

How should central banks communicate?

European Economics

7 January 2009

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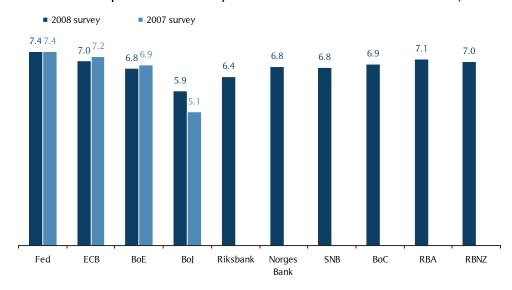
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Summary and conclusions

During the past decade, central banks have spent considerable effort seeking to have clear communication with financial markets in order to improve the effectiveness of their monetary policy operations. In our view, central banks have in general achieved a good level of understanding in this respect. In this note, we support this by reference to surveys of our counterparts which we conducted in August 2007 and August 2008, each time involving over 1000 participants from the financial markets. Our surveys found that investors rated the Federal Reserve System (Fed) as having the best communication abilities, with an average score of 7.4 in both surveys (on a scale of 1~10). Ratings for the European Central Bank (ECB) and Bank of England (BoE) were just slightly lower in the 2008 survey: the ECB rating slipped slightly from 7.2 in 2007 to 7.0 in 2008, while the BoE rating also slipped marginally, from 6.9 in 2007 to 6.8 in 2008, though such shifts could reflect some shifts in the composition of responses. Meanwhile, the Bank of Japan (BoJ) rating for communication improved significantly in our 2008 survey to 5.9, up from 5.1 in the August 2007 survey (we discuss some possible reasons for this within).

Figure 1: Overall assessment of central bank communication (August 2007 and 2008 BarCap Investor Surveys of Central Bank Communication)



Note: The 2007 survey was conducted only for the Fed, ECB, BoE and BoJ. Source: Barclays Capital Investor Surveys of Central Bank Communication (August 2007 and August 2008; excludes those responses saying "no opinion" or not giving an answer)

Our 2008 survey also invited respondents to give ratings on some other central banks for the first time. This resulted in a rating of 7.1 for the Reserve Bank of Australia (RBA), 7.0 for the Reserve Bank of New Zealand (RBNZ), 6.9 for the Bank of Canada (BoC), 6.8

for the Norges Bank and Swiss National Bank (SNB), and 6.4 for the Riksbank ¹. Concerning the current practice of central banks, we draw the following conclusions for effective central bank communication with financial market investors:

- 1) Transparency. To ensure effective communication with financial markets it is important for central banks to pursue transparency, in order that markets can understand their reaction functions. Our survey reveals that investors desire transparency to take many forms, with a statement following policy actions seen as the most important, but with minutes, statements following policy inaction and the publication of summary economic projections all receiving high levels of endorsement.
- 2) Importance of a clear central bank mandate and independence. One feature of our surveys is the relatively weaker rating that emerges for the BoJ's communication, despite the many reforms undertaken in recent years to extend its communication methods (such as conducting press conferences on the day of policy board meetings, publishing a regular monthly report, economic projections and minutes). Based in part upon the comments made by respondents to our survey, it appears that this is partly due to the perception that the BoJ does not operate fully independently from the Japanese government. In turn, in our view, this perception complicates investors' understanding of its objectives and reaction function, and hence their perception of its communication. Related to this, we note that it was not until March 2006 that the BoJ's policy board indicated a numerical range for its understanding of medium to longer-term price stability in terms of the CPI ("an approximate range of between zero and two percent").
- 3) Timeliness of communication. Timeliness is at a premium in order to reduce noise and to ensure that financial markets can understand central bank reaction functions based on the information in hand. In this context, we consider timely central bank communications, published soon after policy meetings, to be clearly helpful. In our view, this is true even if there is no change in the policy rate, since otherwise there can be considerable speculation about what the minutes will reveal. We note here that the FOMC moved (in 2000) to issue a statement after every meeting, whereas the BoJ MPB decided likewise (in July 2008). As well, we believe press conferences which relate directly to the monetary policy decision and which are held soon after policy meetings can be helpful, permitting questions to be raised and answered in a transparent way (our survey suggests that investors from regions that use central bank press conferences which discuss monetary policy deliberations, such as Japan and mainland Europe, tend to rate these somewhat more highly than investors based in North America and the UK).
- 4) Forward-looking language. In our view, conditional forward-looking language can help financial markets to better understand central bank reaction functions. However, we consider that simple "code words", which refer to envisaged future action on the policy rate at the next policy meeting, are generally too blunt a tool to be of much benefit. In our view, central banks should not fool themselves that they are "well understood" by financial markets simply because market pricing does not move on the day of a rate change, if that decision to change rates has been strongly signalled one or more months earlier. Indeed, we argue that, by signalling that a future rate change is envisaged at a subsequent meeting, central banks run the risk of diluting the impact this change will have on the expectations of economic agents across the wider economy (since the action will, in our view, tend to be communicated more vividly and broadly through the media, if the action of changing the key policy rate is accompanied simultaneously with the "new

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¹ We caution here that the proportion of respondents declining to express an opinion on central banks other than the Fed, ECB, BoE and BoJ was much larger – see Appendix 2 for more details

- news" of the explanation of why this is happening). This said, we note that respondents to our surveys conveyed a strong wish for central banks to give some indication about what they expected for the future direction of the policy rate: in our 2007 survey, 62% of the respondents said that they felt central banks should always or as a general rule communicate the policy action which they envisaged at the subsequent policy meeting, while in our 2008 survey only 14% of respondents felt that central banks should not give any information about their expectation for their policy rate.
- 5) Publication of "own" interest rate path in the medium/longer term. We consider that there are considerable difficulties inherent in the publication by a central bank of its central scenario for its policy rate in the medium to longer term. In our view, there is a danger that such a publication could be taken as a commitment, and it could undermine the openness of the discussion by a policy board at the policy meeting. As well, we are not aware of any evidence that central banks have a superior record at forecasting macroeconomic variables, and therefore policy rates, than the financial markets. In our 2008 survey, only 10% of respondents wished to see a baseline expectation for the key policy rate published by the central bank for the next 24 months, but 26% felt a profile of up to three months should be provided, and a further 31% felt a profile of up to twelve months should be provided.
- Publication of economic projections. This is an area in which there has been significant expansion by central banks. In order for the reaction function of policy committees to be well understood by financial markets, it is, in our view, helpful that the projections for economic activity and inflation of those committees are published on a regular (quarterly) basis. In this context, we welcome the initiative by the Federal Open Market Committee (FOMC) to increase the frequency of publication and content within its members' economic projections (announced in November 2007). In particular, we welcome the decision by the FOMC since then to publish its members' economic projections up to a three-year horizon: we encourage all central banks to undertake this. As well, we believe it is preferable, in the interests of helping markets to understand better the current perspectives and reaction functions of policy committees, for the projections to represent the view(s) of the committee (as is the case of the FOMC and BoJ MPB and BoE MPC), rather than of the central bank's staff (as is the case for the ECB's Governing Council). While it can be cumbersome for a committee to express such views as a range and to signal the "central tendency", in our view, it is superior to having the staff seek to represent a committee's view. Our 2008 survey found that a majority of investors wished to see the economic projections of monetary policy committees (with 46% wanting to see, and another 14% wishing to see both this and staff projections; in contrast, 28% wished to see central bank "staff" economic projections published with a risk assessment around these delivered by the policy committee).
- 7) Achieving consensus vs. practising "one member, one vote". In our view, it can be difficult for central bank committees to achieve a good balance on this issue. We note that committees which operate a system of "one member, one vote" in a pure form, with little attempt to formulate consensus (such as the BoE's MPC), need to undertake a more detailed level of communication, including furnishing observers with a robust understanding of the committee's reaction function, than is the case for a central bank which tends to communicate a predominantly consensus-based perspective. In our view, all members of policy committees who operate within a "pure" form of "one member, one vote" should engage in frequent communication via speeches and interviews, such that financial markets can understand their individual reaction functions. However, it should be noted that such frequent communication of diverse views can undermine the institution's ability to

communicate clearly to economic agents more generally across the economy, and potentially could even undermine the institution's authority (for example, by generating the impression that the institution was disunited). There is also the danger that the markets themselves might not correctly understand committee members' reaction functions, or that they may place too much weight on the views of particular policy committee members (particularly since those with minority views may get comparatively more attention in the media relative to their influence on the committee). That said, committees that adopt a consensus position may find it difficult to maintain unity. Consideration of the relative weight to place on the degree of consensus adopted will necessarily be a function of the political/cultural perspective and, especially, the size of the committee. In particular, we consider that the maximum size for a monetary policy committee which adopts a principle of "one member, one vote" in a pure form to be probably only about five members. This is because to formulate a sound understanding of the central bank's reaction function requires financial markets to have a good understanding of each member's own reaction function. This alone implies that each member needs to be prepared to communicate adequately through speeches and interviews, and for their views to be published in terms not just of votes but also their economic projections. If a committee has more than five members, we think it will not be possible for most specialist observers to obtain a good understanding of the individual reaction function of each committee member, given the ensuing volume (and potential cacophony) of communication. In this respect, we can contrast the fact that market participants appear to find it much easier to predict moves by the three-member SNB than the nine-member BoE MPC. Note here that the FOMC, with substantially more members, generally aspires where possible to achieve consensus, with formal dissents comparatively rare in its votes.

Finally, while our survey has suggested that in general the major central banks are well understood by financial markets, we also note that it is less clear how well central banks are understood by economic agents more widely across the economy. This issue was largely outside the scope of our survey, although the responses by participants to one question, where we asked how well financial market participants considered central banks' objectives and reaction functions were understood more by economic agents more broadly (ie, wage and price setters), suggest that our survey respondents tend to share this concern. Particularly in the current uncertain environment, it is vital that objectives and effectiveness of central banks, in maintaining low and stable expectations of inflation, are well understood by price-setters across the economy. This is likely to remain a major challenge for central banks during the next decade.

Key issues for central bank communication²

In this article we analyse communication by central banks, chiefly with respect to the Federal Reserve System (Fed), the Eurosystem/European Central Bank (ECB) and the Bank of England (BoE). We combine our own perspectives on key principles for effective communication with the findings of two surveys of international financial investors we conducted: the first was during 1-24 August, 2007 (and had 1183 responses) and the second during 19 August-10 September, 2008 (with 1165 responses). Survey respondents were those on our economics mailing lists (please see Appendices for more information).

Why do central banks communicate?

There are sound political and economic reasons why central banks have sought to ensure best practice for communication with the public. Central banks that are in some way independent of government face the issue of political legitimacy. Communication can be seen as a way of enhancing accountability, and therefore of maintaining political support for the institutional set-up. If the general public does not understand the role of the central bank and its policy remit, there is a heightened risk that it will be pressured into acts that are sub-optimal from a monetary policy perspective, or even that its powers will be sequestrated by the government. In particular, in periods of monetary policy tightening, there are always likely to be people who ask why the central bank is targeting inflation when this is so low by historical standards (for example, this came to the fore in the previous French presidential elections³).

There is general agreement among the major central banks that the predominant economic motivation for communication is to establish and maintain the credibility of the regime and so to anchor inflation expectations. Because inflation expectations may ultimately be self-fulfilling, anchoring inflation expectations at the target rate is thought to be necessary for inflation stabilisation in the long run. In addition, it is also widely held that a credible regime benefits from an improved short-run trade-off between growth and inflation: shocks to output have lower inflationary consequences, and so require less of a policy response than in a regime that suffers from a lack of credibility. Another potential benefit of effective communication is to reduce uncertainty. This is often cited as the main motivation for communication with financial markets, where unnecessary uncertainty can elevate risk premia.

The importance of consistency and clarity

Effective communication by central banks requires that certain key principles be observed. Consistency is a vital ingredient: central banks need to demonstrate consistency in their analysis and in their communication. As well, to be at its most effective, the monetary regime needs to be consistent over time – in particular, this includes ensuring consistency in terms of independence.

Clarity is also vital. Central banks have but one policy instrument and so they need to be clear about what exactly they are targeting with it. Consistency and clarity of purpose should over time yield predictability. Central banks are going to be most effective if they are predictable: as BoE Governor King famously remarked, monetary policy should be "boring". Predictability reduces inefficient noise in the financial markets and elsewhere, leading to lower risk premia; it also helps to anchor inflation expectations.

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² This article originated from a speech given by Julian Callow to the conference, "The ECB and Its Watchers IX", held in Frankfurt on 7 September, 2007, and organised by the Centre for Financial Studies, Frankfurt.

³ Please see: What can France do about the ECB and the euro?

As ECB President Trichet is fond of pointing out, this is the best contribution monetary policy can make to long-term economic growth.

Transparency requires consistency

Predictability can be enhanced if central banks pursue transparency – by providing information about their analysis, their models and their deliberations – though only if this embraces consistency. If we have transparency without consistency then predictability can be undermined. For example, taking into account some of the responses to our surveys, it might be said that while the BoE's Monetary Policy Committee (MPC) is regarded as relatively transparent; nonetheless, it is sometimes considered as more likely to make surprise decisions than the FOMC or the ECB. There appear to be some similar concerns from participants in the Swedish money markets concerning the Riksbank. In part, such perceptions could have developed because the reaction functions of the MPC and Riksbank Board may be perceived to have shifted over time as the composition of these two committees has changed.

Above all, consistency, clarity, predictability and transparency should all help to reinforce accountability and legitimacy.

Institutional reasons for divergences in communication

Nonetheless, when it comes to applying these principles to communication there are bound to be differences of approach. This is because central banks vary considerably in terms of their statutes, their size, the political framework within which they operate, the heterogeneity of the regions for which they are responsible, the number of languages in which they communicate, and so on.

Figure 2: Voting and dissent on monetary policy decisions (H1 1997- H1 2007)

	Bank of England	Federal Reserve	Riksbank	Bank of Japan
Frequency of meetings	Monthly	Usually 8 per year	7-9 per year*	14-19 per year
Number of meetings in sample	120	85	77	148
Average number of voters	8.7	10.8	5.8	9
Average number of dissenters	1.3	0.3	0.4	1.0
Proportion of meetings with at least one dissenter (%)	65	24	32	58
Proportion of meetings where at least ¼ of voters dissented (%)	18	0	9	5

Note: The end point of the sample shown here is April 2007, whereas the starting point varies as follows: BoE: May 1997; FRS: February 1997; Riksbank: January 1999; BoJ: April 1998.

For example, the MPC is required by statute to adopt formal votes rather than reach a consensus. This structure is underpinned by a belief that a committee of independent voters, whose votes are subject to public scrutiny, will tend to make "better" decisions than a consensus-seeking body. As Governor King explained in 1998, "There can be no hiding behind the coat-tails of the chairman, nor disowning a decision subsequently by claiming to have argued against a position adopted by consensus. Transparency should improve both the quality of decisions and the accountability of Committee members."

In contrast, the Governing Council of the Eurosystem ⁴ reaches decisions by the consensus principle. This reflects the particular nature of European monetary union: the large number of countries involved, diverging national perspectives that had existed historically towards monetary policy, the different languages, and the concern to avoid

^{*}There were 19 meetings in 1999, following the granting of independence to the Riksbank in January 1999. In 2008, the annual frequency of policy meetings was lowered from 7-9 to 6.

Source: "The MPC Ten Years On", lecture by Mervyn King

⁴ The Eurosystem is the term to refer to the national central banks within the euro area plus the European Central Bank; the "ECB" is often referred to as shorthand for the Eurosystem

political pressure. However, a strong focus on achieving consensus can itself limit the scope for transparency (such as by limiting the desire to publish minutes), and this in turn could limit the Eurosystem's predictability. Moreover, precisely what "consensus" means has rarely been formally defined by officials⁵. At the margin, a strong focus on achieving consensus could mean that policy decisions become less "activist".

Like the Eurosystem, the Federal Reserve System also represents a large and diverse economic area, though it places less stress on achieving consensus and publishes minutes in which dissenting views are recorded. This more open stance of the Fed appears to have developed primarily as a result of legislative pressure, though during the past couple of decades it has also increasingly recognised the importance of being well understood by financial markets to enhance the effective implementation of its monetary policy⁶.

That said, there are normally very few dissenters from the Fed Chairman's view (Figure 2), in sharp contrast to the BoE. It seems to be an unwritten rule that no more than two voting members of the FOMC might challenge the Chairman in a vote, amid concern that any more would undermine the Fed's external reputation. Meanwhile, it is unsurprising that central banks which represent small relatively homogenous economies, and which have a small policy board, such as the Swiss National Bank or Norges Bank, are able to achieve a high level of consensus more easily. In turn, this can assist their predictability and ability to speak with a consistent message and so, in theory, anchor expectations more easily.

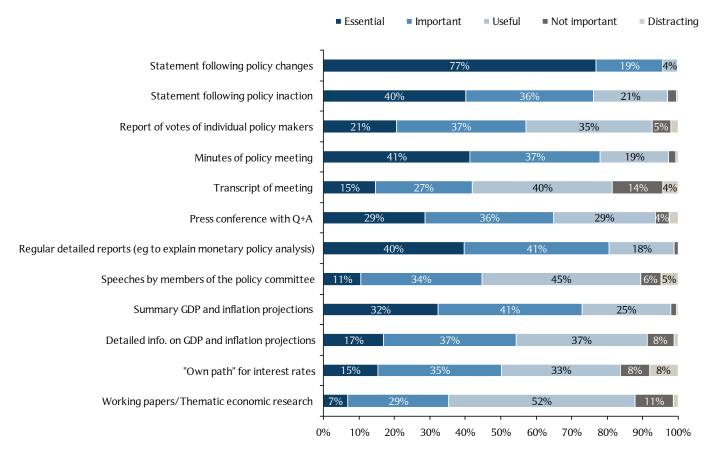
The role of statements, press conferences, minutes by central banks

Central banks have put considerable attention into developing clear communication by means of statements, press conferences and in some cases the publication of minutes. Our surveys found a very strong desire for central banks to publish a statement immediately following a policy change: in our 2008 survey, 77% felt this was "essential" and 19% felt it was "important" (Figure 3). Even if there were no change in the policy rate, 40% of respondents still felt it was "essential" to publish a statement, with another 36% saying this was "important". Similar responses came in our 2007 survey, from which we note also that the distribution of votes from respondents across different regions and from different institutions was quite uniform for this question (Figure 5).

⁵ In his book, "The Birth of the Euro", former ECB board member O Issing comments, "Consensus as practised by the Governing Council means, formally speaking, no more and no less than that at the end of the discussion, in which each member has been able to express his or her opinion and thus the preferences for the policy decision to be taken are all clearly on the table, the chair person formulates the group "will" as a decision by the Governing Council"...."Consensus also means that one or more members who at the time would have preferred a different decision [...] are able to live with the "consensus", that is, they acknowledge the weight of the arguments in favour of the decision"... CUP (2008)

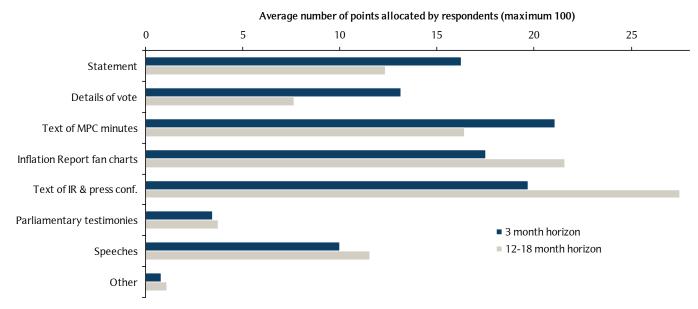
⁶ Since the Banking Act of 1935, the FOMC has been required to make publicly available reports of its meetings6. Under the Federal Reserve Act, these reports needed to be published only annually, though in 1967, given the pending effective date of the Freedom of Information Act, the FOMC announced that it would release its Record of Policy Actions about 90 days after each meeting, along with the "Minutes of Actions." This was revised to a 45-day delay in 1975, under public pressure for more timely information, and then to just over 30 days in 1976. Following further Congressional interest in the FOMC's information disclosure, in 1993 the FOMC also agreed to publish transcripts of FOMC meetings with a five-year lag. However, subsequent enhancements to communication have tended to result from the FOMC's desire to communicate more effectively. For example, in January 2000 the FOMC announced that it would issue a statement immediately after every FOMC meeting (its previous procedure was to release a statement only in the event of a policy action or a major shift in its view about prospective developments). As well, it then introduced new language to describe the FOMC's consensus about the balance of risks around its objectives. Then in December 2004, the FOMC opted to publish its minutes with a lag of three weeks after each meeting (compared with a lag of five to seven weeks on the previous schedule) – this decision was made explicitly in order to help markets to predict better the future course of interest rates, and to provide a more up-to-date context for public remarks by policymakers.

Figure 3: Key "wish list" for communication: Barclays Capital Investor Survey In your opinion, how important is it for central banks to publish the following?



Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008, excludes "no opinions")

Figure 4: Key "wish list" for communication – UK Society of Business Economists' Survey¹



Note: 1) One respondent to question 5A and two to 5B answered "Don't know", which have been excluded here; – "IR" is Inflation Report. Source: Society of Business Economists survey (March, 2007) in association with the Bank of England (question 5A and 5B)

To put this context, as noted above, since 2000, the FOMC has published statements immediately after all of its meetings – a practice the BoJ adopted in July 2008. Meanwhile, the ECB has published an Introductory Statement to each of its monthly press conferences. However, the Bank of England's MPC generally issues a statement only if it has changed the policy rate (though, on occasion, they have issued a statement without changing the policy rate).

The next most-favoured modes of communication by central banks from our survey were the publication of regular detailed reports (such as to explain monetary policy analysis) and of minutes. In our 2008 survey, the publication of regular detailed reports was regarded as "essential" by 40% of respondents, and as "important" by 41%. Similarly, the publication of minutes, rated as "essential" by 41% and as "important" by 37%. The publication of summary GDP and inflation projections was also highly rated: 32% of respondents regarded this as "essential" and 41% as "important". For comparative purposes, in Figure 4 we show the results of a survey into preferences among economists for modes of communication by the Bank of England, as conducted among members of the UK's Society of Business Economists (March 2007)⁷. In this there is a roughly similar ranking of preferences.

We note from the regional analysis of our survey responses that there is some tendency for respondents to express preferences in accordance with the preferred modes of communication of the central bank in their region – ie, in accordance with procedures and arguments with which they are most familiar. In particular, this can be seen in the responses to having a press conference to communicate monetary policy: if we compare responses across the regions in which respondents were based, this mode of communication has the second-highest variance in our survey (second only to publishing a transcript).

⁷ Published in the Bank of England's Quarterly Bulletin, February 2008.

Figure 5: BarCap Investor Survey: relative importance of communication channels (2007 survey)

	Total	Pe	riod		F	Region of r	esponde	ent:	
Mean score*		1-12 Aug.	13-24 Aug.	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Statement following policy changes	4.7	4.7	4.7	4.7	4.7	4.8	4.7	4.6	4.8
Regular detailed reports explaining monetary policy analysis	4.1	4.1	4.1	3.9	4.1	4.2	4.3	4.1	4.3
Minutes of policy meeting	4.1	4.1	4.1	4.2	3.9	4.4	4.2	4.2	4.2
Statement following policy inaction	4.1	4.1	4.1	4.3	4.1	4.1	3.8	4.2	4.3
Summary GDP and inflation projections	4.1	4.0	4.1	4.0	4.0	3.9	4.0	4.2	4.3
Detailed information for components of GDP & inflation projections	3.6	3.6	3.7	3.8	3.5	3.5	3.6	3.8	3.9
Press conference with Q+A	3.6	3.6	3.6	3.7	3.7	3.9	3.5	3.3	3.7
Report of votes of individual policy makers	3.5	3.6	3.7	3.8	3.4	3.8	3.6	3.6	3.4
Working papers/Thematic economic research	3.3	3.3	3.4	3.2	3.3	3.4	3.3	3.4	3.5
Transcript of meeting	3.3	3.3	3.3	3.6	3.2	3.5	3.1	3.6	3.4

Trunseript of meeting			5.5	5.5	5.5	5.5	5.2	5.5	J	5.0	5.1
				Туре	of organisat	ion respond	lent works	s for:			
Mean score*	"long- only" asset manager	central bank	private sector bank	hedge fund	non- financial firm - treasury/ finance	non- financial firm - other	press/ media	academic	consul- tantcy	other public sector	Other
Statement following policy changes	4.7	4.8	4.7	4.5	4.6	4.7	4.9	4.6	5.0	4.8	4.6
Regular detailed reports explaining monetary policy analysis	4.1	4.3	4.0	4.2	4.2	4.2	4.4	4.6	4.4	4.2	4.1
Minutes of policy meeting	4.1	4.1	4.2	4.1	3.8	4.0	4.1	3.6	4.4	3.9	4.0
Statement foll- owing policy inaction	4.1	4.4	4.1	3.9	4.1	4.1	4.3	4.4	4.6	4.2	3.9
Summary GDP & inflation projections	4.0	4.1	4.1	4.0	4.2	4.1	4.2	4.2	4.4	4.3	4.0
Detailed inform- ation for compon- ents of GDP & infl- ation projections	3.5	3.7	3.7	3.7	3.8	3.7	3.7	3.0	3.9	3.8	3.6
Press conference with Q+A	3.5	3.9	3.7	3.3	3.7	3.5	3.9	3.2	3.4	3.8	3.5
Report of votes of individual policy makers	3.4	3.5	3.5	3.5	3.5	3.5	3.8	3.4	3.9	3.5	3.4
Working papers/thematic economic research	3.4	3.7	3.2	3.4	3.1	3.3	3.5	3.0	3.1	3.4	3.3
Transcript of meeting	3.3	3.0	3.4	3.4	3.2	3.2	3.4	2.6	3.5	3.2	3.2

^{*}The original responses were of the form, "Essential", "Important", "Useful", Not-important", "Distracting"; numerical values were assigned, such that "Essential" = 5, "Important" = 4, "Distracting" = 1, etc.

^{**} responses have been split into those received during 1-12 August and those received during 13-24 August Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007).

■ Essential Useful Important ■ Not important Distracting □ No opinion/answer Asia ex Japan 34% 18% 31% Europe ex UK 23% Japan 53% 31% 15% UK 48% 14% North America 43% 22% ROW 52% 30% 17%

Figure 6: How important is it for central banks to publish minutes? (Responses by respondent's region, August 2008 survey)

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

Overall, a press conference with Q&A was considered by respondents in our 2007 survey to be "essential" by 22% and "important" by 34%, though a further 32% considered it "useful" and only 6% considered it "distracting" (the remaining 6% represented respondents expressing no opinion). In our 2008 survey, however, the proportion viewing press conference with Q&A to be "essential" had risen to 29%, while those assessing this to be "important" had risen to 36%, with 29% considering this "useful" and only 4% considering it "distracting".

Meanwhile, our surveys found that respondents from regions for which central banks routinely used press conferences with Q&A tended to find this communications channel to be of more use, suggesting that familiarity with press conferences enhanced the value derived from them. For example, in our 2007 survey, respondents based in Europe ex UK, who have been familiar with the ECB's monthly press conferences for nine years, expressed a stronger preference for this channel – in our 2008 survey, 35% of investors based in Europe ex UK rating press conferences with Q&A to be "essential" and 37% rated this channel as "important", rather more – 25% of these considered them "essential" and 38% "important".

Similarly, also in our 2008 survey, 36% of investors based in Japan rated press conference with Q&A as "essential" and 39% rated this as "important". In contrast, investors based in the US – who are unfamiliar with the channel of press conference as a communications vehicle by the FOMC – considered press conferences with Q&A to be less relevant: only 18% said "essential" and 30% said "important". As well, in the UK, where the BoE's MPC tends to rely at least as much on the monthly publication of minutes as on the quarterly Inflation Report press conferences as a communication channel, the proportion of respondents rating press conferences as "essential" was 21%, with 34% saying "important". Similarly, investors from Asia ex Japan gave somewhat lower ratings: 19% saying "essential" though 46% saying "important", and of investors from the rest of the world, 24% rated press conferences "essential" and 31% rated them "important". These regional differences are clearly apparent in Figure 7).

Essential Important Useful ■ Not important Distracting □ No opinion/answer Asia ex Japan 19% Europe ex UK 35% 37% 21% Japan 36% 21% UK 3% 4% North America 18% ROW 23% 38% 3%

Figure 7: How important is it for central banks to hold a press conference with Q&A? (Responses by respondent's region, August 2008 survey)

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

In our view, it is unsurprising that our US-based survey respondents were less enthusiastic about press conferences than those in Europe ex UK or Japan, since the Fed does not hold press conferences. The slightly less-enthusiastic response to press conferences by UK-based respondents perhaps cannot be so easily explained, but we should note that the press conferences held by the BoE differ from those held by the ECB and BoJ in three respects: a) the BoE conferences are held six days after the policy meeting (and so the value of having communication via a press conference in "real time" is eroded); b) the BoE press conferences are quarterly, not monthly, and, most importantly; c) the BoE press conferences are focused on the Inflation Report itself, not on the MPC's deliberations. In our view, the lack of timeliness, together with the broadbrush presentation of views, suggest to us that the BoE's press conference is not actually aimed at financial market investors, but rather at the general public.

While the publication of minutes is in our view an important additional means by which financial markets can understand better the reaction function of monetary policy committees, the main weakness with the publication of minutes is that they seem to take several weeks to compile (for example, some *ad* hoc responses to our surveys requested that the MPC publish its minutes more quickly). Members of the ECB's Governing Council would also argue that the publication of minutes – even if individual member's votes are not disclosed – would undermine the principle of consensus on the Governing Council, which is held to be especially important given the particular political structure of European monetary union (former ECB board member O Issing has noted that, under a monetary union involving many countries, "any identification of persons in connection with monetary policy decisions would be absolutely bound to take on a 'national' tint''8).

It is noteworthy that, in contrast to the regional perceptions vis-à-vis press conferences, respondents to our surveys from mainland Europe tended to accord a somewhat lower preference for the publication of minutes by central banks, with 31% rating minutes "essential" and 39% rating them "important". In contrast, somewhat higher proportions were recorded by investors in other regions (Figure 6).

⁸ See O Issing, The Birth of the Euro (CUP, 2008), p161.

In conclusion, we consider that a press conference immediately after a central bank's interest rate decision does offer useful "real time" information concerning the views of the policy committee. Investors who are familiar with press conferences appear to value these, and our 2008 survey found that the proportion of investors who rated a press conference as "essential" or "important" (65%) was higher than the proportion who gave these ratings to a report on the votes of individual members (58%).

That said, our survey did find strong support also for the publication of minutes of monetary policy meetings (with 78% of respondents saying this was either "essential" or "important"). We note here though that the publication of minutes by central bank committees can generate too great a focus on outlying views of certain committee members, which in turn means that it is vital that minutes are very precisely drafted, such that the broad thrust of opinion can be well reflected within them. However, such precise drafting in practice often tends to entail a significant delay between the conclusion of a policy meeting and ratification, and publication, of the minutes – currently two weeks for the BoE's MPC and three weeks for the FOMC's minutes.

Of course, for a press conference to be successful at giving a clear indication of the stance of the policy-making body, it is important that its chairman is adroit at reflecting the consensus opinion. This is of course made much easier if there is a strong attempt by the policy committee to achieve consensus as a matter of course. The more a central bank policy board is inclined to go down the route of "one member, one vote", then the harder it can be for the chairman of a committee to reflect the consensus view immediately after the conclusion of the policy meeting. This could help to explain why, for example, when presenting the quarterly Inflation Report (one week after the MPC meeting), Governor King routinely avoids questions relating to individual voting behaviour at that MPC and to the subsequent minutes (which are due to be published another week later). However, in turn, this encourages observers to seek to infer the general thrust of the minutes from both the Inflation Report press conference dialogue, and from the Inflation Report projections themselves, which can in turn lead to some confusion (such as at the time of the August 2007 Inflation Report – see below).

"One-member-one-vote" places a premium on speeches

Although the "one-member-one-vote" system adopted by the UK's MPC is thought to have benefits in terms of avoiding "group think", it is also widely recognised that this formulation raises additional challenges on the communication front. As MPC member Paul Tucker once put it, "The defining feature of the MPC is one person one vote, and virtually all of its strengths come from that, and virtually all of its challenges are then how to communicate something that is not misleading." The main challenge with the UK set-up is in balancing the desire for a consistent and predictable overall message with the institutional reality that each individual member must be free to change their mind — and therefore their vote — at any point in time. This matter is further complicated when MPC members are replaced, since there is then no mechanism for ensuring that the Committee under the new membership will behave in a similar fashion to its predecessor.

This is not, in our view, only a question of principle. Over the past couple of years the MPC has surprised the markets on several occasions – with the rate hikes in August 2006 and January 2007, and with the closeness of the vote to keep rates unchanged in June 2007. Each of these instances would be consistent with the view that the UK set-up encourages a more "activist" approach to setting interest rates. Timely explanation and guidance from policy-makers can be effective antidotes to shock policy moves, so we consider that this puts an additional premium on effective communication.

There have also been instances where the collective and individual communication by the BoE has been apparently contradictory. For example, the BoE's inflation projections – which are designed to illustrate the "best collective judgement" of the MPC– showed in August 2007 that inflation was projected to overshoot the target on the assumption of an unchanged interest rate. Many commentators took this to indicate that an increase in Bank Rate was imminent. However, the minutes of the August meeting stated that "most members emphasised that they had no firm view on whether rates would need to rise further".

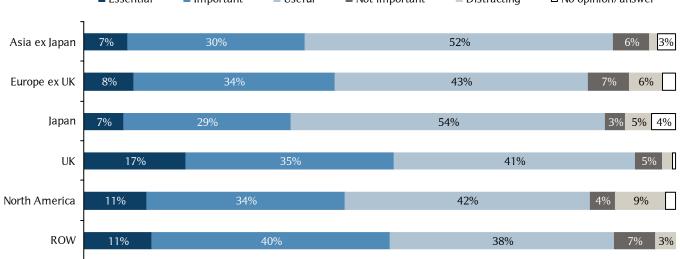
In our minds the key question is whether an effective communication policy can overcome the challenges presented by the one-member-one-vote system, or whether sub-optimal communication is an unavoidable cost of the set-up. Although BoE research has suggested that financial markets respond less to speeches than to central bank statements, and few respondents picked out speeches as an important means of communication in our survey⁹, we would argue that under a one-member, one-vote regime, frequent speeches and interviews are essential for effective communication.

Of course, there may be some utility in boiling individual members' views down to an ostensibly "collective" view – particularly for communication to the general public. But, given the institutional set-up, in our view, this would be fundamentally an artificial exercise. The UK framework is founded on the principle that there are nine different reaction functions within the MPC, and so a full understanding of the Committee's approach to policy can be achieved only through direct communication by individual Committee members.

In our view, the additional communication challenges posed by the non-consensual approach of the MPC are at a clear cost, to be offset against any perceived benefits of this set-up. As well, we think this has not been helped either by the relatively rapid rotation of MPC members (external MPC members serve terms of just three years, albeit these are renewable). If an institution is frequently portrayed in the media as split in its views, then not only can this undermine its predictability but it can also dilute its effectiveness in communicating its views more widely. This, in turn, can undermine its ability to minimise risk premia and to influence inflation expectations.

Figure 8: How important is it for members of monetary policy committees to give speeches and interviews – responses by respondent's region?

■ Essential ■ Important ■ Useful ■ Not important ■ Distracting □ No opinion/answer



Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

⁹ In the relevant question on communication channels, Figure 5, we did not include "speeches" as an option. In a final, unpublished, section of our questionnaire, which requested additional comments, a few respondents argued that speeches could be helpful also to aid understanding of central bank communication.

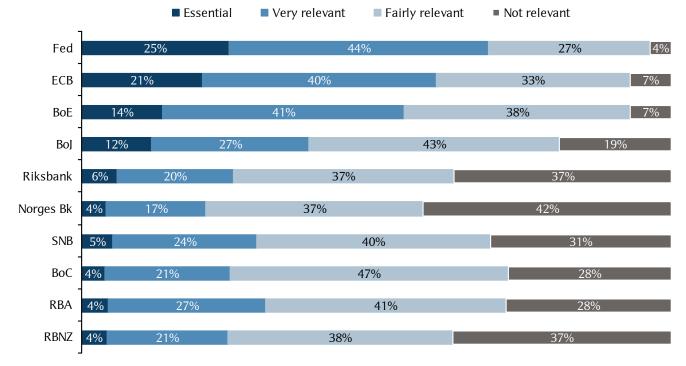
In our 2008 survey, we found that respondents based in the UK, North America and the Rest of the World tended to express a somewhat higher emphasis on the importance of speeches and interviews by monetary policy committee members, compared with respondents based in Asia and mainland Europe (Figure 8) Again, this might reflect familiarity with the process used by different monetary policy committees.

In contrast to the BoE's MPC, the Governing Council of the ECB tends to practice a high degree of consensus, which in turn means that individual speeches by its members tend not to include innovations regarding the outlook for monetary policy.

Indeed, ECB President Trichet has frequently emphasised the importance of focusing on the monthly Press Conference, rather than on the speeches and interviews of individual Governing Council members. That said, we would add that there can be more value in analysing individual speeches for clues as to how recent economic data are being interpreted, which in turn might impact on the future voting pattern and reaction function of the committee.

When we asked our survey respondents (in the 2008 survey) about the importance to which they attached speeches and interviews by committee members other than the committee's chairman, there was still a high proportion expressing the view that these were either "essential" (21%) or "very relevant" (40%) for ECB Governing Council members, only slightly lower than the proportions expressed for members of the Federal Open Markets Committee (FOMC) (for which 25% said "essential" and 44% said "very relevant"). Also of interest with respect to this question, the proportion of respondents who felt that such speeches and interviews were "not relevant" was much higher for many smaller central banks, ie, 37% for the Riksbank, 42% for the Norges Bank, 31% for the Swiss National Bank (SNB), 28% for the Bank of Canada, 28% for the Reserve Bank of Australia (RBA) and 37% for the Reserve Bank of New Zealand.

Figure 9: How relevant for your general understanding of monetary policy do you find speeches and newspaper interviews by monetary policy committee members other than the committee's chairman?



Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008, excludes "no opinion" and no answers)

While such responses (which exclude "no opinion" responses) might have been in part driven by a much larger proportion of "no opinion" responses given in response to these "smaller" central banks, such replies might also reflect a conscious attempt by central banks in these countries to convey less information about the future monetary policy stance in speeches (such as, in particular, the perspective of the Riksbank and Norges Bank)¹⁰.

Publication of GDP and inflation projections by a monetary policy committee

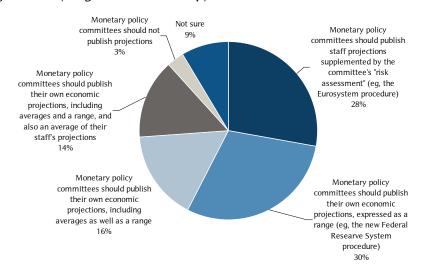
Differences in procedure by monetary policy committees also surround the publication of economic projections, such as for real GDP and inflation. The approach adopted by many central banks, such as the FOMC, MPC, Riksbank and Norges Bank, is for the committee itself to publish its own projections for these variables (or, in the case of the FOMC, to publish ranges incorporating the FOMC's projections). In contrast, the system adopted by the Governing Council of the ECB is for the committee to express a qualitative risk assessment/bias around projections submitted (and published) by the economics staff¹¹.

Our 2008 survey asked investors which approach they favoured policy committees adopting. There was a clear preference for the policy committee itself to set out its own projections for economic activity and inflation. Only 28% of respondents favoured the ECB's approach, ie, monetary policy committees should publish staff projections supplemented by the committee's "risk assessment". Meanwhile, 30% of respondents felt that the policy committee should publish its own economic projections expressed as a range (the relatively new procedure as adopted by the FOMC), while 16% felt that committees should publish not just a range but also their own economic projections, and a further 14% felt that committees should publish not just their own economic projections, including averages and a range, but in addition an average of their staff's projections. Only 3% of respondents felt that policy committees should not publish economic projections, while 9% were not sure on which method they preferred.

¹⁰ For example, in May 2007 the Riksbank announced that it would no longer use speeches or press releases to signal its intentions on its policy rate in between policy meetings, other than in "exceptional" circumstances. It reasoned that the publication of its own interest rate forecasts obviated the need for any further intra-meeting signalling. Following this, in September 2007 the Riksbank announced that it would publish an updated profile for its policy rate six times a year, after all six monetary policy meetings, rather than three times annually. That said, following discussions held by the Riksbank and market participants in the wake of criticism that the Riksbank's hike in February 2008 had not been well anticipated by financial markets, in May 2008 the Riksbank softened its stance of giving no signalling towards the own path for its policy rate in between its board meetings, with the Riksbank commenting that it would be "more generous with information between the monetary policy meetings".

¹¹ Technically, in March and September, the projections are made by the ECB's staff in Frankfurt, while in June and December, the projections are made jointly by the ECB and member national central banks within the Eurosystem.

Figure 10: In your opinion, should central banks publish economic projections made by the staff, to which the policy committee attaches its own risk assessment, or should the committee publish its own economic projections (August 2008 survey)?



Source: Barclays Capital Investor Surveys of Central Bank Communication (August 2008)

Like the majority of respondents to our survey, our recommendation is that the monetary policy committee should publish its own economic projections for real GDP and inflation. We favour the publication of both a range and an average. While this does add to the publication burden of monetary policy committees, in our view it does aid transparency and in particular would help financial market participants to understand better both how such committees are evaluating the economic outlook, as well as over time to assist with understanding of their reaction functions and predictability.

Leaders playing catch-up?

The increasing adoption of central bank independence around the world and associated innovations in central bank communication have raised important questions about whether the FOMC's objectives and procedures have caused it to move away from the best-practice frontier. In early 2006, the FOMC appointed a subcommittee on communications issues, chaired by Vice President Donald Kohn and including Reserve Bank Presidents Janet Yellen and Gary Stern. In part as a result of this Committee's deliberations, the FOMC made a number of changes in November 2007 to its communication strategy. The FOMC now publishes forecasts three years ahead every quarter. It also includes the overall PCE price index in its projections along with the core PCE price index because the FOMC believes that overall inflation is the appropriate gauge of price stability over long horizons. The FOMC also provides information on the distribution of forecasts across participants, including the range, central tendency, and charts depicting the distribution of forecasts. The Fed also provides a narrative that summarizes FOMC participants' views of the outlook, the risks that participants see to that outlook, and a description of the dispersion of views across policy makers.

This new communications strategy serves a number of goals. It provides additional detail on a more frequent basis of how FOMC participants view the outlook, and what is driving their policy choices. In addition, the inclusion of a three-year-ahead forecast is meant to give more information on the medium-term rate of inflation the FOMC sees as consistent with its price stability mandate. The three-year-ahead projections also serve as a signal of the FOMC's estimate of potential GDP growth and its view of the rate of unemployment consistent with price stability.

From our perspective, the new projections represent an improvement in communications because of the additional information they provide on the views of FOMC participants on the likely path of economic growth and inflation. The projections provide a more straightforward way of informing markets and the public about changes in the FOMC's views about the potential growth rate, the natural rate of unemployment, and how quickly the Committee aims to reduce the inflation rate when it rises above the preferred rate. However, the timing of the new communications strategy was perhaps a bit unfortunate because it came during a period when signals from the FOMC were not very informative about the future course of policy. Specifically, the FOMC in its October 2007 meeting shifted to a balanced risk assessment, suggesting it believed it was through the period of easing in response to financial market difficulties. FOMC speakers in the following weeks also generally sounded hawkish notes and questioned the need for further easing. However, market participants largely ignored the hawkish tone from the Fed, a strategy that proved fruitful when Vice Chairman Kohn and Chairman Bernanke shifted tone in late November to signal openness to further easing in response to financial market distress. This turn of events reflects the difficulty in communicating clearly in periods when Fed policy is responding mainly to financial conditions rather than to economic data.

Also, while the new projections give greater prominence to overall inflation, it is not clear how much practical difference this will make. Although the overall PCE price index has increased at a notably faster pace than the "core" PCE over the past decade, FOMC participants generally still have indicated they believe that core inflation is the best measure of the trend in inflation. This is evident in the FOMC's forecasts, in which the forecasts for overall and core inflation are identical for 2010.

Thus, unless the FOMC begins to forecast food and energy inflation trends that differ from the trend in core inflation, it appears that the inclusion of a headline PCE price index forecast is more a change in presentation than one of substance.

Why projecting an 'own path' for interest rates is hazardous

Central banks differ considerably in how much information they are willing to present about the future path for their policy rate (the 'own path'). BoE Governor King has advocated a relatively 'purist' approach, commenting, "What markets need more than anything is not an unconditional forecast of where interest rates might go, but an idea of our contingent response to data as they evolve". On the other hand, central banks increasingly are presenting their envisaged profile for interest rates, a practice adopted recently by the Norges Bank and Riksbank. This might appear to meet the desirable characteristic of transparency as a means of bolstering predictability.

That said, while one can welcome the attempt to be more transparent, there can be dangers in central banks presenting profiles for interest rates. Studies suggest that, despite large teams of economists producing projections, the GDP and inflation projections of the ECB, the Fed and the Bank of England are no more accurate than the consensus¹². The uncertainties endemic in central bank projections for both inflation and for their projections of their own path for interest rates can be plainly seen in Figure 11 and Figure 12¹³. In particular, the RBNZ, Norges Bank and Sveriges Riksbank have all encountered substantial revisions to their own interest path as new information

¹² See, for example, Bank of England Quarterly Bulletin, Autumn 2005, which found that when compared with external forecasters, the MPC tended to over-estimate inflation at the two-year horizon, but otherwise on GDP and inflation its performance was similar to that of external forecasters. Also, Fed researchers recently concluded that the Fed staff "performs about the same as other forecasters for our sample." See Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors, David Reifschneider and Peter Tulip, FEDS working paper 2007-60.

¹³ Thanks to James Ashley for compiling these charts and for his comments on Nordic monetary policy.

has materialised. Moreover, observers of a central bank's projected interest rate path – and perhaps members of the central bank itself – may not appreciate sufficiently the inherent uncertainties that lie around their economic and interest rate projections. In particular, to evaluate correctly such uncertainties, one needs to have an estimate of the degree of confidence around them, yet this itself can vary with time.

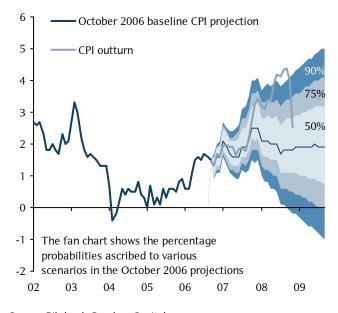
Additionally, it is all too easy for all economic agents – including those inside a central bank – to be seduced by a central bank's baseline projection, and to ascribe too high a probability on its realisation. This might reflect, in part, the central bank having a dominant position as an information provider – its unique position, including the attention it receives in the media, could mean that those outside simply become "information takers" and do not sufficiently question its projections.

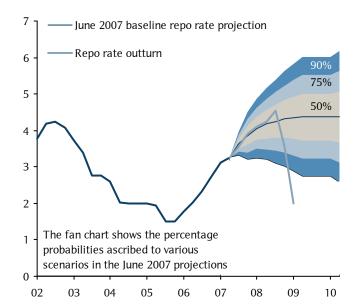
It can therefore become easy for market participants to become entranced by the central bank's view, and for external forecast providers in the financial markets to become less efficient at forecasting, which risks losing valuable plurality of opinion (history is replete with examples of where a lack of plurality of debate has led to mistakes, often highly costly). A particular danger is that since central banks who make interest rate projections are forecasting their own actions, they may become unnecessarily wedded to that view, resulting in a more entrenched risk of a policy error. As well, their actions might be taken by other economic agents to be some kind of pre-commitment.

Figure 11: Projecting inflation and the policy rate 'own path' – the Riksbank's experience

Inflation projections (Oct. 2006 fan chart vs. out-turn)

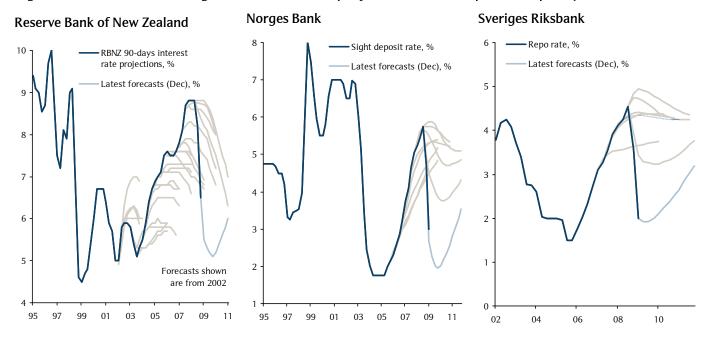
Repo rate projections (Jun 2007 fan chart vs. out-turn)





Source: Riksbank, Barclays Capital

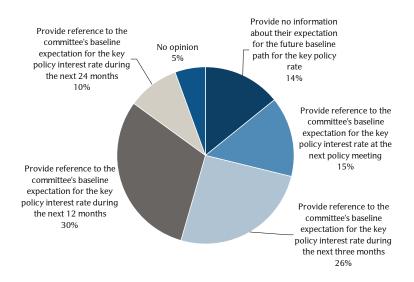
Figure 12: Successive vintages of central bank projections of 'own path' for policy rates



Source: RBNZ, Norges Bank, Riksbank, Barclays Capital

Nonetheless, despite our concerns about the publication of an 'own path' for the policy rate, we must note that in our 2008 investor survey, there was a clear preference for central banks to do this. Only 14% of respondents in our survey felt that policy committees should provide no information about their expectation for the future baseline path for their key policy rate. Meanwhile, 15% of respondents felt that the central bank should provide a reference to its expectation for the policy rate at the next policy meeting, 26% felt that this reference should extend out to three months, 30% felt it should extend out to twelve months and 10% felt that it should extend out to 24 months (Figure 13).

Figure 13: How much information do you think monetary policy committees should publish about the path which they envisage their key policy rate will take in the future (August 2008 survey)?



Source: Barclays Capital Investor Surveys of Central Bank Communication (August 2008)

Forward looking language – why conditional forward language is welcome, but crude code-words aren't

An issue for debate in the euro area has concerned the use of forward-looking language and the use of "code words". First, though, it is important to distinguish between two different kinds of forward-looking language: (a) one approach is to give an opinion on the medium-term outlook for interest rates conditional on the evolution of a particular baseline scenario for economic activity and inflation; and (b) signalling an envisaged future policy move ahead of undertaking that move.

Concerning (a), conditional forward-looking language, the Eurosystem used this successfully during the second half of last year – for example, in commenting that "if the Governing Council's baseline scenario is confirmed, further withdrawal of accommodation will be warranted". This conditional scenario was well-understood by financial markets and helped observers to understand the Eurosystem's reaction function.

However, for (b), should the forward-looking nature of policy include giving markets a strong indication of the policy move that is envisaged at the next meeting? There is some appeal for central banks which have many constituent parts and languages, such as the Eurosystem, to use "code words". This is because communication for the Eurosystem is more of a challenge than for all other central banks, since its discussions are conducted in English, but then need to be communicated into 17 languages. As well, various political, institutional, and cultural reasons (such as the relative infancy of monetary union, the different national perspectives on central banking prior to EMU, the heterogeneity of the euro area economy, and the very large size of the Governing Council) mean that it has had little choice but to pursue a strategy of seeking a high degree of consensus in its decisions and communication, which in turn, taking into account language issues, make recourse to code words more appealing. A much smaller decision making body, undertaking communication in just one language, with one political authority and a relatively unified economy, is likely to find it can communicate in a more supple way than an organisation like the Eurosystem.

That said, we argue that a central bank should be careful about saying too much about its future intentions. Historically, use of the expression "strong vigilance" by the ECB has historically been taken by markets to mean that, unless circumstances evolve in a way within the next month contrary to the recent trend and its expectation, it intends to raise rates in one month's time. In our view, the use of such obvious code words to signal future policy actions in effect means that the Eurosystem gives itself an option not to raise rates, ie, giving itself time for a final double-check of its views before committing itself.

As a consequence, it is the use (or not) of the expression "strong vigilance" that increasingly alters market expectations, rather than the actual policy decision as undertaken by the ECB. Therefore, while the Governing Council might comfort itself with the thought that by using "strong vigilance" it is well understood by the markets the day it raises rates, in effect, much of the real action – and associated surprises – in terms of market interest rates may well have happened a month earlier. So the question then becomes whether the ECB's use of "strong vigilance" had been anticipated by markets a month earlier.

In effect, use of "strong vigilance" represents a two-stage approach to a rate increase. In the first stage the financial markets will tend to raise their expected probability of a rate increase in one month's time from what was prevailing earlier. Monetary policy affects the economy via the transmission through market interest rates and asset prices, and therefore much of the impact of the intention to raise rates will be felt once "strong vigilance" is used. However, the monetary decision affirming the use of the "strong vigilance" code word then typically follows a month later (the "second stage").

Ultimately, in our view, giving a strong steer as to the envisaged policy rate out-turn for the subsequent policy committee meeting is essentially a way of "smoothing" policy changes. This should not be entirely rejected – for example, if the central bank is uncertain about a future action, ie, with respect to how financial markets might react, then it might wish to "float" the proposal first – so that it could always back track later.

Figure 14: Communication of future envisaged policy actions

Question 5 - Do you think central banks should communicate to financial markets the course of monetary policy action they envisage announcing at their subsequent policy meeting (2007 survey)?

	Full results	Results during 1 - 12 August	Results during 13 - 24 August	Asia ex Japan	Europe ex UK	Japan	UK	North America
Yes - at all times	16%	13%	18%	25%	16%	9%	12%	14%
Yes - as a general rule	46%	46%	46%	56%	50%	35%	38%	46%
Yes - but only occasionally	16%	18%	15%	10%	17%	34%	20%	11%
No - not necessary	22%	23%	21%	10%	17%	21%	30%	29%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	3%	3%	3%	3%	3%	9%	2%	2%

	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/ Media
Yes - at all times	15%	17%	7%	24%	12%	25%	19%	22%
Yes - as a general rule	41%	51%	41%	38%	54%	50%	52%	53%
Yes - but only occasionally	18%	16%	18%	20%	17%	0%	17%	10%
No - not necessary	27%	17%	34%	18%	17%	25%	17%	14%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	3%	2%	1%	4%	5%	20%	4%	8%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Another possible advantage of using this "two-stage" approach involving "strong vigilance" is that economic agents more broadly within the economy might notice the ECB's arguments more if they are essentially made twice. This could be important given that expectations are important for the successful control of inflation.

On the other hand, there is a danger that the two stage approach could dilute the impact that is made on expectations in the broader economy. For one thing, the media might end up dividing their coverage of the ECB's actions, such that the actual rate increase carries less weight when it happens (since it is no longer considered newsworthy by the media). We would tend to argue that the actual change in interest rates would carry more weight in the media, and therefore potentially with economic agents more broadly, if the policy logic and action are synchronised – i.e. that the ECB raises rates, and its arguments are newly explained there and then. There is also a danger that with the two-stage process that policy tightening might get delayed, or might appear to be more hesitant on the part of economic agents more generally.

Overall, in our view, the use of simple "code words" can ultimately prove to be too clumsy, as was experienced with the episode of using "strong vigilance" in early August, 2007¹⁴. It should be noted also that "code-words" can take time to be understood. For example, while markets might now think they understand well the use of "strong vigilance", it was not always thus. "Strong vigilance" was in fact used in the ECB's Introductory Statements in October and November 2004, and again in October 2005,

¹⁴ Given the significant changes in the financial environment during that month, the Governing Council refrained from raising rates subsequently at its September 2007 meeting.

without being followed by a rate increase. As well, the Eurosystem's March 2006 rate increase was preceded not by the expression "strong vigilance" a month earlier, but by simply the word "vigilance" (though this was mentioned three times).

In our view, the Governing Council has sufficient linguistic sophistication not to need to feel bound by using code words, even if they apply only to policy intentions one month ahead. We would agree with the observation by BoE Governor King, "Explaining our analysis at some length is a richer source of information for markets than code words or statements about the future path of interest rates" ¹⁵.

Despite this conclusion of ours, our 2007 survey of investors found a small majority of respondents favoured the communication by central banks of their envisaged policy action at their next policy meeting (Figure 14). 16% of respondents opted for the option "Yes – at all times unless prior communication is impossible", while another 46% opted for "Yes – as a general rule". A further 16% opted for "Yes – but only occasionally", leaving just 22% opting for "No – not necessary".

As mentioned earlier, a common feature in our survey is that our respondents tend to have expressed preferences in accordance with the preferred modes of communication of the central bank in their region. Hence, the relatively firm endorsement of communicating envisaged future policy intentions was particularly strong in the responses of investors from mainland Europe and from N America (two regions where central banks tend to give greater indications of future policy moves), whereas the endorsement was weaker from UK and Japan based investors (where the central banks tend to be less influenced by a desire not to "surprise" the market). Additionally, such endorsement was noticeably stronger for respondents from non-financial firms, from academics, the media, and our "other" category, rather than from asset managers and particularly from hedge funds.

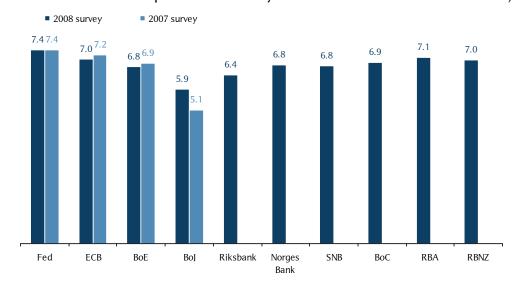
¹⁵ Mervyn King, speech, May 2007

Conclusions from our surveys

Let us now conclude by considering some of the key messages from our 2007 and 2008 surveys of investor perceptions about central bank communication.

- Despite all that happened during the intervening twelve months in the financial markets, the overall communications ratings for the Fed, ECB and Bank of England in our August 2008 survey were similar to those in the August 2007 survey. When asked at the end of the survey to give an "overall mark" as to how well a central bank is estimated to have communicated with the markets and with broader economic agents, the mean grade in 2008 was 7.4 (the same as in our 2007 survey), while the ECB's mean grade slipped slightly from 7.2 to 7.0, and the BoE's slipped slightly from 6.9 to 6.8. Meanwhile, the Bank of Japan's mean grade improved from 5.1 to 5.9. Some of these shifts may have been constituted by changes in the sample mix. While we do not have a clear reason why the BoJ's rating improved so significantly, we do note that the number of responses from Japan itself was substantially larger in the 2008 survey (173 out of 1165 responses, compared with 93 out of 1183 responses) (Figure 15). The somewhat lower rating from survey respondents for the BoJ is perhaps surprising given the BoJ's deliberate advances in enhancing its communications strategy during recent years, bringing it into line with "best practice" in many respects (such as the publication of minutes, regular statements and reports and committee members' projections, as well as the holding of press conferences). In our view, the BoJ's somewhat weaker ratings may result from a degree of uncertainty on the part of international investors as to its underlying objectives and degree of independence from the government (a conclusion which we find is borne out by some of the individual responses to our surveys). We note also that some ad hoc responses welcomed recent communication initiatives from the BoJ, including the use of fan charts, which could explain its higher rating in the 2008 survey.
- 2) Not only were the responses in the 2007 and 2008 surveys broadly similar for the Fed, ECB and BoE, but responses concerning other central banks were of a similar magnitude: 6.4 for the Riksbank, 6.8 for the Norges Bank and Swiss National Bank (SNB), 6.9 for the Bank of Canada, 7.1 for the RBA and 7.0 for the RBNZ. Such ratings for some of these other institutions might be considered a little surprising perhaps, given that institutions such as the Riksbank, Norges Bank and RBNZ are often considered among academics to have "best practice" for communication. In our view, the slightly lower scores on average might simply reflect a lack of familiarity among respondents we have previously observed how investors in our surveys have tended at a regional level to prefer the communication strategies of the central banks for the regions they are based in. That said, in our 2007 survey, the overall marks given by respondents excluding the central bank of the region within which they are located were fairly similar to the aggregate responses eg, the adjusted mean ratings for the Fed, Bank of England and BoJ were the same as in the overall totals, while the ECB's adjusted rating slipped from 7.2 to 7.0 (Figure 16).

Figure 15: Overall assessment of central bank communication (August 2007 and 2008 BarCap Investor Surveys of Central Bank Communication)



Source: Barclays Capital Investor Surveys of Central Bank Communication (August 2007 and August 2008; excludes those responses saying "no opinion" or not giving an answer)

Figure 16: Overall assessment of central bank communication (August 2007 survey): Please give a mark which conveys your overall sense of how well the following central banks communicate with the markets and broader economic agents. (1 = lowest; 10 = highest communication abilities)

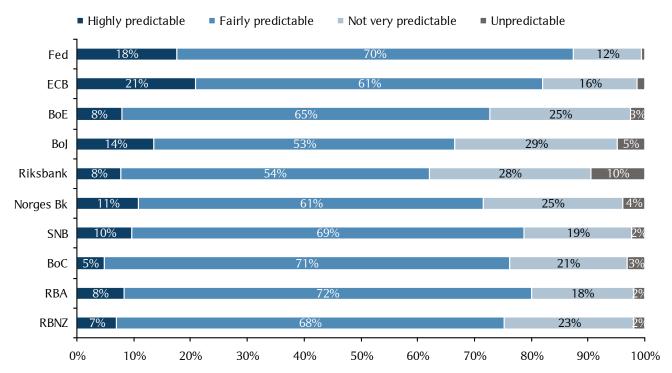
	Total	Total excluding respondents from central bank's own region	Memo: no comment replies	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Fed	7.4	7.4	1.1%	7.7	7.5	7.3	7.1	7.2	7.7
ECB	7.2	7.0	3.3%	7.4	7.4	6.9	6.9	7.0	7.4
BoE	6.9	6.9	8.0%	6.8	6.8	6.9	6.9	7.0	7.1
BoJ	5.1	5.1	12.8%	5.5	5.1	4.7	4.8	5.1	5.6

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007, excludes those responses saying "no opinion" or not giving an answer)

3) In our 2007 survey, we asked respondents how confident they were in understanding central banks' objectives before asking them how confident they felt in understanding central banks' reaction functions. We followed these by asking how confident they felt 'economic agents' (ie, price and wage setters) more broadly within each country/region generally understood the objectives and reaction functions of the central bank responsible for monetary policy within that country/region. Perhaps unsurprisingly, the responses to these three questions revealed a declining level of confidence, with investors feeling that they well understood central bank objectives (other than for the Bank of Japan), but were a little less confident in understanding the "predictability" of central banks (the reaction functions. Meanwhile, the 2007 survey did suggest that respondents felt rather less confident that economic agents more broadly understood central banks objectives and reaction functions. In our view, this is an important message for central banks because it demonstrates the importance of ensuring that they are well understood not just by financial market participants (as illustrated in our surveys) but also by wage and price setters more generally. Overall, it suggests that, according to respondents to our surveys, central banks do need to spend considerable time communicating through many channels (not just via press conferences and websites and publications, but also via speeches and interviews) to ensure that their objectives and reaction functions are as well understood as possible across economies (Figure 18).

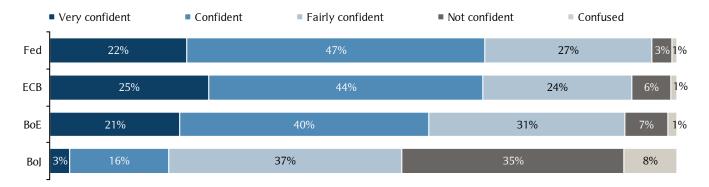
4) Finally, in our 2008 survey we also asked respondents to rate the predictability of central banks. On this particular metric, the Fed came first (with 18% saying "highly predictable" and 70% saying "fairly predictable") followed closely by the ECB (with 21% saying "highly predictable" and 61% saying "fairly predictable" - Figure 17). In general, the ratings given by investors for "predictability" are fairly similar to those for overall communication, although it is noteworthy that the Riksbank scored relatively poorly on this basis – ironic given that, among academics, it would be judged to have "state of the art" communication. In our view, this relatively low rating probably reflects the mismatch of market expectations when the Riksbank unexpectedly raised its policy rate in February 2008, along with the Riksbank's desire to communicate less via speeches and interviews and more via its decisions at its six policy meetings per year.

Figure 17: Question 6. How predictable do you think the monetary policy of the following central banks is (ie, how each bank would respond with interest rates to changes in the outlook for inflation, activity and other variable such as asset prices, given their objectives – August 2008 survey)?

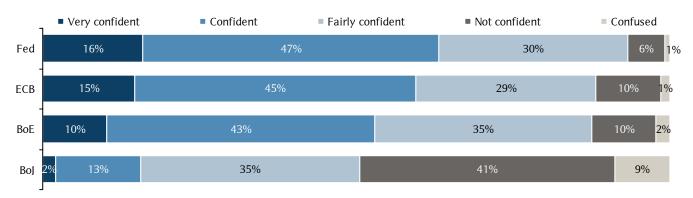


Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008 – excludes "not sure/no opinion" and no answers)

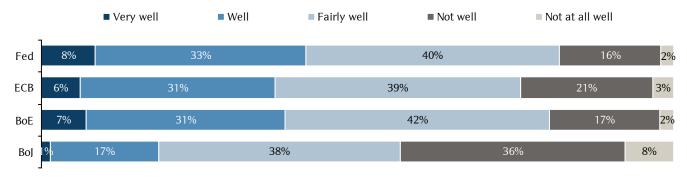
Figure 18: Evaluations of confidence in central bank objectives, reaction function (August 2007 survey) (Question 1) - How confident are you in your understanding of the following central banks' objectives (ie, concerning variables such as inflation, employment, asset prices, money growth, exchange rates, etc.)?



(Question 2) - How confident are you in your understanding of these central banks' "reaction functions" (ie, how each bank would respond with interest rates to changes in the outlook for inflation, activity and other variables such as asset prices, given their objectives)?



(Question 4) - In your view, how well do the 'economic agents' (ie, price and wage setters) within each country/region broadly understand the objectives and reaction functions of the central bank responsible for monetary policy within that country/region?



Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Appendix 1: Survey results (August 2007 survey)¹⁶

Introduction to the Barclays Capital Investor Survey of Central Bank Communication

The Barclays Capital Investor Survey of Central Bank Communication was launched on 1 August and ran until 24 August 2007. All recipients of Barclays Capital's weekly and daily macroeconomics and fixed income research were invited to participate in this web-based survey by being sent a secure and unique link, and 1183 completed the survey.

As the information concerning survey respondents on the following page illustrates, the respondent base was broad in both geographical terms, and in terms of the type of institution being represented, which included central banks. There were also some respondents from the media, and five academics, whose responses are also included ¹⁷. There were 25 responses from employees of Barclays PLC, including fund management operations.

The first email inviting participation was despatched on 1 August. Approximately half the replies (624) were received by 12 August. Since financial market volatility was intensifying dramatically during August, a reminder was despatched on 13 August. This, plus a subsequent reminder sent three days before the close, elicited the remaining 559 responses. In some of the following slides the information has also been parsed according to responses received in the first twelve days (which nearly entirely preceded the ECB's exceptional money market operation on 9 August), compared with responses received in the final twelve days. This parsing enables us to consider whether the exceptional market developments had caused any significant shift in responses, though as can be seen this does not seem to have been the case.

While we have not sought to adjust the results shown here according to a specified sample, nonetheless the relative uniformity of many of the results suggests to us that some of the general responses are broadly felt across different types of financial market participant (according to industry or region). As well we would stress that all the responses given are by *bone fide* financial market participants, or from academics, journalists, and consultants who are focused on monetary policy.

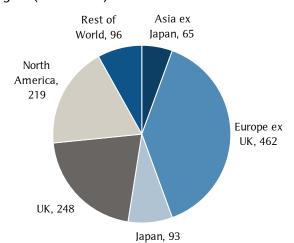
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¹⁶ For further information on the survey methodology and results, please contact Lauren Ungerleider (Lauren.Ungerleider@barcap.com).

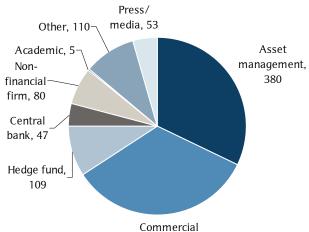
¹⁷ While the academics' responses are a very small sample, and only from academics in Europe (specialising in monetary policy), nonetheless these responses were quite similar, suggesting that the means reported here were not distorted by outlying responses.

Appendix 1: Respondent profile (August 2007 survey)

By region (total: 1183)



By type of employer



bank, 399

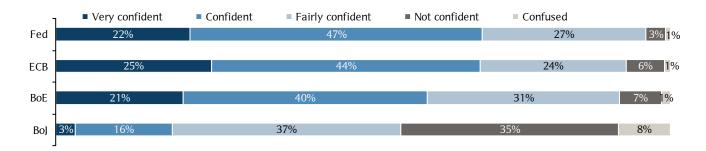
Regional breakdown	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Asset management	15	150	37	85	79	14
Commercial bank	32	190	35	63	42	37
Hedge fund	2	16	3	34	44	10
Central bank	4	21	0	3	7	12
Non-financial firm	5	27	3	25	10	10
Academic		3	0	2	0	0
Other	5	36	10	18	29	12
Press/Media	2	19	5	18	8	1
Total	65	462	93	248	219	96

Breakdown by job	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World	Total
Portfolio/liability manager	20	203	36	97	93	38	487
Analyst/economist	15	80	13	55	53	13	229
Trading/execution	21	112	25	48	43	32	281
Other	7	60	18	42	28	10	165
Not stated	2	7	1	6	2	3	21
Total	65	462	93	248	219	96	1183

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007). The survey was conducted during 1-24 August, 2007

Appendix 1: Personal understanding of central banks' objectives (August 2007 survey)

Question 1 - How confident are you in your understanding of the following central banks' objectives (ie, concerning variables such as inflation, employment, asset prices, money growth, exchange rates, etc.)?



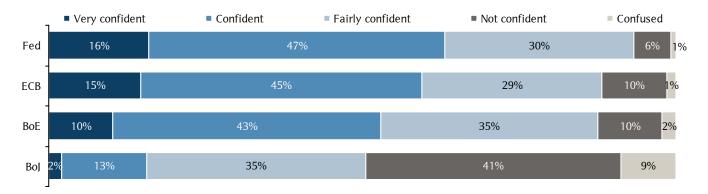
	Very confident					Conf	ident		Fairly confident			
_	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	22%	25%	21%	3%	47%	44%	40%	16%	27%	24%	31%	37%
Results during 1 – 12 August	23%	26%	21%	3%	48%	42%	40%	15%	25%	26%	30%	36%
Results during 13 - 24 August	21%	25%	20%	3%	21%	25%	20%	3%	28%	21%	33%	39%
Asia ex Japan	14%	11%	13%	0%	14%	11%	13%	0%	22%	33%	40%	41%
Europe ex UK	21%	35%	18%	3%	21%	35%	18%	3%	24%	18%	35%	37%
Japan	10%	9%	11%	7%	10%	9%	11%	7%	47%	38%	34%	41%
UK	16%	22%	32%	2%	16%	22%	32%	2%	32%	28%	22%	31%
North America	33%	22%	20%	3%	33%	22%	20%	3%	21%	25%	31%	37%
Rest of World	29%	23%	22%	4%	29%	23%	22%	4%	23%	20%	28%	48%
Asset management	20%	26%	18%	2%	20%	26%	18%	2%	26%	24%	32%	36%
Commercial bank	25%	28%	20%	5%	25%	28%	20%	5%	25%	22%	33%	37%
Hedge fund	29%	32%	32%	1%	29%	32%	32%	1%	24%	23%	28%	38%
Central bank	29%	35%	24%	3%	29%	35%	24%	3%	11%	11%	29%	47%
Non-financial firm	10%	11%	15%	0%	10%	11%	15%	0%	41%	36%	28%	31%
Academic	0%	0%	60%	0%	0%	0%	60%	0%	40%	0%	0%	0%
Other	18%	14%	19%	2%	18%	14%	19%	2%	31%	26%	25%	40%
Press/Media	23%	24%	22%	11%	23%	24%	22%	11%	38%	27%	39%	42%

		Not co	nfident			Conf	used		Memo: no comment/no answer			
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	ВоЕ	BoJ
Full Results	3%	6%	7%	35%	1%	1%	1%	8%	1%	4%	10%	19%
Results during 1 - 12 August	3%	6%	7%	35%	0%	0%	2%	11%	1%	4%	9%	19%
Results during 13 - 24 August	3%	7%	7%	36%	1%	1%	1%	6%	1%	4%	11%	19%
Asia ex Japan	2%	8%	8%	30%	0%	0%	0%	8%	2%	2%	3%	6%
Europe ex UK	3%	3%	6%	35%	0%	0%	1%	9%	1%	0%	13%	23%
Japan	7%	12%	16%	22%	0%	2%	5%	10%	3%	4%	9%	1%
UK	5%	9%	4%	45%	2%	1%	1%	8%	2%	1%	1%	17%
North America	2%	8%	9%	37%	1%	2%	2%	8%	0%	15%	17%	23%
Rest of World	1%	5%	3%	26%	2%	0%	0%	5%	1%	4%	9%	24%
Asset management	4%	6%	7%	36%	1%	1%	2%	11%	1%	4%	9%	17%
Commercial bank	3%	5%	6%	35%	1%	1%	1%	7%	1%	2%	10%	19%
Hedge fund	1%	3%	5%	39%	2%	0%	2%	13%	0%	6%	8%	14%
Central bank	4%	2%	2%	18%	0%	0%	0%	3%	4%	2%	13%	28%
Non-financial firm	5%	13%	10%	43%	0%	0%	0%	4%	2%	8%	27%	57%
Academic	0%	20%	0%	80%	20%	0%	0%	20%	0%	0%	10%	20%
Other	3%	8%	11%	33%	1%	3%	3%	7%	12%	12%	22%	46%
Press/Media	2%	8%	7%	26%	0%	2%	0%	8%	9%	8%	13%	28%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Appendix 1: Personal understanding of central banks' predictability (August 2007 survey)

Question 2 - How confident are you in your understanding of these central banks' "reaction functions" (ie, how each bank would respond with interest rates to changes in the outlook for inflation, activity and other variables such as asset prices, given their objectives)?

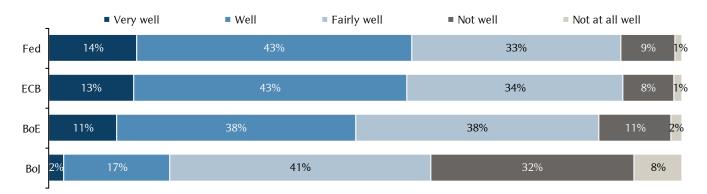


		Very co	onfident			Conf	ident		Fairly confident			
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	16%	15%	10%	2%	47%	45%	43%	13%	30%	29%	35%	35%
Results during 1 – 12 August	17%	14%	10%	2%	46%	43%	43%	12%	30%	29%	34%	31%
Results during 13 - 24 August	15%	16%	10%	2%	15%	16%	10%	2%	30%	28%	36%	39%
Asia ex Japan	9%	9%	6%	2%	9%	9%	6%	2%	22%	34%	47%	42%
Europe ex UK	18%	20%	8%	3%	18%	20%	8%	3%	27%	23%	37%	39%
Japan	11%	5%	8%	2%	11%	5%	8%	2%	43%	39%	25%	33%
UK	9%	10%	14%	2%	9%	10%	14%	2%	39%	30%	31%	28%
North America	21%	11%	10%	2%	21%	11%	10%	2%	30%	36%	40%	31%
Rest of World	22%	21%	16%	0%	22%	21%	16%	0%	17%	23%	24%	41%
Asset management	15%	13%	7%	0%	15%	13%	7%	0%	32%	28%	36%	31%
Commercial bank	19%	16%	12%	3%	19%	16%	12%	3%	28%	27%	35%	39%
Hedge fund	16%	14%	10%	1%	16%	14%	10%	1%	34%	32%	36%	27%
Central bank	16%	22%	19%	6%	16%	22%	19%	6%	22%	22%	31%	56%
Non-financial firm	9%	9%	12%	2%	9%	9%	12%	2%	37%	39%	32%	38%
Academic	0%	0%	40%	0%	0%	0%	40%	0%	20%	0%	0%	40%
Other	14%	16%	8%	2%	14%	16%	8%	2%	25%	31%	32%	38%
Press/Media	19%	22%	13%	6%	19%	22%	13%	6%	30%	20%	30%	31%

		Not co	nfident			Conf	fused		Memo: no comment/no answer			
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	6%	10%	10%	41%	1%	1%	2%	9%	2%	4%	9%	20%
Results during 1 - 12 August	7%	12%	11%	44%	1%	1%	2%	11%	2%	3%	9%	19%
Results during 13 - 24 August	5%	9%	10%	37%	1%	1%	2%	6%	2%	4%	10%	20%
Asia ex Japan	3%	6%	8%	28%	2%	0%	3%	7%	0%	2%	2%	8%
Europe ex UK	3%	6%	9%	39%	0%	1%	1%	8%	2%	0%	13%	23%
Japan	15%	17%	22%	42%	3%	6%	8%	11%	4%	5%	9%	3%
UK	7%	16%	7%	48%	0%	1%	2%	11%	3%	2%	1%	19%
North America	6%	13%	13%	46%	1%	1%	1%	8%	1%	14%	16%	22%
Rest of World	7%	7%	7%	27%	1%	2%	1%	8%	1%	4%	8%	23%
Asset management	6%	11%	11%	48%	1%	1%	2%	10%	1%	4%	8%	17%
Commercial bank	5%	10%	7%	32%	1%	2%	3%	9%	1%	1%	9%	19%
Hedge fund	10%	12%	12%	52%	0%	1%	3%	14%	2%	7%	11%	16%
Central bank	2%	0%	10%	26%	0%	0%	0%	0%	4%	2%	11%	28%
Non-financial firm	8%	11%	9%	34%	1%	1%	1%	6%	2%	13%	25%	62%
Academic	20%	20%	0%	40%	0%	0%	0%	20%	0%	5%	10%	25%
Other	7%	11%	14%	39%	1%	2%	3%	5%	14%	14%	17%	41%
Press/Media	6%	18%	17%	44%	2%	2%	0%	6%	11%	8%	13%	32%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)Appendix 1: Market understanding of central banks' objectives and reaction functions (August 2007 survey)

Question 3 - Based on your perceptions of those you work with, how well do you feel the financial markets understand the central banks' objectives and "reaction functions"?



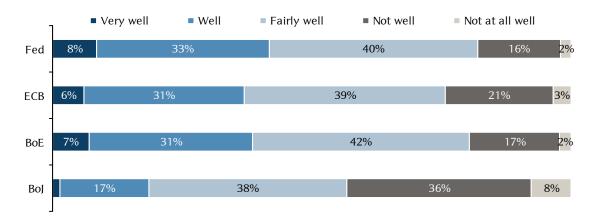
		Very	well			W	ell			Fairly	y well	
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	14%	13%	11%	2%	43%	43%	38%	17%	33%	34%	38%	41%
Results during 1 - 12 August	13%	13%	10%	2%	44%	43%	37%	15%	33%	35%	38%	41%
Results during 13 - 24 August	15%	14%	11%	3%	15%	14%	11%	3%	32%	33%	38%	42%
Asia ex Japan	14%	11%	10%	2%	14%	11%	10%	2%	30%	32%	43%	41%
Europe ex UK	15%	16%	9%	1%	15%	16%	9%	1%	29%	31%	41%	46%
Japan	4%	0%	10%	2%	4%	0%	10%	2%	53%	47%	44%	40%
UK	14%	12%	15%	3%	14%	12%	15%	3%	35%	35%	31%	37%
North America	16%	13%	10%	3%	16%	13%	10%	3%	32%	38%	38%	38%
Rest of World	15%	19%	11%	5%	15%	19%	11%	5%	34%	33%	38%	44%
Asset management	13%	11%	9%	2%	13%	11%	9%	2%	35%	32%	39%	42%
Commercial bank	16%	14%	10%	2%	16%	14%	10%	2%	31%	36%	42%	43%
Hedge fund	9%	16%	10%	0%	9%	16%	10%	0%	38%	35%	33%	37%
Central bank	15%	15%	12%	6%	15%	15%	12%	6%	24%	22%	34%	48%
Non-financial firm	12%	14%	16%	8%	12%	14%	16%	8%	33%	32%	31%	31%
Academic	0%	0%	20%	0%	0%	0%	20%	0%	20%	40%	20%	60%
Other	16%	12%	14%	1%	16%	12%	14%	1%	34%	41%	38%	37%
Press/Media	17%	18%	11%	3%	17%	18%	11%	3%	30%	31%	36%	47%

		Not	well			Not at	all well		Memo:	: no comr	nent/no (answer
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	9%	8%	11%	32%	1%	1%	2%	8%	3%	5%	11%	21%
Results during 1 - 12 August	8%	8%	13%	36%	1%	1%	2%	7%	2%	5%	10%	20%
Results during 13 - 24 August	9%	8%	10%	28%	1%	2%	2%	8%	3%	5%	11%	21%
Asia ex Japan	2%	2%	6%	25%	0%	0%	2%	5%	3%	3%	3%	6%
Europe ex UK	6%	6%	11%	31%	1%	1%	1%	6%	2%	2%	13%	25%
Japan	13%	17%	23%	41%	0%	0%	0%	3%	4%	5%	10%	0%
UK	10%	10%	12%	32%	2%	1%	2%	11%	4%	3%	2%	21%
North America	14%	9%	10%	36%	0%	3%	2%	10%	1%	16%	20%	25%
Rest of World	5%	8%	6%	23%	1%	2%	2%	9%	2%	3%	7%	18%
Asset management	10%	8%	13%	36%	1%	1%	1%	6%	1%	6%	10%	17%
Commercial bank	8%	9%	13%	29%	2%	2%	3%	8%	3%	3%	10%	20%
Hedge fund	17%	12%	17%	40%	1%	1%	4%	16%	2%	6%	8%	17%
Central bank	2%	0%	2%	18%	0%	0%	0%	0%	2%	2%	13%	30%
Non-financial firm	3%	4%	0%	19%	0%	1%	1%	6%	7%	10%	27%	63%
Academic	0%	0%	0%	20%	20%	0%	0%	20%	0%	0%	10%	25%
Other	7%	9%	15%	37%	1%	2%	0%	7%	12%	25%	38%	55%
Press/Media	2%	8%	2%	29%	2%	2%	2%	6%	11%	8%	15%	36%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Appendix 1: Economic agents' understanding of central banks' objectives and reaction functions (August 2007 survey)

Question 4 - In your view, how well do the 'economic agents' (ie, price and wage setters) within each country/region broadly understand the objectives and reaction functions of the central bank responsible for monetary policy within that country/region?

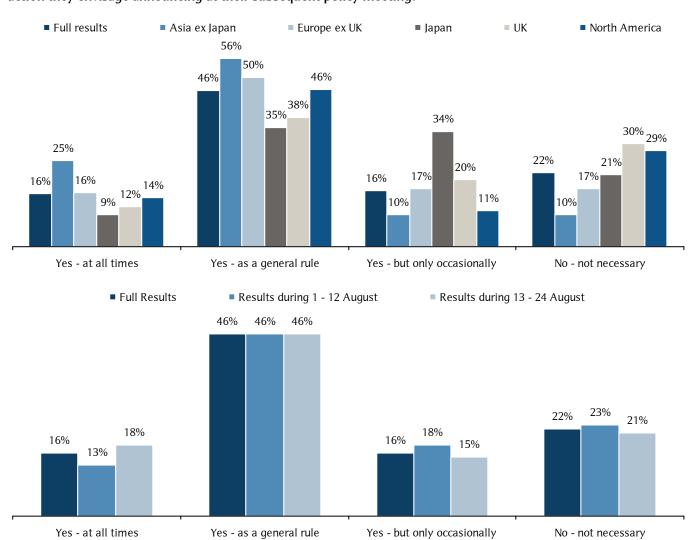


		Very	well			W	'ell			Fairly	y well	
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	8%	6%	7%	1%	33%	31%	31%	17%	40%	39%	42%	38%
Results during 1 - 12 August	8%	6%	8%	1%	34%	29%	32%	16%	40%	40%	41%	35%
Results during 13 - 24 August	9%	6%	6%	2%	9%	6%	6%	2%	40%	37%	43%	42%
Asia ex Japan	15%	12%	12%	4%	15%	12%	12%	4%	42%	41%	48%	30%
Europe ex UK	9%	6%	7%	2%	9%	6%	7%	2%	38%	37%	45%	43%
Japan	5%	1%	5%	1%	5%	1%	5%	1%	49%	51%	49%	29%
UK	4%	6%	7%	1%	4%	6%	7%	1%	43%	38%	39%	32%
North America	12%	5%	6%	1%	12%	5%	6%	1%	39%	40%	42%	39%
Rest of World	10%	9%	7%	1%	10%	9%	7%	1%	32%	36%	29%	47%
Asset management	9%	7%	9%	2%	9%	7%	9%	2%	42%	43%	49%	41%
Commercial bank	8%	6%	7%	1%	8%	6%	7%	1%	38%	37%	42%	37%
Hedge fund	8%	6%	5%	0%	8%	6%	5%	0%	43%	32%	37%	30%
Central bank	17%	7%	5%	3%	17%	7%	5%	3%	41%	39%	39%	48%
Non-financial firm	4%	4%	3%	0%	4%	4%	3%	0%	38%	34%	30%	40%
Academic	0%	0%	25%	0%	0%	0%	25%	0%	60%	60%	25%	50%
Other	11%	5%	7%	2%	11%	5%	7%	2%	38%	43%	43%	38%
Press/Media	4%	7%	5%	0%	4%	7%	5%	0%	36%	33%	22%	33%

		Not	well			Not at	all well		Memo: no comment/no answer			
	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ	Fed	ECB	BoE	BoJ
Full Results	16%	21%	17%	36%	2%	3%	2%	8%	10%	12%	18%	31%
Results during 1 - 12 August	16%	21%	18%	40%	2%	3%	2%	9%	9%	11%	18%	30%
Results during 13 - 24 August	16%	21%	17%	31%	2%	3%	2%	6%	10%	12%	18%	31%
Asia ex Japan	7%	12%	12%	34%	0%	0%	0%	2%	9%	9%	11%	14%
Europe ex UK	13%	21%	15%	34%	1%	3%	2%	4%	9%	7%	22%	37%
Japan	25%	22%	25%	54%	0%	1%	0%	11%	10%	12%	15%	3%
UK	21%	25%	20%	36%	3%	6%	4%	13%	15%	13%	8%	33%
North America	18%	22%	17%	34%	3%	3%	3%	8%	7%	23%	26%	34%
Rest of World	14%	14%	18%	23%	1%	3%	1%	8%	5%	6%	13%	23%
Asset management	19%	22%	15%	39%	2%	3%	3%	6%	9%	13%	18%	30%
Commercial bank	13%	19%	16%	33%	3%	3%	3%	8%	11%	10%	18%	30%
Hedge fund	23%	28%	25%	37%	3%	5%	3%	16%	7%	11%	13%	24%
Central bank	7%	12%	5%	17%	0%	0%	0%	0%	13%	13%	19%	38%
Non-financial firm	15%	21%	25%	34%	0%	3%	0%	2%	23%	27%	43%	72%
Academic	20%	20%	0%	50%	0%	0%	0%	0%	15%	15%	25%	25%
Other	12%	16%	16%	34%	1%	4%	1%	9%	23%	36%	53%	85%
Press/Media	20%	28%	29%	42%	2%	4%	2%	9%	15%	13%	23%	38%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)Appendix 1: Communication of envisaged future policy action (August 2007 survey)

Question 5 - Do you think central banks should communicate to financial markets the course of monetary policy action they envisage announcing at their subsequent policy meeting?



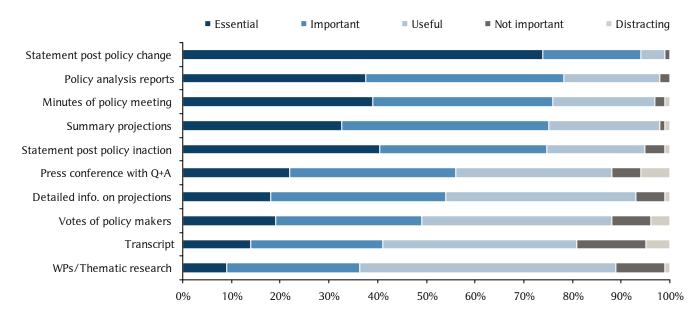
	Full results	Results during 1 - 12 August	Results during 13 - 24 August	Asia ex Japan	Europe ex UK	Japan	UK	North America
Yes - at all times	16%	13%	18%	25%	16%	9%	12%	14%
Yes - as a general rule	46%	46%	46%	56%	50%	35%	38%	46%
Yes - but only occasionally	16%	18%	15%	10%	17%	34%	20%	11%
No - not necessary	22%	23%	21%	10%	17%	21%	30%	29%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	3%	3%	3%	3%	3%	9%	2%	2%

	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/ Media
Yes - at all times	15%	17%	7%	24%	12%	25%	19%	22%
Yes - as a general rule	41%	51%	41%	38%	54%	50%	52%	53%
Yes - but only occasionally	18%	16%	18%	20%	17%	0%	17%	10%
No - not necessary	27%	17%	34%	18%	17%	25%	17%	14%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	3%	2%	1%	4%	5%	20%	4%	8%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Appendix 1: Key wish-list for central bank publishing (August 2007 survey)

Question 6 - In your opinion, how important is it for central banks to publish the following?



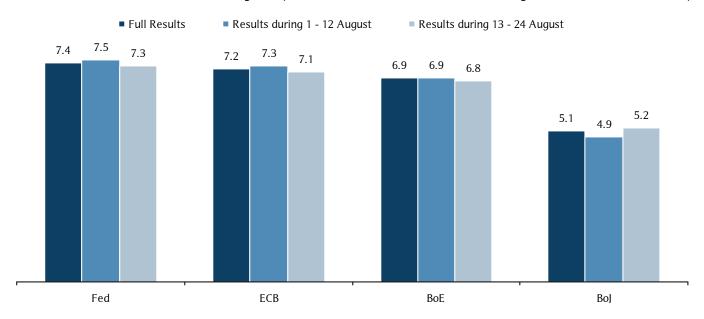
Average Mark*	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/ Media
Statement post policy change	4.7	4.7	4.5	4.8	4.6	4.6	4.7	4.9
Policy analysis report	4.1	4.0	4.2	4.3	4.2	4.6	4.2	4.3
Minutes of policy meeting	4.1	4.2	4.1	4.1	3.9	3.6	4.0	3.8
Summary projections	4.0	4.1	4.0	4.1	4.1	4.2	4.2	4.1
Statement post policy inaction	4.1	4.1	3.9	4.4	4.1	4.4	4.2	3.4
Press conference with Q+A	3.5	3.7	3.3	3.9	3.7	3.2	3.6	3.9
Detailed info. on projections	3.5	3.7	3.7	3.7	3.7	3.0	3.8	4.4
Votes of policy makers	3.4	3.5	3.5	3.5	3.5	3.4	3.5	4.2
Transcript	3.3	3.4	3.4	3.0	3.2	2.6	3.3	3.7
WPs/Thematic research	3.4	3.2	3.4	3.7	3.2	3.0	3.3	3.5

Average Mark*	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Statement post policy change	4.7	4.7	4.8	4.7	4.6	4.8
Policy analysis report	3.9	4.1	4.2	4.3	4.1	4.3
Minutes of policy meeting	4.2	3.9	4.4	4.2	4.2	4.2
Summary projections	4.0	4.0	3.9	4.0	4.2	4.3
Statement post policy inaction	4.3	4.1	4.1	3.8	4.2	4.3
Press conference with Q+A	3.7	3.7	3.9	3.5	3.3	3.7
Detailed info. on projections	3.8	3.5	3.5	3.6	3.8	3.9
Votes of policy makers	3.8	3.4	3.8	3.6	3.6	3.4
Transcript	3.6	3.2	3.5	3.1	3.6	3.4
WPs/Thematic research	3.2	3.3	3.4	3.3	3.4	3.5

^{*}Numerical values have been apportioned on a scale 1 to 5, where 1 = distracting; 2 = not important; 3 = useful; 4 = important; 5 = essential. Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007).

Appendix 1: Overall assessment of central banks' communication (August 2007 survey)

Question 7 - Please give a mark which conveys your overall sense of how well the following central banks communicate with the markets and broader economic agents. (1 = lowest communication abilities, 10 = highest communication abilities)



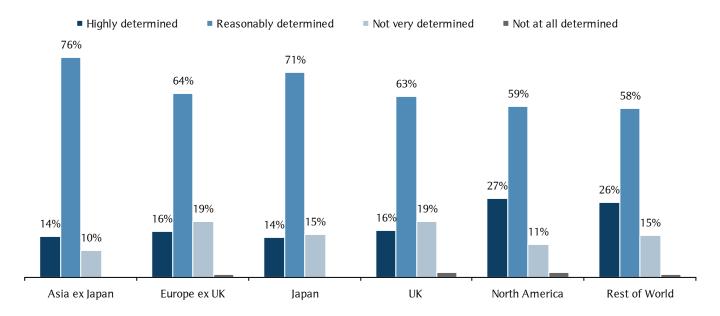
Average Mark	Total	Memo: no comment replies	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Fed	7.4	1.1%	7.7	7.5	7.3	7.1	7.2	7.7
ECB	7.2	3.3%	7.4	7.4	6.9	6.9	7.0	7.4
BoE	6.9	8.0%	6.8	6.8	6.9	6.9	7.0	7.1
BoJ	5.1	12.8%	5.5	5.1	4.7	4.8	5.1	5.6

Average Mark	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/Media
Fed	7.3	7.5	7.1	7.9	7.3	6.8	7.5	7.4
ECB	7.3	7.2	7.0	7.9	6.8	5.2	7.1	7.1
ВоЕ	7.0	6.8	6.8	7.3	6.9	8.2	6.9	7.0
BoJ	5.0	5.2	4.2	6.1	5.2	3.8	5.4	5.4

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2007)

Appendix 1: Investor perceptions of central bank inflation commitment – Fed

Question 8 - Some members of the Federal Reserve System have said they believe the annual inflation rate for the US "core" PCE deflator (the consumption deflator excluding food and energy) should reside in a "comfort zone" of 1-2pc. How determined do you think the Fed is to realise this during the next five years?

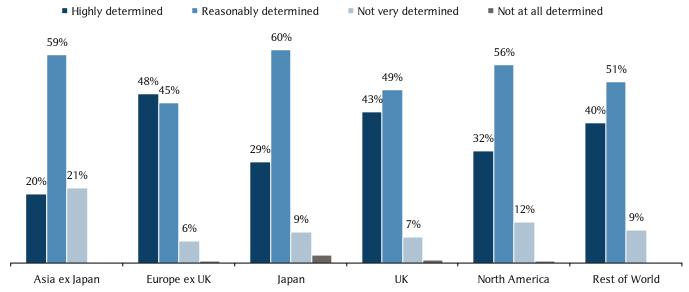


		Asia ex	Europe ex				Rest of
	Total	Japan	υκ	Japan	UK	N. America	World
Highly determined	19%	14%	16%	14%	16%	27%	26%
Reasonably determined	64%	76%	64%	71%	63%	59%	58%
Not very determined	17%	10%	19%	15%	19%	11%	15%
Not at all determined	1%	0%	1%	0%	2%	2%	1%
Total	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	4%	3%	3%	0%	8%	4%	7%

	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/ Media
Highly determined	20%	16%	24%	26%	14%	0%	20%	19%
Reasonably determined	63%	66%	61%	63%	69%	75%	59%	55%
Not very determined	16%	17%	11%	12%	17%	25%	21%	26%
Not at all determined	1%	1%	4%	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	3%	3%	3%	0%	11%	20%	4%	11%

Appendix 1: Investor perceptions of central bank inflation commitment – ECB

Question 9 - The ECB/Eurosystem has said that its definition of price stability is "below, but close to, 2%", with reference to the HICP. How determined do you think the ECB/Eurosystem is to realise this during the next 5 years?

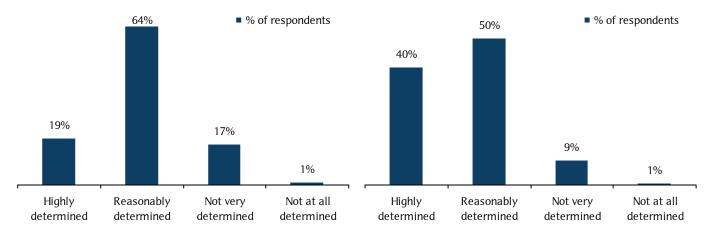


	Total	Asia ex Japan	Europe ex UK	Japan	UK	N. America	Rest of World
Highly determined	40%	20%	48%	29%	43%	32%	40%
Reasonably determined	50%	59%	45%	60%	49%	56%	51%
Not very determined	9%	21%	6%	9%	7%	12%	9%
Not at all determined	1%	0%	1%	2%	1%	1%	0%
Total	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	5%	6%	1%	2%	3%	14%	10%

	Asset management	Commercial bank	Hedge fund	Central bank	Non-financial firm	Academic	Other	Press/ Media
Highly determined	42%	41%	44%	52%	23%	20%	32%	47%
Reasonably determined	51%	47%	49%	43%	68%	60%	58%	43%
Not very determined	6%	12%	7%	2%	9%	20%	9%	10%
Not at all determined	1%	1%	1%	2%	0%	0%	1%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Memo - no comment/no answer	5%	3%	6%	2%	14%	0%	5%	4%

Market perception on Fed determination to realise annual inflation rate for US core PCE deflator of 1-2pc during next 5yrs

Market perception on ECB determination to realise price stability below/close to 2% with reference to HICP during next 5yrs



Appendix 2: Survey results (August 2008 survey)¹⁸

Introduction to the Barclays Capital Investor Survey of Central Bank Communication

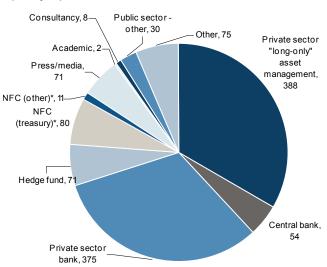
The Barclays Capital 2008 Investor Survey of Central Bank Communication was launched on 19 August and ran until 10 September 2008. All recipients of Barclays Capital's weekly and daily macroeconomics and fixed income research were invited to participate in this web-based survey by being sent a secure and unique link, and 1165 completed the survey, a similar number to a year earlier.

A breakdown of the respondents to the 2008 survey is shown below.

By region (total: 1165)

Rest of World, 87 Non-Japan Asia, 67 UK, 222 Japan, 173 North America, 188 Europe ex UK, 428

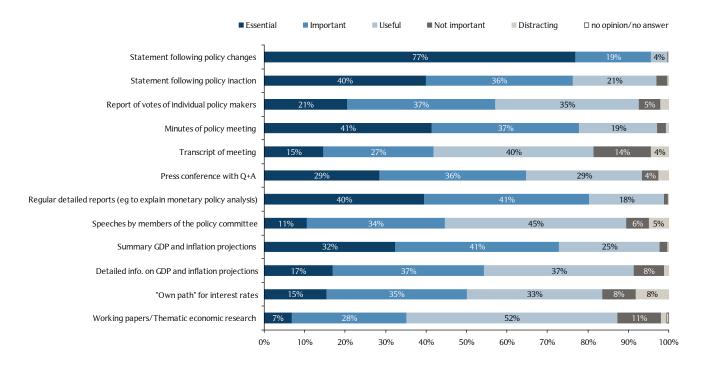
By employer



¹⁸ For further information on the survey methodology and results, please contact Lauren Ungerleider (Lauren.Ungerleider@barcap.com).

Appendix 2: Key wish-list for central bank publishing (August 2008 survey)

Question 1 – In your opinion, how important is it for central banks to publish the following information?

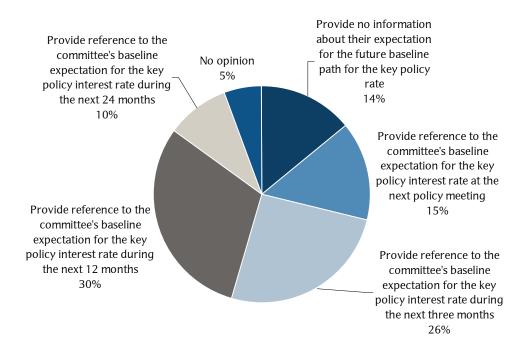


Average Mark*	Asia ex Japan	Europe ex UK	Japan	UK	North America	Rest of World
Statement post policy change	4.6	4.7	4.8	4.7	4.7	4.7
Statement following policy inaction	4.1	4.2	4.8	3.9	4.3	4.1
Report of votes of individual policymakers	3.6	3.5	4.0	3.8	3.8	3.5
Minutes of policy meeting	4.2	4.0	4.4	4.3	4.2	4.3
Transcript of meeting	3.4	3.2	3.4	3.1	3.5	3.5
Press conference with Q&A	3.8	4.0	4.1	3.6	3.4	3.7
Regular detailed reports	4.1	4.1	4.2	4.3	4.2	4.3
Speeches by members of the policy com.	3.4	3.3	3.3	3.6	3.3	3.5
Summary GDP & inflation projections	3.9	4.0	3.8	4.2	4.1	4.3
Detailed info. On GDP & infln. Projections	3.5	3.5	3.4	3.7	3.7	4.0
"Own path" for interest rate	3.5	3.4	2.9	3.4	3.4	3.6
WPs/Thematic research	3.3	3.2	3.1	3.2	3.4	3.6

^{*}Numerical values have been apportioned on a scale 1 to 5, where 1 = distracting; 2 = not important; 3 = useful; 4 = important; 5 = essential. Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

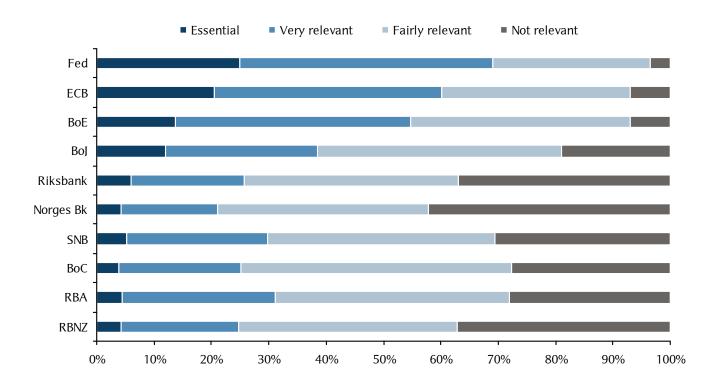
Appendix 2: Information to be published on policy interest rate (August 2008 survey)

Question 2: How much information do you think central bank monetary policy committees should publish about the path (and risks around it) which they envisage their key policy rate will take in the future?



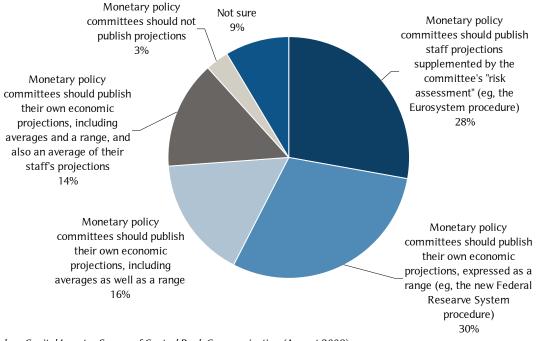
Appendix 2: Speeches, interviews and publication of economic projections (August 2008 survey)

Question 3 – How relevant for you general understanding of monetary policy do you find speeches and newspaper interviews by monetary policy committee members other than the committee's chairman?



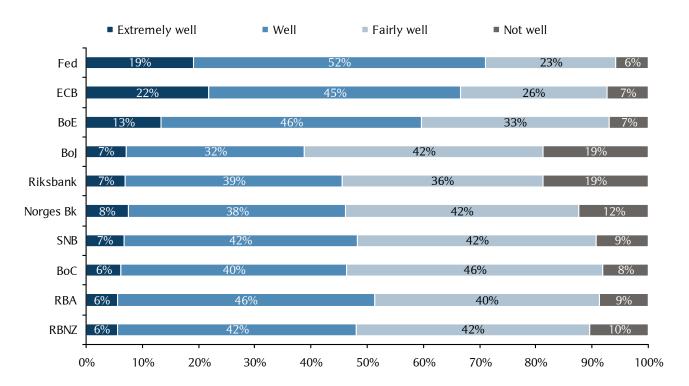
Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

Question 4 - In your opinion, should central banks publish economic projections made by their staff, to which the policy committee should attach its own risk assessment, or should the committee publish its own projections?



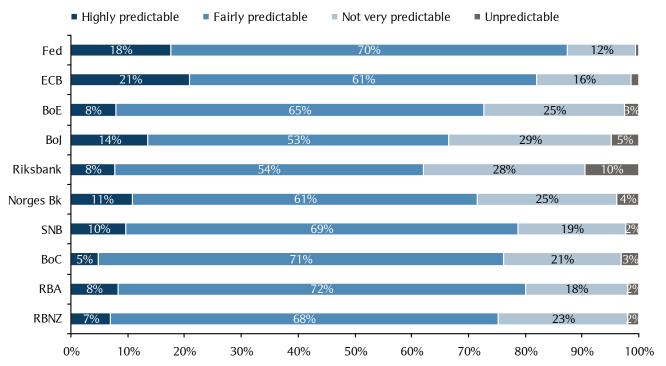
Appendix 2: Perception of market understanding of central bank objectives (August 2008 survey)

Question 5 – In your opinion, how well does the market understand central banks' objectives (ie, concerning variables such as inflation, employment, asset prices, money growth, exchange rates, etc)?



Appendix 2: Perception of central bank predictability (August 2008 survey)

Question 6 – How predictable do you think the monetary policy of the following central banks is (ie, how each bank would respond with interest rates to changes in the outlook for inflation, activity and other variable such as asset prices, given their objectives)?



source: Barclays Capital Investor Survey of Central Bank Communication (August 2008 – excludes "not sure/no opinion" and no answers)

S

Appendix 2: Perception of central bank predictability (August 2008 survey)

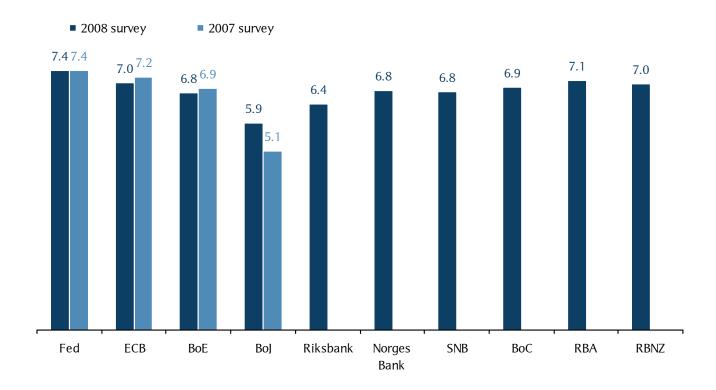
Question 6 – How predictable do you think the monetary policy of the following central banks is (ie, how each bank would respond with interest rates to changes in the outlook for inflation, activity and other variable such as asset prices, given their objectives)?

	Fed	ECB	ВоЕ	BoJ	Riksbank	Norges Bk	SNB	ВоС	RBA	RBNZ
Highly predictable										
Asia ex Japan	23%	12%	8%	19%	5%	11%	10%	7%	11%	5%
Europe ex UK	24%	25%	7%	12%	10%	11%	14%	8%	8%	11%
Japan	4%	5%	3%	11%	1%	1%	1%	48%	2%	2%
UK	13%	25%	10%	13%	8%	19%	10%	2%	10%	8%
N America	17%	21%	9%	17%	2%	9%	6%	4%	8%	4%
Rest of World	19%	25%	16%	18%	13%	7%	6%	9%	12%	10%
Fairly predictable										
Asia ex Japan	66%	72%	73%	58%	57%	61%	71%	66%	79%	80%
Europe ex UK	65%	60%	66%	53%	51%	61%	68%	69%	68%	65%
Japan	70%	66%	48%	49%	16%	18%	25%	35%	41%	46%
UK	73%	54%	69%	58%	56%	58%	74%	66%	74%	76%
N America	75%	62%	70%	53%	73%	72%	76%	85%	82%	83%
Rest of World	68%	63%	64%	47%	69%	60%	63%	68%	65%	50%
Not very predictable										
Asia ex Japan	11%	14%	16%	17%	33%	22%	14%	24%	11%	15%
Europe ex UK	10%	13%	26%	29%	26%	24%	17%	20%	22%	23%
Japan	20%	24%	42%	35%	22%	16%	15%	17%	20%	46%
UK	13%	19%	19%	27%	31%	21%	16%	27%	13%	14%
N America	7%	17%	20%	26%	23%	16%	16%	9%	9%	11%
Rest of World	14%	13%	19%	31%	13%	27%	25%	23%	23%	40%
Unpredictable										
Asia ex Japan	0%	2%	3%	6%	5%	6%	5%	3%	0%	0%
Europe ex UK	0%	1%	2%	5%	13%	4%	2%	2%	2%	1%
Japan	5%	4%	7%	5%	61%	65%	59%	0%	36%	6%
UK	1%	2%	2%	3%	6%	2%	0%	5%	3%	2%
N America	1%	1%	1%	3%	2%	2%	2%	3%	2%	2%
Rest of World	0%	0%	2%	4%	6%	7%	6%	0%	0%	0%

Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008 – excludes responses giving no opinion or no answer)

Appendix 2: Overall assessment of central banks' communication: 2008 and 2007 surveys compared

Question 7 - Please give a mark which conveys your overall sense of how well the following central banks communicate with the markets and broader economic agents. (1 = lowest communication abilities, 10 = highest communication abilities)



Note: the average ratings which we have calculated exclude respondents who did not comment or answer this question: the proportion of such responses, in relation to the total, is as follows: Fed: 7%, ECB: 9%, BoE: 19%, BoJ: 33%, Riksbank: 71%, Norges Bank: 74%, SNB: 72%, BoC: 72%, RBA: 68%, RBNZ: 72%. Source: Barclays Capital Investor Survey of Central Bank Communication (August 2008)

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