lengthy discussion of this issue.

35 In Morris and Shin's (2001) model, private agents overreact to the announcement of public information because of strategic complementarities. Their reactions are privately optimal, but socially suboptimal. In reality, we doubt that the near-hysterical reactions of market participants to bits of actual or alleged central bank news is rational in any sense.

36 See, for example, Archer (2000).
37 The Fed regularly publishes descriptions of this model and will make it available to researchers on request.
38 The ESCB's complex procedure is described in detail in *A Guide to Eurosystem Staff Macroeconomic Projection Exercises* available on the ECB's website: http://www.ecb.int/.
39 Our *maximal* recommendation is complete revelation.
40 Where implementation of the decision will be delayed for some reason, there is a clear case for maintaining secrecy for a while. But such instances must be very rare.
41 The Governing Council meets every two weeks, but the ESCB President normally holds a press conference after every other meeting.
42 Of course, at some central banks there is no recorded vote. The FOMC has a formal, recorded vote, but it is revealed only after the next meeting.
43 See Archer (2000).
44 Blinder (1998) has argued that they should. But Goodhart (2001) has argued that they cannot. The authors of this report are plainly not agreed on this point!
45 If the head of the bank makes decisions alone, there is no debate to reveal.
46 We discuss individual versus group accountability in Chapter 4.
47 A stunning example arose at the February 1994 meeting, when the Fed began raising interest rates. Chairman Alan Greenspan's recommendation to raise the federal funds rate by just 25 basis points was roundly rejected by a majority of the FOMC in the 'policy round.' But, when the final, formal vote was taken, Greenspan demanded – and got – unanimous support. The published verbatim transcript of that meeting makes fascinating reading.
48 For a representative paper, see Dominguez and Frankel (1993).
49 A perfunctory review of recent intervention efforts lends at least some support to this view.
50 There is an observable trend to reduce the role of central banks in bank supervision – the United Kingdom and Germany being prominent examples. Even in this case, however, the central bank will surely have access to confidential information from the bank supervisory agency.
51 The J.P. Morgan, 'Guide to Central Bank Watching' (March 2000) notes, (Introduction, p. 4), that 'One of the most notable developments of the past few years has been the shift of monetary policy decision-making to meetings of central bank policy boards, often loosely fashioned after the U.S. Federal Reserve's open-market committee. Twenty-nine of the 34 central banks covered in this publication have a monetary policy committee (or MPC) that sits with the explicit mandate of setting monetary (generally interest-rate) conditions.... One of the important features of this shift to policymaking by (monetary policy) committee is that it has often accompanied a move to central bank independence'; as in the case of both the Bank of Japan (1998) and the Bank of England (1997). Also see Mahadeva and Sterne (eds) (2000), *Monetary Frameworks in a Global Context*, especially Chapter 7 'Redesigning the Monetary Policy Framework: Practical Considerations'.
52 Most economists treat a committee-run monetary authority as a single agent, and there has been relatively little analysis of the effects, or pros and cons, of a shift to a committee structure. Blinder and Morgan (2000) offer experimental evidence that committee decisions may be superior to individual decisions. See also Kristen (2001) for a theoretical argument for making monetary policy decisions by committee.
53 There is a lengthy and complex history lying behind this. In 1979 the Fed was concerned that Congress and the public would not stomach an overt decision by the Fed to raise nominal interest rates sufficiently to regain low inflation and price stability. Consequently the Fed devised a monetary regime of targeting the non-

borrowed reserve base, which caused interest rates to be largely market-determined (though capped by the Fed). That regime was abandoned in 1982, having succeeded in controlling inflation but at a severe cost in terms of economic volatility. Yet the concern about the public and political consequences of being seen once again to be directly setting short-term interest rates remained. Such inhibitions were not overcome until 1994.

54 Another, different example of 'surprise' arises when the market just refuses to hear. Starting in mid-1993, Greenspan began warning that the Fed could not be expected to keep the funds rate at 3% (zero in real terms) forever. When the Fed finally raised its rate by 25 basis points in February 1994, the markets strongly reacted as if they were taken by surprise.

55 An individualistic committee is defined as one in which the main responsibility of its members is to justify and defend in public their own individual positions and judgments. In a collegial committee their main responsibility is to support, justify and defend in public the collective decision of the committee. On this scale the ESCB counts as collegial, BoE, BoJ and the Swedish Riksbank as individualistic, and FOMC as intermediate.

56 There is a further academic argument advanced by Gersbach and Hahn (2001a). In their model there are two types of MPC member, efficient and inefficient, and each knows its own type. Non-publication of votes allows the inefficient to abstain from voting without embarrassment or imperilling their chance of re-selection, thereby allowing a better chance of successful policy (than if the inefficient voted randomly). An opposite case can be made that the beginning of wisdom is the appreciation of one's own lack of accurate foresight. The 'inefficient' are often more filled with passionate intensity, while the 'efficient' are more doubtful of the correct course. But, of course, such matters can be debated forever. In an associated paper, Gersbach and Hahn (2001b), argue that publication of individual votes is desirable when differences arise over preferences. In their model, committee members have an incentive to vote according to preferences and revelation of votes can lead then to alignment of MPC and public's preferences. Also see Sibert (1999). But what if operational independence is, in effect, a commitment mechanism to allow the public to overcome its own short-run inflation bias? Might not revelation of votes allow lobbyists for quick-expansionary fixes to pressurize MPC members from their longer-term priorities? While more rigorous formal modelling is good, the range of potential assumptions and models is so wide that modelling is no more likely to resolve such issues than more general arguments.

57 In central banks where the governor has the sole responsibility for the decision, there is no need for a black-out since more junior officials would normally only speak on monetary policy issues after clearing permission from the governor.

58 While press releases can provide the gist of the key parts of speeches simultaneously to the media, some aspects of such a communication mode, e.g. Q&A, inflection, body language, imply that some people will be more informed than others. Moreover, the standard fare of such speeches is 'hints' rather than quantitative statements, such as 'I believe there to be a 30% chance of our raising interest rates at our next meeting'. Those supposedly adept at interpreting 'hints' may get some presumed informational advantage.

59 One of the concerns of any central bank, and particularly of its press officer, is to help journalists to understand and appreciate the relevant issues. There are various ways of seeking to assist the press. One of them is to give journalists time to assimilate the issues involved, for example by various forms of embargo and, in more sensitive cases, by lock-up type arrangements as undertaken by the Bank of Canada.

60 The implications for the use of skilled economic forecasters of undertaking a forecast for the euro area or United States as a whole simultaneously in twelve NCBs as well as the ECB (and equivalently in the United States) is beyond our remit.

61 Collegiality comes in different forms. One is where the committee members represent different interests or constituencies, and look to reach an overall decision that will advance the common good of the collective, rather than individual interests. The second is where the wisdom of the majority of the group is held to transcend that of the sum of its individual members. While there are some residual aspects of the first definition of collegiality in some policy committees, e.g. the FOMC, the second kind of collegiality tends to dominate, notably in the Governing Council of the ESCB.

62 A rule of thumb published by the Bank of England in its pamphlet on *The Transmission Mechanism of Monetary Policy* (1999), available on http://www.bankofengland.co.uk suggested that the maximum effect on real output of a 100 basis point increase in interest rates maintained for one year (occurring some five quarters after the hike) would be about 0.25–0.35%, and on inflation (after nine quarters) about 0.23–0.40%. The impact of a 25 basis point change will naturally be roughly one quarter of this. Cecchetti (2001) has done a similar comparative exercise for some 16 OECD countries.

63 See Orphanides (1999). If only Arthur Burns and the Fed had known what we think we know now about US conditions in the 1970s, they would surely have taken quite different decisions.

64 The Parliamentary Committees with oversight over the MPC in the United Kingdom have been pressing for more, rather than less, information on individual MPC members' positions, see for example the House of Lords Select Committee on the MPC, Report, February 13, 2001, especially Chapter 3 on 'Transparency and Operations'.

65 The Federal Reserve System was set up in a manner to provide a balance between regions (e.g. the West and the East, New York and Chicago) and interests (bankers and government). The individual Federal Reserve Banks, and their Presidents, have a function and standing that separates them from the Board members in Washington. Not surprisingly, therefore, the record shows that voting Bank Presidents have registered proportionately more dissents than have Board members (other than the Chairman). Between 1968 and 2000 Board members dissented on 5.8% of the occasions, whereas Bank Presidents dissented 8.1% of the time. We are grateful to Ellen Meade of the Financial Markets Group at LSE for the data.

66 Greenspan himself almost never speaks to journalists on the record. But he does grant off the record interviews to selected journalists.

67 The principal exception is the Bank of Japan. But the practice is new there, so no transcripts will be released for some years yet.

68 See, for example, Greider (1987).

69 Discount rate changes were and are largely symbolic because the Fed does so little lending to banks.

70 Alan Greenspan, testimony before the House Banking Committee, 25 October 1989.

71 Federal Reserve Press Release, 16 August 1994.

72 Federal Reserve Press Release, 25 March 1997.

73 See the transcript of the FOMCs 31 January to 1February 1995 meeting.

74 Members knew the proceedings were taped to enable the Fed's staff to prepare accurate minutes. But they thought the tapes were subsequently destroyed.

76 As an analogy, in its role as bank regulator, the Federal Reserve is constantly providing concrete interpretations (called 'rulemakings') of vaguely worded statutes. If it did not do so, the banks would not know what the rules really were.

76 In fact, some of the authors of this report strongly endorse the dual mandate.
77 Of course, in many meetings there is not much back-and-forth on which to report.
78 But a small part of Greenspan's success may have been due to the improved communications we discussed earlier.
79 In his history of the Bundesbank, Marsh (1992) provides an illustration of the reality of Bundesbank monetary dominance by recounting UK Chancellor of the Exchequer Norman Lamont's 'sixteen word passage on Britain's monetary policy' in his 1992 budget speech before the House of Commons in which he stated unequivocally that 'monetary policy is primarily directed at the maintenance of sterling's parity with the exchange rate mechanism.' (Norman Lamont, Speech in the House of Commons, 10 March 1992.)
80 Deutsche Bundesbank Act, 26 July 1957.
81 The Bundesbank monetary targeting strategy is the subject of extensive literature. See, e.g. Deutsche Bundesbank (1997), Friedman (1990), Issing (1995), Bernanke and Mishkin (1992).
82 See 'Monetary Policy Transparency', *Monthly Report*, Deutsche Bundesbank, March 2000: 23.
83 Interestingly, the word 'pillar' is the exact translation of the term that the Bundesbank used to refer to its own monetary policy strategy objective.
84 The first intervention was conducted in September 2000 and was coordinated with the US and Japanese authorities. Consistent with the Unites States' and Japan's own arrangements, coordination was requested by the Chairman of the Council of Ministers. Subsequent interventions were conducted in November by the ESCB alone, therefore without any traceable role played by the governments.
85 Recent institutional development in economic and monetary cooperation are discussed in *Monthly Report*, Deutsche Bundesbank, January 2001:30.
86 In fact, the ESCB is not under direct threat. In addition to the clear supremacy of the monetary objective of maintaining price stability, a resolution of the European Council of December 1997 specifies that Ecofin orientations for exchange rate policy may only be formulated in exceptional circumstances, for example in the case of significant exchange rate misalignment. The resolution reiterates that such general orientations 'should always respect the independence of the ESCB and be consistent with the primary objective of the ESCB to maintain price stability.'
87 The right conferred of the President of the Ecofin Council to attend Governing Council meetings is automatically transferred to the President of the Eurogroup if the country heading the Ecofin Council is not a member of the European Monetary Union, as was the case during the first half of 2001.
88 See, for example, the debate between Buiter (1999) and Issing (1999).
89 An area-wide model for the euro area was published in January 2001 (as ECB Working Paper No. 42).
90 *On Price Stability*, Bank of Japan, October 2000.
91 A partial, step was taken toward clarifying these two issues in the policy board decision of 19 March 2001, in which the board stated its intention to maintain an expansionary stance until inflation reached zero or positive rates. The Board has made clear, however, that this does not constitute a quantified definition of their price stability objective, but is rather meant to explain the context for the policy shift. That policy decision is described in more detail below.
92 In early 2001, it reactivated the discount window and adjusted the discount rate, but the focus remained the call rate.
93 Most notably Nigel Lawson (Chancellor 1983–9), publicly on leaving office but privately to Mrs Thatcher beforehand.

94 The major changes of monetary policy, for example the adoption of the Medium Term Financial Strategy by Chancellor Geoffrey Howe in the 1980 Budget were subject to intense public discussion.

95 *Central Banking*, 'Interview: Sir Eddie George', X1, 1 August 2000, pp. 22–32.

96 Paragraph 5 of this letter reads as follows:
'The Bank will have operational responsibility for setting short-term interest rates to achieve an inflation target which the Government will determine. This target will be confirmed in each Budget Statement. The Bank will be required to publish a quarterly Inflation Report in which it will account for its monetary policy actions, set out and justify its analysis of the economy, and explain how it intends to meet the Government's inflation target and support the Government's economic policy.'

97 The forecast is conditioned on an assumption of nominal interest rates remaining unchanged from the level chosen at the latest MPC meeting. Given the difficulty of forecasting exchange rates, the proposed exchange rate path has also, in practice, been an assumed path, not an unconditional forecast.

98 One of the common public beliefs about the politicization of interest rate decisions is that both the amount and the timing may be adjusted to serve the government's own political needs, for example an interest decrease (increase) is pushed just before (after) a politically important event – e.g. a party Conference or a by-election. In order to lessen such cynical views, in November 1993, Chancellor Ken Clarke gave the Bank sole responsibility for the choice within the subsequent month of implementing, and announcing, the change agreed at the monthly meeting. In practice, all such announcements have been immediate.

99 Until October 1998, they had been published after the subsequent MPC meeting, with a lag of about 5 or 6 weeks. Initially, before May 1997, when the relevant minutes were those for the 'Ken and Eddie show' one reason for this lag was to enable the Chancellor to consider the Governor's advice during the month until the following meeting before his decision to accept or reject the advice became publicly known. In part, this was because the Chancellor had very little notice of what the Governor's advice might be ( and could never be entirely sure until the Governor–Chancellor meeting itself) and so conceivably might have been 'put on the spot'. The lag in the publication of the minutes enabled him to reflect on the Governor's advice before accepting it, and if he did so at the following meeting then there would be no real news story of the form of a Governor–Chancellor split. Only when the Chancellor had ignored the advice for two consecutive meetings would the difference of view between them be revealed. Of course, under the new system with the MPC that argument became redundant. But besides inertia there was both the precedent of the FOMC and another argument to continue with the same time lag. This was partly because of a desire to avoid commentators concentrating on what clues the minutes gave to the next decision. The Bank for three reasons speeded this up in the United Kingdom. First, the MPC began to feel that it positively wanted financial markets to appreciate as quickly as possible how its thinking was moving; second, the lag occasionally left some members of the MPC having to defend in public – e.g. before the Treasury Select Committee (TSC) – their last known prior minuted position, which they in fact no longer held; and, third, public criticism (e.g. from the TSC) of the length of the avoidable delay.

100 The TSC does not sit in August when the Summer *Inflation Report* is published.

101 When the Bank was given operational independence in May 1997, it was also provided with a small share of the United Kingdom's foreign exchange reserves, which it could use, independently of the Treasury and the Chancellor, in support of its monetary policy and up to a limit decided by the Bank's Court.

102 Except for the European Central Bank, which was closely modelled on the prior structure of the Bundesbank.

103 Unless an explicit over-ride of the price stability target was then to be imposed by the government.

104 Obviously other countries could instead adopt a nominal target for the exchange rate. The key point was the acceptance that in the medium, and longer term, the monetary authorities could, and should, only aim for a single nominal objective.

105 Capitalism needs carrots as well as sticks. It was also initially proposed, (prior to the publication of the articles in that vein by Walsh, 1994 and 1995) that the Governor receive a bonus calibrated according to how closely the target was achieved. That proposal was eventually scuppered on presentational grounds, the NZ Treasury fearing that it might be claimed that the Governor was personally and financially benefiting from interest rate increases which would throw workers out of jobs. That objection could have been deflected by making proper use of the lags in the transmission process – i.e. any bonus to be earned by a decision-maker today should be calibrated on the inflation outcome two years hence and any bonus payment deferred to that later date. Hence an interest rate increase now would not benefit the Governor until it had had its full subsequent effect on inflation and could be shown *ex post* to have been appropriate. In any event there is no case known to us in which any pecuniary incentive scheme has been applied to the monetary authorities.

106 Inflation breached the range in 1996 and again at the end of 2000. In both cases, the Board indicated to the Minister that breaches of the target range were not in their view the result of the Governor shirking his responsibilities or being incompetent.

107 In its 1998–9 survey, the Bank of England asked if procedures existed for occasions when the target was missed, with answers scored as 100 when such procedures did exist; 50 if informal procedures existed, or 'if the CB reports instruments set in conjunction with government', see Mahadeva and Sterne, 2000; and 0 for no such procedures.

For the same countries reported in in Chapter 3, the following results are given:

| *Fed* | *Buba* | *BdeF* | *BoJ* | *BoE* | *BoC* | *Swedish Riksbank* | *RBNZ* |
|---|---|---|---|---|---|---|---|
| 100 | 0 | 0 | 50 | 100 | 100 | 100 | 100 |

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